



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
COCOA REGULATORY OFFICE
400 HIGH POINT DRIVE, SUITE 600
COCOA, FLORIDA 32926

Regulatory Division
North Permits Branch
SAJ-2007-1939(IP-AWP)

MAR 12 2008

Florida Department of Transportation
Attn: Gordon Mullen
P.O. Box 613069
Ocoee, FL 34671

Dear Mr. Mullen:

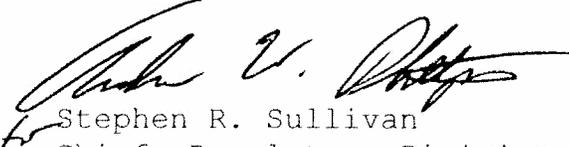
The U.S. Army Corps of Engineers (Corps) is pleased to enclose the Department of the Army permits, which should be available at the construction site. Work may begin immediately but the Corps must be notified of:

- a. The date of commencement of the work,
- b. The dates of work suspensions and resumptions of work, if suspended over a week, and
- c. The date of final completion.

This information should be mailed to the Enforcement Section of the Regulatory Division of the Jacksonville District at Post Office Box 4970, Jacksonville, Florida 32232-0019. The Enforcement Section is also responsible for inspections to determine whether Permittees have strictly adhered to permit conditions,

IT IS NOT LAWFUL TO DEVIATE FROM
THE APPROVED PLANS ENCLOSED.

Sincerely,


Stephen R. Sullivan
Chief, Regulatory Division

Enclosures

Copies Furnished:

FWS, Jacksonville

EPA, Atlanta

CESAJ-RD-PE

DEPARTMENT OF THE ARMY PERMIT

Permittee: FDOT Florida's Turnpike Enterprise
Attn: Catherine Bradley
P.O. Box 613069
Ocoee, Florida 34761

RECEIVED

MAR 11 2008

JACKSONVILLE DISTRICT
USACF

Permit No: SAJ-2007-1939(IP-AWP)

Issuing Office: U.S. Army Engineer District, Jacksonville

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: The placement of clean fill material into 14.1 acres of waters of the United States (wetlands) and 1.36 acres of jurisdictional surface waters including stormwater management ditches and areas capable of impounding water for the widening of Florida's Turnpike. The U.S. Army Corps of Engineers (Corps) has determined there is no apparent connection between wetland 11 and navigable waters of the United States either physically or through an interstate commerce connection other than through use by migratory birds. Therefore, in accordance with Supreme Court decision, Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, 531 U.S. 159 (2001), wetland 11 as depicted on the enclosed drawings is considered isolated and will not be regulated by the Corps. An additional 1.86 acres of temporary impacts to wetlands will occur due to clearing activities. The work described above is to be completed in accordance with the 5 attachments affixed at the end of this permit instrument.

Project Location: The project is the widening of Florida's Turnpike (SR 91) from Beulah Road to State Road (SR) 50. The project is located in Sections 19, & 25-30, Township 22 South, Range 27 East, Orange County, Florida. The on-site wetlands are hydrologically connected to Black Lake, Johns Lake, and Lake Apopka.

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PERMITTEE: FDOT Florida's Turnpike Enterprise
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Directions to site: The project site is the Florida Turnpike from Beulah Road to SR 50, a distance of approximately 4.7 miles.

Latitude & Longitude: Latitude..... 28°33'02.79" North
Longitude..... 81°38'40.22" West

Permit Conditions

General Conditions:

1. The time limit for completing the work authorized ends on **March 12, 2013**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature and the mailing address of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

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5. ~~If a conditioned water quality certification has been~~ issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. All reports, documentation and correspondence required by the conditions of this permit shall be submitted to the following address: U.S. Army Corps of Engineers, Regulatory Division, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232. The Permittee shall reference this permit number, SAJ-2007-1939(IP-AWP), on all submittals.

2. Within 10 days from the date of initiating the authorized work, the Permittee shall provide to the Corps a written notification of the date of commencement of work authorized by this permit.

3. Prior to the initiation of any work authorized by this permit, the Permittee shall install erosion control measures along the perimeter of all work areas to prevent the displacement of fill material. Immediately after completion of the final grading of the land surface, all slopes, land surfaces, and filled areas adjacent to wetlands shall be stabilized using sod, degradable mats, or a combination of similar stabilizing materials to prevent erosion. The erosion control measures shall remain in place and be maintained until all authorized work has been completed and the site has been stabilized.

4. The permittee agrees to incorporate the Eastern Indigo Snake Protection Measures included as attachment of 2 of this permit instrument.

PERMIT NUMBER: SAJ-2007-1939(IP-AWP)
PERMITTEE: FDOT Florida's Turnpike Enterprise
PAGE 4 of 10

~~5. The permittee agrees to implementation and follow the~~
National Bald Eagle Management Guidelines included as attachment
3 of this permit instrument.

6. Wetland impacts will be mitigated pursuant to the Senate Bill 1986 Rule - Section 373.4137 Florida Statutes (F.S.). Within 6 months from the date of initiating the authorized work or 12 months from the effective date of this permit, whichever first occurs, the Permittee shall complete compensatory mitigation in accordance with the 2008 St. Johns River Water Management District (SJRWMD) FDOT MITIGATION PLAN, Mitigation Project Group SJ49. Compensatory mitigation plan # 406146 states the proposed mitigation will include the acquisition of federal credits from approved Mitigation Banks within whose service area covers the project site or preservation and enhancement of uplands and wetlands as part of a future acquisition within SJRWMD Drainage Basin 12. A minimum of 10.44 functional units of loss shall be replaced by the mitigation plan.

7. SJRWMD shall submit an annual status report and five year update of the mitigation described above to ensure completion and success and completion in accordance with the Memorandum of Understanding between the SJRWMD and the United States Army Corps of Engineers, Jacksonville District signed October 16, 2007 and October 9, 2007 respectively.

8. Within 60 days of completion of the authorized work or at the expiration of the construction window of this permit, whichever occurs first, the Permittee shall submit as-built drawings of the authorized work and a completed As-Built Certification Form (Attachment 4) to the Corps. The drawings shall be signed and sealed by a registered professional engineer and include the following:

a. A plan view drawing of the location of the authorized work footprint (as shown on the permit drawings) with an overlay of the work as constructed in the same scale as the attached permit drawings (8½-inch by 11-inch). The drawing should show all "earth disturbance," including wetland impacts, water management structures, and any on-site mitigation areas.

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~~b. List any deviations between the work authorized by this permit and the work as constructed. In the event that the completed work deviates, in any manner, from the authorized work, describe on the As-Built Certification Form the deviations between the work authorized by this permit and the work as constructed. Clearly indicate on the as-built drawings any deviations that have been listed. Please note that the depiction and/or description of any deviations on the drawings and/or As-Built Certification Form does not constitute approval of any deviations by the U.S. Army Corps of Engineers.~~

c. The Department of the Army Permit number.

d. Include pre- and post-construction aerial photographs of the project site, if available.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

() Section 10 of the Rivers and Harbors Act of 1899
(33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

() Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal projects.

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~~3. Limits of Federal Liability. In issuing this permit,~~
the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision: This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

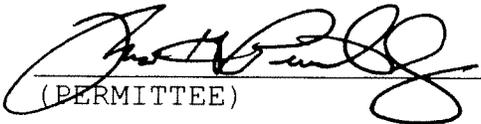
PERMIT NUMBER: SAJ-2007-1939(IP-AWP)
PERMITTEE: FDOT Florida's Turnpike Enterprise
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~~Such a reevaluation may result in a determination that it is~~
appropriate to use the suspension, modification, and revocation
procedures contained in 33 CFR 325.7 or enforcement procedures
such as those contained in 33 CFR 326.4 and 326.5. The
referenced enforcement procedures provide for the issuance of an
administrative order requiring you comply with the terms and
conditions of your permit and for the initiation of legal action
where appropriate. You will be required to pay for any
corrective measures ordered by this office, and if you fail to
comply with such directive, this office may in certain
situations (such as those specified in 33 CFR 209.170)
accomplish the corrective measures by contract or otherwise and
bill you for the cost.

6. Extensions: General Condition 1 establishes a time
limit for the completion of the activity authorized by this
permit. Unless there are circumstances requiring either a
prompt completion of the authorized activity or a reevaluation
of the public interest decision, the Corps will normally give
favorable consideration to a request for an extension of this
time limit.

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~~Your signature below, as permittee, indicates that you accept
and agree to comply with the terms and conditions of this
permit.~~



(PERMITTEE)

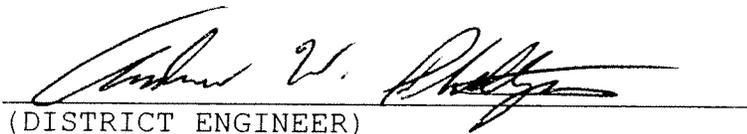
3-7-08

(DATE)

Thomas G. Percival, Jr.

(PERMITTEE NAME-PRINTED)

This permit becomes effective when the Federal official,
designated to act for the Secretary of the Army, has signed
below.



(DISTRICT ENGINEER)

for Paul L. Grosskruger
Colonel, U.S. Army
District Commander

12 March 08

(DATE)

PERMIT NUMBER: SAJ-2007-1939(IP-AWP)
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~~When the structures or work authorized by this permit are still~~
in existence at the time the property is transferred, the terms
and conditions of this permit will continue to be binding on the
new owner(s) of the property. To validate the transfer of this
permit and the associated liabilities associated with compliance
with its terms and conditions, have the transferee sign and date
below.

(TRANSFEEE-SIGNATURE)

(DATE)

(NAME-PRINTED)

(ADDRESS)

(CITY, STATE, AND ZIP CODE)

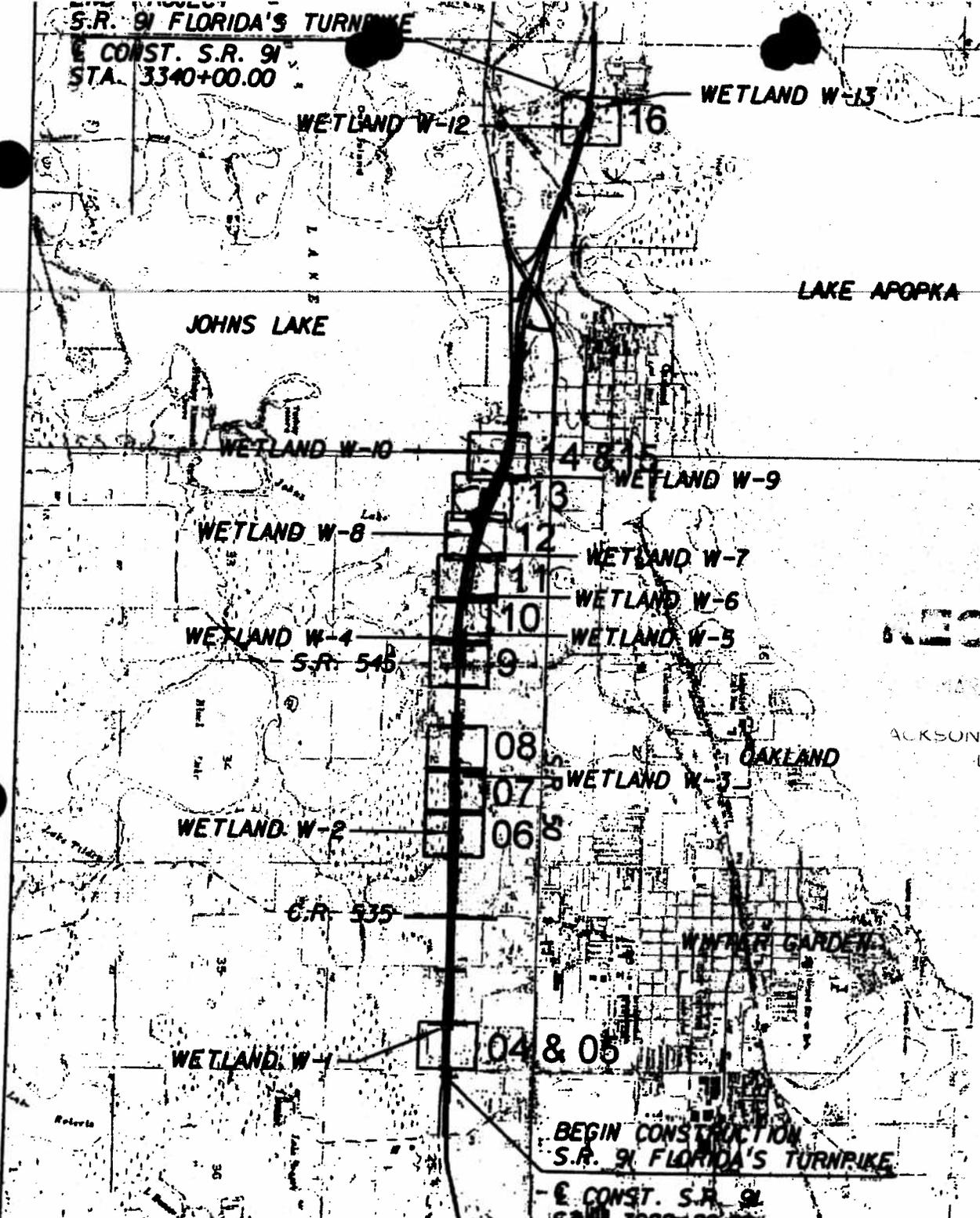
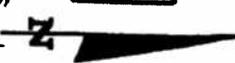
PERMIT NUMBER: SAJ-2007-1939(IP-AWP)
PERMITTEE: FDOT Florida's Turnpike Enterprise
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***Attachments to Department of the Army
Permit Number SAJ-2007-1939(IP-AWP)***

1. PERMIT DRAWINGS: 16 pages
2. Eastern Indigo Snake Protection Measures: 1 page
3. National Bald Eagle Management Guidelines: 23 pages
4. WATER QUALITY CERTIFICATION: Specific Conditions of the water quality permit/certification in accordance with General Condition number 5 on page 2 of this DA permit. 5 pages
5. As-Built Certification: 1 page

S.R. 91 FLORIDA'S TURNPIKE
 E CONST. S.R. 91
 STA. 3340+00.00

4000'



RECEIVED

APR 11 2008
 JACKSONVILLE DISTRICT
 USACE

BEGIN CONSTRUCTION
 S.R. 91 FLORIDA'S TURNPIKE
 - E CONST. S.R. 91
 STA. 3088+80.00

PROJECT:	FLORIDA'S TURNPIKE BEULAH RD. TO S.R. 50	SECTIONS 19, 20, 25, 26, 27, 28, 29, 30, TOWNSHIP 22 SOUTH, RANGE 27 EAST
WATER BODY:	JOHN'S LAKE, LAKE APOPKA	COUNTY OF ORANGE
PURPOSE:	LOCATION MAP - SHEET INDEX	STATE OF FLORIDA
DATUM:	NAD 83	SHEET 1 OF 16

U.S. Army Corps of Engineers
 Application # SAT-2007-1939
 Date: APR 16 2007
 Sheet 1 of 16

DRMP
 DESIGN, REVISIONS & PROJECTS, INC.
 94 LAKE BALDWIN LANE, ORLANDO, FLORIDA 32834
 PHONE: (407) 886-0894 FAX: (407) 886-4138
 CERTIFICATE OF AUTHORIZATION NO. 2848

FLORIDA'S TURNPIKE
 ENTERPRISE

FINANCIAL PERMIT
 106146: U.S. Army Corps of Engineers
 Permit # SAT-2007-1939
 Date: 2/25/08
 Attachment: 1



GENERAL NOTES

1. STRICT ADHERENCE TO SECTION 104 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION WILL BE USED IN CONJUNCTION WITH THIS APPLICATION TO PROVIDE REASONABLE ASSURANCE THAT WATER QUALITY STANDARDS WILL NOT BE VIOLATED. SILT FENCES, HAY BALES AND TURBIDITY BARRIERS WILL BE USED AS REQUIRED.
2. TYPES OF EQUIPMENT INVOLVED IN THE CONSTRUCTION WILL INCLUDE: GRADEALL, DUMP TRUCKS, LONG ARM EXCAVATORS, BULLDOZERS, FRONT END LOADERS AND OTHERS. THE EQUIPMENT WILL BE TRUCKED OR SELF PROPELLED TO THE SITE.
3. TURBIDITY CURTAINS, SILT FENCES, SAND BAGS, HAY BALES OR SOME COMBINATION OF THESE ITEMS WILL BE USED AS DIRECTED BY THE PROJECT ENGINEER TO MAINTAIN STATE WATER QUALITY STANDARDS.
4. EXCAVATED MATERIAL THAT IS SUITABLE WILL BE USED IN CONSTRUCTION OF THE ROADWAY EMBANKMENT AND SHOULDERS. UNSUITABLE MATERIAL WILL BE DISPOSED OF AND CONTAINED IN UPLAND SITES PROVIDED BY THE CONTRACTOR.
5. FILL MATERIAL SHALL BE OF SATISFACTORY MATERIAL THAT IS CLEAN AND COMPACTIBLE INTO A SUITABLE AND ENDURING ROADWAY.
6. DURING THE CONSTRUCTION OR EXTENSION OF MULTIPLE OPENING DRAINAGE STRUCTURES, THE CONTRACTOR, AS DIRECTED BY THE PROJECT ENGINEER, SHALL BE REQUIRED TO PHASE CONSTRUCT DRAINAGE STRUCTURES IN ORDER TO MAINTAIN ADEQUATE WATER FLOW.
7. ALL ELEVATION SHOWN IN THIS PERMIT APPLICATION ARE REFERENCED TO U.S.G.S. NATIONAL VERTICAL DATUM OF 1988
8. THE FOLLOWING AREAS OF IMPACT ARE REQUIRED FOR THE PROJECT.

