

**STATE ROAD 45 (U.S. 41)/STATE ROAD 700 (U.S. 98)
PROJECT DEVELOPMENT
AND
ENVIRONMENTAL STUDIES**

**PASCO AND HERNANDO COUNTIES, FLORIDA
State Project Nos. 14010-1514, 08010-1519
& 08010-1509
W.P. Nos. 7115924, 7112085 & 7112086
Federal Aid No. F-8888(27)**

**ENVIRONMENTAL ANALYSIS
REPORT**

**S.R. 52 in Pasco County
to C.R. 485B in Hernando County**

**Submitted To:
THE FLORIDA DEPARTMENT OF TRANSPORTATION**

**Submitted By:
GREINER, INC.
Tampa, Florida**

APRIL 1990

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TABLE OF CONTENTS

	<u>Page</u>
List of Tables	iii
List of Exhibits	iv
I. INTRODUCTION	1
II. PROJECT DESCRIPTION	2
A. Existing Roadway	2
B. Proposed Improvements	2
III. ALTERNATIVES CONSIDERED	5
IV. IMPACTS	6
A. SOCIAL IMPACTS	6
1. Land Use Changes	6
2. Community Cohesion	6
3. Relocation Potential	7
4. Churches and Schools	11
5. Title VI Considerations	11
6. Controversy Potential	12
7. Energy	12
8. Utilities and Railroads	12
B. CULTURAL IMPACTS	13
1. Section 4(f) Lands	13
2. Historical Sites	18
3. Archaeological Sites	19
4. Recreation Areas	19
C. NATURAL ENVIRONMENT	20
1. Wetlands	20
2. Aquatic Preserves	25
3. Water Quality	28
4. Outstanding Florida Waters	31
5. Wild and Scenic Rivers	31
6. Floodplains	31
7. Coastal Zone Consistency	33
8. Coastal Barrier Islands	34
9. Wildlife and Habitat	34
10. Farmlands	36

TABLE OF CONTENTS
(Continued)

	<u>Page</u>
D. PHYSICAL IMPACTS	37
1. Noise	37
2. Air Quality	47
3. Construction	50
4. Hazardous Materials	53
5. Navigation	65
V. COMMENTS AND COORDINATION	66
Appendix A - Advance Notification Responses	A-1
Appendix B - Historic and Archaeological Resource Findings	B-1
Appendix C - List of Identified Flora	C-1

LIST OF TABLES

<u>Table No.</u>	<u>Title</u>	<u>Page</u>
1	General Design Recommendations	4
2	Estimates of Right-of-Way and Relocation Requirements	8
3	Comparison of Proposed Project and Alignment Shift Alternative	17
4	Wetland Impacts	26
5	Noise Isopleths	39
6	FHWA Noise Abatement Criteria	41
7	Noise Impact Estimates	42
8	Attainment/Non-Attainment Designations	49
9	Predicted One- and Eight-Hour, Worst-Case Carbon Monoxide Levels in the Vicinity of the S.R. 45 (U.S. 41)/S.R. 50 Intersection	51
10	Predicted One- and Eight-Hour, Worst-Case Carbon Monoxide Levels in the Vicinity of the S.R. 45 (U.S. 41)/Summit Road Intersection	52
11	Investigated Sites in the Vicinity of S.R. 45 and S.R. 700	55
12	Agencies Provided with Advance Notification	68

LIST OF EXHIBITS

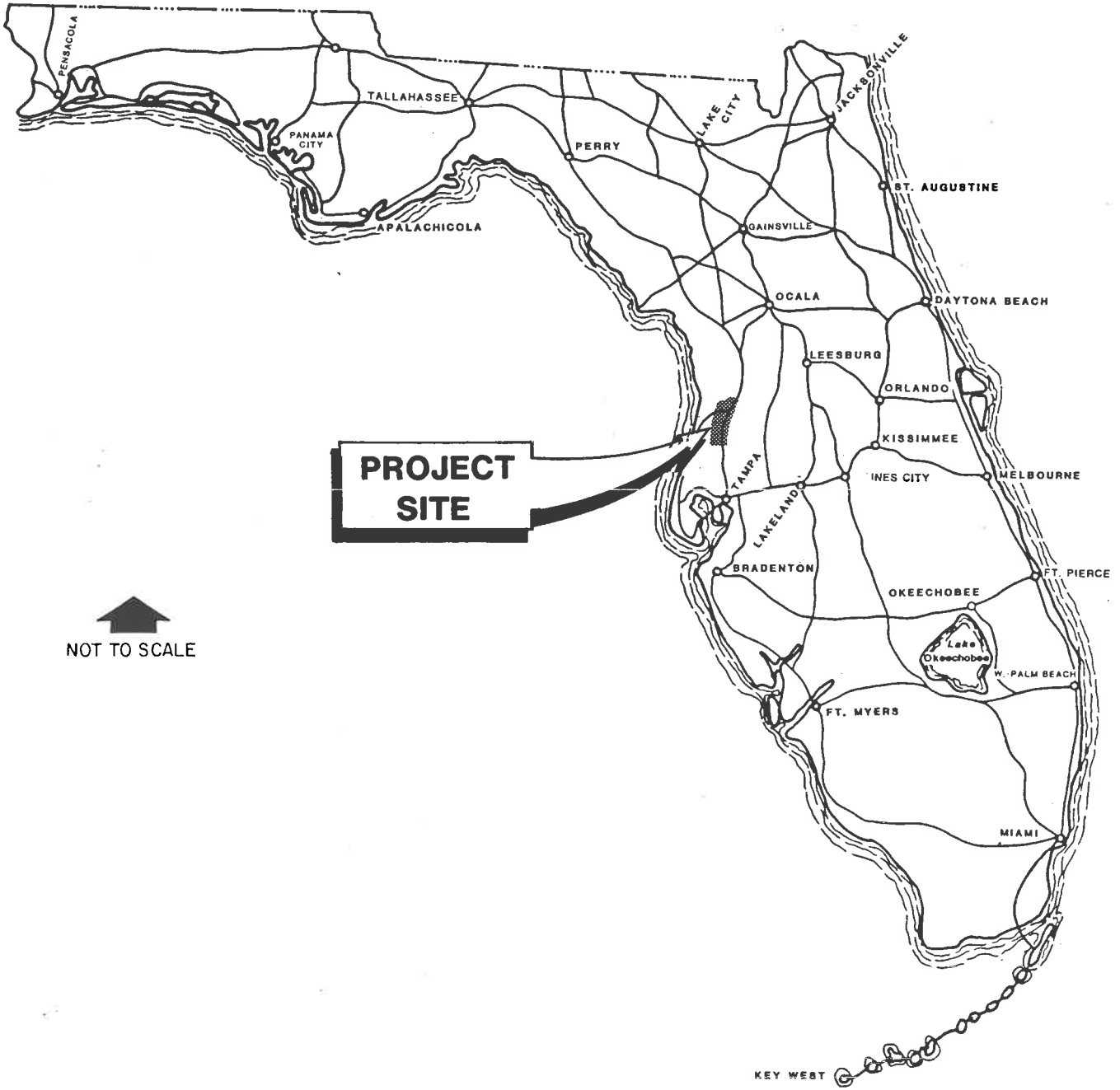
<u>Exhibit No.</u>	<u>Title</u>	<u>Follows</u>
1	Location Map	Page 1
2	Vicinity Map	Exhibit 1
3	Existing Typical Sections	Page 2
4	Proposed Typical Sections	Exhibit 3
5	Existing Land Use	Page 6
6	Community Service Facilities	Page 7
7	Section 4(f) Site Location	Page 14
8	Varn-McKethan Complex	Page 15
9	Typical Sections Comparison	Page 17
10	Wetland Location Sites	Page 20
11	Water Resources	Page 28
12	Noise Impacted Areas	Page 46
13	Investigated Hazardous Material Sites	Page 54

I. INTRODUCTION

This Environmental Analysis Report documents the results of evaluations conducted to assess the impacts of proposed improvement alternatives to S.R. 45 (U.S. 41)/S.R. 700 (U.S. 98). A Categorical Exclusion Package has been prepared which summarizes the impacts of the preferred alternative. This report serves as a supplement to that package.

The total project length is 19.3 miles, a 17.4-mile segment of S.R. 45 from S.R. 52 in Pasco County to S.R. 700 in Hernando County and a 1.9-mile segment on S.R. 700 from S.R. 700 to Yontz Road in Hernando County. Exhibit 1 illustrates the general location of the study area. The study area is within the jurisdictional limits of Pasco and Hernando counties. Exhibit 2 illustrates the jurisdictional boundaries and the limits of the proposed project.

The project involves the improvement of S.R. 45 and S.R. 700 from two-lane roadways to four-lane and six-lane divided roadways. In some portions of the corridor, rural typical sections with paved shoulders and surface drainage systems will be utilized. In the more developed portions of the corridor, urban typical sections with curb and gutter, enclosed drainage and sidewalks will be incorporated.



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NOT TO SCALE

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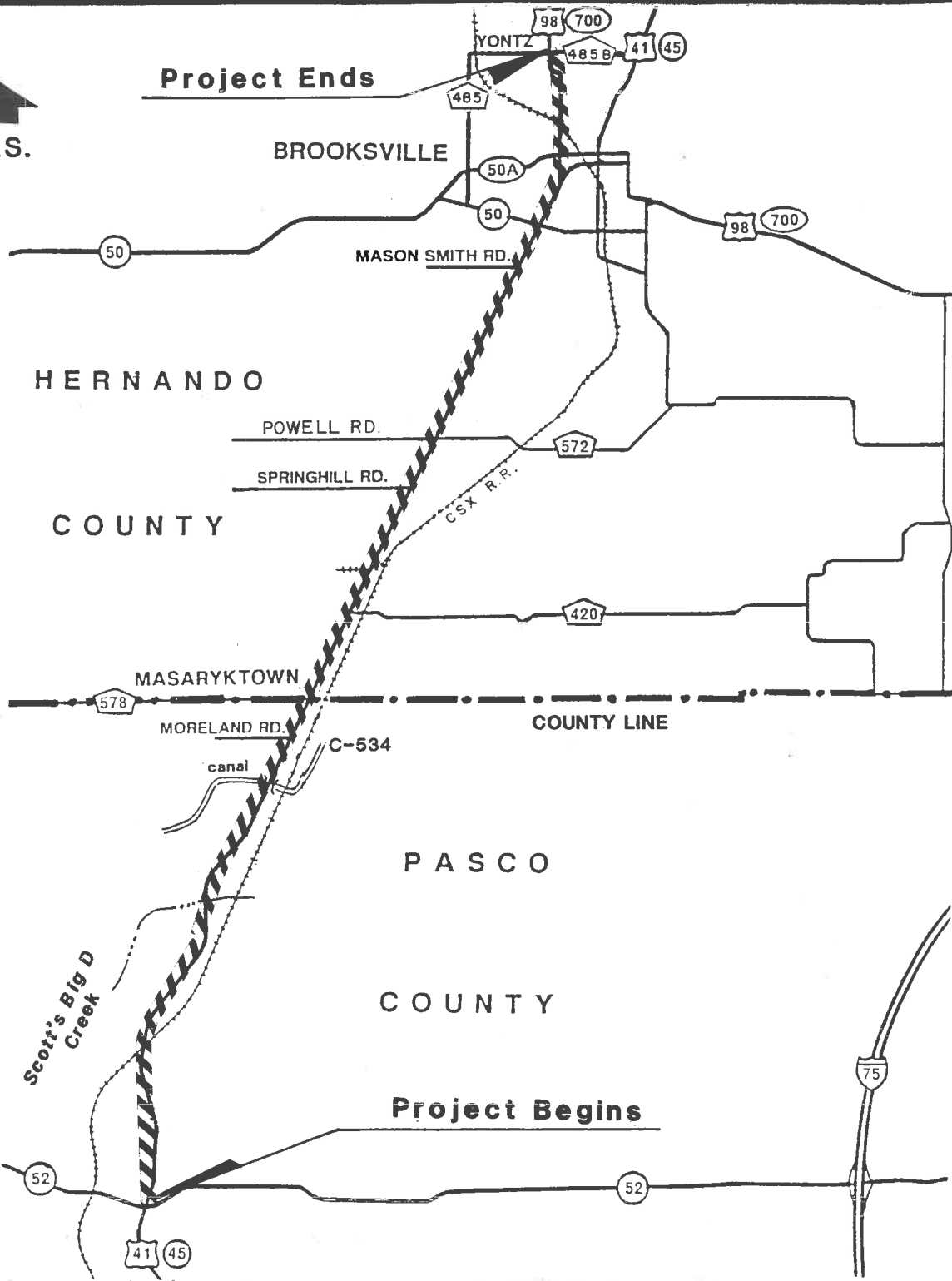
ENVIRONMENTAL ANALYSIS REPORT

S.R. 45 (U.S. 41) / S.R. 700 (U.S. 98)

From S.R. 52 to C.R. 485B

Pasco and Hernando Counties, Florida

LOCATION MAP



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LEGEND

 Project Area

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S.R. 45 (U.S. 41) / S.R. 700 (U.S. 98)
From S.R. 52 to C.R. 485B
Pasco and Hernando Counties, Florida

VICINITY MAP

II. PROJECT DESCRIPTION

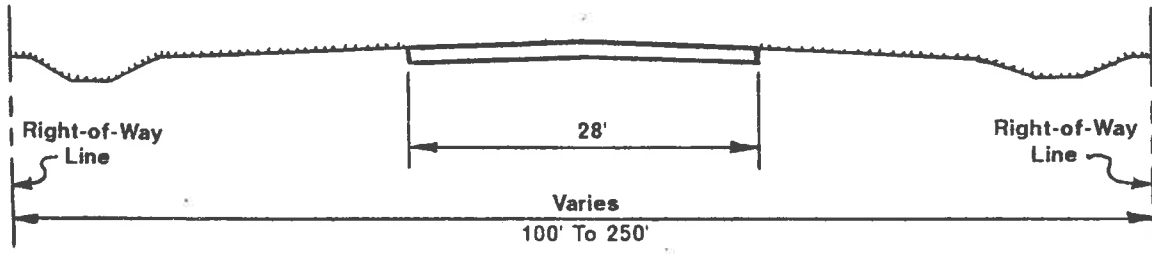
A. EXISTING ROADWAY

In their present configurations, S.R. 45 and S.R. 700 are two-lane rural roadways. S.R. 45 has 28 feet of pavement with 6-foot grassed shoulders. The rural right-of-way on S.R. 45 varies in width from 100 to 250 feet, while urban right-of-way is approximately 128 feet wide. S.R. 700 has 24 feet of pavement with 8-foot grassed shoulders and right-of-way widths of 50 to 190 feet. The existing roadway is projected to operate at level-of-service (LOS) F in the year 2010. The existing typical section is shown on Exhibit 3. There are two bridge structures within the project limits.

