



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
JACKSONVILLE DISTRICT CORPS OF ENGINEERS  
PANAMA CITY FIELD OFFICE  
1002 WEST 23<sup>RD</sup> STREET, SUITE 350  
PANAMA CITY, FLORIDA 32405

Regulatory Division  
North Permits Branch

***PUBLIC NOTICE***

**Permit Application No . SAJ-2004-1799(IP-DHB) OCT 07 2004**

TO WHOM IT MAY CONCERN: This district has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) as described below.

APPLICANT: Arbor Properties Inc.  
2750 Old St. Augustine Road  
Tallahassee, Florida 32301

WATERWAY & LOCATION: The proposed project is located on the west side of Jenks Avenue at the intersection with 26<sup>th</sup> Street, Section 20, Township 3 South, Range 14 West, Lynn Haven, Bay County, Florida. The project site is connected to North Bay through a series of drainage ditches and enters North Bay north of Goose Bayou.

DIRECTIONS TO SITE: North on Jenks Avenue to 26<sup>th</sup> Street. Property is located on west side of Jenks at the intersection with 26<sup>th</sup> Street. The property is bound by Jenks Avenue to the east and State Avenue to the west.

LATITUDE & LONGITUDE: Latitude.....30°13'04" North  
Longitude.....85°39'48" West

PROJECT PURPOSE:

Basic: Residential housing

Overall: The construction of seven, three story, multifamily apartment buildings and amenities to serve the Lynn Haven/Panama City area.

PROPOSED WORK: The applicant proposes to place fill material over 4.133 acres. The area can be characterized as a palustrine forested wetland that has been under silviculture management. The area is predominantly vegetated with slash pine (*Pinus elliotii*), buckwheat titi (*Cliftonia monophylla*), sweet gall berry (*Ilex coriacea*), gallberry

(*Ilex glabra*), *Lyonia lucida*, wax myrtle (*Myrica cerifera*) and pepperbush (*Clethra alterniflora*). Portions of the property have been bedded and rowed.

The applicant has offered the following compensatory mitigation for consideration if it is determined that issuance of a permit is appropriate. The applicant proposes to preserve 0.76 acres of onsite wetlands through a conservation easement. Off site mitigation includes 16 acres of wetlands to be restored and 2 acres of uplands to be preserved. The off site mitigation area is located in Section 14, Township 3 South Range 14 West and is south of the Lynn Haven Industrial Park. Wetlands in the restoration area are contiguous with Mill Bayou and North Bay. Restoration of the offsite wetlands would be accomplished through the use of prescribed burning, mechanical clearing or bushhogging, hydrological restoration through removal of planted pines, exotic plant removal and long term management. The 16 acres of restored wetlands and 2 acres of uplands would be placed into a conservation easement with the State of Florida Department of Environmental Protection.

ENDANGERED SPECIES: The U.S. Army Corps of Engineers is not aware of any threatened or endangered species on the project site.

ESSENTIAL FISH HABITAT: This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The proposal would not impact any habitat utilized by various life stages of commercially harvested fish of the Gulf of Mexico. Our initial determination is that the proposed action would have minor adverse impact on EFH or Federally managed fisheries in the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

NOTE: *This public notice is being issued based on information furnished by the applicant. This information has not been verified.*

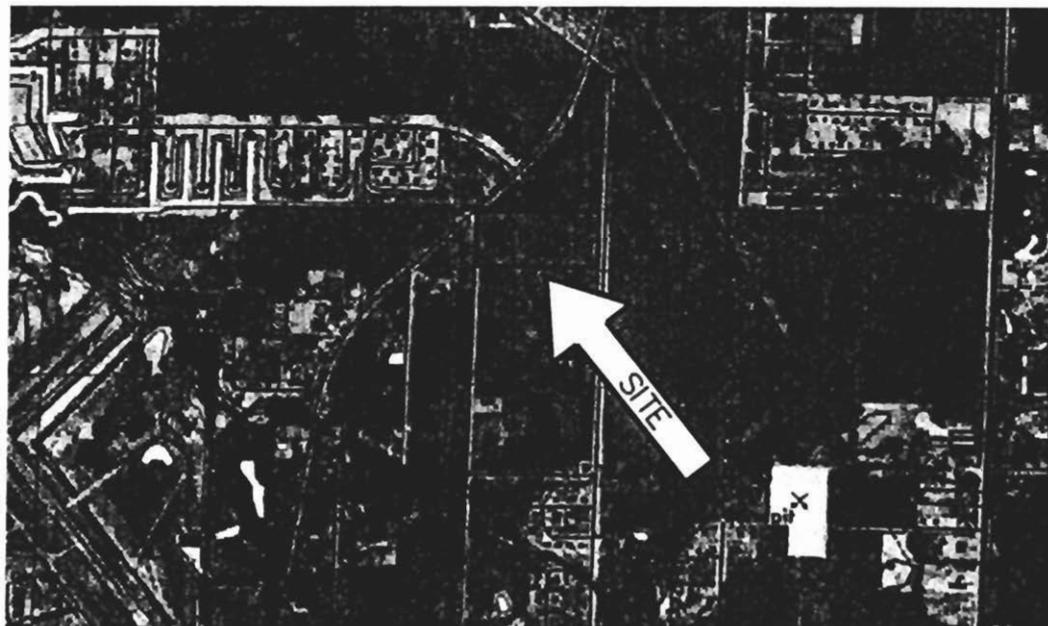
AUTHORIZATION FROM OTHER AGENCIES: A State Water Quality Certification/Permit may be required for this project. The Florida Department of Environmental Protection (DEP) is processing an application for this project. The State application number is 03-0227316-001-DF.

Comments regarding the application should be submitted in writing to the District Engineer at the above address within **30** days from the date of this notice.

If you have any questions concerning this application, you may contact Diane Bateman of this office either by letter at the letterhead address, by telephone at 850-763-0717 x23, by e-mail at [diane.h.bateman@saj02.usace.army.mil](mailto:diane.h.bateman@saj02.usace.army.mil), or by fax at 850-872-0231.