JURISDICTIONAL AREA	DIRECT WETLAND IMPACT AREA (AC)	TEMPORARY IMPACT AREA (AC)	ACOE JURISDICTION (Y/N)
WETLAND W-1	0.14	0	Y
WETLAND W-2	2.44	0	Y
WETLAND W-3	0.68	0	Y
WETLAND W-4	0.77	0	Y
WETLAND W-5	0.56	0	Y
WETLAND W-6	0.02	0.01	Y
WETLAND W-7	0.33	0.12	Y
WETLAND W-8	5.19	1.35	Y
WETLAND W-9	2.95	0.38	Y
WETLAND W-10	0.60	0	Y
WETLAND W-11	0.05	0	N
WETLAND W-12	0	0	Y
WETLAND W-13	0.46	0	Y
TOTAL	14.19	1.86	

PROJECT: FLORIDA'S TURNPIKE BEULAH RD. TO S.R. 50 SECTIONS 19, 20, 25, 26, 27, 28, 29, 30, TOWNSHIP 22 SOUTH, RANGE 27 EAST
 WATER BODY: NONE COUNTY OF ORANGE
 PURPOSE: GENERAL NOTES AND WETLAND IMPACTS STATE OF FLORIDA
 DATUM: NAVD '88 SHEET 2 OF 16

U.S. Army Corps of Engineers
 Application # SAS-2007-1979

Date: APR 16 2007
 Sheet 2 of 26



FLORIDA'S TURNPIKE ENTERPRISE

FINANCIAL
 406146-1-52-01

DATE _____
 REG. FLA. ENG. NO. _____

JURISDICTIONAL AREA	OSW IMPACT AREA (AC)	ACOE JURISDICTION (Y/N)
OSW1	0.24	Y
OSW2	NO IMPACTS	N
OSW3	1.81	N
OSW4	3.47	N
OSW5	0.87	N
OSW6	0.39	N
OSW7	0.12	N
OSW8	0.11	N
OSW9	0.46	N
OSW10	0.49	Y
OSW11	0.03	N
OSW12	0.01	N
OSW13	0.48	Y
OSW14	0.15	Y
OSW15	0.73	N
OSW16	0.75	N
OSW17	0	N
SUB-TOTAL	10.04	

PROJECT: FLORIDA'S TURNPIKE
BEULAH RD. TO S.R. 50

WATER BODY: NONE

PURPOSE: GENERAL NOTES
AND WETLAND IMPACTS

DATUM: NAVD '88

SECTIONS 19, 20, 25, 26, 27, 28, 29, 30, TOWNSHIP 22 SOUTH, RANGE 27 EAST

COUNTY OF ORANGE

STATE OF FLORIDA

SHEET 3 OF 16

U.S. Army Corps of Engineers
Application # SAT-2007-1939
Date: APR 16 2007
Sheet 3 of 16



FLORIDA'S TURNPIKE
ENTERPRISE

FINANCIAL

406146-1-52-01

DATE _____
REG. FLA. ENG. NO. _____

MATCH LINE 3099+00



WETLAND W-1
0.14 AC

OSW4

OSWI
0.24 AC.

3095

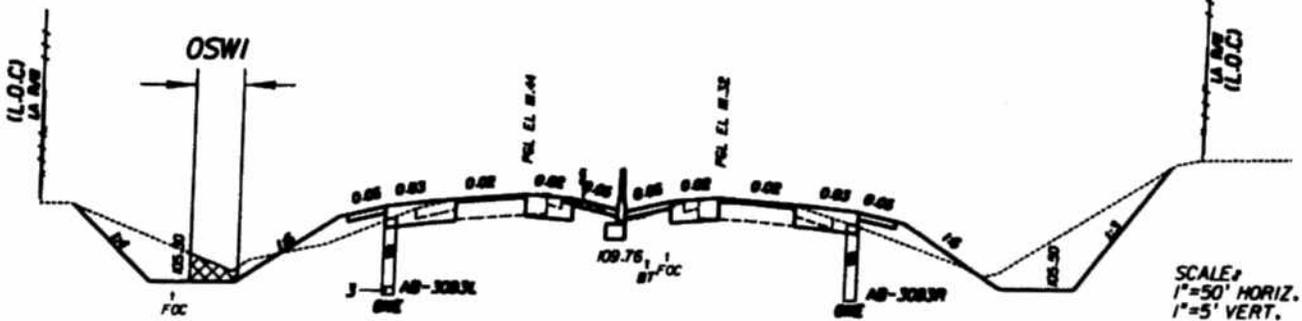
3090

BEGIN CONSTRUCTION
S.R. 91 FLORIDA'S TURNPIKE
E CONST. S.R. 91
STA. 3088+80.00

OSW2

LEGEND

-  WETLAND JURISDICTIONAL IMPACT
DIRECT WETLAND IMPACT
-  ACDE
OSWI IMPACT
-  OTHER SURFACE WATERS



PROJECT: FLORIDA'S TURNPIKE
BEULAH RD. TO S.R. 50
WATER BODY: OSWI & WETLAND 1
PURPOSE: JURISDICTIONAL IMPACT
DATUM: NAVD '88

SECTIONS 19, 20, 25, 26, 27, 28, 29, 30, TOWNSHIP 22 SOUTH, RANGE 27 EAST
COUNTY OF ORANGE
STATE OF FLORIDA
SHEET 4 OF 16

U.S. Army Corps of Engineers
Application # SAT-2007-1939
Date: APR 16 2007
Sheet 4 of 16



FLORIDA'S TURNPIKE
ENTERPRISE

FINANCI

406146-1-52-01

Signed

DATE _____

REG. FLA. ENG. NO. _____

MATCH LINE 3099+00

200'



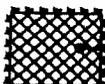
WETLAND W-1
0.14 AC.

OSW4

OSWI
0.24 AC.

BEGIN CONSTRUCTION
S.R. 91 FLORIDA'S TURNPIKE
@ CONST. S.R. 91
STA. 3088+80.00

LEGEND



WETLAND JURISDICTIONAL IMPACT
DIRECT WETLAND IMPACT



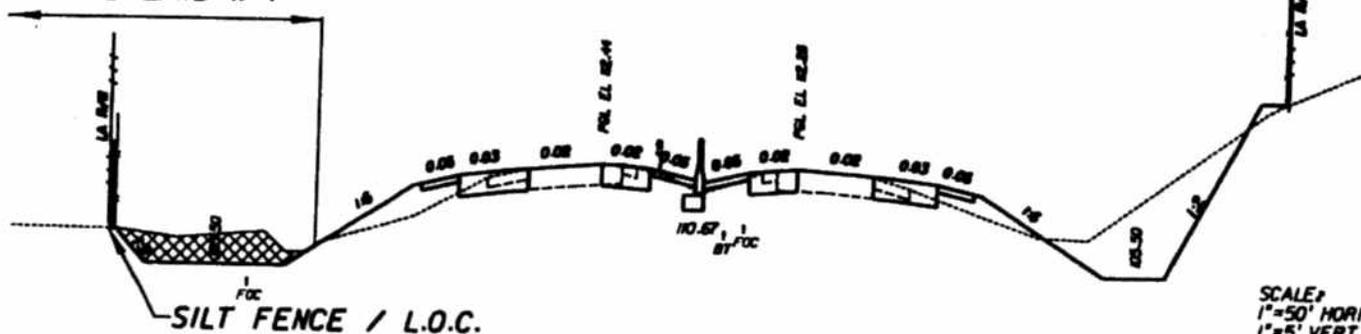
ACOE
OSWI IMPACT



OTHER SURFACE WATERS



WETLAND W-1



SCALE:
1"=50' HORIZ.
1"=5' VERT.

PROJECT: FLORIDA'S TURNPIKE
BEULAH RD. TO S.R. 50

SECTIONS 19, 20, 25, 26, 27, 28, 29, 30, TOWNSHIP 22 SOUTH, RANGE 27 EAST

WATER BODY: WETLAND I & OSWI

COUNTY OF ORANGE

PURPOSE: JURISDICTIONAL IMPACT

STATE OF FLORIDA

DATUM: NAVD '88

SHEET 5 OF 16

U.S. Army Corps of Engineers
Application # 507-2007-1939

Date: APR 16 2007

Sheet 5 of 16



DRMP

DRMP - DESIGN, REVISIONS & PERMITS
OVER, MIDDLE, WILES & PRECOURT, INC.
94 LAKE BALDWIN LANE, ORLANDO, FLORIDA 32834
PHONE: (407) 886-0594 FAX: (407) 886-4838
CERTIFICATE OF AUTHORIZATION NO. 2848

FLORIDA'S TURNPIKE
ENTERPRISE

FINANCIAL PRO

406146-1-52-01

Signed

DATE

REG. FLA. ENG. NO.

MATCH LINE 3154+00

200'

N

WETLAND W-2
2.44 AC

OSW4

OSW3

LEGEND



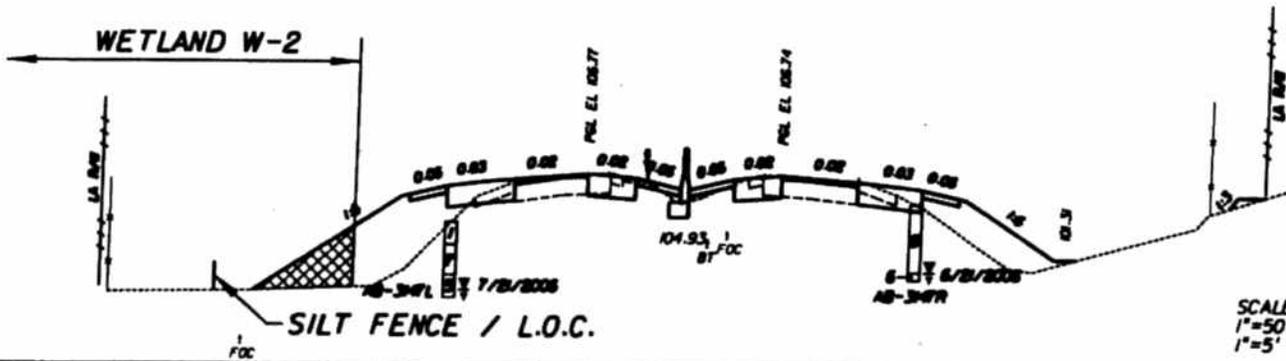
WETLAND JURISDICTIONAL IMPACT
DIRECT WETLAND IMPACT



OTHER SURFACE WATERS

MATCH LINE 3143+00

WETLAND W-2



PROJECT: FLORIDA'S TURNPIKE
BEULAH RD. TO S.R. 50
WATER BODY: WETLAND 2
PURPOSE: JURISDICTIONAL IMPACT
DATUM: NAVD '88

SECTIONS 19, 20, 25, 26, 27, 28, 29, 30, TOWNSHIP 22 SOUTH, RANGE 27 EAST
COUNTY OF ORANGE
STATE OF FLORIDA
SHEET 6 OF 16

U.S. Army Corps of Engineers
Application # 587-2007-1939
Date: APR 16 2007
Sheet 6 of 16



DRMP
DESIGN - RECORD - MEASURE - PLAN - CONSTRUCTION
DYER, RIDOLE, HILLS & PRECOURT, INC.
34 LAKE BALDWIN LAKE, ORLANDO, FLORIDA 32834
PHONE: (407) 896-0294 FAX: (407) 896-4838
CERTIFICATE OF AUTHORIZATION NO. 2548

FLORIDA'S TURNPIKE
ENTERPRISE

FINANCIAL PR

406146-1-52-01

Signed

DATE _____

REG. FLA. ENG. NO. _____

MATCH LINE 3165+00

200'

N

WETLAND W-2
2.44 AC

WETLAND W-3
0.68 AC

OSW4

LEGEND

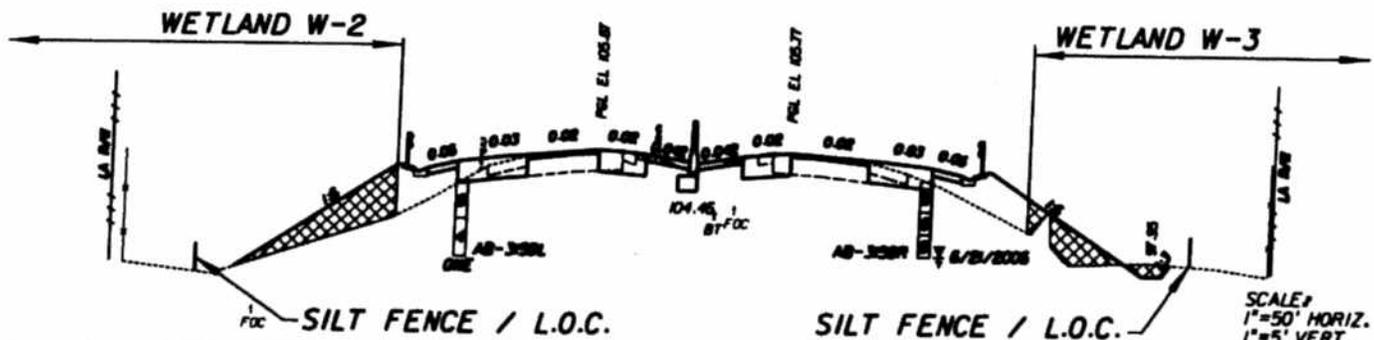


WETLAND JURISDICTIONAL IMPACT
DIRECT WETLAND IMPACT



OTHER SURFACE WATERS

MATCH LINE 3154+00



PROJECT: FLORIDA'S TURNPIKE
BEULAH RD. TO S.R. 50

WATER BODY: WETLANDS 2 & 3

PURPOSE: JURISDICTIONAL IMPACT

DATUM: NAVD '88

SECTIONS 19, 20, 25, 26, 27, 28, 29, 30, TOWNSHIP 22 SOUTH, RANGE 27 EAST

COUNTY OF ORANGE

STATE OF FLORIDA

SHEET 7 OF 16

U.S. Army Corps of Engineers
Application # 545-2007-1939
Date: APR 16 2007
Sheet 7 of 16



FLORIDA'S TURNPIKE
ENTERPRISE

FINANCIA

406146-1-52-01

Signed

DATE _____

REG. FLA. ENG. NO. _____

MATCH LINE 3176+00

200'

N

OSW5

OSW6

WETLAND W-2
2.44 AC

WETLAND W-3
0.68 AC

LEGEND



WETLAND JURISDICTIONAL IMPACT
DIRECT WETLAND IMPACT

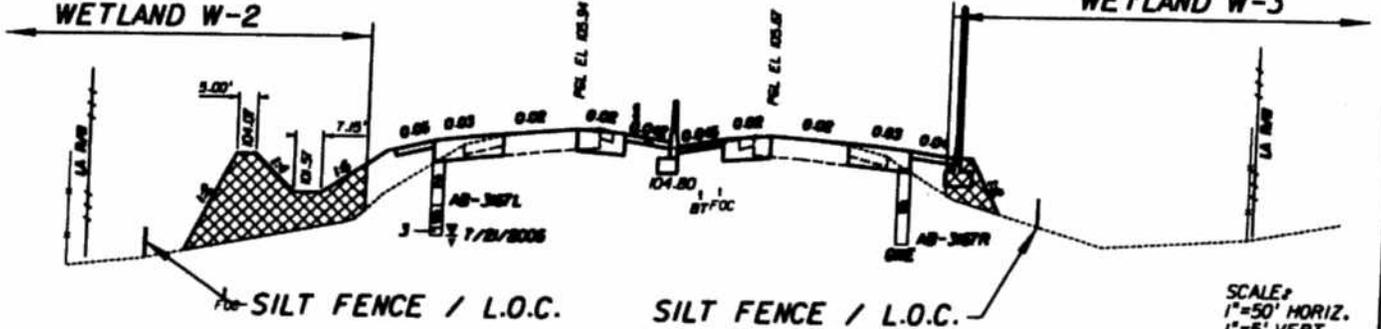


OTHER SURFACE WATERS

MATCH LINE 3165+00

WETLAND W-2

WETLAND W-3



SCALE:
1"=50' HORIZ.
1"=5' VERT.

