FPID #.: 413491-1-52-01
COUNTY: Leon
FAP #.: 00B3-059-B

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.

FPID #.: 413491-1-52-01
COUNTY: Leon
FAP #.: 00B3-059-B

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

FPID #.: 413491-1-52-01
COUNTY: Leon
FAP #.: 00B3-059-B

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

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

By: JASON D. PETERS
(Print Name)

Title: DIR. OF TRANS. DEV.
(Print Title)

Date: 4/3/13

Attest: Kriss Dodd

Legal Review:

Office of the General Counsel

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

By: Vincent S. Long
(Print Name)

Title: County Administrator
(Print Title)

Date: 3/13/13

Attest: John Stott, Deputy Clerk
Clerk of Court

Approved as to Form and Legality:

County Attorney

Exhibit "A"

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 2010,
AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2010,
AS AMENDED BY CONTRACT DOCUMENTS.

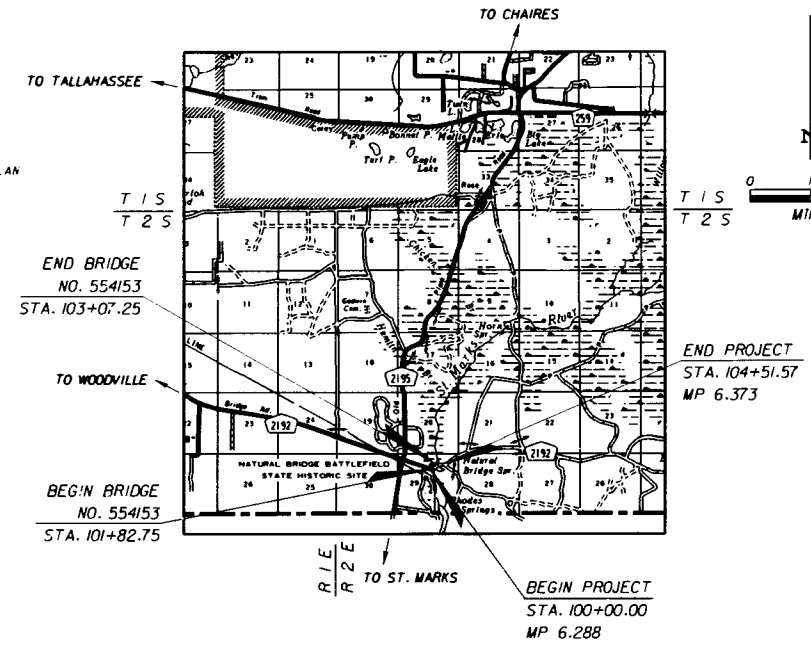
APPLICABLE DESIGN STANDARDS MODIFICATIONS: Jul 01, 2011

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

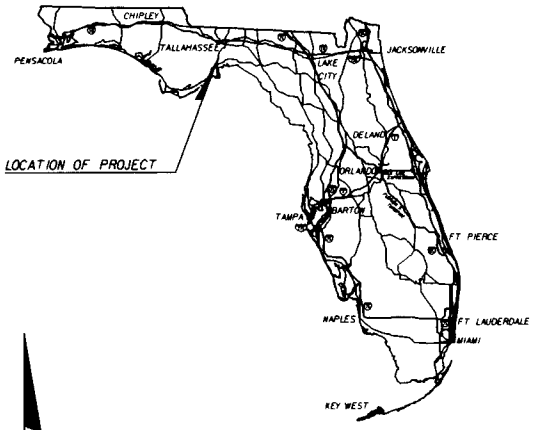
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

CONTRACT PLANS

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



CONSTRUCTION CONTRACT NO. T3408



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. 36-2338811
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

PROJECT LENGTH IS BASED ON ℄ 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

FDOT PROJECT MANAGER: DONALD ROGERS, P.E.

KEY SHEET REVISIONS	
DATE	DESCRIPTION

Project Description: Natural Bridge Road over a Branch of St. Marks River

ROADWAY PLANS
ENGINEER OF RECORD: MICHAEL J. WOODARD, P.E.

P.E. NO.: 47736

FISCAL YEAR	SHEET NO.
2014	1

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

FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSAL SUMMARY OF PAY ITEMS

DATE: 12/19/11 PAGE: 2 A0002

PROPOSAL : T3408 LEAD PROJECT : 413491152O1 COUNTY : LEON MANDIST: 03
PROJECT(S): 413491152O1 COUNTY/SECTION: 55030000

0002 SUMMARY OF ROADWAY

SPC	ALT	ITEM NUMBER	ITEM DESCRIPTION	UN IT	PAY ITEMS 413491152O1		QUANTITY TOTAL
		10101- 1-	MOBILIZATION (413491152O1)	LS	1.000		1.000
		10102- 1-	MAINTENANCE OF TRAFFIC (413491152O1)	LS	1.000		1.000
		10102- 60-	WORK ZONE SIGN	ED	11293.000		11293.000
		10102- 74- 1	BARRICADE, TEMPORARY, TYPES I, II, OI, VP & DRUM	ED	1681.000		1681.000
		10102- 74- 2	BARRICADE, TEMPORARY, TYPE III, 6'	ED	1558.000		1558.000
		10102- 77-	HIGH INTENSITY FLASHING LIGHTS, TEMP, TYPE B	ED	974.000		974.000
		10102- 99-	PORTABLE CHANGEABLE MESSAGE SIGN, TEMPORARY	ED	420.000		420.000
		10104- 10- 3	SEDIMENT BARRIER	LF	788.500		788.500
		10104- 11-	FLOATING TURBIDITY BARRIER	LF	53.600		53.600
		10104- 12-	STAKED TURBIDITY BARRIER- NYLON REINFORCED PVC	LF	280.400		280.400
		10107- 1-	LITTER REMOVAL	AC	1.600		1.600
		10107- 2-	MOWING	AC	1.600		1.600
		10110- 1- 1	CLEARING & GRUBBING (413491152O1)	LS	1.000		1.000
		10120- 1-	REGULAR EXCAVATION	CY	236.000		236.000
		10120- 6-	EMBANKMENT	CY	115.000		115.000
		10160- 4-	TYPE B STABILIZATION	SY	1188.000		1188.000
		10162- 1- 11	PREPARED SOIL LAYER, FINISH SOIL LAYER, 6"	SY	927.000		927.000
		10285-701-	OPTIONAL BASE, BASE GROUP OI	SY	118.000		118.000
		10285-706-	OPTIONAL BASE, BASE GROUP 06	SY	581.000		581.000
		10334- 1- 22	SUPERPAVE ASPH CONC, TRAF B, PG76-22	TN	74.700		74.700
		10339- 1-	MISCELLANEOUS ASPHALT PAVEMENT	TN	13.700		13.700
		10520- 2- 4	CONCRETE CURB, TYPE D	LF	58.200		58.200
		10524- 1- 1	CONCRETE DITCH PAVT, NON REINFORCED, 3"	SY	4.000		4.000
		10530- 3- 4	RIPRAP, RUBBLE, F&I, DITCH LINING	TN	2.100		2.100
		10536- 1- 1	GUARDRAIL -ROADWAY	LF	388.000		388.000
		10536- 73-	GUARDRAIL REMOVAL	LF	480.000		480.000
		10536- 85- 22	GUARDRAIL END ANCHORAGE ASSEMBLY- FLARED	EA	4.000		4.000
		10570- 1- 1	PERFORMANCE TURF	SY	483.000		483.000
		10570- 1- 2	PERFORMANCE TURF, SOD	SY	217.000		217.000
		10999- 25-	INITIAL CONTINGENCY AMOUNT, DO NOT BID (413491152O1)	LS	1.000		1.000

FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSAL SUMMARY OF PAY ITEMS

DATE: 12/19/11 PAGE: 3 A0003

PROPOSAL : T3408 LEAD PROJECT : 413491152O1 COUNTY : LEON MANDIST: 03
PROJECT(S): 413491152O1 COUNTY/SECTION: 55030000

0003 SUMMARY OF SIGNING

SPC	ALT	ITEM NUMBER	ITEM DESCRIPTION	UN IT	PAY ITEMS 413491152O1		QUANTITY TOTAL
		10700- 20- 60	SINGLE POST SIGN, REMOVE	AS	10.000		10.000
		10710- 90-	PAINTED PAVEMENT MARKINGS, FINAL SURFACE (413491152O1)	LS	1.000		1.000

FLORIDA DEPARTMENT OF TRANSPORTATION
PROPOSAL SUMMARY OF PAY ITEMS

DATE: 12/19/11 PAGE: 1 A0001

PROPOSAL : T3408 LEAD PROJECT : 413491152O1 COUNTY : LEON MANDIST: 03
PROJECT(S): 413491152O1 COUNTY/SECTION: 55030000

0001 SUMMARY OF STRUCTURES

SPC	ALT	ITEM NUMBER	ITEM DESCRIPTION	UN IT	PAY ITEMS 413491152O1 BR # 554153		QUANTITY TOTAL
		10110- 3-	REMOVAL OF EXISTING STRUCTURE (413491152O1)	LS	1.000		1.000
		10400- 2- 4	CONC CLASS II, SUPERSTRUCTURE	CY	176.900		176.900
		10400- 2- 5	CONCRETE CLASS II, SUBSTRUCTURE	CY	45.300		45.300
		10400- 2- 10	CONCRETE CLASS II, APPROACH SLABS	CY	66.800		66.800
		10415- 1- 4	REINFORCING STEEL - SUPERSTRUCTURE	LB	47383.000		47383.000
		10415- 1- 5	REINFORCING STEEL- SUBSTRUCTURE	LB	3856.000		3856.000
		10415- 1- 9	REINFORCING STEEL- APPROACH SLABS	LB	11832.000		11832.000
		10455- 35- 22	STEEL PILING, 24" DIA. PIPE	LF	1065.000		1065.000
		10455-144- 22	TEST PILES - STEEL, 24" DIA PIPE	LF	430.000		430.000
		10458- 1- 11	BRIDGE DECK EXPANSION JOINT, NEW CONSTRUCTION, F&I POURED JOINT WITH BACKER ROD	LF	52.000		52.000
		10521- 5- 6	CONCRETE TRAFFIC RAILING- BRIDGE, CORRAL W/CURB	LF	372.000		372.000
		10530- 1-	RIPRAP, SAND-CEMENT	CY	34.700		34.700
		10530- 3- 3	RIPRAP- RUBBLE, BANK AND SHORE	TN	181.500		181.500
		10530- 74-	BEDDING STONE	TN	62.900		62.900

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2540 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47734

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SUMMARY OF PAY ITEMS

SHEET NO. 2

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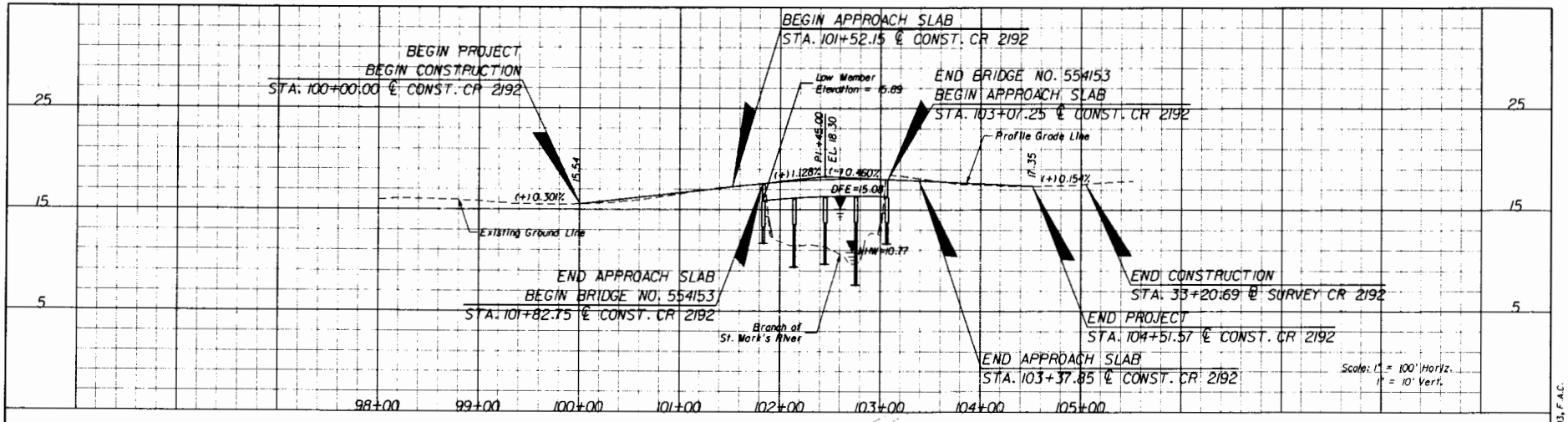
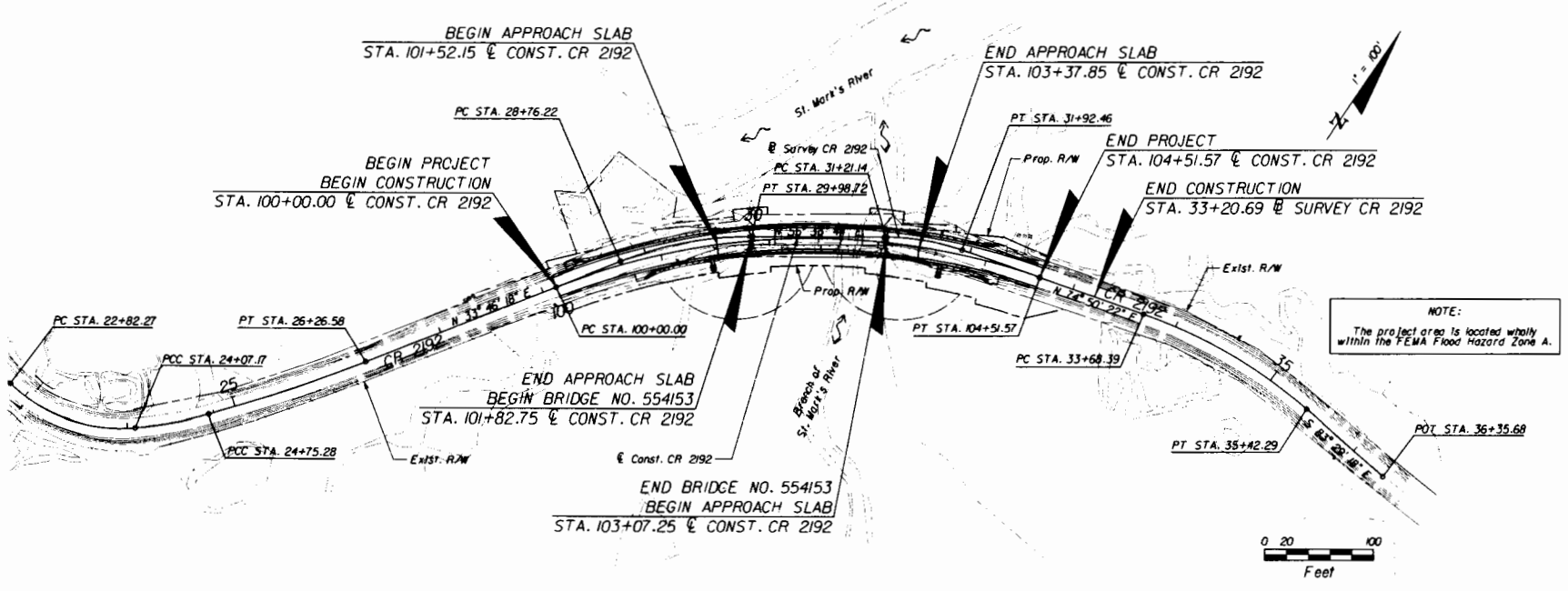




REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
NATALIE BETZ ZIERDEN, P.E. # 56072

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

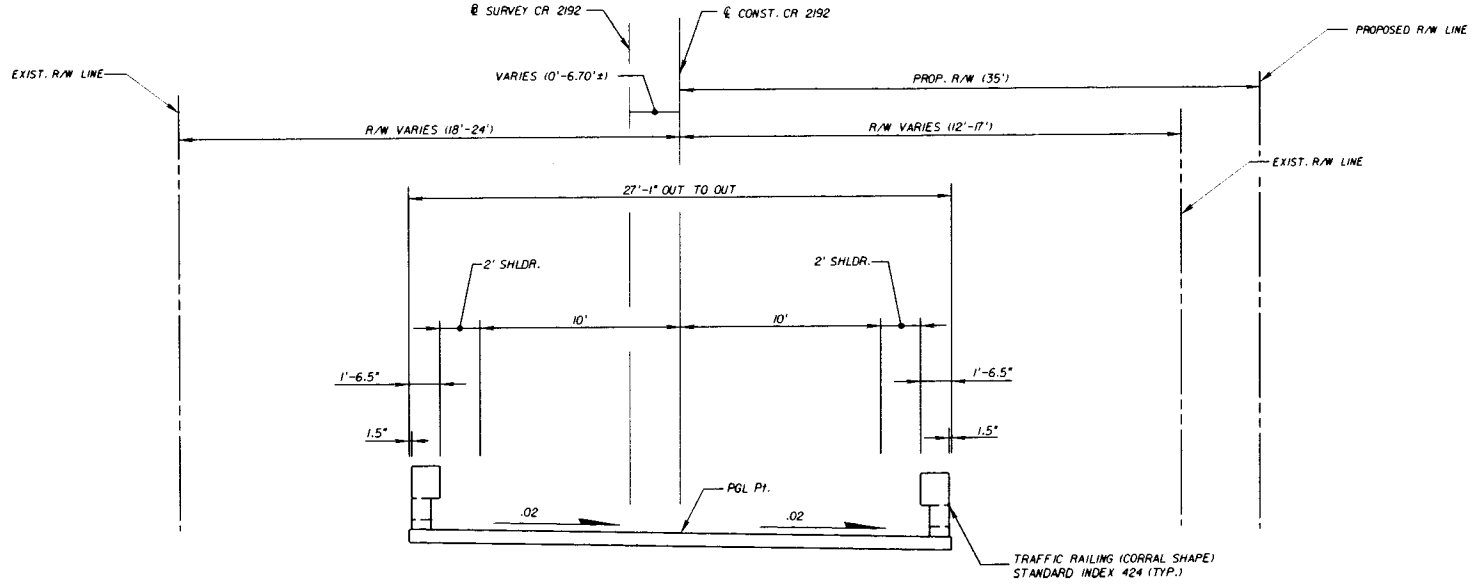
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 2192	LEON	413491-1-52-01

DRAINAGE MAP

SHEET NO. 3

sbarwick 12/20/2011 9:50:4 AM

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



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.

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 6G15-23.003, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

TYPICAL SECTIONS

SHEET NO. 4

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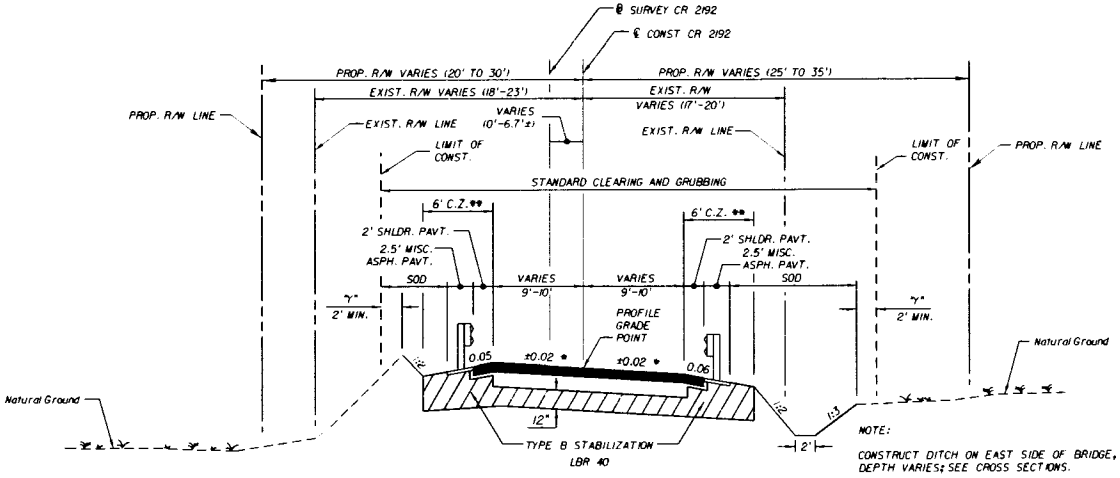


* PART OF ROADWAY IS SUPERELEVATED WITHIN PROJECT LIMITS.
** DESIGN CLEAR ZONE DOES NOT APPLY TO CLEAR ZONE WIDTHS FOR WORK ZONES.

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

TRAFFIC DATA

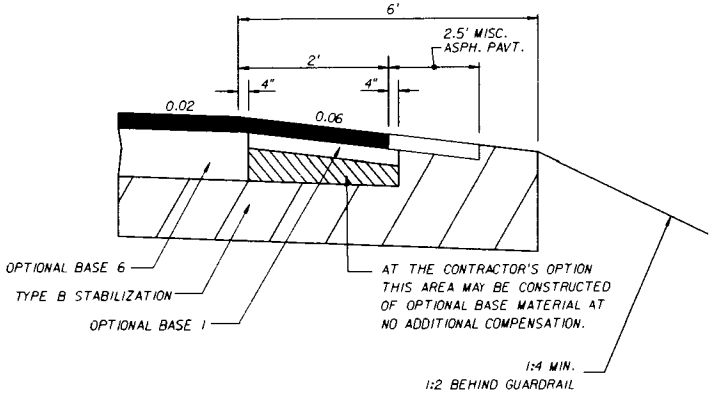
NOT AVAILABLE
DESIGN SPEED = 25 MPH

NEW CONSTRUCTION

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

SHOULDER PAVEMENT

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



SHOULDER PAVEMENT DETAIL

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2960 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

TYPICAL SECTIONS

SHEET NO. 5

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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.

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 6A05-23.003, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SUMMARY OF QUANTITIES

SHEET NO. 6

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SUMMARY OF PERFORMANCE TURF-SOD

LOCATION STA. TO STA.	SIDE	P L	P W	P SY	F L	F W	F SY	FIELD BOOK REFERENCE
NBR Roadway				217.0				
TOTAL:				217.0				

SUMMARY OF EARTHWORK

DESCRIPTION	CY P	CY F
REGULAR EXCAVATION		
Natural Bridge Road	236	
EMBANKMENT		
Natural Bridge Road	115	

* The earthwork quantities have been calculated using the limerock base option.

SUMMARY OF LITTER REMOVAL AND MOWING

CONST. PHASE	DURATION (DAYS)	FREQUENCY (DAYS)	LITTER REMOVAL CYCLES	LITTER REMOVAL AREA AC/CYCLE	LITTER REMOVAL AREA TOTAL (AC)	MOWING CYCLES	MOWING AREA AC/CYCLE	MOWING AREA TOTAL (AC)	REMARKS
1	177	30	6	0.26	1.6	6	0.26	1.6	
		TOTAL		P	1.6	TOTAL	P	1.6	
				F			F		

SUMMARY OF DITCH PAVEMENT AND RUBBLE RIPRAP

LOCATION STA. TO STA.	SIDE	RIPRAP (DITCH LINING) TN P	RIPRAP (DITCH LINING) TN F	RIPRAP (BANK & SHORE) TN P	RIPRAP (BANK & SHORE) TN F	NON-REINFORCED CONCRETE, 3" SY P	NON-REINFORCED CONCRETE, 3" SY F	REMARKS	FIELD BOOK REFERENCE
101+43.96 to 101+48.08		1.07							
101+42.91 to 101+49.30						1.7			
103+57.44 to 103+61.56		1.07							
103+56.29 to 103+62.67						2.1			
TOTAL		2.1				4			

REVISIONS DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2960 EAST PARK AVENUE, SUITE 300
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SUMMARY OF QUANTITIES

SHEET NO. 7

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SUMMARY OF PREPARED SOIL LAYER

LOCATION	6" ORGANIC SOIL LAYER (SY)		6" FINISH SOIL LAYER (SY)		12" FINISH SOIL LAYER (SY)	
	P	F	P	F	P	F
100+00.00 to 104+51.57			927			

SUMMARY OF MISCELLANEOUS ASPHALT

LOCATION	SIDE	UNDER GUARDRAIL			BICYCLE PATH			MEDIAN PAVEMENT			TEMPORARY SIDEWALK			OTHER			REMARKS
STA. TO STA.		THICK (IN)	TN		THICK (IN)	TN		THICK (IN)	TN		THICK (IN)	TN		THICK (IN)	TN		
			P	F		P	F		P	F		P	F		P	F	
100+11.94 to 101+52.15	LT	2.00	4.8														
100+74.50 to 101+52.15	RT	2.00	3.1														
103+37.83 to 104+15.51	LT	2.00	3.0														
103+37.84 to 103+57.67	RT	2.00	0.4														
103+61.33 to 104+15.61	RT	2.00	2.5														
TOTAL			13.7														

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SUMMARY OF QUANTITIES

SHEET NO. 8

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SUMMARY OF GUARDRAIL

LOCATION		GUARDRAIL (LF)										END ANCHORAGE ASSEMBLIES (EA)								REMARKS	FIELD BOOK REFERENCE
STATION	SIDE	ROADWAY		REMOVAL		MOD. THRIE 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	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									

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SUMMARY OF QUANTITIES

SHEET NO. 9

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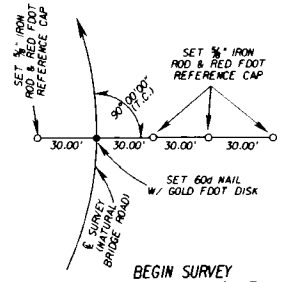
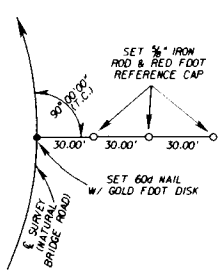
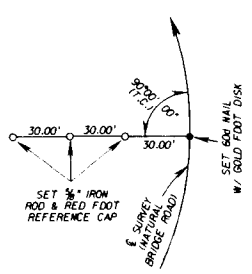
℄ REFERENCE POINTS
(NOT TO SCALE)



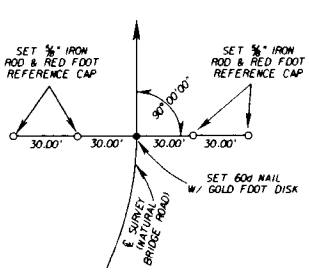
BEGIN SURVEY
P.C.C. STA. 22+82.27
(℄ SURVEY NATURAL BRIDGE ROAD)



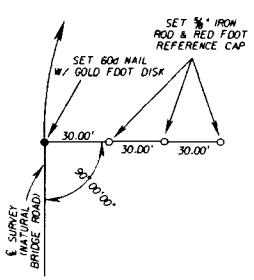
P.C.C. STA. 24+07.17
(℄ SURVEY NATURAL BRIDGE ROAD)



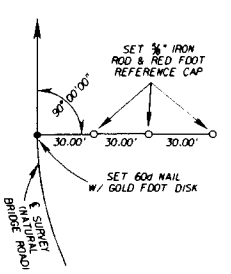
P.C.C. STA. 24+75.29
(℄ SURVEY NATURAL BRIDGE ROAD)



P.T STA. 26+26.58
(℄ SURVEY NATURAL BRIDGE ROAD)



P.C. STA. 28+76.23
(℄ SURVEY NATURAL BRIDGE ROAD)



P.T. STA. 29+98.73
(℄ SURVEY NATURAL BRIDGE ROAD)

B/L STATION	NORTHING (Y)	EASTING (X)	SCALE FACTOR
22+82.27	467151.7835	2078684.2221	0.99995050
24+07.17	467183.5304	2078801.0054	0.99995050
24+75.29	467231.8728	2078848.8641	0.99995051
26+26.58	467353.2402	2078939.0844	0.99995052
28+76.23	467560.7644	2079077.8605	0.99995054
29+98.73	467647.361	2079163.4600	0.99995055

LEGEND
○ = SET ⅝" IRON ROD & RED FDOT REFERENCE CAP
● = SET 60d NAIL W/ GOLD FDOT DISK

HORIZONTAL AND VERTICAL CONTROL

1. 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 PROJECT ADMINISTRATOR SHOULD NOTIFY THE DISTRICT SURVEYOR, WITHOUT DELAY, BY TELEPHONE. (850) 415-9400.
2. THIS PROJECT IS BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM NAD 1983/99 HORIZONTAL DATUM. THE VERTICAL DATUM IS BASED ON NAVD 1988.
3. HORIZ. INFORMATION FOR BENCHMARKS IS SHOWN TO THE NEAREST FOOT FOR COORDINATES AND THE TENTH OF A SECOND FOR LAT. & LONG. TO BE USED FOR RECON PURPOSES ONLY AND SHOULD NOT BE USED FOR HORIZ. CONTROL.

DESIGNATION	B/L STATION	OFFSET	ELEVATION	DESCRIPTION	NORTHING (Y)	EASTING (X)	LATITUDE	LONGITUDE	ELLIP. HT.	SCALE FACTOR
A1	N/A	N/A	N/A	FOUND 5/8" IRON ROD W/ ORANGE FDOT CAP	468131.3006	2076167.7482	30°17'12.442036"	84°09'31.948730"	N/A	0.99995060
A2	N/A	N/A	24.10	FOUND 5/8" IRON ROD W/ ORANGE FDOT CAP	467389.7032	2078171.2778	30°17'05.041374"	84°09'09.122521"	N/A	0.99995053
A3	23+26.58	14.53 FT RT	15.29	FOUND 5/8" IRON ROD W/ ORANGE FDOT CAP	467136.7572	2078730.3744	30°17'02.520654"	84°09'02.754511"	N/A	0.99995050
A4	26+26.51	11.68 FT RT	15.35	FOUND 5/8" IRON ROD W/ ORANGE FDOT CAP	467346.6867	2078948.7560	30°17'04.592034"	84°09'00.256401"	N/A	0.99995052
A5	29+62.55	12.44 FT LT	16.89	FOUND 5/8" IRON ROD W/ ORANGE FDOT CAP	467634.6744	2079126.6918	30°17'07.437298"	84°08'58.216836"	N/A	0.99995055
210JWM USGS 195	N/A	N/A	23.85	FOUND POURED CONCRETE MONUMENT	467430	2078235	30°17'05.4"	84°09'08.4"	N/A	
55-09-A01V	24+08.44	20.73 FT RT	16.89	FOUND 4" SQUARE MONUMENT W/ FDOT DISK	467169	2078815	30°17'02.8"	84°09'01.8"	N/A	

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

NCG
NOBLES CONSULTING GROUP, INC
2844 PABLO AVENUE, TALLAHASSEE, FLORIDA 32308
LB#3297, EB#7918, P:(850) 545-8102, F:(850) 385-1404
SURVEYOR OF RECORD: JAMES E. MELCHER, PSM# 6156

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

PROJECT CONTROL

SHEET NO. 10

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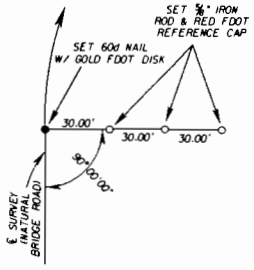
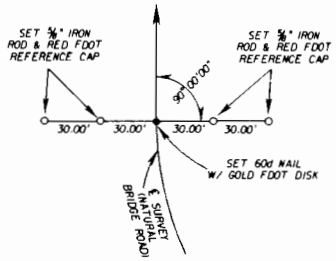
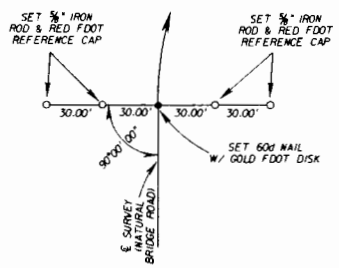
℄ REFERENCE POINTS
(NOT TO SCALE)



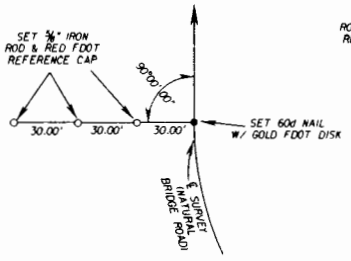
P.C. STA. 31+21.14
(℄ SURVEY NATURAL BRIDGE ROAD)



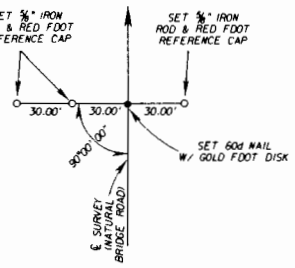
P.T. STA. 31+92.46
(℄ SURVEY NATURAL BRIDGE ROAD)



P.C. STA. 33+68.40
(℄ SURVEY NATURAL BRIDGE ROAD)



P.T STA. 35+42.29
(℄ SURVEY NATURAL BRIDGE ROAD)



END SURVEY
STA. 36+35.68
(℄ SURVEY NATURAL BRIDGE ROAD)

B/L STATION	NORTHING (Y)	EASTING (X)	SCALE FACTOR
31+21.14	467716.5850	2079264.4167	0.99995056
31+92.46	467746.3576	2079328.8553	0.99995056
33+68.40	467792.3701	2079498.6720	0.99995056
35+42.29	467805.4028	2079671.0353	0.99995057
36+35.68	467794.8120	2079763.8229	0.99995056

LEGEND
○ = SET ⅝" IRON ROD & RED FDOT REFERENCE CAP
● = SET 60d NAIL W/ GOLD FDOT DISK

HORIZONTAL AND VERTICAL CONTROL

1. 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 PROJECT ADMINISTRATOR SHOULD NOTIFY THE DISTRICT SURVEYOR, WITHOUT DELAY, BY TELEPHONE. (850) 415-9400.
2. THIS PROJECT IS BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM NAD 1983/99 HORIZONTAL DATUM. THE VERTICAL DATUM IS BASED ON NAVD 1988.
3. HORIZ. INFORMATION FOR BENCHMARKS IS SHOWN TO THE NEAREST FOOT FOR COORDINATES AND THE TENTH OF A SECOND FOR LAT. & LONG. TO BE USED FOR RECON PURPOSES ONLY AND SHOULD NOT BE USED FOR HORIZ. CONTROL.

DESIGNATION	B/L STATION	OFFSET	ELEVATION	DESCRIPTION	NORTHING (Y)	EASTING (X)	LATITUDE	LONGITUDE	ELLIP. HT.	SCALE FACTOR
A6	33+58.71	9.99 FT LT	17.40	FOUND 5/8" IRON ROD W/ ORANGE FDOT CAP	467799.4745	2079486.7065	30°17'09.057615"	84°08'54.104819"	N/A	0.99995056
A7	N/A	N/A	18.55	FOUND 5/8" IRON ROD W/ ORANGE FDOT CAP	467807.9804	2079916.4825	30°17'09.128666"	84°08'49.202599"	N/A	0.99995057
A8	N/A	N/A	19.70	FOUND 5/8" IRON ROD W/ ORANGE FDOT CAP	468109.9316	2080327.7739	30°17'12.104930"	84°08'44.500807"	N/A	0.99995060
55-09-A02V	N/A	N/A	19.21	FOUND 4" SQUARE MONUMENT W/ FDOT DISK	467845	2079902	30°17'09.5"	84°08'49.4"	N/A	

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

NCG
NOBLES CONSULTING GROUP INC
2414 PABLO AVENUE · TALLAHASSEE · FLORIDA 32308
LB#2263 EB#7396 PH(850)385-9170 FX(850)385-7404
SURVEYOR OF RECORD: JAMES C. MELCHER PSM# 6176

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PROJECT CONTROL	SHEET NO.
ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
CR 2192	LEON	413491-1-52-01		11

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NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 6G15-23.001, F.A.C.

GENERAL NOTES

1. All Exist. R/W control points shown in the plans are measured from the ℄ Survey CR 2192.

2. All Prop. R/W and TCE control points shown in the plans are measured from the ℄ 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 ℄ 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 Vvh) are based on limited investigation techniques and should be considered approximate only. The verified locations/elevations apply only at the points shown. Interpolations between these points have not been verified.

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	Thom Duggar	(850) 599-1543
(or Outsource Inc.)	Mark Williams	(229) 224-9380
FDOT Utility Coordinator	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 Shelfer 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 representative(s) at the project Pre-construction conference. The educational packet and presentation will include:
  - 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;
  - a description of the eastern indigo snake and its habits including reproducible photographs and/or posters;
  - 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;
  - instruction not to injure, harm, harass, or kill any eastern indigo snake during construction activities;
  - 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;
  - instruction that no construction personnel may come in contact with a live eastern indigo snake, unless that individual posseses 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).

