



REPLY TO  
ATTENTION OF:

DEPARTMENT OF THE ARMY  
U.S. ARMY ENGINEER DISTRICT, MOBILE DISTRICT  
P.O. BOX 2288  
MOBILE, ALABAMA 36628-0001

CESAM-RD-C

August 29, 2008

**JOINT PUBLIC NOTICE SAM-2008-0524-JBM  
U.S. ARMY CORPS OF ENGINEERS**

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF POLLUTION CONTROL**

**MISSISSIPPI DEPARTMENT OF MARINE RESOURCES**

**Discharge of Fill into Waters of the U.S.  
Jackson Lakes Development,  
Vancleave, Jackson County, Mississippi**

**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 USC 1344). Please communicate this information to interested parties.

**APPLICANT:** Gaddy Management LLC  
Attn: Mr. Allen Baker  
7086 Rolling Green Dr.  
Pass Christian, Mississippi 39571

**Agent:** D.R. Sanders and Associates, Inc.  
4017 Lake Wilma Road  
Moss Point, Mississippi 39562

**LOCATION OF WORK:** 1,537 acre site on the north side of Joe Batt Road (also known as Jim Ramsey Road) approximately 7 miles west of Vancleave, Jackson County, Mississippi (Sections 4, 5, and 6 of Township 6 South, Range 8 West and Section 31 of Township 5 South, Range 8 West).

**WORK DESCRIPTION:** The applicant proposes to impact 163.1 acres of medium quality pine savanna and coastal forested drain wetlands and 9,728 linear feet of low order, perennial stream to construct two dams, two lakes, road crossings, building sites, and a golf course. Unavoidable impacts to wetlands and streams will be mitigated on-site and at approved mitigation banks. See the applicant's project description, environmental assessment and wetland mitigation proposal and figures for details.

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The applicant has applied for certification from the State of Mississippi in accordance with Section 401(a)(1) of the Clean Water Act, and upon completion of the required advertising, a determination relative to certification will be made.

Also, the applicant has applied for certification from the State that the proposed activity complies with and will be conducted in a manner that is consistent with the State Coastal Zone Management Program. A determination relative to consistency will be made by the Mississippi Department of Marine Resources.

This public notice is being distributed to all known interested persons in order to assist in developing facts on which a decision by the U.S. Army Corps of Engineers (Corps) can be based. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition. 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 benefit 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 the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production, and in general, the needs and welfare of the people.

The 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 to determine whether to issue, modify, condition or deny a permit for this proposal. To make 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.

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Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state with particularity, the reasons for holding a public hearing.

Evaluation of the probable impacts involving deposits of dredged or fill material into waters of the United States will include the application of guidelines established by the Administrator of the U.S. Environmental Protection Agency.

In accordance with Section 106 of the National Historic Preservation Act, and Appendix C of 33 CFR 325, the undertaking defined in this notice is being considered for the potential to effect cultural and historic properties within the permit area. Although the extent of federal control and responsibility for these considerations are confined to the limits of the permit area for this particular project, the potential indirect effects that may occur to historic properties as a result of this undertaking are also being considered. We are seeking comment from the State Historic Preservation Officer, federally-recognized American Indian tribes, local historical societies, museums, universities, the National Park Service, and concerned citizens regarding the existence or the potential for existence of significant cultural and historic properties within the permit area. Historic architectural or archaeological investigations may be necessary to ascertain the existence of such resources. Efforts will be made through the consultation process to avoid, minimize, or mitigate any adverse effects to significant cultural and historic properties that may occur as a result of this undertaking. The district engineer remains the final decision authority.

Preliminary review of this application and the U.S. Department of the Interior List of Endangered and Threatened Wildlife and Plants indicate that the proposed activity may affect listed endangered or threatened species. The U.S. Fish and Wildlife Service will be consulted in accordance with Section 7 of the Endangered Species Act.

Correspondence concerning this Public Notice should refer to Public Notice Number SAM-2008-0524-JBM and should be directed to:

District Engineer  
U.S. Army Engineer District, Mobile  
Attention: Regulatory Division, Coastal Branch  
Post Office Box 2288  
Mobile, Alabama 36628-0001

With a Copy to:

Mississippi Department of Environmental Quality  
Office of Pollution Control  
Post Office Box 10385  
Jackson, Mississippi 39289

**CESAM-RD-C**

**Public Notice Number SAM-2008-0524-JBM**

And to:

Mississippi Department of Marine Resources  
1141 Bayview Avenue, Suite 101  
Biloxi, Mississippi 39530

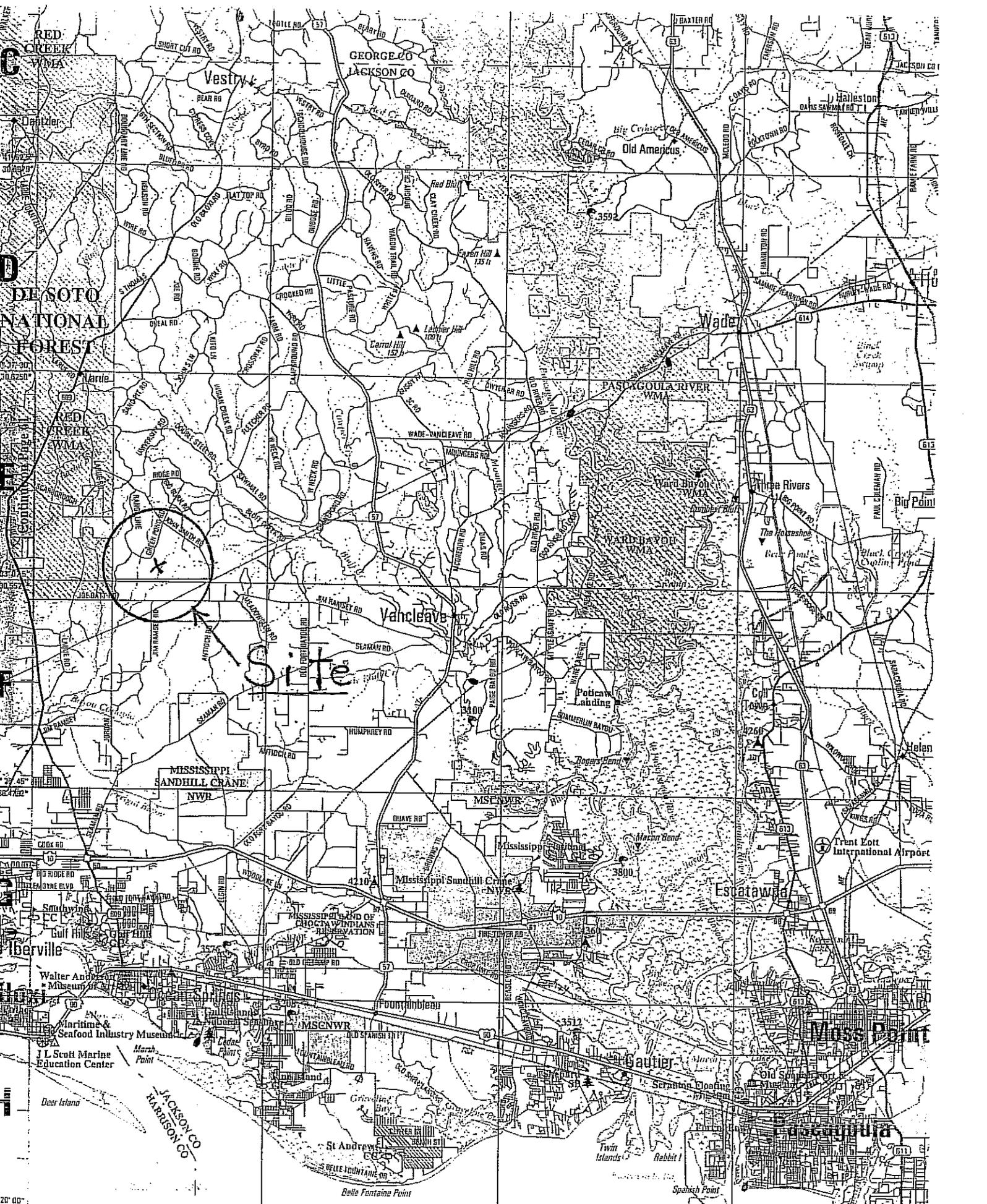
Comments should be received no later than **30 days** from the date of this Public Notice.