PROJECT: FLORIDA'S TURNPIKE
BEULAH RD. TO S.R. 50

WATER BODY: WETLANDS 2 & 3

PURPOSE: JURISDICTIONAL IMPACT

DATUM: NAVD '88

SECTIONS 19, 20, 25, 26, 27, 28, 29, 30, TOWNSHIP 22 SOUTH, RANGE 27 EAST

COUNTY OF ORANGE

STATE OF FLORIDA

SHEET 8 OF 16

U.S. Army Corps of Engineers
Application # *SAJ-2007-1989*

Date: APR 16 2007

Sheet 8 of 16



DRMP
DIER, FIDDLE, HILLS & PRECOURT, INC.
34 LANE BALDWIN LANE, ORLANDO, FLORIDA 32834
PHONE: (407) 898-0294 FAX: (407) 898-8638
CERTIFICATE OF AUTHORIZATION NO. 2848

FLORIDA'S TURNPIKE
ENTERPRISE

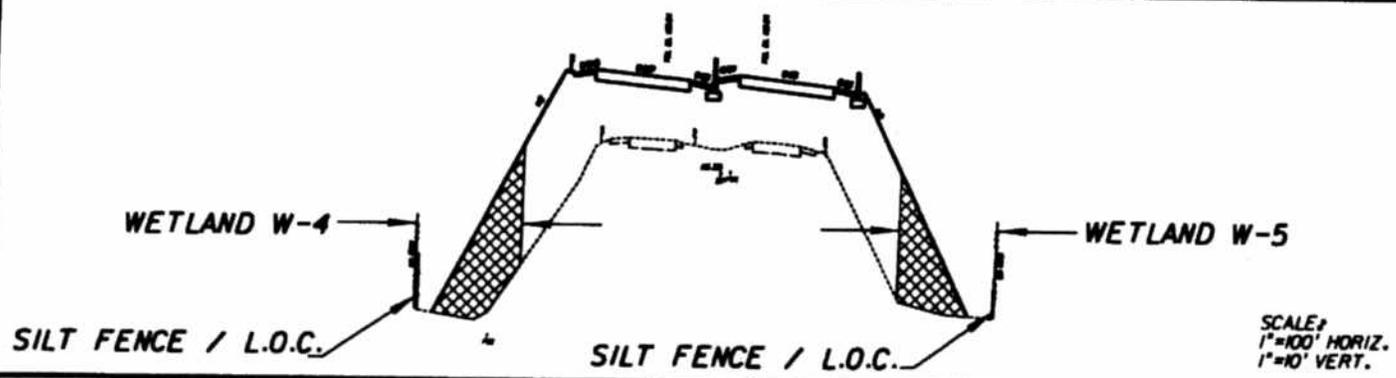
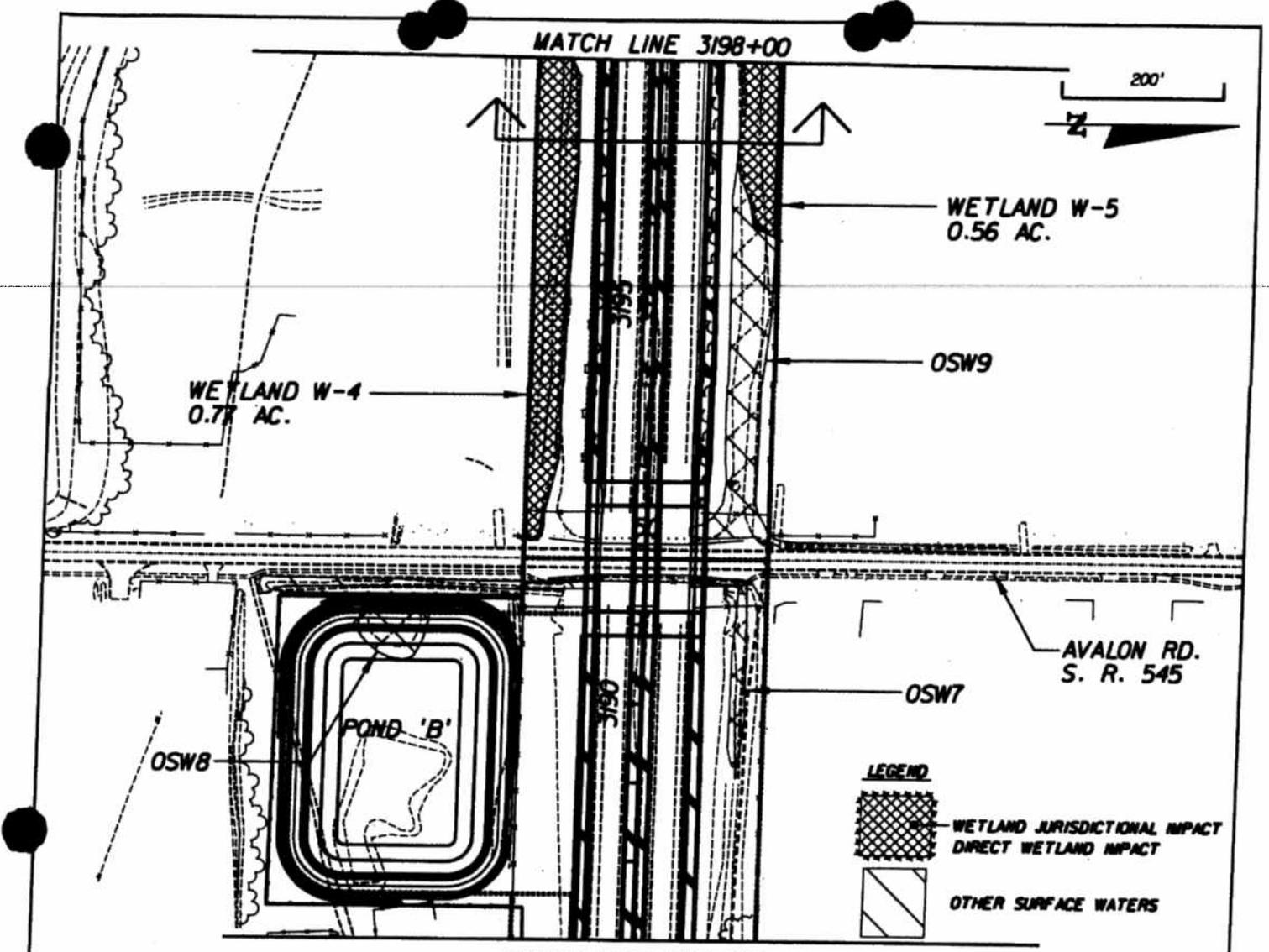
FINANCIAL

406146-1-52-01

Signed _____

DATE _____

REG. FLA. ENG. NO. _____



PROJECT: FLORIDA'S TURNPIKE BEULAH RD. TO S.R. 50	SECTIONS 19, 20, 25, 26, 27, 28, 29, 30, TOWNSHIP 22 SOUTH, RANGE 27 EAST
WATER BODY: WETLANDS 4 & 5	COUNTY OF ORANGE
PURPOSE: JURISDICTIONAL IMPACT	STATE OF FLORIDA
DATUM: NAVD '88	SHEET 9 OF 16

U.S. Army Corps of Engineers
Application # 545-207-1839
Date: APR 16 2007
Sheet 9 of 16



FLORIDA'S TURNPIKE
ENTERPRISE

FINANCIAL

406146-1-52-01

DATE _____

REG. FLA. ENG. NO. _____

MATCH LINE 3209+00



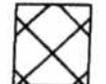
OSWIO
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WETLAND W-6

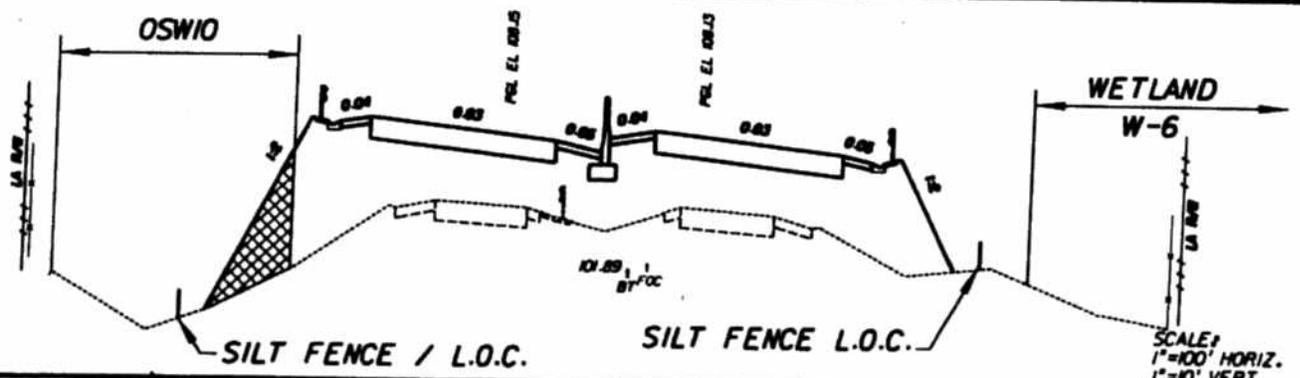
WETLAND W-5
0.56 AC.

WETLAND W-4
0.77 AC.

LEGEND

-  WETLAND JURISDICTIONAL IMPACT
DIRECT WETLAND IMPACT
-  ACCE
OSW IMPACT
-  OTHER SURFACE WATERS

MATCH LINE 3198+00



PROJECT#	FLORIDA'S TURNPIKE BEULAH RD. TO S.R. 50	SECTIONS 19, 20, 25, 26, 27, 28, 29, 30, TOWNSHIP 22 SOUTH, RANGE 27 EAST
WATER BODY#	WETLANDS 485	COUNTY OF ORANGE
PURPOSE#	JURISDICTIONAL IMPACT	STATE OF FLORIDA
DATUM#	NGAVD '88	SHEET 10 OF 16

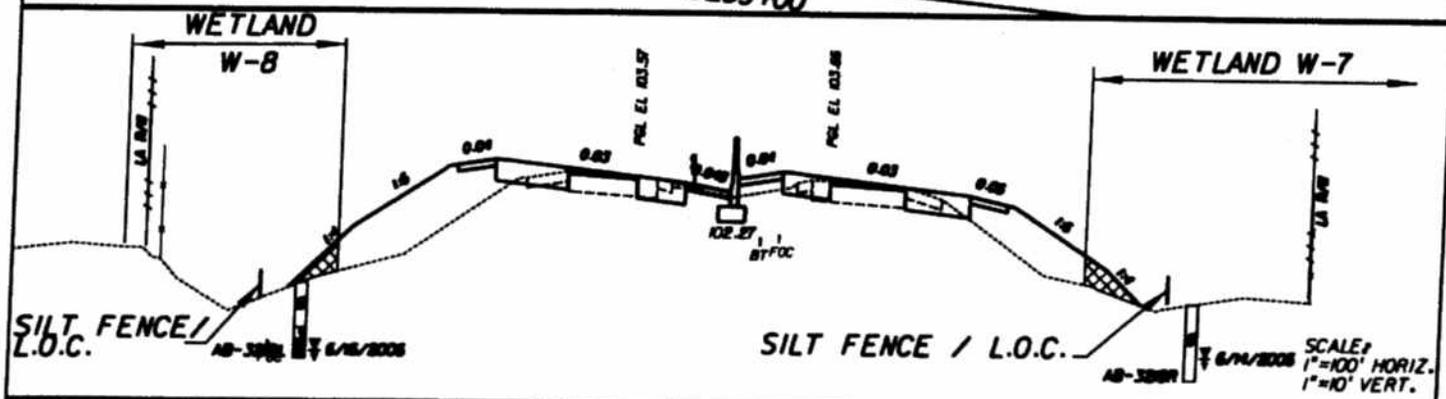
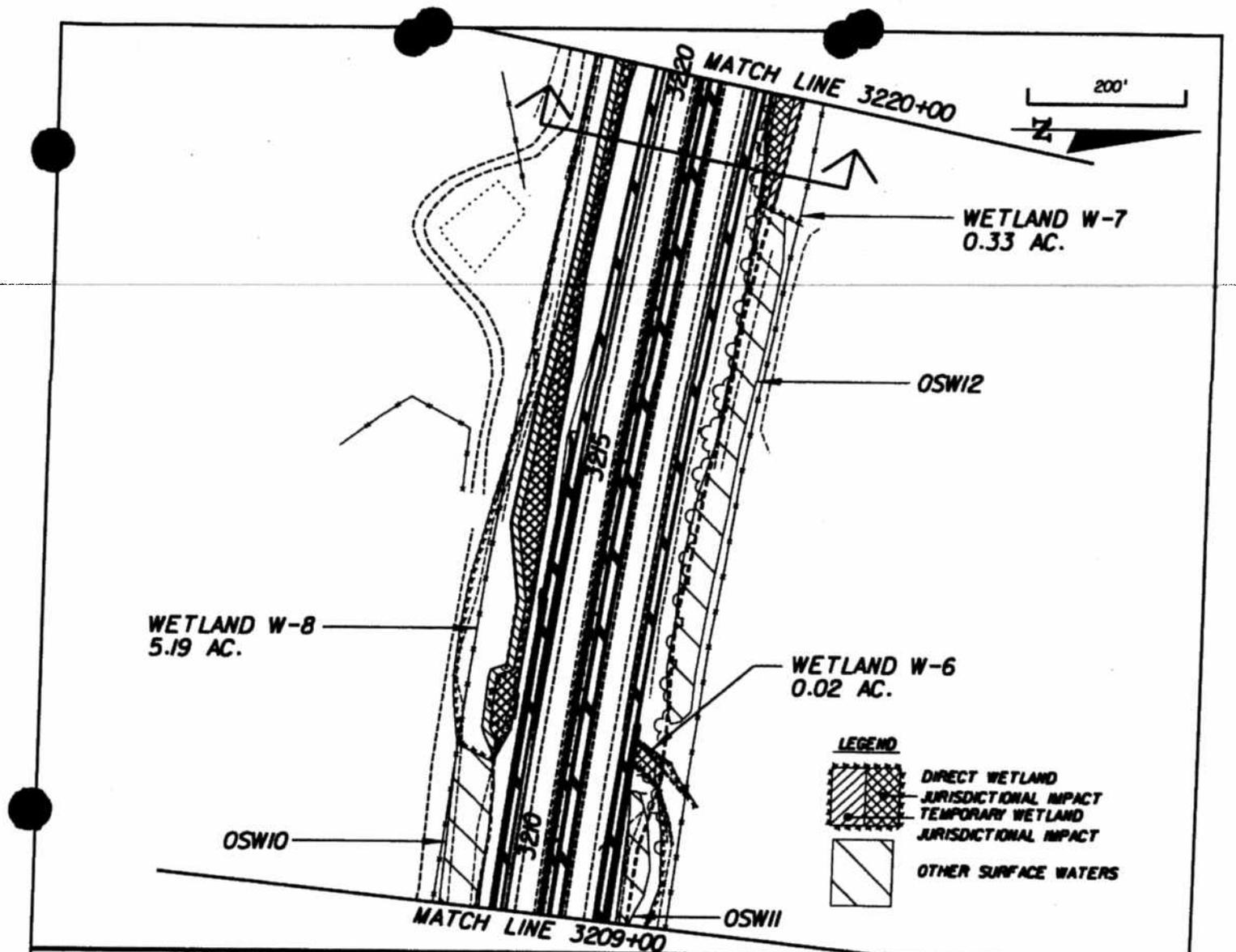
U.S. Army Corps of Engineers
Application # SAT-2007-1939
Date: APR 16 2007
Sheet 10 of 16