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

GENERAL NOTES

SHEET NO. 12

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- 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 educationol 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 meosures that must be implemented during construction, including:
  - 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;
  - a description of the eastern indigo snake and its habits using reproducible photographs and/or posters;
  - 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.
  - instruction not to injure, harm, horass, or kill any eastern indigo snake during construction activities.
  - 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.
  - instruction that no construction personnel may come in contact with a live eastern indigo snake, unless that individual posseses 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 on 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.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2540 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

GENERAL NOTES

SHEET NO. 13

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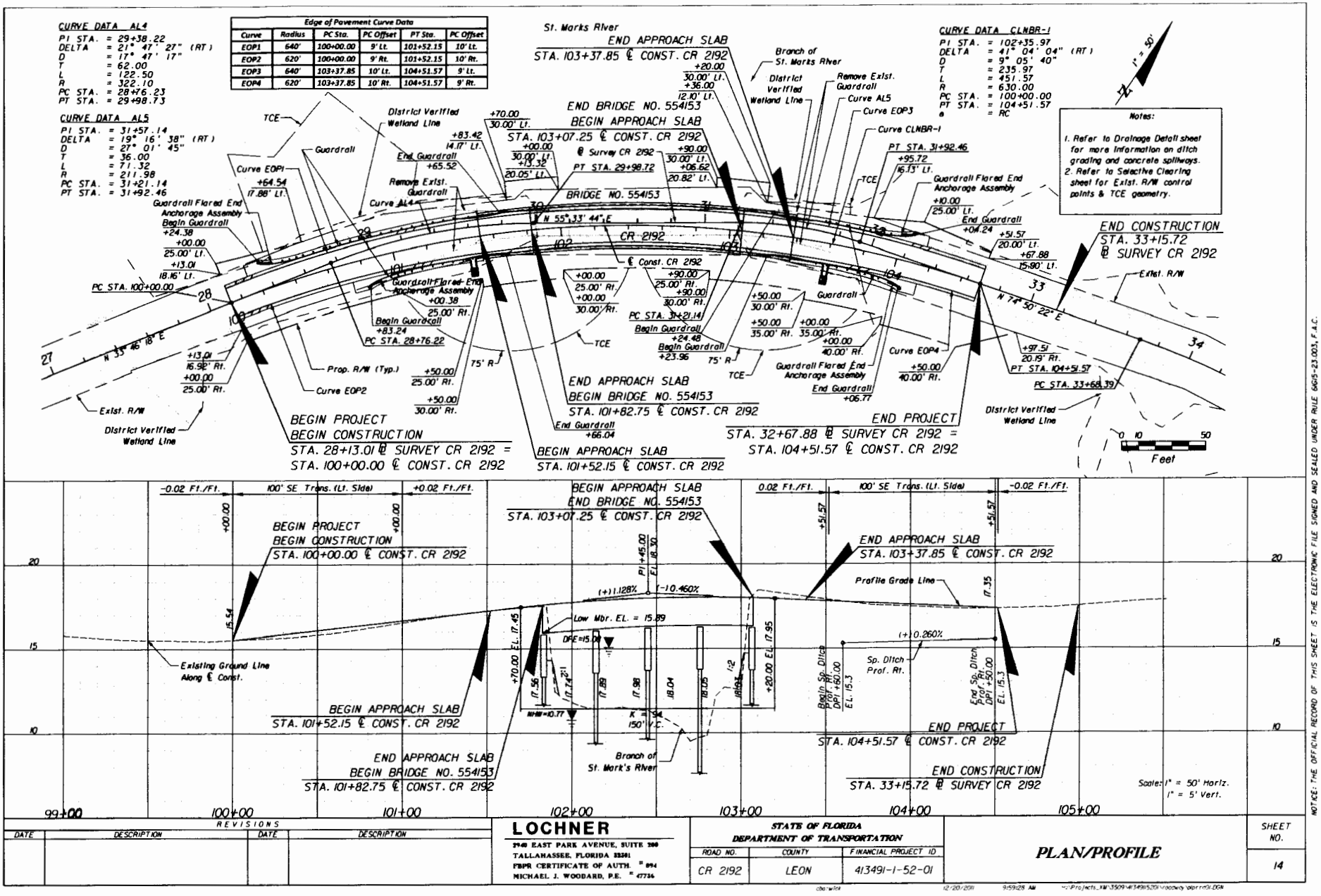
CURVE DATA AL4
PI STA. = 29+38.22
DELTA = 21° 47' 27" (RT)
D = 17° 47' 17"
T = 62.00
L = 122.50
R = 322.10
PC STA. = 28+76.23
PT STA. = 29+98.73
CURVE DATA AL5
PI STA. = 31+57.14
DELTA = 19° 16' 38" (RT)
D = 27° 01' 45"
T = 36.00
L = 71.32
R = 211.98
PC STA. = 31+21.14
PT STA. = 31+92.46
Edge of Pavement 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° 04' 04" (RT)
D = 9° 05' 40"
T = 235.97
L = 451.57
R = 630.00
PC STA. = 100+00.00
PT STA. = 104+51.57
e = RC
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.
St. Marks River
END APPROACH SLAB
STA. 103+37.85 ℄ CONST. CR 2192
END BRIDGE NO. 554153
BEGIN APPROACH SLAB
STA. 103+07.25 ℄ CONST. CR 2192
PT STA. 29+98.72
BRIDGE NO. 554153
℄ Survey CR 2192
℄ Const. CR 2192
CR 2192
N 55° 33' 44" E
PC STA. 100+00.00
PC STA. 28+76.22
PC STA. 31+21.14
PT STA. 31+92.46
Begin Guardrail +83.24
Begin Guardrail +24.48
Begin Guardrail +23.96
End Guardrail +66.04
End Guardrail +06.77
End Guardrail +04.24
Guardrail Flared End Anchorage Assembly
Begin Guardrail +24.38
End Guardrail +65.52
Remove Exist. Guardrail
Curve AL4
Curve EOP1
Curve EOP2
Curve EOP3
Curve EOP4
Curve CLNBR-1
Guardrail
TCE
Prop. R/W (Typ.)
Exist. R/W
District Verified Wetland Line
Branch of St. Marks River
Remove Exist. Guardrail
75' R
BEGIN PROJECT
BEGIN CONSTRUCTION
STA. 28+13.01 ℄ SURVEY CR 2192 =
STA. 100+00.00 ℄ CONST. CR 2192
END APPROACH SLAB
BEGIN BRIDGE NO. 554153
STA. 101+82.75 ℄ CONST. CR 2192
BEGIN APPROACH SLAB
STA. 101+52.15 ℄ CONST. CR 2192
END PROJECT
STA. 32+67.88 ℄ SURVEY CR 2192 =
STA. 104+51.57 ℄ CONST. CR 2192
END CONSTRUCTION
STA. 33+15.72 ℄ SURVEY CR 2192
N 74° 50' 22" E
0 10 50
Feet
-0.02 Ft./Ft.
100' SE Trans. (Lt. Side)
+0.02 Ft./Ft.
BEGIN PROJECT
BEGIN CONSTRUCTION
STA. 100+00.00 ℄ CONST. CR 2192
Existing Ground Line Along ℄ Const.
BEGIN APPROACH SLAB
STA. 101+52.15 ℄ CONST. CR 2192
END APPROACH SLAB
BEGIN BRIDGE NO. 554153
STA. 101+82.75 ℄ CONST. CR 2192
BEGIN APPROACH SLAB
END BRIDGE NO. 554153
STA. 103+07.25 ℄ CONST. CR 2192
PI +45.00 EL. 18.30
(+) 1.128%
(-) 0.460%
Low Mbr. EL. = 15.89
DFE=15.00
+70.00 EL. 17.45
+20.00 EL. 17.95
HHW=10.77
K = 54
150' V.C.
Branch of St. Mark's River
0.02 Ft./Ft.
100' SE Trans. (Lt. Side)
-0.02 Ft./Ft.
END APPROACH SLAB
STA. 103+37.85 ℄ CONST. CR 2192
Profile Grade Line
(+) 0.260%
Sp. Ditch Prof. Rt.
Begin Sp. Ditch Prof. Rt. DPI +60.00 EL. 15.3
End Sp. Ditch Prof. Rt. DPI +50.00 EL. 15.3
END PROJECT
STA. 104+51.57 ℄ CONST. CR 2192
END CONSTRUCTION
STA. 33+15.72 ℄ SURVEY CR 2192
Scale: 1" = 50' Horiz.
1" = 5' Vert.
99+00
100+00
101+00
102+00
103+00
104+00
105+00
REVISIONS
DATE | DESCRIPTION | DATE | DESCRIPTION
LOCHNER
2140 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47734
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION
ROAD NO. | COUNTY | FINANCIAL PROJECT ID
CR 2192 | LEON | 413491-1-52-01
PLAN/PROFILE
SHEET NO.
14
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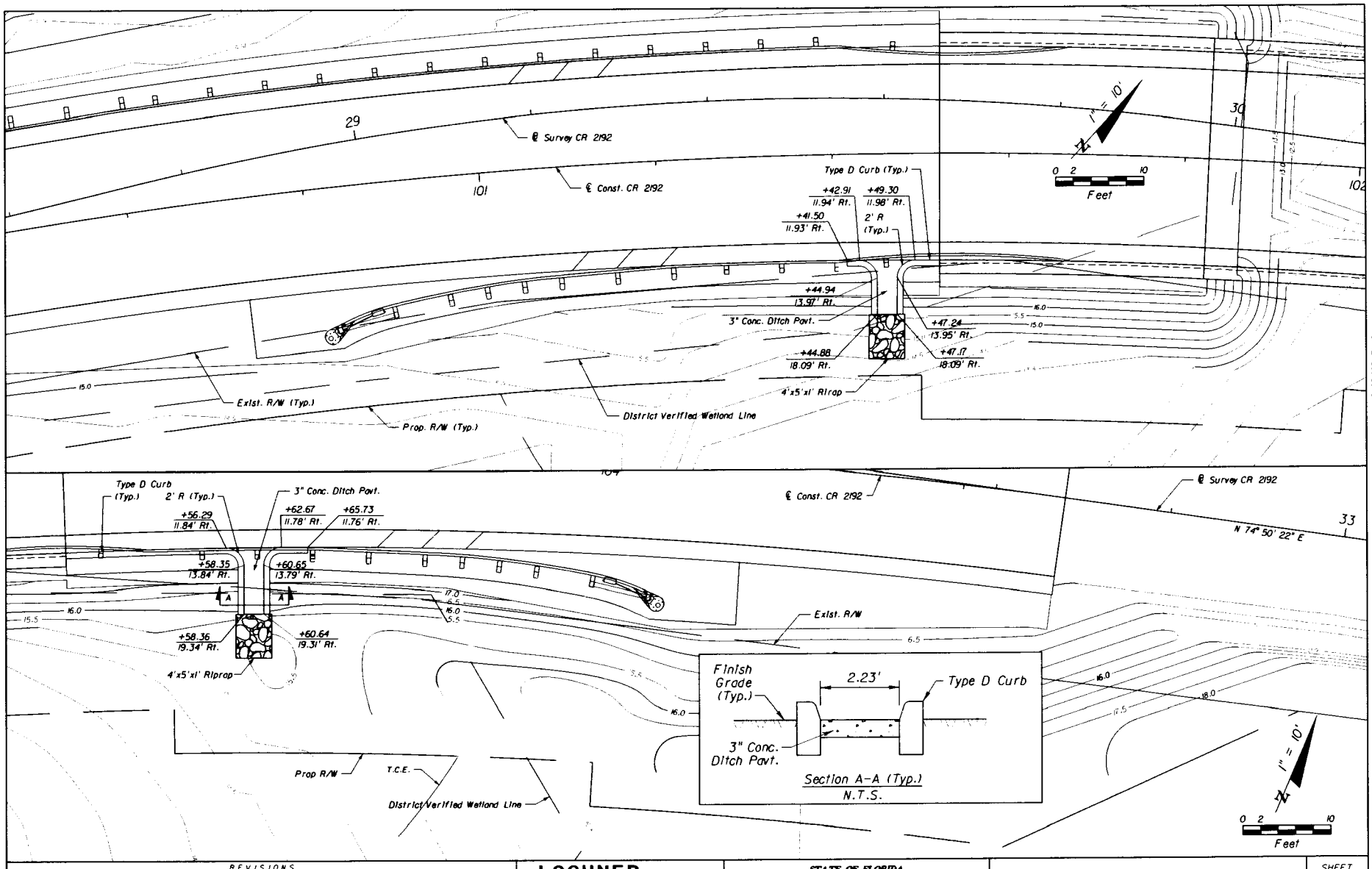

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2140 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR 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

12/20/2011 9:50:37 AM

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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

	ORGANIC CONTENT			LBR VALUE		SIEVE ANALYSIS RESULTS PERCENT PASS						ATTERBERG LIMITS (%)						CORROSION TEST RESULTS				
STRATUM NO.	NO. OF TESTS	MOISTURE CONTENT	% ORGANIC	NO. OF TESTS	MAX LBR	NO. OF TESTS	10 MESH	40 MESH	60 MESH	100 MESH	200 MESH	NO. OF TESTS	LIQUID LIMIT	PLASTIC INDEX	AASHTO GROUP	COLOR	DESCRIPTION	NO. OF TESTS	RESISTIVITY ohm-cm	CHLORIDE ppm	SULFATES ppm	pH
1	--	--	--	2	48-60	5	100	74-98	48-95	31-87	6-9	-	-	-	A-3	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	-	-	-	A-2-4	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	-	-	-	A-3	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	A-2-6	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	A-7-6	GRAY	SANDY CLAY	1	4,100	26	44	6.6
6	3	34-176	10.1-32.9	--	--	1	100	99	97	93	20	-	-	-	A-8	BLACK	ORGANIC SILT	1	5,800	25	18	5.6
7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	GRAY	WEATHERED LIMESTONE	-	-	-	-	-

STRATUM NOTES

1. STRATA 1 AND 2 ARE "SELECT" SOILS.
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 FDOT 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.

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.

REVISIONS			
DATE	DESCRIPTION	DATE	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) 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

ROADWAY SOIL SURVEY

SHEET NO. 16

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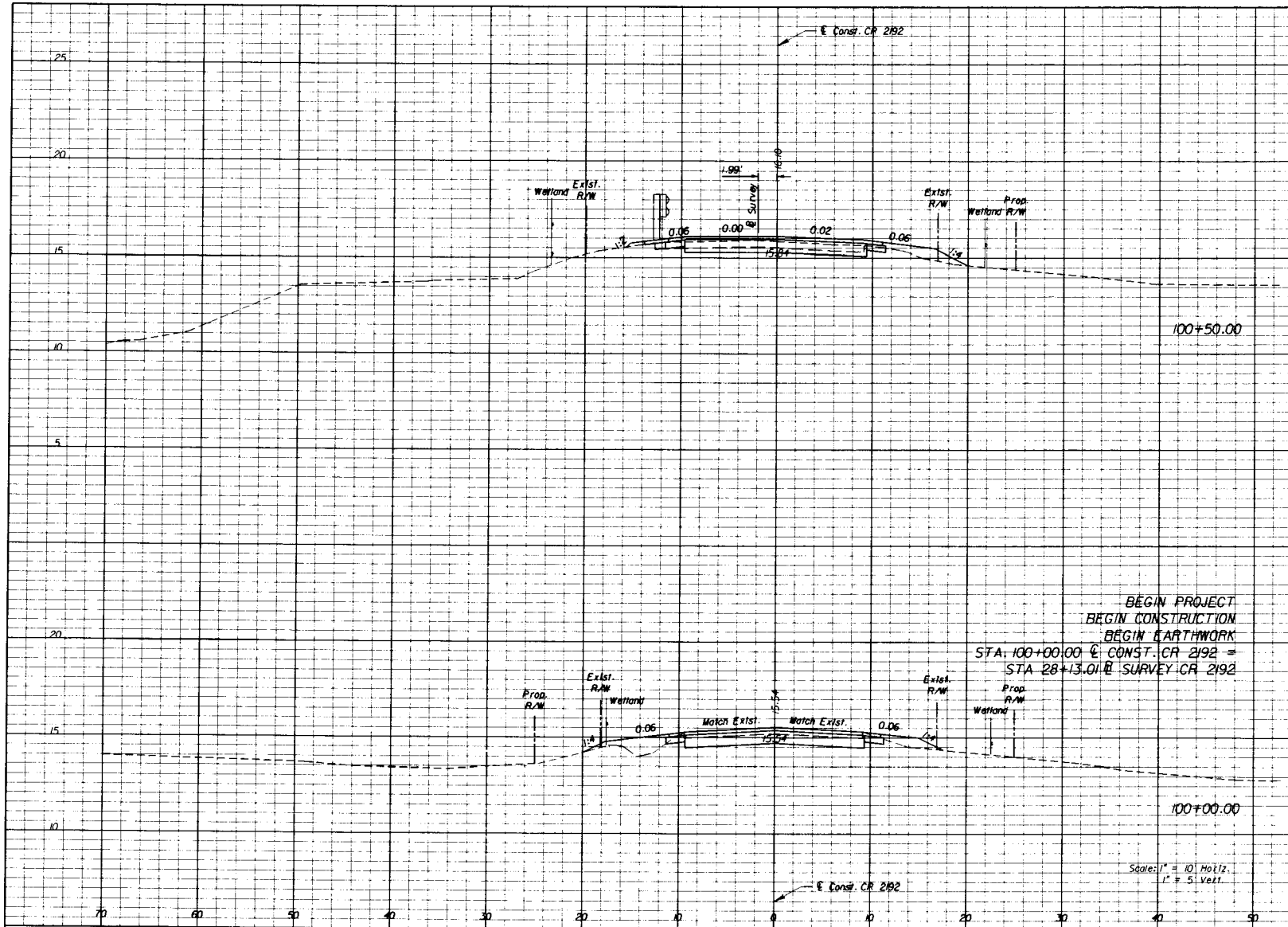

Regular Exc.		Embankment	
A	V	A	V
5		4	
	15		10
11		7	

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

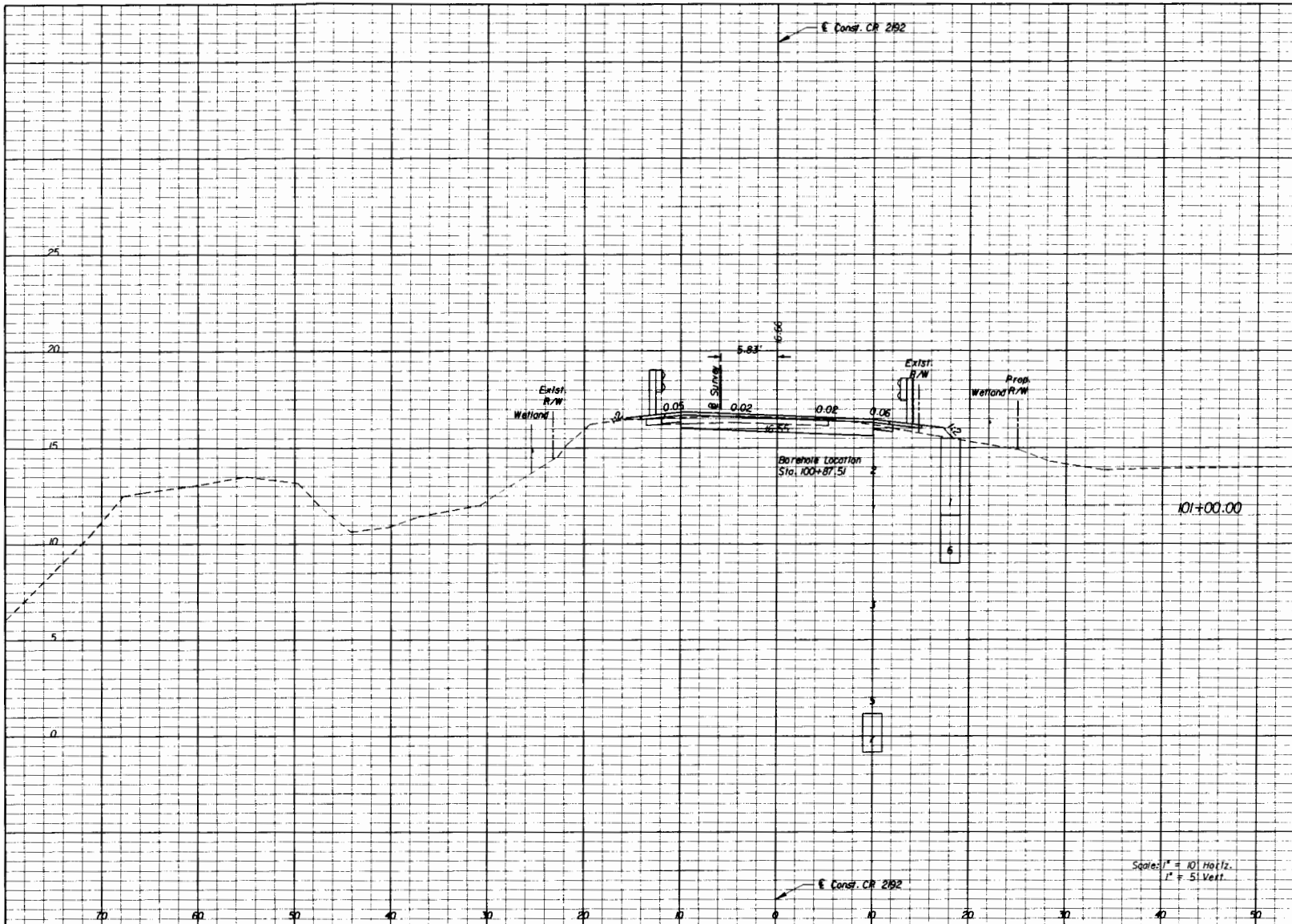
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

CROSS SECTIONS

SHEET NO. 17

12/20/2011 9:59:33 AM



Regular Exc.		Embankment	
A	V	A	V
9		3	
	13		7

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

CROSS SECTIONS

SHEET NO. 18

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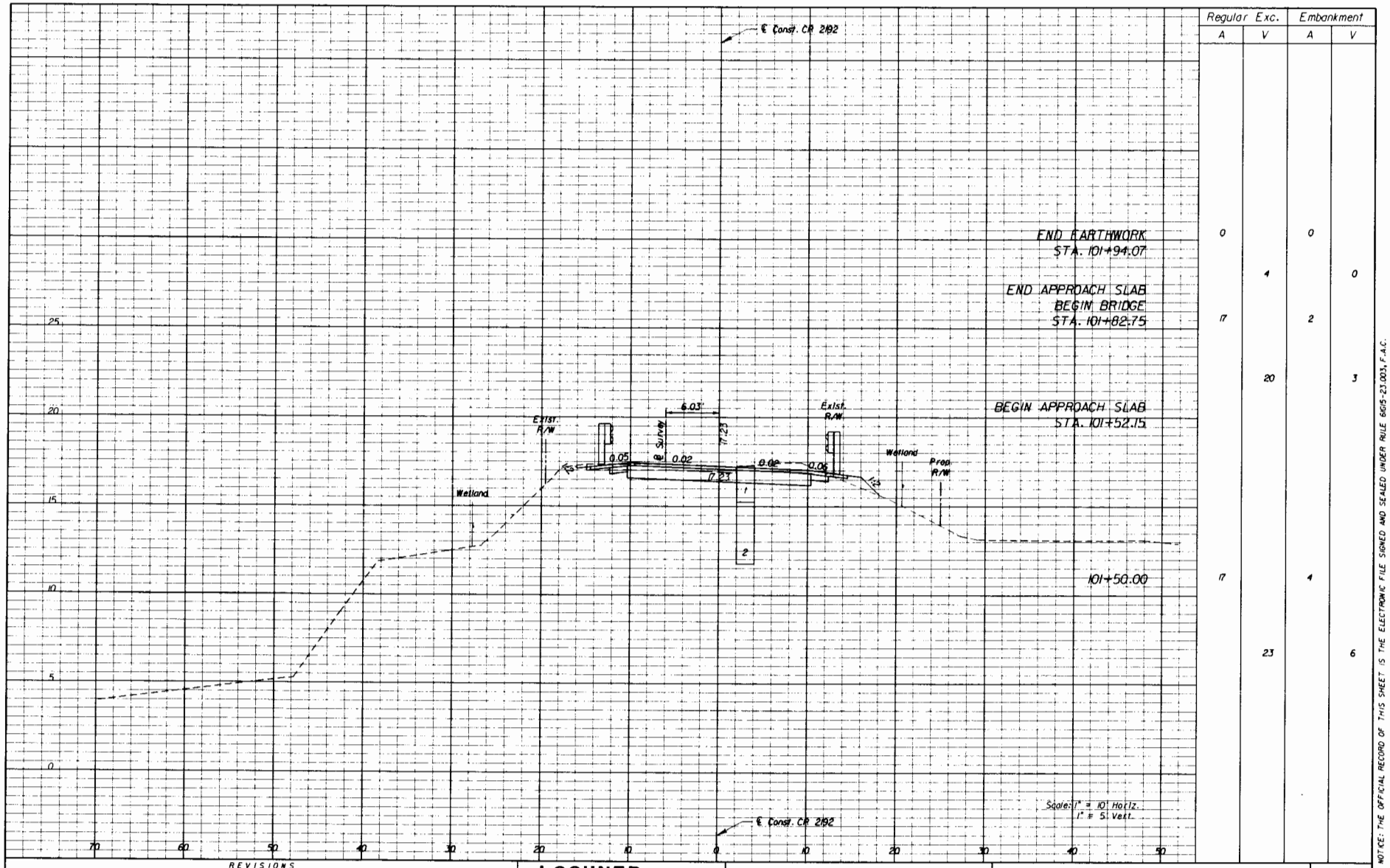

Regular Exc.		Embankment	
A	V	A	V
0		0	
	4		0
17		2	
	20		3
17		4	
	23		6

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47716

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

CROSS SECTIONS

SHEET NO. 19

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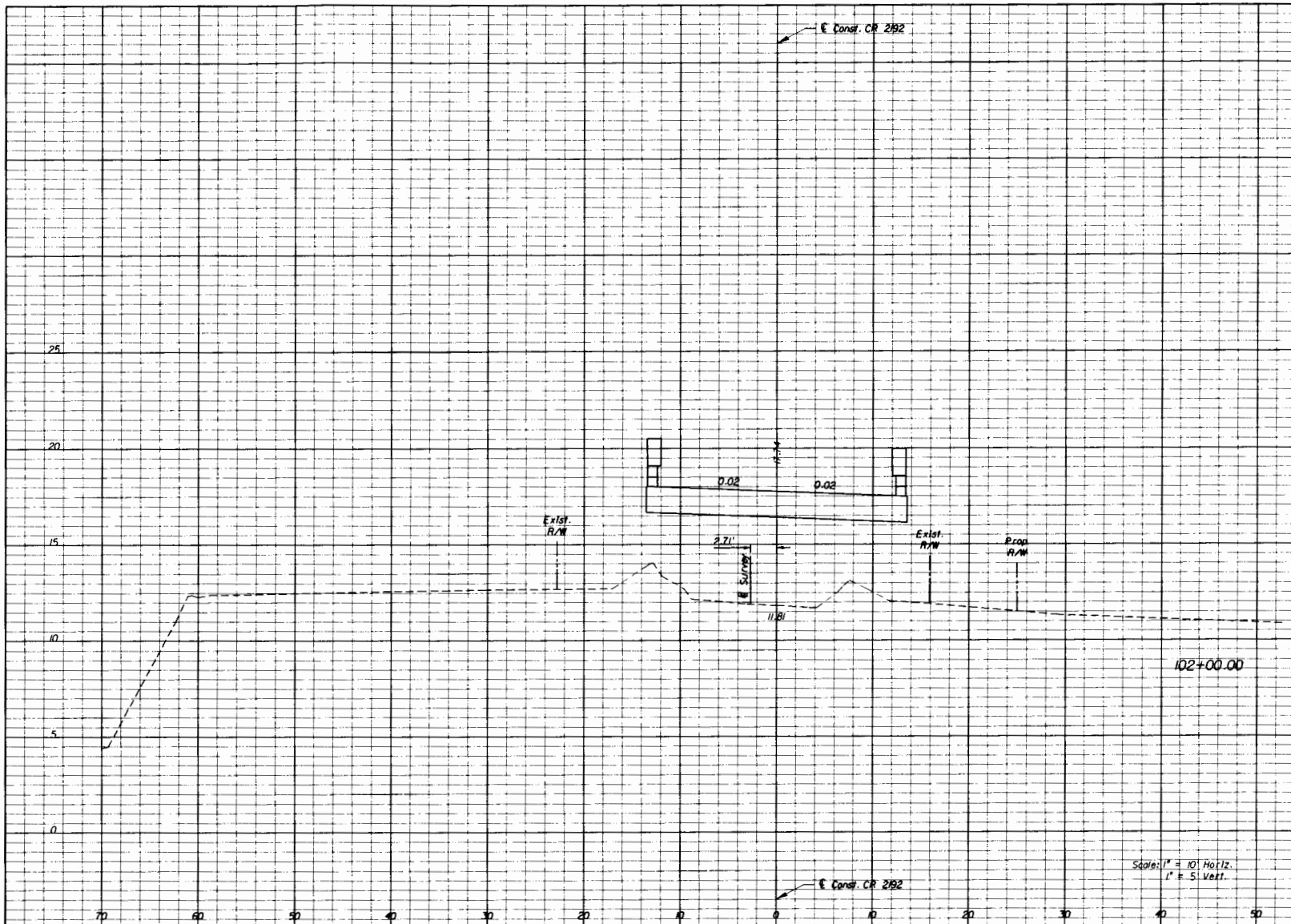

Regular Exc.		Embankment	
A	V	A	V

REVISIONS			
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

CROSS SECTIONS

SHEET NO. 20

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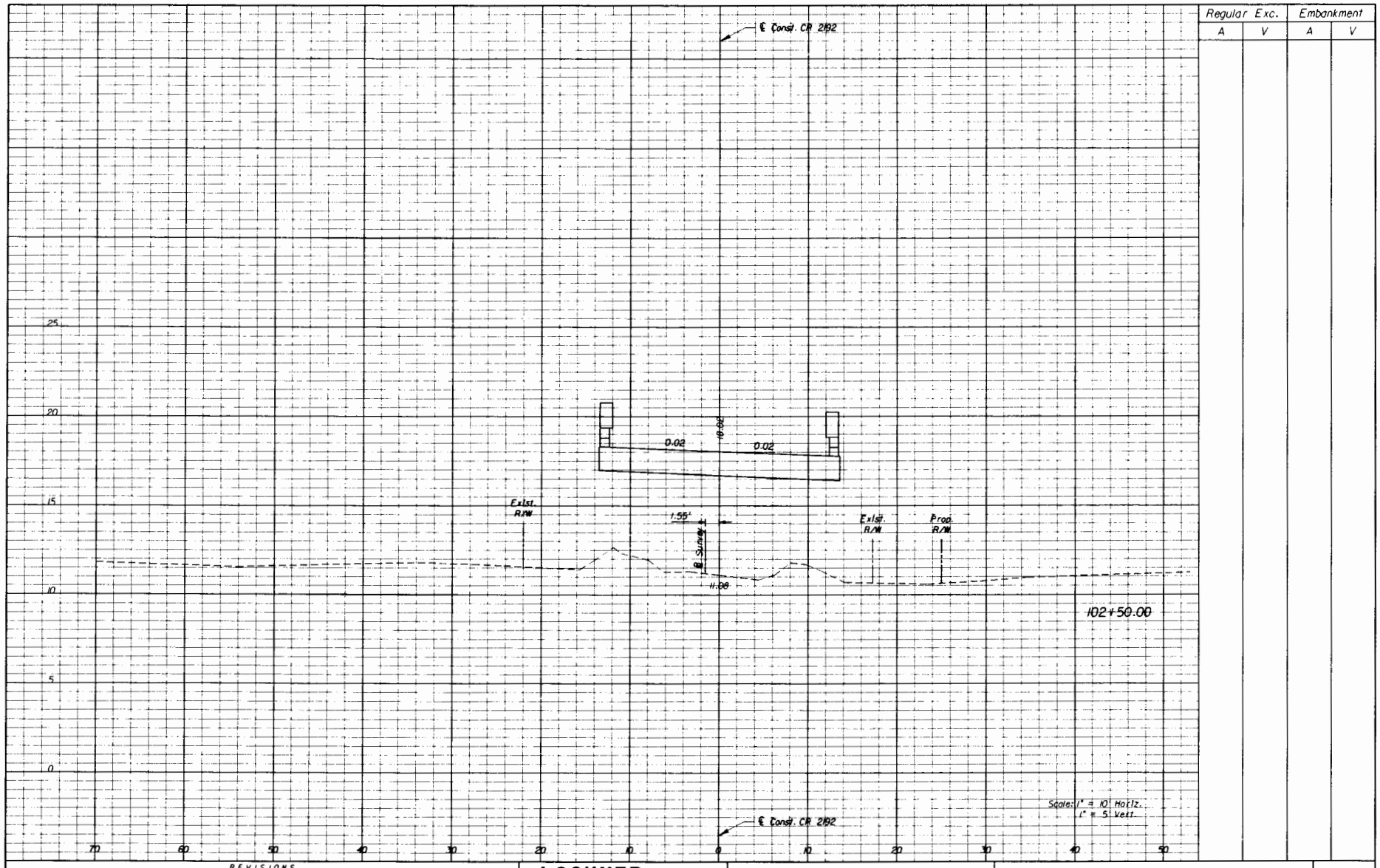

Regular Exc.		Embankment	
A	V	A	V

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Page A21 of 85

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2548 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

CROSS SECTIONS

SHEET NO. 21

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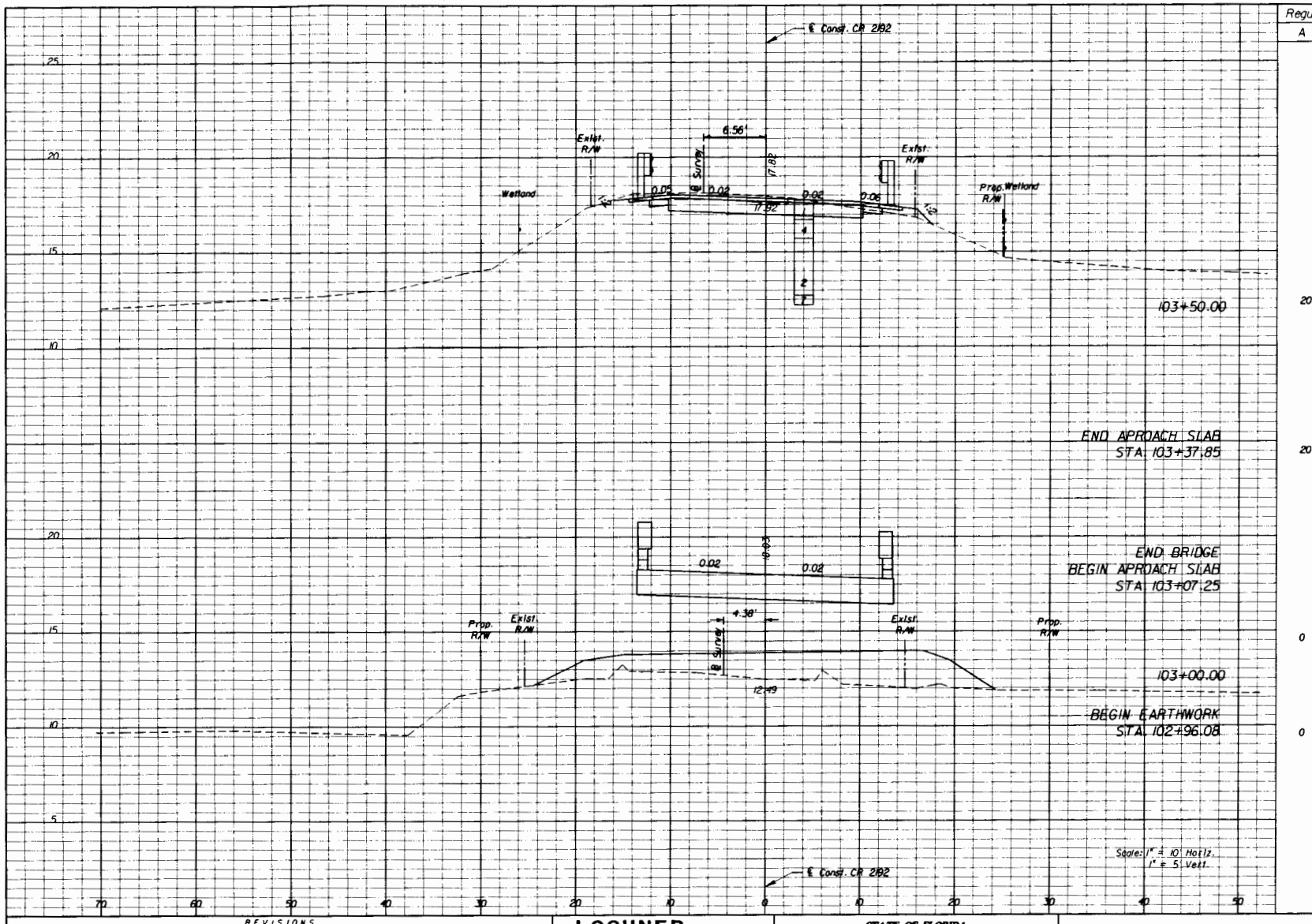

Regular Exc. A	Regular Exc. V	Embankment A	Embankment V
20		2	
	9		8
20		2	
	3		8
0		58	
	0		4
0		0	

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

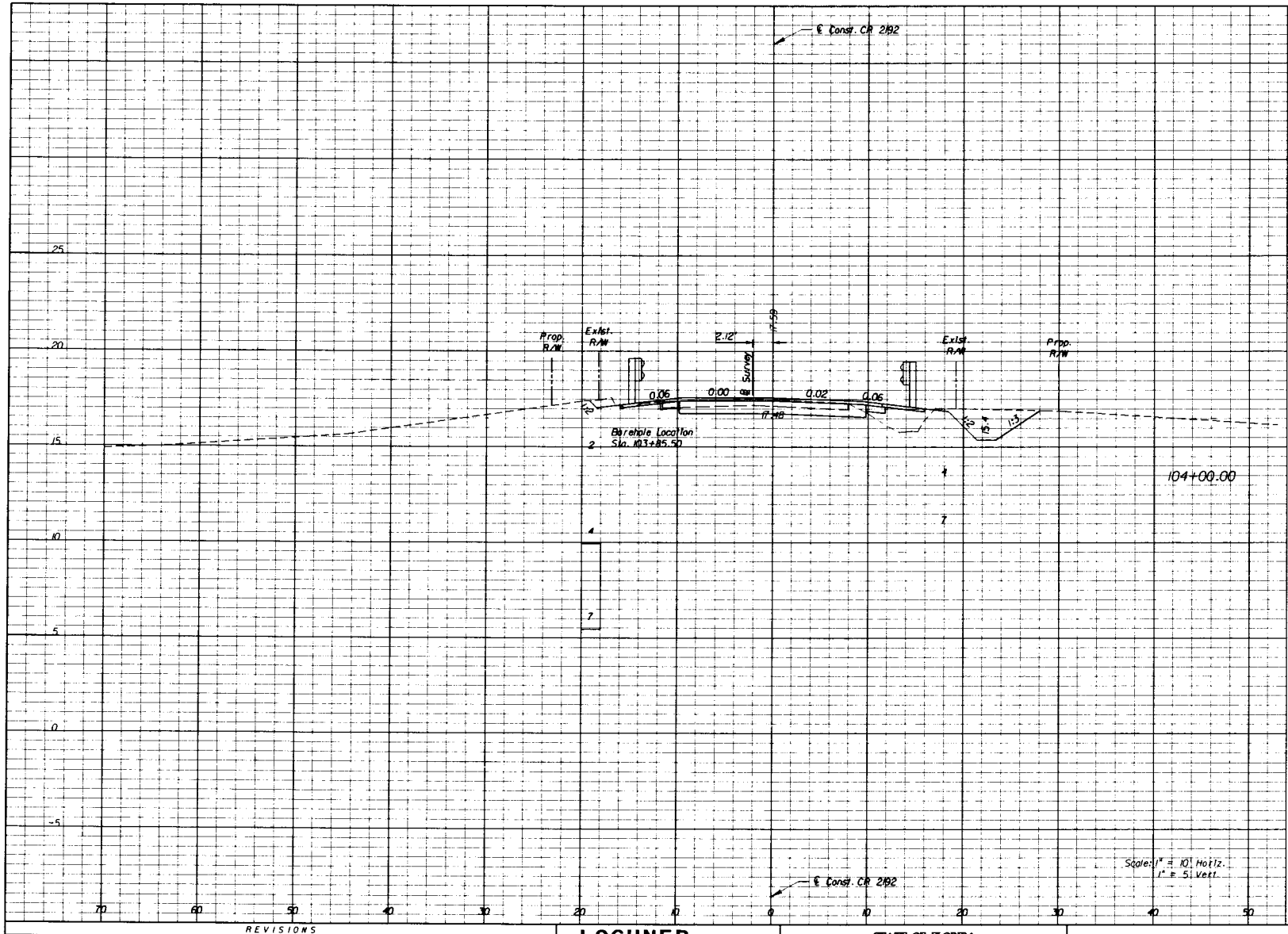
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

CROSS SECTIONS

SHEET NO. 22

cbarwick 12/20/2011 9:59:40 AM



Regular Exc.		Embankment	
A	V	A	V
25	42	5	6

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2140 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

CROSS SECTIONS

SHEET NO. 23

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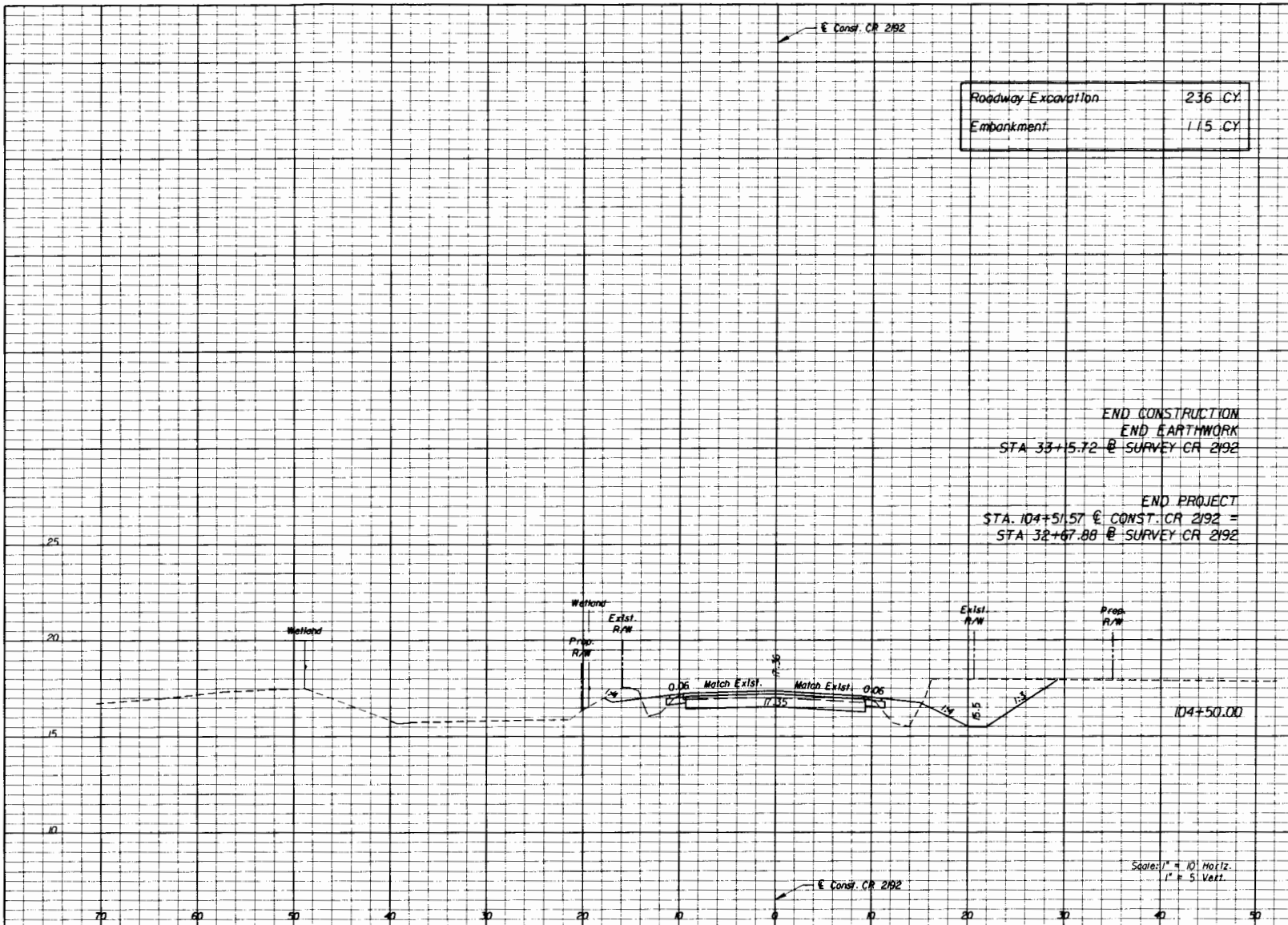

Regular Exc.		Embankment	
A	V	A	V
0		0	
	37		6
41		6	
	61		11

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

CROSS SECTIONS

SHEET NO. 24

cbarwick 12/20/2011 9:59:42 AM H:\Projects_XM\3509\413491152011\roadway\rdxsrc01.DGN

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 LINEP
- ___ SEDIMENT TRAPS/BASINS
- ___ STORM INLET SEDIMENT TRAP
- ___ CURBS AND GUTTERS
- ___ STORM SEWERS
- ___ VELOCITY CONTROL DEVICES
- _X_ TURBIDITY BARRIER
- ___ RIP RAP

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

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

NWFWMD 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.