If you have any questions concerning this publication, you may contact the project manager via e-mail at [john.b.mcfadyen@usace.army.mil](mailto:john.b.mcfadyen@usace.army.mil) or telephone number **(251) 690-3222**. Please refer to the above Public Notice number.

For additional information about our Regulatory Program, please visit our web site at [www.sam.usace.army.mil/RD/reg](http://www.sam.usace.army.mil/RD/reg), and please take a moment to complete our customer satisfaction survey while you're there. Your responses are appreciated and will allow us to improve our services.

Encls

MOBILE DISTRICT  
U.S. Army Corps of Engineer



DE SOTO  
NATIONAL  
FOREST

Site

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Vicinity Map

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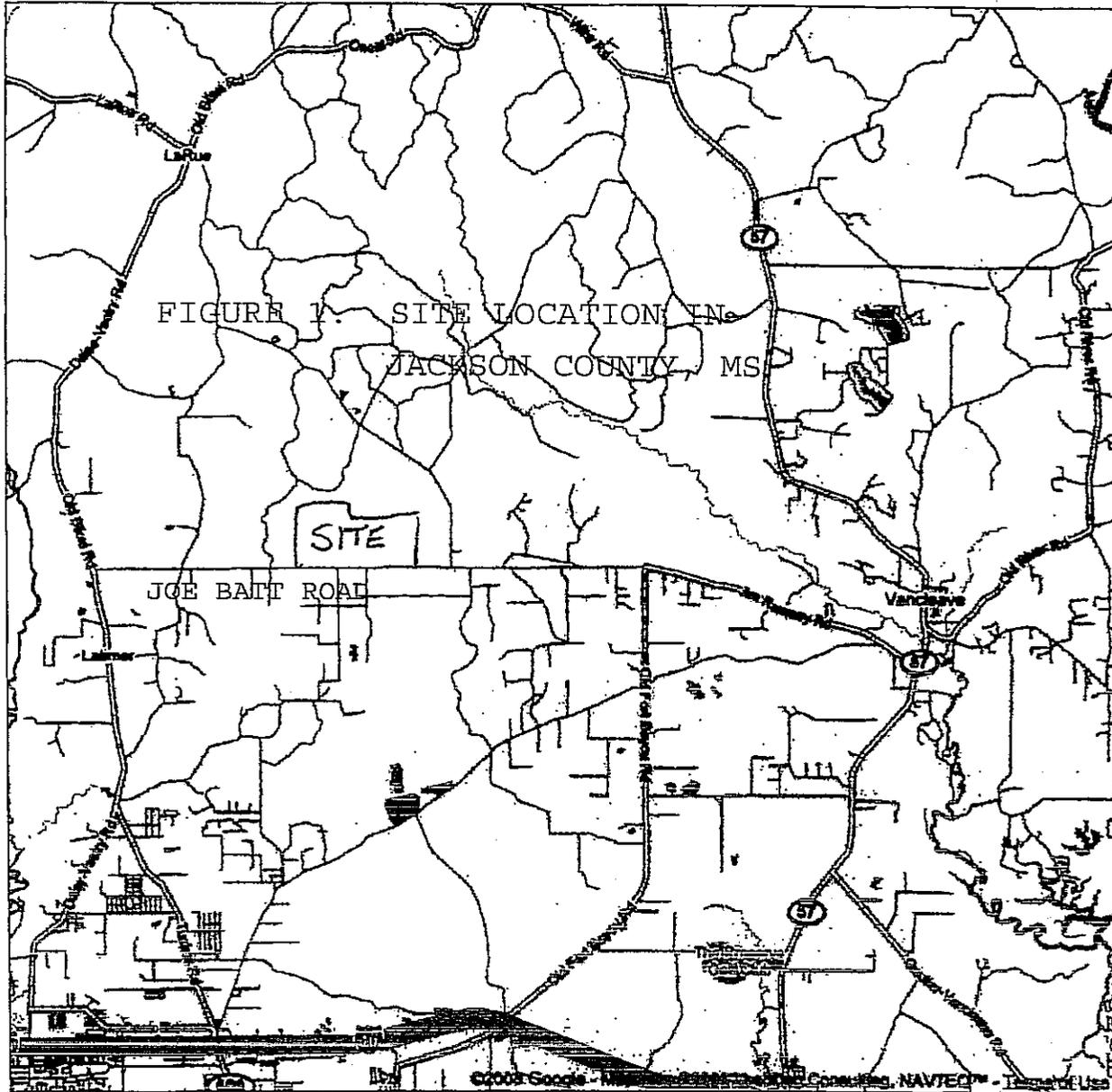
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**FIGURE 2A. WESTERN PORTION OF JACKSON LAKES PROJECT**