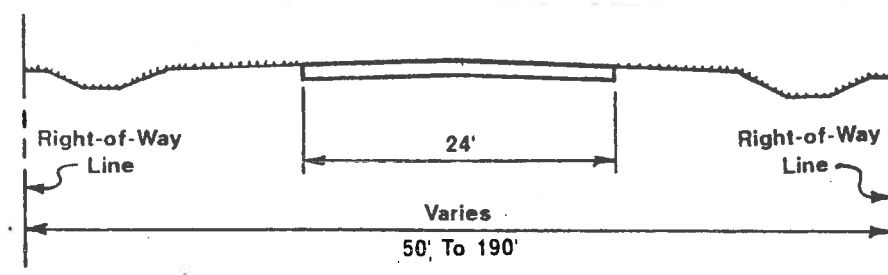
B. PROPOSED IMPROVEMENTS

Proposed improvements to S.R. 45/S.R. 700 involve upgrading the existing facilities to multi-lane divided facilities with grassed shoulders.

The improvement on S.R. 45 from S.R. 52 to Moreland Road would include a rural four-lane divided section with provisions for future expansion to an ultimate six-lane divided section. From Moreland Road to 1,400 feet north of Springhill Road, S.R. 45 is to be improved to an urban six-lane divided section. A rural six-lane divided section is proposed from 1,400 feet north of Springhill Road to 1,400 feet south of Mason Smith Road. From 1,400 feet south of Mason Smith Road to S.R. 700, S.R. 45 is to be improved to an urban six-lane divided section. The improvements on S.R. 700 from S.R. 45 to C.R. 485B would be an urban four-lane divided section. Typical sections of the proposed improvements are provided on Exhibit 4. The bridge



S.R. 45 (U.S. 41)



S.R. 700 (U.S. 98)

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ENVIRONMENTAL ANALYSIS REPORT

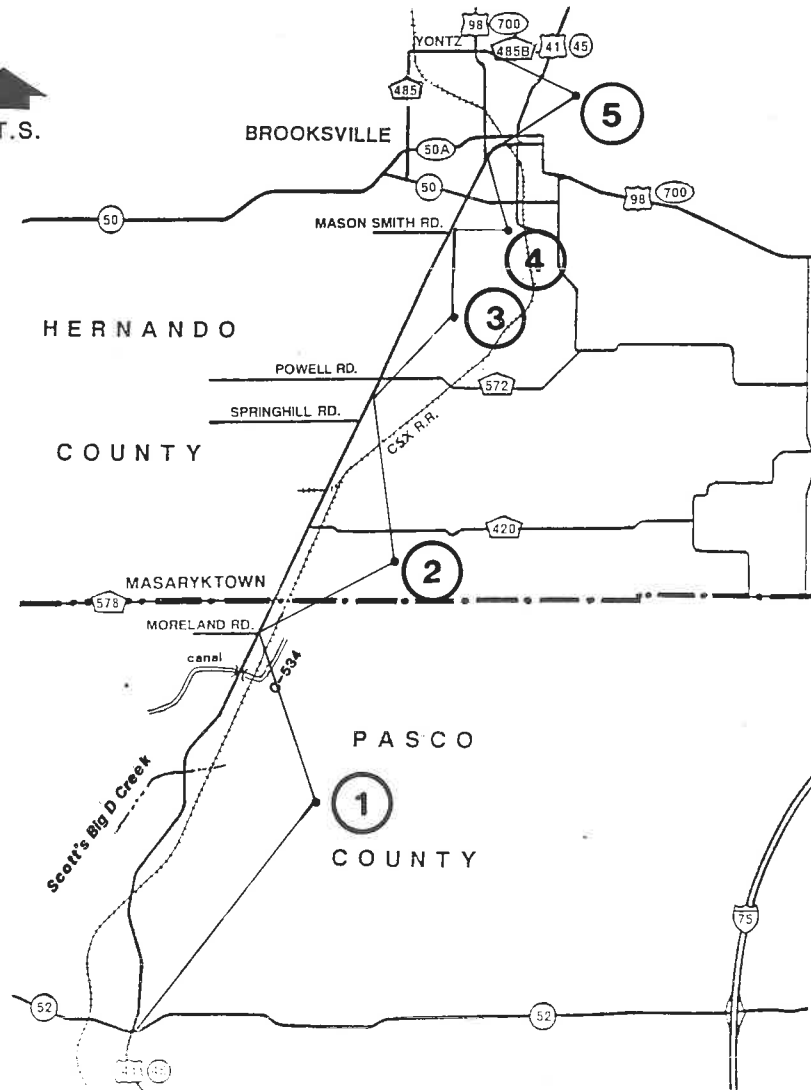
S.R. 45 (U.S. 41) / S.R. 700 (U.S. 98)

From S.R. 52 to C.R. 485B

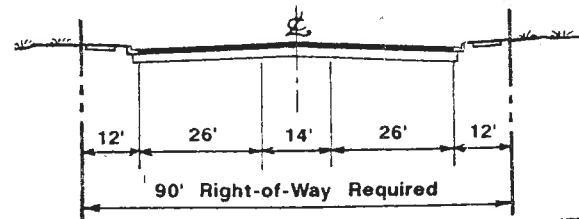
Pasco and Hernando Counties, Florida

EXISTING TYPICAL SECTIONS

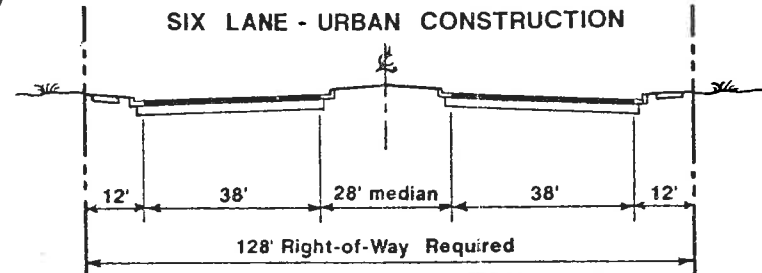
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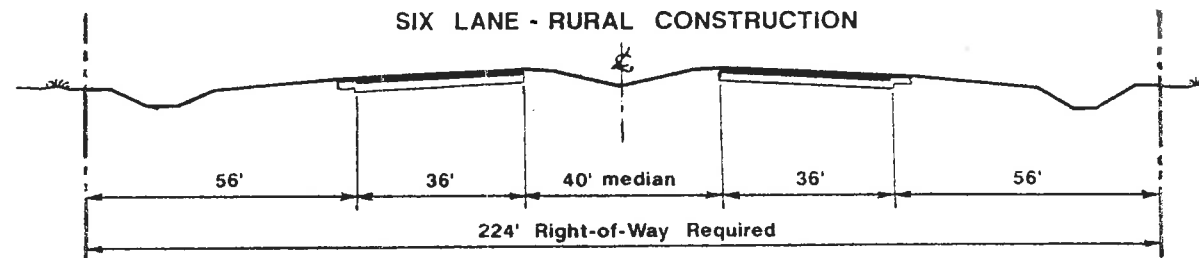
5 FOUR LANE - URBAN CONSTRUCTION



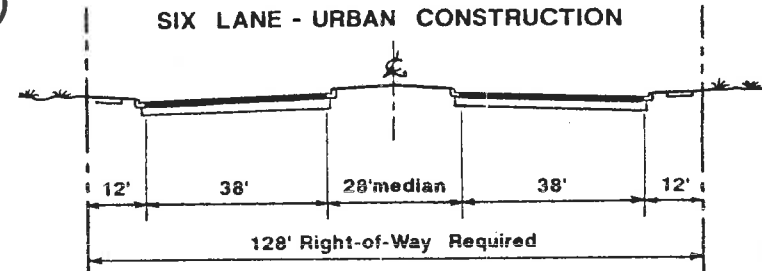
4 SIX LANE - URBAN CONSTRUCTION



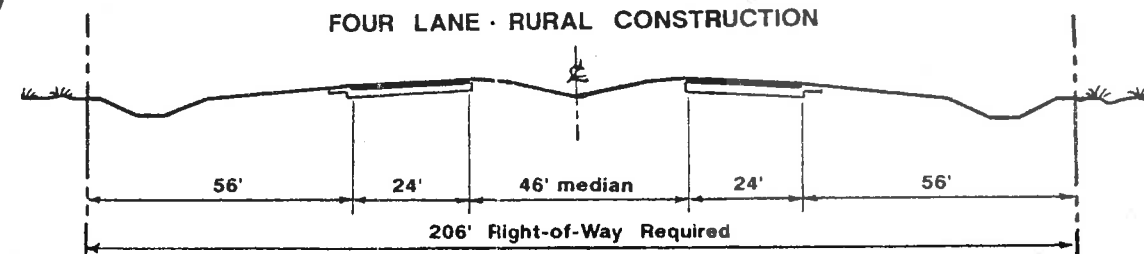
3 SIX LANE - RURAL CONSTRUCTION



2 SIX LANE - URBAN CONSTRUCTION



1 FOUR LANE - RURAL CONSTRUCTION



FLORIDA DEPARTMENT OF TRANSPORTATION
 ENVIRONMENTAL ANALYSIS REPORT
 S.R. 45 (U.S. 41)/ S.R. 700 (U.S.98)
 From S.R. 52 to C.R. 485B
 Pasco and Hernando Counties, Florida

PROPOSED TYPICAL SECTIONS

TABLE 2
ESTIMATES OF RIGHT-OF-WAY AND RELOCATION REQUIREMENTS

Estimated Displacement

Residential (Units)	36
Business (Buildings)	15
Total	51

Right-of-Way Estimates (acres)

Total Area	112
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The areas which are necessary for relocation are not considered to be especially unique or extraordinary in nature. Homes are available in the study area of comparable value and character for residential relocations. Suitable commercial sites exist in the vicinity for the business relocations. The businesses which may be relocated are not major employers in the study area, and the temporary close of business during relocation would not substantially affect the local employment or economy.

In order to minimize the unavoidable effects of right-of-way acquisition and displacement of people, the FDOT will carry out a right-of-way and relocation program in accordance with Florida Statute 339.09 and the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (Public Law 91-646).

The FDOT provides advance notification of impending right-of-way acquisition. Before acquiring right-of-way, all properties are appraised on the basis of comparable sales and land use values in the area. Owners of property to be acquired will be offered and paid fair market value for their property rights.

No person lawfully occupying real property will be required to move without at least 90 days written notice of the intended vacation date, and no occupant of a residential property will be required to move until decent, safe and sanitary replacement housing is made available. "Made available" means that the affected person has either by himself obtained and has the right of possession of replacement housing, or that the FDOT has offered the relocatee decent, safe and sanitary housing which is within his financial means and available for immediate occupancy.

At least one relocation specialist is assigned to each highway project to carry out the relocation assistance and payments program. A relocation specialist will contact each person to be relocated to determine individual needs and desires, and to provide information, answer questions, and give help in finding replacement property. Relocation services and payments are provided without regard to race, color, religion, sex or national origin.

All tenants and owner-occupant displacees will receive an explanation regarding all options available to them, such as (1) varying methods of claiming reimbursement for moving expenses, (2) rental of replacement housing, either private or publicly subsidized, (3) purchase of replacement housing, (4) moving owner-occupied housing to another location.

Financial assistance is available to the eligible relocatee to:

1. reimburse the relocatee for the actual reasonable costs of moving from homes, businesses, and farm operations acquired for a highway project;
2. make up the difference, if any, between the amount paid for the acquired dwelling and the cost of a comparable decent, safe and sanitary dwelling available on the private market;
3. provide reimbursement of expenses such as legal fees and other eligible closing costs incurred in buying a replacement dwelling;
4. make payment for eligible increased interest cost resulting from having to get another mortgage at a higher interest rate. Replacement housing payments,

increased interest payments, and closing costs are limited to \$15,000 combined total.