DRMP
DYER, MIDDLE, WILLS & PRECOURT, INC.
940 LAKE BALDWIN LANE, ORLANDO, FLORIDA 32804
PHONE: (407) 888-0204 FAX: (407) 888-4838
CERTIFICATE OF AUTHORIZATION NO. 2548

FLORIDA'S TURNPIKE
ENTERPRISE

FINANCIAL
406146-1-52-01

Signed _____
DATE _____
REG. FLA. ENG. NO. _____



PROJECT:	FLORIDA'S TURNPIKE BEULAH RD. TO S.R. 50	SECTIONS 19, 20, 25, 26, 27, 28, 29, 30, TOWNSHIP 22 SOUTH, RANGE 27 EAST
WATER BODY:	WETLANDS 7 & 8 ADJACENT TO JOHNS LAKE	COUNTY OF ORANGE
PURPOSE:	JURISDICTIONAL IMPACT	STATE OF FLORIDA
DATUM:	NAVD '88	SHEET 11 OF 16
		U.S. Army Corps of Engineers Application # <u>547-2107-1989</u> Date: <u>APR 16 2007</u> Sheet <u>11</u> of <u>16</u>
FLORIDA'S TURNPIKE ENTERPRISE		406146-1-52-01 Signed _____ DATE _____ REG. FLA. ENG. NO. _____

MATCH LINE 3231+00



COMPENSATING STORAGE POND

POND 'C'

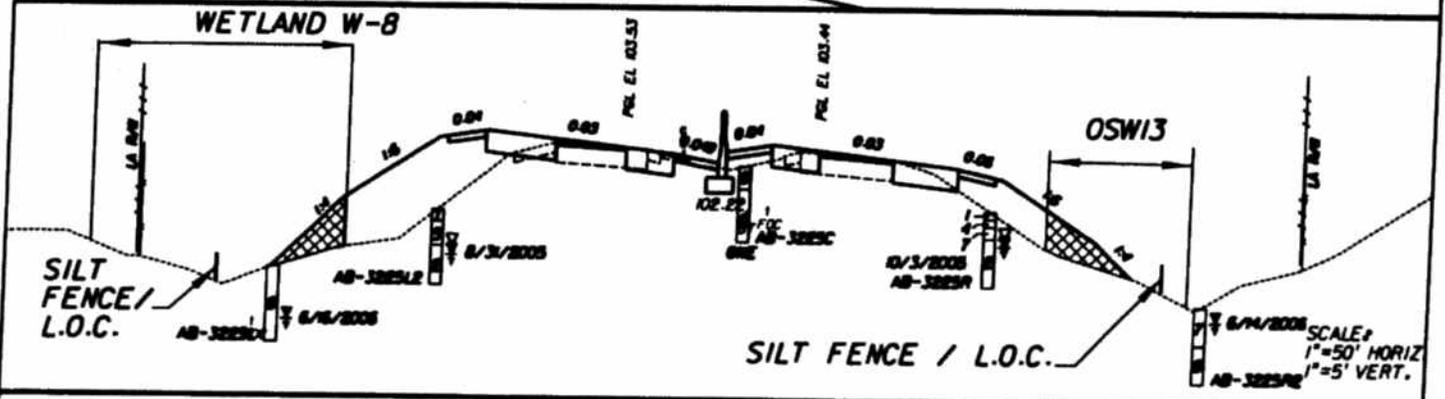
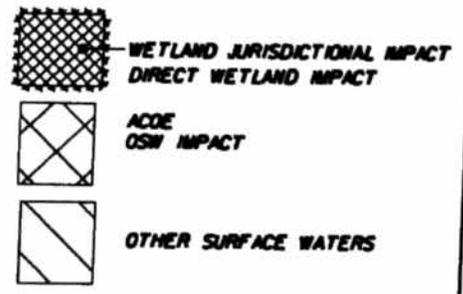
OSWI3
0.48 AC.

WETLAND W-8
5.19 AC.

WETLAND W-7
0.33 AC.

MATCH LINE 3220+00

LEGEND



PROJECT: FLORIDA'S TURNPIKE
BEULAH RD. TO S.R. 50

WATER BODY: WETLANDS 7 & 8
ADJACENT TO JOHNS LAKE

PURPOSE: JURISDICTIONAL IMPACT

DATUM: NAVD '88

SECTIONS 19, 20, 25, 26, 27, 28, 29, 30, TOWNSHIP 22 SOUTH, RANGE 27 EAST

COUNTY OF ORANGE

STATE OF FLORIDA

SHEET 12 OF 16

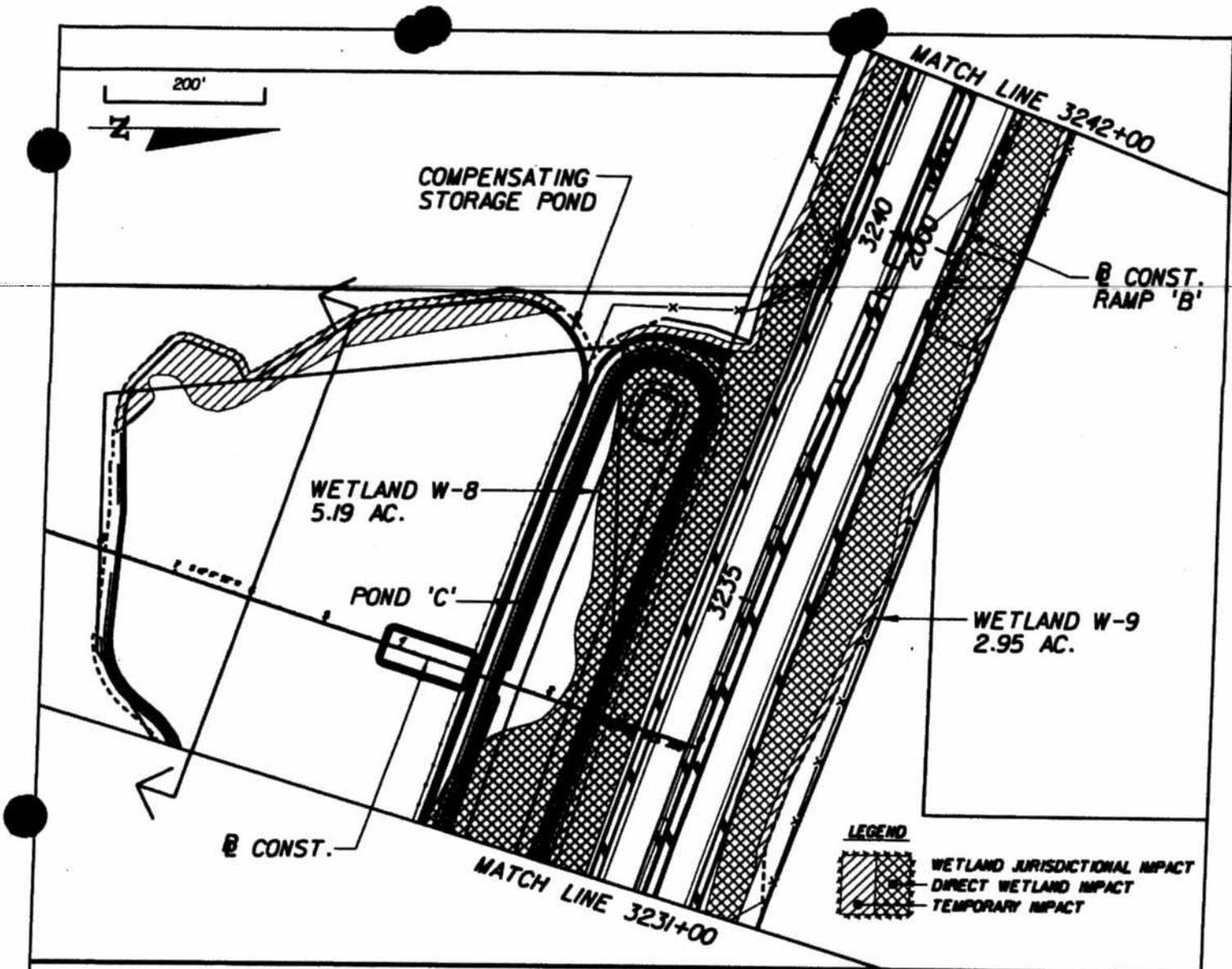
U.S. Army Corps of Engineers
Application # *SAJ-2007-1939*
Date: APR 16 2007
Sheet 12 of 16



FLORIDA'S TURNPIKE
ENTERPRISE

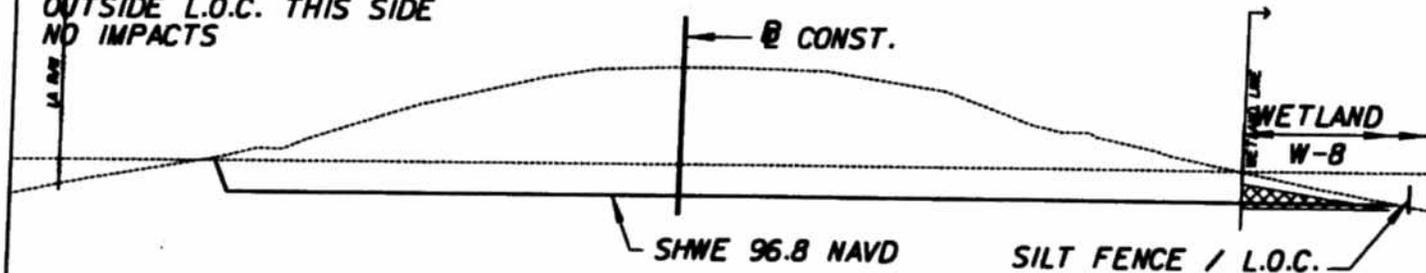
FINA
406146-1-52-01

DATE _____
REG. FLA. ENG. NO. _____



WETLAND W-8
OUTSIDE L.O.C. THIS SIDE
NO IMPACTS

SCALE:
1"=100' HORIZ.
1"=25' VERT.



PROJECT:	FLORIDA'S TURNPIKE BEULAH RD. TO S.R. 50	SECTIONS 19, 20, 25, 26, 27, 28, 29, 30, TOWNSHIP 22 SOUTH, RANGE 27 EAST
WATER BODY:	WETLANDS 8 & 9 / JOHNS LAKE	COUNTY OF ORANGE
PURPOSE:	JURISDICTIONAL IMPACT	STATE OF FLORIDA
DATUM:	NAVD '88	SHEET 13 OF 16

U.S. Army Corps of Engineers
Application # 545-2007-1979
Date: APR 16 2007
Sheet 13 of 16



FLORIDA'S TURNPIKE
ENTERPRISE

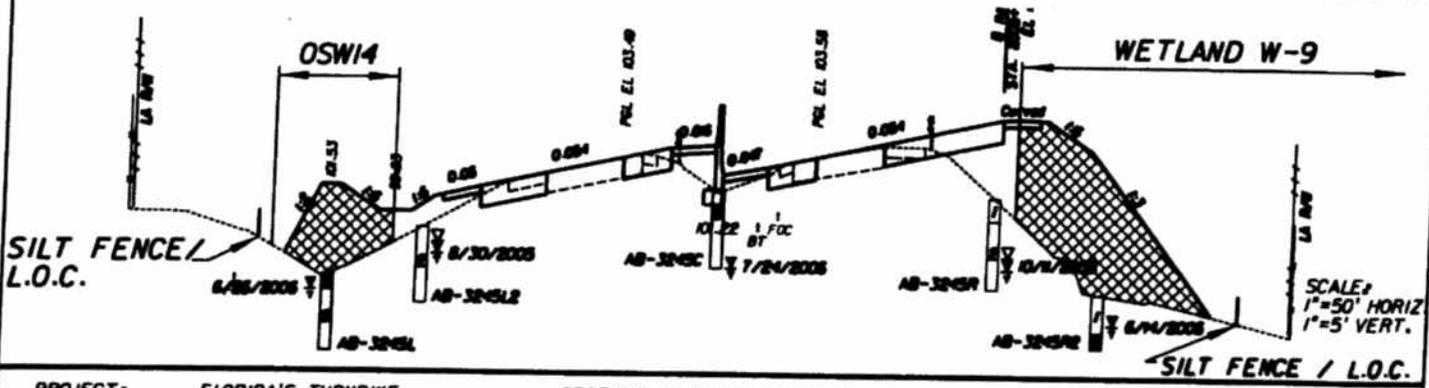
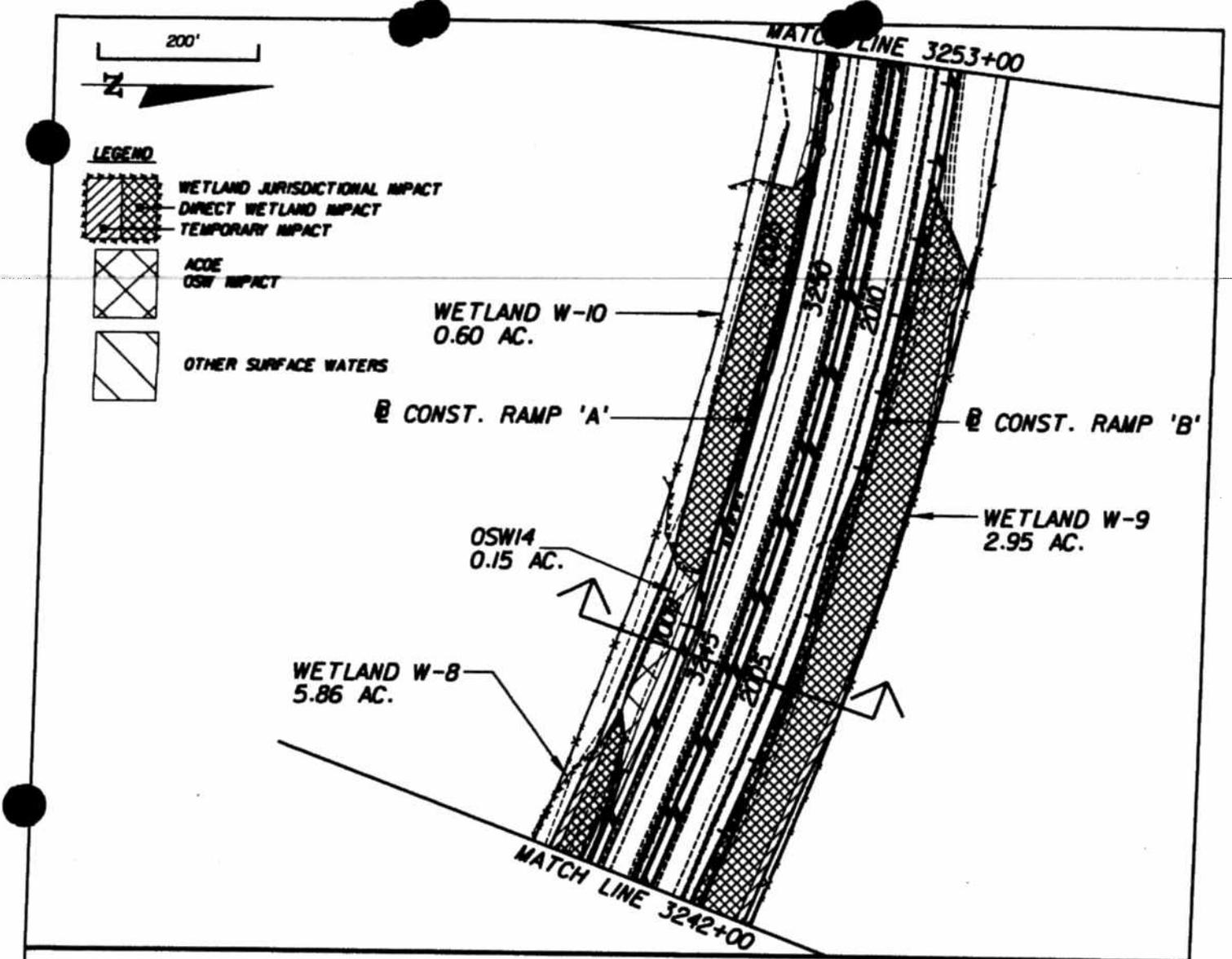
FINANCIAL