# SITE INFORMATIC

APPROX. SITE LOCATION: LAT N30° 13' 04" ~ LON W85° 39' 52"  
 TOTAL BOUNDARY AREA = 691120± S.F. (15.866± AC)  
 TOTAL ONSITE UPLAND AREA = 477992± S.F. (10.97± AC)  
 TOTAL ONSITE WETLAND AREA = 213128± S.F. (4.89± AC)  
 ONSITE PERMANENT COE & DEP IMPACT = 179969± S.F. (4.13± AC)  
 TOTAL ONSITE WETLANDS TO REMAIN UNIMPACTED = 33159± S.F. (0.76± AC)  
 TOTAL OFFSITE WETLAND MITIGATION (BY OTHERS) = 1799028± S.F. (41.3± AC)  
 WETLAND CUT (AREA = 35682± S.F.) (VOLUME = 6607± C.U.) [±10' CUT MAX]  
 WETLAND FILL (AREA = 142850± S.F.) (VOLUME = 7094± C.U.) [±2.75 FILL AVG]



**QUADRANGLE MAP**

SCALE: 1' = 2000'



**AERIAL PHOTOGRAPH**

SCALE: 1' = 2000'



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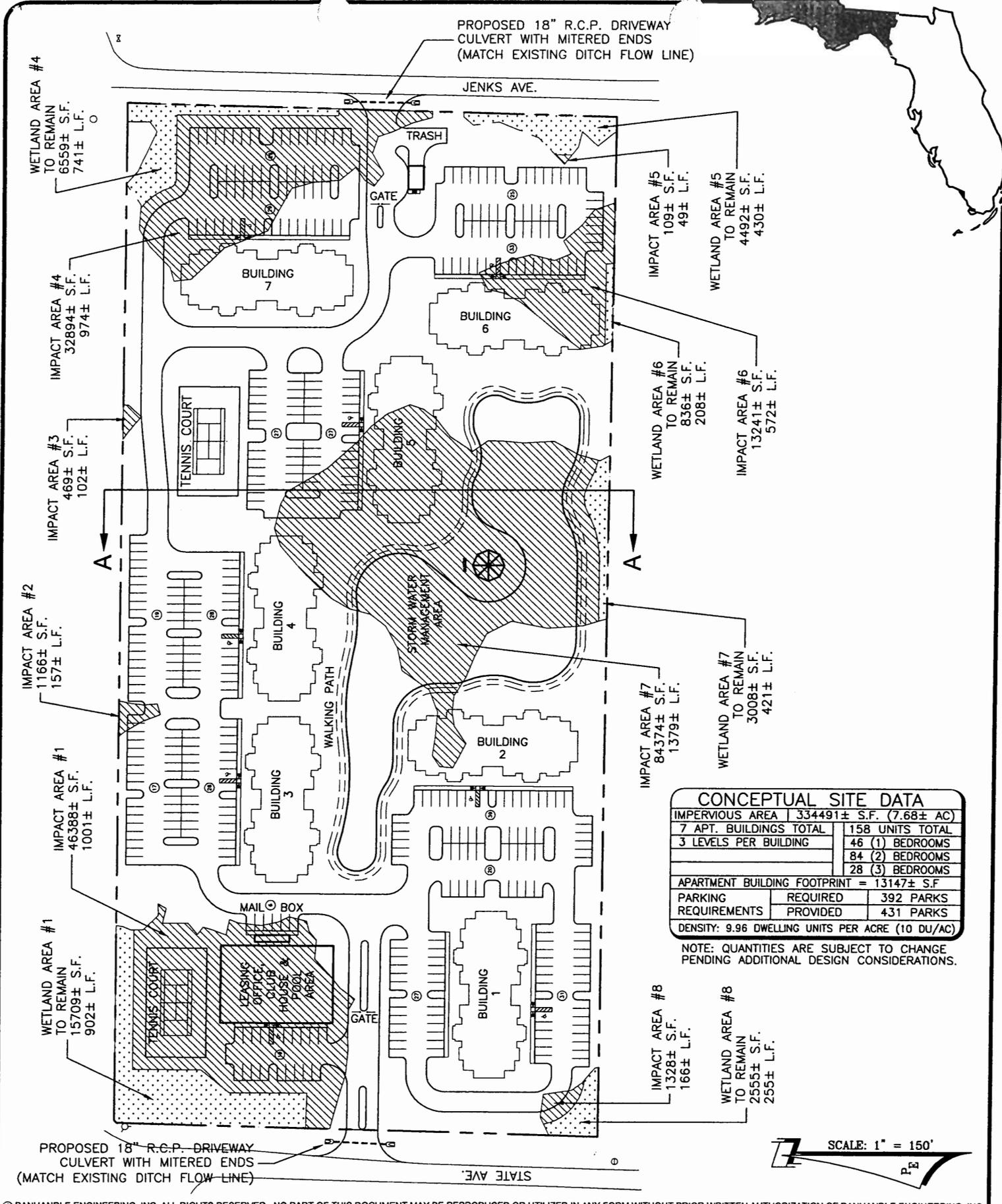
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Arbor Properties, Inc.  
 SAJ-2004-1799 (IP-DHB)  
 Sheet 1 of 16  
 October 1, 2004

**ARBOR APARTMENTS**  
 AT STATE AVE. & JENKS AVE.  
 WETLAND PERMIT DRAWINGS  
 LYNN HAVEN, FLORIDA

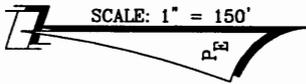
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DATE: 21 APR 04
SHEET NO: 1 OF 4
PROJECT NUMBER 23309

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CONCEPTUAL SITE DATA	
IMPERVIOUS AREA	334491± S.F. (7.68± AC)
7 APT. BUILDINGS TOTAL	158 UNITS TOTAL
3 LEVELS PER BUILDING	46 (1) BEDROOMS
	84 (2) BEDROOMS
	28 (3) BEDROOMS
APARTMENT BUILDING FOOTPRINT = 13147± S.F.	
PARKING REQUIREMENTS	REQUIRED 392 PARKS
	PROVIDED 431 PARKS
DENSITY: 9.96 DWELLING UNITS PER ACRE (10 DU/AC)	

NOTE: QUANTITIES ARE SUBJECT TO CHANGE  
PENDING ADDITIONAL DESIGN CONSIDERATIONS.