A displaced tenant may be eligible to receive a payment, not to exceed \$4,000, to rent a replacement dwelling or room, or to use as down payment including closing costs on the purchase of a replacement dwelling. The brochure which describes in detail the FDOT's relocation assistance program and right-of-way acquisition program is "Your Relocation". This brochure is distributed at all public hearings and is made available upon request to any interested persons.

4. Churches and Schools

The proposed improvements will have a minor effect upon churches and schools within the study area. No schools are located in the immediate vicinity of the project. The improvements would not substantially affect school crossings, bus routes, or school districts. The churches located along the project corridor are the Bethel Baptist Church, Christian Fellowship Center, St. Mary Church, Holy Trinity Lutheran Church, and the Brooksville Bible Chapel. These churches will not be substantially affected. Church locations are shown on Exhibit 6, previously referenced.

5. Title VI Considerations

The proposed improvements will not impact any particular organization or group including ethnic groups, minorities, the elderly, or handicapped. This project has been developed in accordance with the Civil Rights Act of 1964, as amended by the Civil Rights Act of 1968.

6. Controversy Potential

An Advance Notification was forwarded to national, state, and local agencies having interest or involvement in the project. Comments from the agencies which responded were related primarily to procedural requirements and were not controversial in nature.

A Public Information Workshop was held on January 26, 1988 at the Alfred McKethan Civic Auditorium in Brooksville, Florida. The purpose of this workshop was to inform residents and interested parties of the design alternatives being considered for this project. Primary concerns were related to right-of-way requirements and access.

7. Energy

The proposed project will utilize energy resources during construction, but should save energy after construction by providing increased level-of-service.

8. Utilities and Railroads

Utilities currently located adjacent to the existing facility would require relocation during the project construction phase. The relocation of utilities is not expected to significantly impact residents, nor the utility service. Coordination between the FDOT and the utility companies has been initiated and shall be maintained throughout the project. To determine the extent of utility adjustments for roadway improvements, local utility companies were asked to submit the location of their existing and planned facilities. Utility owners with existing facilities located within or near the roadway right-of-way include Florida Power Corporation, Southern Bell

Telephone Company, and General Telephone Company. Street lights along the corridor are limited to the section between S.R. 50 and S.R. 50A. These lights are owned by the Florida Power Corporation and are the shared responsibility of the City of Brooksville, the FDOT, and Hernando County.

The Public Works Departments for Pasco and Hernando counties maintain all the traffic signals within the project limits, including wire detector loops, telephone conduits and power conduits. Exact locations of these utilities will be determined in the field prior to any construction. During final engineering design, the specific relocation requirements will be determined by the FDOT Utility Coordinator.

CSX Transportation, Inc. owns and operates a single track railroad line which parallels the facility. One mainline railroad crossing and one spur crossing are within the S.R. 45 project limits. S.R. 700 has one mainline crossing within its project limits. The mainline crossing on S.R. 45 is approximately 2.5 miles north of S.R. 52, while the spur crossing is 2.2 miles north of the Pasco/Hernando county line. The mainline crossing on S.R. 700 is in north Brooksville, 0.8 miles north of S.R. 50A. The proposed improvements will require the acquisition of some right-of-way from the railroad corridor but will not require the relocation of any track.

B. CULTURAL IMPACTS

1. Section 4(f) Lands

In accordance with Section 4(f) of the Department of Transportation Act of 1966, an evaluation was conducted to determine the impacts of the proposed improvements upon Section 4(f) resources. It was determined that there would be minor involvement

structure located at Scotts Big 'D' Creek is recommended for replacement. The bridge located at Canal C-534 is recommended for improvement without replacement.

The existing drainage system will be replaced with a combination of open ditches and curb and gutter systems. Surface water quality will be maintained through the use of Best Management Practices and adherence to federal, state and local water quality standards. General design recommendations for the project are presented on Table 1.

Approximately 112 acres of property will be necessary for roadway and retention basin right-of-way. Right-of-way acquisition is estimated to result in the displacement of 36 single family homes and mobile homes and 15 business establishments. The proposed improvements comply with all 13 AASHTO Controlling Design Criteria. The proposed improvements will result in improved traffic capacity and increased safety. By the design year (2010), the projected level-of-service will be LOS D.

TABLE 1
GENERAL DESIGN RECOMMENDATIONS

<u>Roadway Characteristics</u>	<u>4-Lane Rural</u>	<u>6-Lane Rural</u>	<u>4-Lane Urban</u>	<u>6-Lane Urban</u>
Outside Lane Widths	12'	12'	14'	14'
Other Lane Widths	12'	12'	12'	12'
Paved Shoulder	yes	yes	no	no
Median Type	depressed grassed	depressed grassed	raised grassed	flush paved
Median Width	46'	40'	28'	14'
Curb and Gutter	no	no	yes	yes
Drainage System	surface	surface	enclosed	enclosed
Sidewalks	no	no	yes	yes
Typical Right-of-Way Width	206'	224'	128'	90'
Level of Service, 2010	D	D	D	D

III. ALTERNATIVES CONSIDERED

The proposed alternative was selected after an evaluation process which included examining the feasibility of improving S.R. 45 and S.R. 700 by constructing a new facility in a new corridor or a parallel facility. It was determined that constructing a new facility would result in greater impacts on wetland areas and significantly higher cost associated with land acquisition. Construction cost of a parallel facility would most likely be less than or the same as the cost of reconstructing S.R. 45 and S.R. 700 on the existing alignment due to a lower cost for maintenance of traffic. However, a major disadvantage to constructing a parallel corridor would be the extensive impact to wetlands.

Therefore, after thorough examination, the only feasible alternative for the project is to upgrade the existing facility. The alternative selection process is discussed in further detail in the Preliminary Engineering Report.

IV. IMPACTS

A. SOCIAL IMPACTS

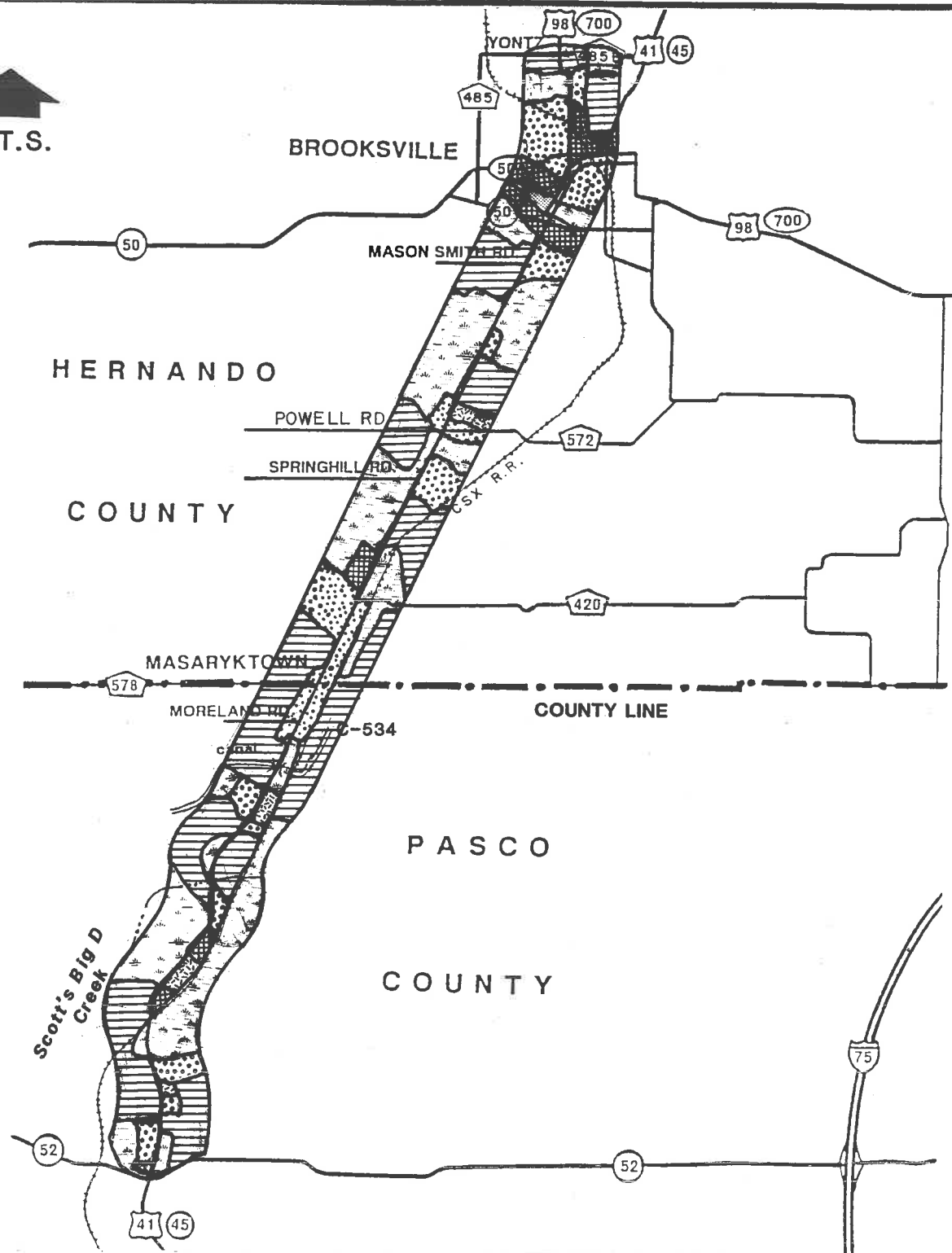
1. Land Use Changes

The S.R. 45/S.R. 700 study area is located in a semi-developed portion of Pasco and Hernando counties. Currently, S.R. 45/S.R. 700 serves as the primary route through the unincorporated cities of Garden Grove and Masaryktown and the City of Brooksville. The predominant land uses along the corridor are commercial, residential, and agricultural/pasture. There is vacant land found along the roadway in Pasco and Hernando counties; therefore, changes in land use could occur in the future. Existing land uses along the corridor are depicted on Exhibit 5.

The alternative being considered is not expected to have any substantial effect upon land use within the study area. The proposed roadway improvements are not expected to promote or accelerate land use changes substantially more than those which would occur with the No-Build Alternative. The proposed improvements are in conformance with the Pasco County adopted 1990 Land Use Plan and the Comprehensive Development Master Plan (1982), and the Hernando County adopted 1990 Land Use Plan and the Comprehensive Development Master Plan (1989).

2. Community Cohesion

The proposed improvements would not have any particular effect upon neighborhood values or the quality of life within the study area. The areas which are located



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LEGEND

-  Agricultural Land
-  Mobile Homes
-  Single Family
-  Commercial
-  Park
-  Wetlands & Woodlands

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S.R. 45 (U.S. 41) / S.R. 700 (U.S. 98)

From S.R. 52 to C.R. 485B
Pasco and Hernando Counties, Florida

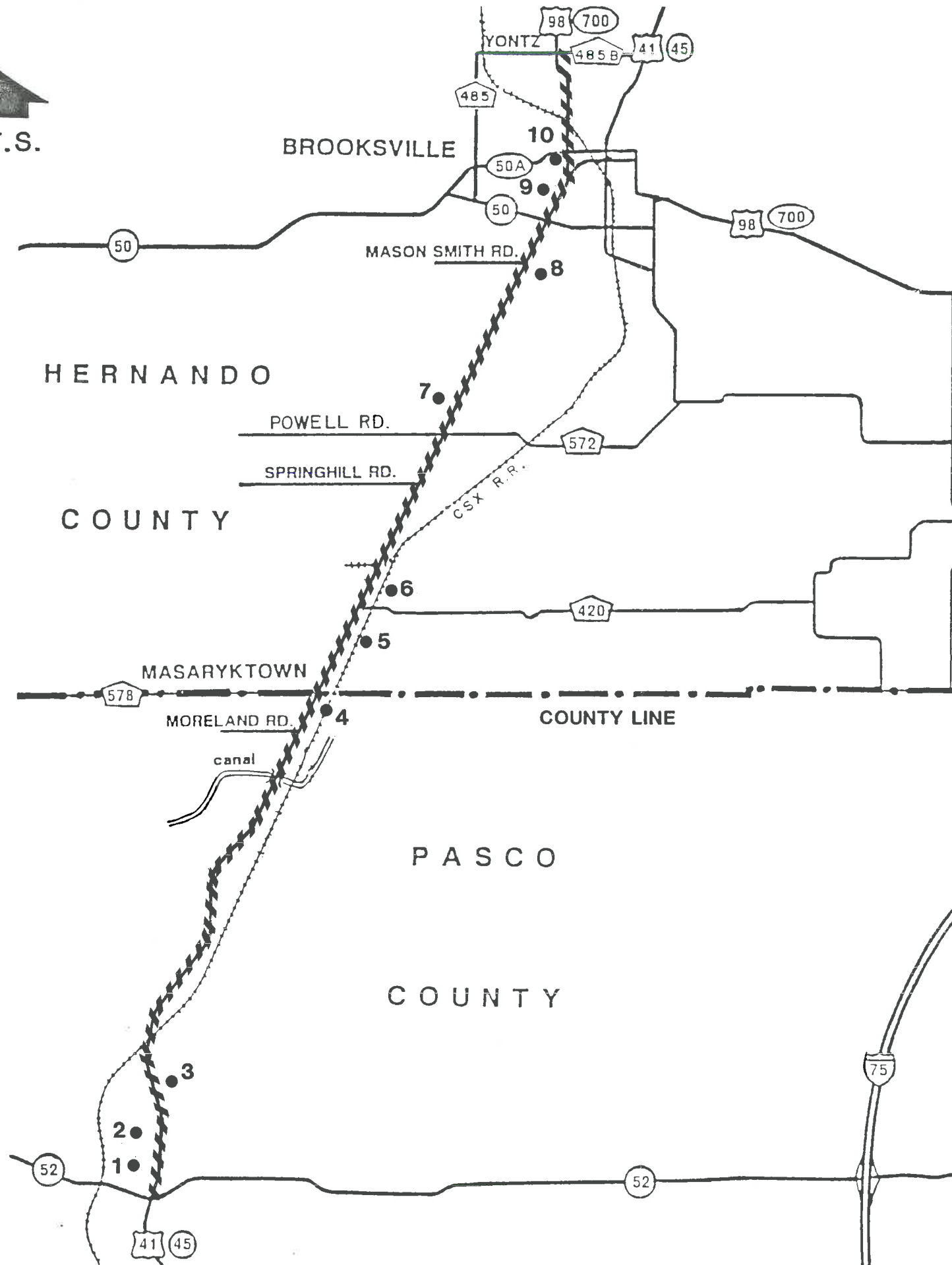
EXISTING LAND USE

between S.R. 52 and Yontz Road are primarily zoned commercial, residential and agricultural/pasture. The area is relatively stable in nature and is composed of primarily middle class residents.