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Page A25 of 85

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2140 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH # 894
NATALIE BETZ ZIERDEN, P.E. # 64073

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

STORMWATER POLLUTION PREVENTION PLAN

SHEET NO. 25

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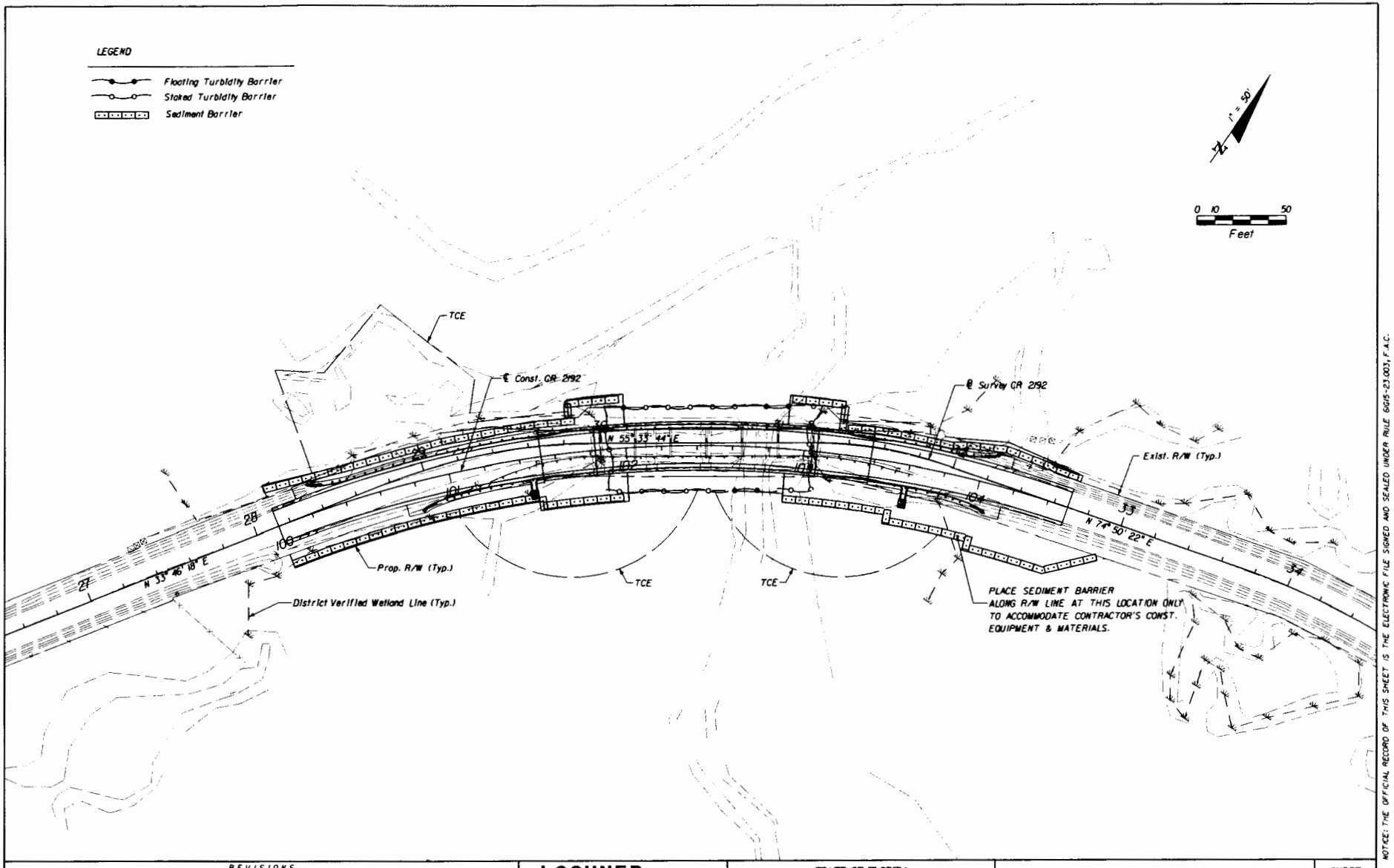

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
NATALIE BETZ ZIERDEN, P.E. # 54072

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

STORMWATER POLLUTION PREVENTION PLAN

SHEET NO. 26

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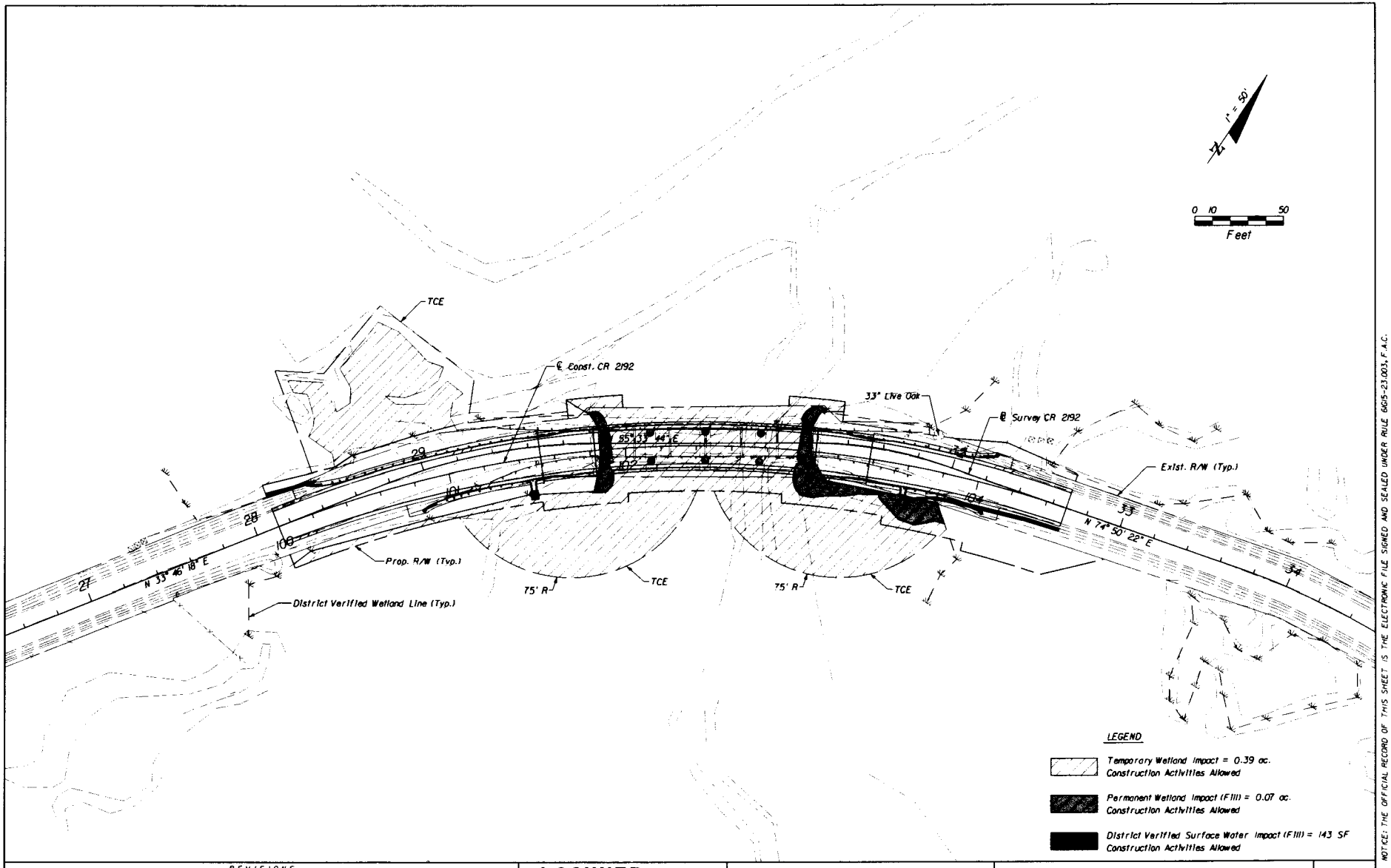

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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

WETLAND IMPACTS

SHEET NO. 27

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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.

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
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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

TRAFFIC CONTROL PLAN

SHEET NO. 28

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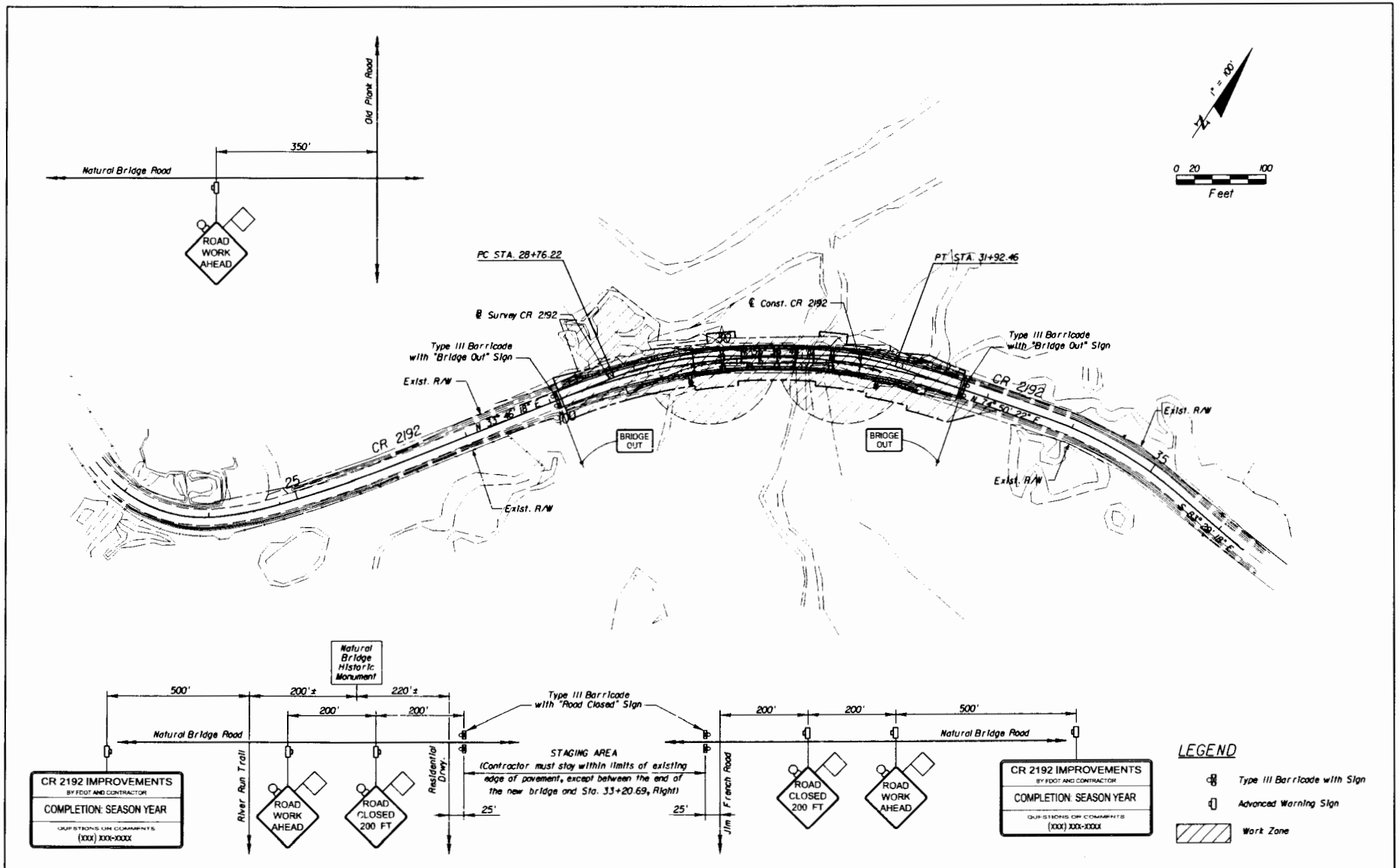

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2040 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E # 47736

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

TRAFFIC CONTROL PLAN

SHEET NO. 29

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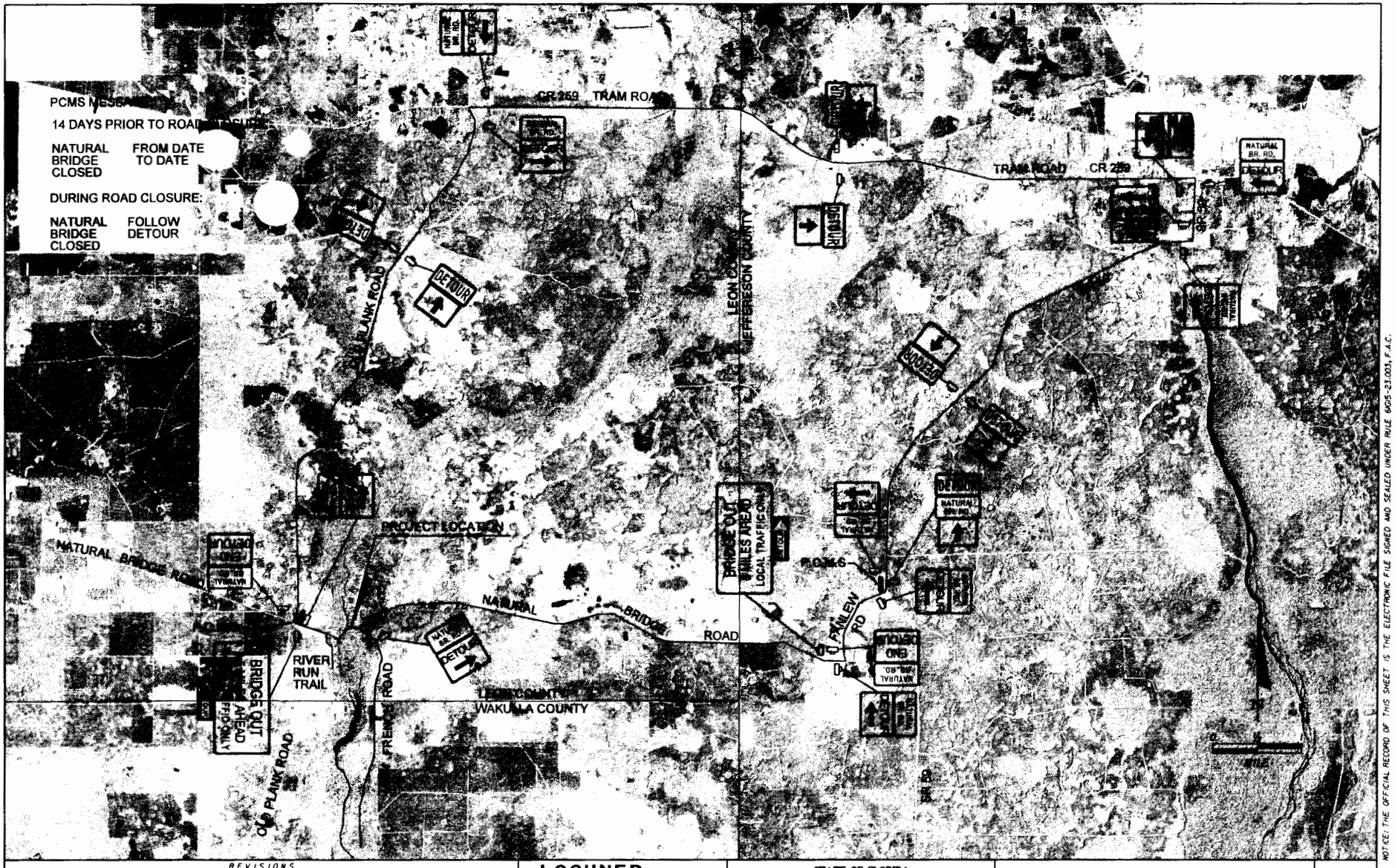

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

TRAFFIC CONTROL PLAN

SHEET NO. 30

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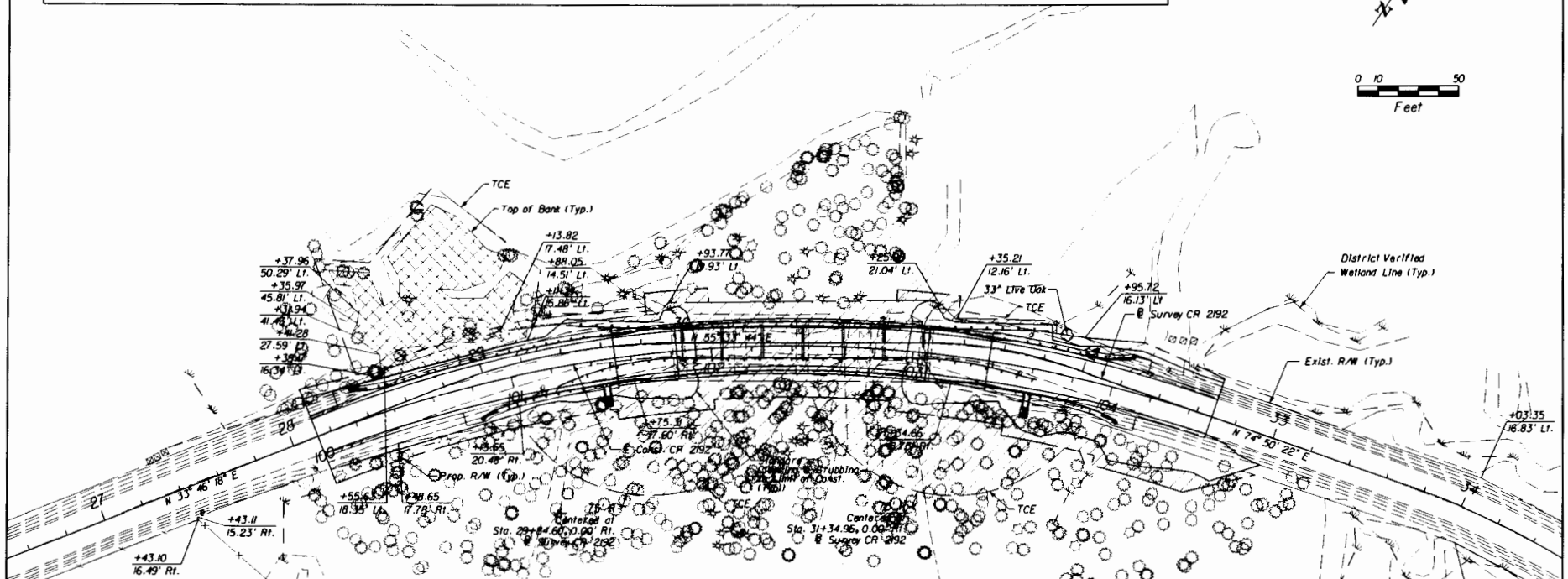
Temporary Construction Easement Control Points*																			
Point	Sta.	Offset	Side	Point	Sta.	Offset	Side	Point	Sta.	Offset	Side	Point	Sta.	Offset	Side	Point	Sta.	Offset	Side
TCE01	100+27.44	21.08	Lt.	TCE04	100+85.37	100.73	Lt.	TCE07	101+00.38	25.00	Rt.	TCE10	103+83.91	35.00	Rt.	TCE13	103+66.70	25.47	Lt.
TCE02	100+26.87	82.83	Lt.	TCE05	101+23.58	48.94	Lt.	TCE08	102+40.19	25.00	Rt.	TCE11	101+70.00	23.71	Lt.	TCE14	31+82.42	13.71	Lt.
TCE03	100+49.39	72.57	Lt.	TCE06	101+15.95	25.62	Lt.	TCE09	102+50.34	25.00	Rt.	TCE12	103+20.00	18.83	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:

1. All Exist. R/W control points shown on this sheet are measured from the ℄ Survey CR 2192.
2. Remove existing asphalt turnout located at approx. Sta. 100+65 Lt. Re-grade within limits of existing turnout.
3. Spread Prepared Soil Layer and Performance Turf to top of river bank and within the limits delineated on this sheet.
4. 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
5. 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. 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)

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SELECTIVE CLEARING

SHEET NO. 31

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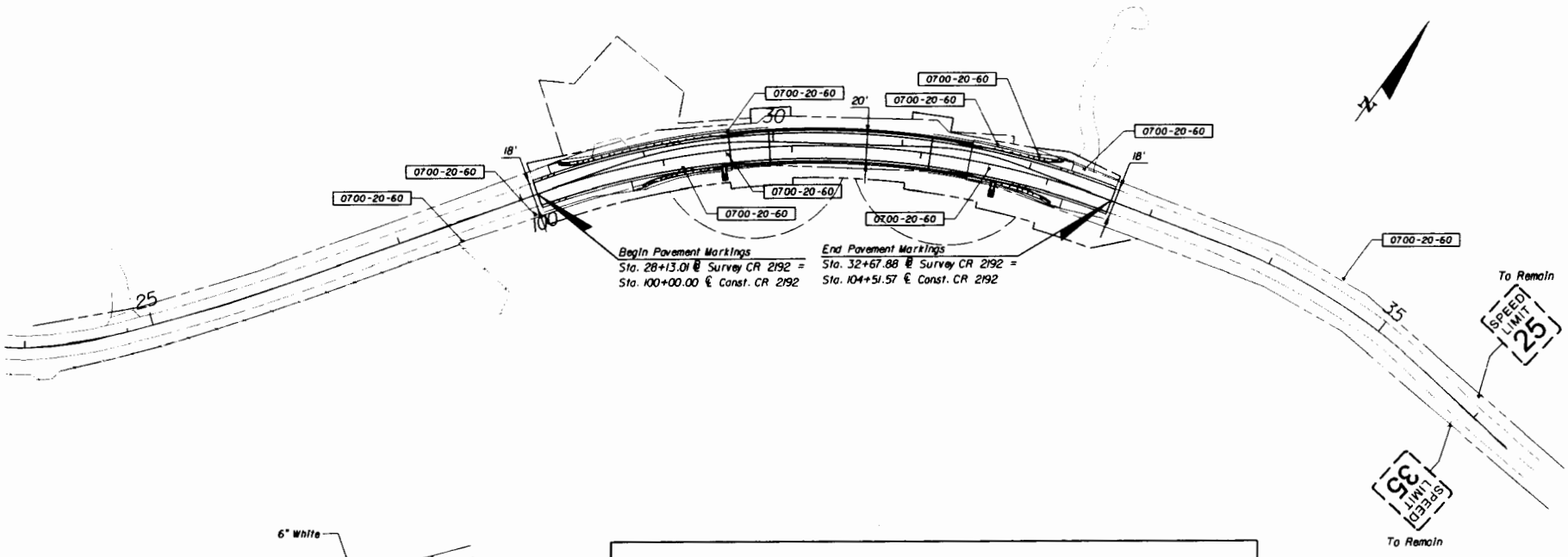

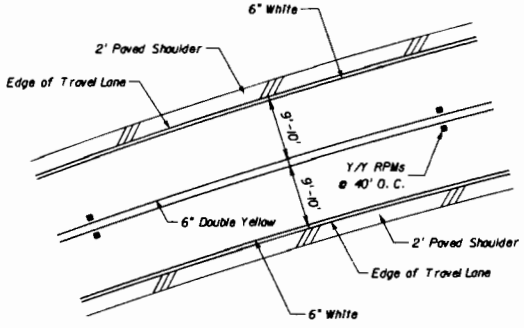

TYPICAL PAVEMENT MARKINGS - PLAN
(N.T.S)

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	GRAND TOTAL PLAN	GRAND TOTAL FINAL	REF. SHEET
0700 20 60	SINGLE POST SIGN (REMOVE)	AS	10		
#	REFLECTIVE PAVEMENT MARKER (YELLOW/YELLOW)	EA	24		
#	TRAFFIC STRIPE SOLID (WHITE) (6")	NM	0.171		
#	TRAFFIC STRIPE SOLID (YELLOW) (6")	NM	0.171		

THESE QUANTITIES ARE PAID FOR UNDER PAINTED PAVEMENT MARKINGS (FINAL SURFACE). LUMP SUM - ITEM NO. 710-90. THE QUANTITIES SHOWN ARE FOR ONE APPLICATION; SEE SPECIFICATION 710 FOR THE NUMBER OF APPLICATIONS REQUIRED.

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
MICHAEL J. WOODARD, P.E. # 47736

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SIGNING & MARKING DETAILS

SHEET NO. 32

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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 GROUNDCOVER, 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.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JUDITH M. HALDEN, P.E. P.E. NO.: 43976
Environmental & Geotechnical Specialists Inc.
EGS 3154 Eliza Road
Tallahassee, Florida 32308
Office: (850) 386-1253
Fax: (850) 385-8050
Certificate of Authorization: 6222

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

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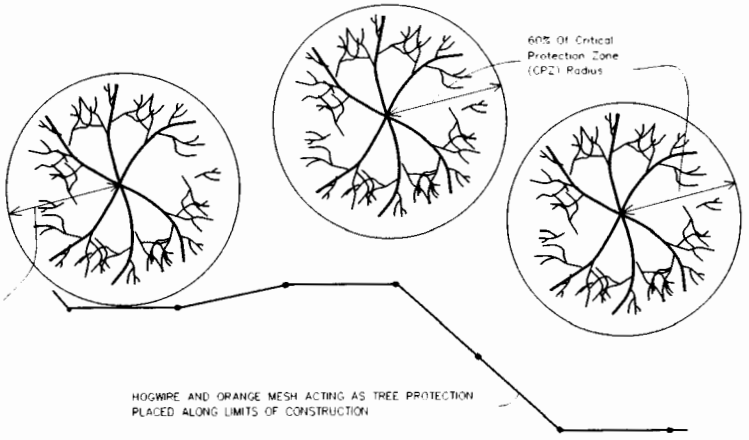
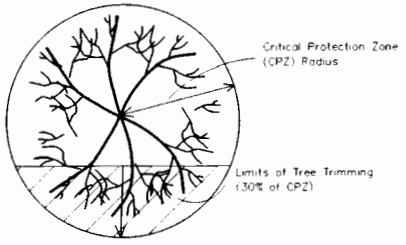


TREES PARTIALLY ON RIGHT OF WAY

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).



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

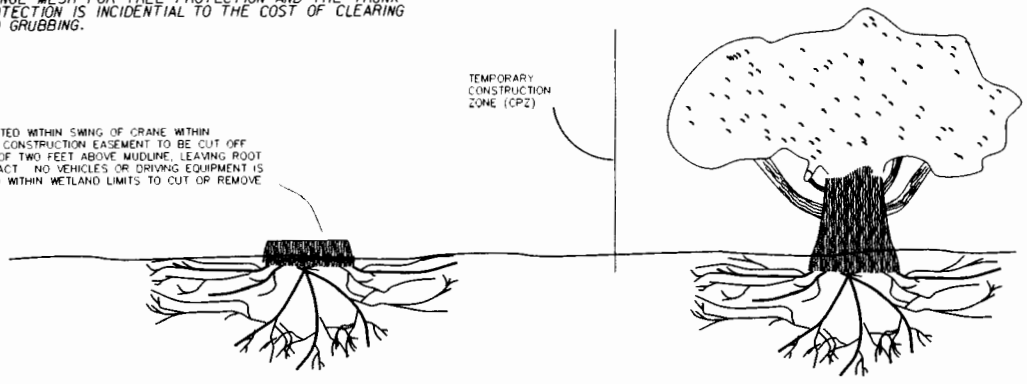
CYPRESS

BARRIER FOR PROTECTED TREE PROTECTION & TRUNK PROTECTION

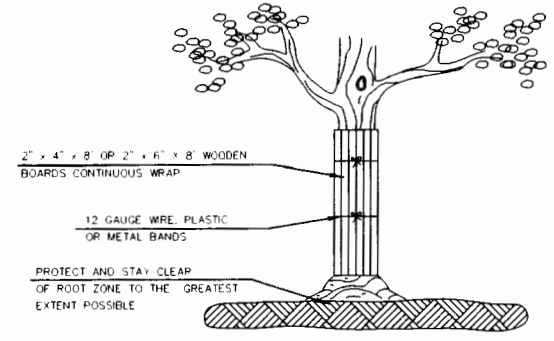
INCLUDES 1,200 L.F. OF HOGWIRE AND 1,200 L.F. OF ORANGE MESH.

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 INCIDENTIAL TO THE COST OF CLEARING AND GRUBBING.



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



TRUNK PROTECTION DETAIL FOR TREE TAG No. 690

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JUDITH M. HAYDEN, P.E. P.E. NO.: 43976
Environmental & Geotechnical Specialists Inc.
EGS
3154 Eliza Road
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Certificate of Authorization: 6222

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

TREE SURVEY

SHEET NO. TR-2

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NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 6G15-23.003, F.A.C.

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
	LAUREL OAK	QUERCUS LAUR FOL A	3	28	28+02.03	8.2 LT	YES			YES	0	
2	WATER OAK	QUERCUS N GRA	8	20	28+03.38	9. LT	YES			YES	4	
3	CHESNUT OAK	CASTANEA DENTATA	3	28	28+06.4	9.5 LT	YES			YES	0	
4	LAUREL OAK	QUERCUS LAUR FOL A	8	20	28+10.06	9.0 LT	YES			YES	4	
5	LAUREL OAK	QUERCUS LAUR FOL A	3	28	28+10.53	8.7 LT	YES			YES	0	
6	WATER OAK	QUERCUS N GRA	9	12	27+98.79	27.7 LT	YES					YES
7	LAUREL OAK	QUERCUS LAUR FOL A	3	28	27+97.5	30.7 LT	YES					YES
8	HACKBERRY	CELT S OCC DENTAL S	2	3	28+05. 3	36.9 LT	YES					YES
9	WATER OAK	QUERCUS N GRA	6	3	28+ 4.24	34.3 LT	YES					YES
10	WATER OAK	QUERCUS N GRA	4	50	29+ 5.75	36.6 LT	YES					YES
	WATER OAK	QUERCUS N GRA	3	28	28+ 5.4	38.8 LT	YES					YES
12	HACKBERRY	CELT S OCC DENTAL S	3	28	28+ 9.88	40.7 LT	YES					YES
13	HACKBERRY	CELT S OCC DENTAL S	2	3	28+2 .59	43.3 LT	YES					YES
14	BLACK GUM	NYSSA SYLVATICA var	5	707	28+00.49	54. LT	YES					YES
15	HACKBERRY	CELT S OCC DENTAL S	6	79	28+ 9.04	59.2 LT	YES					YES
16	LAUREL OAK	QUERCUS LAUR FOL A	3	53	28+ 4.88	58.2 LT	YES					YES
17	HACKBERRY	CELT S OCC DENTAL S	6	3	28+2 .49	64.5 LT	YES					YES
18	HACKBERRY	CELT S OCC DENTAL S	5	79	29+32.77	59.9 LT	YES					YES
19	HACKBERRY	CELT S OCC DENTAL S	5	79	29+44.54	77.8 LT	YES				2	
20	LIVE OAK	QUERCUS VIRGINIANA	30	2827	28+45.90	34.2 LT	YES	YES				YES
21	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	8	3 4	28+45.90	88.2 LT	YES				4	
22	WILLOW	SALIX SPP.	3	28	28+46.4	6 .9 LT	YES				0	
23	HACKBERRY	CELT S OCC DENTAL S	4	50	28+54.36	7 .5 LT	YES			YES	2	
24	WATER OAK	QUERCUS N GRA	2	3	28+57. 7	69.9 LT	YES			YES	0	
25	HACKBERRY	CELT S OCC DENTAL S	2	3	28+63.76	66.8 LT	YES			YES	0	
26	WATER OAK	QUERCUS N GRA	2	452	28+36.36	4 .4 LT	YES					YES
27	TALLOW	SAPIUM SEBIFERUM	4	50	28+36. 8	36.3 LT	YES					YES
28	HICKORY	CARYA SPP.	4	50	28+38.45	24.6 LT	YES			YES	2	
29	BLACKGUM	NYSSA SYLVATICA var	5	79	28+ 5.37	3.6 LT	YES			YES	2	
30	WATER OAK	QUERCUS N GRA	7	54	28+ 7.35	8.9 LT	YES			YES	4	
3	WATER OAK	QUERCUS N GRA	6	3	28+ 9.59	25.3 LT	YES			YES	2	
32	LAUREL	QUERCUS LAUR FOL A	5	79	28+24.68	22.7 LT	YES			YES	2	
33	LAUREL OAK	QUERCUS LAUR FOL A	9	20	29+34.6	7.7 LT	YES			YES	4	
34	LAUREL OAK	QUERCUS LAUR FOL A	9	254	28+38.06	7.3 LT	YES			YES	4	
35	CHESNUT OAK	CASTANEA DENTATA	6	3	28+43.28	25 LT	YES				2	
36	HACKBERRY	CELT S OCC DENTAL S	3	28	23+50.56	9.8 LT	YES			YES	0	
37	HACKBERRY	CELT S OCC DENTAL S	2	3	28+50.94	9.8 LT	YES			YES	0	
38	HACKBERRY	CELT S OCC DENTAL S	4	50	28+51.03	8.9 LT	YES			YES	2	
39	CHERRY	PRUNUS CAROLINIANA	9	254	28+5 .80	8.6 LT	YES			YES	4	
40	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	17	908	28+65.44	20.4 LT	YES			YES	6	
4	HACKBERRY	CELT S OCC DENTAL S	7	54	28+49. 3	31.2 LT	YES			YES	4	
42	WATER OAK	QUERCUS N GRA	9	34	28+72.4	38.8 LT	YES			YES	8	
43	CYPRESS	TAXODIUM SPP.	27	2290	28+78.97	16.4 LT	YES			YES	0	
44	HACKBERRY	CELT S OCC DENTAL S	9	20	28+94. 7	64.3 LT	YES			YES	4	
45	MAPLE	ACER SPP.		380	28+95. 5	87.7 LT	YES			YES	4	
46	MAPLE	ACER SPP.	3	28	28+94.96	88.6 LT	YES			YES	0	
47	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	2	785	29+23.74	53.6 LT	YES			YES	8	
48	HACKBERRY	CELT S OCC DENTAL S	8	20	29+25.78	53.4 LT	YES			YES	4	
49	HACKBERRY	CELT S OCC DENTAL S	6	4	29+26.8	52.3 LT	YES			YES	2	
50	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	5	707	28+90.49	24.0 LT	YES			YES	6	

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.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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