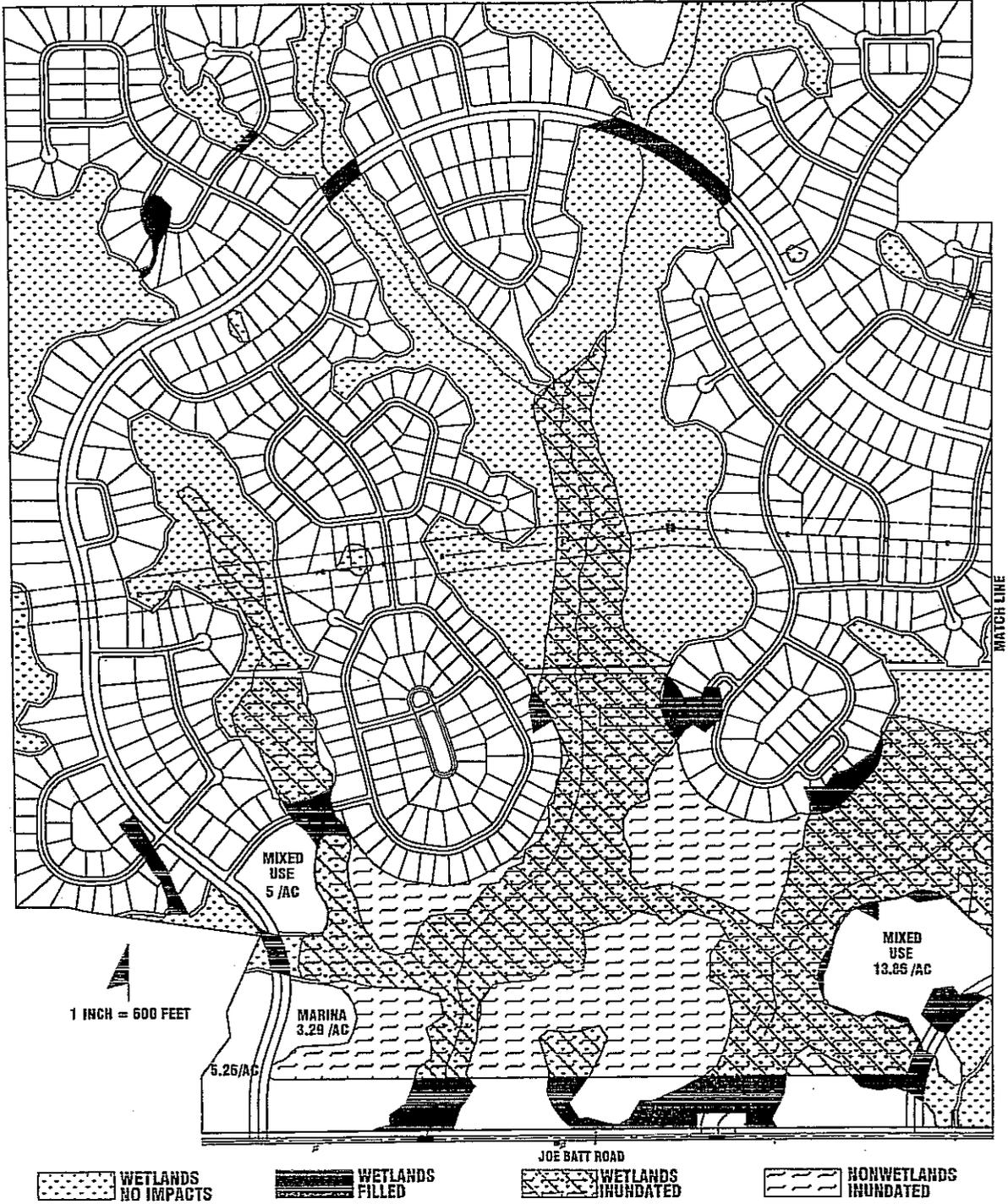


FIGURE 2B. PLANVIEW FOR EAST SIDE OF JACKSON LAKES PROJECT

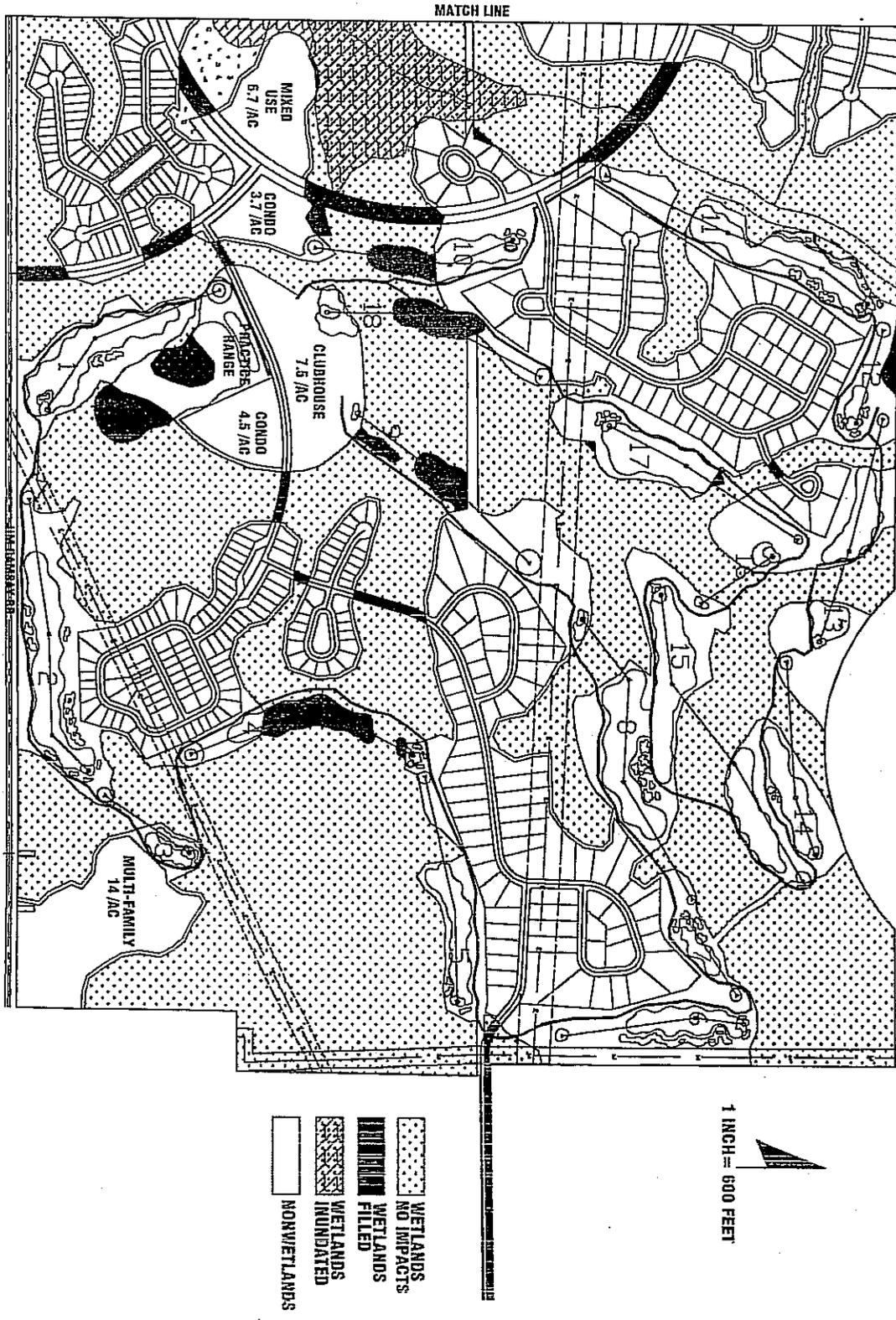