406146-1-52-01

Signed _____

DATE _____

REG. FLA. ENG. NO. _____



PROJECT:	FLORIDA'S TURNPIKE BEULAH RD. TO S.R. 50	SECTIONS 19, 20, 25, 26, 27, 28, 29, 30, TOWNSHIP 22 SOUTH, RANGE 27 EAST
WATER BODY:	WETLANDS 8, 9, 10 AND OSWI4	COUNTY OF ORANGE
PURPOSE:	JURISDICTIONAL IMPACT	STATE OF FLORIDA
DATUM:	NAVD '88	SHEET 14 OF 16

DRMP
DESIGN • CONSTRUCTION • PLANNING • MAINTENANCE
OVER, MIDDLE, HILLS & PRECOURT, INC.
94 LAKE BALDWIN LAKE, ORLANDO, FLORIDA 32834
PHONE: (407) 885-0384 FAX: (407) 885-0338
CERTIFICATE OF AUTHORIZATION NO. 2848

FLORIDA'S TURNPIKE
ENTERPRISE

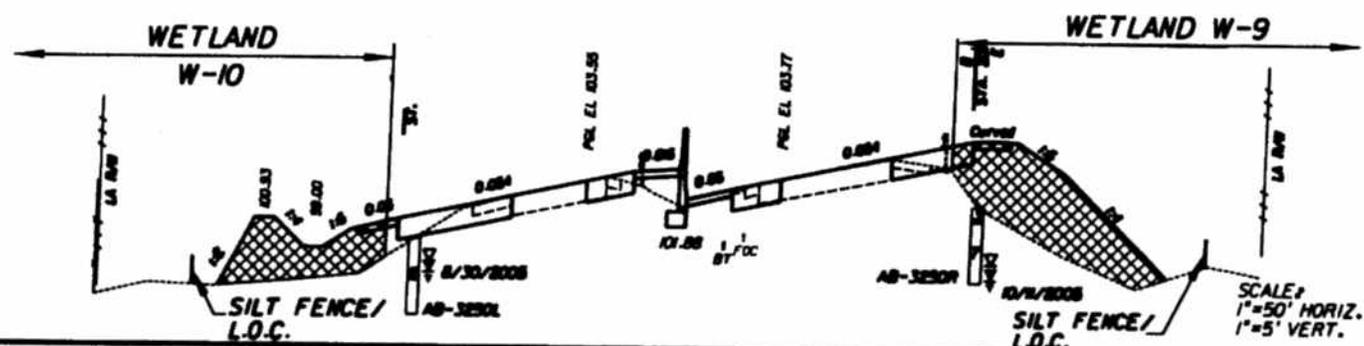
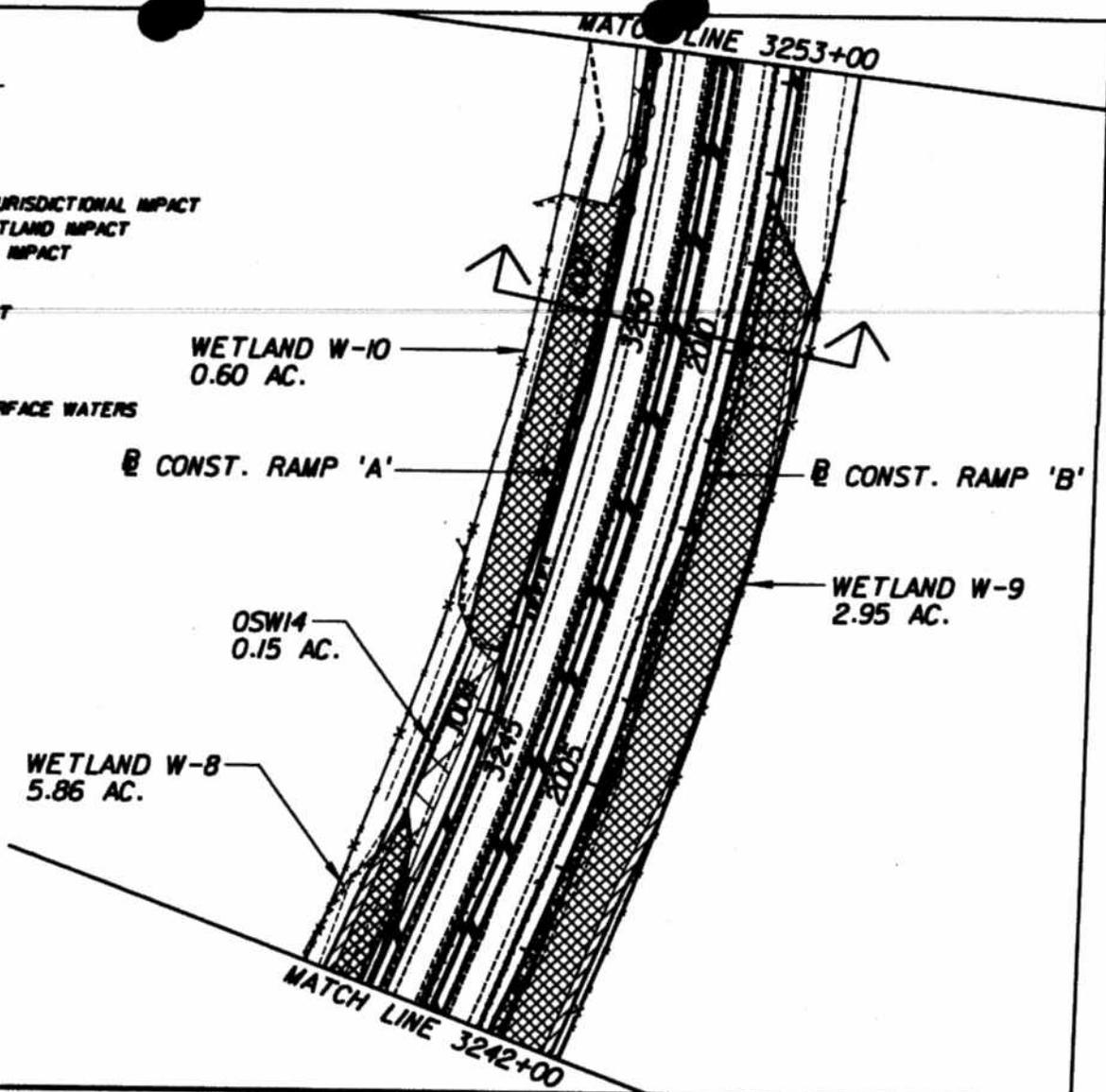
U.S. Army Corps of Engineers
Application # SAF-2007-1939
Date: APR 16 2007
Sheet 14 of 16

406146-1-52-01

DATE _____
REG. FLA. ENG. NO. _____



- LEGEND**
- WETLAND JURISDICTIONAL IMPACT
 - DIRECT WETLAND IMPACT
 - TEMPORARY IMPACT
 - ACQE OSWI IMPACT
 - OTHER SURFACE WATERS



PROJECT: FLORIDA'S TURNPIKE BEULAH RD. TO S.R. 50	SECTIONS 19, 20, 25, 26, 27, 28, 29, 30, TOWNSHIP 22 SOUTH, RANGE 27 EAST
WATER BODY: WETLANDS 9 & 10 AND OSWI4	COUNTY OF ORANGE
PURPOSE: JURISDICTIONAL IMPACT	STATE OF FLORIDA
DATUM: NAVD '88	SHEET 15 OF 16

U.S. Army Corps of Engineers
Application # SAT-2007-1989
Date: APR 16 2007
Sheet 15 of 16

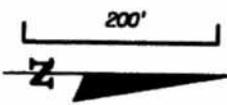
DRMP
Dyer, Middle, Walls & Precourt, Inc.
94 LAKE BALDWIN LANE, ORLANDO, FLORIDA 32834
PHONE: (407) 898-0294 FAX: (407) 898-0238
CERTIFICATE OF AUTHORIZATION NO. 2948

FLORIDA'S TURNPIKE
ENTERPRISE

FINANCIAL
406146-1-52-01

Signed _____
DATE _____
REG. FLA. ENG. NO. _____

OSW17

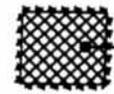


END PROJECT
S.R. 91 FLORIDA'S TURNPIKE
CONST. S.R. 91
STA. 3340+00.00

WETLAND W-13
0.46 AC.

WETLAND W-12

LEGEND



WETLAND JURISDICTIONAL IMPACT
DIRECT WETLAND IMPACT



OTHER SURFACE WATERS

WETLAND W-12

WETLAND W-13

SCALE:
1"=50' HORIZ.
1"=5' VERT.

LA R/W

87.40' 1
BT'FC

AS-11387
ONE
SOIL BORING
STA. 1138+01

22.10'

5.00'

SILT FENCE
/ L.O.C.

PROJECT: FLORIDA'S TURNPIKE
BEULAH RD. TO S.R. 50
WATER BODY: WETLAND 13
PURPOSE: JURISDICTIONAL IMPACT
DATUM: NAVD '88

SECTIONS 19, 20, 25, 26, 27, 28, 29, 30, TOWNSHIP 22 SOUTH, RANGE 27 EAST
COUNTY OF ORANGE
STATE OF FLORIDA
SHEET 16 OF 16

U.S. Army Corps of Engineers
Application # 545-2007-1839
Date: APR 16 2007
Sheet 16 of 16



FLORIDA'S TURNPIKE
ENTERPRISE

FINA

406146-1-52-01

Signed _____
DATE _____
REG. FLA. ENG. NO. _____

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE

1. An eastern indigo snake protection/education plan shall be developed by the applicant or requestor for all construction personnel to follow. The plan shall be provided to the Service for review and approval at least 30 days prior to any clearing activities. The educational materials for the plan may consist of a combination of posters, videos, pamphlets, and lectures (e.g., an observer trained to identify eastern indigo snakes could use the protection/education plan to instruct construction personnel before any clearing activities occur). Informational signs should be posted throughout the construction site and along any proposed access road to contain the following information:
 - a. a description of the eastern indigo snake, its habits, and protection under Federal Law;
 - b. instructions not to injure, harm, harass or kill this species;
 - c. directions to cease clearing activities and allow the eastern indigo snake sufficient time to move away from the site on its own before resuming clearing; and,
 - d. telephone numbers of pertinent agencies to be contacted if a dead eastern indigo snake is encountered. The dead specimen should be thoroughly soaked in water, then frozen.
2. If not currently authorized through an Incidental Take Statement in association with a Biological Opinion, only individuals who have been either authorized by a section 10(a)(1)(A) permit issued by the Service, or by the State of Florida through the Florida Fish and Wildlife Conservation Commission for such activities, are permitted to come in contact with or relocate an eastern indigo snake.
3. If necessary, eastern indigo snakes shall be held in captivity only long enough to transport them to a release site; at no time shall two snakes be kept in the same container during transportation.
4. An eastern indigo snake monitoring report must be submitted to the appropriate Florida Field Office within 60 days of the conclusion of clearing phases. The report should be submitted whether or not eastern indigo snakes are observed. The report should contain the following information:
 - a. any sightings of eastern indigo snakes;
 - b. summaries of any relocated snakes if relocation was approved for the project (e.g., locations of where and when they were found and relocated);
 - c. other obligations required by the Florida Fish and Wildlife Conservation Commission, as stipulated in the permit.

U.S. Army Corps of Engineers
Permit # SAS-2007-1939
Date: 2/25/08
Attachment: 2

Revised July 27, 1999



NATIONAL BALD EAGLE MANAGEMENT GUIDELINES

U.S. Fish and Wildlife Service

May 2007

U.S. Army Corps of Engineers
Permit # SAT-2007-1939
Date: 2/25/08
Attachment: 3



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INTRODUCTION

The bald eagle (*Haliaeetus leucocephalus*) is protected by the Bald and Golden Eagle Protection Act (Eagle Act) and the Migratory Bird Treaty Act (MBTA). The MBTA and the Eagle Act protect bald eagles from a variety of harmful actions and impacts. The U.S. Fish and Wildlife Service (Service) developed these National Bald Eagle Management Guidelines to advise landowners, land managers, and others who share public and private lands with bald eagles when and under what circumstances the protective provisions of the Eagle Act may apply to their activities. A variety of human activities can potentially interfere with bald eagles, affecting their ability to forage, nest, roost, breed, or raise young. The Guidelines are intended to help people minimize such impacts to bald eagles, particularly where they may constitute "disturbance," which is prohibited by the Eagle Act.

The Guidelines are intended to:

- (1) Publicize the provisions of the Eagle Act that continue to protect bald eagles, in order to reduce the possibility that people will violate the law,
- (2) Advise landowners, land managers and the general public of the potential for various human activities to disturb bald eagles, and
- (3) Encourage additional nonbinding land management practices that benefit bald eagles (see Additional Recommendations section).

While the Guidelines include general recommendations for land management practices that will benefit bald eagles, the document is intended primarily as a tool for landowners and planners who seek information and recommendations regarding how to avoid disturbing bald eagles. Many States and some tribal entities have developed state-specific management plans, regulations, and/or guidance for landowners and land managers to protect and enhance bald eagle habitat, and we encourage the continued development and use of these planning tools to benefit bald eagles.

Adherence to the Guidelines herein will benefit individuals, agencies, organizations, and companies by helping them avoid violations of the law. However, the Guidelines themselves are not law. Rather, they are recommendations based on several decades of behavioral observations, science, and conservation measures to avoid or minimize adverse impacts to bald eagles.

The U.S. Fish and Wildlife Service strongly encourages adherence to these guidelines to ensure that bald and golden eagle populations will continue to be sustained. The Service realizes there may be impacts to some birds even if all reasonable measures are taken to avoid such impacts. Although it is not possible to absolve individuals and entities from liability under the Eagle Act or the MBTA, the Service exercises enforcement discretion to focus on those individuals, companies, or agencies that take migratory birds without regard for the consequences of their actions and the law, especially when conservation measures, such as these Guidelines, are available, but have not been implemented. The Service will prioritize its enforcement efforts to focus on those individuals or entities who take bald eagles or their parts, eggs, or nests without implementing appropriate measures recommended by the Guidelines.

