FINAL
WILDLIFE, HABITAT AND LISTED SPECIES TECHNICAL MEMORANDUM

STATE ROAD 52 PD&E STUDY

FROM I-75 (SR 93) to E. of EMMAUS CEMETERY ROAD

Pasco Work Order Number: C-3623.00
WPI Segment Number: 408827 1

Prepared for:

Pasco County Engineering Services Department

May 2005

In cooperation with the Florida Department of Transportation

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Prepared for:

Pasco County Engineering Services Department

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May 2005

TABLE OF CONTENTS

FIGURES

1.0 Introduction

This technical memorandum serves as documentation of the wildlife, habitat and listed species considerations for the referenced project using criteria contained in Part 2, Chapter 27 of the Florida Department of Transportation's Project Development & Environment (PD&E) Manual. This analysis of occurrence, quality, impacts and mitigation is provided following database research, field evaluations and agency coordination.

The proposed project includes improvements on State Road 52 (SR 52) from east of the Interstate-75 ramps to east of Emmaus Cemetery Road, a distance of approximately 1.9 miles see figure 1. The project will result in the widening of this segment of SR 52 from a 2-lane roadway to a 6-lane.

Much of the adjacent property within the project corridor is undeveloped land with some pasture and silviculture activities. Five parcels front the south side of SR 52. From west to east along the corridor, the land uses for these parcels include vacant-unimproved pastureland, a welding business, and timber production. There are 21 parcels fronting the north side of SR 52. From west to east, land uses include a retail truck stop, vacant-unimproved industrially zoned property, a light manufacturing business, mobile homes, a mobile home park, two churches, a residence, a commercial/office business and a commercial business. As addressed herein, isolated and contiguous wetlands occur within and adjacent to the right-of-way, including a riparian system crossed known as Bayou Branch.

2.0 Existing Conditions

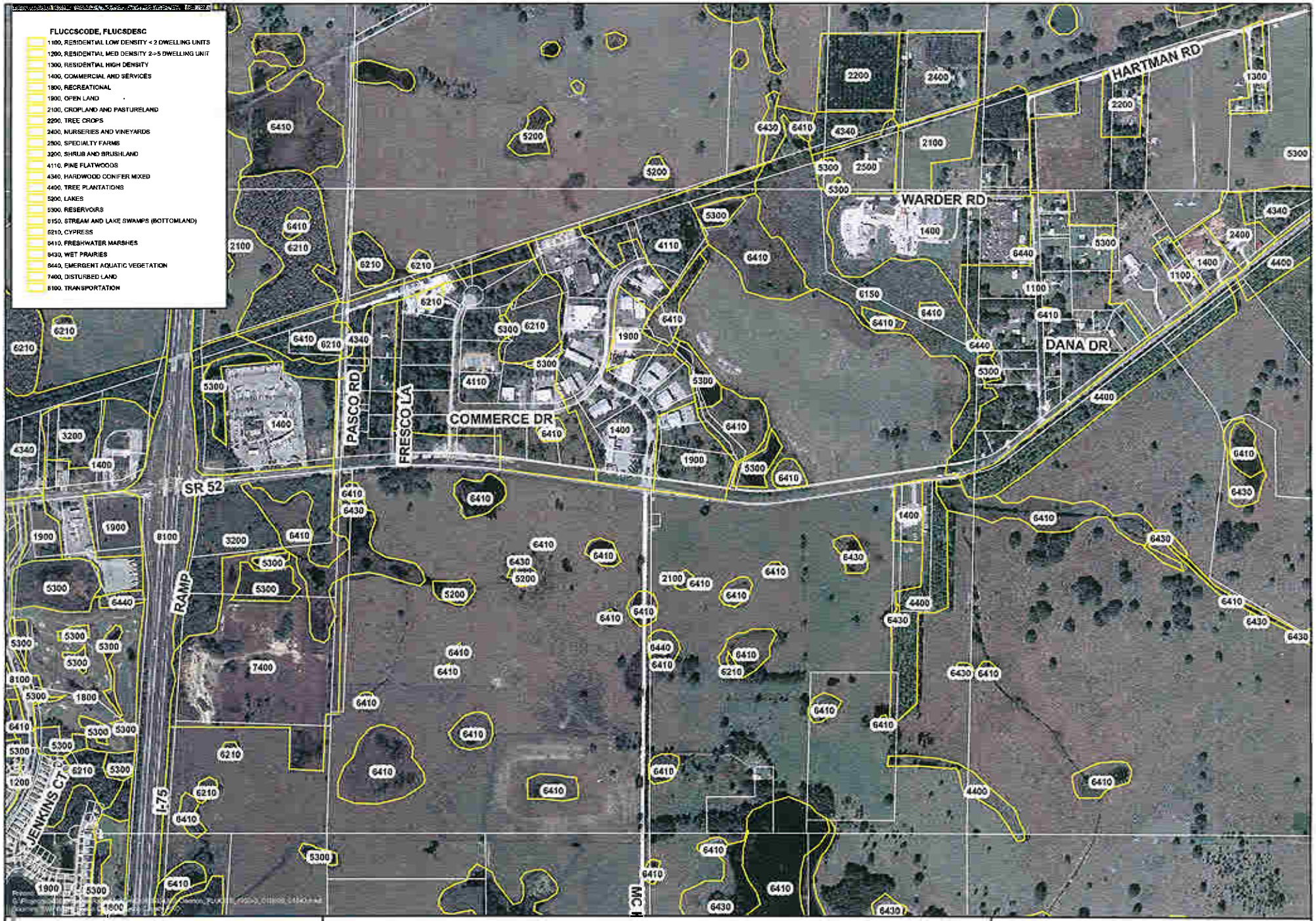
Companion documents for the SR 52 Widening SEIR contain additional information on existing project area conditions and the nature and design of the project. Reviewers of this technical memorandum are referred to the Preliminary Engineering Report (PER) and related documents for such information, including the Wetlands Evaluation Technical Memorandum.