FIGURE 3. JACKSON LAKES MIXED-USE DEVELOPMENT STREET CROSS-SECTIONS

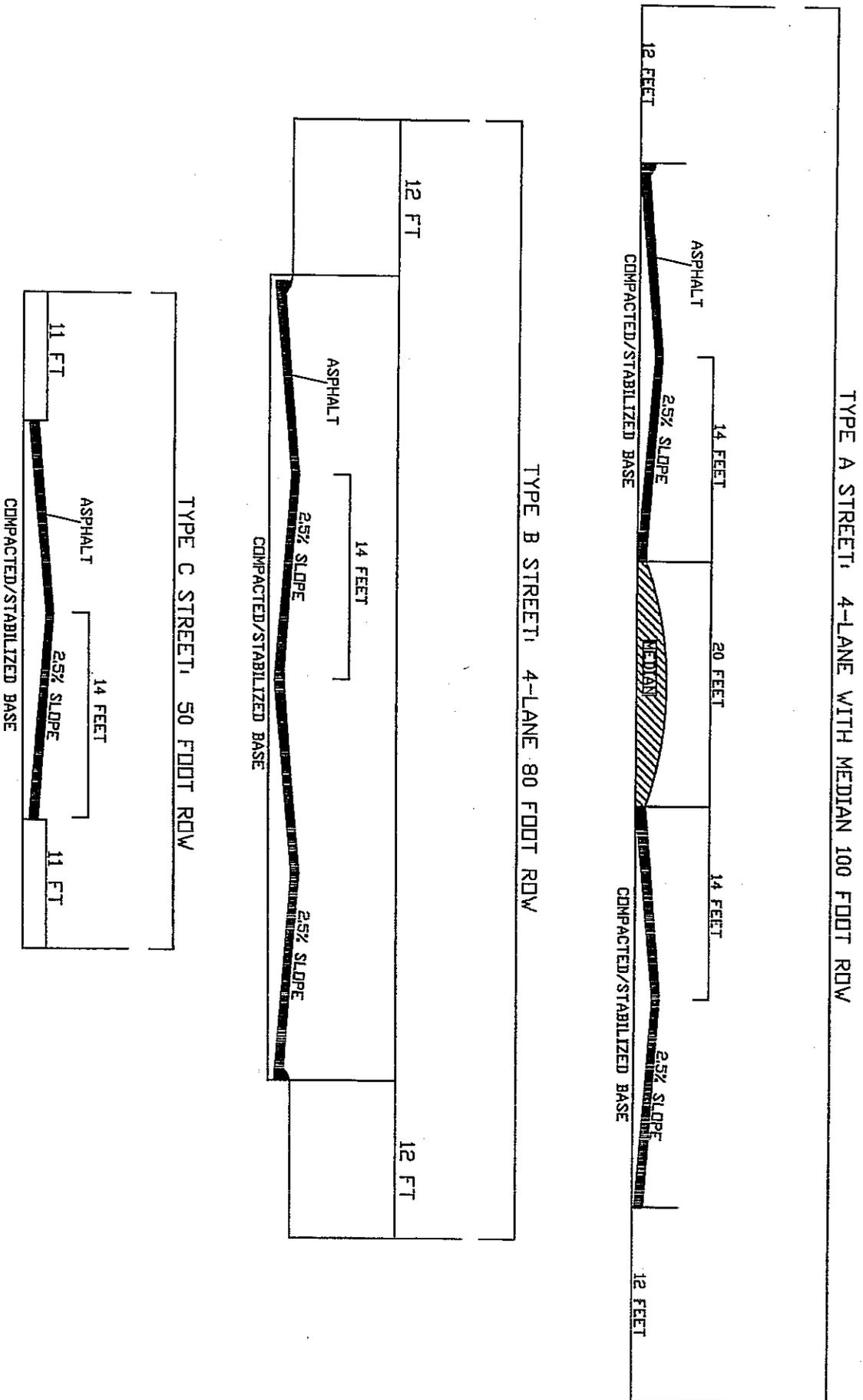


FIGURE 4. LOT LAYOUT FOR TYPICAL INDIVIDUAL LOT AND PATIO HOME LOT