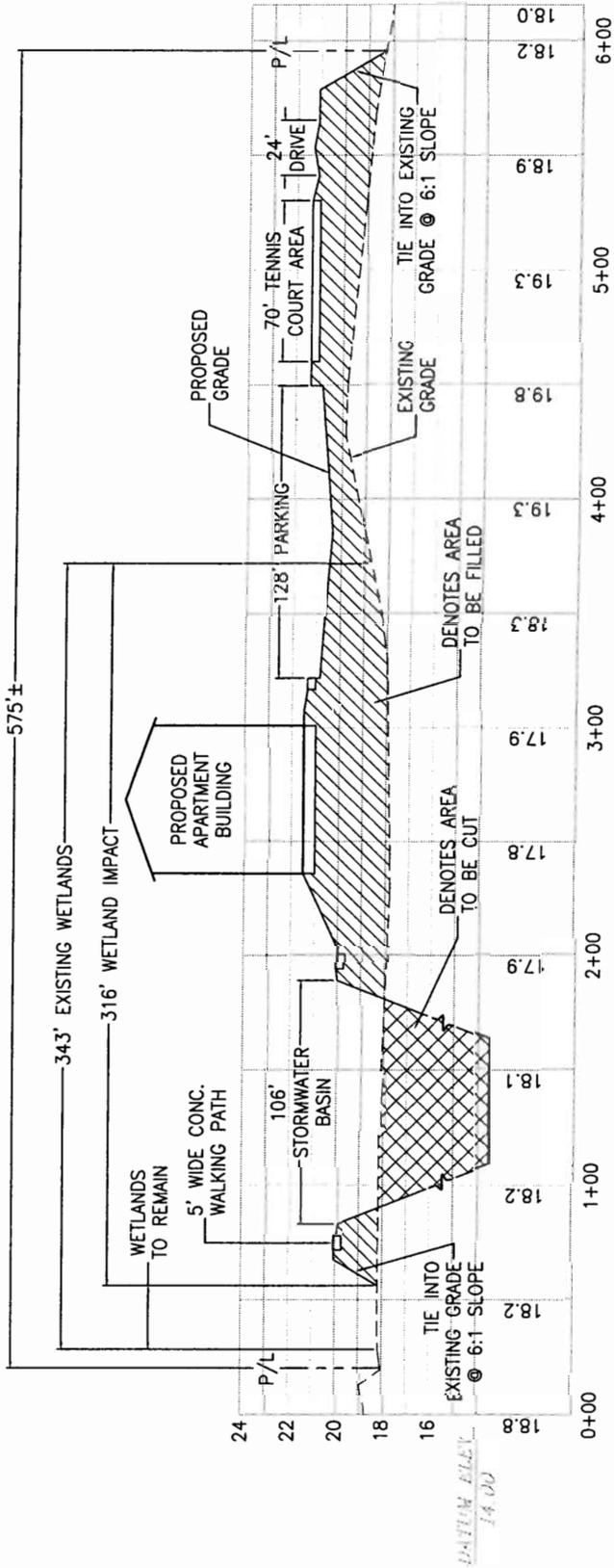


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Arbor Properties, Inc.  
SAJ-2004-1799 (IP-DHB)  
Sheet 2 of 16  
October 1, 2004

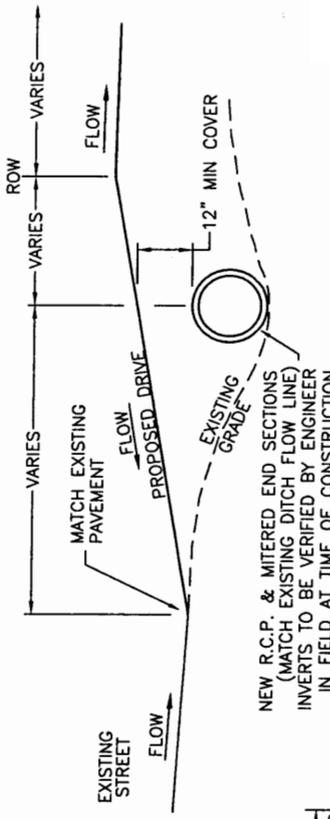
**ARBOR APARTMENTS**  
AT STATE AVE. & JENKS AVE.  
WETLAND PERMIT DRAWINGS  
LYNN HAVEN, FLORIDA

CAD FILE: 23309-WL
DWN BY: EMB
DATE: 21 APR 04
SHEET NO: 2 OF 4
PROJECT NUMBER 23309

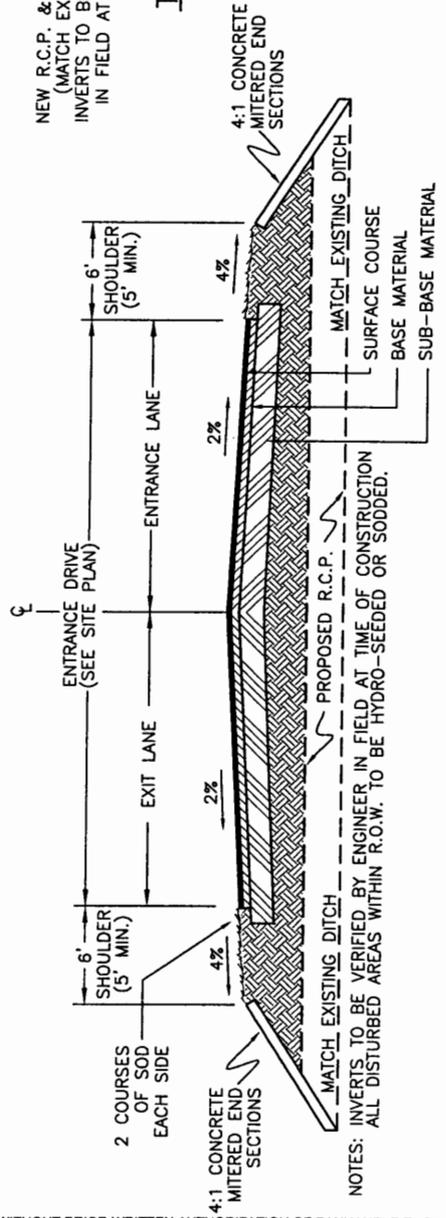


**SECTION A-A**

SCALE: VER: 1" = 80"  
HOR: 1" = 8"



**TYPICAL ENTRANCE DRIVE PROFILE**  
NOT TO SCALE



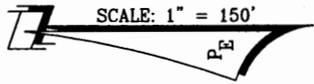
**TYPICAL ENTRANCE DRIVE SECTION**  
NOT TO SCALE

NOTES: INVERTS TO BE VERIFIED BY ENGINEER IN FIELD AT TIME OF CONSTRUCTION  
ALL DISTURBED AREAS WITHIN R.O.W. TO BE HYDRO-SEEDED OR SODDED.