The existing land cover and uses along this segment of SR 52 are predominantly rural in nature and include improved pastureland [Florida Land Use Cover and Forms Classification System (FLUCFCS) code 211], planted pines (441), shrub and brushland (320), and freshwater marshes (641), see figure 2. In the western portion of the project, on the north side of the roadway, there is also a commercial truck stop with retail services and a recreational vehicle commercial facility (141), along with some open land (190). Near the project's eastern terminus on the north, there is some low density residential (110) and a small church (172). At a bend in the road near the eastern terminus, a channelized watercourse known as Bayou Branch is crossed, and this cover type is classified as a stream forest bottomland (615). Except for the narrow floodplain associated with this feature and other wetlands, there are essentially no natural system habitats within or immediately adjacent to the existing or proposed SR 52 right-of-way (R/W).

STATE ROAD 52 PD&E STUDY FROM I-75 (SR 93)
TO EAST OF EMMAUS CEMETERY ROAD
PASCO WORK ORDER NO. C3623.00
WPI SEGMENT NO. 408827 1

NOT TO SCALE

FIGURE 1
PROJECT LOCATION MAP



STATE ROAD 52 PD&E STUDY
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WPI SEGMENT NO. 408827 1

0 500 1,000 2,000 3,000 Feet

1 inch equals 1,000 feet

FIGURE 2
EXISTING LAND USE
SWFWMD LAND USE/COVER 1999

3.0 Natural Features

Because the majority of the proposed project will occur within the cleared and maintained R/W, the natural system impacts will be relatively minor. The only natural habitat temporarily or permanently affected will be non-forested wetlands within or adjacent to the existing R/W, and overall there will be no significant impact, as detailed in the Wetlands Evaluation Technical Memorandum.

Wildlife, habitat and listed species effects also will be minimal. Relative to the existing two-lane state highway condition, the addition of lanes will only incrementally increase impacts. The typical effects of a roadway's barrier to wildlife movement already exist, but the incidence of road kill likely will be increased by the greater width of pavement to cross. This will be somewhat mitigated by the fact that the entire project area is on the verge of experiencing a rapid transition from rural to sub-urban, similar to what is occurring on SR 54 and SR 56 immediately to the south. Most of the project also is within a mile or so of an Interstate-75 interchange that will also experience increased development. Most road kill occurrences today involve small mammals and reptiles, and that pattern likely will continue.

The soils for the project area are typical for the region and are predominantly upland (non-hydric) in association with the existing and proposed R/W. There are no prime agricultural soils mapped for the areas by the Natural Resources Conservation Service (NRCS; fka SCS). Hydric soils generally associated with marsh wetlands are Sellers mucky loamy fine sand and Zephyr muck. The upland soils include Pomona fine sand, Sparr fine sand, Narcoossee fine sand, Kendrick fine sand, Lochlossa fine sand and Millhopper fine sand. A soils map is presented in the project's PER.