TREE SURVEY

SHEET NO. TR-3

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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
5	BLACKGUM	NYSSA SYLVATICA var	8	0.8	28+99.42	20.6 LT	YES			YES	6	
52	SWEETGUM (DEAD)	LIQUIDAMBAR STYRACIFLUA	7	908	29+0.9	24.0 LT	DEAD				DEAD	DEAD
53	WATER OAK (DEAD)	QUERCUS NIGRA	20	257	29+.76	6.9 LT	DEAD				DEAD	DEAD
54	HACKBERRY	CELTIS OCCIDENTALIS	2	3	29+23.35	2.8 LT	YES	YES			0	
55	WATER OAK	QUERCUS NIGRA	9	254	29+32.82	23.5 LT	YES	YES			4	
56	HICKORY	CARYA SPP.	5	707	29+29.07	29.5 LT	YES	YES			6	
57	SHORT LEAF PINE	PINUS SPP.	22	52	29+34.8	30.0 LT	YES	YES			8	
58	LAUREL OAK	QUERCUS LAURIFOLIA	0	3.4	29+36.64	27.6 LT	YES	YES			4	
59	WATER OAK	QUERCUS NIGRA	4	50	29+36.62	22.2 LT	YES	YES			2	
60	WATER OAK	QUERCUS NIGRA	6	3	29+36.02	20.8 LT	YES	YES			2	
6	PERSIMMON	DIOSPYROS VIRGINIANA		380	29+46.64	32.0 LT	YES					YES
62	BLACKGUM	NYSSA SYLVATICA var	9	34	29+48.	3.0 LT	YES					YES
63	HACKBERRY	CELTIS OCCIDENTALIS	6	3	29+49.58	27.2 LT	YES					YES
64	WATER OAK	QUERCUS NIGRA	2	3	29+5.88	26.4 LT	YES					YES
65	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	5	707	29+60.58	9.7 LT	YES	YES			6	
66	LAUREL OAK	QUERCUS LAURIFOLIA	8	20	29+52.64	3.2 LT	YES					YES
67	CYPRESS	TAXODIUM SPP.	2	452	29+66.22	33.8 LT	YES					YES
68	CYPRESS	TAXODIUM SPP.	6	3	29+72.59	25.5 LT	YES			YES	2	
69	LAUREL OAK	QUERCUS LAURIFOLIA	22	52	29+76.52	24.8 LT	YES			YES	8	
70	LAUREL OAK	QUERCUS LAURIFOLIA	2	385	29+80.32	25. LT	YES			YES	8	
7	PARSLEY HAWTHORNE	CRATAEGUS MARSHALLII	2	3	29+78.97	4.2 LT	YES					YES
72	PARSLEY HAWTHORNE	CRATAEGUS MARSHALLII	3	28	29+92.99	39.7 LT	YES					YES
73	CYPRESS	TAXODIUM SPP.	20	257	29+90.54	42.0 LT	YES					YES
74	CYPRESS	TAXODIUM SPP.	7	54	29+98.00	44.3 LT	YES					YES
75	HACKBERRY	CELTIS OCCIDENTALIS	6	3	29+90.72	49.7 LT	YES					YES
76	LAUREL OAK	QUERCUS LAURIFOLIA	29	2642	30+05.57	37.8 LT	YES	YES				YES
77	HACKBERRY	CELTIS OCCIDENTALIS	6	3	30+07.40	38.6 LT	YES					YES
78	HACKBERRY	CELTIS OCCIDENTALIS	5	79	30+07.7	38. LT	YES					YES
79	SPRUCE PINE	PINUS GLABRA	0	3.4	30+05.34	27. LT	YES			YES	4	
80	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	8	0.8	30+24.80	27.2 LT	YES	YES				YES
8	HACKBERRY	CELTIS OCCIDENTALIS	2	3	30+28.8	32. LT	YES					YES
82	HACKBERRY	CELTIS OCCIDENTALIS	6	3	30+3.77	27.2 LT	YES					YES
83	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	6	3	30+29.49	25.2 LT	YES					YES
84	HACKBERRY	CELTIS OCCIDENTALIS	5	79	30+37.64	25.4 LT	YES			YES	2	
85	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	9	254	30+43.44	9.9 LT	YES			YES	4	
86	HACKBERRY	CELTIS OCCIDENTALIS	6	3	30+45.28	23.3 LT	YES			YES	2	
87	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	5	79	30+46.92	23.9 LT	YES			YES	2	
88	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	7	54	30+58.0	24.2 LT	YES			YES	4	
89	CYPRESS	TAXODIUM SPP.	3	30.9	30+54.72	31.6 LT	YES	YES		YES	6	
90	HACKBERRY	CELTIS OCCIDENTALIS	6	3	30+60.32	34.8 LT	YES					YES
9	CYPRESS	TAXODIUM SPP.	0	3.4	30+6.9	45.3 LT	YES					YES
92	CYPRESS	TAXODIUM SPP.	7	54	30+69.0	22.0 LT	YES			YES	4	
93	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	2	452	30+80.9	20.0 LT	YES			YES	4	
94	CYPRESS	TAXODIUM SPP.	0	3.4	30+87.65	22.6 LT	YES			YES	4	
95	BLACKGUM	NYSSA SYLVATICA var	2	452	30+75.96	3.3 LT	YES					YES
96	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	3	53	30+76.45	32.7 LT	YES					YES
97	HACKBERRY	CELTIS OCCIDENTALIS	0	3.4	30+78.30	4.7 LT	YES					YES
98	BLACKGUM	NYSSA SYLVATICA var	8	0.8	30+79.3	44.4 LT	YES					YES
99	LAUREL OAK	QUERCUS LAURIFOLIA	2	3	30+73.3	42.4 LT	YES					YES
100	HACKBERRY	CELTIS OCCIDENTALIS	3	28	30+69.	47.3 LT	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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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 2192	LEON	413491-1-52-01

TREE SURVEY

SHEET NO. TR-4

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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
01	LAUREL OAK	QUERCUS LAUR FOL A	8	201	30+52.7	56.4 LT	YES			YES	4	
02	HACKBERRY	CELT S OCC DENTAL S	7	51	30+48.8	55.8 LT	YES			YES	4	
03	HACKBERRY	CELT S OCC DENTAL S	4	50	30+50.39	12. LT	YES			YES	2	
04	SHORTLEAF P INE	P NUS EC- NATA	26	2 24	30+34.69	48. LT	YES			YES	0	
05	HACKBERRY	CELT S OCC DENTAL S	2	3	30+32.5	43.3 LT	ES			YES	0	
06	HACKBERRY	CELT S OCC DENTAL S	5	79	30+26.84	42.3 LT	YES			YES	2	
07	BLACKGUM	NYSSA SYLVAT CA var	8	201	30+28.48	45.0 LT	YES			YES	4	
08	CYPRESS	TAXOD UM SPP.	13	53	30+27.99	5 .8 LT	YES			ES	6	
09	SWEETGUM	L QU DAMBAR ST RAC FLUA	13	53	30+25.56	50.9 LT	YES			YES	6	
10	HACKBERRY	CELT S OCC DENTAL S	2	3	30+ 2.8	55.6 LT	YES			YES	0	
11	HACKBERRY	CELT S OCC DENTAL S	2	3	30+ 9.52	59.4 LT	YES			YES	0	
12	HACKBERRY	CELT S OCC DENTAL S	2	3	30+ 7.38	63.4 LT	YES			YES	0	
13	SWEETGUM	L QU DAMBAR ST RAC FLUA	9	254	30+ 5.6	65.7 LT	YES			YES	4	
14	BLACKGUM	NYSSA SYLVAT CA var	13	53	30+2 . 1	65.7 LT	ES			YES	6	
15	HACKBERRY	CELT S OCC DENTAL S	7	54	30+22.03	64.7 LT	YES			YES	4	
16	MAPLE	ACER SPP.	10	7 4	30+26.43	63.5 LT	YES			YES	4	
17	LAUREL OAK	QUERCUS LAUR FOL A	5	79	30+29.57	69.2 LT	YES			YES	2	
18	LAUREL	QUERCUS LAUR FOL A	13	28	30+30.27	72.2 LT	YES			YES	0	
19	LAUREL OAK	QUERCUS LAUR FOL A	9	254	30+4 .96	77.3 LT	YES			YES	4	
20	HOLLY	ILEX SPP.	2	3	30+49.64	62.4 LT	YES			YES	0	
21	HACKBERRY	CELT S OCC DENTAL S	4	50	30+57.82	65.2 LT	YES			YES	2	
22	LAUREL OAK	QUERCUS LAUR FOL A	13	28	30+69.94	65. LT	YES			YES	0	
23	LAUREL OAK	QUERCUS LAUR FOL A	13	28	30+7 .	68.4 LT	YES			YES	0	
24	HACKBERRY	CELT S OCC DENTAL S	13	28	30+76. 5	62. LT	YES			YES	0	
25	LAUREL OAK	QUERCUS LAUR FOL A	5	79	30+7 .32	54.3 LT	YES			YES	2	
26	HACKBERRY	CELT S OCC DENTAL S	2	3	30+83.34	54.8 LT	YES			YES	0	
27	BLACKGUM	NYSSA SYLVAT CA var	13	30 9	30+86.52	54.0 LT	YES			YES	6	
28	CHERRY	PRUNUS CAROL N ANA	13	28	30+87.26	48.3 LT	YES			YES	0	
29	HACKBERRY	CELT S OCC DENTAL S	6	113	30+93.56	45.5 LT	YES			YES	2	
30	SWEETGUM	L QU DAMBAR ST RAC FLUA	9	50	30+98.36	45.2 LT	YES			YES	2	
31	BLACKGUM	NYSSA SYLVAT CA var	33	342	3 +05.76	44.8 LT	YES			YES	6	
32	SWEETGUM	L QU DAMBAR ST RAC FLUA	12	452	3 +07.33	43.4 LT	YES			YES	4	
33	HACKBERRY	CELT S OCC DENTAL S	5	79	3 +07.52	40.2 LT	YES			YES	2	
34	HACKBERRY	CELT S OCC DENTAL S	2	3	30+90.37	53.0 LT	YES			YES	0	
35	WATER OAK	QUERCUS N GRA	15	707	30+98.3	38.0 LT	YES			YES	6	
36	LAUREL OAK	QUERCUS LAUR FOL A	7	54	30+99.87	67.0 LT	ES			YES	4	
37	LAUREL	QUERCUS LAUR FOL A	13	28	3 +02.46	69.7 LT	YES			YES	0	
38	CYPRESS	TAXOD UM SPP.	14	50	3 +09.37	6 .0 LT	YES			YES	2	
39	SWEETGUM	L QU DAMBAR ST RAC FLUA	18	0 8	3 + 0.63	65.7 LT	YES			YES	6	
40	HACKBERRY	CELT S OCC DENTAL S	7	50	3 + 3.95	66.3 LT	YES			YES	2	
41	HACKBERRY	CELT S OCC DENTAL S	2	3	3 +05.88	73.6 LT	YES			YES	0	
42	CHERRY	PRUNUS CAROL N ANA	13	28	3 +06.30	77.2 LT	YES			YES	0	
43	CHERRY	PRUNUS CAROL N ANA	13	28	3 +07.03	77.5 LT	YES			YES	0	
44	SWEETGUM	L QU DAMBAR ST RAC FLUA	13	53	3 +05.95	80. LT	YES			YES	6	
45	BLACKGUM	NYSSA SYLVAT CA var	13	28	3 +04.73	77. LT	YES			YES	0	
46	LAUREL	QUERCUS LAUR FOL A	12	452	3 +0 .47	82.3 LT	YES			YES	4	
47	LAUREL	QUERCUS LAUR FOL A	14	50	3 +07.39	8 .6 LT	YES			YES	2	
48	HACKBERRY	CELT S OCC DENTAL S	12	7	3 +06.37	84.8 LT	YES			YES	0	
49	HACKBERRY	CELT S OCC DENTAL S	13	28	30+99. 7	85.3 LT	YES			YES	0	
50	BLACKGUM	NYSSA SYLVAT CA var	14	50	3 +05.83	9 .4 LT	YES			YES	2	

NOTES:

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*** TREES WHERE BRANCHES OVERHANG LIMITS OF CLEARING

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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

TREE SURVEY

SHEET NO. TR-5

12/20/2011 5:11:09 PM N:\Projects_TM\3979\413491\5201\permits\tcb01.dgn

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

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
5	SWEETGUM	L QU DAMBAR ST RAC FLUA	4	6 6	3 +04.2	93.2 LT	YES					YES
52	CYPRESS	TAXOD UM SPP.	8	20	3 + 3.50	93.6 LT	YES					YES
53	CYPRESS	TAXOD UM SPP.	6	3	3 + 5.23	00.5 LT	YES					YES
54	SWEETGUM	L QU DAMBAR ST RAC FLUA	9	254	3 + 0.07	.4 LT	YES					YES
55	BLACKGUM	N SSA SYLVA CA var	5	79	3 +07.89	.9 LT	YES					YES
56	LAUREL OAK	QUERCUS LAUR FOL A	5	79	3 +03.20	08.3 LT	YES					YES
57	HACKBERRY	CELT S OCC DENTAL S	5	79	30+94.5	95.8 LT	YES					YES
58	WATER OAK	QUERCUS N GRA	8	0 8	30+90.92	00.2 LT	YES					YES
59	LAUREL OAK	QUERCUS LAUR FOL A	3	28	30+85.60	98.2 LT	YES					YES
60	LAUREL OAK	QUERCUS LAUR FOL A	7	54	30+92.22	86. LT	YES					YES
61	LAUREL OAK	QUERCUS LAUR FOL A	4	50	30+9 .8	74.6 LT	YES					YES
62	WATER OAK	QUERCUS N GRA	5	79	30+85.9	68.8 LT	YES					YES
63	LAUREL OAK	QUERCUS LAUR FOL A	6	3	30+79.78	66.8 LT	YES					YES
64	WATER OAK	QUERCUS N GRA	5	79	30+78.39	70.9 LT	YES					YES
65	LAUREL OAK	QUERCUS LAUR FOL A	4	50	30+80.55	95.2 LT	YES					YES
66	SWEETGUM	L QU DAMBAR ST RAC FLUA	2	452	30+79.74	90.6 LT	YES					YES
67	HACKBERRY	CELT S OCC DENTAL S	6	3	30+74.46	85.5 LT	YES					YES
68	HACKBERRY	CELT S OCC DENTAL S	3	28	30+75.90	96.3 LT	YES					YES
69	SWEETGUM	L QU DAMBAR ST RAC FLUA	7	908	30+7 .38	96. LT	YES					YES
70	HACKBERRY	CELT S OCC DENTAL S	4	50	30+70.85	92.5 LT	YES					YES
7	HACKBERRY	CELT S OCC DENTAL S	4	50	30+69.50	92.6 LT	YES					YES
72	HACKBERRY	CELT S OCC DENTAL S	5	79	30+69.8	92.6 LT	YES					YES
73	HACKBERRY	CELT S OCC DENTAL S	6	3	30+70. 2	94.2 LT	YES					YES
74	HACKBERRY	CELT S OCC DENTAL S	5	79	30+6 .70	9 .8 LT	YES					YES
75	HACKBERRY	CELT S OCC DENTAL S	3	28	30+62.26	92.0 LT	YES					YES
76	WATER OAK	QUERCUS N GRA	2	452	30+60.63	87.0 LT	YES					YES
77	HACKBERRY	CELT S OCC DENTAL S	3	28	30+58.06	87. LT	YES					YES
78	PERSIMMON	D OSPYROS V RG N ANA	4	50	30+57. 5	85.9 LT	YES					YES
79	HACKBERRY	CELT S OCC DENTAL S	4	50	30+58.90	8 .2 LT	YES					YES
80	BAY	QUERCUS LAUR FOL A	8	0 8	30+56.79	82.2 LT	YES					YES
8	LAUREL OAK	QUERCUS LAUR FOL A	7	54	30+54.69	78.8 LT	YES					YES
82	HACKBERRY	CELT S OCC DENTAL S	6	3	28+00.83	26.4 RT	YES					YES
83	LAUREL OAK	QUERCUS LAUR FOL A	9	254	28+02.9	30.3 RT	YES					YES
84	LAUREL OAK	QUERCUS LAUR FOL A	0	3 4	28+04.77	36.0 RT	YES					YES
85	LAUREL OAK	QUERCUS LAUR FOL A	4	50	28+00.26	37.6 RT	YES					YES
86	LAUREL OAK	QUERCUS LAUR FOL A	7	54	28-07.30	48.9 RT	YES					YES
87	LAUREL OAK	QUERCUS LAUR FOL A	5	79	28+ .89	54.2 RT	YES					YES
88	HACKBERRY	CELT S OCC DENTAL S	2	3	28+ 2.77	58.9 RT	YES					YES
89	LAUREL OAK	QUERCUS LAUR FOL A	6	3	28- 9.53	6 .0 RT	YES					YES
90	LAUREL OAK	QUERCUS LAUR FOL A	7	54	28-27. 0	65.8 RT	YES					YES
9	BAY	QUERCUS LAUR FOL A	4	50	28+27.47	6 . RT	YES					YES
92	LAUREL OAK	QUERCUS LAUR FOL A	6	3	28-3 .04	56.6 RT	YES					YES
93	HACKBERRY	CELT S OCC DENTAL S	3	28	28+28.4	43.4 RT	YES					YES
94	WATER OAK	QUERCUS N GRA	7	54	28+28. 3	47.7 RT	YES					YES
95	LAUREL OAK	QUERCUS LAUR FOL A	6	3	28- 8.70	38.7 RT	YES					YES
96	LAUREL OAK	QUERCUS LAUR FOL A	7	54	28-20.84	38.7 RT	YES					YES
97	LAUREL OAK	QUERCUS LAUR FOL A	4	50	28+25.68	34.9 RT	YES					YES
98	SPRUCE PINE	P NUS GLABRA	9	254	28+16.53	22.2 RT	YES			YES	4	
99	PARSLEY HAWTHORNE	CRATAEGUS MARSHALL	5	79	28+25. 5	9.5 RT	YES			YES	2	
200	HACKBERRY	CELT S OCC DENTAL S	6	3	28+34.8	23.0 RT	YES	YES		YES	2	

NOTES:

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

TREE SURVEY

SHEET NO. TR-6

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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
20	HACKBERRY	CELT S OCC DENTAL S	3	28	28+35.23	21.9 RT	YES			YES	0	
202	LAUREL OAK	QUERCUS LAUR FOL A	2	3	28+37.32	22.3 RT	YES			YES	0	
203	WATER OAK	QUERCUS N GRA	10	3 4	28+45.68	22.5 RT	YES			YES	4	
204	WATER OAK	QUERCUS N GRA	7	54	28+48.53	25.5 RT	YES			YES	4	
205	WATER OAK	QUERCUS N GRA	8	20	28+5 .	25.0 RT	YES			YES	4	
206	WATER OAK	QUERCUS N GRA	9	20	28+5 .88	33.5 RT	YES					YES
207	HACKBERRY	CELT S OCC DENTAL S	4	50	28+44.37	27.8 RT	YES					YES
208	LAUREL OAK	QUERCUS LAUR FOL A	10	3 4	28+43.82	30.8 RT	YES					YES
209	PERS MMON	DIOSPYROS V RG N ANA	7	28	28+42.64	3 .0 RT	YES					YES
210	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	5	79	28+40.73	34. RT	YES					YES
2	HACKBERRY	CELT S OCC DENTAL S	3	28	28+42.00	38. RT	YES					YES
212	LAUREL OAK	QUERCUS LAUR FOL A	6	3	28+42.66	39.4 RT	YES					YES
213	HACKBERRY	CELT S OCC DENTAL S	8	20	28+45.04	45.6 RT	YES					YES
214	HACKBERRY	CELT S OCC DENTAL S	3	28	28+37.85	38.6 RT	YES					YES
215	HACKBERRY	CELT S OCC DENTAL S	3	28	28+35.03	36. RT	YES					YES
216	BLACKGUM	NYSSA SYLVAT CA VAR	8	20	28+32.37	36.2 RT	YES					YES
217	MAPLE	ACER SPE.	4	6 6	28+30.87	37. RT	YES					YES
218	LAUREL OAK	QUERCUS LAUR FOL A	3	93	28+38.0	62.7 RT	YES					YES
219	HACKBERRY	CELT S OCC DENTAL S	1	50	28+33.95	69.4 RT	YES					YES
220	WATER OAK	QUERCUS N GRA	10	3 4	28+35.38	72.2 RT	YES					YES
22	WATER OAK	QUERCUS N GRA	6	707	28+37.87	78.3 RT	YES					YES
222	LAUREL OAK	QUERCUS LAUR FOL A	3	28	28+5 .78	74. RT	YES					YES
223	HACKBERRY	CELT S OCC DENTAL S	3	28	28+59.50	83.6 RT	YES					YES
224	HACKBERRY	CELT S OCC DENTAL S	2	3	28+6 .69	77.5 RT	YES					YES
225	WATER OAK	QUERCUS N GRA	7	54	28+62.35	62.9 RT	YES					YES
226	WATER OAK	QUERCUS N GRA	4	50	28+69.56	38.6 RT	YES					YES
227	HOLLY	ILEX SPP.	4	50	28+6 . 9	6 .2 RT	YES					YES
228	WATER OAK	QUERCUS N GRA	3	28	28+50. 5	57. RT	YES					YES
229	HACKBERRY	CELT S OCC DENTAL S	2	3	28+40.35	48.0 RT	YES					YES
230	HACKBERRY	CELT S OCC DENTAL S	4	50	28+39.77	39.2 RT	YES					YES
23	HACKBERRY	CELT S OCC DENTAL S	3	28	28+54. 4	38.9 RT	YES					YES
232	LAUREL OAK	QUERCUS LAUR FOL A	3	28	28+65.30	45.0 RT	YES					YES
233	WATER OAK	QUERCUS N GRA	12	452	28+65.0	56.3 RT	YES					YES
234	HACKBERRY	CELT S OCC DENTAL S	3	28	28+90.20	57.4 RT	YES					YES
235	HACKBERRY	CELT S OCC DENTAL S	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 N GRA	21	662	28+73.08	29.9 RT	YES			YES	8	
238	HACKBERRY	CELT S OCC DENTAL S	5	79	28+88.00	32.0 RT	YES					YES
239	HACKBERRY	CELT S OCC DENTAL S	4	50	28+92.43	33.2 RT	YES					YES
240	HACKBERRY	CELT S OCC DENTAL S	7	54	28+36.04	40.0 RT	YES					YES
24	HACKBERRY	CELT S OCC DENTAL S	6	3	29+97.70	30.6 RT	YES			YES	2	
242	PARSLEY HAWT-JANE	CRATAEGUS MARSHALL	3	28	29+95. 6	27.2 RT	YES			YES	0	
243	HACKBERRY	CELT S OCC DENTAL S	4	50	29+14. 5	32.8 RT	YES	YES			2	
244	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	9	34	29+97.94	28.8 RT	YES			YES	8	
245	WATER OAK	QUERCUS N GRA	7	54	29+ 9.57	27.4 RT	YES			YES	4	
246	HACKBERRY	CELT S OCC DENTAL S	7	54	29+28.67	22.6 RT	YES			YES	4	
247	HACKBERRY	CELT S OCC DENTAL S	6	79	29+26.52	30. RT	YES			YES	2	
248	WATER OAK	QUERCUS N GRA	4	50	29+32.05	37.9 RT	YES		YES		2	
249	HACKBERRY	CELT S OCC DENTAL S	4	50	29+30.9	4 . RT	YES		YES		2	
250	OAK (DEAD)	QUERCUS ALBA	8	20	29+ 5.47	47.6 RT	DEAD				DEAD	DEAD

NOTES:

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

TREE SURVEY

SHEET NO. TR-7

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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
25	HACKBERRY	CELT S OCC DENTAL S	3	28	29+ .94	45.0 RT	YES					YES
252	HACKBERRY	CELT S OCC DENTAL S	4	50	28+96.75	5 .8 RT	YES					YES
253	LAUREL OAK	QUERCUS LAUR FOL A	7	54	29+00.86	60.0 RT	YES					YES
254	WATER OAK	QUERCUS N GRA	2	452	29+05.99	65.2 RT	YES					YES
255	WATER OAK	QUERCUS N GRA	5	79	28+89.70	63.7 RT	YES					YES
256	HACKBERRY	CELT S OCC DENTAL S	2	3	28+9 .9	69.9 RT	YES					YES
257	HACKBERRY	CELT S OCC DENTAL S	6	3	28+90.97	70.4 RT	YES					YES
258	OAK (DEAD)	QUERCUS LAUR FOL A	7	54	28+67.05	9 .9 RT	DEAD				DEAD	DEAD
259	HACKBERRY	CELT S OCC DENTAL S	2	3	28+70.35	88.9 RT	YES					YES
260	HACKBERRY	CELT S OCC DENTAL S	5	79	28+69.53	88.0 RT	YES					YES
26	HACKBERRY	CELT S OCC DENTAL S	5	79	28+7 .62	94.5 RT	YES					YES
262	PARSLEY HAWTHORNE	CRATAEGUS MARSHALL	5	79	28+74.75	92.6 RT	YES					YES
263	HAWTHORNE (DEAD)	CRATAEGUS MARSHALL	3	28	28+75.67	92.8 RT	DEAD				DEAD	DEAD
264	PARSLEY HAWTHORNE	CRATAEGUS MARSHALL	3	28	28+82.38	95. RT	YES					YES
265	LAUREL OAK	QUERCUS LAUR FOL A	7	54	28+85.23	00.3 R	YES					YES
266	OAK (DEAD)	QUERCUS LAUR FOL A		380	28+88.49	95.7 RT	DEAD				DEAD	DEAD
267	LAUREL OAK	QUERCUS LAUR FOL A	7	54	29+00.94	03.0 R	YES					YES
268	HACKBERRY	CELT S OCC DENTAL S	3	28	29+0 .80	96. RT	YES					YES
269	PARSLEY HAWTHORNE	CRATAEGUS MARSHALL	3	28	29+08.37	89.8 RT	YES					YES
270	WATER OAK	QUERCUS N GRA		380	28+95.83	82.9 RT	YES					YES
27	HACKBERRY	CELT S OCC DENTAL S	3	28	28+76.98	86.4 RT	YES					YES
272	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	8	20	28+83.0	83.5 RT	YES					YES
273	OAK (DEAD)	QUERCUS LAUR FOL A	12	452	28+77.46	82.6 RT	DEAD				DEAD	DEAD
274	BAY	PERSEA SPP.	6	3	29+23.35	95.5 RT	YES					YES
275	BAY	PERSEA SPP.	9	254	29+3 .72	0 .0 R	YES					YES
276	HOLLY	ILEX SPP.	2	3	29+28.48	94.3 RT	YES					YES
277	HACKBERRY	CELT S OCC DENTAL S	9	254	29+35.	9 .3 RT	YES					YES
278	HACKBERRY	CELT S OCC DENTAL S	5	79	29+2 .03	86.6 RT	YES					YES
279	BAY	PERSEA SPP.	7	54	29+20.7	79.6 RT	YES					YES
280	CYPRESS (DEAD)	TAXODIUM SPP.	2	3	29+20.08	77.4 RT	DEAD				DEAD	DEAD
281	LAUREL OAK	QUERCUS LAUR FOL A	3	28	29+ 9.38	74.4 RT	YES					YES
282	LAUREL OAK	QUERCUS LAUR FOL A	3	28	29+28.6	68.4 RT	YES					YES
283	LAUREL OAK	QUERCUS LAUR FOL A	5	79	29+29.2	68.5 RT	YES					YES
284	LAUREL OAK	QUERCUS LAUR FOL A	4	50	29+36.3	64. RT	YES					YES
285	WATER OAK	QUERCUS N GRA	6	3	29+36.72	59.0 RT	YES		YES		2	
286	CYPRESS	TAXODIUM SPP.	20	257	29+42.49	59. RT	YES		YES		8	
287	LAUREL OAK	QUERCUS LAUR FOL A	4	50	29+36.98	54.5 RT	YES		YES		2	
288	HACKBERRY	CELT S OCC DENTAL S	3	28	29+27.55	56.9 RT	YES					YES
289	HACKBERRY	CELT S OCC DENTAL S	6	3	29+42.30	47.3 RT	YES		YES		2	
290	HACKBERRY	CELT S OCC DENTAL S	2	3	29+42.73	47.0 RT	YES		YES		0	
291	HACKBERRY	CELT S OCC DENTAL S	7	54	29+46.5	5 .8 RT	YES		YES		4	
292	HACKBERRY	CELT S OCC DENTAL S	3	28	29+52.3	5 .7 RT	YES		YES		0	
293	MAGNOLIA	MAGNOLIA SPP.	2	3	29+54.7	45.6 RT	YES		YES		0	
294	HACKBERRY	CELT S OCC DENTAL S	6	3	29+37.64	34.9 RT	YES		YES		2	
295	HACKBERRY	CELT S OCC DENTAL S	6	3	29+36.50	31.0 RT	YES			YES	2	
296	HACKBERRY	CELT S OCC DENTAL S	2	3	29+56.68	28.0 RT	YES			YES	0	
297	HACKBERRY	CELT S OCC DENTAL S	2	3	29+58.00	27.8 RT	YES			YES	0	
298	HACKBERRY	CELT S OCC DENTAL S	6	3	29+57.04	27.6 RT	YES			YES	2	
299	WATER OAK	QUERCUS N GRA	6	804	29+55.32	32.7 RT	YES		YES		6	
300	CHESNUT OAK	CASTANEA DENTATA	3	28	29+57.35	42.3 RT	YES		YES		0	

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

TREE SURVEY

SHEET NO. TR-8

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30	CHESNUT OAK	CASTANEA DENTATA	5	79	29+64.74	28.5 RT	YES			YES	2	
302	HACKBERRY	CELTIS OCCIDENTALIS	2	3	29+75.9	25.6 RT	YES			YES	0	
303	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	8	0.6	29+77.44	36.0 RT	YES		YES		6	
304	HACKBERRY	CELTIS OCCIDENTALIS	2	3	29+79.83	4.8 RT	YES		YES		0	
305	BLACKGUM	NYSSA SYLVATICA var		380	29+76.63	45.2 RT	YES		YES		4	
306	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	6	707	29+69.44	52.5 RT	YES		YES		6	
307	HACKBERRY	CELTIS OCCIDENTALIS	5	79	29+65.09	37.5 RT	YES		YES		2	
308	PARSLEY HAWTHORNE	CRATAEGUS MARSHALLII	2	3	29+62.79	58.3 RT	YES		YES		0	
309	WATER OAK	QUERCUS NIGRA	3	28	29+56.9	65.4 RT	YES		YES		0	
310	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	9	34	29+69.35	7.0 RT	YES		YES		8	
311	HACKBERRY	CELTIS OCCIDENTALIS	4	50	29+72.12	7.6 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+50.8	76.6 RT	YES					YES
315	LAUREL OAK	QUERCUS LAURIFOLIA	5	79	29+4.39	78.0 RT	YES					YES
316	MAPLE	ACER SPP.	4	50	29+40.2	82.5 RT	YES					YES
317	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	24	80	29+42.67	99.3 RT	YES					YES
318	LAUREL OAK	QUERCUS LAURIFOLIA	2	3	29+4.0	0.8 RT	YES					YES
319	LAUREL OAK	QUERCUS LAURIFOLIA	3	28	29+53.3	96.4 RT	YES					YES
320	BLACKGUM	NYSSA SYLVATICA var	8	0.8	29+63.9	90.5 RT	YES					YES
321	CHESNUT OAK	CASTANEA DENTATA	2	3	29+69.80	97.7 RT	YES					YES
322	WATER OAK	QUERCUS NIGRA	7	54	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	3	7	29+72.56	8.4 RT	YES					YES
325	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	8	0.8	29+79.00	8 RT	YES	YES				YES
326	CHESNUT OAK	CASTANEA DENTATA	2	3	29+86.50	86.3 RT	YES					YES
327	WATER OAK	QUERCUS NIGRA	6	304	29+97.83	83.8 RT	YES					YES
328	LAUREL OAK	QUERCUS LAURIFOLIA	6	3	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	2	28	29+97.86	100.5 RT	YES					YES
33	CHERRY	PRUNUS CAROLINIANA	4	50	30+00.43	95.6 RT	YES					YES
332	BLACKGUM	NYSSA SYLVATICA var	5	79	30+02.95	93.0 RT	YES					YES
333	BLACKGUM	NYSSA SYLVATICA var	3	28	30+00.77	9.4 RT	YES					YES
334	BLACKGUM	NYSSA SYLVATICA var	2	3	30+07.2	9.2 RT	YES					YES
335	LAUREL OAK	QUERCUS LAURIFOLIA	4	50	30+ .09	80.6 RT	YES					YES
336	BLACKGUM	NYSSA SYLVATICA var	10	3.4	30+ 7.85	73.8 RT	YES					YES
337	CYPRESS	TAXODIUM SPP.		380	30- 5.60	83.9 RT	YES					YES
338	MAPLE	ACER SPP.		380	30- 8.43	13.6 RT	YES	YES				YES
339	BLACKGUM	NYSSA SYLVATICA var	5	3	30- 9.37	72.3 RT	YES					YES
340	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	5	79	30+ 5.3	59. RT	YES		YES		2	
34	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	2	3	30+ 3.37	69.9 RT	YES		YES		0	
342	CHESNUT OAK	CASTANEA DENTATA	7	50	30+ 0.93	70.3 RT	YES		YES		2	
343	MAPLE	ACER SPP.	2	3	30-04.37	70.7 RT	YES		YES		0	
344	LAUREL OAK	QUERCUS LAURIFOLIA	4	50	29+98.92	67.4 RT	YES		YES		2	
345	LAUREL OAK	QUERCUS LAURIFOLIA	3	28	29+96.8	64. RT	YES		YES		0	
346	BLACKGUM	NYSSA SYLVATICA var	6	79	30+00.98	60.9 RT	YES		YES		2	
347	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	9	254	29+94.38	59.7 RT	YES		YES		4	
348	HACKBERRY	CELTIS OCCIDENTALIS	5	79	29+85.6	6.3 RT	YES		YES		2	
349	HACKBERRY	CELTIS OCCIDENTALIS	4	50	29+85.22	50.7 RT	YES		YES		2	
350	HACKBERRY	CELTIS OCCIDENTALIS	9	254	29+87.56	28.2 RT	YES			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.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JUDITH M. HAYDEN, P.E. P.E. NO.: 43976
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Certificate of Authorization: 6222

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

TREE SURVEY

SHEET NO. TR-9

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NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 6G5-23.003, F.A.C.

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
35	HACKBERRY	CELT S OCC DENTAL S	8	20	29+96.7	28.0 RT	YES			YES	4	
352	HACKBERRY	CELT S OCC DENTAL S	3	28	30+03.47	29.2 RT	YES			YES	0	
353	TALLOW	SAP UM SEB FERUM	8	20	30+06.6	34.3 RT	YES		YES		4	
354	SWEETGUM	L QU DAMBAR STYRAC FLUA	5	79	30+00.79	38.7 RT	YES		YES		2	
355	CYPRESS	TAXOD UM SPP.	2	385	30+05.46	4 .2 RT	YES		YES		8	
356	LAUREL	QUERCUS LAUR FOL A	3	28	30+07.67	46.6 RT	YES		YES		0	
357	SWEETGUM	L QU DAMBAR STYRAC FLUA	7	54	30-07.42	6 .3 RT	YES		YES		4	
358	SWEETGUM	L QU DAMBAR STYRAC FLUA	6	3	30- 0.76	65.4 RT	YES		YES		2	
359	SWEETGUM	L QU DAMBAR STYRAC FLUA	7	54	30- 0.62	69.2 RT	YES		YES		4	
360	SWEETGUM	L QU DAMBAR STYRAC FLUA	9	254	30- 4.58	60.5 RT	YES		YES		4	
36	LAUREL OAK	QUERCUS LAUR FOL A	6	804	30+ 6.56	57.4 RT	YES		YES		6	
362	LAUREL OAK	QUERCUS LAUR FOL A	3	28	30+ 7.9	56.9 RT	YES		YES		0	
363	SWEETGUM	L QU DAMBAR STYRAC FLUA		3	30- 8.5	48.7 RT	YES		YES		0	
364	SWEETGUM (DEAD)	L QU DAMBAR STYRAC FLUA	2	3	30+2 .8	49.8 RT	DEAD				DEAD	DEAD
365	CHESNUT OAK	CASTANEA DENTATA	2	3	30+ 4.38	48.8 RT	YES		YES		0	
366	CHESNUT OAK	CASTANEA DENTATA	3	28	30+ 4.80	44.0 RT	YES		YES		0	
367	HACKBERRY	CELT S OCC DENTAL S	6	3	30+ 7.45	40.8 RT	YES		YES		2	
368	MAPLE	ACER SPP.	8	20	30+23.89	35.7 RT	YES		YES		4	
369	SWEETGUM	L QU DAMBAR STYRAC FLUA	2	452	30+28.35	36. RT	YES		YES		4	
370	SWEETGUM	L QU DAMBAR STYRAC FLUA	2	452	30+30.08	36.0 RT	YES		YES		4	
37	LAUREL OAK	QUERCUS LAUR FOL A	2	3	30+33.37	33.6 RT	YES		YES		0	
372	MAPLE	ACER SPP.	6	804	30+32.52	26.3 RT	YES			YES	6	
373	HACKBERRY	CELT S OCC DENTAL S	9	254	30+28.2	24.5 RT	YES			YES	4	
374	HACKBERRY	CELT S OCC DENTAL S	3	28	30+29.22	23.4 RT	YES			YES	0	
375	HACKBERRY	CELT S OCC DENTAL S	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	54	30+39.97	23.6 RT	YES			YES	4	
378	SWEETGUM	L QU DAMBAR STYRAC FLUA	9	34	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	3	30+46.34	37.2 RT	YES			YES	0	
38	HICKORY	CARYA SPP.	5	79	30+48.53	35.7 RT	YES			YES	2	
382	MAPLE	ACER SPP.	6	3	30+49.34	34.6 RT	YES			YES	2	
383	HACKBERRY	CELT S OCC DENTAL S	5	79	30+5 .55	3 .5 RT	YES			YES	2	
384	SWEETGUM	L QU DAMBAR STYRAC FLUA	5	79	30+52.22	32.7 RT	YES		YES		2	
385	SWEETGUM	L QU DAMBAR STYRAC FLUA	9	254	30+57.6	27.5 RT	YES			YES	4	
386	SWEETGUM	L QU DAMBAR STYRAC FLUA	7	54	30+54.96	25.0 RT	YES			YES	4	
387	SWEETGUM	L QU DAMBAR STYRAC FLUA	6	3	30+55.84	22.2 RT	YES			YES	2	
388	PERSIMMON	DIOSPYROS VIRGINIANA	5	79	30+57.26	20.0 RT	YES			YES	2	
389	PERSIMMON	DIOSPYROS VIRGINIANA	3	28	30+48.72	9.6 RT	YES			YES	0	
390	PERSIMMON	DIOSPYROS VIRGINIANA	3	28	30+48.5	2 .3 RT	YES			YES	0	
39	GUM (DEAD)	L QU DAMBAR STYRAC FLUA	7	54	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	2 . RT	YES			YES	2	
395	CHESNUT OAK (DEAD	CASTANEA DENTATA	2	3	30+73.89	30.8 RT	DEAD				DEAD	DEAD
396	SWEETGUM	L QU DAMBAR STYRACIFLUA	9	254	30+69.07	35.6 RT	YES			YES	4	
397	LAUREL OAK	QUERCUS LAUR FOL A	2	3	30+67.7	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	CELT S OCC DENTAL S	5	79	30+7 .74	40.5 RT	YES			YES	2	

NOTES:

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 2192	LEON	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
40	HACKBERRY	CELTIS OCCIDENTALIS	5	79	30+65.23	45.6 RT	YES					YES
402	CYPRESS	TAXODIUM SPP.	5	707	30+59.46	4 .5 RT	YES					YES
403	BLACKGUM	NYSSA SYLVATICA var	3	53	30+59.65	47.4 RT	YES					YES
404	CYPRESS	TAXODIUM SPP.	2	3	30+6 .03	48.2 RT	YES					YES
405	CYPRESS	TAXODIUM SPP.	3	26	30+55.73	48.3 RT	YES					YES
406	CYPRESS	TAXODIUM SPP.	6	3	30+52. 4	54. RT	YES					YES
407	PERSIMMON	DIOSPYROS VIRGINIANA	2	3	30+49.66	5 .2 RT	YES					YES
408	CHESNUT OAK	CASTANEA DENTATA	3	28	30+47.32	46.2 RT	YES					YES
409	BLACKGUM	NYSSA SYLVATICA var	8	20	30+44.82	53.5 RT	YES	YES				YES
4 0	BLACKGUM	NYSSA SYLVATICA var	3	28	30+43.48	53.0 RT	YES					YES
4	BLACKGUM	NYSSA SYLVATICA var	8	20	30+4 .52	52.3 RT	YES	ES				YES
4 2	BLACKGUM	NYSSA SYLVATICA var	5	79	30+40.84	54.9 RT	YES					YES
4 3	WHITE OAK	QUERCUS ALBA	2	3	30+38. 2	55.2 RT	YES					YES
4 4	PERSIMMON	DIOSPYROS VIRGINIANA	4	50	30+34.54	53.2 RT	YES		YES		2	
4 5	PERSIMMON	DIOSPYROS VIRGINIANA	2	3	30+33.56	44.6 RT	YES		YES		0	
4 6	CHERRY	PRUNUS SEROTINA	6	2	30+30.22	46.2 RT	YES		YES		2	
4 7	PERSIMMON	DIOSPYROS VIRGINIANA	7	54	30+29.8	49.2 RT	YES		YES		4	
4 8	PERSIMMON	DIOSPYROS VIRGINIANA	5	3	30+2 .04	47.7 RT	YES		YES		2	
4 9	PERSIMMON	DIOSPYROS VIRGINIANA	6	3	30+27.59	53.5 RT	YES		YES		2	
420	BLACKGUM	NYSSA SYLVATICA var	5	79	30+24.22	57. RT	YES		YES		2	
42	BLACKGUM	NYSSA SYLVATICA var	6	3	30+24.8	59.4 RT	YES		YES		2	
422	BLACKGUM	NYSSA SYLVATICA var	3	28	30+25.89	53.5 RT	YES		YES		0	
423	PARSLEY HAWTHORNE	CRATAEGUS MARSHALL	4	50	30+20.46	62. RT	YES		YES		2	
424	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	4	50	30+22.83	66. RT	YES		YES		2	
425	BLACKGUM	NYSSA SYLVATICA var	5	79	30+29.06	68.2 RT	YES					YES
426	BLACKGUM	NYSSA SYLVATICA var	4	50	30+3 .59	7 .0 RT	YES					YES
427	BLACKGUM	NYSSA SYLVATICA var	2	3	30+32.	7 .2 RT	YES					YES
428	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	4	50	30+35.39	72.2 RT	YES					YES
429	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	7	54	30+34.49	64.7 RT	YES					YES
430	BLACKGUM	NYSSA SYLVATICA var	3	28	30+35.20	63. RT	YES					YES
43	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	3 4	30+42.73	63.8 RT	YES					YES
434	CYPRESS	TAXODIUM SPP.	4	5 6	30+43.35	70.7 RT	YES					YES
435	UNKNOWN		4	50	30+46.3	70.6 RT	YES					YES
436	LAUREL OAK	QUERCUS LAURIFOLIA	5	79	30+43.25	79.3 RT	YES					YES
437	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	3	53	30+4 .	73.4 RT	YES					YES
438	LAUREL OAK	QUERCUS LAURIFOLIA	5	79	30+39.38	8 . RT	YES					YES
439	LAUREL OAK	QUERCUS LAURIFOLIA	2	3	30+37.38	83.3 RT	YES					YES
440	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	8	20	30+35.68	84.4 RT	YES					YES
44	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	5	79	30+36.05	88.3 RT	YES					YES
442	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	7	54	30+4 .	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	80.7 RT	YES					YES
445	LAUREL OAK	QUERCUS LAURIFOLIA	2	3	30+23.70	86.0 RT	YES					YES
446	LAUREL OAK	QUERCUS LAURIFOLIA	4	50	30+23.24	88.4 RT	YES					YES
447	LAUREL OAK	QUERCUS LAURIFOLIA	2	3	30+28.9	90.7 RT	YES					YES
448	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	6	3	30+2 .50	9 .8 RT	YES					YES
449	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	10	3 4	30+2 .74	91.0 RT	YES					YES
450	CYPRESS	TAXODIUM SPP.	3	28	30+28.45	94.3 RT	YES					YES

NOTES:

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

TREE SURVEY

SHEET NO. TR-11

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NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 6G15-23.003, F.A.C.