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PROJECT NUMBER 23309

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SCALE: 1" = 150'

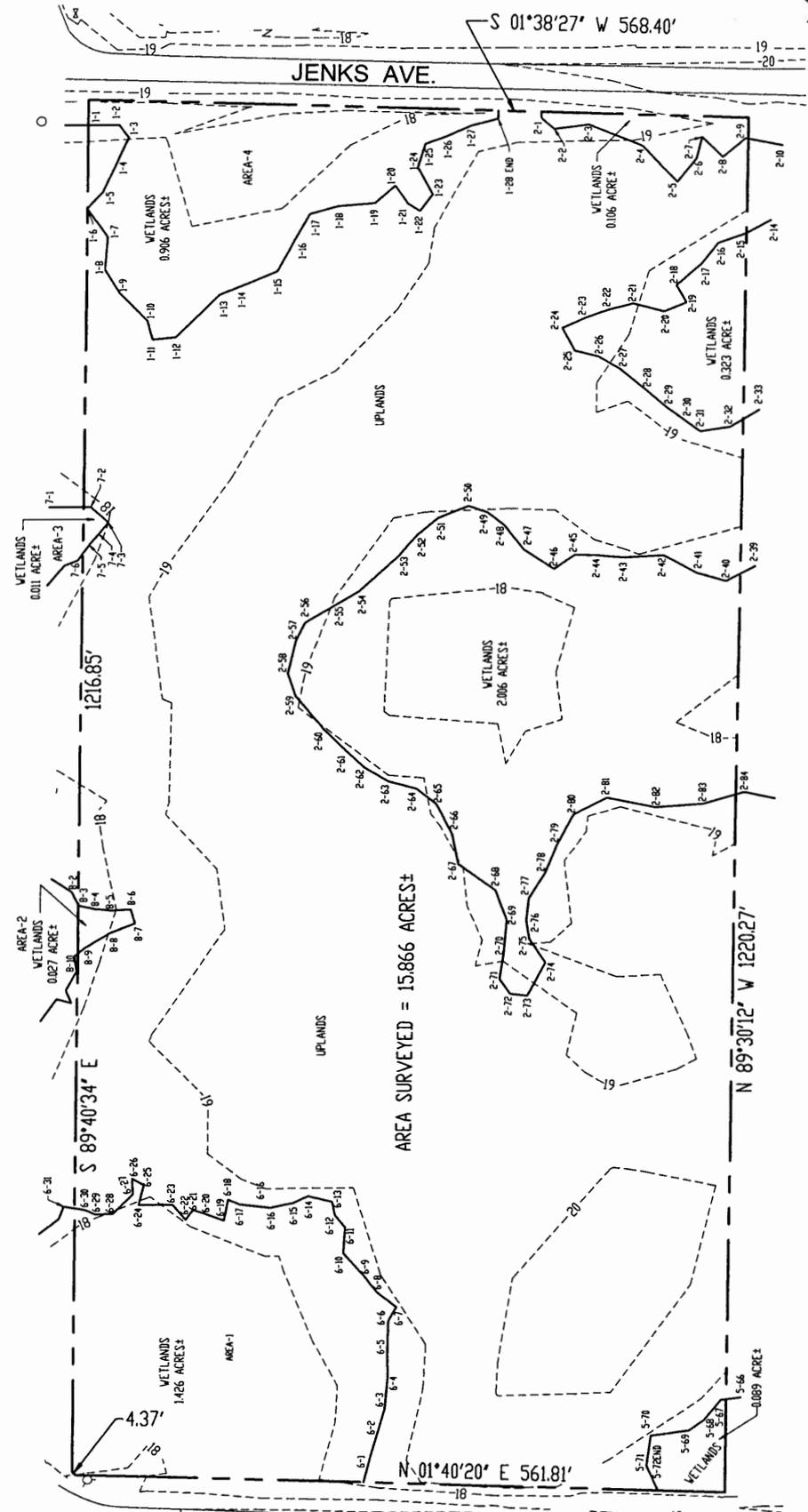
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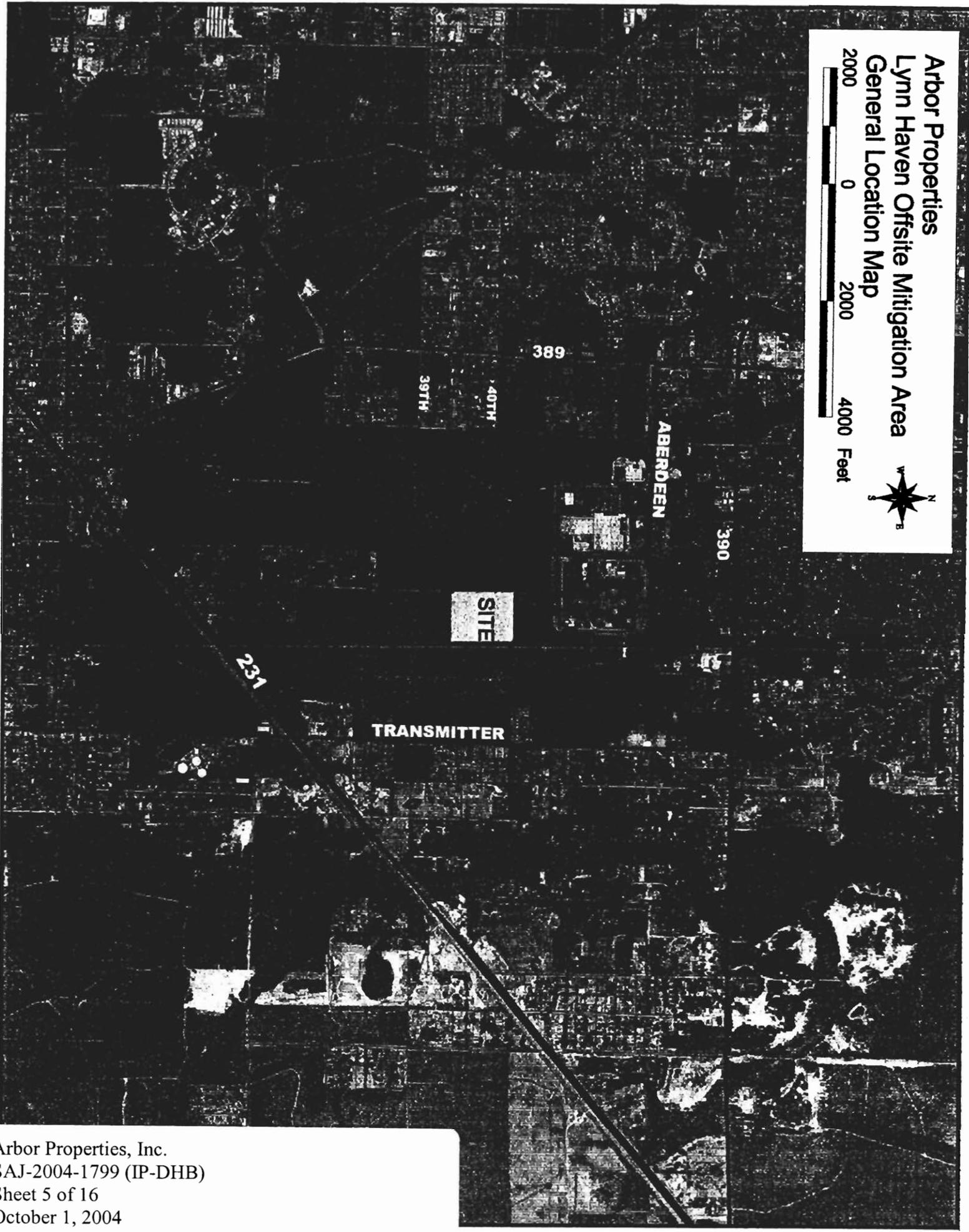
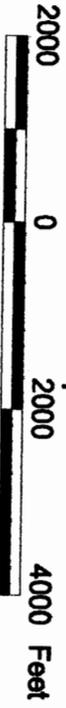
Arbor Properties, Inc.  
SAJ-2004-1799 (IP-DHB)  
Sheet 4 of 16  
October 1, 2004