The Service intends to pursue the development of regulations that would authorize, under limited circumstances, the use of permits if "take" of an eagle is anticipated but unavoidable. Additionally, if the bald eagle is delisted, the Service intends to provide a regulatory mechanism to honor existing (take) authorizations under the Endangered Species Act (ESA).

During the interim period until the Service completes a rulemaking for permits under the Eagle Act, the Service does not intend to refer for prosecution the incidental "take" of any bald eagle under the MBTA or Eagle Act, if such take is in full compliance with the terms and conditions of an incidental take statement issued to the action agency or applicant under the authority of section 7(b)(4) of the ESA or a permit issued under the authority of section 10(a)(1)(B) of the ESA.

The Guidelines are applicable throughout the United States, including Alaska. The primary purpose of these Guidelines is to provide information that will minimize or prevent violations only of *Federal* laws governing bald eagles. In addition to Federal laws, many states and some smaller jurisdictions and tribes have additional laws and regulations protecting bald eagles. In some cases those laws and regulations may be more protective (restrictive) than these Federal guidelines. If you are planning activities that may affect bald eagles, we therefore recommend that you contact both your nearest U.S. Fish and Wildlife Service Field Office (see the contact information on p.16) and your state wildlife agency for assistance.

LEGAL PROTECTIONS FOR THE BALD EAGLE

The Bald and Golden Eagle Protection Act

The Eagle Act (16 U.S.C. 668-668c), enacted in 1940, and amended several times since then, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald eagles, including their parts, nests, or eggs. The Act provides criminal and civil penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." "Disturb" means:

"Disturb means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that injures an eagle or substantially interferes with normal breeding, feeding, or sheltering habits and causes, or is likely to cause, a loss of productivity or nest abandonment.

A violation of the Act can result in a criminal fine of \$100,000 (\$200,000 for organizations), imprisonment for one year, or both, for a first offense. Penalties increase substantially for additional offenses, and a second violation of this Act is a felony.

The Migratory Bird Treaty Act

The MBTA (16 U.S.C. 703-712), prohibits the taking of any migratory bird or any part, nest, or egg, except as permitted by regulation. The MBTA was enacted in 1918; a 1972 agreement supplementing one of the bilateral treaties underlying the MBTA had the effect of expanding the scope of the Act to cover bald eagles and other raptors. Implementing regulations define "take" under the MBTA as "pursue, hunt, shoot, wound, kill, trap, capture, possess, or collect."

Copies of the Eagle Act and the MBTA are available at: <http://permits.fws.gov/ltr/ltr.shtml>.

State laws and regulations

Most states have their own regulations and/or guidelines for bald eagle management. Some states may continue to list the bald eagle as endangered, threatened, or of special concern. If you plan activities that may affect bald eagles, we urge you to familiarize yourself with the regulations and/or guidelines that apply to bald eagles in your state. Your adherence to the Guidelines herein does not ensure that you are in compliance with state laws and regulations because state regulations can be more specific and/or restrictive than these Guidelines.

NATURAL HISTORY OF THE BALD EAGLE

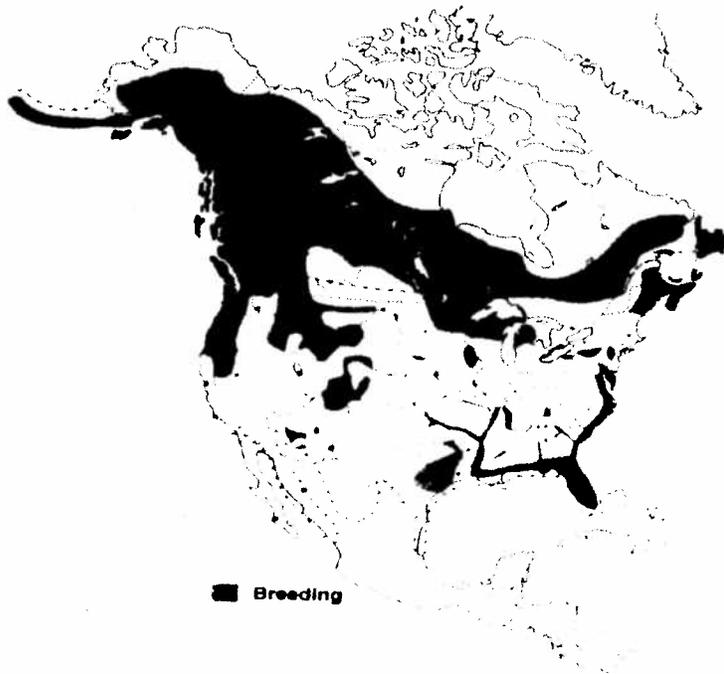
Bald eagles are a North American species that historically occurred throughout the contiguous United States and Alaska. After severely declining in the lower 48 States between the 1870s and the 1970s, bald eagles have rebounded and re-established breeding territories in each of the lower 48 states. The largest North American breeding populations are in Alaska and Canada, but there are also significant bald eagle populations in Florida, the Pacific Northwest, the Greater Yellowstone area, the Great Lakes states, and the Chesapeake Bay region. Bald eagle distribution varies seasonally. Bald eagles that nest in southern latitudes frequently move northward in late spring and early summer, often summering as far north as Canada. Most eagles that breed at northern latitudes migrate southward during winter, or to coastal areas where waters remain unfrozen. Migrants frequently concentrate in large numbers at sites where food is abundant and they often roost together communally. In some cases, concentration areas are used year-round: in summer by southern eagles and in winter by northern eagles.

Juvenile bald eagles have mottled brown and white plumage, gradually acquiring their dark brown body and distinctive white head and tail as they mature. Bald eagles generally attain adult plumage by 5 years of age. Most are capable of breeding at 4 or 5 years of age, but in healthy populations they may not start breeding until much older. Bald eagles may live 15 to 25 years in the wild. Adults weigh 8 to 14 pounds (occasionally reaching 16 pounds in Alaska) and have wingspans of 5 to 8 feet. Those in the northern range are larger than those in the south, and females are larger than males.

Where do bald eagles nest?

Breeding bald eagles occupy "territories," areas they will typically defend against intrusion by other eagles. In addition to the active nest, a territory may include one or more alternate nests (nests built or maintained by the eagles but not used for nesting in a given year). The Eagle Act prohibits removal or destruction of both active and alternate bald eagle nests. Bald eagles exhibit high nest site fidelity and nesting territories are often used year after year. Some territories are known to have been used continually for over half a century.

Bald eagles generally nest near coastlines, rivers, large lakes or streams that support an adequate food supply. They often nest in mature or old-growth trees; snags (dead trees); cliffs; rock promontories; rarely on the ground; and with increasing frequency on human-made structures such as power poles and communication towers. In forested areas, bald eagles often select the tallest trees with limbs strong enough to support a nest that can weigh more than 1,000 pounds. Nest sites typically include at least one perch with a clear view of the water where the eagles usually forage. Shoreline trees or snags located in reservoirs provide the visibility and accessibility needed to locate aquatic prey. Eagle nests are constructed with large sticks, and may be lined with moss, grass, plant stalks, lichens, seaweed, or sod. Nests are usually about 4-6 feet in diameter and 3 feet deep, although larger nests exist.



Copyright *Birds of North America*, 2000

The range of breeding bald eagles in 2000 (shaded areas). This map shows only the larger concentrations of nests; eagles have continued to expand into additional nesting territories in many states. The dotted line represents the bald eagle's wintering range.

When do bald eagles nest?

Nesting activity begins several months before egg-laying. Egg-laying dates vary throughout the U.S., ranging from October in Florida, to late April or even early May in the northern United States. Incubation typically lasts 33-35 days, but can be as long as 40 days. Eaglets make their first unsteady flights about 10 to 12 weeks after hatching, and fledge (leave their nests) within a few days after that first flight. However, young birds usually remain in the vicinity of the nest for several weeks after fledging because they are almost completely dependent on their parents for food until they disperse from the nesting territory approximately 6 weeks later.

The bald eagle breeding season tends to be longer in the southern U.S., and re-nesting following an unsuccessful first nesting attempt is more common there as well. The following table shows the timing of bald eagle breeding seasons in different regions of the country. The table represents the range of time within which the majority of nesting activities occur in each region and does not apply to any specific nesting pair. Because the timing of nesting activities may vary within a given region, you should contact the nearest U.S. Fish and Wildlife Service Field Office (see page 16) and/or your state wildlife conservation agency for more specific information on nesting chronology in your area.

Chronology of typical reproductive activities of bald eagles in the United States.

Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.
SOUTHEASTERN U.S. (FL, GA, SC, NC, AL, MS, LA, TN, KY, AR, eastern 2 of TX)											
Nest Building											
Egg Laying/Incubation											
Hatching/Rearing Young											
Fledging Young											
CHESAPEAKE BAY REGION (NC, VA, MD, DE, southern 2 of NJ, eastern 2 of PA, panhandle of WV)											
Nest Building											
Egg Laying/Incubation											
Hatching/Rearing Young											
Fledging Young											
NORTHERN U.S. (ME, NH, MA, RI, CT, NY, northern 2 of NJ, western 2 of PA, OH, WV exc. panhandle, IN, IL, MI, WI, MN, IA, MO, ND, SD, NB, KS, CO, UT)											
Nest Building											
Egg Laying/Incubation											
Hatching/Rearing Young											
Fledging Young											
PACIFIC REGION (WA, OR, CA, ID, MT, WY, NV)											
Nest Building											
Egg Laying/Incubation											
Hatching/Rearing Young											
Fledging Young											
SOUTHWESTERN U.S. (AZ, NM, OK panhandle, western 2 of TX)											
Nest Building											
Egg Laying/Incubation											
Hatching/Rearing Young											
Fledging Young											
ALASKA											
Nest Building											
Egg Laying/Incubation											
Hatching/Rearing Young											
Ing Young											
Fledg-											
Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.

How many chicks do bald eagles raise?

The number of eagle eggs laid will vary from 1-3, with 1-2 eggs being the most common. Only one eagle egg is laid per day, although not always on successive days. Hatching of young occurs on different days with the result that chicks in the same nest are sometimes of unequal size. The overall national fledging rate is approximately one chick per nest, annually, which results in a healthy expanding population.

What do bald eagles eat?

Bald eagles are opportunistic feeders. Fish comprise much of their diet, but they also eat waterfowl, shorebirds/colonial waterbirds, small mammals, turtles, and carrion. Because they are visual hunters, eagles typically locate their prey from a conspicuous perch, or soaring flight, then swoop down and strike. Wintering bald eagles often congregate in large numbers along streams to feed on spawning salmon or other fish species, and often gather in large numbers in areas below reservoirs, especially hydropower dams, where fish are abundant. Wintering eagles also take birds from rafts of ducks at reservoirs and rivers, and congregate on melting ice shelves to scavenge dead fish from the current or the soft melting ice. Bald eagles will also feed on carcasses along roads, in landfills, and at feedlots.

During the breeding season, adults carry prey to the nest to feed the young. Adults feed their chicks by tearing off pieces of food and holding them to the beaks of the eaglets. After fledging, immature eagles are slow to develop hunting skills, and must learn to locate reliable food sources and master feeding techniques. Young eagles will congregate together, often feeding upon easily acquired food such as carrion and fish found in abundance at the mouths of streams and shallow bays and at landfills.

The impact of human activity on nesting bald eagles

During the breeding season, bald eagles are sensitive to a variety of human activities. However, not all bald eagle pairs react to human activities in the same way. Some pairs nest successfully just dozens of yards from human activity, while others abandon nest sites in response to activities much farther away. This variability may be related to a number of factors, including visibility, duration, noise levels, extent of the area affected by the activity, prior experiences with humans, and tolerance of the individual nesting pair. The relative sensitivity of bald eagles during various stages of the breeding season is outlined in the following table.

Nesting Bald Eagle Sensitivity to Human Activities

Phase	Activity	Sensitivity to Human Activity	Comments
I	Courtship and Nest Building	Most sensitive period; likely to respond negatively	Most critical time period. Disturbance is manifested in nest abandonment. Bald eagles in newly established territories are more prone to abandon nest sites.
II	Egg laying	Very sensitive period	Human activity of even limited duration may cause nest desertion and abandonment of territory for the breeding season.
III	Incubation and early nesting period (up to 4 weeks)	Very sensitive period	Adults are less likely to abandon the nest near and after hatching. However, flushed adults leave eggs and young unattended; eggs are susceptible to cooling, loss of moisture, overheating, and predation; young are vulnerable to elements.
IV	Nestling period, 4 to 8 weeks	Moderately sensitive period	Likelihood of nest abandonment and vulnerability of the nestlings to elements somewhat decreases. However, nestlings may miss feedings, affecting their survival.
V	Nestlings 8 weeks through fledging	Very sensitive period	Gaining flight capability, nestlings 8 weeks and older may flush from the nest prematurely due to disruption and die.

If agitated by human activities, eagles may inadequately construct or repair their nest, may expend energy defending the nest rather than tending to their young, or may abandon the nest altogether. Activities that cause prolonged absences of adults from their nests can jeopardize eggs or young. Depending on weather conditions, eggs may overheat or cool too much and fail to hatch. Unattended eggs and nestlings are subject to predation. Young nestlings are particularly vulnerable because they rely on their parents to provide warmth or shade, without which they may die as a result of hypothermia or heat stress. If food delivery schedules are interrupted, the young may not develop healthy plumage, which can affect their survival. In addition, adults startled while incubating or brooding young may damage eggs or injure their young as they abruptly leave the nest. Older nestlings no longer require constant attention from the adults, but they may be startled by loud or intrusive human activities and prematurely jump from the nest before they are able to fly or care for themselves. Once fledged, juveniles range up to ¼ mile from the nest site, often to a site with minimal human activity. During this period, until about six weeks after departure from the nest, the juveniles still depend on the adults to feed them.

The impact of human activity on foraging and roosting bald eagles

Disruption, destruction, or obstruction of roosting and foraging areas can also negatively affect bald eagles. Disruptive activities in or near eagle foraging areas can interfere with feeding, reducing chances of survival. Interference with feeding can also result in reduced productivity (number of young successfully fledged). Migrating and wintering bald eagles often congregate at specific sites for purposes of feeding and sheltering. Bald eagles rely on established roost sites because of their proximity to sufficient food sources. Roost sites are usually in mature trees where the eagles are somewhat sheltered from the wind and weather. Human activities near or within communal roost sites may prevent eagles

from feeding or taking shelter, especially if there are not other undisturbed and productive feeding and roosting sites available. Activities that permanently alter communal roost sites and important foraging areas can altogether eliminate the elements that are essential for feeding and sheltering eagles.

Where a human activity agitates or bothers roosting or foraging bald eagles to the degree that causes injury or substantially interferes with breeding, feeding, or sheltering behavior and causes, or is likely to cause, a loss of productivity or nest abandonment, the conduct of the activity constitutes a violation of the Eagle Act's prohibition against disturbing eagles. The circumstances that might result in such an outcome are difficult to predict without detailed site-specific information. If your activities may disturb roosting or foraging bald eagles, you should contact your local Fish and Wildlife Service Field Office (see page 16) for advice and recommendations for how to avoid such disturbance.

RECOMMENDATIONS FOR AVOIDING DISTURBANCE AT NEST SITES

In developing these Guidelines, we relied on existing state and regional bald eagle guidelines, scientific literature on bald eagle disturbance, and recommendations of state and Federal biologists who monitor the impacts of human activity on eagles. Despite these resources, uncertainties remain regarding the effects of many activities on eagles and how eagles in different situations may or may not respond to certain human activities. The Service recognizes this uncertainty and views the collection of better biological data on the response of eagles to disturbance as a high priority. To the extent that resources allow, the Service will continue to collect data on responses of bald eagles to human activities conducted according to the recommendations within these Guidelines to ensure that adequate protection from disturbance is being afforded, and to identify circumstances where the Guidelines might be modified. These data will be used to make future adjustments to the Guidelines.