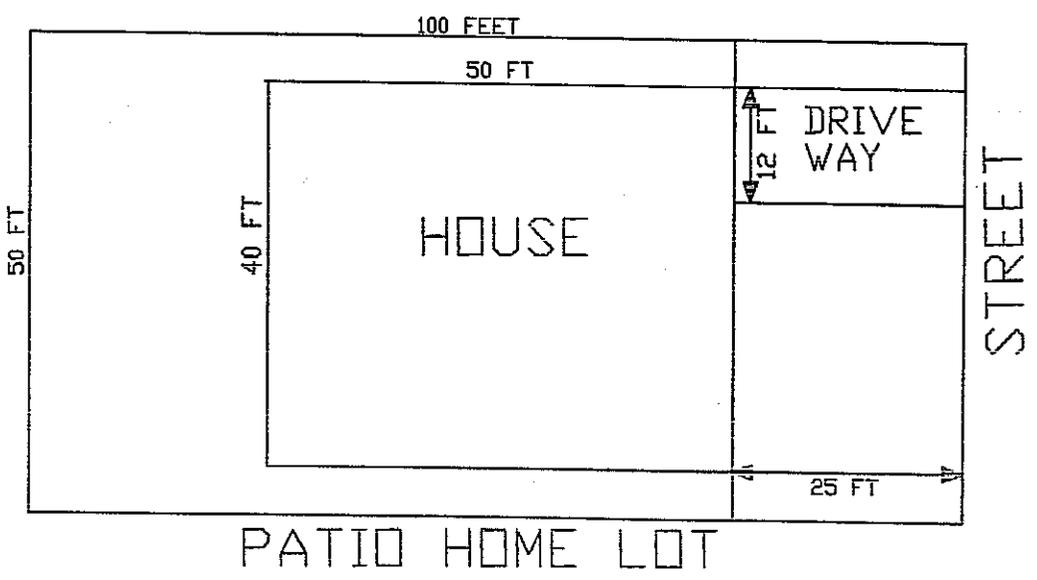
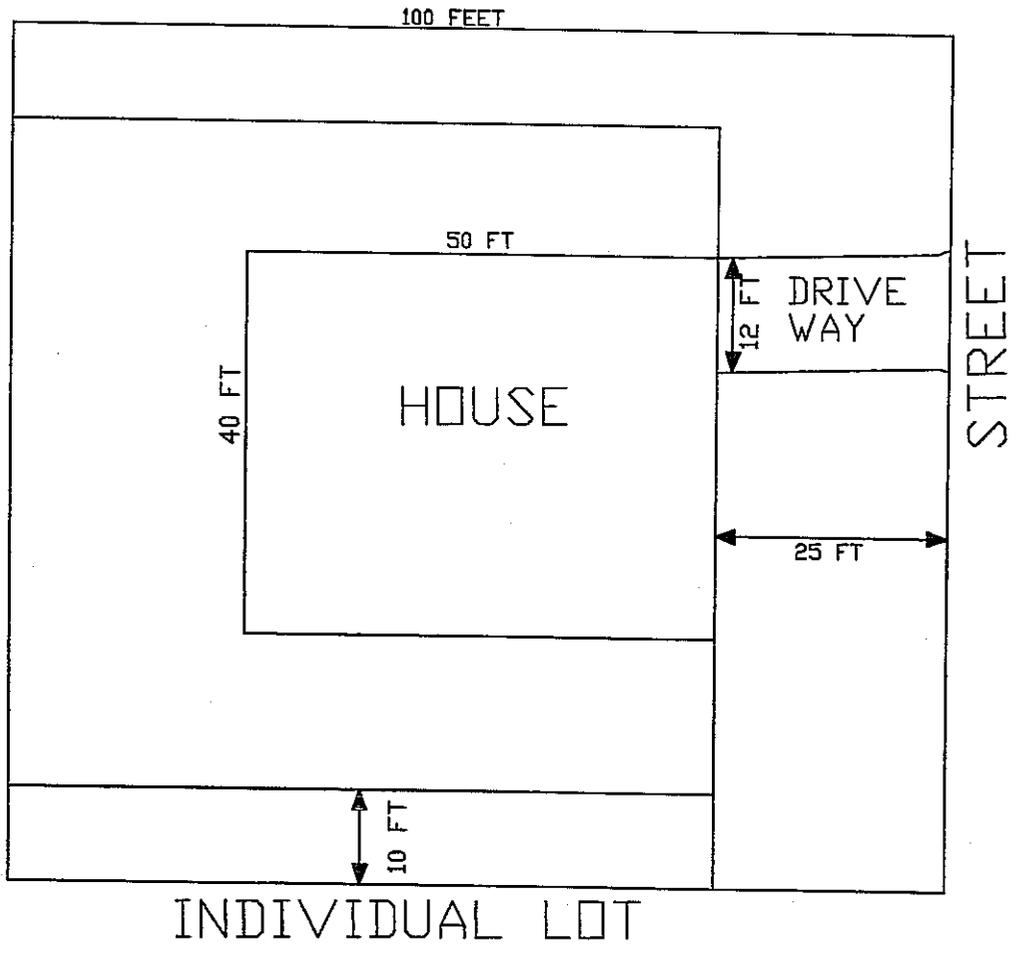
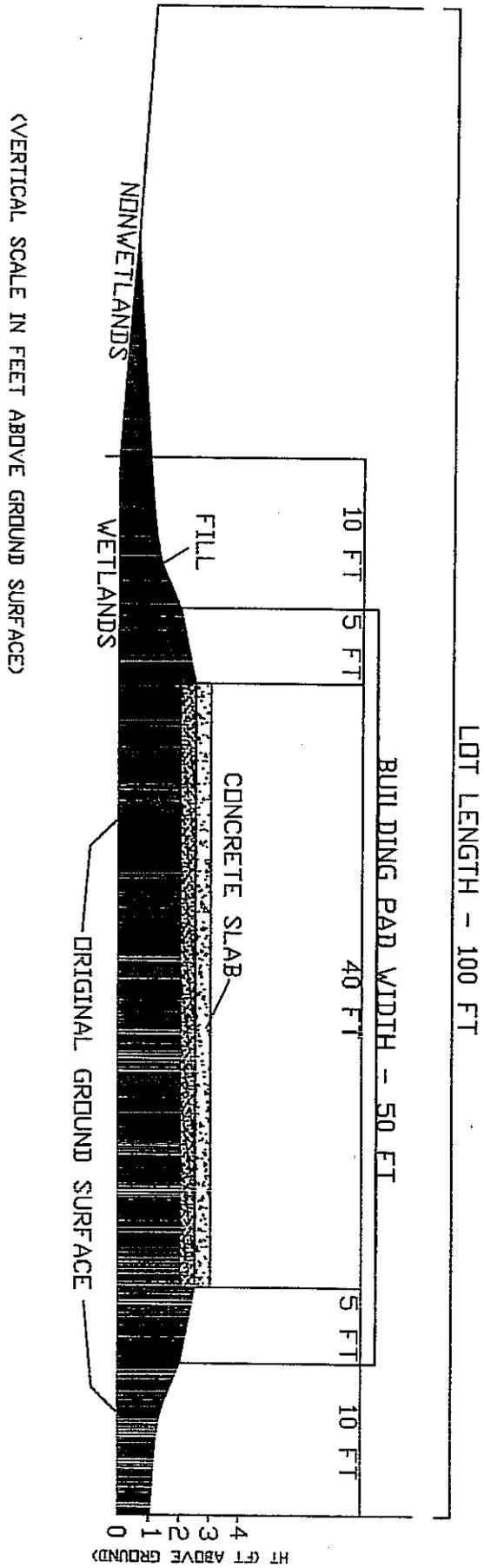
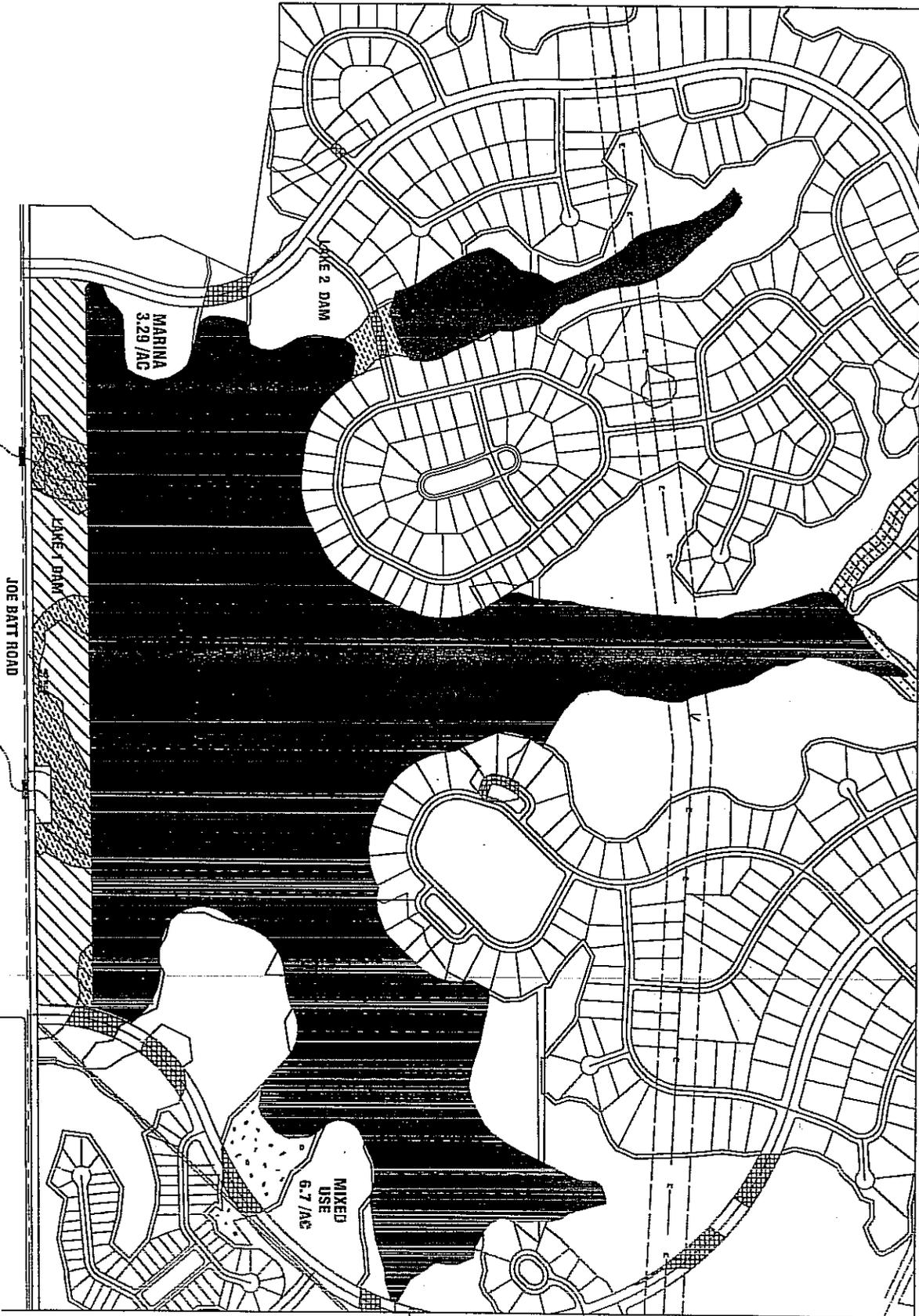