**ARBOR APARTMENTS**  
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WETLAND PERMIT DRAWINGS  
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CAD FILE: 23309-WL
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Arbor Properties  
Lynn Haven Offsite Mitigation Area  
General Location Map



**Arbor Properties**  
**Offsite Mitigation Area**  
**Adjacent Mitigation Parcels**



Proposed Mitigation Area  
16 Ac +/- Wetlands  
2 Ac +/- Uplands

**Arbor Properties  
Offsite Mitigation Area  
Monitoring Plot and Well Locations**



**LEGEND**

- Wetland Delineation Lines
- Monitoring Plot and Monitoring Well Locations
- Mitigation Area Boundary- 18 Ac +/-

## I. Compensatory Mitigation Plan Summary / Arbor Properties

In order to compensate for the wetland impacts associated with the construction of the Arbor Properties, Inc multi-family living complex, offsite compensatory mitigation is proposed. Onsite mitigation consists of 0.76 acres of wetlands being placed in conservation easement in perpetuity. The site proposed for development contained the least amount of wetland habitat in the site selection area. The offsite mitigation is approximately 1.5 linear miles of the impact site in Lynn Haven, Bay County, FL. The mitigation consists of restoration of wetland planted pine habitat. A conservation easement will be placed on the offsite mitigation area with FDEP as the grantee. The proposed acreage of impact is 4.13 acres of FDEP & Corps regulated wetland habitat. The mitigation includes 16 acres of offsite restoration and 2 acres of offsite upland preservation, in addition to the 0.76 acres of onsite preservation.

## II. Restoration of Wetland Habitat

### A. Management Plan: Restoration of Wetlands Habitat

**1. Goals & Objectives:** The goals of the proposed compensatory mitigation plan are restoration of managed planted pine habitats into the ecosystems that were historically located on the mitigation site. The goals include restoration of the (1) ecological integrity of the mitigation area as defined by species composition, community structure, and biodiversity (2) ecosystem health as defined by function and structure and (3) ecosystem stability (Clewel 2002). In addition, the mitigation site will provide habitat for an endangered species (*Procambus ecofinae*). Successful restoration of the site is proposed utilizing currently available data, supplemented with the opinions of scientists with extensive experience examining the target ecosystem type and responses of the ecosystems to manipulations.

Specifically, the mitigation goals and objectives are to enhance the environmental parameters on the mitigation site that include wildlife habitat, water storage and conveyance, groundwater recharge, water treatment, endangered species habitat, plant community development, aquatic and wildlife habitat support, erosion control, and aesthetics, thus increasing overall net environmental function and quality of life for the public (WRP Technical Note VN-EM-2.1). Due to the nature of the onsite conditions, the mitigation site was determined to be optimal for restoration and will provide habitat for numerous threatened and endangered floral and faunal species. The mitigation ratios were based on the proposed long-term management plan based on sound scientific principles, monitoring plan (8-10 years), data obtained from the functional assessment methodology preferred by the Corps (WRAP), and best scientific judgment.

**2. Procedure:** Prior to designing the mitigation plan, experts from academia (Dr.Means), private sector (Meadowview Research Facility) conducted onsite investigations with Ecological Resource Consultants, Inc. to evaluate the biological conditions and proposed restoration methodologies at the mitigation site. The referenced scientists have published numerous articles regarding herbaceous bog ecosystem function, diversity and restoration and are regarded by the scientific community as experts in the field. Onsite field investigations have been conducted with Dr. Bruce Means, Meadowview Biological Research Station (MBRS), Ecological Resource

Consultants, Inc. (ERC), United States Fish and Wildlife Service (USFWS), United States Army Corps of Engineers (Corps), Florida Department of Environmental Protection (FDEP)(Dr. John Tobe) and the Florida Freshwater Game and Fish Commission (FFGFC) to review the onsite environmental parameters and projected environmental response.

The methodologies proposed for the mitigation site are similar to those that have been implemented in Tate's Hell State Forest (THSF). Environmental response to the management plan is also expected to be consistent with the results obtained in the THSF. In addition, reference sites have been documented in Apalachicola National Forest (ANF) that represents the target ecological communities for restoration. Three publications describing the restoration activities were utilized greatly when drafting the management plan. These publications were "Guidelines for Restoration of Historic Vegetation on Tate's Hell State Forest" (Haddock 2001), "Historic Distribution of West Savannas in Tate's Hell State Forest" (Kindell 1997) and "Historic Vegetation of Tate's Hell State Forest" (Kindell 2000).

**3. Site Location:** The offsite mitigation for Arbor Properties, Inc. is located in Section 14, Township 3 South, Range 14 West, Bay County, Florida. The site was selected because of the onsite biological conditions and geographical location. The mitigation site proposed for Arbor Properties, Inc. contains approximately 18 acres, of which 16 acres consists of regulated wetland habitat that has been impacted from silviculture activity. The wetlands have been delineated in the field and a binding jurisdictional determination has been issued from the Corps. The mitigation site is contained within approximately 315 acres of undeveloped land that may be available for future restoration and conservation. It is also adjacent to the 27 acres mitigation site proposed for Bay Haven Charter School and a 5.68 acre mitigation site proposed for Christian Advent Church. The project site is located in the St. Andrews Bay watershed. This watershed is under development pressure, and environmental groups and regulators have expressed concern regarding the reduction of natural habitat within this vicinity. The mitigation site is located south of the industrial park in Lynn Haven, and the onsite wetlands discharge into North Bay. The land proposed for compensatory mitigation for Arbor Properties, Inc. is within the first phase of the mitigation implementation. The area proposed for Arbor Properties, Inc. includes 16 acres, square in area, located in the center portion of the property. An unpaved trail/road is adjacent to the parcel on the western boundary. The southern boundary is adjacent to a mitigation area proposed to offset impacts associated with the construction of Bay Haven Charter School. The Bay Haven Charter School mitigation site has been approved by FDEP and is in the final stages of processing with the Corps.