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
45	CYPRESS	TAXODIUM SPP.		380	30+32.33	94.7 RT	YES					YES
452	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	4	50	30+36.7	96.9 RT	YES					YES
453	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	10	314	30+33.9	94.1 RT	YES					YES
454	HACKBERRY	CELTIS OCCIDENTALIS	2	3	30+26.94	0 . RT	YES					YES
455	PERSIMMON	DIOSPYROS VIRGINIANA	3	28	30+23.62	0 .6 RT	YES					YES
456	CYPRESS	TAXODIUM SPP.	2	385	30+18.24	99.9 RT	YES					YES
457	CYPRESS	TAXODIUM SPP.	5	707	30+20.03	93.7 RT	YES					YES
458	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	4	50	30+4 .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	04.8 RT	YES					YES
46	HACKBERRY	CELTIS OCCIDENTALIS	6	113	30+53.08	04.2 RT	YES					YES
462	PERSIMMON	DIOSPYROS VIRGINIANA	3	28	30+57.8	95.9 RT	YES					YES
463	SWEETGUM (DEAD)	LIQUIDAMBAR STYRACIFLUA	9	254	30+62.38	85.8 RT	DEAD				DEAD	DEAD
464	OAK (DEAD)	QUERCUS LAURIFOLIA	20	257	30+57.59	82. RT	DEAD				DEAD	DEAD
465	DOGWOOD	CORNUS SPP.	5	79	30+64.0	84.6 RT	YES					YES
466	PERSIMMON	DIOSPYROS VIRGINIANA	3	28	30+63.08	79.9 RT	YES					YES
467	SWEETGUM	LIQUIDAMBAR STYRACIFLUA		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	3	30+63. 9	68.9 RT	YES					YES
470	HACKBERRY	CELTIS OCCIDENTALIS	8	20	30+66.85	66.5 RT	YES					YES
47	BLACKGUM	NYSSA SYLVATICA var	3	28	30+66.92	60. RT	YES					YES
472	LAUREL OAK	QUERCUS LAURIFOLIA	6	113	30+65. 6	59.9 RT	YES					YES
473	BLACKGUM	NYSSA SYLVATICA var	3	28	30+63.5	6 .2 RT	YES					YES
474	BLACKGUM	NYSSA SYLVATICA var	4	50	30+60.68	59.5 RT	YES					YES
475	HACKBERRY	CELTIS OCCIDENTALIS	2	3	30+55.33	64.3 RT	YES					YES
476	CHESNUT OAK	CASTANEA DENTATA	2	3	30+50.83	6 .9 RT	YES					YES
477	PARSLEY HAWTHORNE	CRATAEGUS MARSHALL	2	3	30+48.00	65.4 RT	YES					YES
478	PARSLEY HAWTHORNE	CRATAEGUS MARSHALL	2	3	30+47.80	6 . RT	YES					YES
479	CHESNUT OAK	CASTANEA DENTATA	2	3	30+46. 7	6 .0 RT	YES					YES
480	BLACKGUM	NYSSA SYLVATICA var	7	54	30+48.04	59.0 RT	YES					YES
48	WAX MYRTLE	MYRICA CERIFERA	3	28	30+70.36	58.6 RT	YES			YES	0	
482	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	2	385	30+72.45	5 .7 RT	YES			YES	8	
483	BLACKGUM	NYSSA SYLVATICA var	5	707	30+79.28	52.6 RT	YES			YES	6	
484	HACKBERRY	CELTIS OCCIDENTALIS	7	54	30+7 .46	49.2 RT	YES			YES	4	
485	BLACKGUM	NYSSA SYLVATICA var	2	452	30+74.05	48. RT	YES			YES	4	
486	BLACKGUM	NYSSA SYLVATICA var	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		0	
488	LAUREL OAK	QUERCUS LAURIFOLIA	2	3	29+82. 4	78.5 RT	YES					YES
489	CHESNUT OAK	CASTANEA DENTATA	3	28	29+ 7.65	58.7 RT	YES					YES
490	HACKBERRY	CELTIS OCCIDENTALIS	2	3	29+10.92	59.7 RT	YES					YES
49	PARSLEY HAWTHORNE	CRATAEGUS MARSHALL	7	54	30+96.63	23. RT	YES			YES	4	
492	BLACKGUM	NYSSA SYLVATICA var	5	79	30+97.32	23.2 RT	YES			YES	2	
493	LAUREL OAK	QUERCUS LAURIFOLIA	17	908	30+96. 5	24.4 RT	YES			YES	6	
494	HACKBERRY	CELTIS OCCIDENTALIS	3	28	31+02.62	24.9 RT	YES			YES	0	
495	HACKBERRY	CELTIS OCCIDENTALIS	5	79	31+02.46	24.0 RT	YES			YES	2	
496	BLACKGUM	NYSSA SYLVATICA var	6	113	30+95.50	30.7 RT	YES		YES		2	
497	LAUREL OAK	QUERCUS LAURIFOLIA	2	3	30+95. 3	30.2 RT	YES		YES		0	
498	BLACKGUM	NYSSA SYLVATICA var	3	28	30+92.78	26.2 RT	YES			YES	0	
499	LAUREL OAK	QUERCUS LAURIFOLIA	2	3	30+92.27	25.7 RT	YES			YES	0	
500	CYPRESS	TAXODIUM SPP.	2	3	30+91.05	26.5 RT	YES			YES	0	

NOTES:

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*** TREES WHERE BRANCHES OVERHANG LIMITS OF CLEARING.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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Certificate of Authorization: 6222

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

TREE SURVEY

SHEET NO. TR-12

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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
501	CYPRESS	TAXODIUM SPP.	8	3	30+86.8	26.4 RT	YES			YES	2	
502	BLACKGUM	NYSSA SYLVATICA var	4	50	30+92.52	36.9 RT	YES		YES		2	
503	BLACKGUM	NYSSA SYLVATICA var	2	3	30+99.52	44.9 RT	YES		YES		0	
504	BLACKGUM	NYSSA SYLVATICA var	8	20	30+96.22	42.3 RT	YES		YES		4	
505	BLACKGUM	NYSSA SYLVATICA var	2	3	30+94.99	44.7 RT	YES		YES		0	
506	CHERRY	PRUNUS CAROLINIANA	2	3	3 +03.46	45.4 RT	YES		YES		0	
507	SWEETGUM	LIQUIDAMBAR STYRACIFLUA		380	3 +03.49	43.3 RT	YES		YES		4	
508	HACKBERRY	CELTIS OCCIDENTALIS	4	50	3 +05.88	49.6 RT	YES		YES		2	
509	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	4	6.6	3 +0 .73	52.5 RT	YES		YES		6	
510	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	5	707	3 +03.24	34. RT	YES			YES	6	
511	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	7	54	3 +06.26	29.5 RT	YES			YES	4	
512	HACKBERRY	CELTIS OCCIDENTALIS	5	79	3 - 4.33	36. RT	YES		YES		2	
513	HACKBERRY	CELTIS OCCIDENTALIS	8	20	3 + 4.83	35.2 RT	YES			YES	4	
514	BLACKGUM (DEAD)	NYSSA SYLVATICA var	8	0.8	3 - 0.8	38.9 RT	DEAD				DEAD	DEAD
515	BAY	PERSEA SPP.	5	28	3 - 2.62	27.4 RT	YES			YES	0	
516	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	7	54	3 - 3.56	52.3 RT	YES		YES		4	
517	HACKBERRY	CELTIS OCCIDENTALIS	2	3	3 - 5.72	53.8 RT	YES		YES		0	
518	HACKBERRY	CELTIS OCCIDENTALIS	4	50	3 - 6.36	53.6 RT	YES		YES		2	
519	HACKBERRY	CELTIS OCCIDENTALIS	2	3	3 - 4. 2	53.4 RT	YES		YES		0	
520	HACKBERRY	CELTIS OCCIDENTALIS	4	50	3 -04.26	7 .5 RT	YES	YES			2	
521	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	8	452	3 +0 .30	58.9 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	3 +00.59	63.0 RT	YES	YES			2	
524	PARSLEY HAWTHORNE	CRATAEGUS MARSHALL	2	3	30+99.99	65.6 RT	YES					YES
525	PARSLEY HAWTHORNE	CRATAEGUS MARSHALL	5	79	30+9 .09	65.3 RT	YES					YES
526	PARSLEY HAWTHORNE	CRATAEGUS MARSHALL	3	28	30+93.24	53. RT	YES		YES		0	
527	HACKBERRY (DEAD)	CELTIS OCCIDENTALIS	8	0.4	3 -00.25	53.3 RT	DEAD				DEAD	DEAD
528	CHERRY	PRUNUS CAROLINIANA	5	79	3 +00.73	52.2 RT	YES		YES		2	
529	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	13	904	30+98.58	8 .3 RT	YES					YES
530	HACKBERRY	CELTIS OCCIDENTALIS	2	3	3 -06.02	79.2 RT	YES					YES
531	LAUREL OAK	QUERCUS LAURIFOLIA	2	3	3 +06.20	79.5 RT	YES					YES
532	HACKBERRY	CELTIS OCCIDENTALIS	2	3	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	3	3 -03. 2	86.5 RT	YES					YES
536	HACKBERRY	CELTIS OCCIDENTALIS	2	3	3 -04.93	88.2 RT	YES					YES
537	HACKBERRY	CELTIS OCCIDENTALIS	3	28	3 -05.47	86.2 RT	YES					YES
538	HACKBERRY	CELTIS OCCIDENTALIS	3	28	3 -06. 2	85.3 RT	YES					YES
539	BLACKGUM	NYSSA SYLVATICA var	8	20	3 +09.56	86.4 RT	YES					YES
540	LAUREL OAK	QUERCUS LAURIFOLIA	6	3	3 - 3.63	83.9 RT	YES					YES
541	BAY	PERSEA SPP.	6	804	3 - 2.54	30.2 RT	YES					YES
542	PARSLEY HAWTHORNE	CRATAEGUS MARSHALL	5	79	3 - 3.37	77.9 RT	YES					YES
543	HACKBERRY	CELTIS OCCIDENTALIS	5	79	3 - 4.27	90.4 RT	YES					YES
544	HACKBERRY	CELTIS OCCIDENTALIS	2	3	3 - 3.6	9 .5 RT	YES					YES
545	BLACKGUM	NYSSA SYLVATICA var	5	79	3 +0 .97	34.9 RT	YES					YES
546	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	2	325	30+8 .58	02.2 RT	YES					YES
547	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	8	20	30+79.47	00.3 RT	YES					YES
548	BLACKGUM	NYSSA SYLVATICA var	9	31	30+95.32	07.4 RT	YES					YES
549	HACKBERRY	CELTIS OCCIDENTALIS	2	3	3 -20.86	03.5 RT	YES					YES
550	HACKBERRY	CELTIS OCCIDENTALIS	2	3	3 -20.39	03.5 RT	YES					YES

NOTES:

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Certificate of Authorization: 6222

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

TREE SURVEY

SHEET NO. TR-13

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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
55	HACKBERRY	CELTIS OCCIDENTALIS	4	50	3+20.06	03.0 RT	YES					YES
552	CHINABERRY		5	79	3+56.77	88.8 RT	YES					YES
553	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	2	3	3+52.26	9[illegible].3 RT	YES					YES
554	HACKBERRY	CELTIS OCCIDENTALIS	5	79	3+50.5	94.9 RT	YES					YES
555	WAX MYRTLE	MYRICA CERIFERA	2	3	3+63.08	84.9 RT	YES					YES
556	WAX MYRTLE	MYRICA CERIFERA	2	3	3+5[illegible].3	84.7 RT	YES					YES
557	PARSLEY HAWTHORNE	CRATAEGUS MARSHALLII	2	3	3+48.72	83.6 RT	YES					YES
558	BAY	PERSEA SPP.	2	3	3+4[illegible].54	79.7 RT	YES					YES
559	HACKBERRY	CELTIS OCCIDENTALIS	6	3	3+32.43	79.8 RT	YES					YES
560	HACKBERRY	CELTIS OCCIDENTALIS	4	50	3+32.30	79.[illegible] RT	YES					YES
56	HACKBERRY	CELTIS OCCIDENTALIS	5	79	3+22.73	73.6 RT	YES		YES		2	
562	WATER OAK	QUERCUS NIGRA	7	54	3+32.20	72.3 RT	YES		YES		4	
563	HACKBERRY	CELTIS OCCIDENTALIS	3	28	3+44.37	7[illegible].0 RT	YES		YES		0	
564	HACKBERRY	CELTIS OCCIDENTALIS	5	79	3+3[illegible].9	64.2 RT	YES		YES		2	
565	WATER OAK	QUERCUS NIGRA	13	53	3+33.67	60.4 RT	YES		YES		6	
566	HACKBERRY	CELTIS OCCIDENTALIS	5	79	3+43.0	58.9 RT	YES		YES		2	
567	MAPLE	ACER SPP.	8	20	3+53.88	47.7 RT	YES			YES	4	
568	HACKBERRY	CELTIS OCCIDENTALIS	2	3	3+4[illegible].29	45.7 RT	YES			YES	0	
569	WATER OAK	QUERCUS NIGRA	10	314	3+38.5	47.3 RT	YES		YES		4	
570	HACKBERRY	CELTIS OCCIDENTALIS	3	28	3+26.83	47.2 RT	YES		YES		0	
57	WATER OAK	QUERCUS NIGRA	4	50	3+3[illegible].27	34.6 RT	YES			YES	2	
572	LAUREL OAK	QUERCUS LAURIFOLIA	5	79	3+28.04	29.8 RT	YES			YES	2	
573	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	3	28	3+42.5	34.7 RT	YES			YES	0	
574	WATER OAK	QUERCUS NIGRA	4	50	3+45.76	3[illegible].[illegible] RT	YES			YES	2	
575	HACKBERRY	CELTIS OCCIDENTALIS	4	50	3+5[illegible].30	28.9 RT	YES			YES	2	
576	HACKBERRY	CELTIS OCCIDENTALIS	6	3	3+48.90	26.9 RT	YES			YES	2	
577	HACKBERRY	CELTIS OCCIDENTALIS	2	3	3+53.4	29.9 RT	YES			YES	0	
578	HACKBERRY	CELTIS OCCIDENTALIS	4	50	3+53.96	33.8 RT	YES			YES	2	
579	SWEETGUM (DEAD)	LIQUIDAMBAR STYRACIFLUA	5	707	3+57.05	3[illegible].8 RT	DEAD				DEAD	DEAD
580	HACKBERRY	CELTIS OCCIDENTALIS	3	28	3+6[illegible].87	56.2 RT	YES		YES		0	
58	HACKBERRY	CELTIS OCCIDENTALIS	2	3	3+78.93	47.6 RT	YES			YES	0	
582	HACKBERRY	CELTIS OCCIDENTALIS	5	79	3+78.2	47.4 RT	YES			YES	2	
583	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	12	452	3+82.2	43.4 RT	YES			YES	4	
584	HACKBERRY	CELTIS OCCIDENTALIS	7	54	3+76.54	33.2 RT	YES			YES	4	
585	HACKBERRY	CELTIS OCCIDENTALIS	3	28	3+69.40	34.2 RT	YES			YES	0	
586	HACKBERRY	CELTIS OCCIDENTALIS	4	50	3+63.80	35.7 RT	YES			YES	2	
587	HACKBERRY	CELTIS OCCIDENTALIS	3	28	3+59.36	36.2 RT	YES			YES	0	
588	HACKBERRY	CELTIS OCCIDENTALIS	6	3	3+65.5	3[illegible].5 RT	YES			YES	2	
589	HACKBERRY	CELTIS OCCIDENTALIS	4	50	3+85.26	33.5 RT	YES			YES	2	
590	HACKBERRY	CELTIS OCCIDENTALIS	5	79	3+84.58	3[illegible].5 RT	YES			YES	2	
59	HACKBERRY	CELTIS OCCIDENTALIS	2	3	3+89.59	30.8 RT	YES			YES	0	
592	HACKBERRY	CELTIS OCCIDENTALIS	3	28	3+32.54	3[illegible].[illegible] RT	YES			YES	0	
593	HACKBERRY	CELTIS OCCIDENTALIS	3	28	3+97.68	43.8 RT	YES			YES	0	
594	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	4	6[illegible].6	3+99.5	29.5 RT	YES			YES	6	
595	WATER OAK	QUERCUS NIGRA	2	3	32+01.00	26.7 RT				YES	0	
596	HACKBERRY	CELTIS OCCIDENTALIS	4	50	3+97.04	24.2 RT				YES	0	
597	MAGNOLIA	MAGNOLIA SPP.	23	662	32+09.23	28.3 RT	YES			YES	8	
598	WATER OAK	QUERCUS NIGRA	4	50	32+05.[illegible]	24.[illegible] RT				YES	2	
599	BLACKGUM	NYSSA SYLVATICA var	2	3	32+05.39	27.4 RT				YES	0	
600	HACKBERRY	CELTIS OCCIDENTALIS	2	3	3+89.53	34.2 RT	YES			YES	0	

NOTES:

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 2192	LEON	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
60	BLACKGUM	NYSSA SYLVATICA VAR.	2	452	32+48.27	58.4 RT	YES		YES		4	
602	HACKBERRY	CELTIS OCCIDENTALIS	5	79	32+79.08	63.2 RT	YES		YES		2	
603	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	7	154	32+88.48	67.6 RT	YES					YES
604	SPRUCE PINE	PINUS GLABERA	9	254	32+79.73	75.0 RT	YES					YES
605	WATER OAK	QUERCUS NIGRA	10	314	32+63.65	79.1 RT	YES		YES		4	
606	WATER OAK	QUERCUS NIGRA	3	28	32+55.20	75.6 RT	YES	YES			0	
607	HACKBERRY	CELTIS OCCIDENTALIS	5	79	32+64.43	82.7 RT	YES					YES
608	HOLLY	ILEX SPP.	3	28	32+27.36	38.7 RT	YES					YES
609	OAK (DEAD)	QUERCUS ALBA	27	2290	32+36.26	93.2 RT	DEAD				DEAD	DEAD
610	HICKORY	CARYA SPP.	2	3	32+0.70	92.2 RT	YES					YES
611	HICKORY	CARYA SPP.	5	79	32+0.23	80.5 RT	YES					YES
612	HICKORY	CARYA SPP.	5	79	32+0.26	78.2 RT	YES					YES
613	SPRUCE PINE	PINUS GLABERA	4	50	32+95.8	83.7 RT	YES					YES
614	HACKBERRY	CELTIS OCCIDENTALIS	2	3	32+8.72	79.8 RT	YES					YES
615	BLACKGUM	NYSSA SYLVATICA VAR.	5	707	32+06.94	56.6 RT	YES					YES
616	SPRUCE PINE	PINUS GLABERA	2	3	32+03.53	52.1 RT	YES					YES
617	HACKBERRY	CELTIS OCCIDENTALIS	6	3	32+5.54	52.7 RT						YES
618	HICKORY	CARYA SPP.	5	79	32+2.98	44.5 RT				YES	2	
619	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	6	3	32+9.64	28.7 RT				YES	2	
620	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	3	20	32+9.83	29.6 RT				YES	4	
621	LAUREL	QUERCUS LAURIFOLIA	8	20	32+20.30	23.7 RT				YES	4	
622	HICKORY	CARYA SPP.		380	32+28.10	35.7 RT				YES	4	
623	HICKORY	CARYA SPP.	5	3	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+4.13	27.2 RT				YES	0	
626	BAY	PERSEA SPP.	2	3	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.	6	3	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.	4	50	32+50.63	24.4 RT				YES	6	
631	LIVE OAK	QUERCUS VIRGINIANA	8	201	32+54.77	30.0 RT	YES			YES	4	
632	HICKORY	CARYA SPP.	4	50	32+5.86	38.5 RT				YES	2	
633	HICKORY	CARYA SPP.	2	3.6	32+52.62	45.4 RT						YES
634	HICKORY	CARYA SPP.	5	79	32+5.93	39.9 RT						YES
635	HICKORY	CARYA SPP.	4	50	32+40.67	52.5 RT						YES
636	HICKORY	CARYA SPP.	4	50	32+37.92	45.8 RT						YES
637	LAUREL	QUERCUS LAURIFOLIA	2	385	32+36.54	56.5 RT	YES					YES
638	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	8	20	32+29.98	63.0 RT						YES
639	CHESTNUT OAK	CASTANEA DENTATA	18	0.18	32+24.07	67.1 RT	YES					YES
640	HOLLY	ILEX SPP.	6	3	32+27.40	76.0 RT						YES
641	HOLLY	ILEX SPP.	4	50	32+26.67	75.5 RT						YES
642	SPRUCE PINE	PINUS GLABERA	3	28	32+25.26	82.2 RT						YES
643	HACKBERRY	CELTIS OCCIDENTALIS	3	28	32+5.78	75.4 RT						YES
644	WATER OAK	QUERCUS NIGRA	4	50	32+5.29	79.5 RT						YES
645	HICKORY	CARYA SPP.	5	79	32+26.53	99.0 RT						YES
646	BLACKGUM	NYSSA SYLVATICA VAR.	9	254	32+4.24	97.7 RT						YES
647	HICKORY	CARYA SPP.	4	50	32+30.62	92.9 RT						YES
648	HICKORY	CARYA SPP.	2	3	32+35.03	90.3 RT						YES
649	HOLLY	ILEX SPP.	3	28	32+38.73	98.1 RT						YES
650	HOLLY	ILEX SPP.	5	79	32+39.07	97.4 RT						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.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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Certificate of Authorization: 6222

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

TREE SURVEY

SHEET NO. TR-15

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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
65	HICKORY	CARYA SPP.	5	79	32+5 .86	88.5 RT						YES
652	HICKORY	CARYA SPP.	6	3	32+35.08	74.2 RT						YES
653	LIVE OAK	QUERCUS VIRGINIANA	32	32?7	32+68. 6	88.6 RT	YES					YES
654	HOLLY	ILEX SPP.	4	50	32+63. 2	84. RT						YES
655	HOLLY	ILEX SPP.	2	3	32+63.66	84.0 RT						YES
656	HICKORY	CARYA SPP.	4	50	32+56.94	95.2 RT						YES
657	HOLLY	ILEX SPP.	2	3	32+58.38	8?.3 RT						YES
658	HOLLY	ILEX SPP.	4	50	32+79.90	73.9 RT						YES
659	HICKORY	CARYA SPP.	4	6 6	32+78.7	73.4 RT						YES
660	HOLLY	ILEX SPP.	6	3	32+8 .54	68.6 RT						YES
66?	HICKORY	CARYA SPP.	4	50	33+00.24	56.4 RT						YES
662	LAUREL	QUERCUS LAURIFOLIA	2	3	33+04.	56. 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	5?.6 RT						YES
666	HICKORY	CARYA SPP.	5	79	32+89.37	50. RT						YES
667	HICKORY	CARYA SPP.	24	8?0	32+75.35	5 . 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+8 . 9	4?.3 RT						YES
670	WATER OAK	QUERCUS NIGRA	3	28	32+84.76	35.3 RT						YES
67?	SWEETGUM	LIQUIDAMBAR STYRACIFLUA	2	452	32+84.49	29.6 RT	YES			YES	4	
672	HICKORY	CARYA SPP.	7	54	32+86.37	29.0 RT	YES			YES	4	
673	HICKORY	CARYA SPP.	3	28	32+87.6	26.4 RT	YES			YES	0	
674	HICKORY	CARYA SPP.	2	3	32+78. 6	34.5 RT						YES
675	HICKORY	CARYA SPP.	5	79	32+95.75	28.2 RT						YES
676	HOLLY	ILEX SPP.	2	3	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	3	33+ 3. 4	33.5 RT						YES
679	SPRUCE PINE	PINUS GLABERA		380	33+ 5.58	29.9 RT						YES
680	SPARKLEBERRY	VACCINIUM ARBOREUM	2	3	33+ 8.20	27.7 RT						YES
68?	HOLLY	ILEX SPP.	3	28	33+ 5.44	23.9 RT						YES
682	LAUREL	QUERCUS LAURIFOLIA	6	3	33+ 5.39	5. RT	YES			YES	2	
683	LAUREL	QUERCUS LAURIFOLIA	3	28	33+2 .64	6.0 RT	YES			YES	0	
684	SPARKLEBERRY	VACCINIUM ARBOREUM	2	3	32+8 .85	20.9 RT	YES			YES	0	
685	HICKORY	CARYA SPP.	2	3	32+62.90	57.5 RT						YES
686	HICKORY	CARYA SPP.	2	3	32+59.56	50.0 RT						YES
687	WAX MYRTLE	MYRICA CERIFERA	2	3	32+5 .39	62.6 RT						YES
688	SHORTLEAF PINE	PINUS ECHINATA		380	32+48.50	66.9 RT						YES
689	SWEETGUM (DEAD)	LIQUIDAMBAR STYRACIFLUA	2	452	32+40.66	8 . RT	DEAD				DEAD	DEAD
690	LIVE OAK	QUERCUS VIRGINIANA	33	342	3 +87.27	4.9 LT	YES	YES			6****	
					TOTAL NUMBER OF TREES			23	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.

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

TREE SURVEY

SHEET NO.
TR-16

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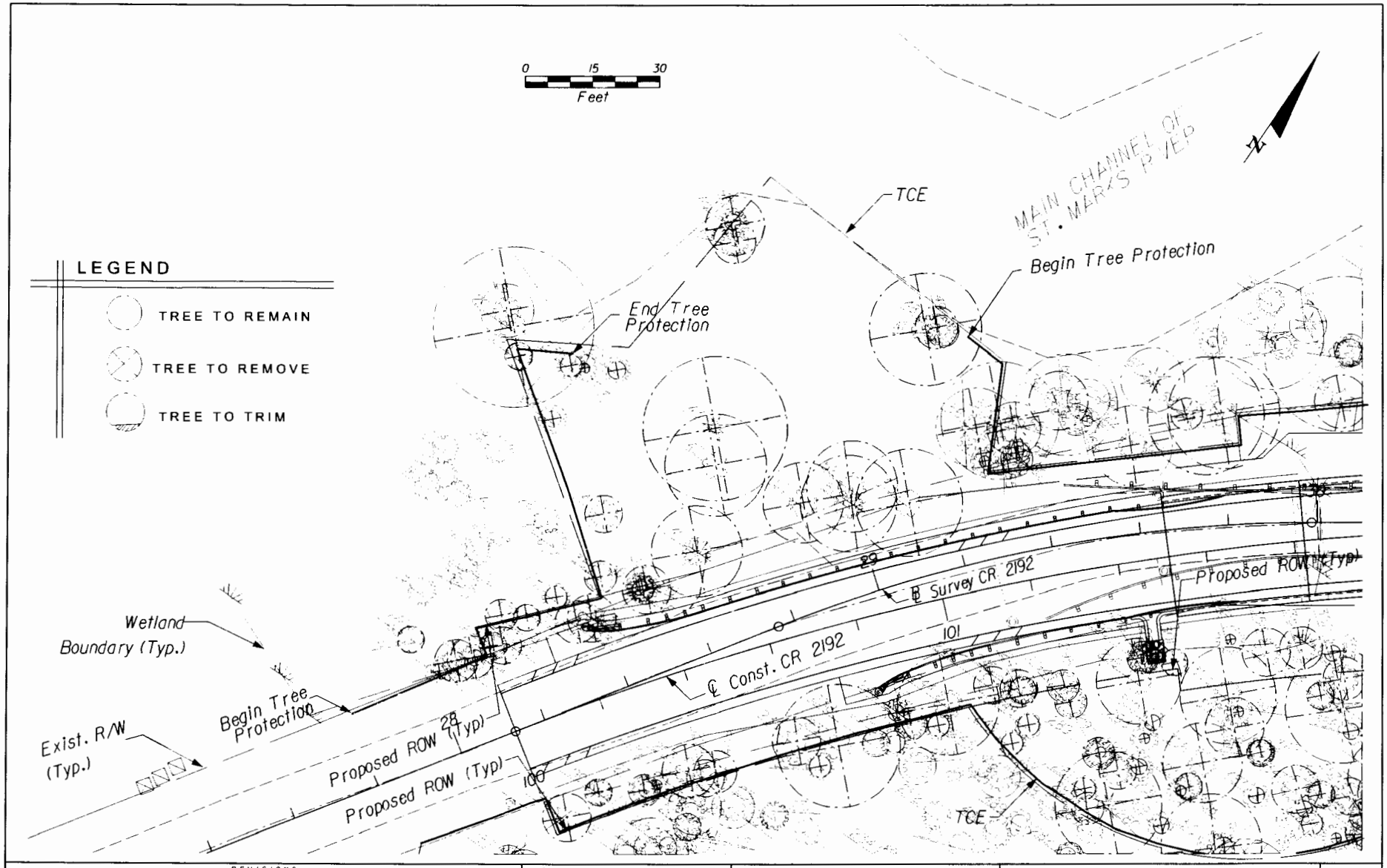

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TREE SURVEY

SHEET NO.
TR-17

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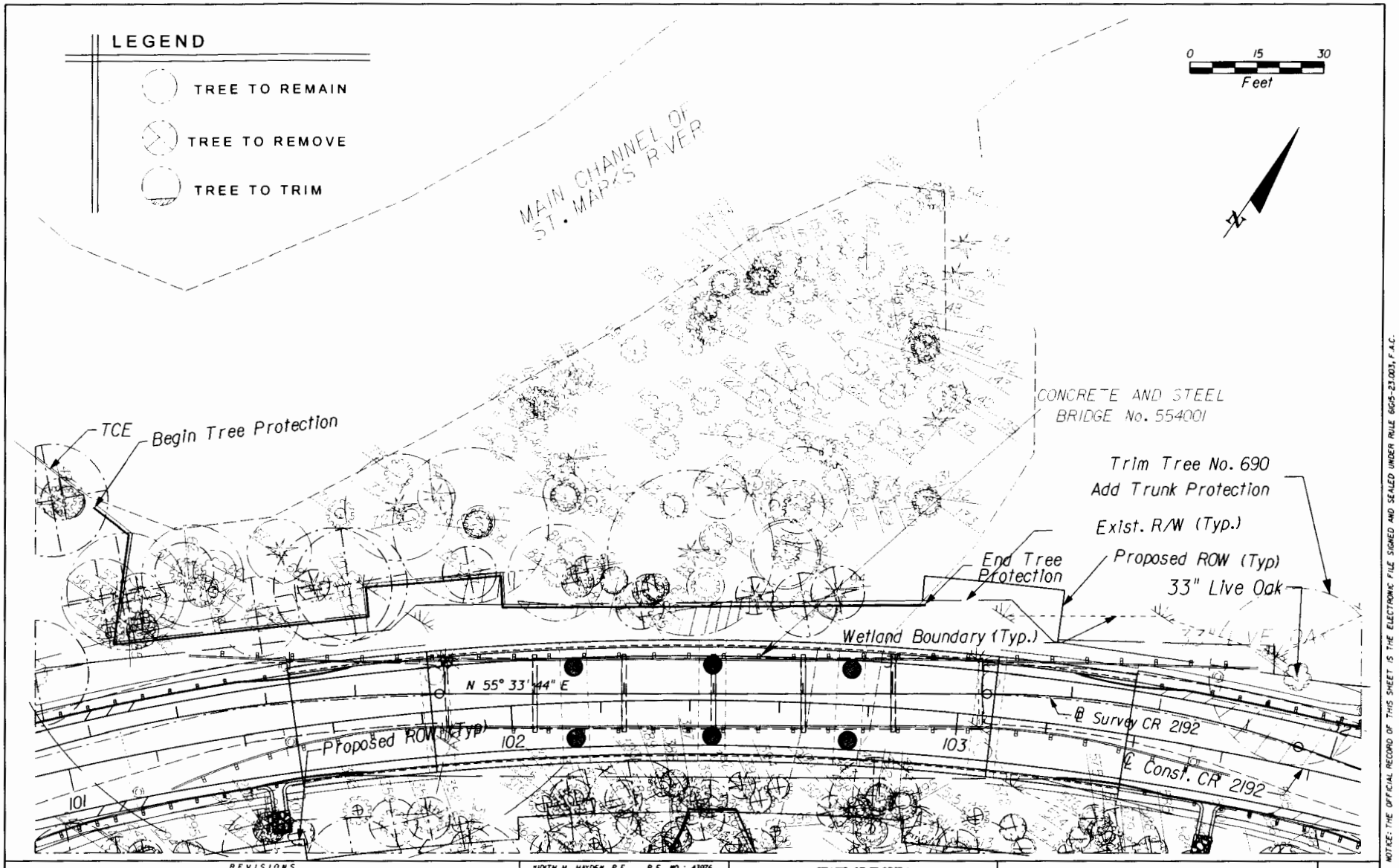

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TREE SURVEY

SHEET NO.
TR-18

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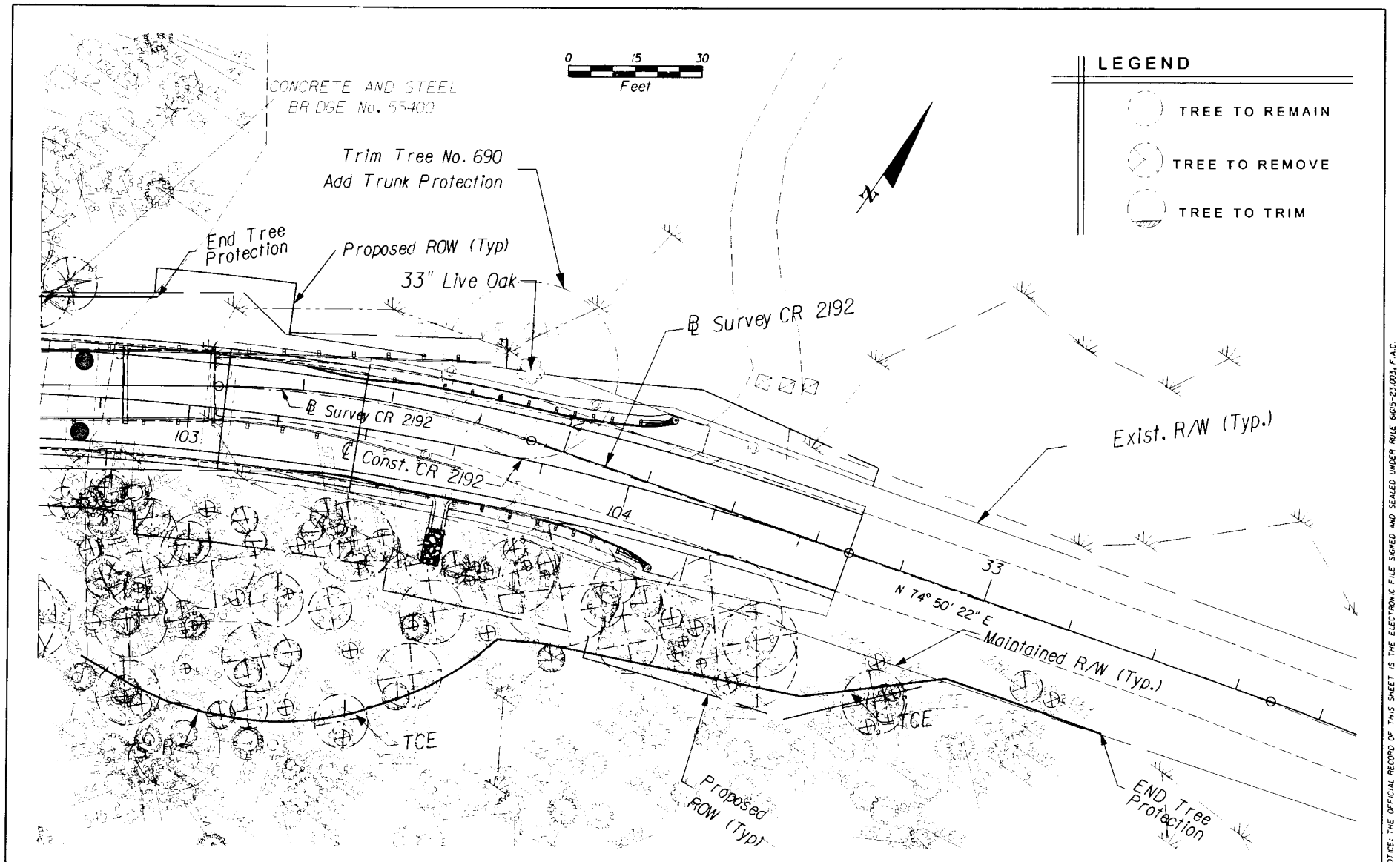

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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CR-2192	LEON	413491-1-52-01

