

**BRIDGE CULVERT EVALUATION REPORT**  
**BOGGY CREEK WIDENING AND RECONSTRUCTION**  
**PROJECT**  
**Osceola County, Florida**

**PS-20-11479-DG**

**Prepared for:**  
**Osceola County**

**Prepared by:**  
**Dewberry Engineers Inc.**  
**800 N. Magnolia Avenue, Suite 1000**  
**Orlando, Florida 32803**

**March, 2021**

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- APPENDIX C: As-Built Plans

## **1.0 INTRODUCTION**

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### **1.1 Purpose**

The purpose of the Bridge Culvert Evaluation Report is to provide Osceola County with the findings and recommendations related to Bridge Culvert No. 924036 (Boggy Creek Road over Jim Branch). Our project is the preliminary design and engineering to widen Boggy Creek Road from Simpson Road to Narcoossee Road.

## **2.0 BRIDGE CULVERT ANALYSIS**

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### **2.1 Existing Conditions of Culvert**

Bridge Culvert 924036 was originally built in 1950 and extended on both sides (10' left and 11' right) in 2011. It carries Jim Branch Creek under Boggy Creek Road approximately 1.15 miles west of Narcoossee Road (CR-15). The culvert is cast-in-place concrete and consists of three cells, 8 feet wide by 5 feet high and is 52' in length. At all four corners, the slope in front of the wingwalls is protected by 10-foot-wide concrete slope pavement. On the north side of the culvert (upstream side) at the time of our field review, the water was still and 6" deep. On the south side of the culvert (downstream side) the water is flowing much faster mainly out of the east barrel. The west barrel is full of debris and riprap is migrating downstream. (See Appendix A for pictures).

We noted in the field that the downstream cutoff wall is exposed. There is cracking and efflorescence as noted in the latest inspection report (see Appendix B). Comparing the existing conditions to the widening plans from 2009, we noted the top of asphalt elevation in the field does not match the plans. The plans show the height of asphalt even with the top of the headwalls, but in the field, we measured the top of asphalt to be 12" above the top of headwall.

The original culvert is 71 years old, and near the end of its service life. Due to the age, the fact that the culvert has already been widened, and the inconsistency in field conditions vs. the plans, we recommend replacing the bridge culvert.

### **2.2 Utilities in the Area**

On the north side of the culvert is Sprint Buried Fiber Optic Cable. On the south side of the culvert is overhead power on concrete strain poles, an unidentified utility on a wood pole, and buried sewer.

### **2.3 Aesthetics**

Due to the nature of the bridge site this will be listed as a Level One aesthetics effort. Uncoated smooth concrete is the preferred finish.

## **APPENDIX A**



Upstream view of Jim Branch Creek



Culvert Opening Upstream



Culvert Headwall Upstream



Culvert Opening Downstream





Cutoff Wall Exposed



Culvert Downstream showing debris in Barrel



Looking Downstream Jim Branch Creek



Asphalt at Headwalls



Wood Utility Pole and Concrete Strain Pole



Wood Utility pole



Sewer Utility on downstream side



Buried Fiber on Upstream side



## **APPENDIX B**

**FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM  
Inspection/CIDR Report with PDF attachment(s)  
Inspection**

Structure ID: 924036

DISTRICT: D5 - Deland

INSPECTION DATE: 6/28/2020 LLAI

BY: Transystems Corporation Consultants	STRUCTURE NAME: 3-8x5x52 CBC
OWNER: 2 County Hwy Agency	YEAR BUILT: 1950
MAINTAINED BY: 2 County Hwy Agency	SECTION NO.: 92 500 000
STRUCTURE TYPE: 1 Reinforced Concrete - 19 Culvert	MP: 9.910
LOCATION: 2.2 mi. West of CR-15	ROUTE: 00530
SERV. TYPE ON: 1 Highway	FACILITY CARRIED: Boggy Creek Rd
SERV. TYPE UNDER: 5 Waterway	FEATURE INTERSECTED: Jim Branch

 FUNCTIONALLY OBSOLETE STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI

DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 6/28/2020 UNDERWATER: N/A

SUFFICIENCY RATING: 98.1  
HEALTH INDEX: 96.51

FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM  
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SECTION NO.: 92 500 000  
MP: 9.910  
ROUTE: 00530  
FACILITY CARRIED: Boggy Creek Rd  
FEATURE INTERSECTED: Jim Branch

- THIS BRIDGE CONTAINS FRACTURE CRITICAL COMPONENTS
- THIS BRIDGE IS SCOUR CRITICAL
- THIS REPORT IDENTIFIES DEFICIENCIES WHICH REQUIRE PROMPT CORRECTIVE ACTION
- FUNCTIONALLY OBSOLETE
- STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI

DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 6/28/2020 UNDERWATER: N/A

OVERALL NBI RATINGS:

DECK: N N/A (NBI)	CHANNEL: 7 Minor Damage
SUPERSTRUCTURE: N N/A (NBI)	CULVERT: 8 No Major Problem
SUBSTRUCTURE: N N/A (NBI)	SUFF. RATING: 98.1
PERF. RATING: Good	HEALTH INDEX: 96.51

FIELD PERSONNEL / TITLE / NUMBER:

INITIALS

Noel, Benjamin - Team Leader (CBI#00537) (lead)  
England, David - Assistant Bridge Inspector

\_\_\_\_\_  
\_\_\_\_\_

REVIEWING BRIDGE INSPECTION SUPERVISOR:

Rodriguez, Natalie - Bridge Inspector (PE #70945)

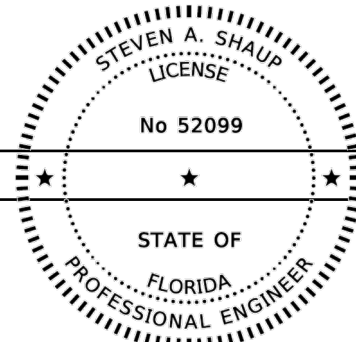
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CONFIRMING REGISTERED PROFESSIONAL ENGINEER:

Shaup, Steven - Professional Engineer (P.E. #52099) TranSystems Corporation Consultants  
3230 West Commercial Blvd.  
Suite 450 (Auth. No. 00007503)  
Fort Lauderdale FL 33309

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_



*This report has been digitally signed and sealed by Steven Shaup, PE on the date adjacent to the seal as required by Rule 61G15-23.004, F.A.C.. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.*

This report contains information relating to the physical security of a structure and depictions of the structure. This information is confidential and exempt from public inspection pursuant to sections 119.071(3)(a) and 119.071(3)(b), Florida Statutes. Only the cover page of this report may be inspected and copied.

**FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM  
Inspection/CIDR Report with PDF attachment(s)  
Inspection**

Structure ID: 924036

DISTRICT: D5 - Deland

INSPECTION DATE: 6/28/2020 LLAI

**All Elements**

**MISCELLANEOUS : Channel**

Str Unit	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	T Qty
0	8290 / 3	Channel	0	.	0	.	1	100	0	.	1 (EA)
0	9140 / 3	Debris	0	.	0	.	1	100	0	.	1 (EA)

**Element Inspection Notes:**

8290/3

Previously Noted:

CS3 = There is minor vegetation in the channel at each end of the culvert which does not impede the flow.

CS3 (9140) = There is debris buildup at the north end of Wall 3. Previously noted at both north ends of Walls 2 and 3. Refer to Photo 1. REPAIR (1EA)

There is minor exposure of the north and south edges of the floor slab which have rubble and filter cloth for erosion protection.

The south toe wall is exposed up to 14in. high at Cell 3 with no undermining noted (previously noted as minor exposure). Refer to Photo 2. REPAIR

Noted This Inspection:

The previously noted area of erosion at the north end was not found, area was filled with rock and sand.

The previously noted undermining at the south end was not found, area was covered with sand and vegetation.

The previously noted buildup at the north end of Wall 2 was not found.

9140/3

Refer to Parent Element

**MISCELLANEOUS : Other Elements**

Str Unit	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	T Qty
0	8475 / 3	R/Conc Walls	118	98.33	2	1.67	0	.	0	.	120 ft
0	1120 / 3	Efflorescence/Rust Staining	0	.	2	100	0	.	0	.	2 ft

**Element Inspection Notes:**

8475/3

Previously Noted:

CS2 (1120) = There are 1/64in. W cracks with efflorescence in the north and south headwall over Walls 2 and 3. Refer to Photo 3. (2FT)

1120/3

Refer to Parent Element

**SUBSTRUCTURE : Culvert**

Str Unit	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	T Qty
0	241 / 3	Re Conc Culvert	144	92.31	2	1.28	10	6.41	0	.	156 ft
0	1080 / 3	Delamination/Spall/Patched Area	0	.	2	50	2	50	0	.	4 ft
0	1120 / 3	Efflorescence/Rust Staining	0	.	0	.	8	100	0	.	8 ft

**Element Inspection Notes:**

241/3

Previously Noted:

CS3 (1080) = There is a 2ft. H x 7in. W delaminated patch on the north end of Wall 4. Refer to Photo 4. REPAIR (2FT)

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Structure ID: 924036

DISTRICT: D5 - Deland

INSPECTION DATE: 6/28/2020 LLAI

CS3 (1120) = The underside of Cells 1 and 2 has patched cracks with efflorescence and rust staining 10ft. from the north end at the cold joint. Refer to Photo 5. REPAIR (8FT)

CS2 (1080) = The north end of Wall 1 has a 2ft. H x 7in. W patch with 1/64in. W cracking with efflorescence, however the patch is sound. (2FT)

1080/3 Refer to Parent Element

1120/3 Refer to Parent Element

**SUBSTRUCTURE : Substructure**

Str Unit	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	T Qty
0	8394 / 3	R/Conc Abut Slope Protection	720	100	0	.	0	.	0	.	720 (SF)

**Element Inspection Notes:**

8394/3 Note: This element describes the poured concrete slope protection at the corners of the structure.

Previously Noted:

INCIDENTAL:

There is vegetation on all slope protections. Refer to Photo 6. REPAIR

Noted This Inspection:

INCIDENTAL:

The slope protection weep holes are clogged with dirt and vegetation. Refer to Photo 7. REPAIR.

**Total Number of Elements\*:** 4

\*excluding defects/protective systems

**Structure Notes**

BRIDGE OWNER: OSCEOLA COUNTY

Bridge inventoried from west to east.

**TRAFFIC RESTRICTIONS:**

Based on the most recent load rating analysis dated 7/8/85, the structure does not required posting, based on the Operating Ratings. The structure is currently not posted.

There is an approximately 2.5in. thick asphalt surfacing and 2ft. of fill over the structure.

This structure was widened in 2011.

As stated in section 3.4 of the Bridge and Other Structures Inspection and Reporting as of 11/24/2009 superstructure unit numbering (Section 3.4.2.2) and substructure unit numbering (Section 3.4.3) are designated NOT BY ORDER IN WHICH THE ELEMENTS WERE CONSTRUCTED AND PUT INTO SERVICE. Plans sheet or drawing in Topic G, Bridge Description and Drawings section of the bridge folder can confirm all references to these elements prior to this date.

**FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM****Inspection/CIDR Report with PDF attachment(s)  
Inspection****Structure ID: 924036****DISTRICT: D5 - Deland****INSPECTION DATE: 6/28/2020 LLAI****INSPECTION NOTES:            LLAI                            6/28/2020**

Sufficiency Rating Calculation Accepted by kntccdn at 7/16/2020 11:49:20 AM

**LOAD CAPACITY EVALUATION:**

A cursory review of the current load rating analysis dated 7/8/1985 was conducted during this inspection by Steven Shaup, P.E. 7/22/2020. The findings of this review and inspection reveal no substantial deterioration, geometric changes or additional dead load to the bridge that warrant the need for a new load rating analysis; therefore, the current load rating is considered applicable.

The Photographic Inventory was updated 6/6/2012.

**FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM  
BRIDGE INSPECTION REPORT  
ADDENDUM**

**CONTENTS OF ADDENDUM**

	Bridge Location Map		Sketches and Photos
*	Additional Element Inspection Notes		Recommended Corrective Action
	Load Rating Analysis Summary		Scour Evaluation
*	Posting Photos	*	Fracture Critical Inspections

\* This section is not included in this report.