The mitigation property is a component of a larger proposed mitigation area that will provide a continuum of upland and wetland ecosystems that are habitat for the referenced species. The acreage of the proposed mitigation area, in conjunction with surrounding lands, is sufficient not only to support wildlife and vegetative species but also provide water quality benefits on a landscape level. An endemic species of crayfish has been documented in the ditch located adjacent to Transmitter Road. Transmitter Road is the eastern boundary of the Bay Haven Charter School mitigation area. A conservation easement has been recorded in Bay County for 10 acres of wetland habitat west of the Bay Haven Charter School mitigation site. This easement was recorded to offset impacts that will result from the construction of a hotel and restaurant

accessed from Highway 77. The impacts have been permitted from the FDEP and Corps. The FDEP is the grantee for the conservation easement. The mitigation areas contain habitat that was suitable for the propagation of the species prior to conversion to silviculture. This plan proposes restoring the habitat on the mitigation site to the historical habitat, once again establishing habitat for this species.

**4. Existing Vegetative Communities/Features:** The dominant vegetation located in the wetlands on the proposed mitigation site includes *Pinus elliottii*, *Cyrilla racemiflora*, *Cliftonia monophylla*, *Smilax laurifolia*, *Hypericum fasciculatum*, *Aristida spp.*, *Andropogon glomeratus var. glaucopsis*, *Andropogon perangustatus*, and *Paspalum praecox*. Sparse species located onsite include *Sarracenia flava*, *Xyris spp.* and *Eriocaulon compressum*, *Eriocaulon decangulare*, *Rhexia alifanus*, *Ludwigia spp.*, *Polygala lutea*, *Rhynchospora spp.*, *Drosera capillaris*, *Calopogon spp.*, *Ludwigia spp.*, *Drosera capillaris*, *Aster chapmanii*, *Coreopsis linifolia*, *Euthamia minor*, *Liatris spicata* and *Xyris difformis*. Alterations in vegetative succession are strongly pronounced. Undisturbed savanna ecosystems are one of the most diverse ecosystems in the world due to the species richness in the floral and faunal components of the systems (Means (personnel communication) (Folkerts 1982). However, the onsite plant community has been degraded by woody species encroachment and is dominated by *Cyrilla racemiflora*, *Cliftonia monophylla*, *Ilex glabra*, *Andropogon spp.*, *Smilax laurifolia* and *Hypericum fasciculatum* with individuals from the historical system scattered throughout the herbaceous layer suppressed from germination. In addition, the silvicultural practices have masked variations in the onsite ecotones.

The intensive forestry management practices have altered the onsite hydrology. The management practices include installation of beds prior to planting and road construction. The hydrological degradation on the 16 acres proposed for Arbor Properties, Inc. is primarily due to bedding for forestry management practices. Due to the disturbances, and fire suppression, exotic species are sparsely scattered throughout the site. The primary exotic is popcorn tree or *Sapium seriferum*.

The onsite features include the dirt road that borders the western boundary of the mitigation area. The road, located adjacent to the western boundary, is required for access to the surrounding parcels of land.

**5. Historical Vegetative Community:** The onsite soil and vegetative indices, in conjunction with historical data suggest that, prior to silvicultural management practices, the wetland habitat in the Arbor Properties, Inc. mitigation area would have been classified as wet savannah and wet cypress savannas. Dr. Bruce means conducted an onsite investigation with ERC in April 2000 in order to validate these findings.

The onsite historic ecological communities were fire-dependent for maintenance of ecosystem function. The habitats burned on a 1-3 year basis, primarily during the summer fire season. Exotic species were not present.

**6. Restoration Methodologies:** For appropriate restoration, the habitat that was historically present on these sites prior to disturbances was identified. Various data sources were utilized for

this analysis that included historical documentation, aerial photo interpretation, expert opinion, soils series classification, remnant vegetative species composition and comparison to scientific research (THSF). In order to achieve the goals set forth in the compensatory mitigation plan, restoration of the wet prairie ecosystem will be achieved through reintroduction of a prescribed burning regime, hydrological restoration, exotic species removal and a long-term management plan for maintenance.

**7. Prescribed Burning Restoration:** Fire exerts considerable influence over the biogeochemical cycling and productivity through organic matter and nutrient transformations, physicochemical modifications, and vegetative composition. Various vegetative species respond differently to burning, and fire directly affects the diversity of the plant composition. These responses range from serotinus species that require fire for regeneration to species that are fire intolerant.

Prescribed burning and the hydrological restoration will restore the onsite habitat quality and function and are essential in order to restore the overall biodiversity of the onsite ecosystems. An innovative component of the plan was the incorporation of a long-term management plan to maintain the fire-dependent ecosystems. Historically, the ecosystem on the mitigation site burned, and, due to fire suppression, the successions of the vegetative species and the hydroperiods have been altered. Projected ecological responses to the proposed methodologies include reduction in evapotranspiration rates, mineralization of phosphorous into the soil surface horizons, woody vegetative species mortality, increased light penetration into the herbaceous layer and stimulation in seed production.

The 18 acres proposed for mitigation for the Arbor Properties, Inc. permit contains predominantly slash pine, shrubs and herbaceous vegetation. Due to the age class of the vegetation and onsite fuel loads, reduction of vegetation prior to burning will be required. Mowing or mechanical clearing is proposed prior to burning for the mitigation area. Best Management Practices (BMP's) will be used on the site at all times, specifically during clearing activities. Firebreaks will be designed to meet or exceed BMP guidelines and will be re-habilitated as soon as possible after burning.

A conceptual prescription burn plan will be written and submitted for review/approval to the Corps, FDEP, USFWS, National Marine Fisheries Service (NMFS) and Environmental Protection Agency (EPA) as a component of the first monitoring report. A site-specific burn plan will be submitted to the agencies prior to the prescription burn. The first monitoring report will be conduct prior to the first burn and will document the existing onsite conditions.

It is anticipated that future projects will result in additional impacts to wetlands that will in turn result in a need for additional mitigation areas within the following year the St Andrews Bay Watershed. The additional mitigation areas will be located in the vicinity of the Arbor Properties, Inc. mitigation area, so the management area will most likely be expanded prior to implementation of the mitigation plan. Since the site boundaries will change, the specifics that are detailed in a prescribed burn plan will also be appropriately modified for the environmental conditions of the area proposed for burning.

In order to receive a permit from the Department of Forestry, a prescribed burn plan is required for the specific area that will be burned during that event. Copies of the burn plan will be provided to the Corps, USFWS, EPA & FDEP prior to all prescribed burning activities. An experienced, licensed, insured burner will write the plan and supervise implementation of the plan. Existing roads and natural barriers will be used for existing firebreaks where possible. When necessary, new firebreaks will be disked and constructed in accordance with Department of Forestry (DOF) guidelines.