TREE SURVEY

SHEET NO.
TR-19

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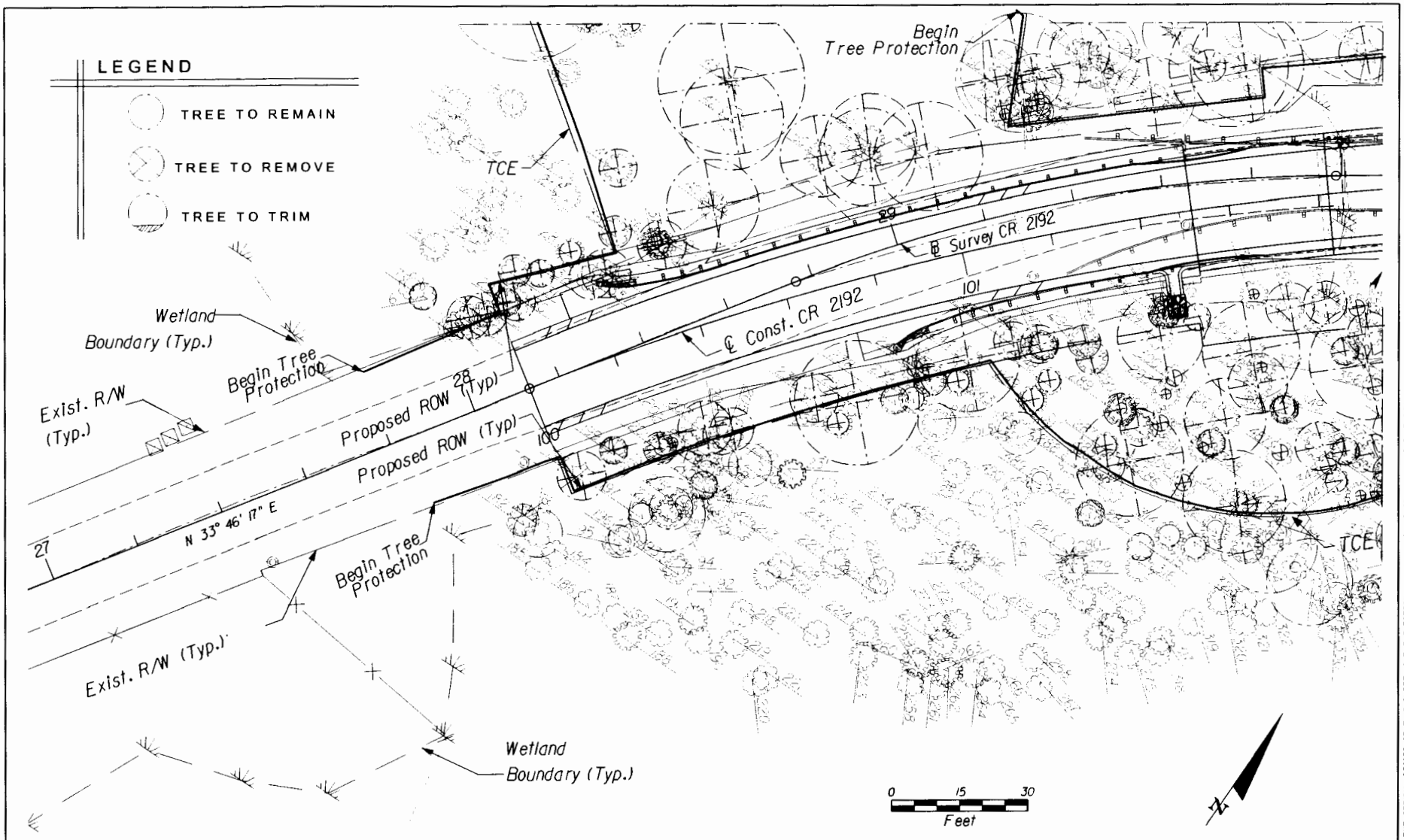

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

TREE SURVEY

SHEET NO. TR-20

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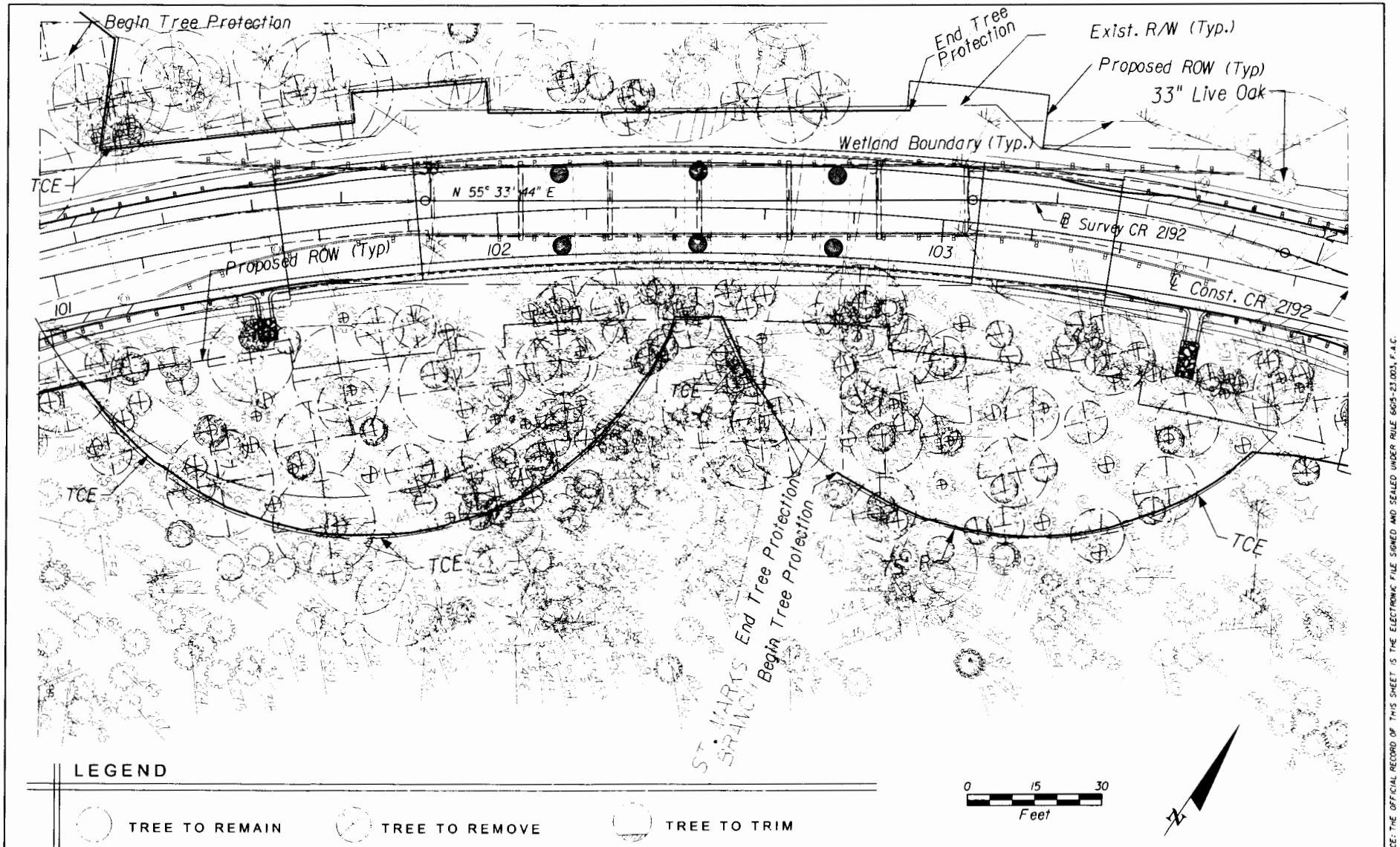

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DEPARTMENT OF TRANSPORTATION

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TREE SURVEY

SHEET NO.
TR-21

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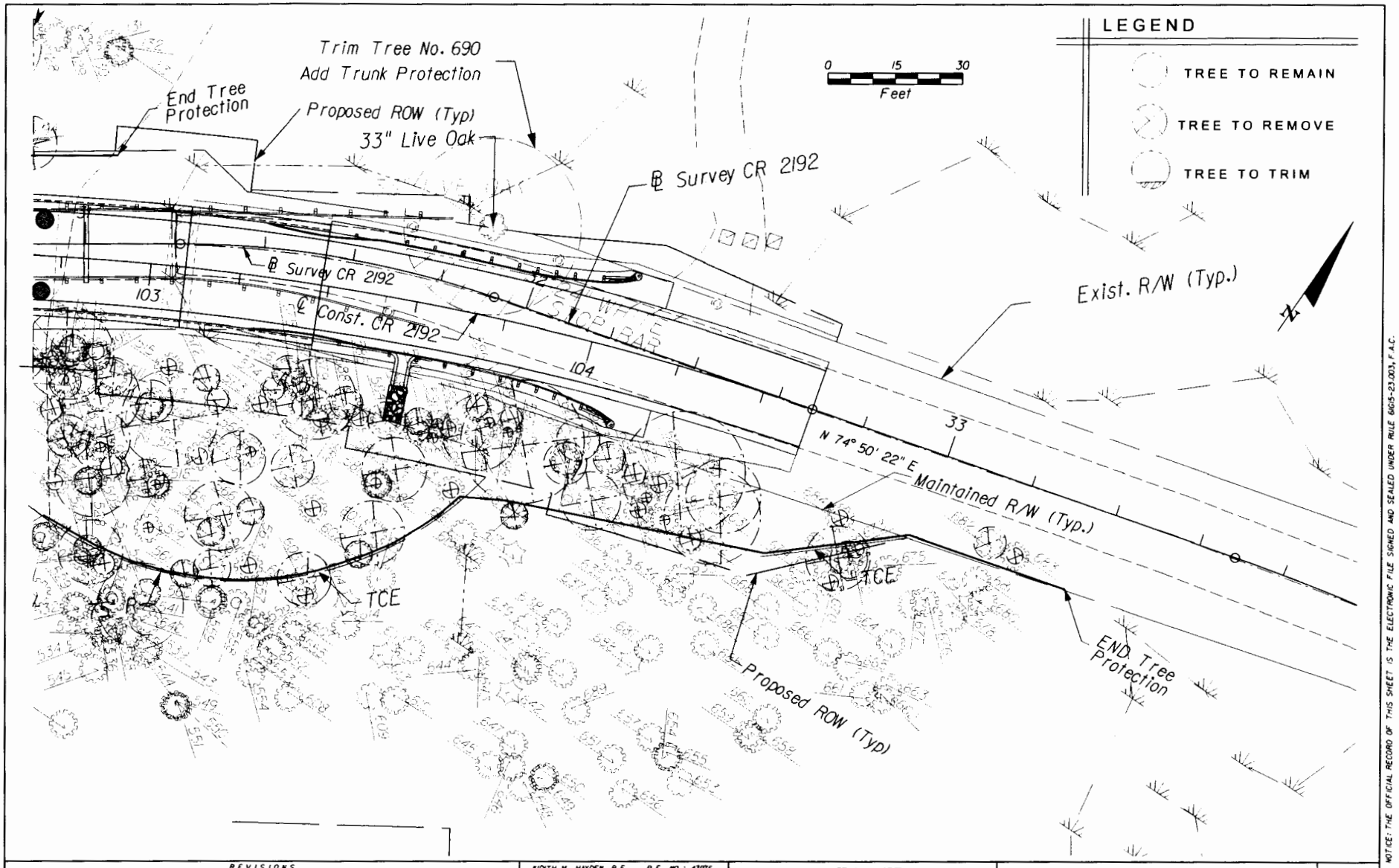

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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CR 2192	LEON	413491-1-52-01

TREE SURVEY

SHEET NO. TR-22

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

CONSTRUCTION CONTRACT NO. E

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

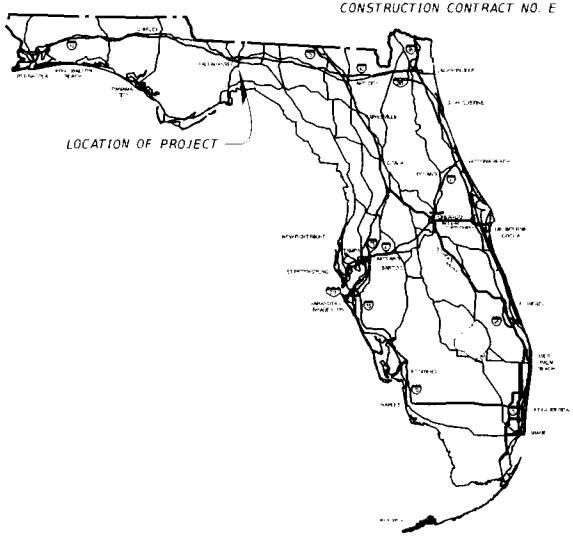
CONTRACT PLANS

FINANCIAL PROJECT ID 413491-1-52-01

LEON COUNTY (55030)

ROAD NO. 2192

STRUCTURE PLANS



INDEX OF STRUCTURE PLANS

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B1- 1	GENERAL NOTES (1 OF 2)
B1- 2	GENERAL NOTES (2 OF 2)
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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- 8	REPORT OF CORE BORINGS (4 OF 8)
B1- 9	REPORT OF CORE BORINGS (5 OF 8)
B1-10	REPORT OF CORE BORINGS (6 OF 8)
B1-11	REPORT OF CORE BORINGS (7 OF 8)
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B1-13	FOUNDATION LAYOUT
B1-14	PIPE PILE DATA TABLE AND NOTES
B1-15	END BENT 1
B1-16	END BENT 5
B1-17	END BENT DETAILS (1 OF 2)
B1-18	END BENT DETAILS (2 OF 2)
B1-19	INTERMEDIATE BENTS 2, 3, & 4
B1-20	INTERMEDIATE BENT DETAILS
B1-21	TYPICAL SECTION
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B1-29	REINFORCING BAR LIST
B1-30	LOAD RATING SUMMARY

STRUCTURE SHOP DRAWINGS
TO BE SUBMITTED TO:

CHARLES F. CRAYCRAFT
FL 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-8RB1
VENDOR NUMBER VF 36233881101
FBPR CERTIFICATE OF
AUTHORIZATION NO. 894

REVISIONS:

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

KEY SHEET REVISIONS		
DATE	BY	DESCRIPTION

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

FDOT PROJECT MANAGER: DONALD ROGERS, P.E.

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

FISCAL YEAR	SHEET NO.
14	B-1

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15 23 003, F.A.C.

12/20/2011 10:04:01 AM

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	RANGE
CONCRETE	70	105	35	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:

4 - 8 B1 — MARK
QUANTITY — SIZE

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 ---------- 3½"
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 ½" 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.

Bridge No. 554153

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

LOCHNER
2960 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FDPR CERTIFICATE OF AUTH. # 894
CHARLES F. CRAYCRAFT, P.E. # 22131

DRAWN BY: BCR 05-11
CHECKED BY: RDB 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: GENERAL NOTES (1 OF 2)
REF. DRG. NO.:
PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
SHEET NO.: B1-1

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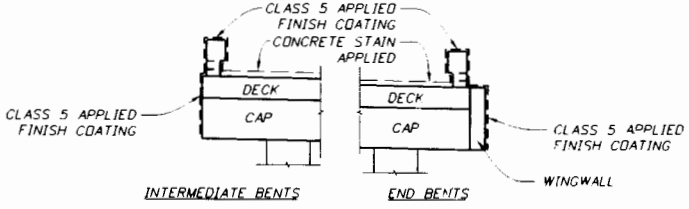
GENERAL NOTES

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



SURFACE FINISH DETAILS

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 PREMOLDED 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 SHELFER ROAD PIT.

COORDINATE THE DISPOSAL OF THE EXISTING BRIDGE CONCRETE DEBRIS WITH:

MIDWAY OPERATIONS CENTER
GREG OUZTS, 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 SHELFER 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.

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
UNO	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.

UTILITY/AGENCY OWNERS

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

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.

Bridge No. 554153

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

LOCHNER
2960 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
CHARLES F CRAYCRAFT, P.E. # 52131

DRAWN BY: BCR 05-11
CHECKED BY: MDB 05-11
DESIGNED BY: BCR 05-11
APPROVED 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: GENERAL NOTES (2 OF 2)
REF. DWG. NO.:
PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
SHEET NO.: B1-2

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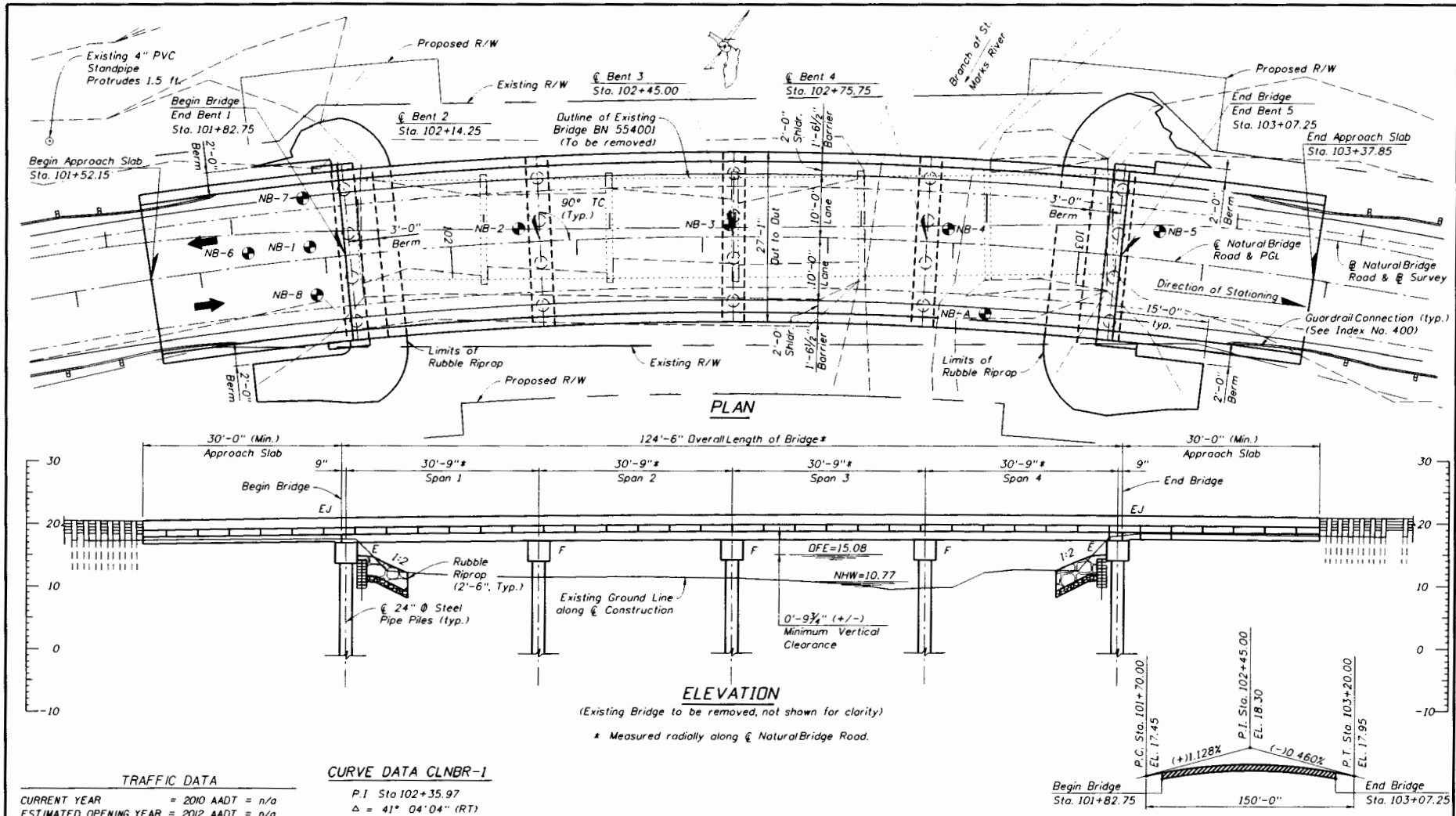

TRAFFIC DATA

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
Δ = 41° 04'04" (RT)
D = 9° 05'40"
T = 235.97'
L = 451.57'
R = 630.00'
PC Sta. = 100+00.00
PT Sta. = 104+51.57
e = RC

LEGEND

Boring Location

Bridge No. 554153

REVISIONS					
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. # 32131

DRAWN BY: LTG 05-11
CHECKED BY: MDB 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: PLAN AND ELEVATION
PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
REF. DWG. NO.
SHEET NO. B1-3

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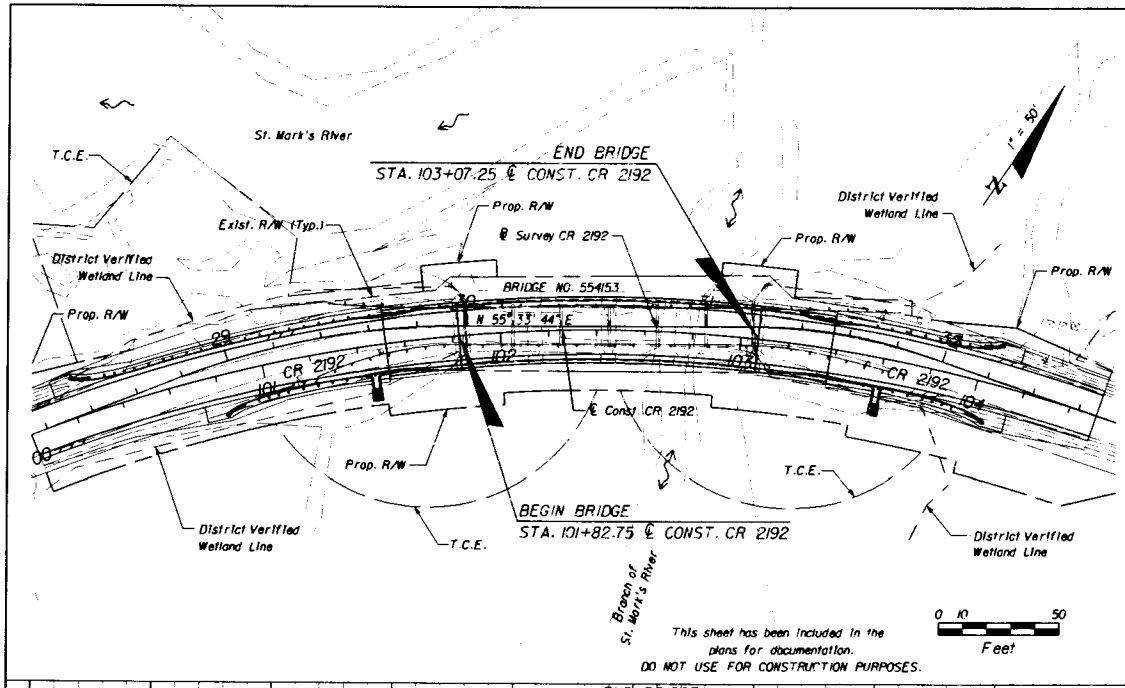
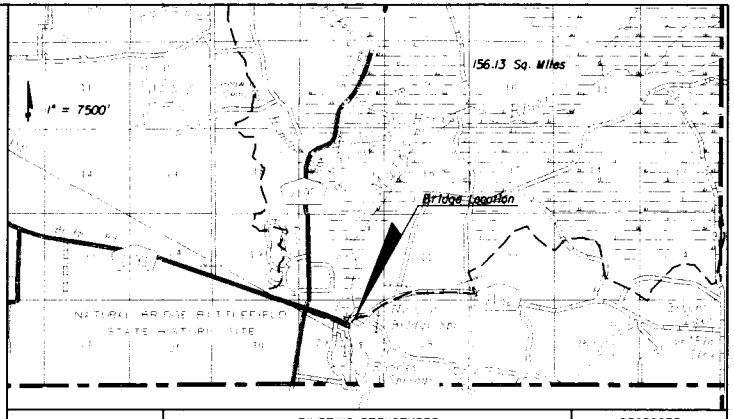


This sheet has been included in the plans for documentation.
DO NOT USE FOR CONSTRUCTION PURPOSES.



	EXISTING STRUCTURES (1)	(2)	(3)	(4)	PROPOSED STRUCTURE
(REFERENCE)					
FOUNDATION	12" sq. concrete piles				24" steel pipe piles
OVERALL LENGTH	121.00 ft.				124.50 ft.
SPAN LENGTH	20.50 ft.				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.				27.08 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.

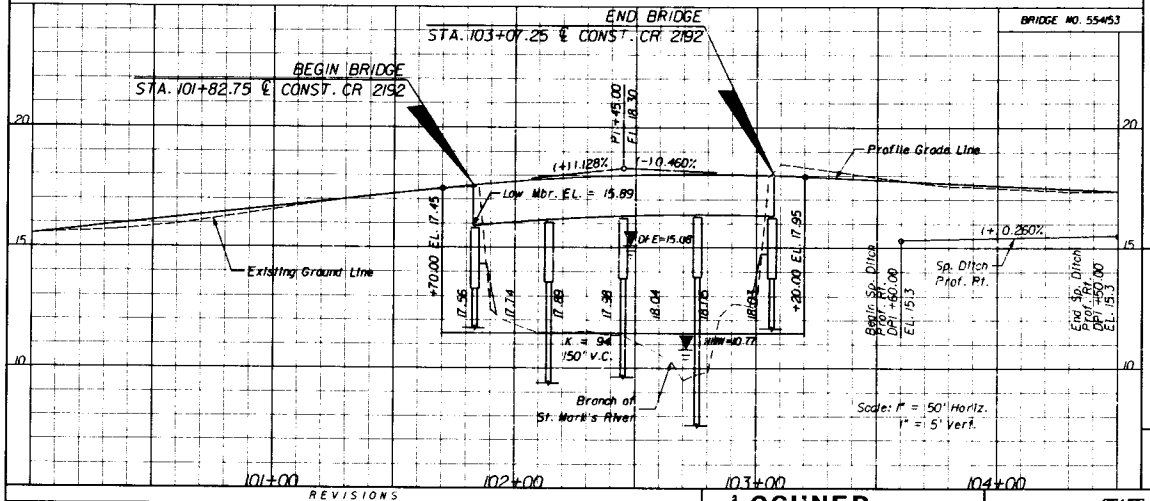
TERMS:
Design Flood: Utilized to assure a desired level of hydraulic performance.
Base Flood: Has a 1% chance of being exceeded in any given year (100 year frequency)
Overlapping Flood: Causes flow over the highway, over a watershed divide, or thru emergency relief structures.
Greatest Flood: The most severe that can be predicted where overtopping 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 (f/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 NUMBERS	SIZE AND TYPE	LONG TERM SCOUR ELEV.	TOTAL SCOUR ELEVATION WORST CASE < 100 yr. FREQ. (yr.) 100	WORST CASE < 500 yr. FREQ. (yr.) 200
3	24" steel pipe pile	0	7.5	7.0



HYDRAULIC RECOMMENDATIONS

1. BEGIN BRIDGE STATION 101+82.75 END BRIDGE STATION 103+07.25 SKEW ANGLE ____
2. CLEARANCE PROVIDED: MAV: HORIZ. N/A VERT. N/A ABOVE EL. ____ DRIFT: HORIZ. ____ VERT. 0.81 ABOVE EL. 15.08
3. MINIMUM CLEARANCE: MAV: HORIZ. N/A VERT. N/A ABOVE EL. ____ DRIFT: HORIZ. ____ VERT. 0.81 ABOVE EL. 15.08
4. ABUTMENTS:

	BEGIN BRIDGE	END BRIDGE
RUBBLE GRADE:	Standard	Standard
SLOPE:	1:2	1:2
BURIED OR NON-BURIED HORIZ. TOE:	N/A	N/A
TOE HORIZ. DISTANCE:	0	0
LIMIT OF PROTECTION:		

5. DECK DRAINAGE: Spread is contained in shoulder. Runoff captured off bridge ends.

REMARKS: ____

REVISIONS DATE	DESCRIPTION	DATE	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
NATALIE BETZ ZIERDEN, P.E. # 56672

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

BRIDGE HYDRAULIC RECOMMENDATIONS

SHEET NO. BI-4

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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) ← (%)

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

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

ENVIRONMENTAL CLASSIFICATION

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

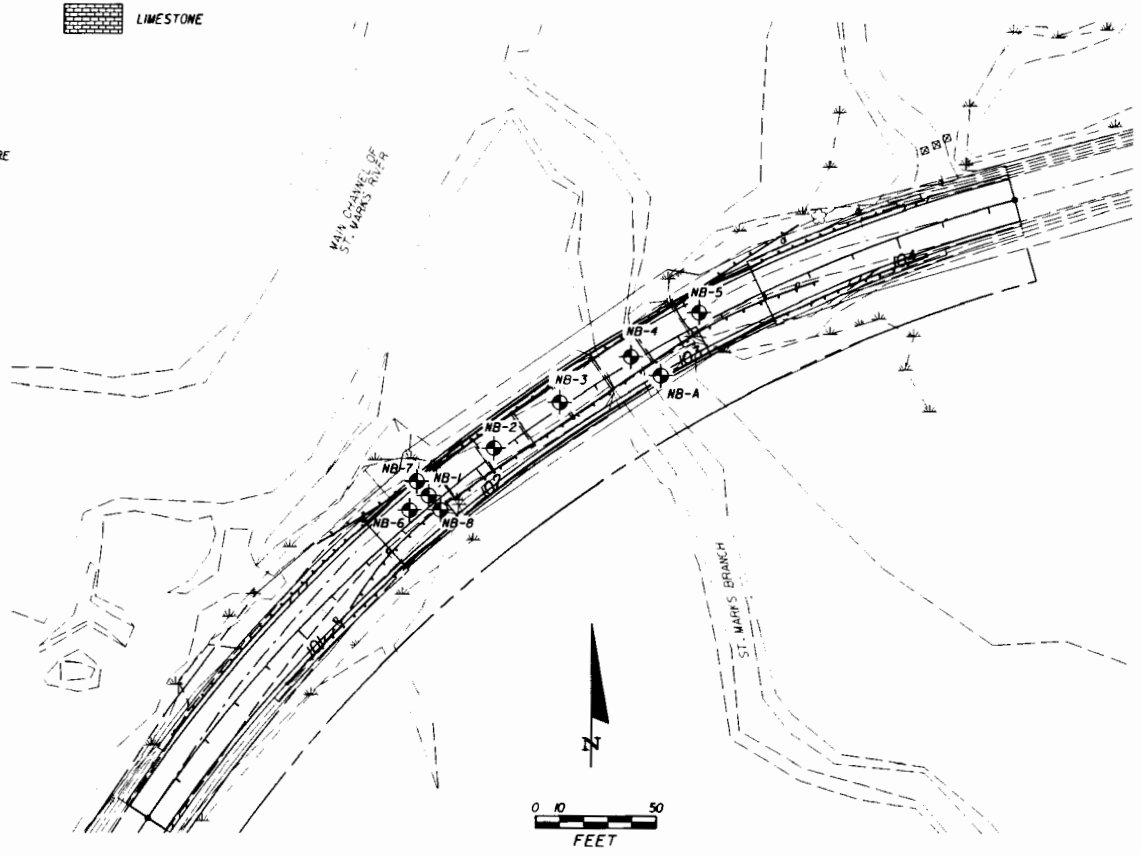
NOTES

1. Numbers left of borings indicate standard penetration test (SPT) N-values for 12 in. penetration (Unless otherwise noted)
2. Water elevations shown are the water elevations encountered. Fluctuations in the elevation of water should be expected.
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 Relative Density	SPT (blows/12 in.)	Silts and Clays Consistency	SPT (blows/12 in.)
Very Loose	Less than 3	Very Soft	Less than 1
Loose	3 - 8	Soft	1 - 3
Medium Dense	8 - 24	Firm	3 - 6
Dense	24 - 40	Stiff	6 - 12
Very Dense	Greater than 40	Very Stiff	12 - 24
		Hard	Greater than 24



REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DERWOOD SHEPPARD, P.E. P.E. NO.: 69228
Environmental & Geotechnical Specialists, Inc.
EGS
3154 Eliza Road
Tallahassee, Florida 32308
Office: (850) 386-1253
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: MLH 05-11

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: REPORT OF CORE BORINGS
REF. DWG. NO.
PROJECT NAME: NATURAL BRIDGE ROAD OVER ST. MARKS BRANCH
SHEET NO. B1-5

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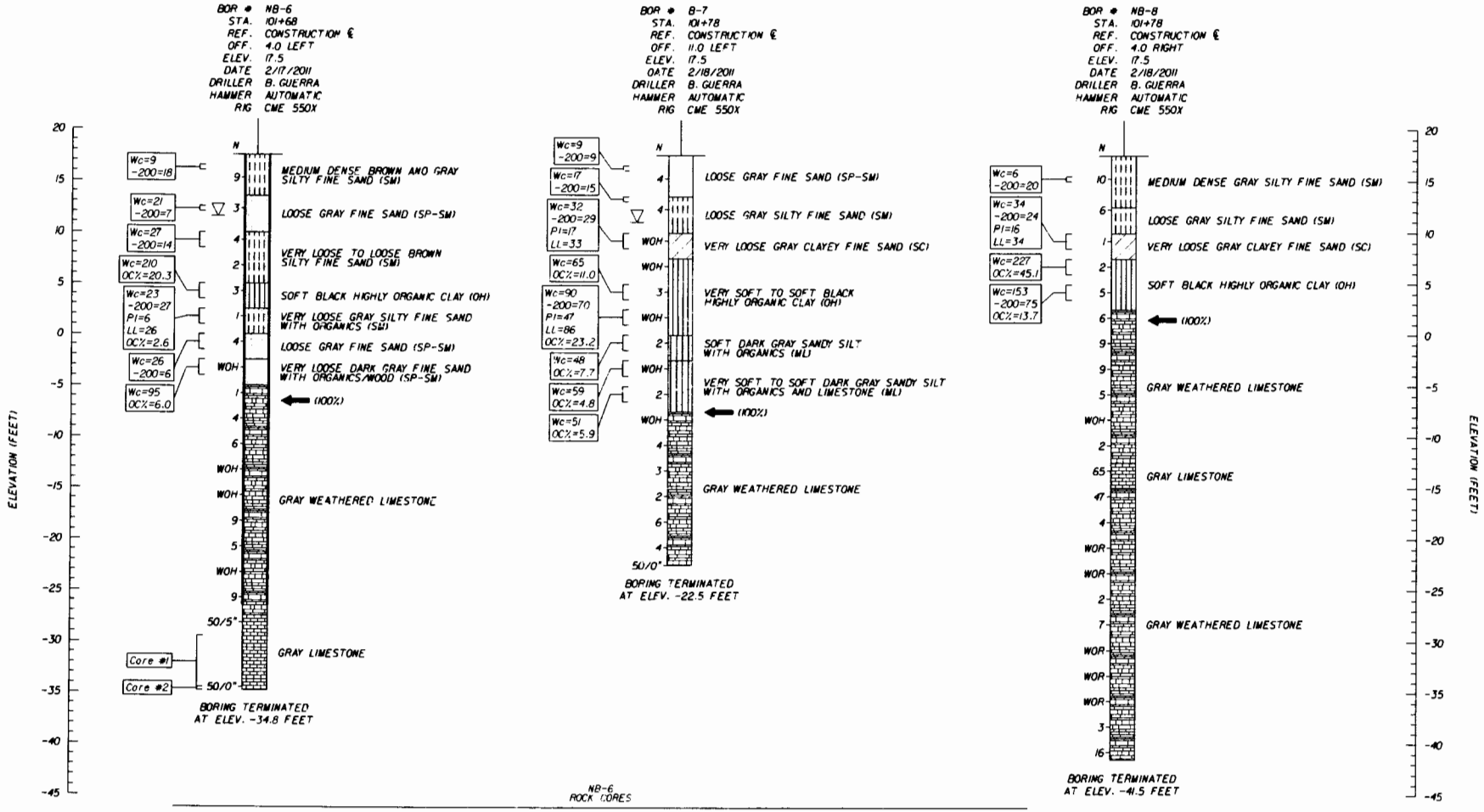

NB-6
ROCK CORES

CORE	ELEVATION (FEET)	CORING PRESSURE (LB/IN²)	CORING TIME (HR:MIN:SEC)	RECOVERY (%)	RQD (%)	UNCONFINED COMPRESSION (LB/FT²)	UNCONFINED COMPRESSION (LB/IN²)	SPLITTING TENSILE (LB/FT²)	SPLITTING TENSILE (LB/IN²)
1	-29.5 - -34.5	400	01:51:38	62	55	472,668 - 2,217,668	3,282 - 15,401	179,377 - 228,857	1,246 - 1,589
2	-34.5 - -34.2	400	02:26:02	0	0	--	--	--	--

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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Environmental & Geotechnical Specialists, Inc.
EGS
3154 Eliza Road
Tallahassee, Florida 32308
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: REPORT OF CORE BORINGS

PROJECT NAME: NATURAL BRIDGE ROAD OVER ST. MARKS BRANCH

REF. DWG. NO.