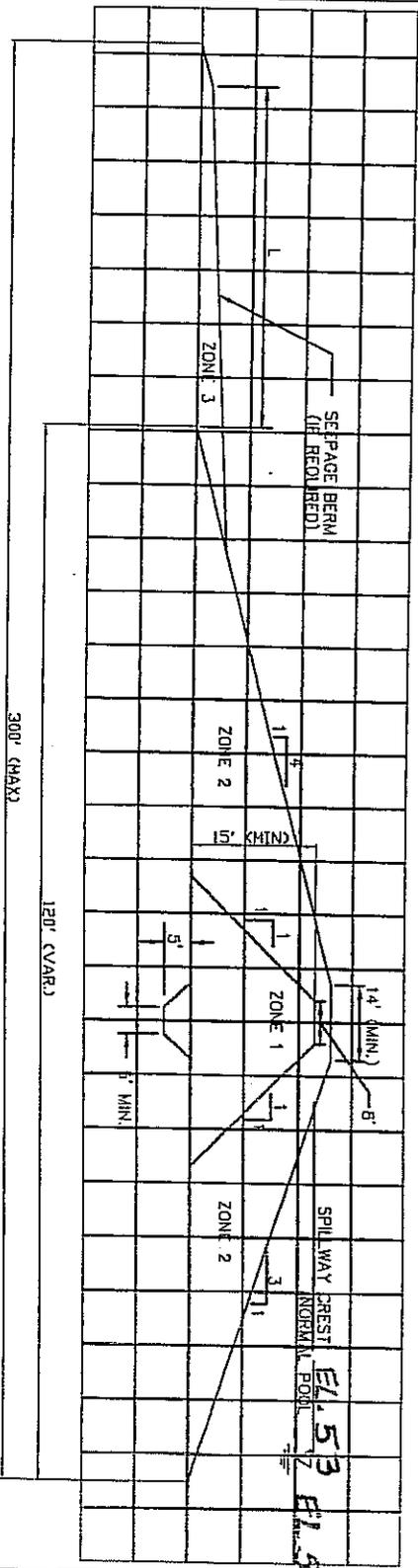
FIGURE 5. CROSS-SECTION OF TYPICAL LOT IN WETLANDS  
JACKSON LAKES DEVELOPMENT



(VERTICAL SCALE IN FEET ABOVE GROUND SURFACE)

**FIGURE 6. FOOTPRINT OF LAKES (192.69 ACRES).**





EMBANKMENT ZONE NO.	TYPICAL SOIL TYPE
1	USE LOWEST PERMEABILITY MATERIAL AVAILABLE FROM SITE BORROW AREAS
2	USE HIGHEST PERMEABILITY MATERIAL AVAILABLE FROM SITE BORROW AREAS
3	USE RANDOM MATERIAL TYPES FOR SEEPAGE BERM

Figure 7. Cross Section of Dam

**ATTACHMENT A**

**PROJECT DESCRIPTION FOR  
JACKSON LAKES MIXED-USE PROJECT IN THE  
VANCLEAVE AREA OF JACKSON COUNTY), MISSISSIPPI**

The Jackson Lakes mixed-use development is proposed to be constructed on 1,537.03 acres located adjacent to the north side of Joe Batt Road (also known as Jim Ramsey Road) approximately seven miles west of Vancleave in Jackson County, Mississippi (Figure 1). The property, located in Sections 4, 5, and 6 of Township 6 South, Range 8 West, and Section 31, Township 5 South, Range 8 West, is bounded on the south by Joe Batt Road, and on the west, north and east by undeveloped land. There are several places along Joe Batt Road where the property can be accessed. The total area of wetlands on the property is 647.22 acres, of which 163.10 acres are proposed to be impacted. Only 41.30 acres (6.4%) of the wetlands are proposed to be filled.

**Project Design**

A plan view showing the spatial arrangement of streets, residential areas, two lakes and a marina, an eighteen hole, signature golf course (including 7.5 acres for a clubhouse and a golf cart path), and 30 acres devoted to mixed-use commercial businesses, churches, schools, etc. is provided in Figure 2, 2A, and 2B. Figure 2 illustrates the overall development, while Figures 2A and 2B provide a larger scale illustration of the western and eastern portions of the overall project, respectively.

Streets and Utilities. Three types of streets will be constructed on the development:

(1) The main street, which forms a loop more than 3 miles in length, will enter the development from Joe Batt Road on the east end of the dam and loop to the north, west, and then south on the west side of the project, rejoining Joe Batt Road on the west end of the dam. Thus, there will be two places where this street accesses Joe Batt Road. This will be a 4-lane road with a median. The right-of-way will be 100 feet wide, and most of the utilities will be placed within the right-of-way. A typical cross-section of the street through a wetland is provided as Figure 3. As shown on Figure 3, the crossing will consist of an earthen embankment (height will vary) to the stream channel, and box culverts of sufficient size to accommodate flows will be emplaced in the stream channel. The culvert size for each crossing will be determined by the project engineer.

(2) Other main roads will be 80 feet wide. These will be four-lane streets, but without a central median. Utilities will be placed within the right-of-way of the various streets. A typical cross-section of a wetland crossing is provided in Figure 3. As shown on Figure 3, the crossing will consist of an earthen embankment (height will vary) to the

stream channel, and box culverts of sufficient size to accommodate flows will be emplaced in the stream channel. The culvert size for each crossing will be determined by the project engineer. There will be three places where the development can be accessed using this type of street. One access is off Joe Batt Road and is located west of Hole 1 of the golf course (Figure 2). Another street will access the property from John Smith Road on the east side of the property. A third entrance into the development (not shown on Figure 2) will be constructed in the area where multi-family housing will be constructed

(3) Interior streets within the pods of the subdivision will be 50 feet wide and have two lanes. As for the other street types, utilities will be placed within the street right-of-way. As shown on Figure 3, the crossing will consist of an earthen embankment (height will vary) to the stream channel, and box culverts of sufficient size to accommodate flows will be emplaced in the stream channel. The culvert size for each crossing will be determined by the project engineer. Some road crossings will involve wetlands for which no channel exists. In these cases, culverts will be emplaced at the lowest elevation to allow water flows during and following significant rainfall events.

Residential Project Components. Areas devoted to residential use will include an estimated 1028 residential lots, 8.2 acres for condominiums, and a 14-acre area for multi-family housing (Figure 2). Homes on individual lots will include both typical subdivision lots and patio homes. Detailed plans for the condominiums and multi-family housing have not been developed yet. The number of residential lots may be more or less, depending on a variety of factors, including the amount of land needed for providing storm water detention areas. None of the area devoted to condominiums or multi-family housing are located in wetlands.

Individual lots for will range in size from typically about 90 feet X 100 feet (9,000 square feet) to a few odd-shaped lots of approximately 0.5 acre (Figure 2). Although the lot size in the areas devoted to patio homes varies from one lot to another, the typical lot will be 50 feet wide and 100 feet long. A few patio lots will be only 46 feet wide. Figure 4 shows a lot plan view for a typical subdivision lot and a lot for a patio home. Figure 5 shows a cross-section view of a typical subdivision lot within the wetlands area. The amount of required fill for a lot will vary from 1 foot to 4 feet, but in all cases, the building pad will be at an elevation that conforms to local, state, and federal requirements.

Specific plans have not been developed for the areas dedicated to condominiums or multi-family housing, but the design and construction of these types of housing will conform to local, regional, and federal design standards and requirements. Construction in the areas devoted to these units will not involve discharges of fill material into wetlands because none of the areas selected for these types of residential units contain wetlands other than access streets which will be built as part of the system of streets. The request for authorization to construct the road crossings to these areas is included in this permit application.