**PREPARED FOR: FDOT  
BRIDGE OWNER: OSCEOLA COUNTY  
PREPARED BY: TRANSYSTEMS CORPORATION CONSULTANTS  
REPORT IDENTIFICATION**

Bridge Number: 924036 – Regular NBI	Inspection Date: 06/28/2020
Bridge Name: Boggy Creek Rd over Jim Branch (3 – 8 ft. x 5 ft. x 52 ft. CBC)	
Facility Carried: Boggy Creek Rd	
Featured Intersected: Jim Branch	



East Approach

# FLORIDA DEPARTMENT OF TRANSPORTATION BRIDGE MANAGEMENT SYSTEM BRIDGE INSPECTION REPORT

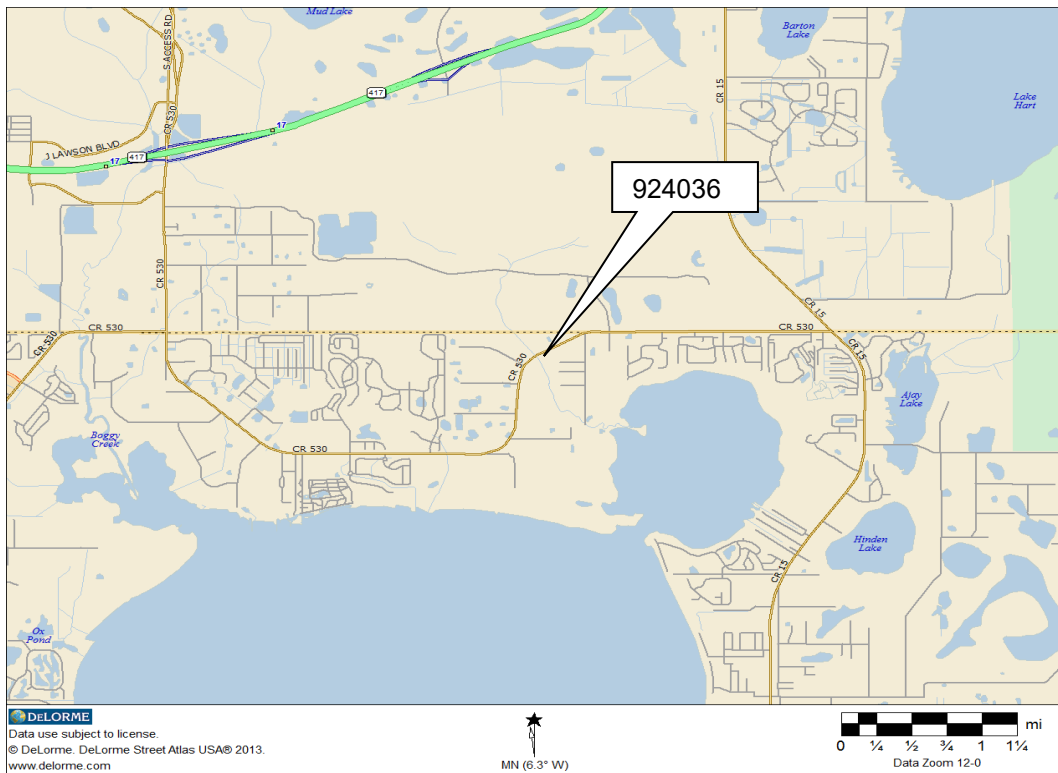
Bridge No: 924036

Inspection Date: 06/28/2020

## BRIDGE LOCATION MAP



North Elevation



Boggy Creek Rd over Jim Branch

2.2 miles west of CR-15



**FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM  
BRIDGE INSPECTION REPORT**

Bridge No: 924036

Inspection Date: 06/28/2020

**LOAD RATING ANALYSIS SUMMARY**

Bridge No. 920036

D. LOAD CAPACITY INFORMATION

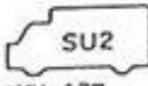
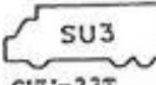
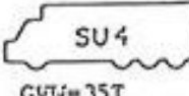
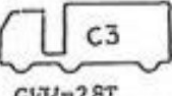
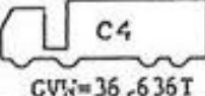
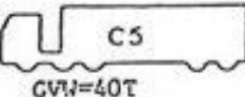
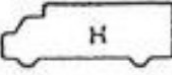
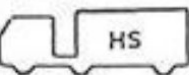
GUIDE

924036

LOAD RATING SUMMARY

Rating Performed By: Bruce A. Wright P.E. # 17188

Date of Computations: 7-8-85, Computer Program: N.A.

Loading Classification	TYPE OF LOADING	RATING LEVEL	MOMENT CAPACITY OF THE CULVERT		No. POSTING REQUIRED					
Legal Loading	 SU2 GVW=17T	Inventory	26.6	>	17	✓				
		Operating	44.4				40			
Legal Loading	 SU3 GVW=33T	Inventory	47.3	>	33	✓				
		Operating	78.8				71			
Legal Loading	 SU4 GVW=35T	Inventory	59.0	>	35	✓				
		Operating	98.3				89			
Legal Loading	 C3 GVW=28T	Inventory	43.9	>	28	✓				
		Operating	73.1				66			
Legal Loading	 C4 GVW=36.636T	Inventory	52.5	>	36.6	✓				
		Operating	87.4				79			
Legal Loading	 C5 GVW=40T	Inventory	57.3	>	40	✓				
		Operating	95.6				86			
Design Loading	 H	Inventory	421.5							
		Operating	435.9							
Design Loading	 HS	Inventory	421.5				35.1			
		Operating	435.9				58.6			

NOTES: 1. Governing span length for Design Load is 8' 2.4m

FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM  
BRIDGE INSPECTION REPORT

Bridge No: 924036

Inspection Date: 06/28/2020

SKETCHES AND PHOTOS



Photo 1: Element 8290: Debris in channel at Wall 3.



Photo 2: Element 8290: South toe wall exposure at Cell 3.

FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM  
BRIDGE INSPECTION REPORT

Bridge No: 924036

Inspection Date: 06/28/2020

SKETCHES AND PHOTOS



Photo 3: Element 8475: Vertical crack with efflorescence in north headwall.



Photo 4: Element 241: Delaminated patch at the north end of Wall 4.

FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM  
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Bridge No: 924036

Inspection Date: 06/28/2020

SKETCHES AND PHOTOS



Photo 5: Element 241: Patched crack with efflorescence and rust staining in the underside of Cell 2 at the cold joint.



Photo 6: Element 8394: Heavy vegetation growth on the southwest slope protection.

FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM  
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Bridge No: 924036

Inspection Date: 06/28/2020

SKETCHES AND PHOTOS



Photo 7: Element 8394: Clogged weep hole at the northwest slope protection.

**FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM  
BRIDGE INSPECTION REPORT**

Bridge No: 924036

Inspection Date: 06/28/2020

**RECOMMENDED CORRECTIVE ACTION**

8290 Channel

Repair the exposure of the south toe wall at Cell 3.  
Remove the debris build up at the north end of Walls 2 and 3.

241 Re Conc Culvert

Repair the delaminated patch at the north end of Wall 4.  
Repair the patched crack with efflorescence and rust staining in the underside of Cell 2.

8394 R/Conc Abut Slope Protection

Clean and clear out clogged weep holes at the slope protection.  
Herbicide vegetation growth on the slope protection.

**FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM  
BRIDGE INSPECTION REPORT**

Bridge No: 924036

Inspection Date: 06/28/2020

## SCOUR EVALUATION

## COMPARATIVE SOUNDINGS

## LEFT SIDE

		05/21/88	06/28/18	06/28/20	
Wall 1			7.0	6.8	0.2
C/L Cell 1		6.8	7.3	7.5	-0.2
Wall 2			7.4	7.9	-0.5
C/L Cell 2		6.8	7.3	7.6	-0.3
Wall 3			7.2	7.2	0.0
C/L Cell 3		6.9	7.2	7.2	0.0
Wall 4			7.0	7.1	-0.1

Waterline at Wall 2		6.5	6.0
---------------------	--	-----	-----

## RIGHT SIDE

		05/21/88	06/28/18	06/28/20	
Wall 1			7.5	7.1	0.4
C/L Cell 1		6.6	7.5	7.5	0.0
Wall 2			7.5	7.5	0.0
C/L Cell 2		7.1	7.7	7.7	0.0
Wall 3			8.5	8.5	0.0
C/L Cell 3		6.7	8.5	8.5	0.0
Wall 4			8.0	8.0	0.0

Waterline at Wall 2		6.5	6.5
---------------------	--	-----	-----

NOTE: - = An increase in degradation.

Blank box = No previous measurement available.

Relative Channel Plots Are Not To Scale.

Any Vertical Curvature Of Datum Point Is Not Reflective In Plot.

The waterline and mudline measurements, in reference to the top of the headwall, are provided for future comparison. All measurements are in feet.

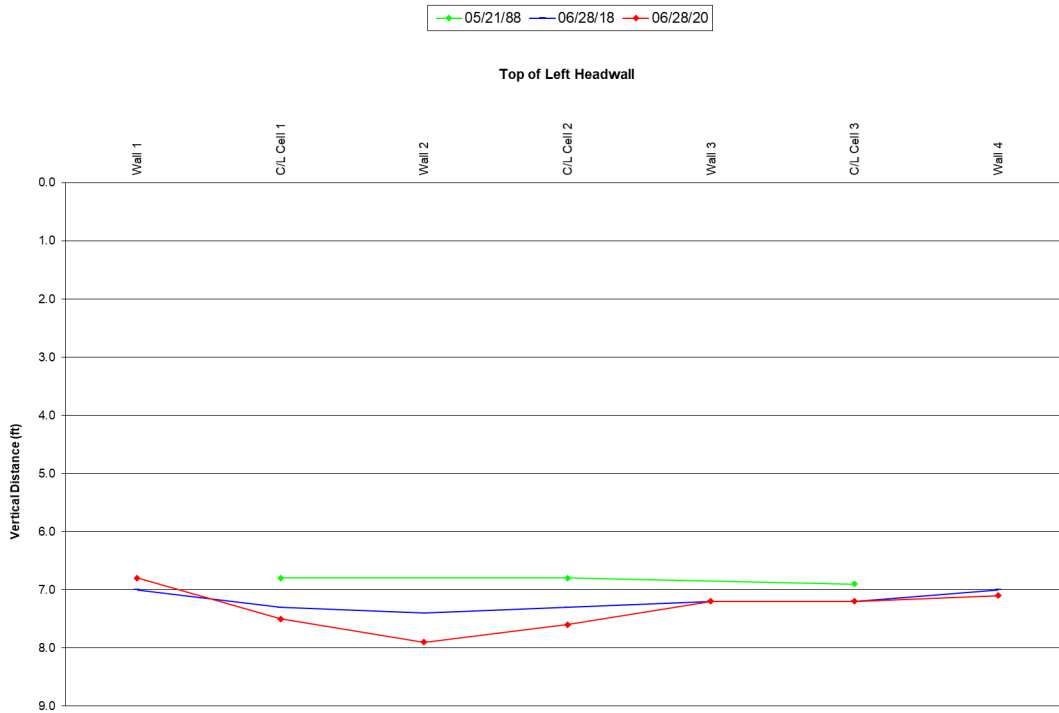
**FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM  
BRIDGE INSPECTION REPORT**

Bridge No: 924036

Inspection Date: 06/28/2020

**SCOUR EVALUATION**

**LEFT SIDE SOUNDINGS**



**RIGHT SIDE SOUNDINGS**



Relative Channel Plots Are Not To Scale.  
Any Vertical Curvature Of Datum Point Is Not Reflective In Plot.



FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM  
BRIDGE INSPECTION REPORT

Bridge No: 924036

Inspection Date: 06/28/2020

SCOUR EVALUATION



Channel Looking North



Channel Looking South

**FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM  
BRIDGE INSPECTION REPORT**

Bridge No: 924036

Inspection Date: 06/28/2020

**FIELD PREPARATION**

**A. Tools and Equipment**

Full Size Cargo Van:	Yes: <u>—</u>	No: <u>X</u>	Pick-up Truck:	Yes: <u>X</u>	No: <u>—</u>
Automobile:	Yes: <u>—</u>	No: <u>X</u>	Video:	Yes: <u>—</u>	No: <u>X</u>
Camera:	Yes: <u>X</u>	No: <u>—</u>			
NDT Equipment:	Yes: <u>—</u>	No: <u>X</u>			
NDT Type: N/A					
Binoculars:	Yes: <u>—</u>	No: <u>X</u>			
Diving Performed:	Yes: <u>—</u>	No: <u>X</u>	Max Depth: <u>2.0 ft.</u>	Current: <u>None</u>	

Dive Mode: N/A

Hand Tools: (i.e. Chipping Hammer, 6' Ruler, etc.)

- |                              |                     |
|------------------------------|---------------------|
| 1. Standard Inspection Tools | 2. Chipping Hammers |
| 3. Flashlights               | 4. Carpenter Ruler  |
| 5. Inspection Hand Tools     |                     |

Other: N/A

**B. Services**

Flag Crew: N/A  
Electrician: N/A

Snooper: N/A  
Other: N/A

**C. Scheduling (Brief Explanation)**

Topside:

Man Hours: 6 hrs. Travel Time: 2 hrs.

**D. Site Conditions**

Boat Needed: NO Type of Boat: N/ALocation of Boat Ramp: N/ALengthy Travel Required: NODifficult Access: NOWater Obviously Polluted: NOWater quality is fair (partially meets use): YESStrong Water Current: NOOther: NONE

**E. UNDERWATER ELEMENTS INSPECTED:**

N/A

**FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM**

**Inspection/CIDR Report with PDF attachment(s)  
CIDR**

REPORT ID: INSP005

Structure ID: 924036

DATE PRINTED: 8/3/2020

<b>Description</b>
--------------------

**Structure Unit Identification**

Bridge/Unit Key: 924036 0  
 Structure Name: 3-8x5x52 CBC  
 Description: CELLS 1, 2 & 3  
 Type: M - Main

**Roadway Identification**

NBI Structure No (8): 924036  
 Position/Prefix (5): 1 - Route On Structure  
 Kind Hwy (Rte Prefix): 4 County Hwy  
 Design Level of Service: 1 Mainline  
 Route Number/Suffix: 00530 / 0 N/A (NBI)  
 Feature Intersect (6): Jim Branch  
 Critical Facility: Not Defense-crit  
 Facility Carried (7): Boggy Creek Rd  
 Mile Point (11): 9.91  
 Latitude (16): 028d20'42.5"      Long (17): 081d16'00.0"

**Roadway Traffic and Accidents**

Lanes (28): 2      Medians: 0      Speed: 45 mph  
 ADT Class: 3 ADT Class 3  
 Recent ADT (29): 10700      Year (30): 2020  
 Future ADT (114): 18565      Year (115): 2042  
 Truck % ADT (109): 8  
 Detour Length (19): 5.0 mi  
 Detour Speed: 45 mph  
 Accident Count: -1      Rate:

**Roadway Classification**

Nat. Hwy Sys (104): 0 Not on NHS  
 National base Net (12): 0 - Not on Base Network  
 LRS Inventory Rte (13a): 92 500 000      Sub Rte (13b): 00  
 Functional Class (26): 17 Urban Collector  
 Federal Aid System: ON  
 Defense Hwy (100): 0 Not a STRAHNET hwy  
 Direction of Traffic (102): 2 2-way traffic  
 Emergency:

**Roadway Clearances**

Vertical (10): 99.99 ft      Appr. Road (32): 38 ft  
 Horiz. (47): 42 ft      Roadway (51): 42 ft  
 Truck Network (110): 0 Not part of natl netwo  
 Toll Facility (20): 3 On free road  
 Fed. Lands Hwy (105): 0 N/A (NBI)  
 School Bus Route:   
 Transit Route:

**NBI Project Data**

Proposed Work (075A): Not Applicable (P)  
 Work To Be Done By (075B): Not Applicable (P)  
 Improvement Length (076): 0 ft

Improvement Cost (094): \$ 0.00  
 Roadway Improvement Cost (095): \$ 0.00  
 Total Cost (096): \$ 0.00  
 Year of Estimate (097):

**NBI Rating**

Channel (61): 7 Minor Damage  
 Deck (58): N N/A (NBI)  
 Superstructure (59): N N/A (NBI)  
 Substructure (60): N N/A (NBI)

Culvert (62): 8 No Major Problem  
 Waterway (71): 7 Above Minimum  
 Unrepaired Spalls: -1 sq.ft.  
 Review Required:

# FLORIDA DEPARTMENT OF TRANSPORTATION BRIDGE MANAGEMENT SYSTEM

## Inspection/CIDR Report with PDF attachment(s) CIDR

REPORT ID: INSP005

Structure ID: 924036

DATE PRINTED: 8/3/2020

**Structure Identification**

Admin Area: METROPLAN Orlando  
 District (2): D5 - Deland  
 County (3): (92)Osceola  
 Place Code (4): No city involved  
 Location (9): 2.2 mi. West of CR-15  
 Border Br St/Reg (98): Not Applicable (P) Share: 0 %  
 Border Struct No (99):  
 FIPS State/Region (1): 12 Florida Region 4-Atlanta  
 NBIS Bridge Len (112): Y - Meets NBI Length  
 Parallel Structure (101): No || bridge exists  
 Temp. Structure (103): Not Applicable (P)  
 Maint. Resp. (21): 2 County Hwy Agency  
 Owner (22): 2 County Hwy Agency  
 Historic Signif. (37): 5 Not eligible for NRHP

**Structure Type and Material**

Curb/Sidewalk (50): Left: 0 ft Right: 0 ft  
 Bridge Median (33): 0 No median  
 Main Span Material (43A): 1 Reinforced Concrete  
 Appr Span Material (44A): Not Applicable  
 Main Span Design (43B): 19 Culvert  
 Appr Span Design (44B): Not Applicable

**Appraisal****Structure Appraisal**

Open/Posted/Closed (41): A Open, no restriction  
 Deck Geometry (68): N Not applicable (NBI)  
 Underclearances (69): N Not applicable (NBI)  
 Approach Alignment (72): 8-No Speed Red thru Curv  
 Bridge Railings (36a): N N/A or not required  
 Transitions (36b): N N/A or not required  
 Approach Guardrail (36c): 1 Meets Standards  
 Approach Guardrail Ends (36d): 1 Meets Standards  
 Scour Critical (113): 8 Stable Above Footing

**Minimum Vertical Clearance**

Over Structure (53): 99.99 ft  
 Under (reference) (54a): N Feature not hwy or RR  
 Under (54b): 0 ft

**Schedule****Current Inspection**

Inspection Date: 06/28/2020  
 Inspector: KNTCCBN - Benjamin Noel  
 Bridge Group: CA429  
 Alt. Bridge Group:  
 Primary Type: Regular NBI  
 Review Required:

**Geometrics**

Spans in Main Unit (45): 3  
 Approach Spans (46): 0  
 Length of Max Span (48): 7.9 ft  
 Structure Length (49): 25.3 ft  
 Total Length: 25.3 ft  
 Deck Area: 0 sqft  
 Structure Flared (35): 0 No flare

**Age and Service**

Year Built (27): 1950  
 Year Reconstructed (106): 2011  
 Type of Service On (42a): 1 Highway  
 Under (42b): 5 Waterway  
 Fracture Critical Details: Not Applicable

**Deck Type and Material**

Deck Width (52): 0 ft  
 Skew (34): 0 deg  
 Deck Type (107): N N/A (NBI)  
 Surface (108): N N/A (no deck (NBI))  
 Membrane: N N/A (no deck (NBI))  
 Deck Protection: N N/A (no deck (NBI))

**Navigation Data**

Navigation Control (38): Permit Not Required  
 Nav Vertical Clr (39): 0 ft  
 Nav Horizontal Clr (40): 0 ft  
 Min Vert Lift Clr (116): 0 ft  
 Pier Protection (111): Not Applicable (P)

**NBI Condition Rating**

Sufficiency Rating: \* 98.1  
 Health Index: 96.51  
 Structural Eval (67): 8 Equal Desirable Crit  
 Deficiency: Not Deficient

**Minimum Lateral Underclearance**

Reference (55a): N Feature not hwy or RR  
 Right Side (55b): 0 ft  
 Left Side (56): 0 ft

**Next Inspection Date Scheduled**

NBI: 06/28/2022  
 Element: 06/28/2022  
 Fracture Critical:  
 Underwater:  
 Other/Special:  
 Inventory Photo Update Due: 06/06/2022

**FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM**

**Inspection/CIDR Report with PDF attachment(s)  
CIDR**

REPORT ID: INSP005

Structure ID: 924036

DATE PRINTED: 8/3/2020

**Schedule Cont.**

**Inspection Types Performed**

NBI  Element  Fracture Critical  Underwater  Other Special

**Inspection Intervals Required (92) Frequency (92) Last Date (93) Inspection Resources**

Fracture Critical	<input type="checkbox"/>	mos			Crew Hours: 6
Underwater	<input type="checkbox"/>	mos			Flagger Hours: 0
Other Special	<input type="checkbox"/>	mos			Helper Hours: 0
NBI		24 mos	(91)	06/28/2020 (90)	Snooper Hours: 0
					Special Crew Hours: 0
					Special Equip Hours: 0

**Bridge Related**

**General Bridge Information**

Parallel Bridge Seq:		Bridge Rail 1: Steel guard/steel post
Channel Depth: 2 ft		Bridge Rail 2: Not applicable-No rail
Radio Frequency: -1		Electrical Devices: No electric service
Phone Number:		Culvert Type: Cast-in-place conc box
Exception Date:		Maintenance Yard: Not FDOT Maintained
Exception Type: Unknown		FIHS ON / OFF: No Routes on FIHS
Accepted By Maint: 01/01/1950		Previous Structure:
Warranty Expiration: 00/00/0000		2nd Previous Structure:
Performance Rating: Good		Replacement Structure:

Permitted Utilities: Power  Water  Gas  Fiber Optic  Sewage  Other

**Bridge Load Rating Information**

Inventory Type (065): 1 LF Load Factor	Inventory Rating (066): 38.7 tons
Operating Type (063): 1 LF Load Factor	Operating Rating (064): 64.6 tons
Original Design Load (031): 5 MS 18 (HS 20)	FL120 Permit Rating: -1.0 tons
Date: 07/08/1985	HS20/FL120 Max Span Rating: 64.6 tons
Initials: BAM	Dynamic Impact in Percent: 30 %
Load Rating Rev. Recom.: No	Governing Span Length: 7.9 ft
Load Rating Plans Status: Unknown	Minimum Span Length:
	Distribution Method: AASHTO formula

Load Rating Notes:

**LEGAL LOADS**

SU2: 44.4 tons  
 SU3: 78.8 tons  
 SU4: 98.3 tons  
 C3: 73.1 tons  
 C4: 87.4 tons  
 C5: 95.6 tons  
 ST5: -1.0 tons  
 Posting (070): 5 At/Above Legal Loads  
 Open/Posted/Closed (041): A Open, no restriction

**POSTING**

Recom. SU Posting: 99 tons  
 Recom. C Posting: 99 tons  
 Recom. ST5 Posting: 99 tons  
 Actual SU Posting: 99 tons  
 Actual C Posting: 99 tons  
 Actual ST5 Posting: 99 tons  
 Actual Blanket Posting: 99 tons  
 Emergency Vehicle: 1 EV inapplicable

**FLOOR BEAM (FB)**

FB Present: No  
 FB Span Length, Gov: 0.0 ft  
 FB Spacing, Gov: 0.0 ft  
 FB OPR Rating: 0.0 tons  
 FB SU4 OPR Rating: 0.0 tons  
 FB FL120 Rating: 0.0 tons