SHEET NO. B1-6

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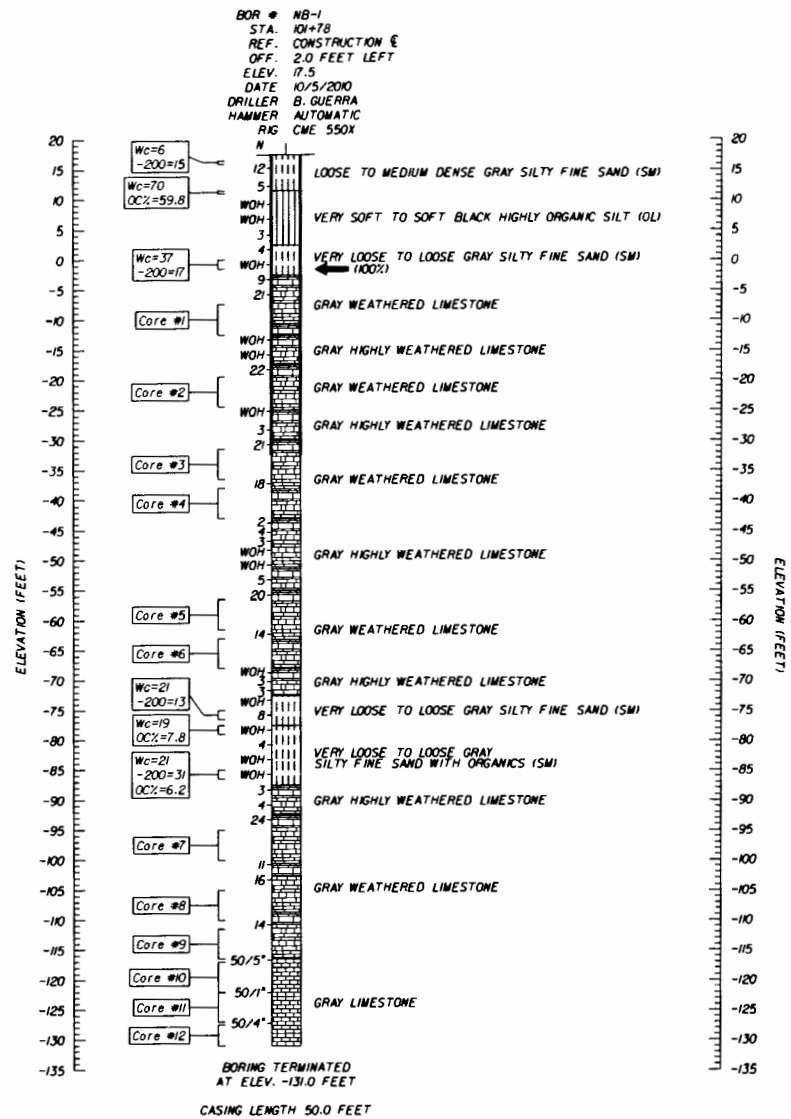

NB-1
ROCK CORES

CORE	ELEVATION (FEET)	CORING PRESSURE (LB/IN²)	CORING TIME (HR:MIN:SEC)	RECOVERY (%)	RQD (%)	UNCONFINED COMPRESSION (LB/FT²)	UNCONFINED COMPRESSION (LB/IN²)	SPLITTING TENSILE (LB/FT²)	SPLITTING TENSILE (LB/IN²)
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
8	-105.0 - -110.0	350	00:15:36	48	37	293,034	2,035	29,646 - 87,910	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
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
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
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

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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3154 Eliza Road
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: REPORT OF CORE BORINGS
PROJECT NAME: NATURAL BRIDGE ROAD OVER ST. MARKS BRANCH
REF. DWG. NO.
SHEET NO. 81-7

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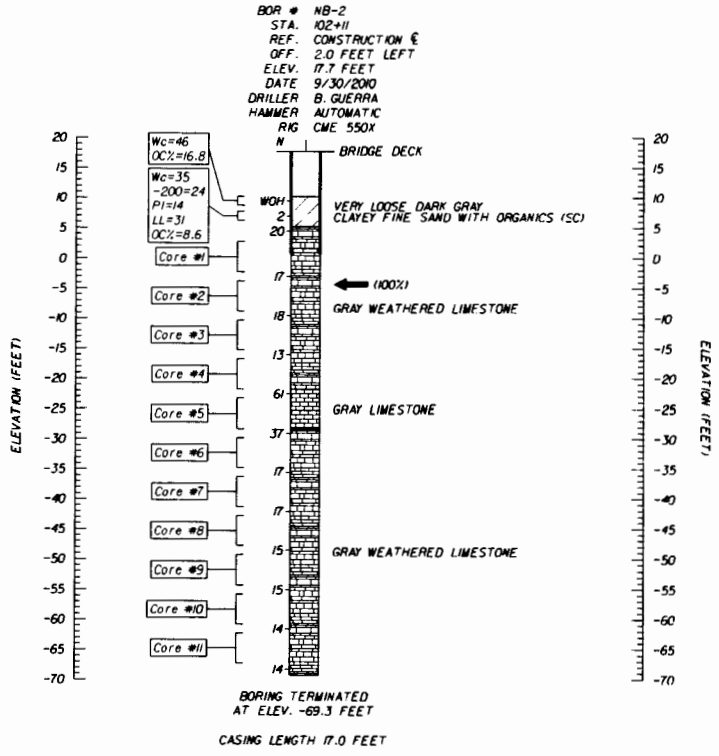

NB-2
ROCK CORES

CORE	ELEVATION (FEET)	CORING PRESSURE (LB/IN²)	CORING TIME (HR:MIN:SEC)	RECOVERY (%)	RQD (%)	UNCONFINED COMPRESSION (LB/FT²)	UNCONFINED COMPRESSION (LB/IN²)	SPLITTING TENSILE (LB/FT²)	SPLITTING TENSILE (LB/IN²)
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	-15.8 - -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

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DERWOOD SHEPPARD, P.E. P.E. NO.: 69328
Environmental & Geotechnical Specialists, Inc.
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CHECKED BY: MLH 05-11

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: REPORT OF CORE BORINGS
PROJECT NAME: NATURAL BRIDGE ROAD OVER ST. MARKS BRANCH
REF. DWG. NO.:
SHEET NO.: B1-8

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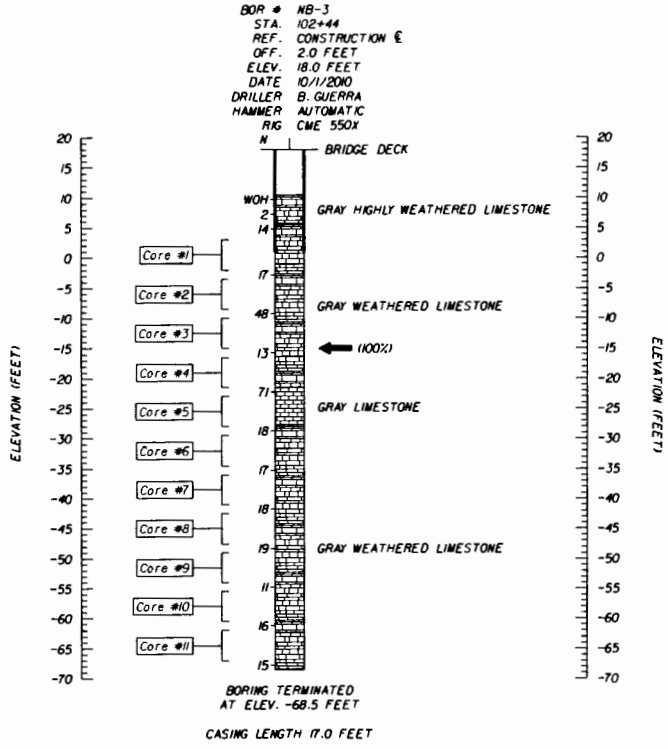

NB-3
ROCK CORES

CORE	ELEVATION (FEET)	CORING PRESSURE (LB/IN²)	CORING TIME (HR:MIN:SEC)	RECOVERY (%)	RQD (%)	UNCONFINED COMPRESSION (LB/FT²)	UNCONFINED COMPRESSION (LB/IN²)	SPLITTING TENSILE (LB/FT²)	SPLITTING TENSILE (LB/IN²)
1	3.0 - -2.0	400	00:03:59	95	83	21,529 - 29,779	150 - 207	2,355 - 4,910	16 - 34
2	-3.5 - -8.5	400	00:04:00	95	93	19,712 - 54,694	137 - 380	5,426 - 16,681	38 - 116
3	-10.0 - -15.0	400	00:04:42	88	75	30,903 - 30,994	215	2,391 - 8,733	17 - 61
4	-16.5 - -21.5	400	00:04:20	65	53	10,535 - 24,409	73 - 170	25,641 - 36,248	178 - 252
5	-23.0 - -28.0	400	00:03:51	100	77	19,340	134	8,573 - 28,844	60 - 200
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	2,097 - 2,258	15 - 16
8	-42.5 - -47.5	450	00:01:33	92	85	13,922 - 14,008	97	7,514 - 13,851	52 - 96
9	-49.0 - -54.0	400	00:03:02	93	93	48,976 - 58,438	340 - 406	1,321 - 1,872	9 - 13
10	-55.5 - -60.5	450	00:02:30	95	93	35,265 - 36,617	245 - 254	3,147 - 3,540	22 - 25
11	-62.0 - -67.0	350	00:02:16	98	97	38,064 - 39,904	264 - 277	2,361 - 3,608	16 - 25

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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DESIGNED BY: DCS 05-11
CHECKED BY: MLH 05-11

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: REPORT OF CORE BORINGS
PROJECT NAME: NATURAL BRIDGE ROAD OVER ST. MARKS BRANCH
REF. DWG. NO.
SHEET NO. 81-9

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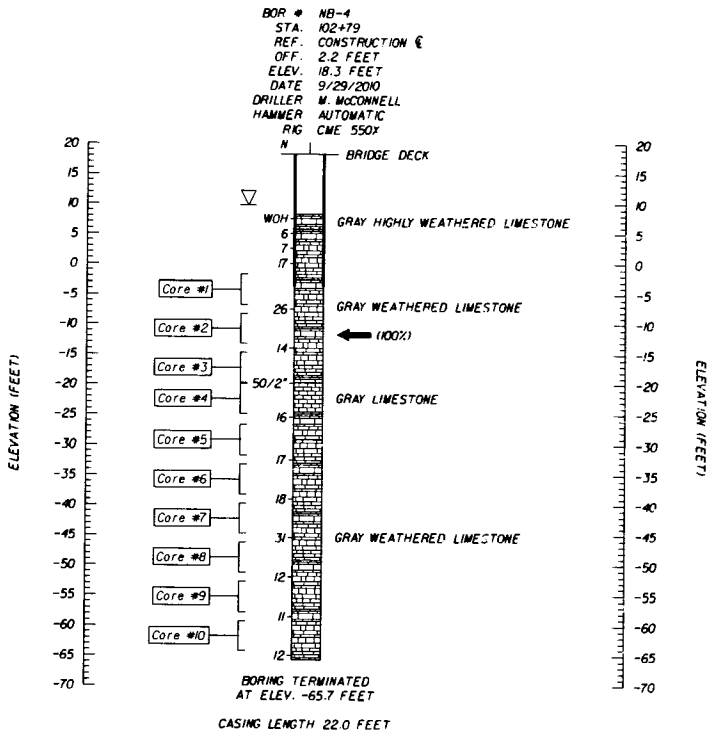

NB-4
ROCK CORES

CORE	ELEVATION (FEET)	CORING PRESSURE (LB/IN²)	CORING TIME (HR:MIN:SEC)	RECOVERY (%)	RQD (%)	UNCONFINED COMPRESSION (LB/FT²)	UNCONFINED COMPRESSION (LB/IN²)	SPLITTING TENSILE (LB/FT²)	SPLITTING TENSILE (LB/IN²)
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

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DERWOOD SHEPPARD, P.E. P.E. NO.: 69228
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DESIGNED BY: DCS 05-11
CHECKED BY: MLH 05-11

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: REPORT OF CORE BORINGS

PROJECT NAME: NATURAL BRIDGE ROAD OVER ST. MARKS BRANCH

REF. DWG. NO.

SHEET NO. B1-10

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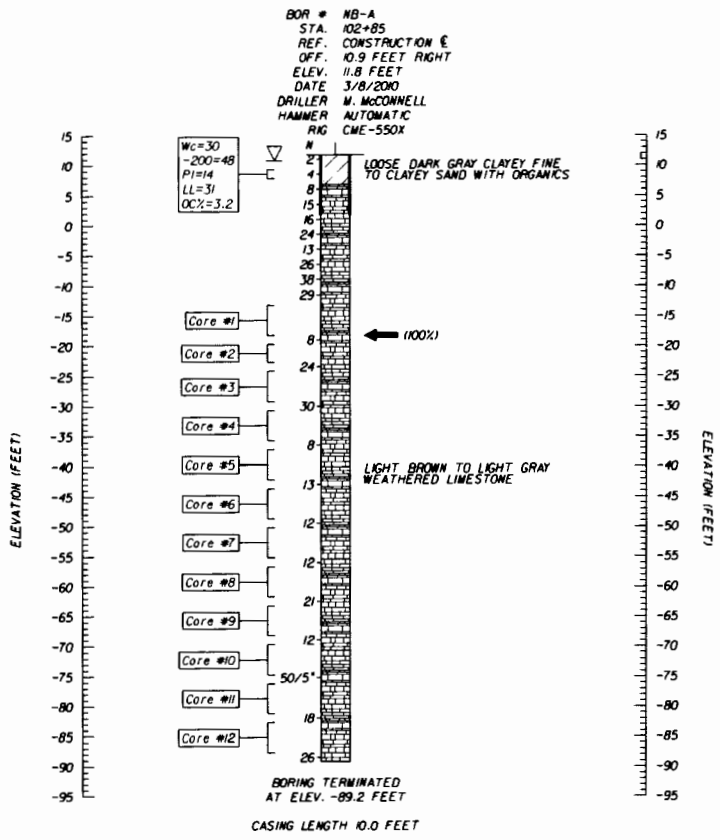

NB-A
ROCK CORES

CORE	ELEVATION (FEET)	CORING PRESSURE (LB/IN²)	CORING TIME (HR:MIN:SEC)	RECOVERY (%)	RQD (%)	UNCONFINED COMPRESSION (LB/FT²)	UNCONFINED COMPRESSION (LB/IN²)	SPLITTING TENSILE (LB/FT²)	SPLITTING TENSILE (LB/IN²)
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	37,682	262
3	-24.2 - -28.8	700	00:07:14	92	87	23,472 - 82,051	163 - 570	18,517 - 39,806	129 - 276
4	-30.7 - -35.2	650	00:04:11	90	90	6,431 - 9,562	45 - 66	1,189 - 2,409	8 - 17
5	-37.2 - -40.9	650	00:03:06	73	57	8,413 - 17,106	58 - 119	1,414 - 1,986	10 - 14
6	-43.7 - -47.5	650	00:03:18	77	70	8,901 - 17,302	62 - 120	1,481 - 3,952	10 - 27
7	-50.2 - -55.0	650	00:02:59	95	90	25,868 - 33,680	180 - 234	3,663 - 6,132	25 - 43
8	-56.7 - -61.5	650	00:02:34	97	97	31,060 - 36,867	216 - 256	4,238 - 4,669	29 - 32
9	-63.2 - -68.0	650	00:03:07	97	93	20,893 - 51,105	145 - 355	7,098 - 8,231	49 - 57
10	-69.7 - -74.7	650	00:03:27	100	100	22,190	154	6,834 - 8,160	47 - 57
11	-76.2 - -80.0	650	00:04:50	77	50	28,896 - 31,270	201 - 217	3,921 - 7,824	27 - 54
12	-82.7 - -86.0	600	00:04:39	67	63	38,403 - 42,341	266 - 294	4,509 - 8,659	31 - 60

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CHECKED BY: MLH 05-11

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: REPORT OF CORE BORINGS
PROJECT NAME: NATURAL BRIDGE ROAD OVER ST. MARKS BRANCH
REF. DWG. NO.
SHEET NO. B1-11

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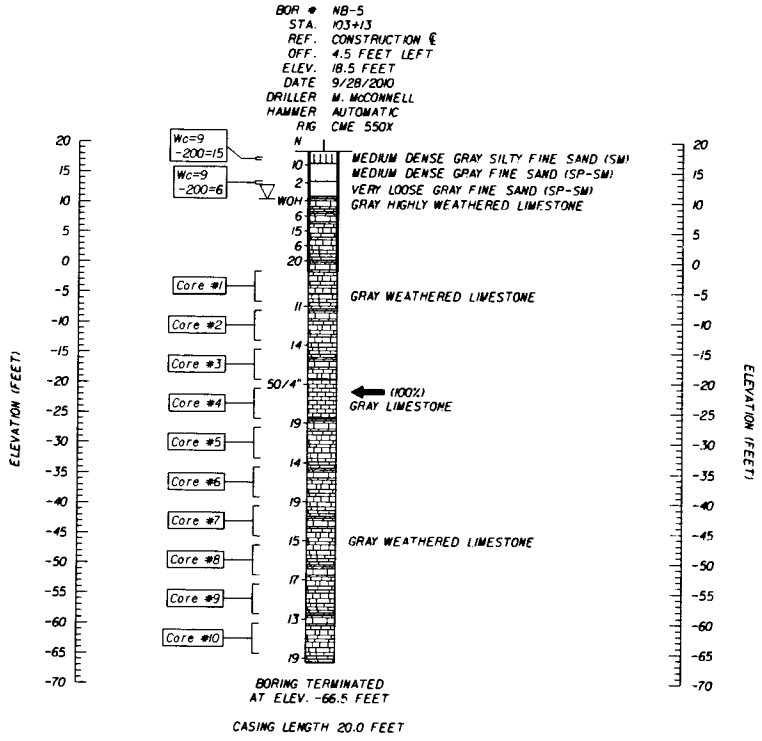

NB-5
ROCK CORES

CORE	ELEVATION (FEET)	CORING PRESSURE (LB/IN²)	CORING TIME (HR:MIN:SEC)	RECOVERY (%)	RQD (%)	(LB/FT²)	(LB/IN²)	(LB/FT²)	(LB/IN²)
1	-1.5 - -6.5	400	00:05:10	52	40	13,962 - 26,585	97 - 185	2,793 - 3,181	19 - 22
2	-8.0 - -13.0	400	00:05:48	65	18	--	--	11,867	82
3	-14.5 - -19.5	400	00:03:10	98	92	23,901 - 108,995	166 - 757	1,983 - 15,648	14 - 109
4	-21.0 - -26.0	400	00:02:47	63	62	35,868 - 54,114	249 - 376	5,121 - 5,176	36
5	-27.5 - -32.5	400	00:03:31	100	83	10,347 - 10,498	72 - 73	1,627 - 3,984	11 - 28
6	-34.0 - -39.0	400	00:01:34	87	75	9,609 - 10,077	67 - 70	1,543	11
7	-40.5 - -45.5	400	00:02:23	78	63	11,844 - 21,068	82 - 146	2,743 - 3,735	19 - 26
8	-47.0 - -52.0	400	00:02:58	72	43	18,688 - 22,110	130 - 154	7,382 - 13,824	51 - 96
9	-53.5 - -58.5	400	00:02:57	100	80	8,006	56	1,318 - 1,651	9 - 11
10	-60.0 - -65.0	400	00:02:31	100	100	27,722 - 27,849	193	3,928 - 7,157	27 - 50

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: REPORT OF CORE BORINGS

PROJECT NAME: NATURAL BRIDGE ROAD OVER ST. MARKS BRANCH

REF. DWG. NO.

SHEET NO. B1-12

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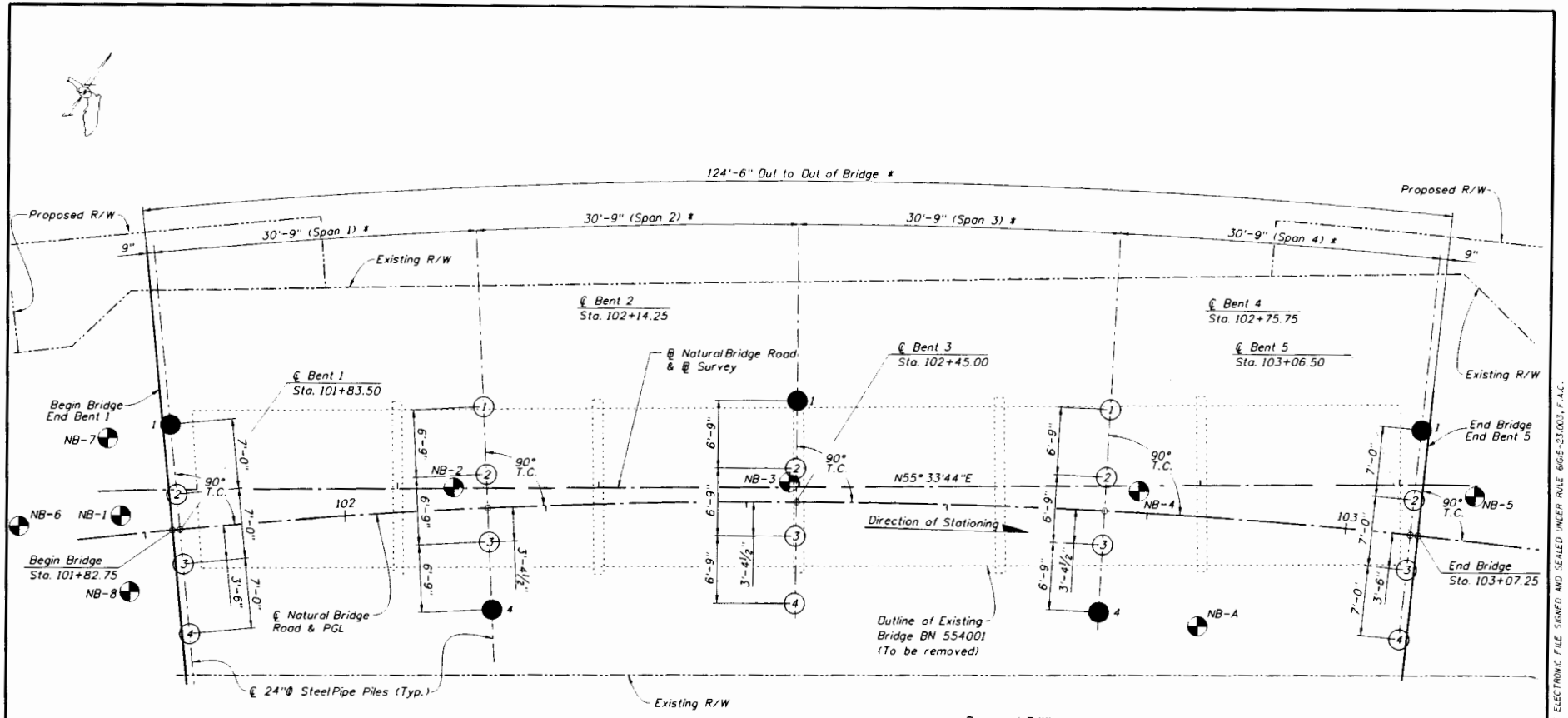

LEGEND

- ○ -- 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 B1-14.

FOUNDATION LAYOUT

CURVE DATA CLNBR-1

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

Bridge Nos. 554153

REVISIONS					
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. # 32121

DRAWN BY:	CHECKED BY:	DESIGNED BY:	CHECKED BY:
LTG 05-11	MDB 05-11	BCR 05-11	MDB 05-11

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: FOUNDATION LAYOUT
REF. DWG. NO.
PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
SHEET NO. B1-13

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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-Ø	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

$$\frac{\text{Factored Design Load} + \text{Net Scour Resistance} + \text{Down Drag}}{\emptyset} \leq \text{Nominal Bearing Resistance}$$

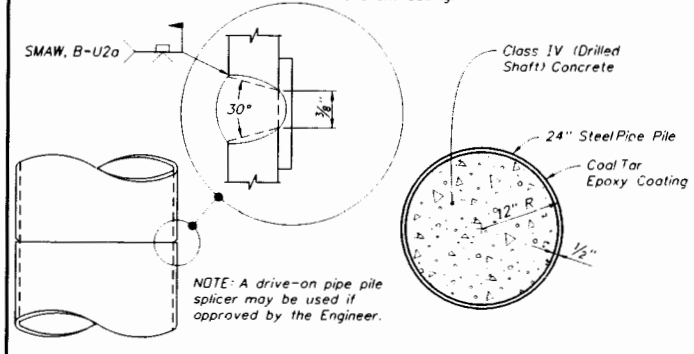
TENSION RESISTANCE - The ultimate side friction capacity that must be obtained below the 100 year scour elevation to resist pullout of the pile (Specify only when design requires tension capacity)

TOTAL SCOUR RESISTANCE - An estimate of the ultimate static side friction resistance provided by the scourable soil

NET SCOUR RESISTANCE - An estimate of the ultimate static side friction resistance provided by the soil from the required preformed or jetting elevation to the scour elevation.

100-YEAR SCOUR ELEVATION - Estimated elevation of scour due to the 100 year storm event.

LONG TERM SCOUR ELEVATION - Estimated elevation of scour used in design for extreme event loading.



PIPE PILE SPLICE DETAIL

TYPICAL PILE SECTION

PILE INSTALLATION NOTES:

1. Pipe piles shall be driven plumb. Provide pipe piles in accordance with FDOT Specification 962-8.8. Pipe wall thickness to be ½".
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.
3. 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.
4. 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.
5. All welding shall conform to AMERICAN WELDING SOCIETY (AWS) Bridge Welding Code.
6. N/A means values do not apply.
7. 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.
8. Notarized mill test report shall be required for all steel pipe pile.
9. 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.
10. Place Coal 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 coal tar-epoxy in accordance with Specification Section 560.

PILE INSTALLATION NOTES (CONT'D):

11. Contractor to verify location of all utilities prior to any pile driving.
12. Minimum Tip Elevation is required for lateral stability.
13. No jetting will be allowed without the approval of the Engineer.
14. The Contractor should not anticipate being allowed to jet piles below the minimum tip elevation.
15. At each Bent, pile driving is to commence at the center of the Bent and proceed outward.
16. All piles are to be dynamically load tested per Specification Section 455 during driving and on all test piles during restriking.
17. 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.
18. Tip protection shall be provided by the Contractor.
19. The Contractor shall fill voids resulting from soil plugs with flowable fill up to 5 ft. below the 100-year scour elevation.

Bridge Nos. 554153

REVISIONS					
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. # 32131

DRAWN BY: LTG 05-11
CHECKED BY: BDB 05-11
DESIGNED BY: BDB 05-11
CHECKED BY: BDB 05-11

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: PIPE PILE DATA TABLE AND NOTES
REF. DWG. NO.
PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
SHEET NO. B1-14

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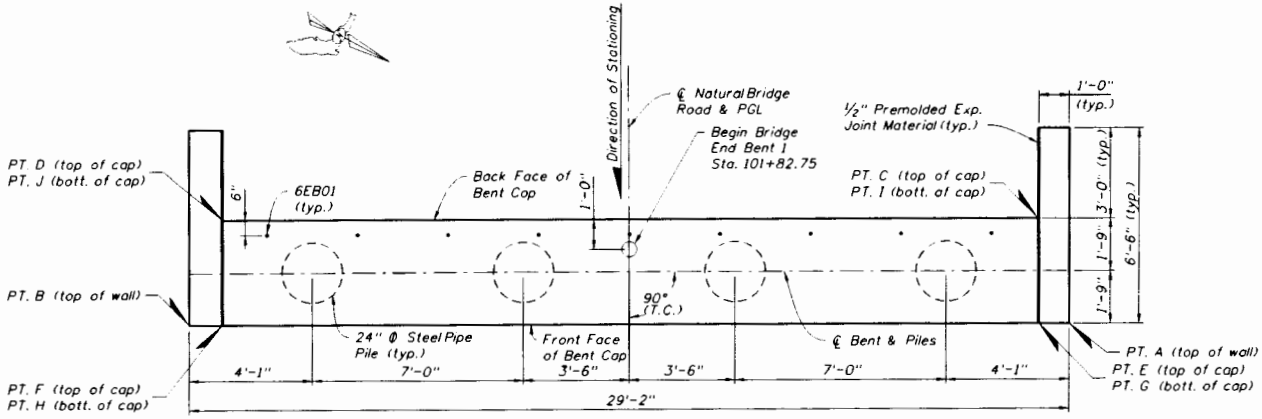
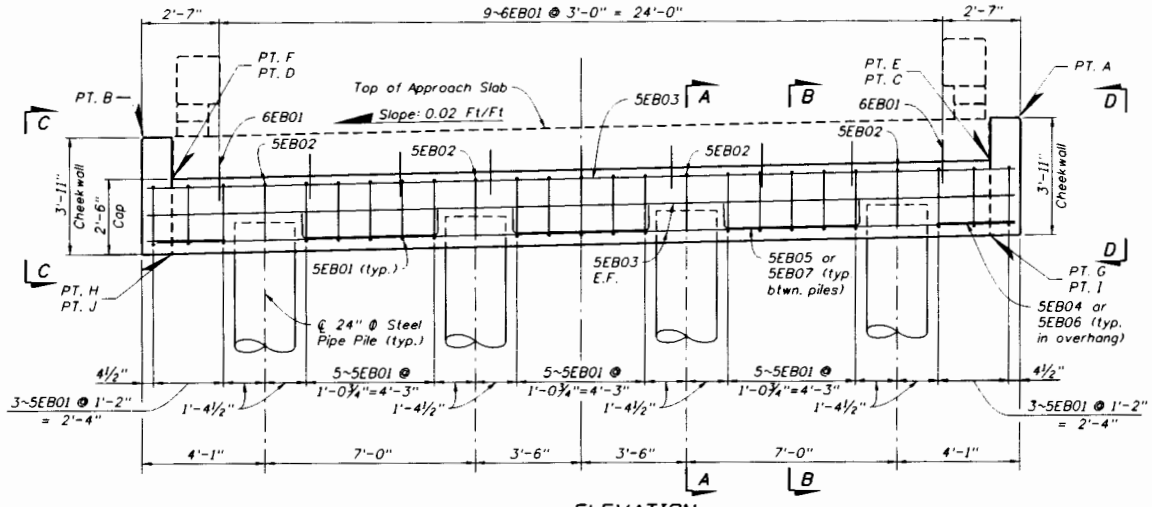


PLAN



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

REVISIONS					
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. # 32131

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: END BENT 1
REF. DWG. NO.
PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
SHEET NO. B1-15

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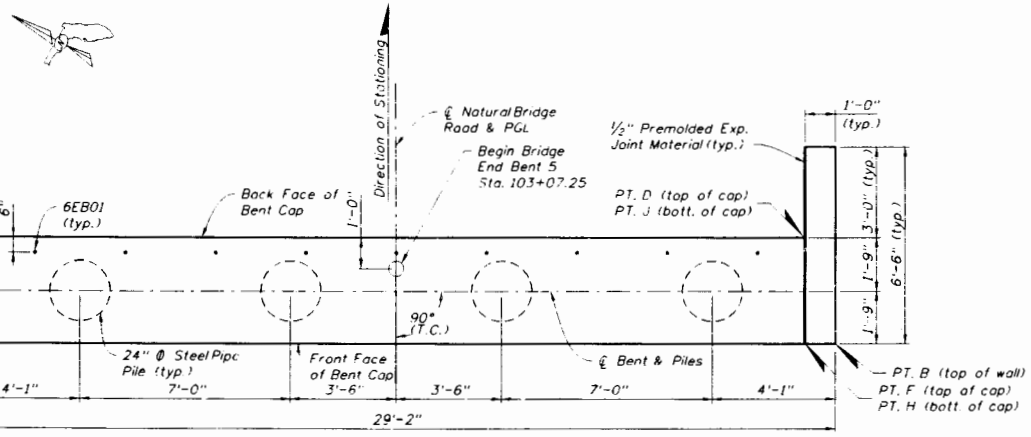

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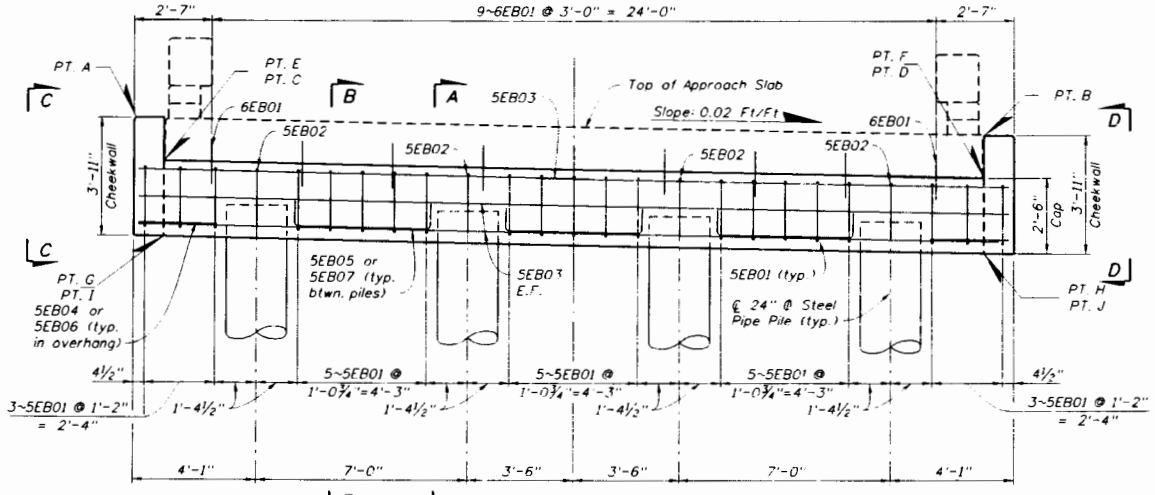

ELEVATION

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

** See Summary of Bridge Pay Items.

ELEVATIONS	
POINT	ELEVATION
A	18.284
B	17.742
C	16.856
D	16.314
E	16.867
F	16.325
G	14.367
H	13.825
I	14.356
J	13.814

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

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

LOCHNER
2140 EAST PARK AVENUE SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPP CERTIFICATE OF AUTH. # 894
CHARLES F. CRAYCRAFT, P.E. # 55131

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET TITLE: END BENT 5	REF. DWG. NO.
ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER	SHEET NO. B1-16
CR 2192	LEON	413491-1-52-01		

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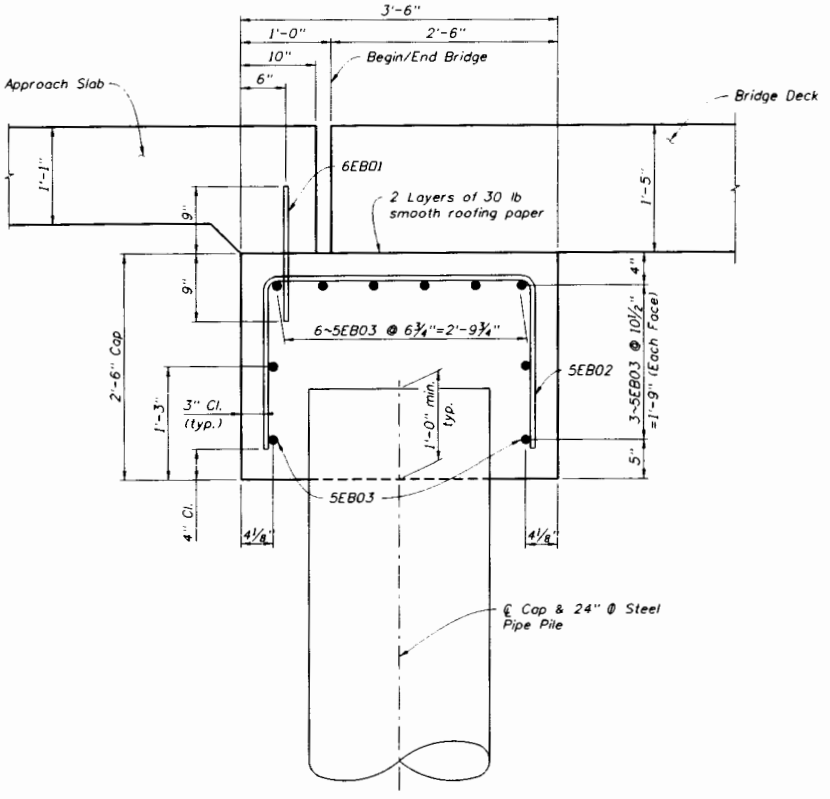
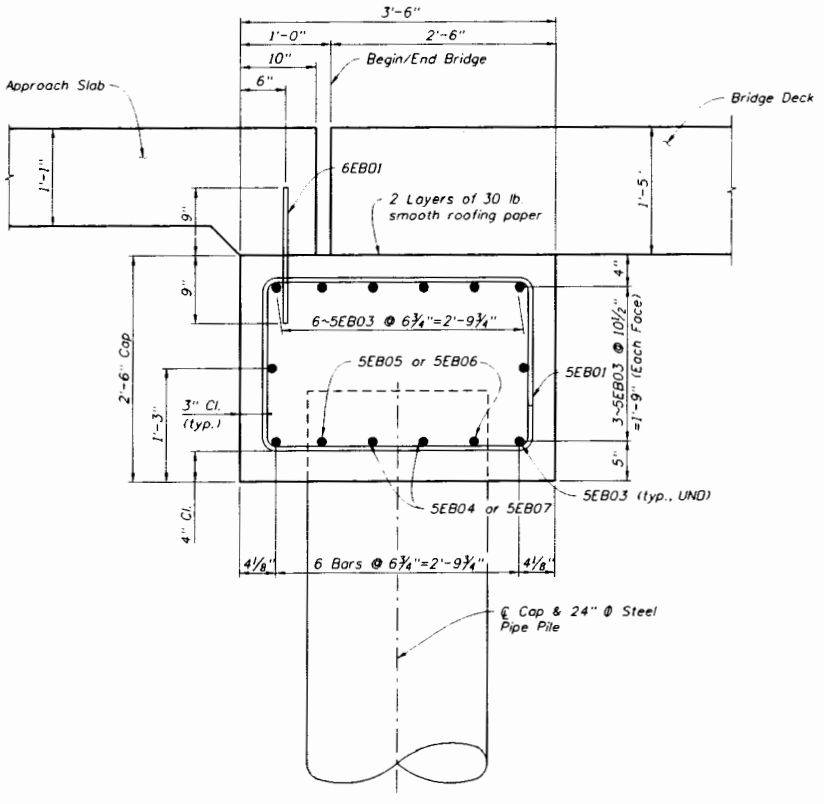


SECTION A-A



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.

Bridge No. 554153

REVISIONS					
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. # 39131

DRAWN BY: LTG 05-11
CHECKED BY: RDS 05-11
DESIGNED BY: BCR 05-11
CHECKED BY: RDB 05-11

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 2192	LEON	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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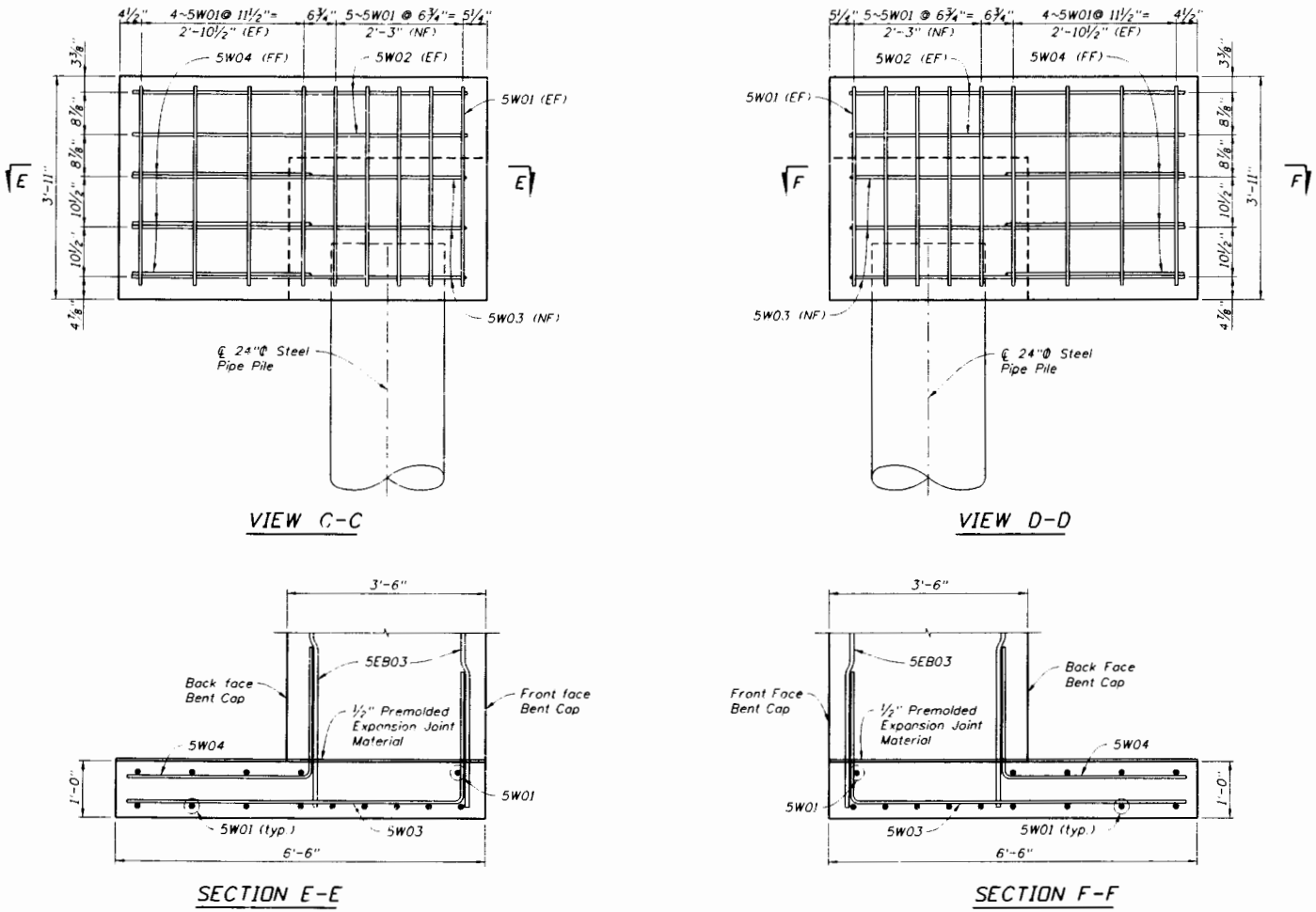

NOTES:

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.