The project alternative being examined is not expected to have any substantial effect upon the socioeconomic and demographic characteristics of the study area. The roadway improvements would not have any marked effect on housing, employment, land use, or community services. Community service facilities (shown on Exhibit 6) would not be affected by the project. The right-of-way acquisition, residential relocations, and business relocations which would occur with the improvements would not substantially disrupt or alter neighborhood character.

3. Relocation Potential

The proposed improvements require some right-of-way acquisition and relocations. Table 2 summarizes the right-of-way and relocation necessary for the project. Most of the right-of-way acquisition associated with the project occurs along both sides of the proposed project. The total amount of right-of-way necessary for the roadway construction is estimated to be approximately 112 acres. This would involve the acquisition of approximately 36 single family residential and mobile homes and 15 businesses. The relocations are approximate because the design of the roadway is preliminary at this time. No structures of any historic or archaeological significance would be affected. The proposed project would not require right-of-way acquisition of any sites of institutional, recreational, historical, or archaeological significance.



LEGEND

- 1** Pasco-Hernando Community College Annex
- 2** Bethel Baptist Church
- 3** Christian Fellowship Center
- 4** St. Mary Church
- 5** Masaryk Memorial Library
- 6** Holy Trinity Lutheran Church
- 7** Brooksville Bible Chapel
- 8** Alfred A. McKethan Civic Auditorium/
Hernando County Fairgrounds
- 9** Bud McKethan Park
- 10** Lykes Memorial Hospital
- ///** Project Area

FLORIDA DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ANALYSIS REPORT
S.R. 45 (U.S. 41)/ S.R. 700 (U.S.98)
From S.R. 52 to C.R. 485B
Pasco and Hernando Counties, Florida

COMMUNITY SERVICE FACILITIES

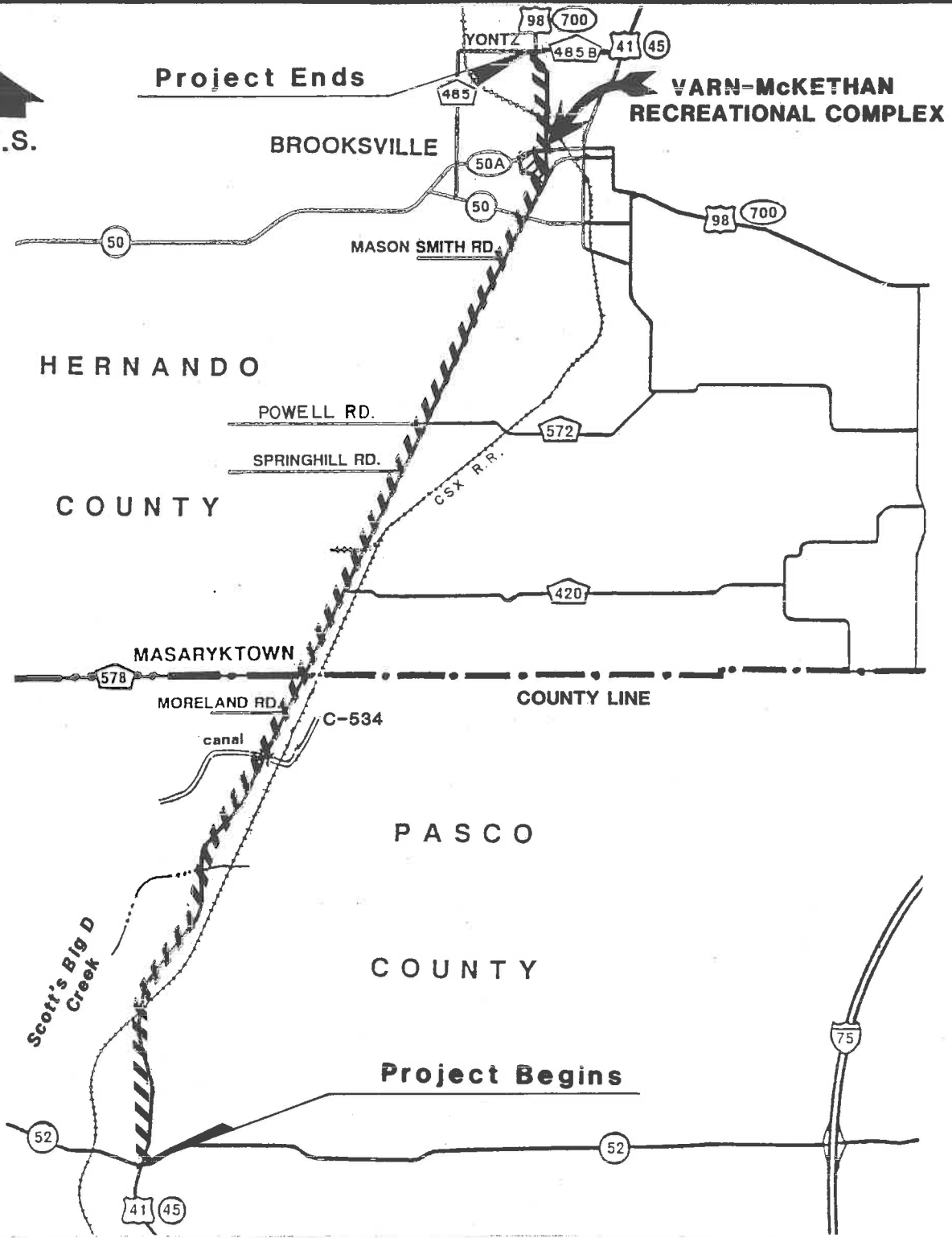
with one Section 4(f) resource: the City of Brooksville's Varn-McKethan Recreational Complex. The location of the park is shown on Exhibit 7. A Programmatic Section 4(f) Evaluation was conducted and is available for inspection at the FDOT District Seven office in Tampa.

Park Description

The Varn-McKethan Recreational Complex consists of approximately 116 acres of land situated south of S.R. 50A and west of S.R. 45. The complex consists of two adjacent parks: the Tom Varn Park and Bud McKethan Park. There are no distinct boundaries between the parks and they are considered to be one functioning unit: the Varn-McKethan Recreational Complex.



The complex is an outdoor recreational and sports center. Existing facilities at the complex include jogging/fitness trails, three tennis courts, four playground areas, two horseshoe courts, two basketball courts, four softball diamonds, picnic tables and a picnic pavilion. There are currently parking spaces for approximately 150 cars, 50 of which are paved. Park improvements planned in the next several years include a nature trail, a swimming pool, handball courts, a soccer field, an indoor recreational center, a fourth tennis court, additional picnic areas and more parking.

The park is estimated to be used by approximately 300 people per day. The facilities are used by individuals and organized groups (leagues, clubs and tournaments). The park is open from 7 a.m. to 11 p.m. daily. No pets or alcoholic beverages are allowed.



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LEGEND

-  Project Area
-  4(f) Site

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 ENVIRONMENTAL ANALYSIS REPORT
S.R. 45 (U.S. 41) / S.R. 700 (U.S. 98)
 From S.R. 52 to C.R. 485B
 Pasco and Hernando Counties, Florida

SECTION 4(f) SITE LOCATION

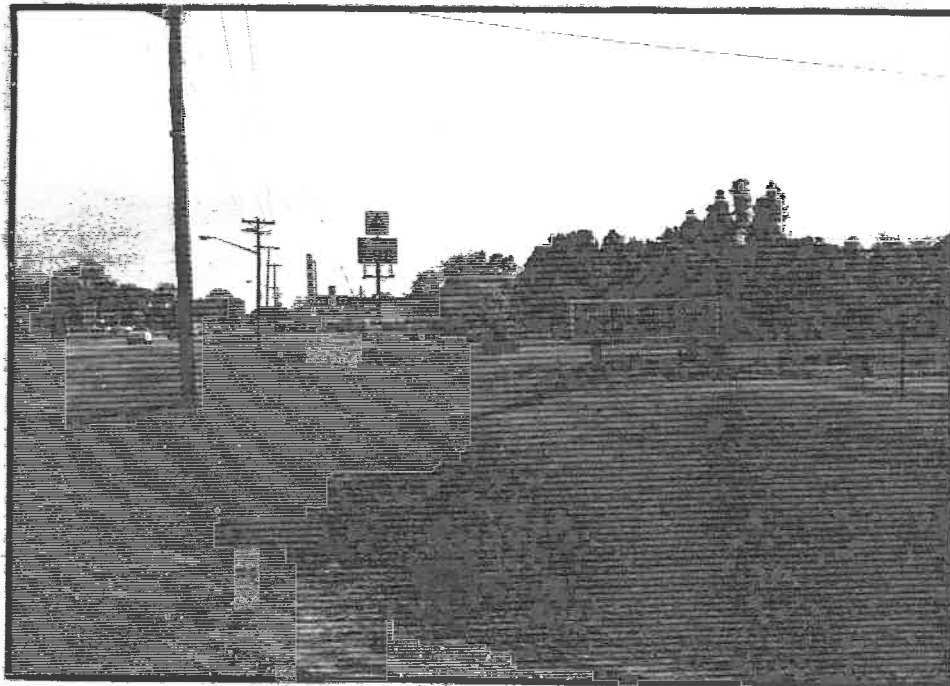
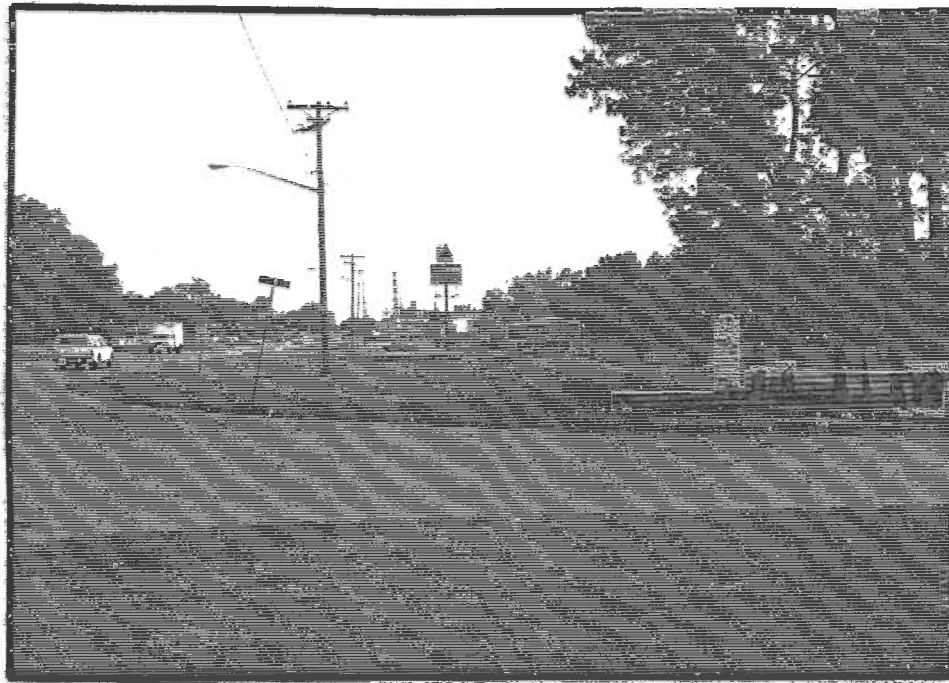
The Varn-McKethan Recreational Complex is one of the major recreational facilities in Hernando County. It is the only facility in the county for softball leagues and tournaments.

Impacts to the Park

The improvements proposed to S.R. 45 in the vicinity of the Varn-McKethan Recreational Complex primarily involve widening the existing two-lane undivided roadway to a six-lane divided urban roadway. The additional right-of-way necessary for the improved roadway would require the acquisition of a narrow strip of property from the park's frontage on S.R. 45. This property ranges in width from approximately 5 to 8 feet for a linear distance of about 265 feet. The total area to be acquired is estimated to be less than 0.04 acres. This represents approximately 0.03 percent of the 116-acre Varn-McKethan Recreational Complex site.