**SEGMENTAL (SEG)**

SEG Wing-Span: -1.0 ft  
 SEG Web-to-Web Span: -1.0 ft  
 SEG Transverse HL93 Operating: -1.00 RF

**Bridge Scour and Storm Information**

Pile Driving Record: Not Applicable	Scour Recommended I: Not Applicable
Foundation Type: No foundation details	Scour Recommended II: Not Applicable
Mode of Flow: Riverine	Scour Recommended III: Not Applicable
Rating Scour Eval: Low Risk - High	Scour Elevation: 999 ft
Highest Scour Eval: No phase completed	Action Elevation: 999 ft
Scour Evaluation Method:	Storm Frequency: 999

**FLORIDA DEPARTMENT OF TRANSPORTATION  
BRIDGE MANAGEMENT SYSTEM**

**Inspection/CIDR Report with PDF attachment(s)  
CIDR**

REPORT ID: INSP005

Structure ID: 924036

DATE PRINTED: 8/3/2020

**Elements**

Inspection Date: 06/28/2020 LLAI

**MISCELLANEOUS : Channel**

Str Unit	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	T Qty
0	8290 / 3	Channel	0	.	0	.	1	100	0	.	1 (EA)
0	9140 / 3	Debris	0	.	0	.	1	100	0	.	1 (EA)

**MISCELLANEOUS : Other Elements**

Str Unit	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	T Qty
0	8475 / 3	R/Conc Walls	118	98.33	2	1.67	0	.	0	.	120 ft
0	1120 / 3	Efflorescence/Rust Staining	0	.	2	100	0	.	0	.	2 ft

**SUBSTRUCTURE : Culvert**

Str Unit	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	T Qty
0	241 / 3	Re Conc Culvert	144	92.31	2	1.28	10	6.41	0	.	156 ft
0	1080 / 3	Delamination/Spall/Patched Area	0	.	2	50	2	50	0	.	4 ft
0	1120 / 3	Efflorescence/Rust Staining	0	.	0	.	8	100	0	.	8 ft

**SUBSTRUCTURE : Substructure**

Str Unit	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	T Qty
0	8394 / 3	R/Conc Abut Slope Protection	720	100	0	.	0	.	0	.	720 (SF)

**Total Number of Elements\*:** 4

\*excluding defects/protective systems

**Inspection Information****Inspection Date:** 06/28/2020**Type:** Regular NBI**Inspector:** KNTCCBN - Benjamin Noel**Inspection Notes:** Sufficiency Rating Calculation Accepted by kntccdn at 7/16/2020 11:49:20 AM**LOAD CAPACITY EVALUATION:**

A cursory review of the current load rating analysis dated 7/8/1985 was conducted during this inspection by Steven Shaup, P.E. 7/22/2020. The findings of this review and inspection reveal no substantial deterioration, geometric changes or additional dead load to the bridge that warrant the need for a new load rating analysis; therefore, the current load rating is considered applicable.

The Photographic Inventory was updated 6/6/2012.

**Structure Notes**

BRIDGE OWNER: OSCEOLA COUNTY

Bridge inventoried from west to east.

**TRAFFIC RESTRICTIONS:**

Based on the most recent load rating analysis dated 7/8/85, the structure does not required posting, based on the Operating Ratings. The structure is currently not posted.

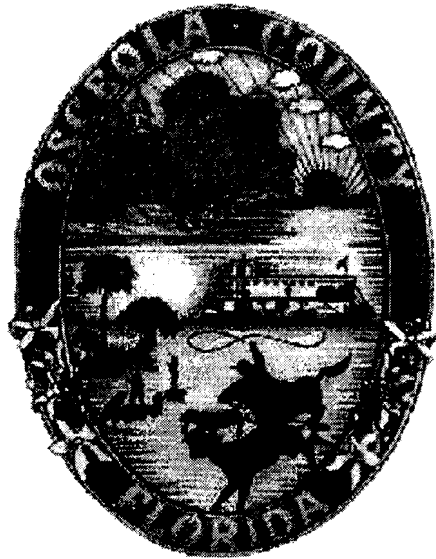
There is an approximately 2.5in. thick asphalt surfacing and 2ft. of fill over the structure.

This structure was widened in 2011.

As stated in section 3.4 of the Bridge and Other Structures Inspection and Reporting as of 11/24/2009 superstructure unit numbering (Section 3.4.2.2) and substructure unit numbering (Section 3.4.3) are designated NOT BY ORDER IN WHICH THE ELEMENTS WERE CONSTRUCTED AND PUT INTO SERVICE. Plans sheet or drawing in Topic G, Bridge Description and Drawings section of the bridge folder can confirm all references to these elements prior to this date.

**Schedule Notes**

## APPENDIX C



CONSTRUCTION PLANS

FOR

BOGGY CREEK ROAD IMPROVEMENT PROJECT

OSCEOLA COUNTY

FDOT FINANCIAL PROJECT ID. ....

FEDERAL AID NO. ARRA-.....

RECEIVED

NOV 18 2009

ORLANDO SERVICE CENTER

APP# 091118-6

PLANS PREPARED FOR:

OSCEOLA COUNTY BOARD OF COUNTY COMMISSIONERS  
PUBLIC WORKS DIVISION  
1 COURTHOUSE SQUARE, SUITE 3100  
KISSIMMEE, FLORIDA 34741  
PH: 407-742-0662  
FAX: 407-742-0660

ROADWAY

SHOP DRAWINGS  
TO BE SUBMITTED TO:  
STEVEN M. KREIDT, P.E.  
KELLY, COLLINS & GENTRY, INC.  
1700 N. ORANGE AVE.  
SUITE 400  
ORLANDO, FLORIDA 32804

STRUCTURAL

SHOP DRAWINGS  
TO BE SUBMITTED TO:  
MARK NIEDERMANN, P.E.  
FLORIDA BRIDGE & TRANSPORTATION, INC.  
P.O. BOX 947777  
MAITLAND, FLORIDA 32794-7777

PLANS PREPARED BY:

**KCG** KELLY, COLLINS & GENTRY, INC.  
ENGINEERING & PLANNING  
1700 N. ORANGE AVE., SUITE 400 ORLANDO, FL 32804  
407-898-7858 CERT. OF AUTHORIZATION NO. 7350  
STEVEN M. KREIDT, P.E. LICENSE NO. 22542

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

ROADWAY PLANS  
ENGINEER OF RECORD: STEVEN M. KREIDT, P.E.

P.E. No: 39540

INDEX OF ROADWAY PLANS

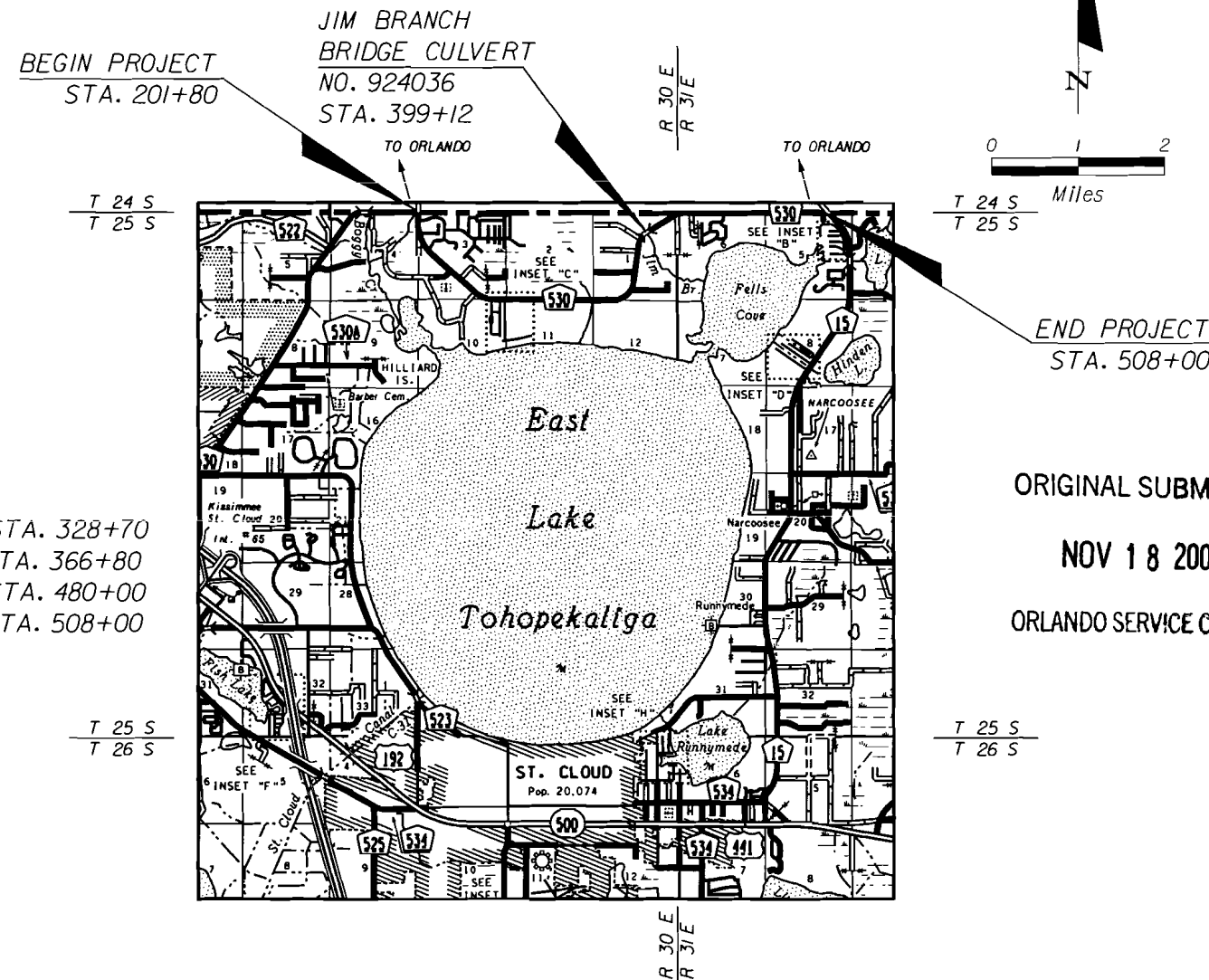
SHEET NO.	SHFT DESCRIPTION
1	KEY SHEET
2	SUMMARY OF PAY ITEMS
3-5	TYPICAL SECTIONS
6	GENERAL NOTES
7-8	TRAFFIC CONTROL PLAN
9-29	PLAN SHEETS
30	BOX CULVERT EXTENSION PLAN
31-33	CROSS SECTIONS
34-36	BOX CULVERT DATA SHEETS
37	SIGNING & PAVEMENT MARKING QUANTITIES
38-58	SIGNING & PAVEMENT MARKING PLAN SHEETS

EXCEPTIONS

STA. 295+00 TO STA. 328+70  
STA. 351+50 TO STA. 366+80  
STA. 456+00 TO STA. 480+00  
STA 507+00 TO STA. 508+00

GOVERNING STANDARDS AND SPECIFICATIONS:  
FLORIDA DEPARTMENT OF TRANSPORTATION,  
DESIGN STANDARDS DATED 2008,  
AND STANDARD SPECIFICATIONS FOR ROAD  
AND BRIDGE CONSTRUCTION DATED 2007,  
AS AMENDED BY CONTRACT DOCUMENTS.

APPLICABLE DESIGN STANDARDS MODIFICATIONS: 07/01/09  
For Design Standards Modifications click on  
"Design Standards" at the following web site:  
<http://www.dot.state.fl.us/rddesign/>



END PROJECT  
STA. 508+00

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ORLANDO SERVICE CENTER

PROJECT LENGTH IS BASED ON  $\varnothing$  OF CONSTRUCTION

LENGTH OF PROJECT		
	LINEAR FEET	MILES
ROADWAY	30,620.00	5.799
BRIDGES	0.00	0.000
NET LENGTH OF PROJECT	30,620.00	5.799
EXCEPTIONS	8,250.00	1.563
GROSS LENGTH OF PROJECT	22,370.00	4.236

OSCEOLA COUNTY PROJECT MANAGER: STEVE NICHOLS, P.E.