Bridge No. 554153

REVISIONS					
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. # 32131

DRAWN BY: LTG 05-11
CHECKED BY: WDB 09-10
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: END BENT DETAILS (2 OF 2)
PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
REF. DWG. NO.
SHEET NO. B1-18

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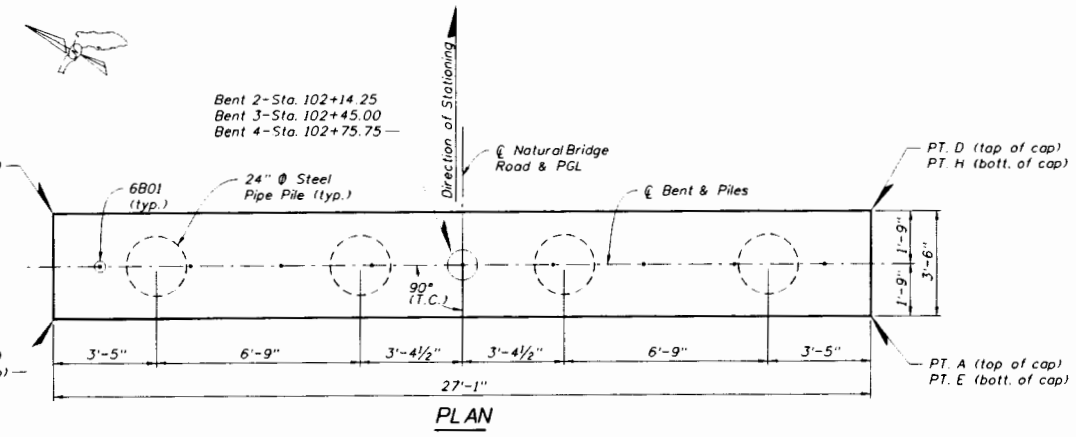
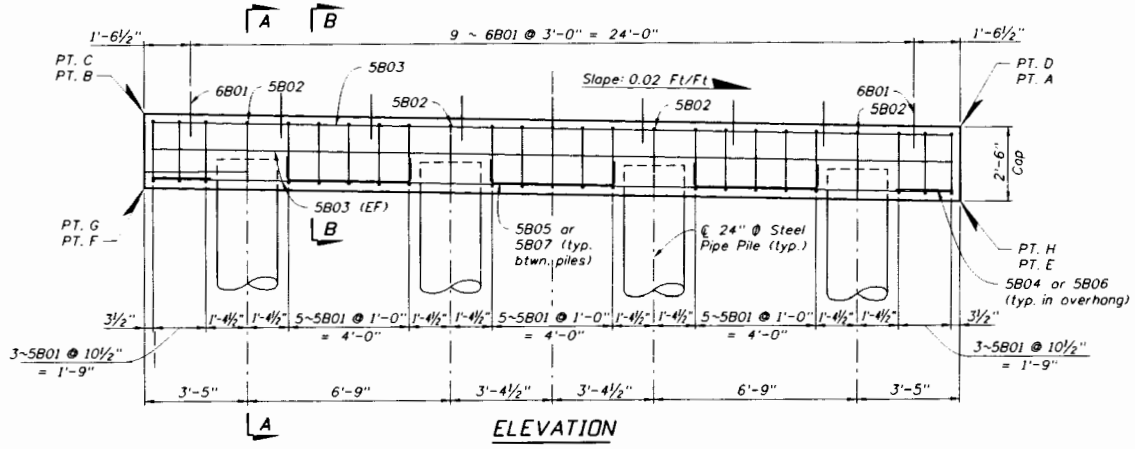


PLAN



ELEVATION

TABLE OF ELEVATIONS			
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

* ESTIMATED QUANTITIES		
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

Bridge No. 554153

REVISIONS					
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. # 39131

DRAWN BY: LTG 05-11
CHECKED BY: MDS 05-11
DESIGNED BY: BCR 05-11
CHECKED BY: MDS 05-11

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: INTERMEDIATE BENTS 2, 3, & 4
REF. DWG. NO.
PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
SHEET NO. B1-19

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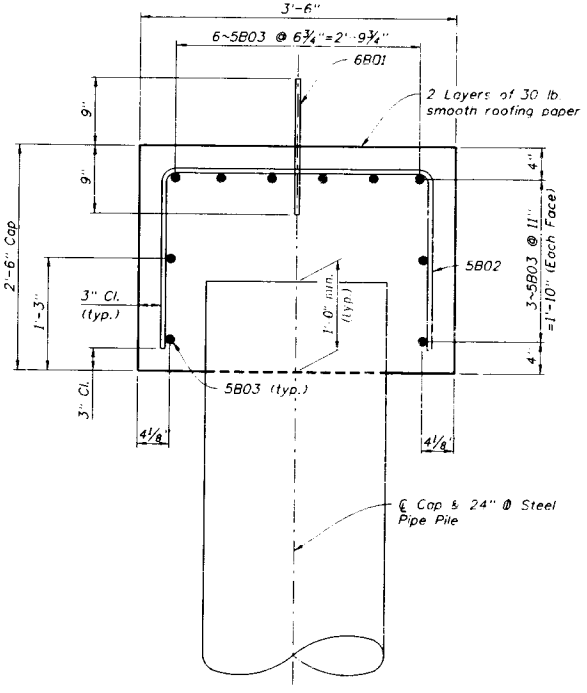
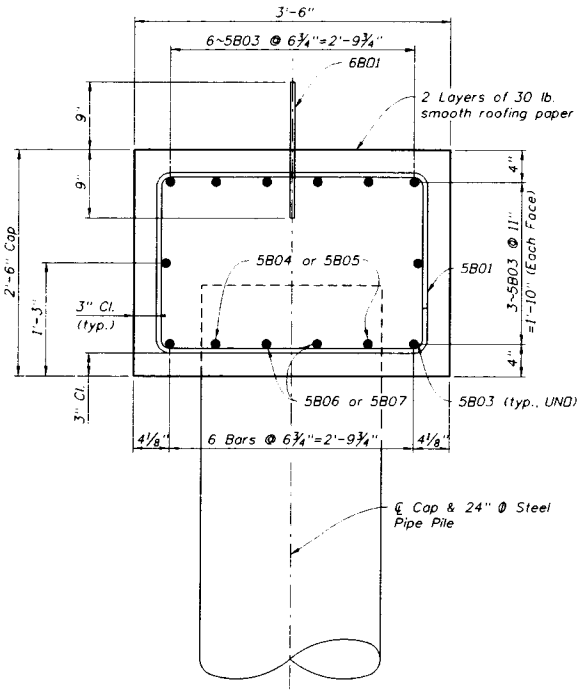


SECTION A-A



SECTION B-B

NOTES:

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

Bridge No. 554153

REVISIONS					
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. # 32131

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

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: INTERMEDIATE BENT DETAILS

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

REF. DWG. NO.

SHEET NO. B1-20

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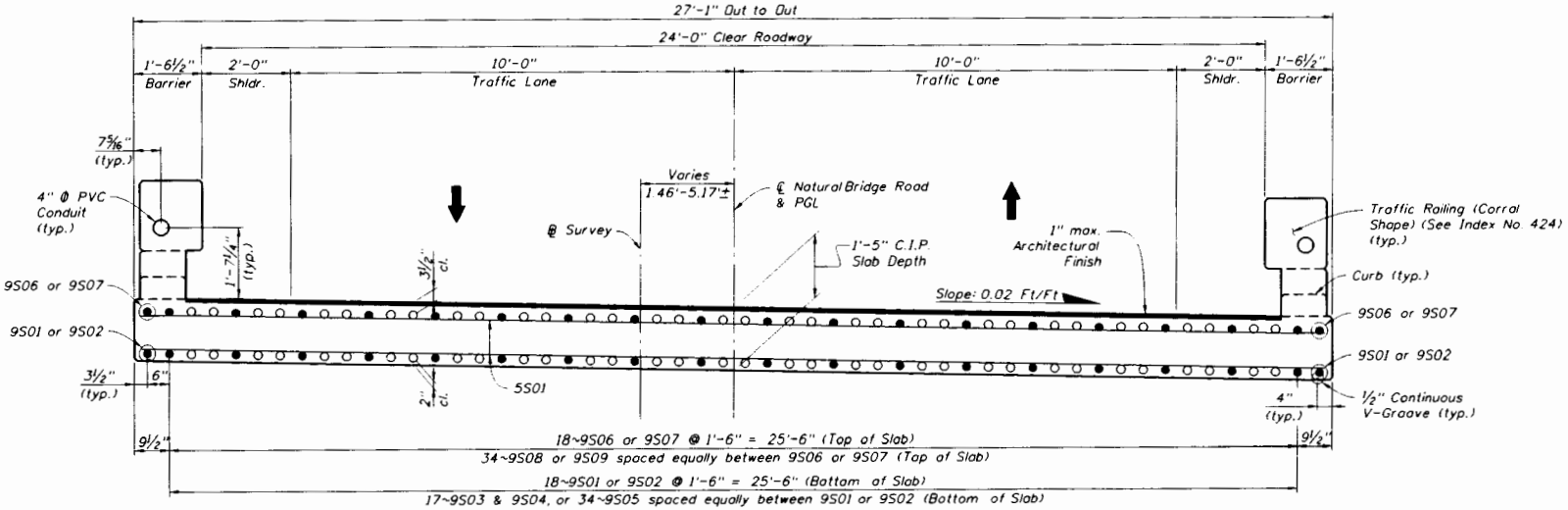

TYPICAL SECTION

(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					
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. # 32131

DRAWN BY: LTG 08-10
CHECKED BY: MDB 09-10
DESIGNED BY: BCR 10-10
CHECKED BY: JTF 10-10

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

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

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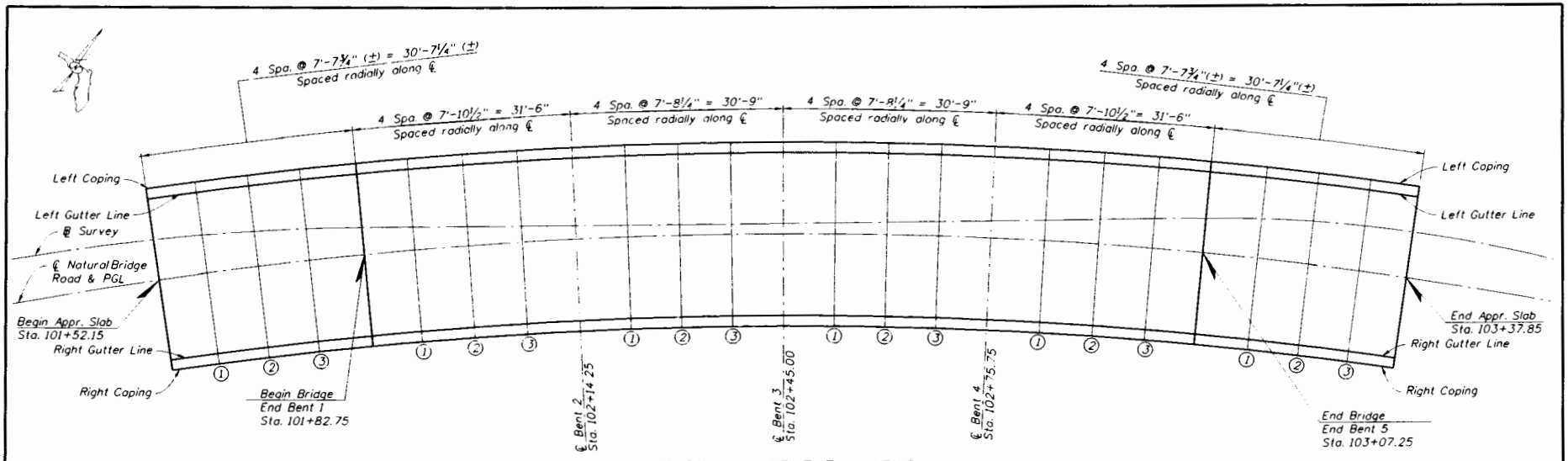


FINISH GRADE ELEVATIONS

LOCATION	BEGIN BRIDGE	SPAN 1		
		1	2	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

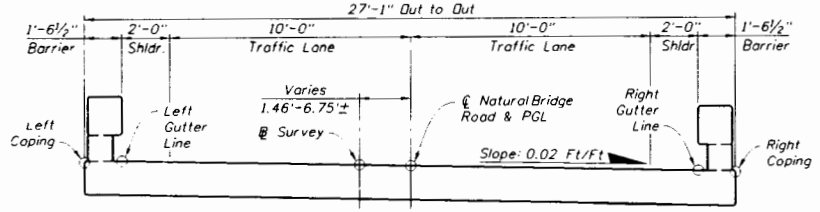
LOCATION	℄ BENT 2	SPAN 2		
		1	2	3
LEFT COPING	18.120	18.168	18.209	18.244
LEFT GUTTER	18.089	18.137	18.178	18.213
BASELINE SURVEY	17.889	17.931	17.969	18.003
CENTERLINE BRIDGE	17.849	17.897	17.938	17.973
RIGHT GUTTER	17.609	17.657	17.698	17.733
RIGHT COPING	17.579	17.626	17.668	17.703

LOCATION	℄ BENT 3	SPAN 3		
		1	2	3
LEFT COPING	18.273	18.296	18.312	18.322
LEFT GUTTER	18.242	18.265	18.281	18.291
BASELINE SURVEY	18.032	18.057	18.077	18.093
CENTERLINE BRIDGE	18.002	18.025	18.041	18.051
RIGHT GUTTER	17.762	17.785	17.801	17.811
RIGHT COPING	17.731	17.754	17.770	17.780

LOCATION	℄ BENT 4	SPAN 4		
		1	2	3
LEFT COPING	18.326	18.323	18.314	18.298
LEFT GUTTER	18.295	18.292	18.283	18.267
BASELINE SURVEY	18.105	18.113	18.116	18.114
CENTERLINE BRIDGE	18.055	18.052	18.043	18.027
RIGHT GUTTER	17.815	17.812	17.703	17.787
RIGHT COPING	17.784	17.781	17.772	17.757

LOCATION	BEGIN SLAB	APPROACH SLAB 1		
		1	2	3
LEFT COPING	17.523	17.610	17.696	17.781
LEFT GUTTER	17.493	17.579	17.665	17.750
BASELINE SURVEY	17.372	17.452	17.529	17.604
CENTERLINE BRIDGE	17.253	17.339	17.425	17.510
RIGHT GUTTER	17.013	17.099	17.185	17.270
RIGHT COPING	16.982	17.068	17.154	17.239

LOCATION	APPROACH SLAB 2			END SLAB
	1	2	3	
LEFT COPING	18.248	18.214	18.179	18.144
LEFT GUTTER	18.217	18.183	18.148	18.113
BASELINE SURVEY	18.094	18.070	18.041	18.008
CENTERLINE BRIDGE	17.977	17.943	17.908	17.873
RIGHT GUTTER	17.737	17.703	17.668	17.633
RIGHT COPING	17.706	17.672	17.637	17.602



TYPICAL SECTION
(Looking Ahead Station)

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

Bridge No. 554153

REVISIONS

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. # 32131

DRAWN BY: DMS 05-11
CHECKED BY: BCR 05-11
DESIGNED BY: BCR 05-11
QUANTITIES BY: JTG 05-11

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: FINISH GRADE ELEVATIONS
REF. DWG. NO.
PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
SHEET NO. BI-22

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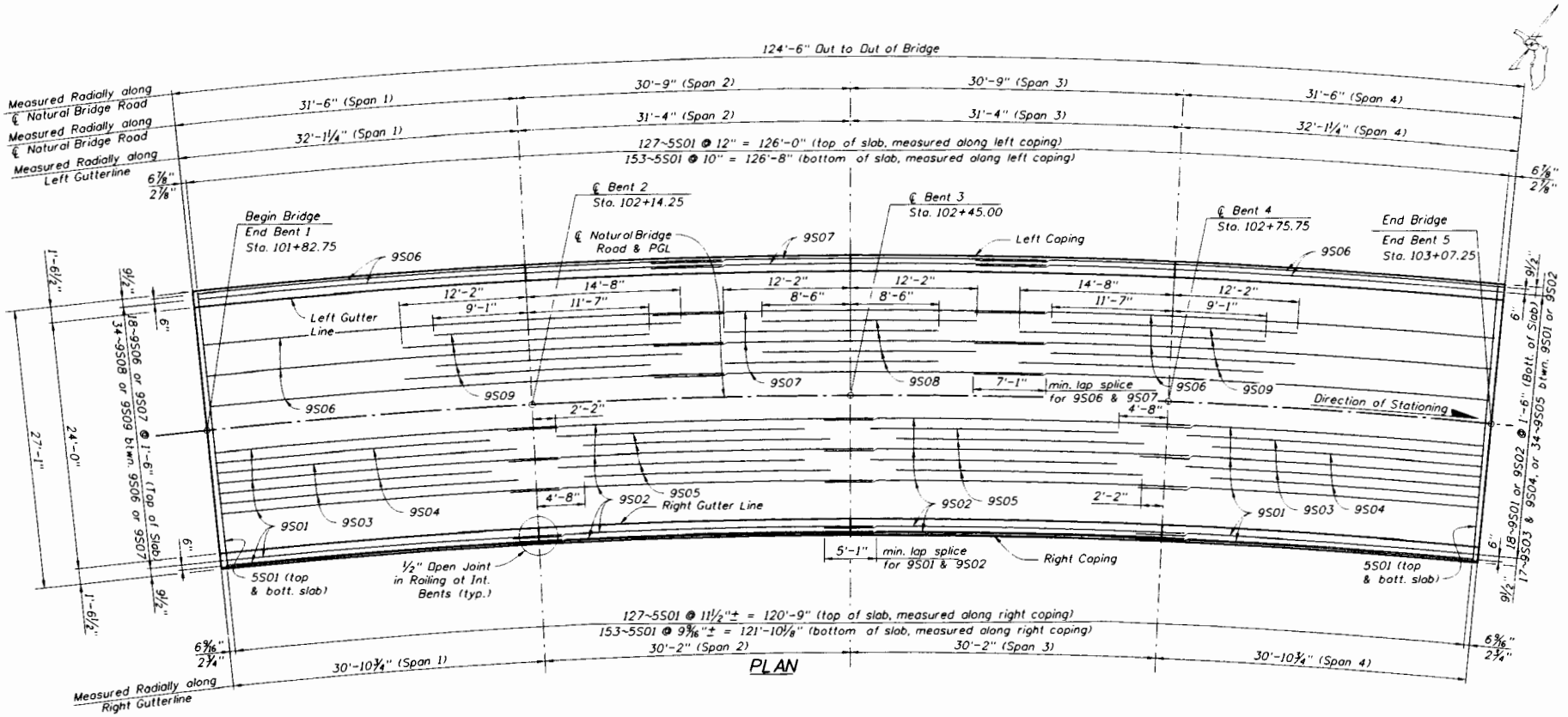

END POST LENGTH (Index No. 424)		
SPAN	GUTTER LINE	
	LEFT	RIGHT
1 & 4	3'-11½"	3'-3¾"
2 & 3	3'-1½"	2'-6¾"

NOTES:
1. For reinforcing bar list, see sheet B1-29.
2. Work this sheet with sheet B1-21.
3. For pouring sequence, see sheet B1-24.

Bridge Nos. 554153

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

LOCHNER
2140 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
CHARLES F. CRAYCRAFT, P.E. # 39131

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

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

SHEET TITLE: SUPERSTRUCTURE PLAN
REF. DWG. NO.
PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
SHEET NO. B1-23

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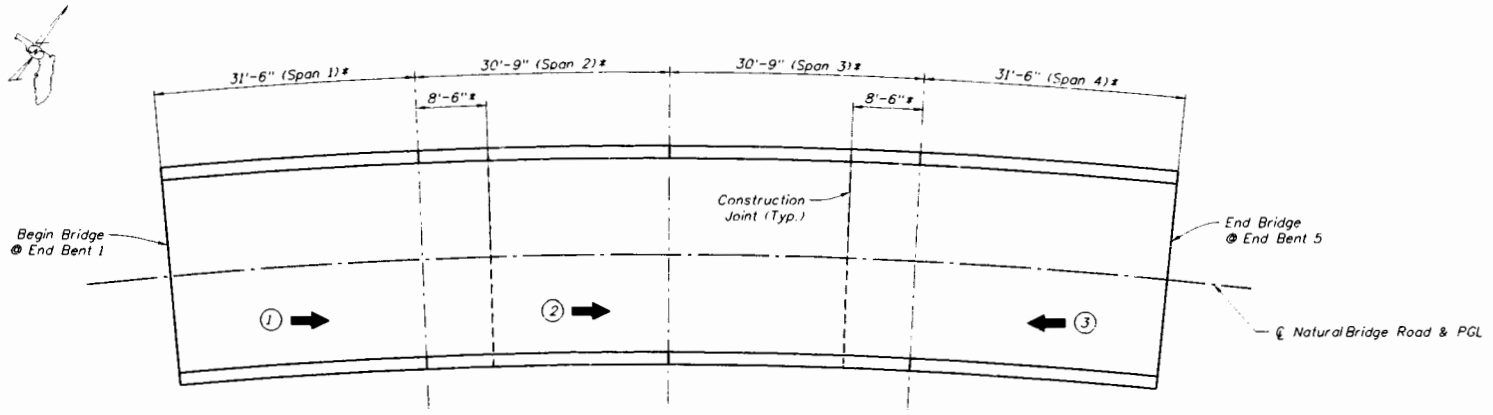
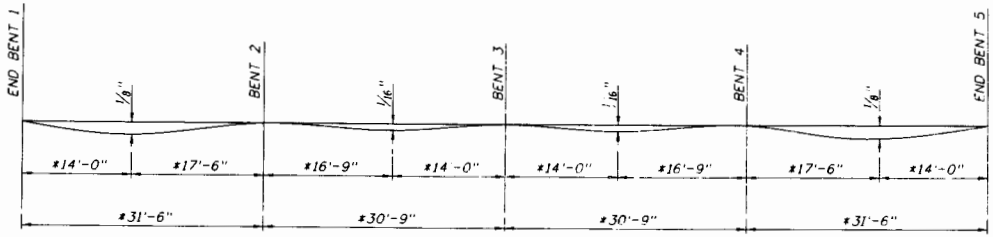


CASTING SEQUENCE

* MEASURED ALONG ℄ NATURAL BRIDGE ROAD



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.

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.

Bridge No. 554153

REVISIONS					
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. # 32131

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

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: SUPERSTRUCTURE DETAILS

PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARK'S RIVER

REF. DWG. NO.

SHEET NO. B1-24

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POURED EXPANSION JOINT DATA TABLE INDEX NO. 21110			Table Date 1-01-09
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 ℄ Expansion Joint. Work this table with Design Standards Index No. 21110.

Bridge No. 554153

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REVISIONS					
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. # 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

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

SHEET TITLE: EXPANSION JOINT DETAILS
PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
REF. DWG. NO.
SHEET NO. B1-25

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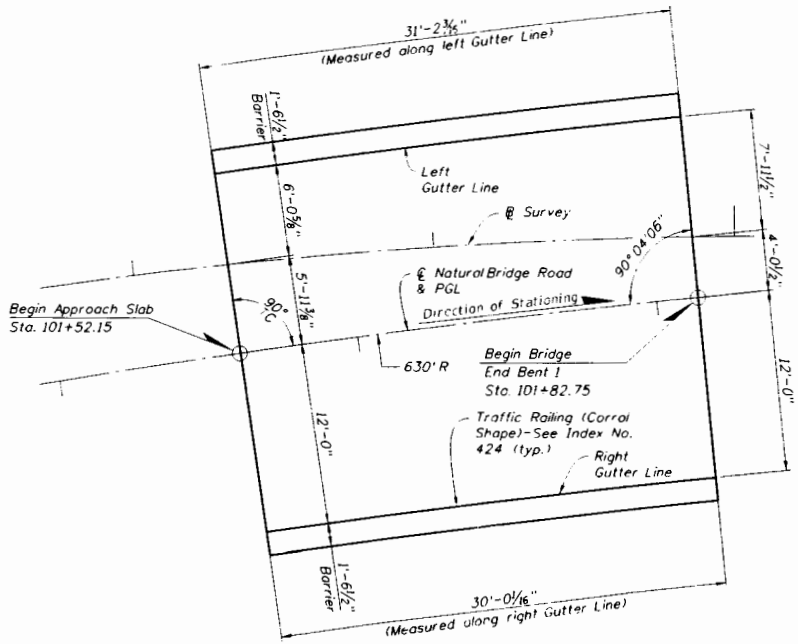

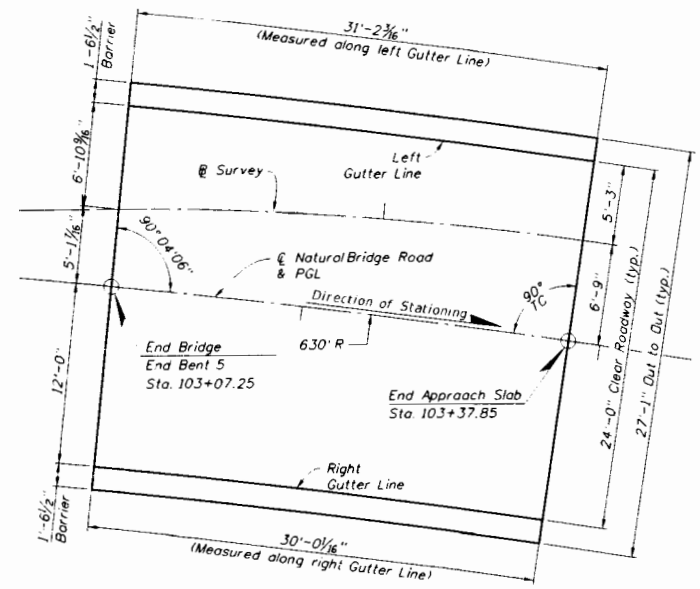

APPROACH SLAB INDEX 20910 TABLE OF DIMENSIONS AND ESTIMATED QUANTITIES								Table Date 7-01-05
LOCATION	DIMENSIONS					ANGLE Ø	REINFORCING STEEL (Lbs.)	CLASS II CONCRETE (C.Y.)
	L 1	L 2	M1	M2	N			
Approach Slab @ EB1	31'-2 3/16"	30'-0 1/16"	1'-6 1/2"	1'-6 1/2"	24'-0"	90°04'06"	5916	33.4
Approach Slab @ EB5	31'-2 3/16"	30'-0 1/16"	1'-6 1/2"	1'-6 1/2"	24'-0"	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

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REVISIONS					
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. # 32131

DRAWN BY: LTG 05-11
CHECKED BY: ADB 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.
PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
SHEET NO. B1-26

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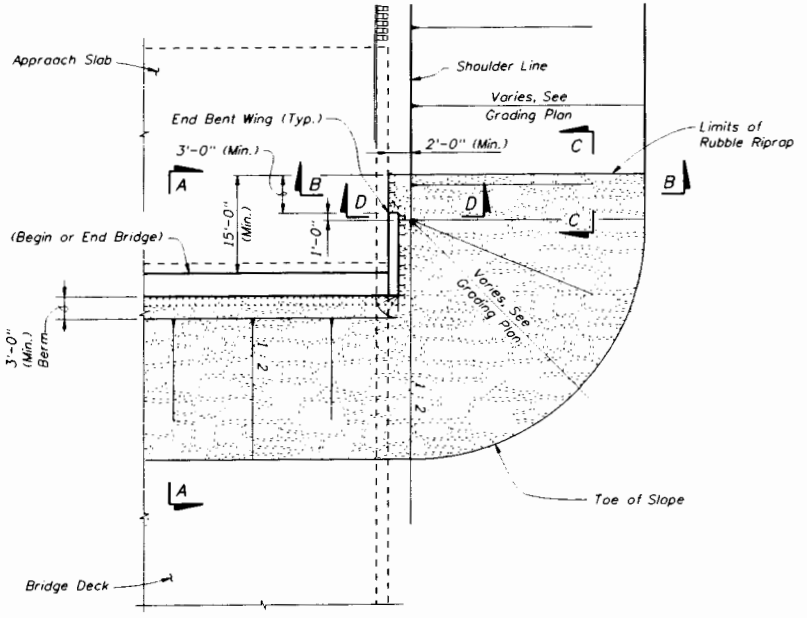
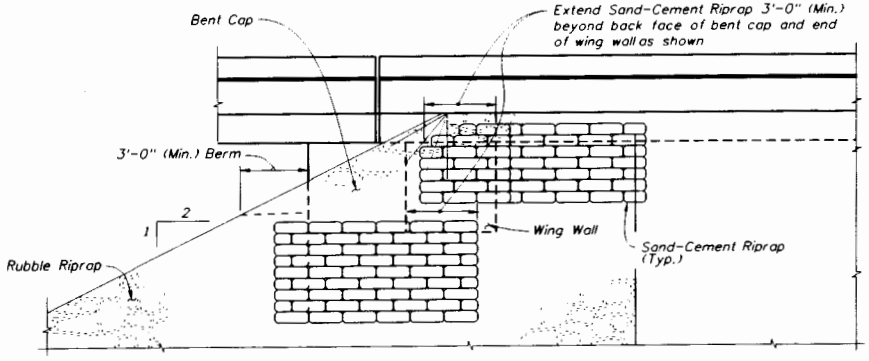


PARTIAL PLAN VIEW

(Bridge Deck and Approach Slab shown Dashed)

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



PARTIAL SIDE ELEVATION

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

Bridge No. 554153

REVISIONS

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. # 32131

DRAWN BY: NRA 12-10
CHECKED BY: KDE 12-10
DESIGNED BY: NL 12-10
CHECKED BY: NZ 12-10

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

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

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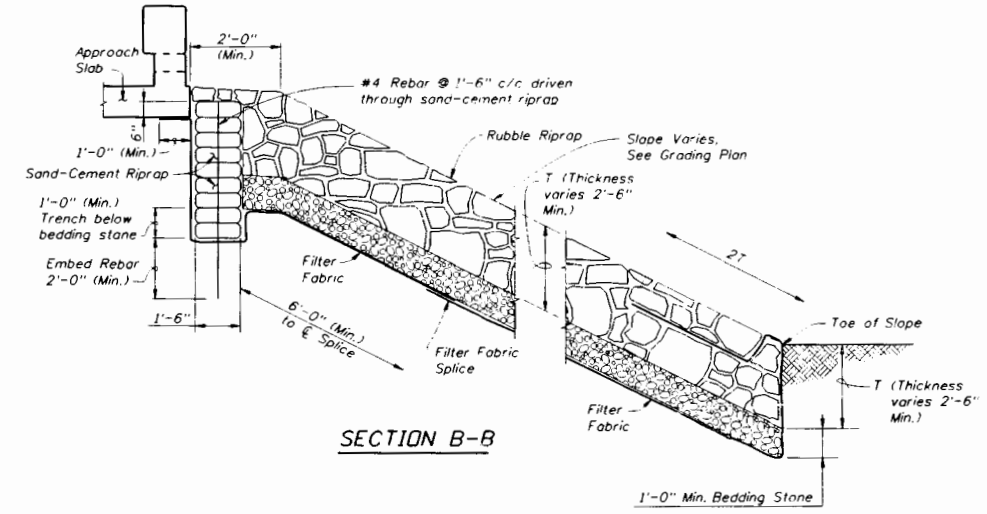
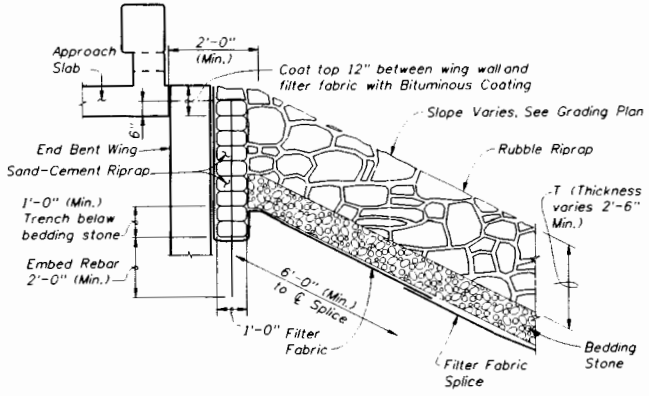


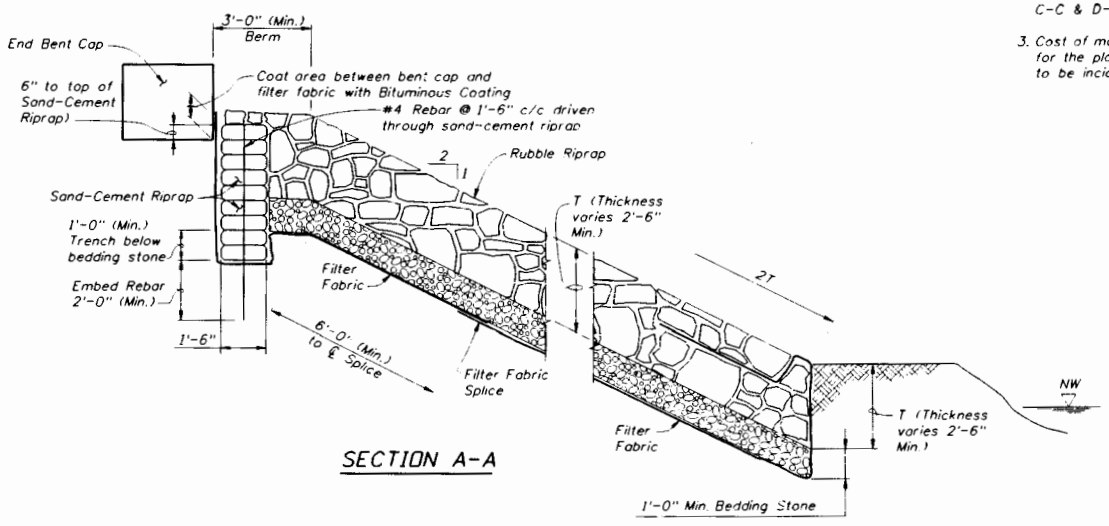
SECTION B-B



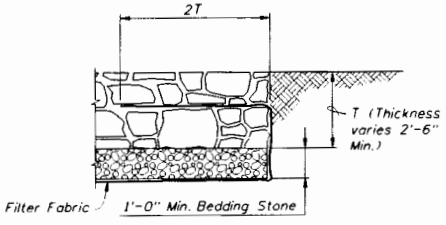
SECTION D-D

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.



SECTION A-A



SECTION C-C

Bridge No. 554153

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

LOCHNER
2960 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
CHARLES F. CRAYCRAFT, P.E. # 32131

DRAWN BY: LTG 08-11
CHECKED BY: MDB 08-11
DESIGNED BY: ML 08-11
CHECKED BY: MZ 08-11

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: RUBBLE RIPRAP (2 OF 2)
REF. DWG. NO.:
PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
SHEET NO.: B1-28

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

MARK		LENGTH		NO	TYP	STY			B			C			D			E			F			H			J			K			N	Ø
SIZE	DES	FT	IN	BARS	BAR	A	G		FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	NO	ANG
LOCATION END BENTS																		NO. REQUIRED = 2																
5	EB01	10	10	21	4	4	4		1-11			3- 0																						
5	EB02	6	10	4	11				3- 0			1-11			1-11																			
5	EB03	28	10	10	1				28-10																									
5	EB04	2	6	4	1				2- 6																									
5	EB05	6	9	6	11				5- 3			0-10			0-10																			
5	EB06	3	0	4	1				3- 0																									
5	EB07	6	2	6	11				4- 6			0-10			0-10																			
6	EB01	1	6	9	1				1- 6																									
5	W01	3	6	28	1				3- 6																									
5	W02	5	11	8	1				5-11																									
5	W03	8	1	6	10				5-11			2- 2																						
5	W04	5	4	6	10				3- 2			2- 2																						
LOCATION INTERMEDIATE BENTS																		NO. REQUIRED = 3																
5	B01	11	0	21	4	4	4		2- 0			3- 0																						
5	B02	7	0	4	11				3- 0			2- 0			2- 0																			
5	B03	26	9	10	1				26- 9																									
5	B04	2	5	4	1				2- 5																									
5	B05	6	8	6	11				5- 0			0-10			0-10																			
5	B06	2	1	4	1				2- 1																									
5	B07	6	0	6	11				4- 4			0-10			0-10																			
6	B01	1	6	9	1				1- 6																									
LOCATION SLAB																		NO. REQUIRED = 1																
5	S01	26	9	280	1				26- 9																									
9	S01	34	7	40	1				34- 7																									
9	S02	36	7	40	1				36- 7																									
9	S03	30	1	34	1				30- 1																									
9	S04	27	7	34	1				27- 7																									
9	S05	24	10	68	1				24-10																									
9	S06	51	4	40	1				51- 4																									
9	S07	38	7	20	1				38- 7																									
9	S08	20	8	34	1				20- 8																									
9	S09	23	9	68	1				23- 9																									
LOCATION APPROACH SLAB																		NO. REQUIRED = 2																
5	A1	VARY		28	1				29- 5																									
		30	1	0	1				30- 9																									
5	B	26	9	74	1				26- 9																									
8	A2	VARY		37	1				29- 5																									
		30	1	0	1				30- 9																									
END OF LIST																																		

Bridge No. 554153

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

LOCHNER
2960 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
FBPR CERTIFICATE OF AUTH. # 894
CHARLES F CRAYCRAFT, P.E. # 32131

DRAWN BY: LTG 06-11
CHECKED BY: JTF 08-11
DESIGNED BY: BCR 06-11
CHECKED BY: JTF 08-11

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: REINFORCING BAR LIST
REF. DWG. NO.:
PROJECT NAME: NATURAL BRIDGE ROAD OVER BRANCH OF ST. MARKS RIVER
SHEET NO.: BI-29

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Load Rating Summary Details for Reinforced Concrete Bridges

Table Date 08-01-10

Table 2 - LRFR using Part A

Level	Limit State	Vehicle	Weight (tons)	Load Factors: LL	Load Factors: DC	Load Factors: DW	Moment (Strength): Distribution Factor (DF)	Moment (Strength): Rating Factor	Moment (Strength): Tons	Moment (Strength): Location	Moment (Strength): Dimension	Shear (Strength): Distribution Factor (DF)	Shear (Strength): Rating Factor	Shear (Strength): Tons	Shear (Strength): Location	Shear (Strength): Dimension	Comments: Interior/exterior beam DF method if other than LRFD. Other appropriate comments
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	N/A	N/A	
	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	N/A	N/A	
Legal Load Rating	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	N/A	N/A	
	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	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	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	N/A	N/A	

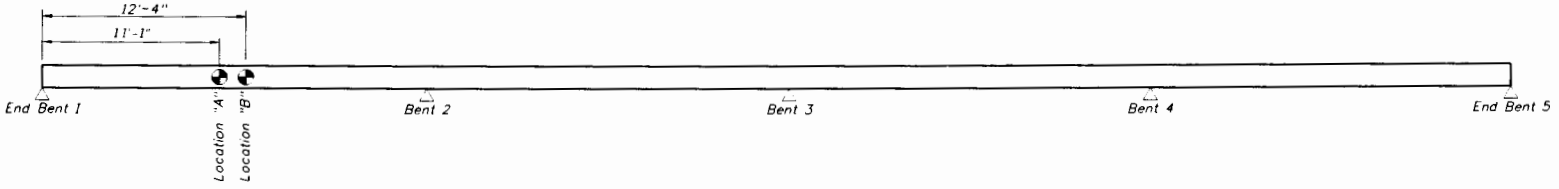
General Notes:
1. This table is based on the requirements established in the January 2011 "Structures Manual".

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

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REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

LOCHNER
2940 EAST PARK AVENUE, SUITE 200
TALLAHASSEE, FLORIDA 32301
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CHARLES F. CRAYCRAFT, P.E. # 32131

DRAWN BY: BCR 10-10
CHECKED BY: MDB 10-10
DESIGNED BY: BCR 10-10
CHECKED BY: JTF 10-10

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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

SHEET TITLE: LOAD RATING SUMMARY

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

REF. DWG. NO.

SHEET NO. B1-30

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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 23rd 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 60°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)

Janet P. Greeno
Print Name: Janet P. Greeno

Print Name: Jeff Stauffer

St. Joe Timberland Company of Delaware, LLC

By: _____
Patrick Bienvenue

Its: _____
Executive Vice President

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

SHERRY L. JOHNSON
MY COMMISSION EXPIRES
May 29, 2016
EE 202470
Notary Public Underwriters
NOTARY PUBLIC, STATE OF FLORIDA