Direct Impacts

Direct impacts to the complex resulting from the right-of-way acquisition are limited to the relocation of the complex sign and associated landscaping. Approximately 3 feet of the 10-foot-long sign is currently within the existing FDOT right-of-way. Approximately 8 feet of the sign would be within the proposed right-of-way. The sign would have to be relocated because it would block the proposed sidewalk. No other facilities are currently located or proposed within the area to be acquired for roadway construction. Exhibit 8 illustrates the portion of the property which would be acquired.



Views are looking south at the east boundary of the Varn-McKethan Complex along S.R. 45

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ENVIRONMENTAL ANALYSIS REPORT

S.R. 45 (U.S. 41) / S.R. 700 (U.S. 98)

From S.R. 52 to C.R. 485B
Pasco and Hernando Counties, Florida

VARN-McKETHAN COMPLEX

EXHIBIT 8

Indirect Impacts

Indirect impacts to the complex are limited to reduced access associated with curbed median installation. To provide for efficient operation of the intersection of S.R. 45 and S.R. 700, a median opening at the complex entrance to S.R. 45 will not be provided. This would not allow left turns into or out of the complex. This reduction in access will not substantially affect the complex since alternative access exists.

The improvements will not result in any other substantial indirect impacts to the complex. Projected air quality and noise levels have been determined to be well within accepted criteria within sensitive areas of the park. The acquisition of the small amount of property along the S.R. 45 frontage will not affect the aesthetic appearance or function of the park.

Avoidance Alternatives

An examination of available alternatives to avoid the park was conducted and it was determined that there was no feasible and prudent alternative to the proposed action. The alternatives considered either fail to provide acceptable roadway capacity or cost substantially more. Alternatives evaluated included No-Action, alternative corridors, reduced typical section widths and alignment shift. The alignment shift alternative involved the shift of the roadway east for a sufficient distance to completely avoid property acquisition within the park. Table 3 and Exhibit 9 compare the alignment shift alternative with the proposed improvements. This alternative was found to cost approximately \$370,000 more, have the same effect upon access and still require relocation of the park sign because it is within the existing right-of-way.

TABLE 3
COMPARISON OF PROPOSED PROJECT AND
ALIGNMENT SHIFT ALTERNATIVE

The following values compare the two alternatives within the 1,645 linear feet which would be involved in the Alignment Shift Alternative:

<u>Parameters</u>	<u>Proposed Project</u>	<u>Avoidance Alternative</u>
Area of Varn-McKethan Complex Involved (acres)	0.04	0
Number of Parcels	11	13
Number of Relocations	1	1
Estimated R/W Cost	\$992,950	\$1,362,950
Construction Costs	same	same
Facilities Affected	Complex Sign	Complex Sign
Affect on Access	Minor	Minor
Noise Impacts	None	None
Air Quality Impacts	None	None
Aesthetic Impacts	None	None

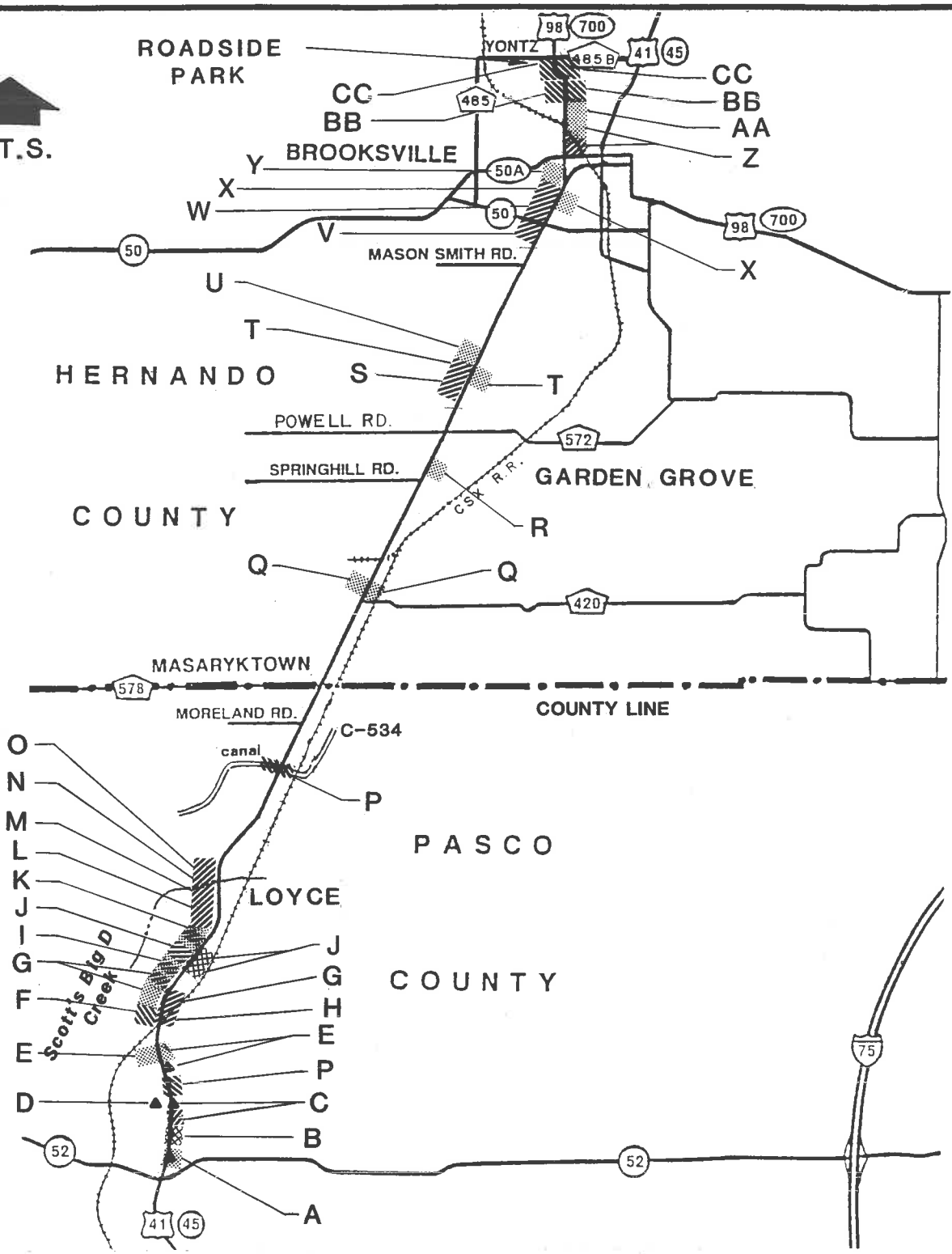
C. NATURAL ENVIRONMENT

1. Wetlands

Overview

In compliance with Executive Order 11990, the study area has been evaluated for wetlands which could be impacted by the proposed improvements. The study corridor encompasses the existing U.S. 41 roadway and the paralleling 100 to 225 feet of right-of-way (total for both sides). Identification and inventory of wetlands was accomplished through field reconnaissance, interpretation of 1" = 100' scale aerial photographs, review of National Wetlands Inventory (NWI) maps and use of the U.S. Fish and Wildlife Service's (USFWS) wetlands classification system described in "Classification of Wetlands and Deepwater Habitats." Field reviews were conducted on January 25, 30 and 31, 1989. Exhibit 10 shows the location of wetlands within the study area. Appendix C contains a list of flora identified during the field review.

A total of twenty-nine wetland systems were identified, with a total area of 14.40 acres, within the proposed highway right-of-way. Wetlands are concentrated in the southern portion of the study area, with most occurring between the town of Loyce and S.R. 52. They include mixed wetland hardwoods, cypress swamps, freshwater marshes and wet prairies. Most wetlands in the study area occur in natural wet depressions and connected stormwater ditches. The depressions are generally isolated basins that overflow into each other during periods of heavy rains. A few wetlands border natural lakes or excavated ponds.



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LEGEND

-  Mixed Wetland Hardwoods
-  Freshwater Marsh
-  Wet Prairie
-  Cypress Swamp

FLORIDA DEPARTMENT OF TRANSPORTATION

**ENVIRONMENTAL ANALYSIS REPORT
S.R. 45 (U.S. 41) / S.R. 700 (U.S. 98)**

From S.R. 52 to C.R. 485B
Pasco and Hernando Counties, Florida

WETLAND LOCATION SITES

Most wetlands occurring south of the Brooksville area have been ditched and border citrus groves, cattle fields or other wetlands. A few border residences, plant nurseries or other types of businesses along U.S. 41. Most wetlands in the Brooksville portion of the study area have been ditched and are surrounded by urban land uses. One wetland borders a roadside picnic area just south of Yontz Road. This wetland system has some recreational value, as it screens picnic area users from surrounding urban land uses.

Other wetlands in the project area occur on private lands used for agriculture, private residences, commercial businesses, or within the proposed highway right-of-way. These wetlands are not likely to be used for recreation. None of the wetlands in the project area are used as a source of public water supply, food, or timber.

Mixed Wetland Hardwoods

Twelve hardwood communities were identified within the study area. They range in size from 0.02 to 2.90 acres and cover a total area (within the proposed right-of-way) of 5.59 acres. These mixed hardwood communities would be classified as PFO1 or palustrine, forested, broad-leaved deciduous under the USFWS system. Some had pockets of standing water on the days of the field review. They generally occur in natural depressions with edges which were encroached upon by surrounding agriculture and development. A few communities occur in ditches near the southern boundary of the project area. The condition of these wetland communities ranges from slightly to highly disturbed. The size and shape of most of the communities have been altered through filling and ditching. Some of the wetlands show significant invasion by exotics. Two had been used as illegal trash dumps. These are located east of U.S. 41, just north of Buena Vista Road in Brooksville and Spangler Street in Garden Grove.

The mixed wetland hardwood forests contain one to two well-established strata. They all have well-established canopies, which typically include sweet gum, southern magnolia, laurel oak, water oak, loblolly pine, sweet bay and camphor-tree. Shrub layers are well-established in communities in and south of Garden Grove; however, they are absent north of Garden Grove. Typical shrubs include Carolina willow, water primrose, wax myrtle, salt bush, blackberry and St. John's-wort. Ground cover is generally sparse. The more common species include soft rush, bulrush, pennywort, and lantana. Vines, such as air potato, grape and briar, are common throughout the study area.

Cypress Swamp

Four cypress swamps were identified within the study area. They range in size from 0.04 to 3.84 acres, with a total of 4.13 acres. These communities would be classified as palustrine, forested, needle-leaved deciduous (PFO2) under the USFWS system. The cypress swamp communities occur in natural depressions near the southern boundary of the project area. Exotics are not present in these communities, and modification by filling and ditching is minimal.

The cypress swamp communities exhibit three well-established strata (canopy, shrub layer and ground cover). Canopies are primarily composed of bald cypress and include some red maple and sweet bay. Shrub layers have a mixture of salt bush, St. John's wort, elderberry, wax myrtle, water primrose and Carolina willow. The dense ground cover layers include cinnamon fern, royal fern, swamp fern, soft rush, star rush and bog button. The cypress swamps also include standing water vegetated with cattail, bulrush, pickerelweed, duckweed and water-hyssops.

Freshwater Marshes

Twenty-three freshwater marshes were identified within the study area. They range in size from 0.01 to 0.44 acres, with a total of 3.45 acres. The marshes would be classified as palustrine, emergent, persistent (PEM1) and palustrine, scrub-shrub, broad-leaved deciduous (PSS1) under the USFWS system. The marshes occur in lakes, parallel highway ditches and cross-drains. Conditions range from undisturbed to highly disturbed. Some of the marshes in ditches are mowed regularly. One marsh in a ditch east of U.S. 41, south of the Seaboard Railroad crossing, is dying due to recent placement of concrete rubble in the ditch.

The PSS1 marshes in the study area generally contain a well-established shrub layer. All of the marshes contain a well-established emergent layer and most also have floating aquatics. Common shrubs include salt bush, primrose willow, wax myrtle, Carolina willow, St. John's-wort, elderberry and blackberry. Emergents are composed primarily of cattail, spikerush, bulrush, star-rush, flat sedge, pennywort, arrowhead, soft rush, pickerelweed and torpedo grass. Floating aquatics include duckweed, water spangles and water lilies.

Wet Prairies

Two wet prairies, with a total acreage of 1.23 acres, were identified in the study area. They would be classified as palustrine, emergent, persistent (PEM1) under the USFWS system. These communities occur east of U.S. 41 near the town of Loyce. They rim an excavated lake and a cypress swamp. The wet prairie surrounding the excavated lake includes upland grasses and automobile tire tracks and appears drier than the one surrounding the cypress swamp.

Grasses are well-established in the wet prairie communities, which also include a few shrubs. Predominant grasses include torpedo grass, bulrush, soft rush, yellow-eyed grass and pennywort. The scattered shrubs are generally salt bush, St. John's-wort and wax myrtle.

Wetland Functions

The wetlands perform beneficial hydrologic functions for the project area. They act as pollutant and sediment traps for stormwater runoff, collection basins for flood waters and recharge areas for the region's potable groundwater supply. Significant surface and groundwater quality impacts will be avoided through coordination with regulatory agencies and adherence to Chapters 17-3 and 17-25 of the Florida Administrative Code and Section 104 of the FDOT Standard Specifications for Road and Bridge Construction. Additional information can be found in the "Water Quality" section of this report.