*Handwritten signature and date: 11-18-09*

SCANNED 11 OSCEOLA COUNTY  
SCANNED 11 PUBLIC WORKS

JOHN QUIÑONES  
KEN SMITH  
FRED HAWKINS, JR.  
BRANDON ARRINGTON  
MICHAEL E. HARFORD  
MICHAEL FREILINGER  
KENNETH ATKINS

CHAIRMAN OF THE BOARD OF COUNTY COMMISSIONERS  
VICE CHAIRMAN OF THE BOARD OF COUNTY COMMISSIONERS  
COUNTY COMMISSIONER  
COUNTY COMMISSIONER  
COUNTY COMMISSIONER  
COUNTY MANAGER  
PUBLIC WORKS ADMINISTRATOR

SHEET NO.  
1



NOTE: THESE QUANTITIES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING THE INFORMATION NECESSARY TO PREPARE HIS BID.

APP# 091118-6

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NOV 18 2009

PAY ITEM NOTES

ORLANDO SERVICE CENTER

SUMMARY OF PAY ITEMS				
ITEM NUMBER	DESCRIPTION	UNIT	PLAN QUANTITY	FINAL QUANTITY
101-1	MOBILIZATION	LS	1	
102-1	MAINTENANCE OF TRAFFIC	LS	1	
102-14	TRAFFIC CONTROL OFFICER	MH	560	
102-60	WORK ZONE SIGNS	ED	840	
102-71-11	BARRIER WALL, TEMPORARY, F&I, CONCRETE	LF	850	
102-71-21	BARRIER WALL, TEMPORARY, RELOCATE, CONCRETE	LF	850	
102-74-1	BARRICADES	ED	280	
102-77	HIGH INTENSITY FLASHING LIGHTS, TEMP, TYPE B	ED	280	
102-99	CHANGEABLE-VARIABLE MESSAGE SIGN, TEMP	ED	280	
104-99	EROSION CONTROL	LS	1	
110-1-1	CLEARING AND GRUBBING	LS	1	
120-1	REGULAR EXCAVATION	CY	137	
120-4	SUBSOIL EXCAVATION	CY	88	
120-6	EMBANKMENT	CY	616	
285-709	OPTIONAL BASE GROUP 9 TYPE B-12.5	SY	67	
327-70-5	MILLING EXIST ASPHALT PAV'T (2" AVG DEPTH)	SY	54,737	
337-7-32	ASPHALTIC CONCRETE FRICTION COURSE (FC-12.5)(TRAFFIC C)(2")(RUBBER)	TN	6,081	
339-1	MISCELLANEOUS ASPHALT PAVEMENT	TN	44	
400-4-1	CLASS IV CONCRETE (CULVERTS)	CY	90.9	
415-1-1	REINFORCING STEEL (ROADWAY)	LB	15,683	
524-1-1	CONCRETE DITCH PAVEMENT	SY	62	
530-3-4	RIP RAP, RUBBLE, F & I, DITCH LINING	TN	70	
536-1-1	GUARDRAIL	LF	400	
536-76	SPECIAL GUARDRAIL POST	EA	12	
536-85-22	GUARDRAIL END ANCHORAGE ASSEMBLY (FLARED)	EA	4	
570-1-2	PERFORMANCE TURF, SOD	SY	400	
710-90	SIGNING AND PAVEMENT MARKINGS	LS	1	

- 104-99 THE LUMP SUM COST FOR EROSION CONTROL SHALL INCLUDE ALL ACTIVITIES AND ITEMS REQUIRED, INCLUDING BUT NOT LIMITED TO STAKED SILT FENCE, TURBIDITY BARRIERS, SYNTHETIC BALES, ROCK BAGS, SAND BAGS, RIP-RAP, SLOPE DRAINS, FILTER FABRIC, TEMPORARY SODDING, ROCK OUTLET STRUCTURES, EARTHEN CONTAINMENT BERMS, PUMPING SYSTEM FOR STREAM DIVERSION, FLOCCULANTS, MONITORING, ETC.
- 110-1-1 INCLUDES THE REMOVAL OF CURB, GUTTER, SIDEWALK, AND GUARDRAIL.
- 327-70-5 MILLINGS SHALL BE RETAINED AND TRANSPORTED BY THE CONTRACTOR TO OSCEOLA COUNTY ROAD AND BRIDGE STORAGE YARD #1 AT 3850 OLD CANOE CREEK ROAD, ST. CLOUD, FLORIDA 34769. PAYMENT SHALL BE INCLUDED IN COST OF MILLING. CONTRACTOR SHALL NOTIFY OSCEOLA ROAD AND BRIDGE DEPARTMENT AT 407-343-7164 AT LEAST 48 HOURS PRIOR TO DELIVERY OF MATERIAL.
- 337 INCLUDES THE COST OF TACK.
- 710-90 THE CONTRACTOR SHALL APPLY THERMOPLASTIC AS THE SECOND APPLICATION A MINIMUM OF THIRTY (30) DAYS AFTER THE FIRST APPLICATION OF PAINT BUT PRIOR TO THE FINAL ACCEPTANCE OF THE PROJECT. THE THERMOPLASTIC SHALL BE IN ACCORDANCE WITH SECTION 711 OF THE SPECIFICATION. ALL PAVEMENT MARKINGS SHALL BE INCLUDED IN THE COST OF ITEM NUMBER 710-90. ALL SIGNING AND PAVEMENT MARKINGS SHALL MATCH EXISTING, UNLESS NOTED OTHERWISE, AND MEET FDOT DESIGN STANDARDS. INCLUDES COST OF SIGNING.

SUMMARY OF SODDING								
LOCATION STA. TO STA.	SIDE	P			F			FIELD BOOK REFERENCE
		L	W	SY	L	W	SY	
397+65 - 400+60	LT	VARIES	VARIES	100				
397+65 - 400+60	RT	VARIES	VARIES	100				
* MISCELLANEOUS	L/R	VARIES	VARIES	200				
				TOTAL	400			

\* TO BE PLACED AS DIRECTED BY ENGINEER.

SUMMARY OF DITCH PAVEMENT AND SODDING				
LOCATION STA. TO STA.	SIDE	CONCRETE SY		FIELD BOOK REFERENCE
		P	F	
398+84 - 398+98	L/R	31		
399+24 - 399+38	L/R	31		
		TOTAL	62	

*Handwritten signature and date: 11-18-09*

SCANNED 11/19/2009 JC  
SCANNED 11/19/2009 JC

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

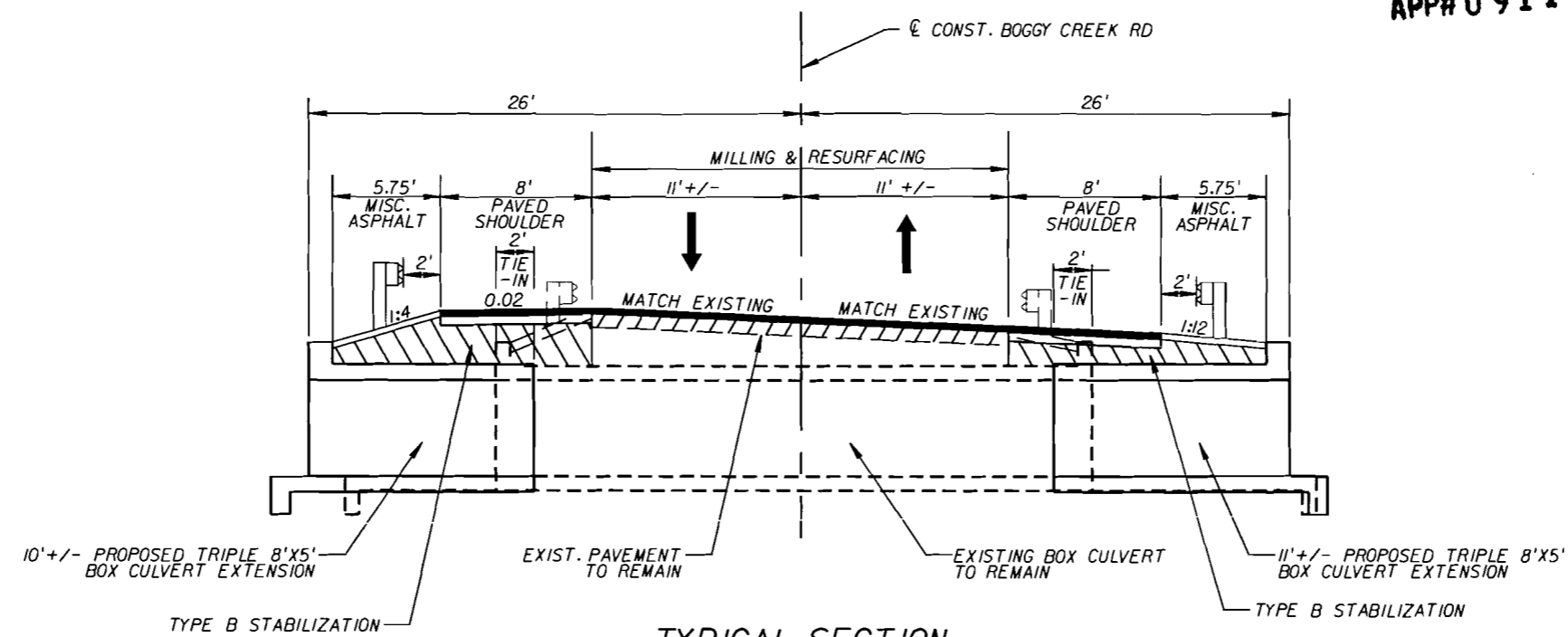
**KCG** KELLY, COLLINS & GENTRY, INC.  
ENGINEERING / PLANNING  
1700 N. ORANGE AVE., SUITE 400, ORLANDO, FL 32804  
407-898-7858 CERT. OF AUTHORIZATION NO. 7350  
STEVEN M. KREIDT, P.E. LICENSE NO. 39540

OSCEOLA COUNTY  
PUBLIC WORKS  
BOGGY CREEK ROAD

SUMMARY OF PAY ITEMS

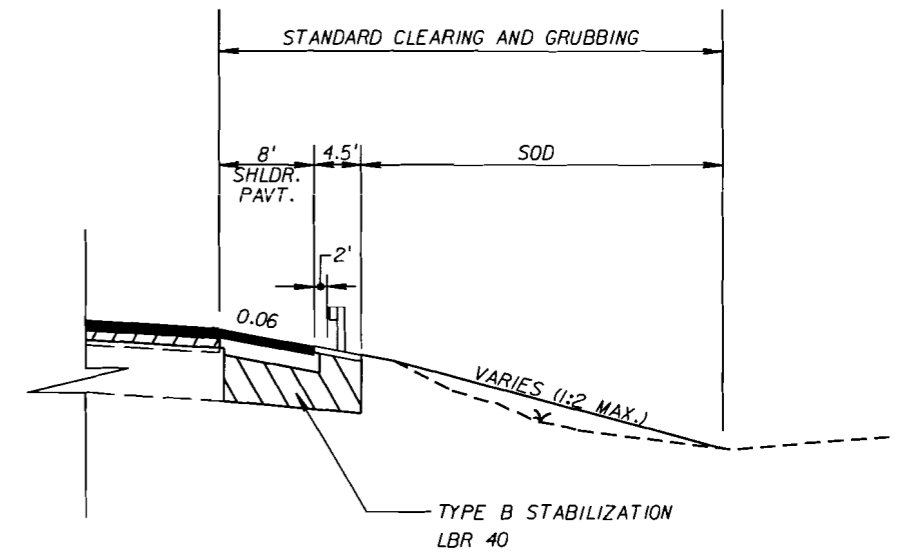
SHEET NO.  
2

APP# 091118-6



TYPICAL SECTION  
 BOX CULVERT EXTENSION  
 AT JIM BRANCH CREEK  
 STA. 397+65 TO STA. 400+60

- MILLING (MAINLINE)**  
 MILL EXISTING ASPHALT PAVEMENT (2" AVG. DEPTH)
- RESURFACING (MAINLINE)**  
 FRICTION COURSE FC-12.5 (TRAFFIC C) (2") (RUBBER)
- SHOULDER PAVEMENT**  
 OPTIONAL BASE GROUP 1 WITH  
 FRICTION COURSE FC-12.5 (TRAFFIC C) (2") (RUBBER)