To avoid disturbing nesting bald eagles, we recommend (1) keeping a distance between the activity and the nest (distance buffers), (2) maintaining preferably forested (or natural) areas between the activity and around nest trees (landscape buffers), and (3) avoiding certain activities during the breeding season. The buffer areas serve to minimize visual and auditory impacts associated with human activities near nest sites. Ideally, buffers would be large enough to protect existing nest trees and provide for alternative or replacement nest trees.

The size and shape of effective buffers vary depending on the topography and other ecological characteristics surrounding the nest site. In open areas where there are little or no forested or topographical buffers, such as in many western states, distance alone must serve as the buffer. Consequently, in open areas, the distance between the activity and the nest may need to be larger than the distances recommended under Categories A and B of these guidelines (pg. 12) if no landscape buffers are present. The height of the nest above the ground may also ameliorate effects of human activities; eagles at higher nests may be less prone to disturbance.

In addition to the physical features of the landscape and nest site, the appropriate size for the distance buffer may vary according to the historical tolerances of eagles to human activities in particular localities, and may also depend on the location of the nest in relation

to feeding and roosting areas used by the eagles. Increased competition for nest sites may lead bald eagles to nest closer to human activity (and other eagles).

Seasonal restrictions can prevent the potential impacts of many shorter-term, obtrusive activities that do not entail landscape alterations (e.g. fireworks, outdoor concerts). In proximity to the nest, these kinds of activities should be conducted only outside the breeding season. For activities that entail both short-term, obtrusive characteristics and more permanent impacts (e.g., building construction), we recommend a combination of both approaches: retaining a landscape buffer *and* observing seasonal restrictions.

For assistance in determining the appropriate size and configuration of buffers or the timing of activities in the vicinity of a bald eagle nest, we encourage you to contact the nearest U.S. Fish and Wildlife Service Field Office (see page 16).

Existing Uses

Eagles are unlikely to be disturbed by routine use of roads, homes, and other facilities where such use pre-dates the eagles' successful nesting activity in a given area. Therefore, in most cases *ongoing* existing uses may proceed with the same intensity with little risk of disturbing bald eagles. However, some *intermittent, occasional, or irregular* uses that pre-date eagle nesting in an area may disturb bald eagles. For example: a pair of eagles may begin nesting in an area and subsequently be disturbed by activities associated with an annual outdoor flea market, even though the flea market has been held annually at the same location. In such situations, human activity should be adjusted or relocated to minimize potential impacts on the nesting pair.

ACTIVITY-SPECIFIC GUIDELINES

The following section provides the Service's management recommendations for avoiding bald eagle disturbance as a result of new or intermittent activities proposed in the vicinity of bald eagle nests. Activities are separated into 8 categories (A – H) based on the nature and magnitude of impacts to bald eagles that usually result from the type of activity. Activities with similar or comparable impacts are grouped together.

In most cases, impacts will vary based on the visibility of the activity from the eagle nest and the degree to which similar activities are already occurring in proximity to the nest site. Visibility is a factor because, in general, eagles are more prone to disturbance when an activity occurs in full view. For this reason, we recommend that people locate activities farther from the nest structure in areas with open vistas, in contrast to areas where the view is shielded by rolling topography, trees, or other screening factors. The recommendations also take into account the existence of similar activities in the area because the continued presence of nesting bald eagles in the vicinity of the existing activities indicates that the eagles in that area can tolerate a greater degree of human activity than we can generally expect from eagles in areas that experience fewer human impacts. To illustrate how these factors affect the likelihood of disturbing eagles, we have incorporated the recommendations for some activities into a table (categories A and B).

First, determine which category your activity falls into (between categories A – H). If the activity you plan to undertake is not specifically addressed in these guidelines, follow the recommendations for the most similar activity represented.

If your activity is under A or B, our recommendations are in table form. The vertical axis shows the degree of visibility of the activity from the nest. The horizontal axis (header row) represents the degree to which similar activities are ongoing in the vicinity of the nest. Locate the row that best describes how visible your activity will be from the eagle nest. Then, choose the column that best describes the degree to which similar activities are ongoing in the vicinity of the eagle nest. The box where the column and row come together contains our management recommendations for how far you should locate your activity from the nest to avoid disturbing the eagles. The numerical distances shown in the tables are the closest the activity should be conducted relative to the nest. In some cases we have included additional recommendations (other than recommended *distance* from the nest) you should follow to help ensure that your activity will not disturb the eagles.

Alternate nests

For activities that entail permanent landscape alterations that may result in bald eagle disturbance, these recommendations apply to both active and alternate bald eagle nests. Disturbance becomes an issue with regard to alternate nests if eagles return for breeding purposes and react to land use changes that occurred while the nest was inactive. The likelihood that an alternate nest will again become active decreases the longer it goes unused. If you plan activities in the vicinity of an alternate bald eagle nest and have information to show that the nest has not been active during the preceding 5 breeding seasons, the recommendations provided in these guidelines for avoiding disturbance around the nest site may no longer be warranted. The nest itself remains protected by other provisions of the Eagle Act, however, and may not be destroyed.

If special circumstances exist that make it unlikely an inactive nest will be reused before 5 years of disuse have passed, and you believe that the probability of reuse is low enough to warrant disregarding the recommendations for avoiding disturbance, you should be prepared to provide all the reasons for your conclusion, including information regarding past use of the nest site. Without sufficient documentation, you should continue to follow these guidelines when conducting activities around the nest site. If we are able to determine that it is unlikely the nest will be reused, we may advise you that the recommendations provided in these guidelines for avoiding disturbance are no longer necessary around that nest site.

This guidance is intended to minimize disturbance, as defined by Federal regulation. In addition to Federal laws, most states and some tribes and smaller jurisdictions have additional laws and regulations protecting bald eagles. In some cases those laws and regulations may be more protective (restrictive) than these Federal guidelines.

Temporary Impacts

For activities that have temporary impacts, such as the use of loud machinery, fireworks displays, or summer boating activities, we recommend seasonal restrictions. These types of activities can generally be carried out outside of the breeding season without causing disturbance. The recommended restrictions for these types of activities can be lifted for alternate nests within a particular territory, including nests that were attended during the current breeding season but not used to raise young, after eggs laid in another nest within the territory have hatched (depending on the distance between the alternate nest and the active nest).

In general, activities should be kept as far away from nest trees as possible; loud and disruptive activities should be conducted when eagles are not nesting; and activity between the nest and the near est foraging area should be minimized. If the activity you plan to undertake is not specifically addressed in these guidelines, follow the recommendations for the most similar activity addressed, or contact your local U.S. Fish and Wildlife Service Field Office for additional guidance.

If you believe that special circumstances apply to your situation that increase or diminish the likelihood of bald eagle disturbance, or if it is not possible to adhere to the guidelines, you should contact your local Service Field Office for further guidance.

Category A:

- Building construction, 1 or 2 story, with project footprint of ½ acre or less.
- Construction of roads, trails, canals, power lines, and other linear utilities.
- Agriculture and aquaculture – new or expanded operations.
- Alteration of shorelines or wetlands.
- Installation of docks or moorings.
- Water impoundment.

Category B:

- Building construction, 3 or more stories.
- Building construction, 1 or 2 story, with project footprint of more than ½ acre.
- Installation or expansion of marinas with a capacity of 6 or more boats.
- Mining and associated activities.
- Oil and natural gas drilling and refining and associated activities.

	<i>If there is no similar activity within 1 mile of the nest</i>	<i>If there is similar activity closer than 1 mile from the nest</i>
<i>If the activity will be visible from the nest</i>	660 feet. Landscape buffers are recommended.	660 feet, or as close as existing tolerated activity of similar scope. Landscape buffers are recommended.
<i>If the activity will not be visible from the nest</i>	Category A: 330 feet. Clearing, external construction, and landscaping between 330 feet and 660 feet should be done outside breeding season. Category B: 660 feet.	330 feet, or as close as existing tolerated activity of similar scope. Clearing, external construction and landscaping within 660 feet should be done outside breeding season.

The numerical distances shown in the table are the closest the activity should be conducted relative to the nest.

Category C. Timber Operations and Forestry Practices

- Avoid clear cutting or removal of overstory trees within 330 feet of the nest at any time.
- Avoid timber harvesting operations, including road construction and chain saw and yarding operations, during the breeding season within 660 feet of the nest. The distance may be decreased to 330 feet around alternate nests within a particular territory, including nests that were attended during the current breeding season but not used to raise young, after eggs laid in another nest within the territory have hatched.
- Selective thinning and other silviculture management practices designed to conserve or enhance habitat, including prescribed burning close to the nest tree, should be undertaken outside the breeding season. Precautions such as raking leaves and woody debris from around the nest tree should be taken to prevent crown fire or fire climbing the nest tree. If it is determined that a burn during the breeding season would be beneficial, then, to ensure that no take or disturbance will occur, these activities should be conducted only when neither adult eagles nor young are present at the nest tree (i.e., at the beginning of, or end of, the breeding season, either before the particular nest is active or after the young have fledged from that nest). Appropriate Federal and state biologists should be consulted before any prescribed burning is conducted during the breeding season.
- Avoid construction of log transfer facilities and in-water log storage areas within 330 feet of the nest.

Category D. Off-road vehicle use (including snowmobiles). No buffer is necessary around nest sites outside the breeding season. During the breeding season, do not operate off-road vehicles within 330 feet of the nest. In open areas, where there is increased visibility and exposure to noise, this distance should be extended to 660 feet.

Category E. Motorized Watercraft use (including jet skis/personal watercraft). No buffer is necessary around nest sites outside the breeding season. During the breeding season, within 330 feet of the nest, (1) do not operate jet skis (personal watercraft), and (2) avoid concentrations of noisy vessels (e.g., commercial fishing boats and tour boats), except where eagles have demonstrated tolerance for such activity. Other motorized boat traffic passing within 330 feet of the nest should attempt to minimize trips and avoid stopping in the area where feasible, particularly where eagles are unaccustomed to boat traffic. Buffers for airboats should be larger than 330 feet due to the increased noise they generate, combined with their speed, maneuverability, and visibility.

Category F. Non-motorized recreation and human entry (e.g., hiking, camping, fishing, hunting, birdwatching, kayaking, canoeing). No buffer is necessary around nest sites outside the breeding season. If the activity will be visible or highly audible from the nest, maintain a 330-foot buffer during the breeding season, particularly where eagles are unaccustomed to such activity.

Category G. Helicopters and fixed-wing aircraft.

Except for authorized biologists trained in survey techniques, avoid operating aircraft within 1,000 feet of the nest during the breeding season, except where eagles have demonstrated tolerance for such activity.

Category H. Blasting and other loud, intermittent noises.

Avoid blasting and other activities that produce extremely loud noises within 1/2 mile of active nests, unless greater tolerance to the activity (or similar activity) has been demonstrated by the eagles in the nesting area. This recommendation applies to the use of fireworks classified by the Federal Department of Transportation as Class B explosives, which includes the larger fireworks that are intended for licensed public display.

RECOMMENDATIONS FOR AVOIDING DISTURBANCE AT FORAGING AREAS AND COMMUNAL ROOST SITES

1. Minimize potentially disruptive activities and development in the eagles' direct flight path between their nest and roost sites and important foraging areas.
2. Locate long-term and permanent water-dependent facilities, such as boat ramps and marinas, away from important eagle foraging areas.
3. Avoid recreational and commercial boating and fishing near critical eagle foraging areas during peak feeding times (usually early to mid-morning and late afternoon), except where eagles have demonstrated tolerance to such activity.
4. Do not use explosives within 1/2 mile (or within 1 mile in open areas) of communal roosts when eagles are congregating, without prior coordination with the U.S. Fish and Wildlife Service and your state wildlife agency.
5. Locate aircraft corridors no closer than 1,000 feet vertical or horizontal distance from communal roost sites.

ADDITIONAL RECOMMENDATIONS TO BENEFIT BALD EAGLES

The following are additional management practices that landowners and planners can exercise for added benefit to bald eagles.

1. Protect and preserve potential roost and nest sites by retaining mature trees and old growth stands, particularly within ½ mile from water.
2. Where nests are blown from trees during storms or are otherwise destroyed by the elements, continue to protect the site in the absence of the nest for up to three (3) complete breeding seasons. Many eagles will rebuild the nest and reoccupy the site.
3. To avoid collisions, site wind turbines, communication towers, and high voltage transmission power lines away from nests, foraging areas, and communal roost sites.
4. Employ industry-accepted best management practices to prevent birds from colliding with or being electrocuted by utility lines, towers, and poles. If possible, bury utility lines in important eagle areas.
5. Where bald eagles are likely to nest in human-made structures (e.g., cell phone towers) and such use could impede operation or maintenance of the structures or jeopardize the safety of the eagles, equip the structures with either (1) devices engineered to discourage bald eagles from building nests, or (2) nesting platforms that will safely accommodate bald eagle nests without interfering with structure performance.
6. Immediately cover carcasses of euthanized animals at landfills to protect eagles from being poisoned.
7. Do not intentionally feed bald eagles. Artificially feeding bald eagles can disrupt their essential behavioral patterns and put them at increased risk from power lines, collision with windows and cars, and other mortality factors.
8. Use pesticides, herbicides, fertilizers, and other chemicals only in accordance with Federal and state laws.
9. Monitor and minimize dispersal of contaminants associated with hazardous waste sites (legal or illegal), permitted releases, and runoff from agricultural areas, especially within watersheds where eagles have shown poor reproduction or where bioaccumulating contaminants have been documented. These factors present a risk of contamination to eagles and their food sources.