Generally, the type of wetland communities found in the study area could provide suitable feeding habitat for eastern indigo snakes, wood storks and bald eagles. Because of the large home range of the eastern indigo snake and the extensive suitable feeding habitat currently existing adjacent to the project corridor, only minimal impact to wildlife habitat is anticipated.

Impacts and Mitigation Measures

Short term wetland impacts which could occur due to the proposed project may be from soil erosion during construction. This type of impact will be minimized through the use of Best Management Practices.

Potential long term impacts may be related to dredging and filling for project construction. Mitigation measures to offset wetland impacts will be determined during the permitting process when project plans are more specific. Mitigation measures may include the following:

- * Minimization of impacts through design considerations, such as steep-ended side slopes or the use of retaining walls to reduce/eliminate wetland encroachment;
- * Preservation of existing wetland systems through maintaining requisite hydro-periods and possible commitment of land to be preserved as a wetland;
- * Improvement of existing wetlands through restoring requisite hydro-periods to upgrade existing wetland values;
- * Enhancement of existing wetlands through the planting of additional hydrophytic vegetation and removing exotic or invader species;
- * Creation of new wetlands to compensate for impacted wetlands; and
- * Replacement of existing wetlands with wetlands of greater habitat value.

Table 4 summarizes the acreages of affected wetlands.

Wetland acreages were determined using two different methods. Acreages of smaller wetlands were planimetered from aerial photographs. However, complete aerial coverage was not available for larger wetlands, so acreages of these wetlands were estimated using topographic maps. These two methods resulted in the two different levels of precision in values in Table 4.

2. Aquatic Preserves

There are no areas designated by the State of Florida as Aquatic Preserves located in or adjacent to the project area. No impacts to Aquatic Preserves would result from this project.

TABLE 4
WETLAND IMPACTS

<u>Wetland</u>	<u>USFWS Wetlands Classification</u>	<u>Wetland Acreage Within ROW</u>	<u>Total Wetland Acreage</u>	<u>Data Source (For Total Acreage)</u>
A	PFO2, PEM1	0.174	9	Ehren & Fivay Junction F1 USGS Topos, 1954 (Estimated)
B	PFO2, PEM1	1.253	4.019	Air-photo (Planimetered)
C	PFO2, PSS1	3.835	64	Ehren & Fivay Junction F1 USGS Topos, 1954 (Estimated)
D	PEM1	0.040	0.313	Air-photo (Planimetered)
E	PFO2, PFO1	3.002	55	Ehren & Fivay Junction F1 USGS Topos, 1954 (Estimated)
F	PSS1, PEM1	0.272	4.064	Air-photo (Planimetered)
G	PFO1, PEM1	1.030	1.932	Air-photo (Planimetered)
H	PSS1, PEM1	0.444	0.662	Air-photo (Planimetered)
I	PSS1, PEM1	0.211	1.484	Air-photo (Planimetered)
J	PEM1	0.684	15.335	Air-photo (Planimetered)
K	PFO1, PEM1	0.234	105	Ehren, Fivay Junction & Masaryktown, F1 USGS Topos, 1954 (Estimated)
L	PSS1, PEM1	0.342	79	Ehren, Masaryktown, F1 USGS Topos, 1954 (Estimated)
M	PEM1	0.058	0.131	Air-photo (Planimetered)
N	PSS1, PEM1	0.212	0.285	Air-photo (Planimetered)

TABLE 4
WETLAND IMPACTS
(Continued)

<u>Wetland</u>	<u>USFWS Wetlands Classification</u>	<u>Wetland Acreage Within ROW</u>	<u>Total Wetland Acreage</u>	<u>Data Source (For Total Acreage)</u>
O	PEM1	0.096	75	Ehren & Masaryktown, F1 USGS Topos, 1954 (Estimated)
P	PEM1	0.264	955 (Includes Crews Lake)	Fivay Junction, Masaryktown, Port Richey NE, FL F1 USGS Topos, 1954 (Estimated)
Q	PFO1	0.176	3.356	Air-photo (Planimetered)
R	PFO1	0.133	0.891	Air-photo (Planimetered)
S	PEM1, POW	0.061	0.431	Air-photo (Planimetered)
T	PFO1, PEM1	0.262	5.292	Air-photo (Planimetered)
U	PFO1	0.126	0.229	Air-photo (Planimetered)
V	PSS1, PEM1	0.168	0.360	Air-photo (Planimetered)
W	PEM1	0.133	0.553	Air-photo (Planimetered)
X	PFO1, PEM1	0.072	1.329	Air-photo (Planimetered)
Y	PFO1	0.359	1.449	Air-photo (Planimetered)
Z	PFO1, PEM1	0.124	1.699	Air-photo (Planimetered)
AA	PFO1	0.135	1.876	Air-photo (Planimetered)
BB	PEM1	0.007	0.429	Air-photo (Planimetered)
CC	PEM1	0.161	0.427	Air-photo (Planimetered)

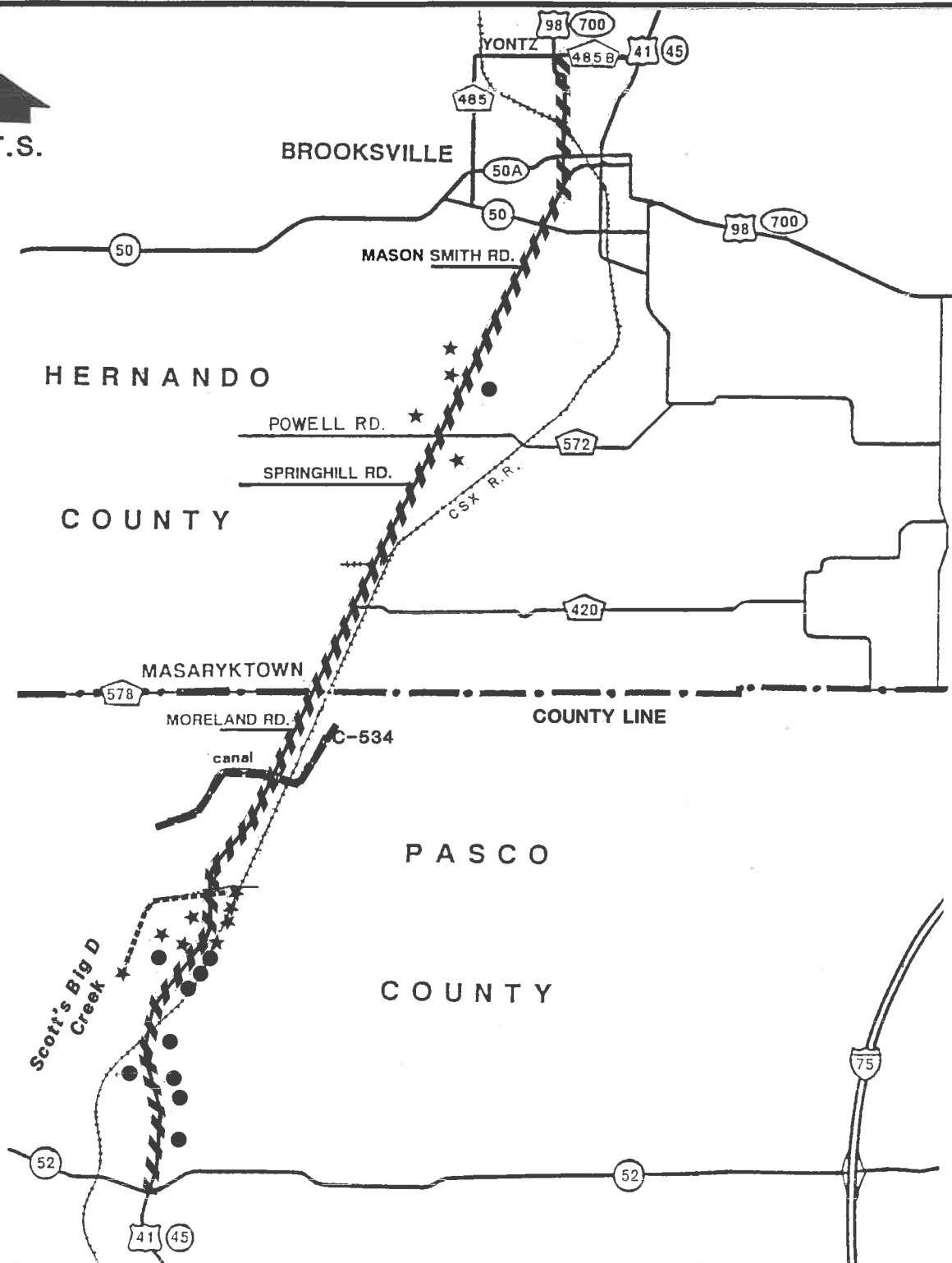
3. Water Quality

Surface Water

The project site lies in the coastal plain physiographic province between the Hillsborough River valley on the south and the Withlacoochee River valley on the northeast. Surface drainage is poorly developed in this area. The area is drained primarily by underground seepage. Surface waters in the study area are illustrated in Exhibit 11 and include natural, enclosed depressions containing water intermittently or perennially and unnamed, perennial creeks near Loyce and Gowers Corner. The enclosed depressions are numerous in the Pasco County segment of the study area, but only a few occur in the Hernando County segment. When rainfall is heavy, the depressions fill up and then spill into one another as the water moves generally westward towards the Gulf of Mexico, approximately 24 miles west of the site.

All surface waters in the project area are designated by the State of Florida as Class III Waters (Florida Administrative Code, Chapter 17-3). Water quality must be maintained to provide for recreation, and for propagation and maintenance of fish and wildlife populations. Using the Surface Water Quality Index Criteria developed by the Environmental Protection Agency, existing surface water quality is generally good in the project area. Levels of orthophosphate and dissolved solids are generally low, while nitrogen levels are moderate.

Short term surface water impacts which could result from the project would be the occurrence of soil erosion during construction. Erosion would increase turbidity and siltation in surface waters. Long term impacts could result from the increase in



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LEGEND

- Intermittent Pond
- ★ Perennial Pond
- Perennial Stream (Ditched)
- //// Proposed Easement
- Intermittent Ditch

FLORIDA DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL ANALYSIS REPORT
S.R. 45 (U.S. 41) / S.R. 700 (U.S. 98)

From S.R. 52 to C.R. 485B
 Pasco and Hernando Counties, Florida

WATER RESOURCES

Note: Exclusive of U.S. 41 Storm Drains

EXHIBIT 11

impervious surfaces associated with the project. This will result in increased stormwater runoff and a corresponding increase in pollutants, including oil and grease, nutrients and suspended solids. Both short term and long term impacts will be minimized through the use of Best Management Practices and adherence to federal, state and local water quality standards.

Groundwater

The project site is underlain by the Floridan Aquifer. This limestone formation is the source of practically all potable water used in the area. The top of the Floridan Aquifer lies within 100 feet of the ground surface in the project area. Flow direction in the aquifer is generally northwest towards the Gulf of Mexico. The Floridan aquifer is not designated as a Sole Source Aquifer.

The project site is located in an area where recharge to the Floridan Aquifer occurs naturally and at a high rate. Recharge may occur by direct movement of surface water through drain sinks, by percolation through the overlying sand and clay layers, and by lateral movement along the hydraulic gradient.

Groundwater in the project area is hard due to the presence of calcium and magnesium bicarbonates, which have dissolved from the surrounding rock. Groundwater quality is fair to good throughout most of the project area. Chloride and nitrate concentrations are generally low throughout the study area. Total dissolved solids levels are moderate to high in the project area. Sulfate concentrations are generally low; however, the U.S. Geological Survey monitoring well located near Brooksville (0.1 mile north of State Highway 50 and 0.4 mile west of U.S. 98) indicated

high sulfate concentrations (1,100 to 1,500 milligrams per liter) during the 1986 water year (October 1985 to September 1986).

There are potential groundwater quality impacts in the project area because of the rapid rate of recharge to the Floridan Aquifer and the location of public supply wells in the project vicinity. Impacts will be minimized through coordination with regulatory agencies and adherence to Chapters 17-3 and 17-25 of the Florida Administrative Code (F.A.C.) and Section 104 of the FDOT Standard Specifications for Road and Bridge Construction.

Drainage Considerations

Drainage for the existing U.S. 41 roadway occurs primarily through cross-drains and roadside ditches. There are two bridges, thirty concrete box culverts and nine concrete pipes for cross-drainage.

The proposed drainage for the project would utilize a combination of open ditches and curb and gutter systems. Open ditches would be used for the Pasco County roadway portion south of Moreland Road and the Hernando County roadway portion between Springhill Road and Mason Smith Road. The rest of the roadway would have a curb and gutter enclosed drainage system.

The FDOT has coordinated with the Florida Department of Environmental Regulation and the Southwest Florida Water Management District and provided them with a preliminary coordination package describing the conceptual design of the stormwater management system for this project. As a result of that coordination, the Department is developing a stormwater treatment system for the project in accordance with

Chapter 17-25, F.A.C. The Department will continue the coordination effort during subsequent project development stages to ensure compliance with Chapter 17-25, F.A.C. Coordination does not relieve the Department of the necessity to acquire permits under Chapter 17-25, F.A.C., nor does the preliminary review ensure a favorable permitting review.