4.0 Proposed Alternatives

The need for widening this segment of SR 52 to enhance capacity and safety is recognized and supported by Pasco County and District Seven of the Florida Department of Transportation. There is an existing alignment for the present two-lane facility that has been cleared and is maintained. Near the eastern terminus is an existing culverted crossing of Bayou Branch and its floodplain, and near the western terminus there is an existing Interstate-75 interchange. The project segment in between is nearly straight and the only logical corridor for the roadway. To conform to design and safety standards, and to minimize wetland involvement, the widening calls for additional R/W acquisition only on the south. Given these circumstances, the project design employs wetland avoidance and minimization to the extent practicable and there are no viable alternatives.

5.0 Project Impacts Assessment

The habitat types occurring within and adjacent to the lineal project corridor were briefly addressed in the Existing Conditions section above. For wildlife and listed species utilization, the essential elements of cover, diversity, connectivity and natural/native character are largely missing from the local landscape. The entire alignment envelope, including proposed right-of-way acquisition parallel on the south, traverses a man-altered environment. The existing SR 52 right-of-way clear zone has no meaningful habitat characteristics. Most of the south side is treeless improved pasture, with some planted pines and a few wetland sites. To the north, the cover and land uses include pasture, open/vacant land, and commercial and residential uses. Only the narrow Bayou Branch bottomland crossing on the north side near the eastern terminus has a relatively intact stand of native tree canopy.

For the past half-century, the project area and surrounding region have been in agricultural use, primarily improved cattle pasture. The upland forest stands have been cleared, the wetlands frequently ditched and interconnected, and the natural drainageways channelized. The present landscape soon will be even less hospitable to wildlife as the sub-urbanization of Tampa rapidly moves north. Existing and proposed Developments of Regional Impact already are moving forward in the immediate project area.

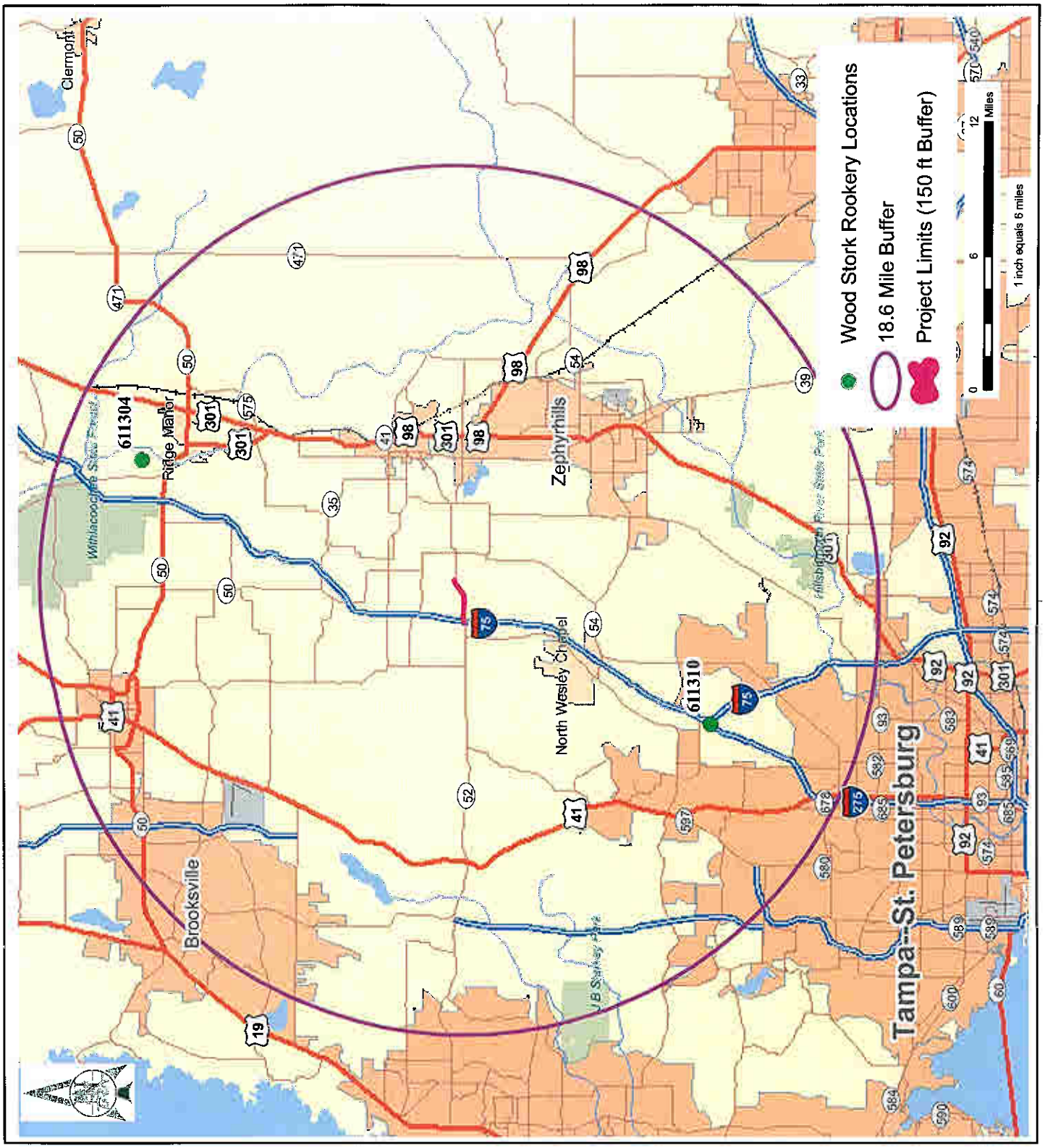
Literature review and agency coordination were used to obtain existing information concerning lised species within the study area. This includes a review of the U.S. Fish and Wildlife Service (FWS) lists under 50 CFR 17.11-12 and the Florida Fish and Wildlife Conservation Commission's (FWC) *Florida's Endangered Species, Threatened Species and Species of Special Concern Official Lists (August 2997), the Florida Atlas of Breeding Sites for Herons and Their Allies, Update 1986-89* [Florida Game and Fresh Water Fish Commission (FGFWFC), 1991], and the FWC's Eagle Nest Locator web site. The region of the approximately 1.9-mile road widening is very familiar to the Senior Ecologists with Biological Research Associates (BRA) who periodically conducted field assessments for the project from August 2003 through December 2004. The occurrence of native and naturalized flora and fauna is known and understood in terms of the habitat and wildlife interrelationships. For the most part, the plant associations have been modified to be roadside, ruderal, pastureland and waste place assemblages, and the wildlife community has been reduced to common species adapted to open spaces, diminished natural habitats and cultural activities.