CONTACTS

The following U.S. Fish and Wildlife Service Field Offices provide technical assistance on bald eagle management:

<u>Alabama</u>	Daphne	(251) 441-5181	<u>New Hampshire</u>	Concord	(603) 223-2541
<u>Alaska</u>	Anchorage	(907) 271-2888	<u>New Jersey</u>	Pleasantville	(609) 646-9310
	Fairbanks	(907) 456-0203	<u>New Mexico</u>	Albuquerque	(505) 346-2525
	Juneau	(907) 780-1160	<u>New York</u>	Cortland	(607) 753-9334
<u>Arizona</u>	Phoenix	(602) 242-0210		Long Island	(631) 776-1401
<u>Arkansas</u>	Conway	(501) 513-4470	<u>North Carolina</u>	Raleigh	(919) 856-4520
<u>California</u>	Arcata	(707) 822-7201		Asheville	(828) 258-3939
	Barstow	(760) 255-8852	<u>North Dakota</u>	Bismarck	(701) 250-4481
	Carlsbad	(760) 431-9440	<u>Ohio</u>	Reynoldsburg	(614) 469-6923
	Red Bluff	(530) 527-3043	<u>Oklahoma</u>	Tulsa	(918) 581-7458
	Sacramento	(916) 414-6000	<u>Oregon</u>	Bend	(541) 383-7146
	Stockton	(209) 946-6400		Klamath Falls	(541) 885-8481
	Ventura	(805) 644-1766		La Grande	(541) 962-8584
	Yreka	(530) 842-5763		Newport	(541) 867-4558
<u>Colorado</u>	Lakewood	(303) 275-2370		Portland	(503) 231-6179
	Grand Junction	(970) 243-2778		Roseburg	(541) 957-3474
<u>Connecticut</u>	(See New Hampshire)		<u>Pennsylvania</u>	State College	(814) 234-4090
<u>Delaware</u>	(See Maryland)		<u>Rhode Island</u>	(See New Hampshire)	
<u>Florida</u>	Panama City	(850) 769-0552	<u>South Carolina</u>	Charleston	(843) 727-4707
	Vero Beach	(772) 562-3909	<u>South Dakota</u>	Pierre	(605) 224-8693
	Jacksonville	(904) 232-2580	<u>Tennessee</u>	Cookeville	(931) 528-6481
<u>Georgia</u>	Athens	(706) 613-9493	<u>Texas</u>	Clear Lake	(281) 286-8282
	Brunswick	(912) 265-9336	<u>Utah</u>	West Valley City	(801) 975-3330
	Columbus	(706) 544-6428	<u>Vermont</u>	(See New Hampshire)	
<u>Idaho</u>	Boise	(208) 378-5243	<u>Virginia</u>	Gloucester	(804) 693-6694
	Chubbuck	(208) 237-6975	<u>Washington</u>	Lacey	(306) 753-9440
<u>Illinois/Iowa</u>	Rock Island	(309) 757-5800		Spokane	(509) 891-6839
<u>Indiana</u>	Bloomington	(812) 334-4261		Wenatchee	(509) 665-3508
<u>Kansas</u>	Manhattan	(785) 539-3474	<u>West Virginia</u>	Elkins	(304) 636-6586
<u>Kentucky</u>	Frankfort	(502) 695-0468	<u>Wisconsin</u>	New Franken	(920) 866-1725
<u>Louisiana</u>	Lafayette	(337) 291-3100	<u>Wyoming</u>	Cheyenne	(307) 772-2374
<u>Maine</u>	Old Town	(207) 827-5938		Cody	(307) 578-5939
<u>Maryland</u>	Annapolis	(410) 573-4573			
<u>Massachusetts</u>	(See New Hampshire)				
<u>Michigan</u>	East Lansing	(517) 351-2555			
<u>Minnesota</u>	Bloomington	(612) 725-3548			
<u>Mississippi</u>	Jackson	(601) 965-4900			
<u>Missouri</u>	Columbia	(573) 234-2132			
<u>Montana</u>	Helena	(405) 449-5225			
<u>Nebraska</u>	Grand Island	(308) 382-6468			
<u>Nevada</u>	Las Vegas	(702) 515-5230			
	Reno	(775) 861-6300			

National Office

U.S. Fish and Wildlife Service
 Division of Migratory Bird Management
 4401 North Fairfax Drive, MBSP-4107
 Arlington, VA 22203-1610
 (703) 358-1714
<http://www.fws.gov/migratorybirds>

State Agencies

To contact a state wildlife agency, visit the Association of Fish & Wildlife Agencies' website at http://www.fishwildlife.org/where_us.html

GLOSSARY

The definitions below apply to these National Bald Eagle Management Guidelines:

Communal roost sites – Areas where bald eagles gather and perch overnight – and sometimes during the day in the event of inclement weather. Communal roost sites are usually in large trees (live or dead) that are relatively sheltered from wind and are generally in close proximity to foraging areas. These roosts may also serve a social purpose for pair bond formation and communication among eagles. Many roost sites are used year after year.

Disturb – To agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.

In addition to immediate impacts, this definition also covers impacts that result from human-caused alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that injures an eagle or substantially interferes with normal breeding, feeding, or sheltering habits and causes, or is likely to cause, a loss of productivity or nest abandonment.

Fledge – To leave the nest and begin flying. For bald eagles, this normally occurs at 10-12 weeks of age.

Fledgling – A juvenile bald eagle that has taken the first flight from the nest but is not yet independent.

Foraging area – An area where eagles feed, typically near open water such as rivers, lakes, reservoirs, and bays where fish and waterfowl are abundant, or in areas with little or no water (i.e., rangelands, barren land, tundra, suburban areas, etc.) where other prey species (e.g., rabbit, rodents) or carrion (such as at landfills) are abundant.

Landscape buffer – A natural or human-made landscape feature that screens eagles from human activity (e.g., strip of trees, hill, cliff, berm, sound wall).

Nest – A structure built, maintained, or used by bald eagles for the purpose of reproduction. An **active** nest is a nest that is attended (built, maintained or used) by a pair of bald eagles during a given breeding season, whether or not eggs are laid. An **alternate** nest is a nest that is not used for breeding by eagles during a given breeding season.

Nest abandonment – Nest abandonment occurs when adult eagles desert or stop attending a nest and do not subsequently return and successfully raise young in that nest for the duration of a breeding season. Nest abandonment can be caused by altering habitat near a nest, even if the alteration occurs prior to the breeding season. Whether the eagles migrate during the non-breeding season, or remain in the area throughout the non-breeding season, nest abandonment can occur at any point between the time the eagles return to the nesting site for the breeding season and the time when all progeny from the breeding season have

dispersed.

Project footprint – The area of land (and water) that will be permanently altered for a development project, including access roads.

Similar scope – In the vicinity of a bald eagle nest, an existing activity is of similar scope to a new activity where the types of impacts to bald eagles are similar in nature, and the impacts of the existing activity are of the same or greater magnitude than the impacts of the potential new activity. Examples: (1) An existing single-story home 200 feet from a nest is similar in scope to an additional single-story home 200 feet from the nest; (2) An existing multi-story, multi-family dwelling 150 feet from a nest has impacts of a greater magnitude than a potential new single-family home 200 feet from the nest; (3) One existing single-family home 200 feet from the nest has impacts of a lesser magnitude than three single-family homes 200 feet from the nest; (4) an existing single-family home 200 feet from a communal roost has impacts of a lesser magnitude than a single-family home 300 feet from the roost but 40 feet from the eagles' foraging area. The existing activities in examples (1) and (2) are of similar scope, while the existing activities in example (3) and (4) are not.

Vegetative buffer – An area surrounding a bald eagle nest that is wholly or largely covered by forest, vegetation, or other natural ecological characteristics, and separates the nest from human activities.

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ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
Post Office Box 1429
Palatka, Florida 32178-1429

PERMIT NO. 4-095-20358-17

DATE ISSUED: February 12, 2008

PROJECT NAME: Florida Turnpike (Beulah Rd to SR 50), FPID 406146-1

A PERMIT AUTHORIZING:

Construction of a surface water management system for a 4.635-mile roadway widening project know as Florida Turnpike (Beulah Road to SR 50), FPID 406146-1. This permit also authorizes work in, on or over 16.05 acres of wetlands and 10.04 acres of other surface waters.

LOCATION:

Section(s): 19, 25, 26, 27, Township(s): 22S Range(s): 27E
28, 29, 30

Orange County

ISSUED TO:

FDOT Florida's Turnpike Enterprise Environmental Management
P.O. Box 613069
Ocoee, FL 34761

Permittee agrees to hold and save the St. Johns River Water Management District and its successors harmless from any and all damages, claims, or liabilities which may arise from permit issuance. Said application, including all plans and specifications attached thereto, is by reference made a part hereof.

This permit does not convey to permittee any property rights nor any rights of privileges other than those specified herein, nor relieve the permittee from complying with any law, regulation or requirement affecting the rights of other bodies or agencies. All structures and works installed by permittee hereunder shall remain the property of the permittee.

This permit may be revoked, modified or transferred at any time pursuant to the appropriate provisions of Chapter 373, Florida Statutes:

PERMIT IS CONDITIONED UPON:

See conditions on attached "Exhibit A", dated February 12, 2008

AUTHORIZED BY: St. Johns River Water Management District

Department of Water Resources

Governing Board

By:



Jeff Elledge
(Director)

By:



Kirby B. Green III

(Assistant: U.S. Army Corps of Engineers

Permit # SAS-2007-1939

Date: 2/25/08

Attachment: 4



"EXHIBIT A"
CONDITIONS FOR ISSUANCE OF PERMIT NUMBER 4-095-20358-17
FDOT FLORIDA'S TURNPIKE ENTERPRISE ENVIRONMENTAL MANAGEMENT
DATED FEBRUARY 12, 2008

1. All activities shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit.

2. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications, shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by District staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.
3. Activities approved by this permit shall be conducted in a manner which do not cause violations of state water quality standards.
4. Prior to and during construction, the permittee shall implement and maintain all erosion and sediment control measures (best management practices) required to retain sediment on-site and to prevent violations of state water quality standards. All practices must be in accordance with the guidelines and specifications in chapter 6 of the Florida Land Development Manual: A Guide to Sound Land and Water Management (Florida Department of Environmental Regulation 1988), which are incorporated by reference, unless a project specific erosion and sediment control plan is approved as part of the permit, in which case the practices must be in accordance with the plan. If site specific conditions require additional measures during any phase of construction or operation to prevent erosion or control sediment, beyond those specified in the erosion and sediment control plan, the permittee shall implement additional best management practices as necessary, in accordance with the specifications in chapter 6 of the Florida Land Development Manual: A Guide to Sound Land and Water Management (Florida Department of Environmental Regulation 1988). The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.
5. Stabilization measures shall be initiated for erosion and sediment control on disturbed areas as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 7 days after the construction activity in that portion of the site has temporarily or permanently ceased.
6. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the District a Construction Commencement Notice Form No. 40C-4.900(3) indicating the actual start date and the expected completion date.
7. When the duration of construction will exceed one year, the permittee shall submit construction status reports to the District on an annual basis utilizing an Annual Status Report Form No. 40C-4.900(4). These forms shall be submitted during June of each year.
8. For those systems which will be operated or maintained by an entity which will require an easement or deed restriction in order to provide that entity with the authority necessary to operate or maintain the system, such easement or deed restriction, together with any other final operation or maintenance documents as are required by subsections 7.1.1 through 7.1.4 of the Applicant's Handbook: Management and Storage of Surface Waters, must be submitted to the District for approval. Documents meeting the requirements set forth in these subsections of the Applicant's Handbook will be approved. Deed restrictions, easements and other operation and maintenance documents which require recordation either with the Secretary of State or the Clerk of the Circuit Court must be so recorded prior

to lot or unit sales within the project served by the system, or upon completion of construction of the system, whichever occurs first. For those systems which are proposed to be maintained by county or municipal entities, final operation and maintenance documents must be received by the District when maintenance and operation of the system is accepted by the local governmental entity. Failure to submit the appropriate final documents referenced in this paragraph will result in the permittee remaining liable for carrying out maintenance and operation of the permitted system.

9. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the initiation of the permitted use of site infrastructure located within the area served by the portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of that phase or portion of the system to local government or other responsible entity.
10. Within 30 days after completion of construction of the permitted system, or independent portion of the system, the permittee shall submit a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing As Built Certification Form 40C-1.181(13) or 40C-1.181(14) supplied with this permit. When the completed system differs substantially from the permitted plans, any substantial deviations shall be noted and explained and two copies of as-built drawings submitted to the District. Submittal of the completed form shall serve to notify the District that the system is ready for inspection. The statement of completion and certification shall be based on on-site observation of construction (conducted by the registered professional engineer, or other appropriate individual as authorized by law, or under his or her direct supervision) or review of as-built drawings for the purpose of determining if the work was completed in compliance with approved plans and specifications. As-built drawings shall be the permitted drawings revised to reflect any changes made during construction. Both the original and any revised specifications must be clearly shown. The plans must be clearly labeled as "as-built" or "record" drawing. All surveyed dimensions and elevations shall be certified by a registered surveyor. The following information, at a minimum, shall be verified on the as-built drawings:
 1. Dimensions and elevations of all discharge structures including all weirs, slots, gates, pumps, pipes, and oil and grease skimmers;
 2. Locations, dimensions, and elevations of all filter, exfiltration, or underdrain systems including cleanouts, pipes, connections to control structures, and points of discharge to the receiving waters;
 3. Dimensions, elevations, contours, or cross-sections of all treatment storage areas sufficient to determine state-storage relationships of the storage area and the permanent pool depth and volume below the control elevation for normally wet systems, when appropriate;
 4. Dimensions, elevations, contours, final grades, or cross-sections of the system to determine flow directions and conveyance of runoff to the treatment system;
 5. Dimensions, elevations, contours, final grades, or cross-sections of all conveyance systems utilized to convey off-site runoff around the system;
 6. Existing water elevation(s) and the date determined; and Elevation and location of benchmark(s) for the survey.

11. The operation phase of this permit shall not become effective until the permittee has complied with the requirements of general condition 9 above, the District determines the system to be in compliance with the permitted plans, and the entity approved by the District in accordance with subsections 7.1.1 through 7.1.4 of the Applicant's Handbook: Management and Storage of Surface Waters, accepts responsibility for operation and maintenance of the system. The permit may not be transferred to such an approved operation and maintenance entity until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the District, the permittee shall request transfer of the permit to the responsible approved operation and maintenance entity, if different from the permittee. Until the permit is transferred pursuant to section 7.1 of the Applicant's Handbook: Management and Storage of Surface Waters, the permittee shall be liable for compliance with the terms of the permit.
12. Should any other regulatory agency require changes to the permitted system, the permittee shall provide written notification to the District of the changes prior implementation so that a determination can be made whether a permit modification is required.
13. This permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any activity approved by this permit. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and chapter 40C-4 or chapter 40C-40, F.A.C.
14. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities which may arise by reason of the activities authorized by the permit or any use of the permitted system.
15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered specifically approved unless a specific condition of this permit or a formal determination under rule 40C-1.1006, F.A.C., provides otherwise.
16. The permittee shall notify the District in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of the permitted system or the real property at which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of rule 40C-1.612, F.A.C. The permittee transferring the permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to such sale, conveyance or other transfer.
17. Upon reasonable notice to the permittee, District authorized staff with proper identification shall have permission to enter, inspect, sample and test the system to insure conformity with the plans and specifications approved by the permit.
18. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the District.
19. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.
20. This permit for construction will expire five years from the date of issuance.
21. At a minimum, all retention and detention storage areas must be excavated to rough grade prior to building construction or placement of impervious surface within the area to be served by those facilities. To prevent reduction in storage volume and percolation rates, all accumulated sediment must be removed from the storage area prior to final grading and stabilization.

22. All wetland areas or water bodies that are outside the specific limits of construction authorized by this permit must be protected from erosion, siltation, scouring or excess turbidity, and dewatering.

23. Prior to construction, the permittee must clearly designate the limits of construction on-site. The permittee must advise the contractor that any work outside the limits of construction, including clearing, may be a violation of this permit.

24. The proposed surface water management system shall be constructed as per the plans received by the District on April 3, 2007.

25. The operation and maintenance entity shall inspect the stormwater or surface water management system once within two years after the completion of construction and every two years thereafter to determine if the system is functioning as designed and permitted. The operation and maintenance entity must maintain a record of each required inspection, including the date of the inspection, the name, address, and telephone number of the inspector, and whether the system was functioning as designed and permitted, and make such record available for inspection upon request by the District during normal business hours.

If at any time the system is not functioning as designed and permitted, then within 14 days the entity shall submit an Exceptions Report to the District, on form number 40C-42.900(6), Exceptions Report for Stormwater Management Systems Out of Compliance.

26. Mitigation to offset the impacts to 18.82 acres of wetlands authorized by this permit will be provided through Section 373.4137, F.S. Construction activities shall not occur prior to the approval of the mitigation plan by the District's Governing Board or its designee.

AS-BUILT CERTIFICATION BY PROFESSIONAL ENGINEER

Submit this form and one set of as-built engineered drawings to the U.S. Army Corps of Engineers, Enforcement Branch, Post Office Box 4970, Jacksonville, Florida 32232-0019. If you have questions regarding this requirement, please contact the Enforcement Branch at 904-232-2907.

1. Department of the Army Permit Number: _____

2. Permittee Information:

Name _____

Address _____

3. Project Site Identification:

Physical location/address _____

4. As-Built Certification:

I hereby certify that the authorized work has been accomplished in accordance with the Department of the Army permit with any deviations noted below. This determination is based upon on-site observation, scheduled and conducted by me or by a project representative under my direct supervision. I have enclosed one set of as-built engineering drawings.

Signature of Engineer

Name (Please type)

Florida Reg. Number

Company Name

Address

(Affix Seal)

City State ZIP

Date

Telephone Number

Deviations from the approved plans and specifications: (attach additional pages if necessary)

U.S. Army Corps of Engineers
Permit # SAS-2007-1939
Date: 2/25/08
Attachment: 5