Because of the state-of-the-art in highway stormwater research, it is not possible at this time to determine the impact of this drainage on the surrounding waters. The appropriate Best Management Practices will be used during the construction phase for erosion control and water quality considerations. Any additional stormwater treatment measures found necessary over and above Best Management Practices in order to obtain Chapter 17-25, F.A.C. compliance will be state-funded.

4. Outstanding Florida Waters

There are no Outstanding Florida Waters within or adjacent to the project study area.

5. Wild and Scenic Rivers

There are no Wild and Scenic Rivers listed in the National Park Service Southeastern Rivers Inventory. Therefore, the coordination requirements for the Wild and Scenic Rivers Act do not apply to this project.

6. Floodplains

A floodplain evaluation was conducted in accordance with Executive Order 11988 "Floodplain Management" and FHPM 6-7-3(2) in order to determine the proposed

project's encroachment on floodplains. The proposed improvements represent a minor change in the area's topography and would result in minimal floodplain impacts. These impacts would be both longitudinal and transverse to the floodplain.

The 100-year floodplains immediately adjacent to and crossing the project are associated with an area of extensive lowlands, cypress heads, lakes and intermittent creeks. The project crosses no major waterways. According to the Floodplain Evaluation Criteria developed by the FDOT drainage office in consultation with FHWA, this project falls within floodplain evaluation Category 3 (projects involving modification to existing drainage structures), Category 4 (projects on existing alignment involving replacement of existing drainage structures with no record of drainage problems) and Category 5 (projects on existing alignment involving replacement of structures in heavily urbanized floodplains).

The modifications to drainage structures included in this project will result in an insignificant change or an increase in their capacity to carry floodwater. This change will cause minimal increases in flood heights and flood limits. These minimal increases will not result in any significant adverse impacts on the natural and beneficial floodplain values or any significant change in flood risks or damage. There will be a decrease in the potential for interruption or termination of emergency service or emergency evacuation routes. Therefore, it has been determined that this encroachment is not significant.

The proposed structures for this project for Category 3 and 4 structures will perform hydraulically in a manner equal to or greater than the existing structures, and backwater surface elevations are not expected to increase. As a result, there will be

no significant adverse impacts on natural and beneficial floodplain values. There will be no decrease in flood risk, and there will not be a significant change in the potential for interruption or termination of emergency service or emergency evacuation routes. Therefore, it has been determined that this encroachment is not significant.

Replacement drainage for Category 5 structures for this project are limited to hydraulically equivalent structures. The limitations to the hydraulic equivalency being proposed are basically due to restrictions imposed by the geometrics of design, existing development, cost feasibility, or practicability. An alternative encroachment location is not considered in this category since it defeats the project purpose or is economically unfeasible. Since flooding conditions in the project area are inherent in the topography or are a result of other outside contributing sources, and there is no practical alternative to totally eradicate flood impacts or even reduce them in any significant amount, existing flooding will continue, but not be increased. The proposed structure will be hydraulically equivalent to or greater than the existing structure, and backwater surface elevations are not expected to increase. As a result, the project will not affect existing flood heights or floodplain limits. This project will not result in any new or increased adverse environmental impacts. There will be no significant change in the potential for interruption or termination of emergency service or emergency evacuation routes. Therefore, it has been determined that this encroachment is not significant.

7. Coastal Zone Consistency

The Office of Planning and Budget, Office of the Governor, has determined that this project is consistent with the Florida Coastal Zone Management Plan Appendix A).

8. Coastal Barrier Islands

It has been determined that this project is not located within, or in the vicinity of, Coastal Barrier Islands.

9. Wildlife and Habitat

The project area has been evaluated for impacts on threatened and endangered species. A literature review resulted in the determination that three threatened or endangered species may occur within the project corridor due to the presence of suitable habitat. The literature review also provided a determination that the United States Fish and Wildlife Service (USFWS) has no designated critical habitat for threatened or endangered species within vicinity of this project. A field review on January 11, 1989 did not result in the sighting of any threatened or endangered species or other positive indicators of their presence (i.e., nests, burrows, etc.).

Informal contact with the USFWS identified the following five federally listed threatened or endangered species that may be found in Pasco and Hernando counties and consequently may occur within the project area:

<u>Common Name</u>	<u>Scientific Name</u>	<u>Federally Designated Status</u>
Eastern indigo snake	<u>Drymarchon corais couperi</u>	Threatened
Florida scrub jay	<u>Aphelocoma coerulescens</u>	Threatened
Red-cockaded woodpecker	<u>Picoides borealis</u>	Endangered
Southern bald eagle	<u>Haliaeetus leucocephalus</u>	Endangered
Wood stork	<u>Mycteria americana</u>	Endangered

Eastern indigo snakes often inhabit dry, sandy areas, especially Florida's high pine communities, but they are actually characteristic of moister habitats. In drier environments, indigo snakes invariably seek shelter in the burrows of gopher tortoises to prevent desiccation. Some active gopher tortoise burrows were observed and suitable habitat for the species occurs in the proposed corridor. Although suitable habitat is present within the study corridor, the species is not prevalent in any part of its known range as a result of collection by snake enthusiasts and exploitation of gopher tortoises. Because indigo snakes have extremely large home ranges, the likelihood of finding specimens within the areas of impact should be minimal. Therefore, the project should have no significant negative impact on this species.

Florida scrub jays have extremely specific habitat requirements. They reside permanently in oak scrub consisting of live myrtle and Chapman's oak, along with saw and sand palmetto with some scattered sand pine and rosemary. The lack of scrub oak communities within the project area indicates that it is highly unlikely for this species to occur on site. Consequently, no significant negative impact to this species is expected due to the proposed project.

Red-cockaded woodpeckers are associated with stands of mature to overmature southern pines. Historically, longleaf pine has been the most utilized, although loblolly, shortleaf, slash and pond pine are used occasionally. Typically, the forests are open park-like stands and lack a thick understory because of frequent burning. A few stands of mature pines with an open understory are present in the proposed right-of-way. No evidence of the presence of the woodpeckers was noted in these communities. Although mature, the pines do not appear to be suitable due to their

small size. In addition, similar habitat is present and the proposed corridor will only be impacting a small portion of the existing community. Consequently, it is anticipated that the proposed project would have no adverse impacts on the red-cockaded woodpeckers.

Southern bald eagles are usually found near riparian habitats, nesting near water bodies where they feed along the shore or over extensively shallow water. Some interior pairs nest far from expanses of open water on tree islands, in marshes, or in mainly dry prairies with small marshes and ponds. Potential feeding habitat for this species occurs within the project boundaries, but no nests are located within the corridor or within a 1,500-foot radius of the project boundaries. The closest nest is approximately 1 1/8 miles away. No significant negative impacts are expected on this species due to the proposed project.

The wood stork characteristically nests in cypress or mangrove swamps and feeds in freshwater marshes, flooded pastures, and flooded ditches. Suitable feeding habitat is present in the project corridor, although no individuals were seen during the field review. However, the presence of adjacent, suitable habitat should result in no significant loss of available habitat for the species. Consequently, no significant negative impacts to this species are anticipated due to the proposed project.

10. Farmlands

The proposed project is excluded from the requirements for farmlands evaluation and coordination with the Soil Conservation Service because it has been determined to be a

Categorical Exclusion as defined in 23 CFR 771. (Letter of Agreement, January 9, 1985, Federal Highway Administration and the Soil Conservation Service.)

D. PHYSICAL IMPACTS

1. Noise

A noise analysis was accomplished using methods established in Title 23 CFR, Part 772, U.S. Department of Transportation FHWA, Procedures for Abatement of Highway Traffic Noise and Construction Noise. Further details are provided in a Noise Report, published separately.

Noise Sensitive Areas

The existing land uses in the project area are primarily commercial, residential and agricultural/pasture. Noise sensitive areas in the study corridor include single family homes, mobile homes, motels, a park, a library, a church and a meeting hall. Existing land uses are shown on Exhibit 5, previously referenced. Because there are portions of the project area that are not fully developed, some changes in land use could occur in the future.

Predicted Noise Levels

Existing and future noise levels within the study area were evaluated by considering noise measurements and by predicting traffic noise levels with the FHWA computer prediction model STAMINA 2.0/OPTIMA. The computer model was validated by

running the program with traffic data gathered during noise monitoring, and by comparing measured results with predicted results. Predicted and measured levels were found to be within an acceptable difference of 3 dBA. Based on this comparison, the STAMINA/OPTIMA model was considered to be a reliable tool for the determination of noise levels for this project.

Noise prediction analyses were performed for the Existing condition in 1988, and the No-Build and Build conditions in 2010. The traffic characteristics used to perform the analysis represent the conditions (vehicle volume, mix and speed) present during the peak hour (demand) or at level-of-service (LOS) C, whichever is less. For modeling purposes, the posted speed limit was assumed for all roadway segments. Traffic considerations are discussed in further detail in the Traffic Memorandum, published separately. Traffic projections assumed annual growth rates ranging from 1.6 percent (at the intersection of S.R. 45 and S.R. 700) to 2.4 percent (from S.R. 50 to S.R. 700). The Peak Hour Factor (K) was assumed to be 9 percent in Pasco County and 11 percent in Hernando County. Vehicle mix percentages during peak hour were assumed to be 94 percent cars, 2 percent medium trucks and 4 percent heavy trucks in Pasco County. In Hernando County, vehicle mix percentages were assumed to be 88 percent cars, 4 percent medium trucks and 8 percent heavy trucks.

The approximate noise levels at properties adjacent to the roadway were estimated by determining the noise levels at specific distances from the roadway for the various segments of each study scenario. Table 5 compares the distances from the roadway centerline where noise levels of 67 dBA are estimated to occur. As would be expected, the areas of greatest change in traffic volume are predicted to receive the greatest change in noise level.

TABLE 5
NOISE ISOPLETHS
Hourly Leq of 67 dBA

<u>Roadway Section</u>	<u>Approximate Distance From Roadway Centerline (ft)</u>		
	<u>1987</u>	<u>2010</u>	
	<u>Existing</u>	<u>No-Build</u>	<u>Build</u>
S.R. 45 from S.R. 52 to Moreland Road	97	135	150
S.R. 45 from Moreland Road to Kollar Street	100	118	200
S.R. 45 from Kollar Street to Hooza Street	87	103	200
S.R. 45 from Hooza Street to Ayers Road	100	118	200
S.R. 45 from Ayers Road to Barnett Road	135	135	245
S.R. 45 from Barnett Road to S.R. 700	58	58	146
S.R. 700 from S.R. 45 to Ward Avenue	70	70	150
S.R. 700 from Ward Avenue to Yontz Road	94	94	150

Noise Impact Analysis

The noise impact potential of the proposed project was determined by comparing land use, existing noise levels, and predicted noise levels with established criteria, which consider exceedance and significant increase. Although levels are not expected to increase substantially, they will exceed recommended criteria. FHWA Noise Abatement Criteria, shown in Table 6, establish guidelines for traffic noise impact assessment with respect to land use. When the traffic noise of a proposed roadway project is predicted to approach or exceed the criteria established for certain activity categories, noise abatement measures must be considered. For purposes of impact evaluation, the FDOT considers "approach" to normally mean within 2 dBA of the FHWA Noise Abatement Criteria.

Predicted noise levels were determined to approach or exceed the Noise Abatement Criteria for Activity Category B for the Existing, No-Build, and Build conditions. Activity Category B impacts were identified primarily at single family homes. Noise impact estimates are presented in Table 7. The location of noise impacted sites is illustrated on Exhibit 12.

Noise Abatement Measures

Various noise abatement measures were considered for this project because levels were determined to approach or exceed the FHWA Noise Abatement Criteria.