Due to the nature of this roadway project area, there are no unfragmented or self-sustaining habitat types. In turn, such conditions dictate the character of the wildlife assemblage. Certain birds, reptiles, amphibians and small mammals are known to occur and have been observed, not infrequently as road kills. There is nothing unique about the local wildlife, and few species are commonly observed. Vertebrate animals within the right-of-way are strictly transients.

The most observed bird tends to be the Cattle Egret (*Bubulcus ibis*). Others occasionally noted were the Northern Mockingbird (*Mimus polyglottos*), Common Crow (*Corvus brachyrhynchos)*, Palm Warbler (*Dendroica palmarum)* and over flying vultures. Great Egrets *(Ardea alba)* and other wading birds (addressed below) were periodically encountered in adjacent wetlands. Mammals known to occur locally include armadillo (*Dasypus novemcinctus*), eastern cottontail (*Syvilagus floridanus*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana)* and various rodents. All of these may be regularly encountered as road kills. There is sometimes sign from southeastern pocket gophers (*Geomys pinetis*) in adjacent pastureland. The common black racer snake (*Coluber constrictor priapus)* has been noticed as a road kill.

A summary of known and potentially occurring listed species within the study area is presented below. None of these species include the existing road right-of-way in their preferred or typical habitat. The only listed species observed were wetland-dependent birds. As indicated in the table, four of these are Species of Special Concern wading birds that forage opportunistically in local and regional wetlands. The same is true for the Wood Stork (*Mycteria americana*), which is classified as Endangered. As a result of small breeding colonies in the nearby region, this species is regularly observed foraging in local wetlands, including some adjacent to SR 52. Florida Sandhill Cranes (*Grus canadensis pratensis;* Threatened-state) commonly forage in pasturelands and wetland edges, including in the project area, and sometimes forage within a road right-of-way, especially in Pasco County. None of the habitat within the project right-of-way, or proposed acquisition area, is crucial to the life cycle requirements of this species.

As indicated above, the SR 52 widening project segment is located within 18.6 miles of the two recently active rookeries for Wood Storks (*Mycteria americana*), considered an endangered species by both the state (Florida Fish and Wildlife Conservation Commission [FFWCC]) and federal (US Fish and Wildlife Service [USFWS]), wildlife agencies. The nearest rookery during the 2004 breeding season was located approximately 12 miles south at the I-75/I-275 merged highway "apex" near the Hillsborough-Pasco County line, see Figure 3, Wood Stork Rookery Location Map. The other rookery is located about 16 miles north in Hernando County, just north of Highway 50 and southeast of the Withlacoochee State Forest. Project sites within 18.6 miles of an active Wood Stork rookery are considered to be within a "critical foraging area," and any loss of suitable feeding (foraging) wetlands must be appropriately compensated for in the mitigation plan as part of the permitting process. As a result, mitigation for the project will specifically include creation of emergent, freshwater marsh wetlands that will be appropriate replacement habitat.