Prior to the first prescribed burn, mechanical clearing or bushhogging is proposed to remove the planted slash pine and reduce the onsite fuel loads. A licensed prescribed burner has conducted onsite investigations and determined that area must be cleared in order to safely burn the habitats.

The proposed burning regime is based on a recommendation by Dr. Bruce Means after conducting an onsite evaluation of the project area. The plan is supported by scientific literature and was implemented on the Tates Hell State Forest (THSF) and Apalachicola National Forest (ANF) reference sites. The burning is consistent with the mitigation plan for the West Bay Regional Mitigation Area. Specifically, prescribed burns are proposed for year 1, year 3 and year 5. The first burn (year 1) will be a summer burn and will be conducted during the summer of 2003. The second burn will be a winter burn and will be conducted in 2005. The third burn will be a summer burn and will be conducted during the year 2007. Subsequent burns will take place on a 1 to 3 year rotation (depending on fuel and climatic conditions) to promote the reproduction and establishment of desirable wet prairie species. Recommendations for additional burns will be proposed in the 2008 monitoring report. Summer burns will be conducted between April and June and winter burns will be conducted between October and February. Existing onsite fuel loads are sufficient for a summer burn. If sufficient fuel loads do not exist onsite, then the agencies will be notified and the site will be burned when conditions are suitable. A winter burn is proposed in year 3 in order to stimulate flowering and seeding in different plant species. Since the site is located in an urban environment, mechanical disturbances may be used to mimic fire if a condition if burning proposes a safety hazard.

The methodology for re-vegetating the site is recruitment from the onsite native seed bank in the wetland habitat. Planting of vegetation would not be appropriate for restoration of the target wetland ecological communities. The native seed bank refers to the seeds dormant in the soil surface horizons. Extensive research has been conducted regarding the vitality of seeds, and natural recruitment is common in wetland mitigation projects throughout the world. This technique is supported throughout the scientific literature and by Dr. Means after his onsite investigation.

**8. Hydrological Restoration:** Hydrological restoration will be achieved by introduction of a prescribed burning management plan. Clearing of the vegetation prior to burning and maintaining the onsite ecosystem by prescribed burning will dramatically alter evapotranspiration rates. The existing bedding, resulting from silvicultural management practices, will remain undisturbed except for secondary affects resulting from mechanical

clearing of vegetation. Natural erosion processes will be stimulated by the removal of stabilizing root mass of woody species and rainfall.

**9. Exotic Species Removal:** The pre-dominant exotic species located in the ecosystems is popcorn tree (*Sapium sebiferum*). *S. sebiferum* is an exotic that spreads aggressively and often out-competes native hydrophytic vegetation. We propose removal of the *S. sebiferum* throughout the restored conservation area. The herbicide will be species specific and should neither kill non-targeted species in the vicinity nor degrade water quality. Within three months of the initial burn (the first prescribed burn), *S. sebiferum* sprouts throughout the site will be treated with Garlon IV. All herbicide use will conform to the label specifications. Following initial treatment, prescribed burns are expected to control re-growth of *S. sebiferum* and any other inappropriate or invasive species.

**10. Long-term Management Plan:** St. Joe Company will be responsible for long term management activities on the property in accordance with a long term management plan approved by the Corps and FDEP. The St. Joe Company is responsible for perpetual maintenance of the offsite mitigation area in its enhanced state by conducting periodic prescribed burns and eliminating invasive exotic plants. The St. Joe Company may transfer perpetual maintenance responsibility to a third party conservation organization approved by the Corps and FDEP. Within 180 days of final permit issuance, a long-term management agreement for the mitigation area should be submitted to the Corps and FDEP for review and approval.

**B. Conservation Easement:** The 16 acres of wetland habitat proposed for restoration and the 2 acres of upland habitat on the mitigation site will be placed into a conservation easement, in addition to the 0.76 acres of on site preservation. The Conservation Easement will be granted to FDEP and will be recorded in Bay County. Hence, the mitigation site will be preserved in perpetuity.

**C. Miscellaneous:** All culverts, internal fencing and rubbish, including silt fences (after graded areas are stabilized) shall be removed from the site to an appropriate disposal area. The conservation area will be posted with the signage specified as a specific condition of the FDEP dredge and fill permit.

**D. Monitoring Plan / Success Determination:** Monitoring will be conducted annually beginning in the fall of 2004 and will continue through the fall of 2010. Eight monitoring reports will be submitted. These include a baseline report, to document the existing conditions prior to implementation of the plan, plus seven annual monitoring reports. Additional monitoring will be required after 2008 if the success criteria are not met by 2008. Monitoring reports will be submitted to Corps, FDEP, USFWS, and the EPA within two months of the onsite field investigation for that monitoring session.

Mechanically clearing (bushhogging) & burning of both upland and wetland habitats in late summer 2004 or early fall 2005. The uplands and wetlands will be maintained by prescribed burning at years 1, 3, & 5. If burning is not permitted due to restriction imposed by the DOF,

then the agencies will be notified and the burn will be implemented when the restrictions are lifted.

**1. Hydrological Monitoring:** The hydrologic monitoring was included as a component of the mitigation plan because the hydroperiod of a wetland has a tremendous influence on the overall health of the ecosystem. The baseline data will be gathered in the first monitoring report. This report will document all of the onsite baseline conditions and will be submitted prior to implementation of the mitigation plan. The hydrology will be recorded using monitoring wells to measure actual groundwater table levels, and the wells will be permanently installed in the center of the two 50 ft by 100 ft plots (Reference attached Exhibit). The depth to the "free water" table will be recorded in inches. The specific monitoring procedure includes installation of shallow wells that are made of PVC. Additionally, the depth to redoximorphic feature that are indicative of the seasonal high water table depth, will be recorded. Any additional hydrological indices that are listed in the 1987 Corps manual as primary or secondary hydrological indices will also be documented.

**2. Vegetative Monitoring:** Vegetation will be monitored on a landscape scale, within 2 permanent 50 ft by 100 ft plots. Two permanent square meter plots will be located within each large 50ft by 100ft plot for sampling herbaceous vegetation (Reference attached Exhibit). The northern, southern, eastern and western corners and center points of the plots and the square meter plots will be surveyed by submeter GPS and permanently labeled in the field. Both locations for large and small plots will be established. The initial monitoring will be a baseline study including a vegetative inventory and soils classification, and would include photographs of the individual plots. A detailed summary of the findings including photographs from an established referenced point will be submitted to agencies after each monitoring session. Parameters documented during monitoring will include species composition and diversity, diameter of the tree species, percent cover and seasonal high water table evaluations. Photographs will be taken from the same compass direction from permanently recorded locations during each monitoring event. Baseline conditions will be recorded prior to initiating any work on the mitigation site. Vegetation will be recorded as discussed below.