NEW PAVED SHOULDER DETAIL  
 STA. 397+65 TO STA. 400+60 (LT. & RT.)  
 SHOULDER PAVEMENT  
 OPTIONAL BASE GROUP 1 WITH  
 FRICTION COURSE FC-12.5 (TRAFFIC C) (2") (RUBBER)

SCANNED 11/19/2009 JC  
 SCANNED 11/19/2009 JC

*R. B. [Signature]*  
 11-18-09

NOT TO SCALE

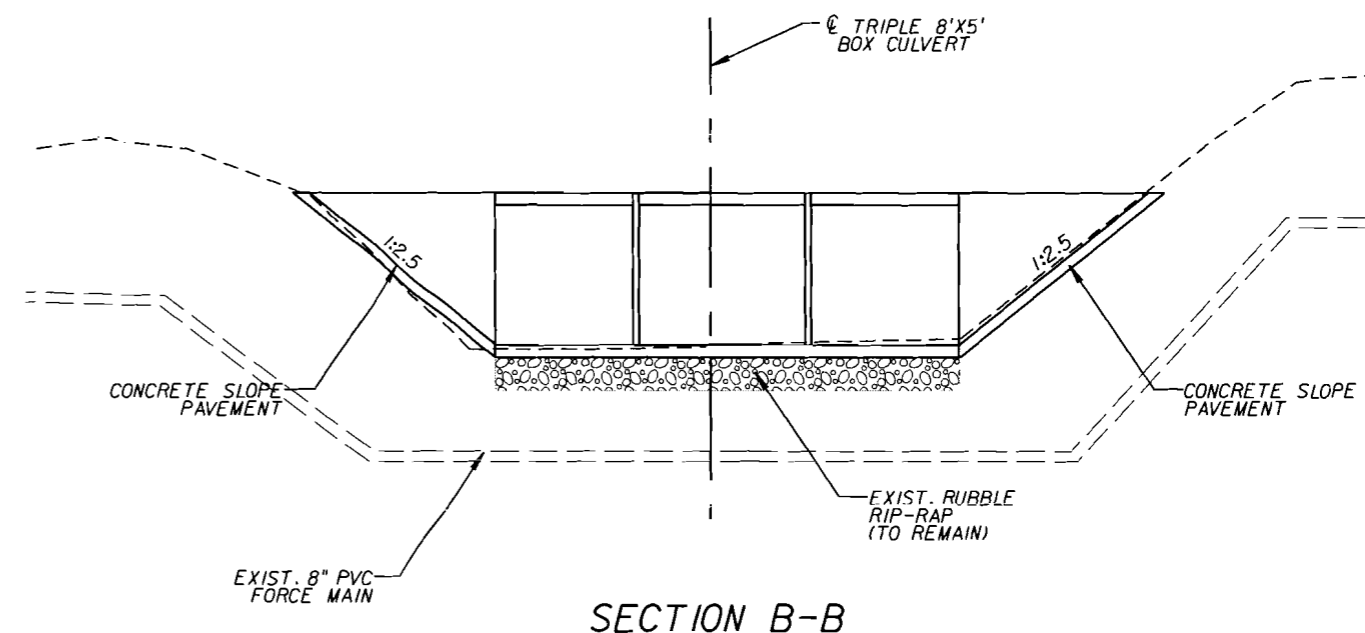
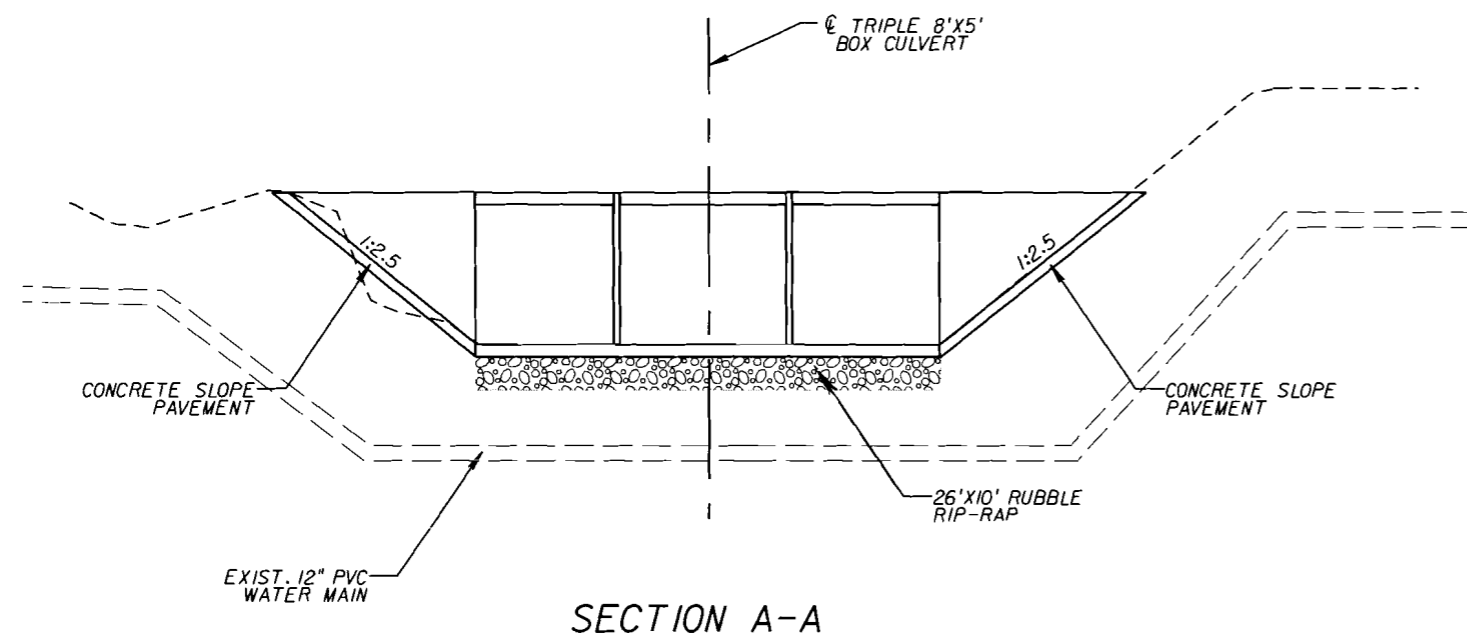
REVISIONS		REVISIONS		 <b>KELLY, COLLINS &amp; GENTRY, INC.</b> ENGINEERING / PLANNING 1700 N. ORANGE AVE., SUITE 400 ORLANDO, FL 32804 407-898-7858 CERT. OF AUTHORIZATION NO. 7350 STEVEN M. KRUIDI, P.E. LICENSE NO. 39540	OSCEOLA COUNTY PUBLIC WORKS BOGGY CREEK ROAD	TYPICAL SECTION BOX CULVERT EXTENSION	SHEET NO. 4
DATE	DESCRIPTION	DATE	DESCRIPTION				

APP# 091118-6

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NOV 18 2009

ORLANDO SERVICE CENTER



SCANNED 11/19/2009 JC  
 SCANNED 11/19/2009 JC

*[Handwritten Signature]*  
 11-18-09

NOT TO SCALE

REVISIONS	
DATE	DESCRIPTION

**KCG**  
 KELLY, COLLINS & GENTRY, INC.  
 ENGINEERING & PLANNING  
 1700 N. ORANGE AVE., SUITE 400 ORLANDO, FL 32804  
 407-898-7858 CERT. OF AUTHORIZATION NO. 7350  
 STEVEN M. KREIDT, P.E. LICENSE NO. 39540

OSCEOLA COUNTY  
 PUBLIC WORKS  
 BOGGY CREEK ROAD

TYPICAL SECTION  
 JIM BRANCH CREEK

SHEET NO.  
 5

APP# 091118-6

ORIGINAL SUBMITTAL

NOV 18 2009

ORLANDO SERVICE CENTER

GENERAL NOTES


1. THE STATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION WITHIN THE PROJECT LIMITS.
2. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE ENGINEER SHOULD NOTIFY THE DISTRICT LOCATION SURVEYOR, WITHOUT DELAY, BY TELEPHONE.
3. DURING MILLING OPERATIONS BASE MAY BE EXPOSED. IF BASE IS EXPOSED, THE CONTRACTOR SHALL PRIME PRIOR TO RESURFACING.
4. CONTRACTOR SHALL NOT ALLOW ANY ASPHALT OR BASE SPOILS TO BE SWEEP ONTO EXISTING GRASSED SHOULDER.
5. THE CONTRACTOR IS REQUIRED TO FIELD VERIFY THESE CONSTRUCTION PLANS AGAINST THE EXISTING CONDITIONS TO ENSURE THAT ANY CHANGES THAT HAVE OCCURRED ARE INCLUDED WITHIN THE BID PRICE. ANY DISCREPANCIES DISCOVERED SHALL NOT BE CONSIDERED ADDITIONAL WORK. SUCH CHANGES ARE TO BE INCLUDED WITHIN THE CONSTRUCTION BID PRICE AND NO ADDITIONAL COMPENSATION FOR SUCH CHANGES WILL BE GIVEN DURING CONSTRUCTION.
6. EROSION PROTECTION AT INLET OPENINGS AND BRIDGE BOX CULVERT SHALL BE PROVIDED USING ROCK BAGS, SOCKDRAINS, OR OTHER EROSION CONTROL DEVICE AS APPROVED BY THE ENGINEER TO PREVENT THE INTRUSION OF MILLED MATERIALS, SOIL AND DEBRIS FROM ENTERING THE EXISTING DRAINAGE INLETS AND WATER BODY.
7. THE FOLLOWING LIST OF UTILITY COMPANIES HAVE FACILITIES WITHIN THE PROJECT LIMITS. IT HAS BEEN DETERMINED THAT NO RELOCATION IS ANTICIPATED BY THE FOLLOWING COMPANIES FOR THE PROJECT:

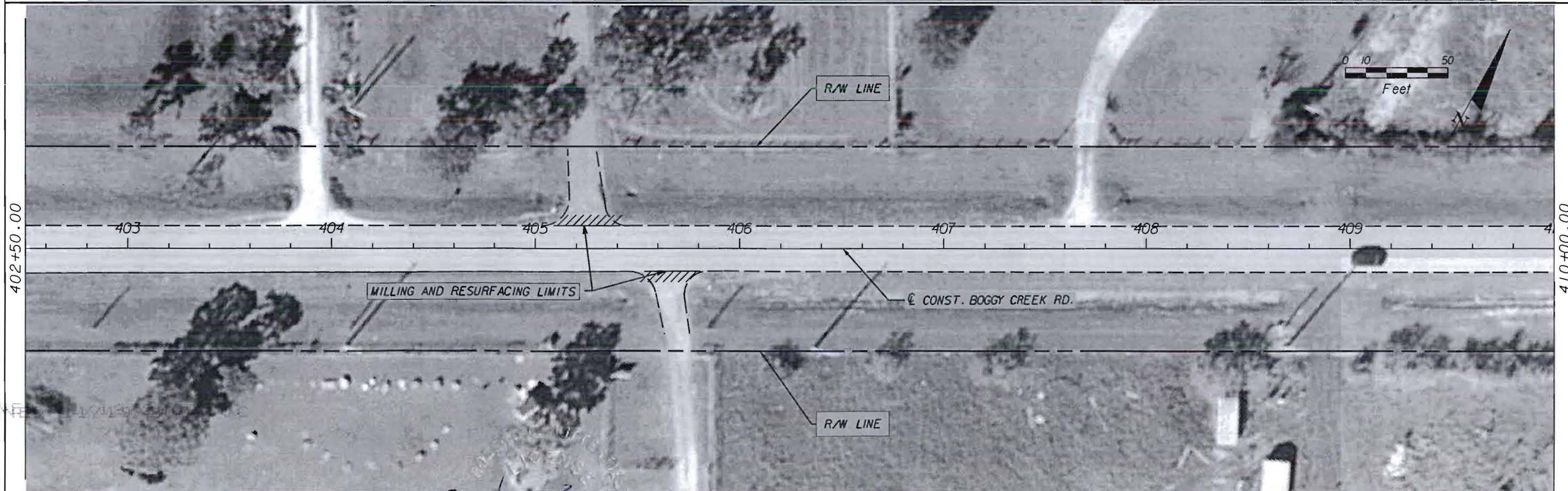
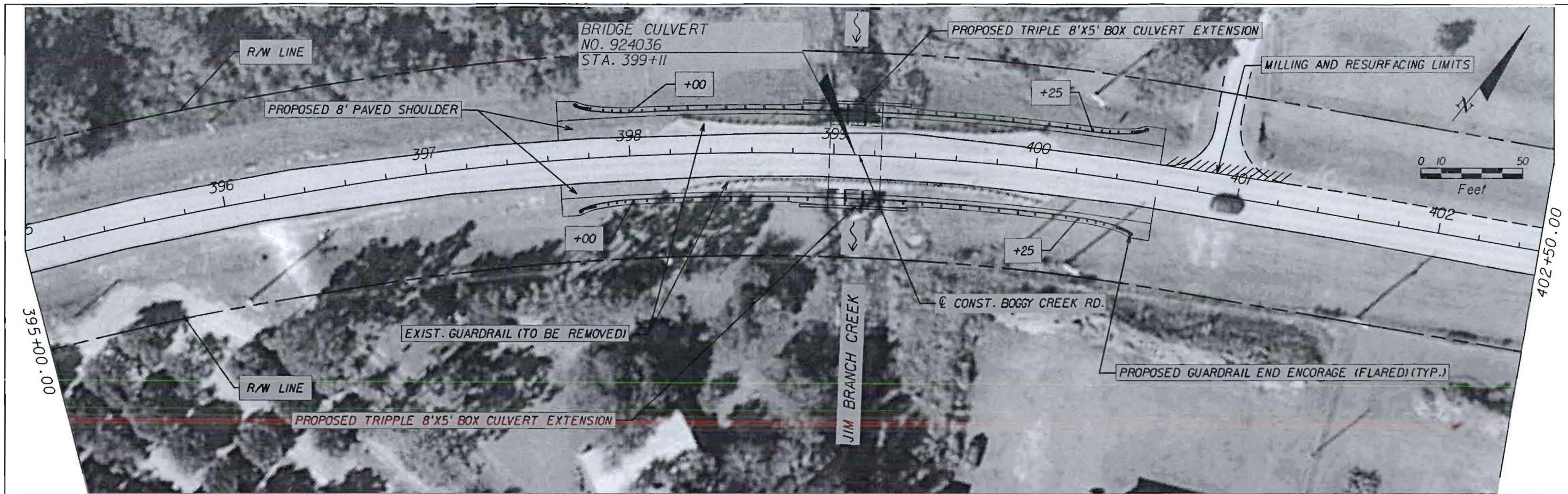
<u>COMPANY</u>	<u>TELEPHONE NO.</u>
AT&T LONG DISTANCE	352-331-9294
AT&T	561-439-9118
BRIGHT HOUSE NETWORKS	407-532-8509
CITY OF ST. CLOUD	407-957-7301
COMCAST COMMUNICATIONS	407-849-3610
CONNEXION TECHNOLOGIES	919-535-7280
EMBARQ	407-814-5383
KISSIMMEE UTILITY AUTHORITY	407-933-7777 X1210
ORLANDO UTILITIES COMMISSION (OUC)	407-236-9651
OSCEOLA COUNTY TRAFFIC	407-742-0501
SPRING NEXTEL	407-838-5602
TOHO WATER AUTHORITY	407-518-2253

8. THE COST OF DE-WATERING SHALL BE INCLUDED IN THE COST OF THE BOX CULVERT EXTENSION.

SCANNED 11/19/2009 JC  
SCANNED 11/19/2009 JC

*TKB*  
11-18-09

REVISIONS		REVISIONS		 <b>KELLY, COLLINS &amp; GENTRY, INC.</b> ENGINEERING / PLANNING 1700 N. ORANGE AVE., SUITE 400, ORLANDO, FL 32804 407-898-7858 CERT. OF AUTHORIZATION NO. 7350 STEVEN M. KREIDT, P.E. LICENSE NO. 39540	<b>OSCEOLA COUNTY PUBLIC WORKS BOGGY CREEK ROAD</b>	<b>GENERAL NOTES</b>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION				6



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
		11-18-09	TAB

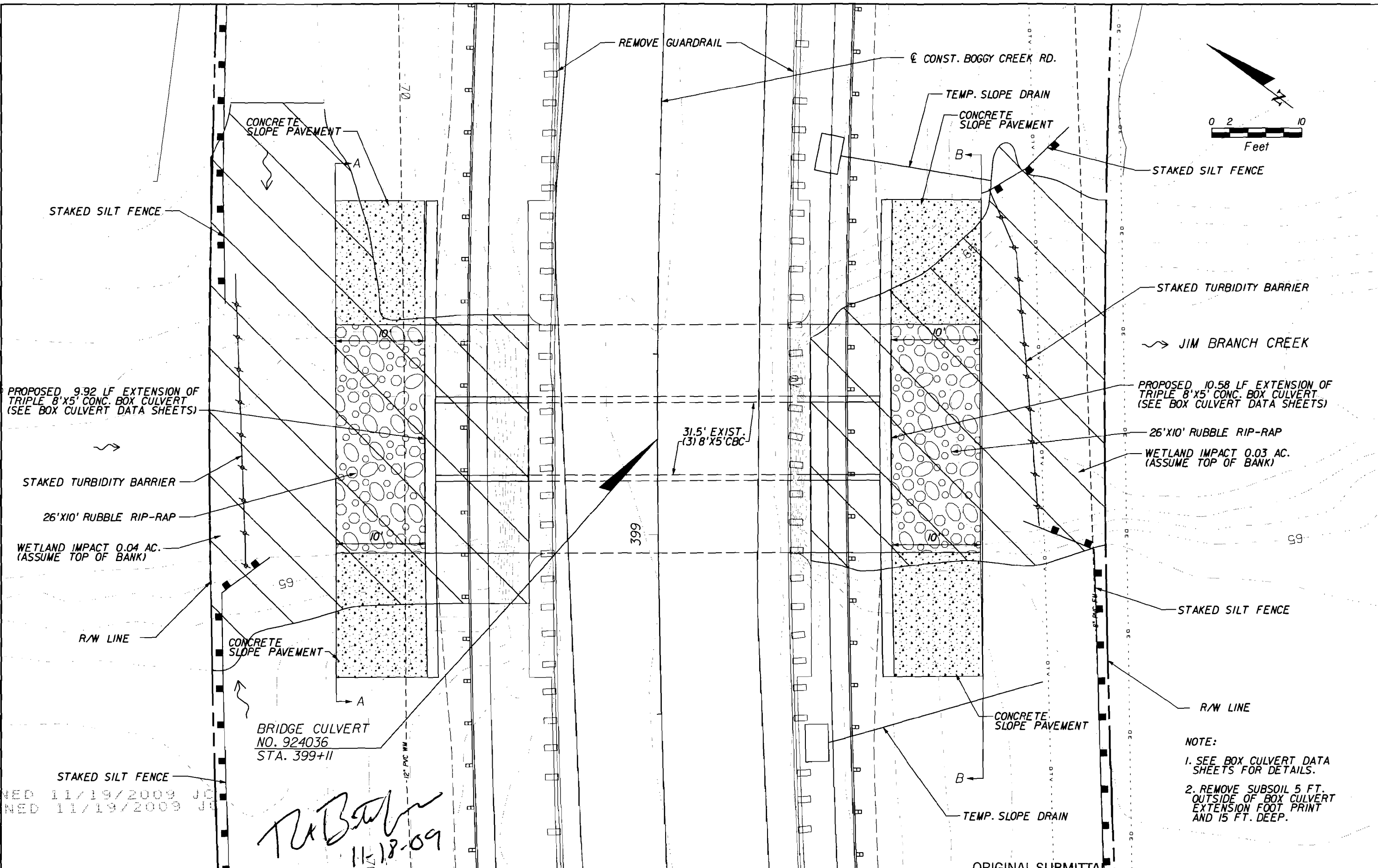
**KCG**  
**KELLY, COLLINS & GENTRY, INC.**  
 ENGINEERING / PLANNING  
 1700 N ORANGE AVE., SUITE 400 ORLANDO, FL 32804  
 407-898-7858 CERT. OF AUTHORIZATION NO. 7350  
 STEVEN M. KREIDT, P.E. LICENSE NO. 39540

**OSCEOLA COUNTY  
 PUBLIC WORKS  
 BOGGY CREEK ROAD**

ORIGINAL SUBMITTAL  
 NOV 18 2009  
 APP# 091118-6  
 PLAN SHEET

SHEET NO.  
 22

APP#091118-6



PROPOSED 9.92 LF EXTENSION OF TRIPLE 8'x5' CONC. BOX CULVERT (SEE BOX CULVERT DATA SHEETS)

PROPOSED 10.58 LF EXTENSION OF TRIPLE 8'x5' CONC. BOX CULVERT (SEE BOX CULVERT DATA SHEETS)

BRIDGE CULVERT NO. 924036 STA. 399+11

31.5' EXIST. (3) 8'x5' CBC

NOTE:  
 1. SEE BOX CULVERT DATA SHEETS FOR DETAILS.  
 2. REMOVE SUBSOIL 5 FT. OUTSIDE OF BOX CULVERT EXTENSION FOOT PRINT AND 15 FT. DEEP.