Sec. 9 & 10 Twp. 25S Rng 30E

Preparation Date:	Revision Date:	Project Number:
14 March 2005		3782-059-b02
Project Manager:	GIS Operator:	GIS QA/ QC:
KBA	LBS	
ArcMap Name:	Plot File:	
woodstork8x11.mxd	woodstork8x11.pdf	

SR 52 Widening Design
SEIR Pipeline Project
Pasco County
Wood Stork Rookery Location Map

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6.0 Listed Species Summary

Common Name	Scientific Name	Listed Status	Sampling Method	On-site Occurrence
Birds				
Burrowing Owl	*Athene cunicularia*	Species of special concern – state	Pedestrian transects	–
Florida Sandhill Crane	*Grus canadensis pratensis*	Threatened – state	Pedestrian transects	Observed
Little Blue Heron	*Egretta caerulea*	Species of special concern – state	Pedestrian transects	Observed
Roseate Spoonbill	*Ajaia ajaja*	Species of special concern – state	Pedestrian transects	–
Snowy Egret	*Egretta thula*	Species of special concern – state	Pedestrian transects	Observed
Southeastern American Kestrel	*Falco sparverius paulus*	Threatened – state	Pedestrian transects	–
Tricolored Heron	*Egretta tricolor*	Species of special concern – state	Pedestrian transects	Observed
White Ibis	*Eudocimus albus*	Species of special concern – state	Pedestrian transects	Observed
Wood Stork	*Mycteria americana*	Endangered-federal and state	Pedestrian transects	Observed
Mammals				
Sherman's fox squirrel	*Sciurus niger shermani*	Species of special concern – state	Pedestrian transects	–
Herptiles				
eastern indigo snake	*Drymarchon corais couperi*	Threatened – federal, threatened – state	Pedestrian transects; shed skin identification	–
gopher frog	*Rana capito*	Species of special concern – state	Pedestrian transects, inspection of burrow entrances	–
gopher tortoise	*Gopherus polyphemus*	Species of special concern – state	Minimum 50 percent survey	–

None of the other faunal species on the list was observed or expected within or immediately adjacent to the project area, which is also the case for listed plant species. A minor exception is the American alligator (*Alligator mississippiensis*), which is likely to periodically occur within the Bayou Branch floodplain and associated wetlands, but it should not be adversely affected by the project.

In addition to potential listed species considerations for the project's right-of-way, there are three proposed stormwater management ponds (A through C), from just east of the Bayou Branch crossing to the I-75 interchange on the west, see wetland and pond location map. Pond A is proposed at a previously disturbed upland site with no significant habitat value and no known

listed species occurrence. Pond B is proposed in improved pastureland on the north side of SR 52, just west of Bayou Branch, but no wetlands or listed species should be involved. Prior to construction, a gopher tortoise (Species of Special Concern – state) survey should be conducted, but none are known to occur at this time. Pond C is proposed to be located on the south side of SR 52, east of Bayou Branch, and only pastureland and planted slash pines are in the immediate vicinity. As with the other pond sites, there are no known concerns for listed species involvement or native habitat loss.

7.0 Conclusions

There is no critical habitat for threatened or endangered species occurring within or very near to the project limits. Virtually all native, natural habitat already has been culturally modified and fragmented. The only state or federal listed faunal species observed or expected adjacent to the project are species of Special Concern (SSC) wading birds, such as the White Ibis, Snowy Egret, Little Blue Heron and Tricolored Heron, and foraging Florida Sandhill Cranes, classified as threatened by the State. No gopher tortoises (SSC) have been observed in proximity to the right-of-way. No listed plant species were encountered. None of the three proposed stormwater management pond sites will have any known involvement with listed species, nor will their location have an adverse impact on any significant natural habitat. The potential need for design of a specific wildlife underpass in association with the Bayou Branch crossing was discussed with appropriate representatives of both Pasco County and the Southwest Florida Water Management District (SWFWMD) and a crossing may be included in the final design. This SR 52 roadway-widening project will not result in any significant impact to listed species or their habitat. Appropriate mitigation for minor (<1.5 acres) losses of wetland foraging habitat for wading birds will take place in the immediate project area, as approved in the pending permitting process.