Lakes. Two lakes (Figure 6) will be constructed on the project area. One will be the large (181.5 acres) lake located at the main entrances to the property, while the other lake will be a small fishing lake located on the western side of the property (Figure 2). The larger lake will be for multi-purpose use, including boating, skiing, sailing, and fishing. The smaller lake, the use of which will be limited to fishing (only electric trolling motors), will consist of 11.19 acres of surface area. Although the specific engineering designs of the two dams have not been completed, all design specifications will conform to state and local regulations pertaining to dam construction and safety.

Dams. The dam for the larger lake will occupy an area 3800 feet in length and 300 feet in width. It will be an earthen dam, with a concrete control structure and spillway. Much of the fill material to construct the dam will be excavated from the nonwetland areas that are within the lake footprint. The control structure will be designed to maintain base flow in the streams downstream from the dam by allowing flows to be maintained from the lake to downstream reaches. The spillway, the top of which represents normal pool stage, will allow an avenue for excess water to be removed quickly following rainfall events. Rate of flow out of the lakes will be critical due to the fact that wetlands upstream from the lakes must be protected from being negatively impacted by prolonged inundation.

The dam for the smaller lake will be more than 250 feet long and 240 feet wide. It will be designed in a manner similar to the larger lake, but of course at a smaller level. The dam will be sufficiently wide to allow a road having a 50-foot street to be constructed on its crest.

Golf Course. The 18-hole golf course will be constructed on the eastern third of the property in an area that has a large percentage of wetlands. However, it has been designed to minimize wetland impacts. The course is designed to play across many of the wetlands to nonwetlands where the holes and tees are located, while leaving space for numerous residential lots. None of the tees or golf holes will be constructed in wetlands. Except in three or four instances, play is designed to shoot over the wetlands. Most of the trees will be removed by hand in areas within the fairways where shots must be played over wetlands. Periodic mowing with bushhogs will keep the woody plants under control, while allowing the herbaceous species associated with pine savanna wetlands to flourish.

A golf cart path will be constructed across the full length of the golf course. The golf cart path through wetlands will involve a 12-foot wide right-of-way, with an 8-foot wide raised earthen embankment. Bridges will be constructed in areas where the golf cart path crosses channels.

Details related to storm water management cannot be provided at this stage of planning the development. However, there are a number of nonwetland areas that may provide potential areas for detention. In some residential areas, some lots might have to

be sacrificed to provide sufficient storm water detention. The applicant understands the need to handle storm water runoff appropriately, and it is willing to take whatever measures are needed to conform to local, state, and federal rules and regulations related to water quality.

Regarding water and waste-water treatment, the applicant is working with local officials to provide adequate sources of potable water and wastewater treatment. It is anticipated that wastewater treatment may be provided as a result of expansion of the West Jackson County Wastewater Treatment Authority by the time the need for such services arises.

### **Wetland Impacts**

The spatial distribution of wetlands impacts is shown on Figures 2, 2A, and 2B. A total of 163.10 acres of wetlands will be impacted by the project. Of this total, 41.30 acres will be filled, including fill for construction of streets, lots, dams, golf carts, golf course, and a few other areas in areas of unspecified development. The major impacts to wetlands will involve land-clearing and inundation of 121.80 acres of wetlands for the two lakes.

A total of 42.67 acres of the 113.38 acres of forested drains on the property will be impacted by the project. Except for 2.69 acres of impacts to forested drains associated with dam construction, all the remaining 39.98 acres of impacts to these wetlands will be as the result of mechanically clearing the wetlands and inundating them. A total of 533.84 acres of pine savanna wetlands occur on the property, of which 120.43 acres are proposed to be either filled or inundated by water of the lakes. The remaining 413.41 acres of pine savannah wetlands are proposed to not be impacted by the project (see Figure 2).

### **Best Management Practices**

Best management practices will be implemented during and following all construction activities. Silt fences and other appropriate materials will be installed to block erosion and sedimentation of contiguous wetlands offsite. Disturbed surfaces will be planted to grass mixtures, except in areas to be sodded, which will be undertaken as soon as possible after preparation of the project area.

## **ATTACHMENT C**

### **ENVIRONMENTAL ASSESSMENT AND WETLAND MITIGATION PROPOSAL FOR JACKSON LAKES MIXED-USE DEVELOPMENT IN THE VANCLEAVE AREA (JACKSON COUNTY), MISSISSIPPI**

This proposed mixed-use development will be constructed on 1537-acre tract located adjacent to the north side of Joe Batt Road in the western part of Jackson County, Mississippi. More specifically, it is located about 7 miles west of Vancleave in Jackson County, Mississippi (Figure 1) in Sections 4, 5, and 6 of Township 6 South, Range 8 West, and Section 31, Township 5 South, Range 8 West.

#### **Scope of Project**

This development will focus on constructing a large number of needed housing units in areas capable of providing a variety of recreational opportunities for the residents in the Jackson County area. The project (Attachment A, Figures 2, 2A, and 2B) will feature more than 1000 individual lots for conventional houses and patio homes, in addition to a large number of housing units consisting of condominiums and multi-family housing, all centered around a 181-acre lake (including a marina) for general boating, a smaller 11-acre fishing lake, and an 18-hole golf course. Additionally, 25 acres will be available for other uses (i. e., shops, offices, food stores, churches, schools, etc.). To construct the development, there will be a need to construct several miles of streets (including at least 5 connections to existing roads, install utilities, provide storm water treatment capabilities, and construct the golf course. All construction will conform to local, state, and federal rules and regulations. Much of the fill material used in the construction will be taken from the project area, especially material used to construct the dams of the lakes and the golf course. For example, approximately 60 acres of nonwetlands occur within the proposed footprint of the lake. These areas are expected to be excavated to provide construction fill material.

A total of 41.30 acres of wetlands are proposed to be filled during construction of the project. The discharge of fill material into these wetlands will be needed to construct the lake dams, road beds through wetland areas, construction of the golf course and golf cart path, and a limited amount (approximately 10 lots) of squaring off lots to provide sufficient space to build. In addition to the wetlands proposed to be filled, a total of 121.80 acres of wetlands will be impacted by lake construction. Wetlands in these areas will be mechanically cleared of vegetation, and will be covered by lake waters. The project has been designed to provide an economically feasible project using all nonwetlands possible, while avoiding the maximum amount of wetlands. Of a total of 647.22 acres of wetlands within the project area, a total of 484.24 acres will be avoided.

(Figure 2). The scope of the project is more fully described in Attachment A

### Current Environmental Status

The project is situated in the hills common in the northern portion of Jackson County. Elevations of the site range from less than 44 feet MSL in the southwestern portion of the property where the streams exit the area to slightly more than 90 feet MSL on the crests of some of the ridges.

The historic vegetation of the site was pine savanna, both wetlands and nonwetlands, except in the areas along the streams, which were vegetated by coastal forests. Because much of the site has been used for many years for silvicultural purposes, most of the nonwetlands and some of the wetlands qualifying as pine savanna wetlands have lost the structure typical of pine savanna. The structural degradation occurred due to the elimination of fire as a component of the environment, which in turn has allowed dense tree and sapling/shrub canopies to develop that severely limits light to the herbaceous stratum.