*T. B. ...*  
 11-18-09

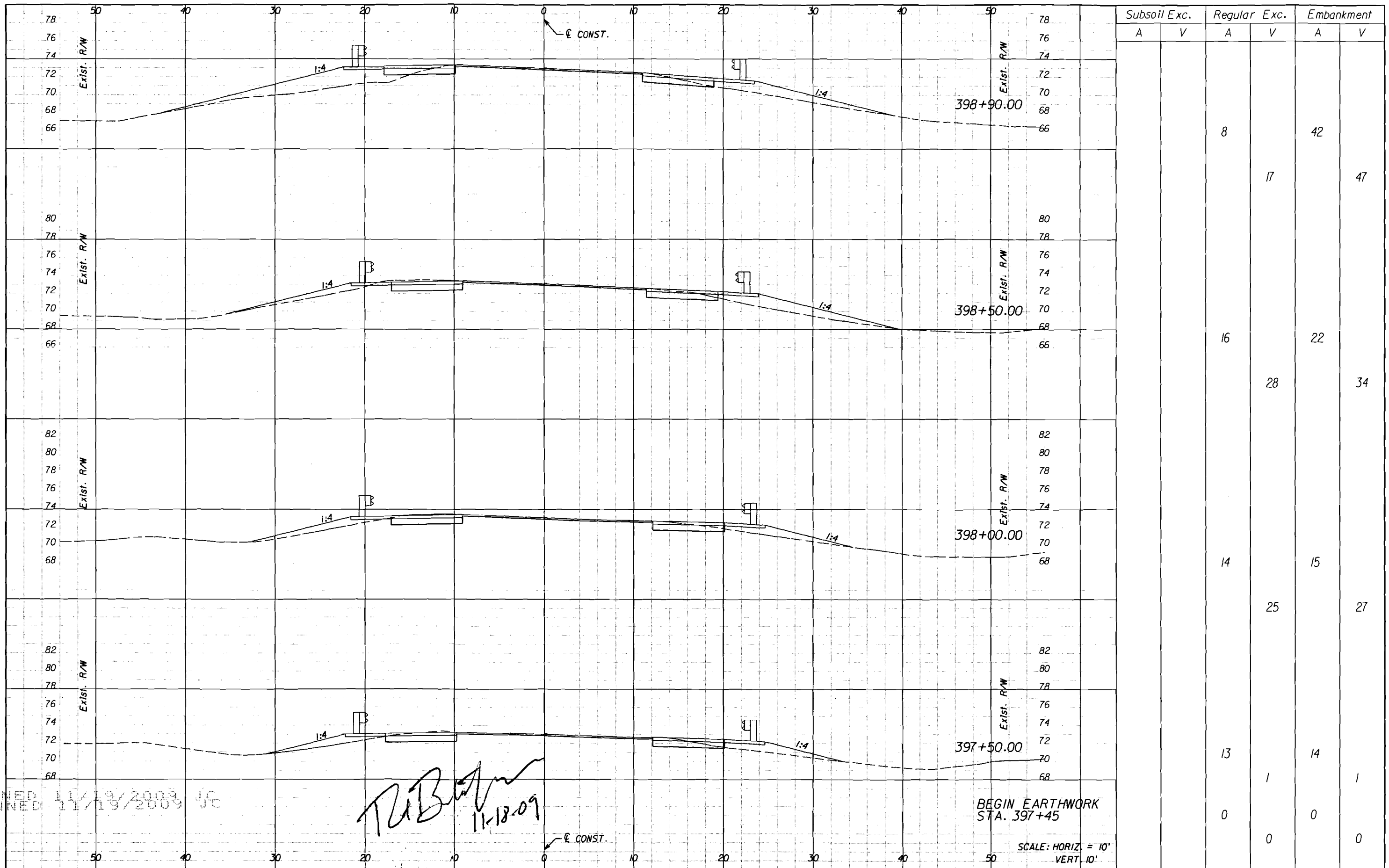
REVISIONS	
DATE	DESCRIPTION

**KCG**  
 KELLY, COLLINS & GENTRY, INC.  
 ENGINEERING / PLANNING  
 1700 N. ORANGE AVE., SUITE 400 ORLANDO, FL 32804  
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OSCEOLA COUNTY PUBLIC WORKS  
 JIM BRANCH CULVERT PROJECT

NOV 18 2009  
 BOX CULVERT EXTENSION PLAN  
 ORLANDO SERVICE CENTER

SHEET NO.  
 30



Subsoil Exc.		Regular Exc.		Embankment	
A	V	A	V	A	V
		8		42	
			17		47
		16		22	
			28		34
		14		15	
			25		27
		13		14	
			1		1
		0		0	
			0		0

SCANNED 11/19/2009 JC  
 SCANNED 11/19/2009 JC

*TUB*  
 11-18-09

BEGIN EARTHWORK  
 STA. 397+45

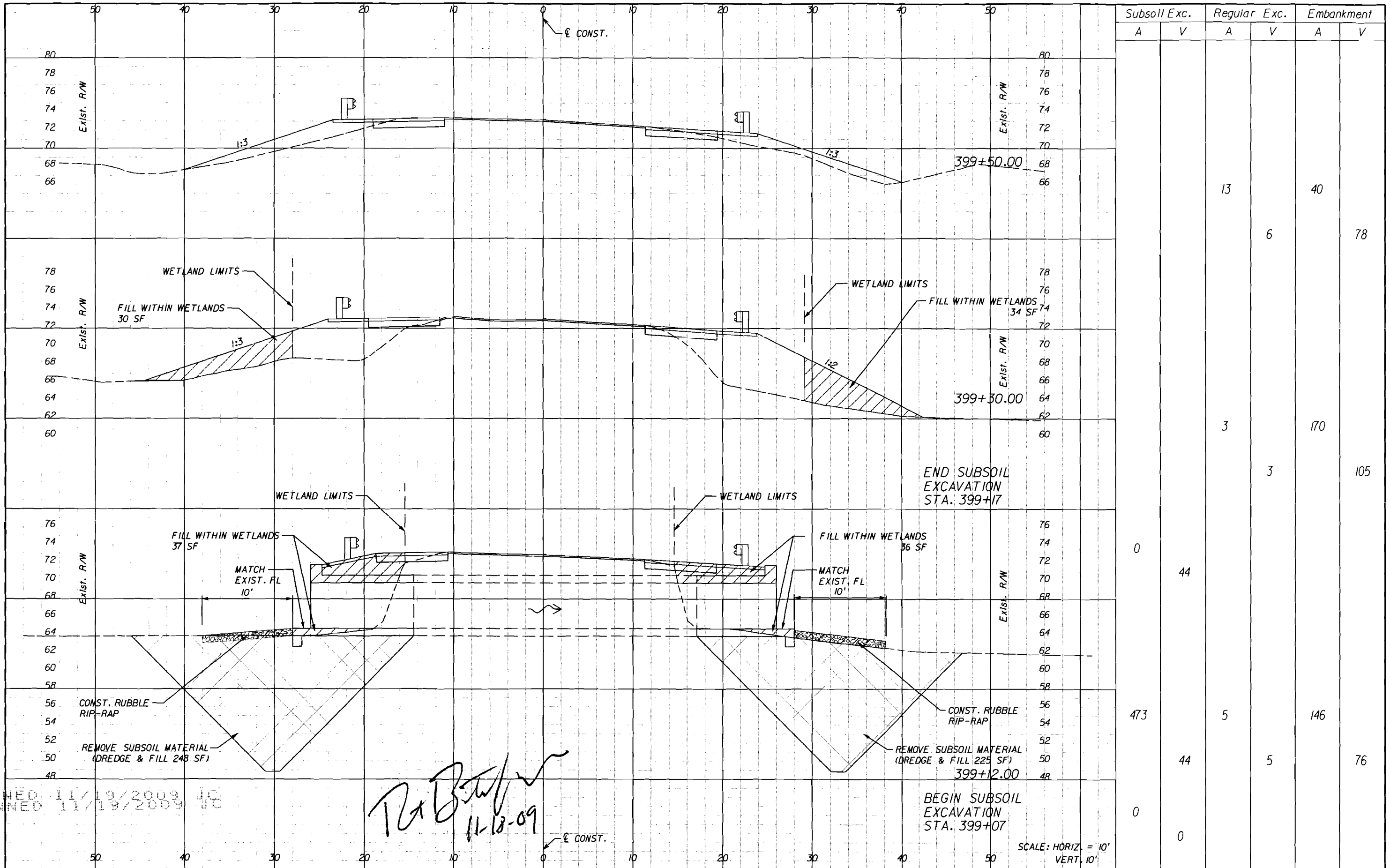
REVISIONS	
DATE	DESCRIPTION

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OSCEOLA COUNTY  
 PUBLIC WORKS  
 BOGGY CREEK ROAD

ORIGINAL SUBMITTAL APP# 091118-6  
 NOV 18 2009 CROSS SECTION

SHEET NO.  
 31



SCANNED 11/19/2009 JC  
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*T. A. B. 11-18-09*

REVISIONS	
DATE	DESCRIPTION

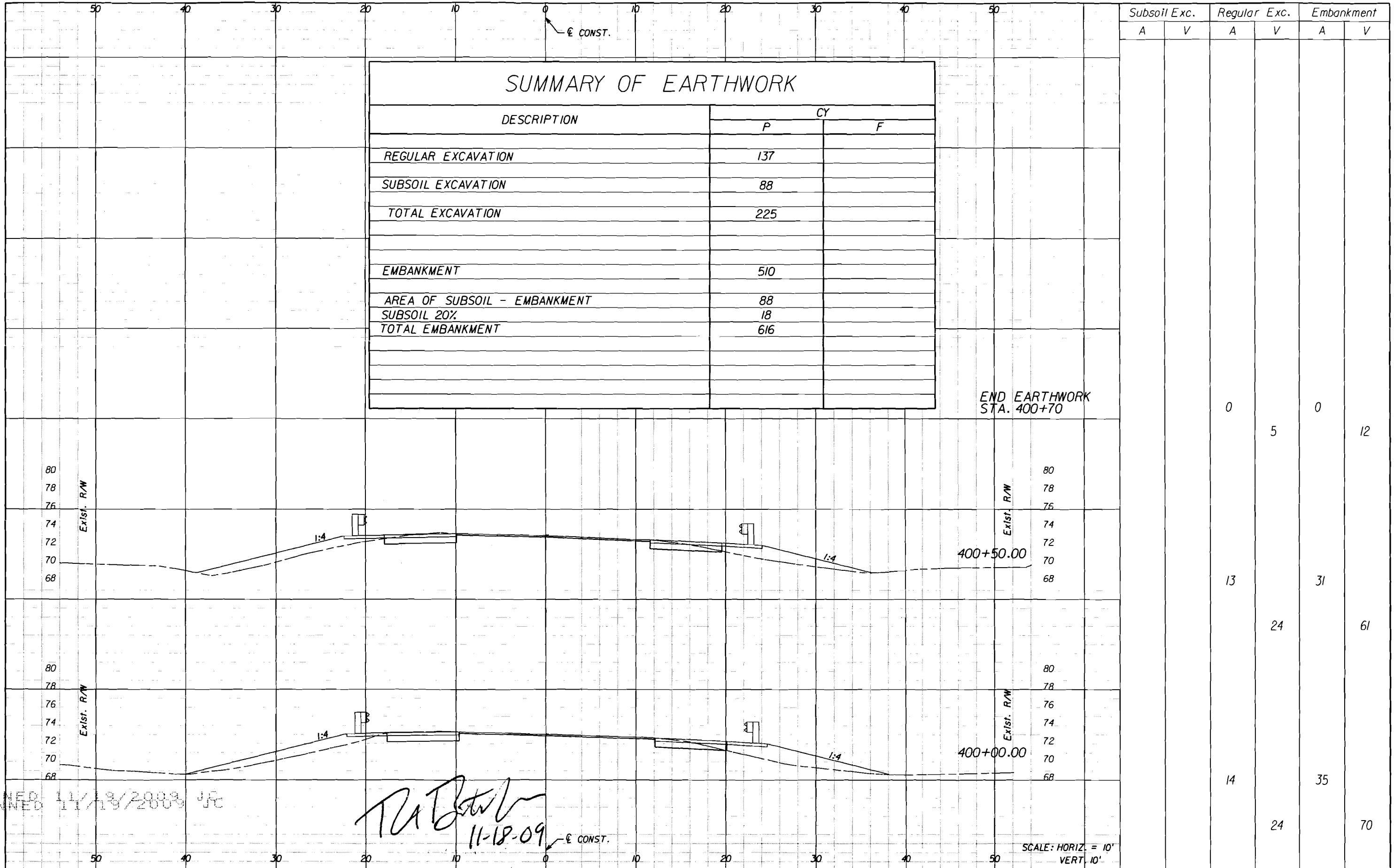
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**OSCEOLA COUNTY  
 PUBLIC WORKS  
 BOGGY CREEK ROAD**

ORIGINAL SUBMITTAL  
**APP# 091118-6**  
 NOV 18 2009 **CROSS SECTION**

SHEET NO.  
**32**





SUMMARY OF EARTHWORK		
DESCRIPTION	CY	
	P	F
REGULAR EXCAVATION	137	
SUBSOIL EXCAVATION	88	
TOTAL EXCAVATION	225	
EMBANKMENT	510	
AREA OF SUBSOIL - EMBANKMENT	88	
SUBSOIL 20%	18	
TOTAL EMBANKMENT	616	

END EARTHWORK  
STA. 400+70

Subsoil Exc.		Regular Exc.		Embankment	
A	V	A	V	A	V
		0	5	0	12
		13	24	31	61
		14	24	35	70

*T.A. [Signature]*  
11-18-09

SCANNED 11/19/2009 JJC  
SCANNED 11/19/2009 JJC

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**KCG**  
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**OSCEOLA COUNTY**  
**PUBLIC WORKS**  
**BOGGY CREEK ROAD**

ORIGINAL SUBMITTAL  
**APP# 091118-6**  
 NOV 18 2009 CROSS SECTION

SHEET NO.  
**33**