### **3. Goals of Mitigation Plan Implementation:**

- a. Establish a natural mix of vegetative associations by restoring a herbaceous community while reducing the abundance of undesirable tree species.
- b. Reduce the size and abundance of shrub and woody vine species as appropriate for the target ecosystem.
- c. Eliminate then control exotic species.
- d. Increase the abundance of desirable species or demonstrate a trend towards an increase in abundance of desirable species.
- e. Increase the total cover of graminoids or demonstrate a trend towards an increase in the total cover of graminoids.
- f. Restoration of natural hydrologic regime

**4. Field Sampling Methods:** The letter for each field sampling method corresponds to the goal with the same letter listed above.

- a. The abundance of undesirable tree species (primarily planed slash pine (*Pinus elliotii*) will be reduced through harvesting and prescribed burning. The reduction of undesirable tree species will be monitored on a landscape scale. A walk through will be conducted during each monitoring event and photographs will be taken from permanently recorded locations.
- b. The abundance of shrub and woody vine species will be reduced through prescribed burning. Any undesirable shrub species rooted within a 50 ft by 100 ft plot will be counted and measured for maximum stem height. Percent cover of each species within the monitoring plot will be estimated visually using a modification of Daubenmire's coverage classes (Daubenmire 1959). The six coverage classes have the following ranges of percent coverage: 1) 0-5, 2) 5-25, 3) 25-50, 4) 50-75, 5) 75-95, 6) 95-100.
- c. The abundance of exotic species will be recorded on both a landscape scale and within the monitoring plots. Any exotic species noticed during the walk through or within any of the monitoring plots will be recorded by species and location. Any exotic species will be treated using the appropriate control treatment.
- d. The abundance of desirable species will be increased through prescribed burning. Any vascular plant species rooted within the 50 ft by 100 ft monitoring plots will be recorded. Monitoring plots may be visited during different seasons to record the presence of vascular plant species, however, they will always be monitored in autumn. Some plant species will be more readily identified during different seasons.
- e. The total percent cover of graminoids will be increased through prescribed burning. The total cover of graminoids within each of the 10 square meter plots will be visually estimated using a modification of Daubenmire's coverage classes (Daubenmire 1959) as discussed above.
- f. Areas requiring earth moving with mechanical equipment will be inspected to determine if the required work has been constructed as proposed and completed.

**5. Success Criteria:** The letter for each success criteria corresponds to the goal and method with the same letter listed above.

- a. No planted slash pine shall be left standing 12 months following a fire. Planted slash pine shall be eliminated from the mitigation area. After the first three burns, the interagency team will review the restoration effort and determine if any persistent patches of woody vegetation need to be mechanically or chemically controlled.
- b. The total cover of shrub and woody vine species shall be less than 50% within each of the 50 ft by 100 ft monitoring plots 12 months following a fire. Shrub species shall be no taller than expected coppice sprouts following the most recent fire. After 3 years of burns, the interagency team will review the restoration effort and determine if any persistent patches of woody vegetation need to be

- mechanically or chemically controlled.
- c. The total cover of invasive exotic species shall be less than 1% within any of the monitoring plots.
  - d. Each of the 50 ft by 100 ft monitoring plots shall contain 50 desirable species included on the attached list or demonstrate a definite trend towards 50 desirable species. Dr. Clewell prepared a list of characteristic species at the time of an on-site investigation on the West Bay Peninsula Regional Mitigation Area (WBPRMA). The onsite soils series, existing vegetative communities and target ecosystems are the same for the WBPRMA and the currently proposed mitigation site are the same. (Reference attached Vegetation List).
  - e. The total cover of graminoids shall average 80% 12 months following a fire or demonstrate a definite trend towards 80% total cover.

**6. Physical Stabilization:** All of the ditch plugs and graded areas in the mitigation area are stabilized. The ditch block and ditch fill areas are effectively curtailing any channelized drainage from the site and have required no repairs beyond minor maintenance.

**7. Contingency Plan:** Management activities will be designed to accomplish the overall restoration goals and to respond to roadblocks that could potentially jeopardize the project's success. A responsive management approach will correct problems identified during monitoring, prevent deterioration of wetland functions, and respond to unforeseen changes that may occur. The St. Joe Company shall develop necessary contingency plans and implement appropriate remedial actions for the offsite mitigation area in coordination with the Corps and FDEP.

**E. Monitoring / Mitigation Implementation Schedule:**

<b>Year</b>	<b>Monitoring Report (Fall)</b>	<b>Prescribed Burn (Summer)</b>	<b>Prescribed Burn (Winter)</b>
2004	X		
2005	X	X	
2006	X		
2007	X		X
2008	X		
2009	X	X	
2010	X		

**IMPACT ON NATURAL RESOURCES:** Preliminary review of this application indicates that an Environmental Impact Statement will not be required. Coordination with U.S. Fish and Wildlife Service, Environmental Protection Agency (EPA), the National Marine Fisheries Services, and other Federal, State, and local agencies, environmental groups, and concerned citizens generally yields pertinent environmental information that is instrumental in determining the impact the proposed action will have on the natural resources of the area. By means of this notice we are soliciting comments on the potential effects of the project on threatened or endangered species or their habitat.

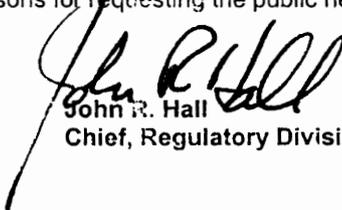
**IMPACT ON CULTURAL RESOURCES:** Review of the latest published version of the National Register of Historic Places indicates that no registered properties, or properties listed as eligible or inclusion therein, are located at the site of the proposed work. Presently, unknown archeological, scientific, prehistorical, or historical data may be lost or destroyed by the work to be accomplished.

**EVALUATION:** The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including cumulative impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act of the criteria established under authority of Section 102(a) of the Marine, Protection, Research, and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.

The U.S. Army Corps of Engineers (Corps) is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make or deny this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

**COASTAL ZONE MANAGEMENT CONSISTENCY:** In Florida, the State approval constitutes compliance with the approved Coastal Zone Management Plan. In Puerto Rico, a Coastal Zone Management Consistency Concurrence is required from the Puerto Rico Planning Board. In the Virgin Islands, the Department of Planning and Natural Resources permit constitutes compliance with approved Coastal Zone Management Plan.

**REQUEST FOR PUBLIC HEARING:** Any person may request a public hearing. The request must be submitted in writing to the District Engineer within the designated comment period of the notice and must state the specific reasons for requesting the public hearing.

  
John R. Hall  
Chief, Regulatory Division