At the present time, most of the pine savanna wetlands of the property are severely stressed by limited light availability. The tree stratum consists of mature slash pine (*Pinus elliottii*), loblolly pine (*Pinus taeda*), scattered bald cypress (*Taxodium distichum*)(some areas), and swamp black gum (*Nyssa sylvatica* var. *biloba*), while the sapling-shrub stratum in many places is very dense and dominated by inkberry (*Ilex glabra*), big-leaf gallberry (*Ilex coriacea*), ti-ti (*Cyrilla racemiflora*), and swamp black gum. Together, the tree and sapling-shrub strata seriously limit sunlight available to the herbaceous stratum, which includes various species associated with pine savanna wetlands including typified by yellow pitcher plant (*Sarracenia flava*), hatpins (*Eriocaulon decangulare*), Carolina redroot (*Lachnanthes caroliniana*), and other species usually associated with pine savanna wetlands. A more expansive listing of these species may be found in data sheets provided in Part I, Wetlands Delineation Report.

The vegetation of the coastal forested drains is characterized by a very dense tree canopy, a sparse sapling/shrub stratum, a well-developed woody vine stratum, and a sparse patchy herbaceous stratum usually dominated by species of ferns. These coastal forested drains are typified in the tree stratum by some combination of bald cypress, slash and/or loblolly pine, swamp black gum, Drummond red maple (*Acer drummondii*), and sweetbay (*Magnolia virginiana*). The sapling/shrub stratum includes saplings of the above species, ti-ti, and big-leaf gallberry. The woody vine stratum is dominated by laurel-leaved greenbrier (*Smilax laurifolia*). Dominant species of the herbaceous stratum include some combination of royal fern (*Osmunda regalis*), cinnamon fern (*Osmunda cinnamomea*), and lizard's tail (*Saururus cernuus*), in addition to seedlings of the above-listed woody plants.

Soils of the property range from Poarch, Benndale, Vancleave, Malbis, and Escambia on nonwetland areas to Atmore, Hyde, Smithton, and Johnston/Croatan Association in the wetlands. The soils in the forested drains are mucky to organic.

The hydrologic regime of the wetlands ranges from seasonally saturated in the pine savanna areas to seasonally inundated for brief to long duration in the forested drains. The nonwetland areas lack evidence of wetlands hydrology.

A detailed wetland quality assessment has not been conducted, but my best professional opinion is that the pine savanna wetlands should be classified as **moderate quality**, and the wetlands of the coastal forested drains also are of **moderate quality** based on their position in the landscape and relatively narrow configuration.

### **Wetland Impacts of Proposed Project**

The proposed project will result in the discharge of fill material into 41.30 acres of acres of the total of 647.22 acres of pine savanna and coastal forested drain wetlands within the project area (Figure 2). An additional 121.80 of wetlands will be impacted by land-clearing and inundation within the footprint of the lakes. Therefore, the total wetland impacts of the project will be 163.10 acres of moderate quality wetlands.

Wetlands impacts will involve the discharge of 1 foot to 4 feet of fill material, resulting in the elimination of all wetlands characteristics in all areas so designated. Table 1 provides information pertaining to the total impacts of various components of the project on wetlands

### **Proposed Mitigation for Wetland Impacts**

The proposed mitigation for wetland impacts associated with the proposed project in Gulfport (Harrison County), Mississippi is to provide avoid wetland impacts to the greatest possible degree, minimize wetland impacts in cases where possible, and provide compensatory mitigation for unavoidable wetland impacts. The compensatory mitigation will consist of preserving all remaining un-impacted wetlands on the property, and buying wetland credits at a Corps of Engineers-approved wetlands mitigation bank.

Avoidance of Wetland Impacts. The plan view of the project shows that impacts to wetlands were avoided in large contiguous areas throughout the property. Virtually all of the nonwetland areas shown on Figures 2, 2A, and 2B have been, or will be soon (due to planning for storm water management), incorporated into the project footprint. An earlier configuration of the project area included a significantly larger area of proposed wetland impacts (258.60 acres), in which nearly 40% of wetlands on the property were proposed to be impacted. Moreover, only 41.30 acres of the area would be converted to

nonwetlands. More than 484 acres of the wetlands of the property will still qualify as wetlands and will still perform the functions of wetlands. The areas of wetlands within the project footprint will still have hydric soils and a wet hydrologic regime. If the dam were to be removed, the area within the project footprint would become re-vegetated by species common to the coastal forested drains. However, not all wetlands of the project can be avoided. The project plan view shown in Figure 2 requires impacts to 163.1 acres of wetlands, which constitutes approximately 25% of the wetlands of the property.

Minimization of Wetland Impacts. Minimization of wetland impacts will be carried out by using best management practices. Moreover, sod or over-seeding will be carried out in all areas where bare ground exists in order to minimize sediment loading of surface runoff. Silt fences and hay bales will be used to prevent sedimentation. Insofar as possible, swales will be incorporated as runoff features.

Proposed Compensatory Wetlands Mitigation. The total area of wetlands to be impacted by the project is 163.1 acres of pine savanna and coastal forested drains (Figure 2 in Attachment A). Based on my best professional judgment, all wetlands proposed to be impacted by this project have **moderate** wetland value, due to the effects of being long overgrown. In addition, fires will continue to be excluded from the degraded pine savanna wetlands, thus preventing redevelopment of high quality pine savanna wetlands. The total number of required wetland credits to offset impacts to 163.1 acres of moderate quality wetlands at a ratio of 3:1 is 489.3 credits.

The applicant proposes to mitigate for the wetland impacts resulting from the project by: (1) preserving all non-impacted wetlands of the property, which will provide wetland mitigation credits at a ratio of 10 wetland acres preserved : 1 acre of wetlands impacted; and (2) purchase the remaining required credits from a wetlands mitigation bank approved by the Corps of Engineers.

Preservation Credits. Based on Figures 2, 2A, and 2B, a total of 484.12 acres of wetlands on the property will not be impacted by the project. At a ratio of 10:1, preservation of all remaining wetlands on the property will result in 48.4 credits. Therefore, the remaining number of wetland mitigation credits to be purchased at a wetlands mitigation bank is 163.1 acres of impacts minus 48.4 preservation credits leaves a total balance of 114.7 acres of wetland impacts not accounted for by the preservation credits.

Purchase of Credits. The applicant will purchase sufficient wetland mitigation credits from a Corps-approved wetlands mitigation bank to offset impacts to 114.7 acres of impacts to moderate quality wetlands. At a ratio of 3:1, the number of required credits is  $3 \times 114.7 = 344.1$  wetland mitigation credits.

Other Avenues for Mitigation. The applicant provides the above as one avenue for mitigating for the wetland impacts. It reserves the right to explore other possible opportunities for offsetting or partially offsetting the required wetlands mitigation.

**D. R. SANDERS AND ASSOCIATES, INC.**

4017 Lake Wilma Road, Moss Point, MS 39562

TABLE 1. WETLAND IMPACTS RESULTING FROM VARIOUS PROJECT COMPONENTS

Project Component	Wetland Impacts (Acres)	Impact Type*
Road Crossings	11.94	Fill
Lakes (Total)	121.80	Inundation.
Lakes (Coastal Forests)	39.98	Inundation.
Development (lots)	7.66	Fill
Dams (Total)	10.13	Fill
Dam (Coastal Forests)	2.69	Fill
Golf Course	10.04	Fill
Golf Cart Path	1.44	Fill

\* In all these instances, mechanized land-clearing will precede the indicated type of fill.