TABLE 6
FHWA NOISE ABATEMENT CRITERIA

<u>Activity Category</u>	<u>Hourly Leq (dBA)</u>	<u>Description of Activity Category</u>
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above.
D		Undeveloped lands.
E	52 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

References: 23 CFR, Part 772

TABLE 7
NOISE IMPACT ESTIMATES

Site Number	Site Description	Hourly Leq (dBA)			Increase With Project
		1987 Existing	2010 No-Build	2010 Build	
1-2	Single Family Home	65*	67**	70**	5
3	Single Family Home	68**	70**	76**	8
4	Mobile Home	65*	67**	70**	5
5	Mobile Home	63	66*	68**	5
6	Mobile Home	60	62	65*	5
7	Single Family Home	62	65*	66*	4
8-12	D & M Trailer Park	66*	69**	74**	8
13	D & M Trailer Park	60	62	65*	5
14	Single Family Home	63	65*	67**	4
15	Single Family Home	70**	72**	76**	6
16	Single Family Home	64	66*	68**	4
17	Mobile Home	71**	73**	69**	0
18	Mobile Home	68**	70**	67**	0
19	Single Family Home	64	66*	68**	4
20	Single Family Home	64	66*	65*	1
21	Tennis Courts	65*	67**	66*	1
22	Single Family Home	68**	70**	69**	1
23-24	Single Family Home	65*	67**	66*	1
25	Mobile Home	65*	67**	66*	1
26	Mobile Home	63	65*	64	1
27	Mobile Home	63	65*	68**	5
28-29	Mobile Home	65*	67**	69**	4
30	Single Family Home	63	66*	65*	2
31	Single Family Home	64	66*	65*	1
32-33	Single Family Home	65*	67**	66*	1
34	Single Family Home	62	65*	65*	3
35	Single Family Home	64	66*	66*	2
36	Single Family Home	65*	67**	68**	3
37	Single Family Home	62	65*	66*	4
38-40	Single Family Home	63	65*	66*	3
41	Single Family Home	65*	67**	68**	3
42	Single Family Home	62	64	65*	3
43	Single Family Home	62	65*	66*	4
44	Single Family Home	65*	67**	68**	3
45	Single Family Home	62	65*	65*	3
46	Mobile Home	63	65*	65*	2
47	Single Family Home	65*	67**	66*	1
48	Mobile Home	63	65*	68**	5
49	Mobile Home	66*	68**	66*	0
50-51	Single Family Home	66*	68**	66*	0
52-53	Single Family Home	66*	69**	66*	0
54	Single Family Home	65*	67**	66*	1
55	Mobile Home	70**	72**	69**	0
56	Single Family Home	68**	70**	67**	0

TABLE 7
NOISE IMPACT ESTIMATES
(Continued)

<u>Site Number</u>	<u>Site Description</u>	<u>Hourly Leq (dBA)</u>			<u>Increase With Project</u>
		<u>1987 Existing</u>	<u>2010 No-Build</u>	<u>2010 Build</u>	
57-58	Single Family Home	66*	69**	66*	0
59-60	Single Family Home	65*	67**	66*	1
61	Mobile Home	65*	67**	71**	6
62	Mobile Home	67**	69**	74**	7
63	Mobile Home	64	66*	71**	7
64	Mobile Home	66*	69**	74**	8
65	Mobile Home/Big Oak Campground	71**	73**	Taken with project	
66	Mobile Home/Big Oak Campground	63	65*	68**	5
67	Mobile Home/Big Oak Campground	66*	69**	74**	8
68	Single Family Home	63	65*	68**	5
69	Mobile Home	63	65*	65*	2
70	Mobile Home	65*	67**	66*	1
71	Single Family	63	65*	65*	2
72	Sevilla Mobile Home Court	62	65*	64	2
73-75	Sevilla Mobile Home Court	63	65*	65*	2
76	Single Family Home	63	65*	65*	2
77	Single Family Home	66*	68**	67**	1
78	Single Family Home	68**	70**	69**	1
79	Single Family Home	66*	69**	67**	1
80	Single Family Home	63	65*	66*	3
81	Single Family Home	66*	69**	69**	3
82	Single Family Home	66*	68**	68**	2
83	Single Family Home	71**	73**	74**	3
84	Single Family Home	63	65*	66*	3
85-88	Single Family Home	65*	67**	68**	3
89	Single Family Home	64	66*	66*	2
90	Single Family Home	64	66*	67**	3
91	Mobile Home	66*	68**	68**	2
92-93	Mobile Home	63	65*	66*	3
94	Mobile Home	65*	67**	68**	3
95-96	Single Family Home	64	66*	66*	2
97	Single Family Home	66*	68**	68**	2
98	Single Family Home	63	65*	66*	3
99	Single Family Home	62	65*	65*	3
100	Single Family Home	64	66*	66*	2
101-108	Single Family Home	65*	66*	70**	5
109	Single Family Home	64	65*	69**	5
110	Single Family Home	63	64	68**	5

TABLE 7
NOISE IMPACT ESTIMATES
(Continued)

<u>Site Number</u>	<u>Site Description</u>	<u>Hourly Leq (dBA)</u>			<u>Increase With Project</u>
		<u>1987 Existing</u>	<u>2010 No-Build</u>	<u>2010 Build</u>	
111-112	Single Family Home	65*	66*	69**	4
113	Single Family Home	64	65*	68**	4
114	Single Family Home	66*	67**	70**	4
115	Single Family Home	63	64	67**	4
116	Single Family Home	65*	66*	69**	4
117	Single Family Home	66*	68**	70**	4
118	Single Family Home	65*	66*	70**	5
119	Mobile Home	64	65*	69**	5
120	Single Family Home	67**	68**	73**	6
121-124	Single Family Home	66*	67**	71**	5
125	Single Family Home	67**	68**	71**	4
126	Mobile Home	67**	68**	71**	4
127	Single Family Home	68**	69**	72**	4
128	Single Family Home	65*	66*	69**	4
129-130	Single Family Home	65*	66*	71**	6
131	Single Family Home	62	64	68**	6
132	Single Family Home	66*	67**	73**	7
133	Single Family Home	63	65*	69**	6
134	Single Family Home	66*	67**	72**	6
135	Mobile Home	67**	68**	72**	5
136	Single Family Home	66*	67**	71**	5
137	Single Family Home	63	64	68**	5
138-139	Single Family Home	62	63	67**	5
140	Single Family Home	65*	66*	70**	5
141	Pool (Masary Hotel)	62	63	67**	5
142	Mobile Home	66*	67**	71**	5
143	Single Family Home	65*	66*	70**	5
144-145	Single Family Home	66*	67**	70**	4
146	Single Family Home	64	65*	69**	5
147	Single Family Home	66*	68**	72**	6
148	Single Family Home	67**	68**	73**	6
149-150	Single Family Home	62	63	67**	5
151-152	Mobile Home	62	63	67**	5
153	Single Family Home	67**	68**	72**	5
154	Single Family Home	69**	70**	72**	3
155	Single Family Home	66*	67**	70**	4
156	Single Family Home	67**	68**	71**	4
157	Single Family Home	65*	66*	69**	4
158	Mobile Home	61	61	66*	5
159-160	Mobile Home	66*	66*	69**	3
161-162	Single Family Home	66*	66*	69**	3
163	Single Family Home	65*	65*	69**	4
164	Mobile Home	61	61	65*	4
165	Single Family Home	63	63	67**	4
166	Mobile Home	62	62	66*	4

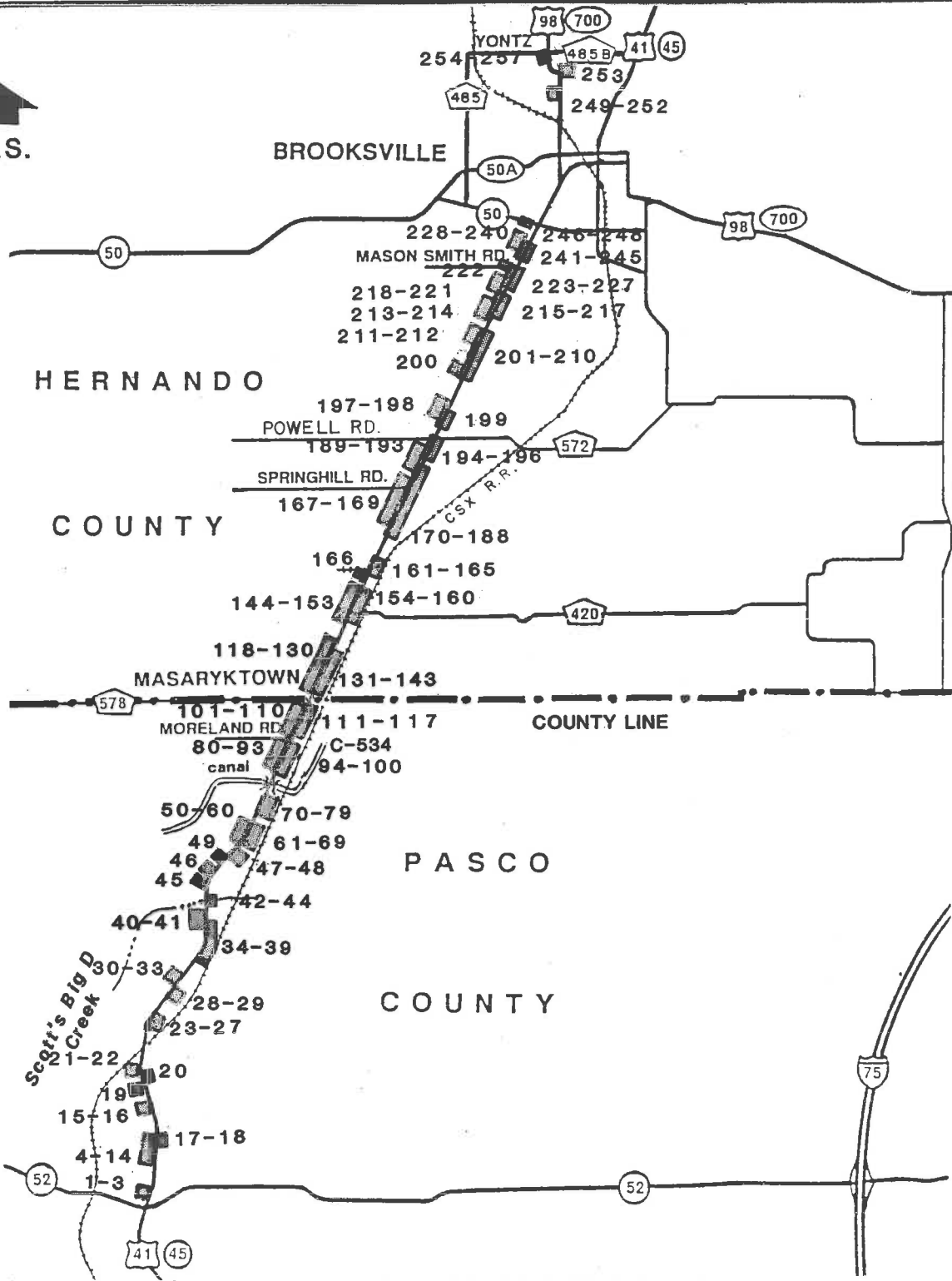
TABLE 7
NOISE IMPACT ESTIMATES
(Continued)

<u>Site Number</u>	<u>Site Description</u>	<u>Hourly Leq (dBA)</u>			<u>Increase With Project</u>
		<u>1987 Existing</u>	<u>2010</u>		
			<u>No-Build</u>	<u>Build</u>	
167	Mobile Home	66*	66*	70**	4
168	Mobile Home	68**	68**	72**	4
169	Single Family Home	66*	66*	70**	4
170	Single Family Home	64	64	67**	3
171	Single Family Home	70**	70**	73**	3
172	Single Family Home	62	62	66*	4
173	Single Family Home	67**	67**	70**	3
174	Single Family Home	62	62	65*	3
175	Single Family Home	65*	65*	69**	4
176	Single Family Home	63	63	67**	4
177	Mobile Home	69**	69**	72**	3
178	Mobile Home	71**	71**	74**	3
179	Mobile Home	65*	65*	68**	3
180	Single Family Home	63	63	66*	3
181	Mobile Home	64	64	67**	3
182	Mobile Home	62	62	65*	3
183-184	Single Family Home	69**	69**	73**	4
185	Mobile Home	65*	65*	69**	4
186	Single Family Home	63	63	66*	3
187	Mobile Home	66*	66*	69**	3
188	Single Family Home	69**	69**	72**	3
189	Single Family Home	70**	70**	75**	5
190	Single Family Home	67**	67**	71**	4
191	Single Family Home	67**	67**	70**	3
192-193	Single Family Home	65*	65*	70**	5
194	Single Family Home	67**	67**	71**	4
195	Single Family Home	64	64	67**	3
196	Single Family Home	66*	66*	69**	3
197-198	Single Family Home	65*	65*	70**	5
199	Single Family Home	63	63	66*	3
200	Single Family Home	63	63	68**	5
201	Single Family Home	63	63	65*	2
202	Single Family Home	70**	70**	71**	1
203	Mobile Home	63	63	66*	3
204	Single Family Home	65*	65*	67**	2
205-208	Pine Cabins	70**	70**	71**	1
209	Single Family Home	70**	70**	71**	1
210	Single Family Home	67**	67**	71**	4
211-212	Single Family Home	69**	69**	71**	2
213	Single Family Home	67**	67**	70**	3
214	Single Family Home	64	64	67**	3
215	Single Family Home	62	62	65*	3
216	Single Family Home	69**	69**	75**	6
217	Single Family Home	68**	68**	70**	2

TABLE 7
NOISE IMPACT ESTIMATES
(Continued)

<u>Site Number</u>	<u>Site Description</u>	<u>Hourly Leq (dBA)</u>			<u>Increase With Project</u>
		<u>1987 Existing</u>	<u>2010 No-Build</u>	<u>2010 Build</u>	
218-219	Single Family Home	69**	69**	71**	2
220	Single Family Home	65*	65*	68**	3
221	Single Family Home	63	63	67**	4
222	Single Family Home	63	63	68**	5
223	Single Family Home	62	62	67**	5
224-225	Evergreen Mobile Home	62	62	67**	5
226	Single Family Home	72**	72**	78**	6
227	Single Family Home	69**	69**	71**	2
228-229	Mobile Home	62	62	66*	4
230-232	Single Family Home	61	61	65*	4
233	Single Family Home	65*	65*	69**	4
234	Single Family Home	63	63	65*	2
235	Mobile Home	69**	69**	73**	4
236-238	Mobile Home	64	64	68**	4
239	Mobile Home	62	62	65*	3
240	Single Family Home	62	62	66*	4
241	Mobile Home	67**	67**	71**	4
242	Single Family Home	64	64	67**	3
243	Single Family Home	71**	71**	74**	3
244	Single Family Home	66**	67**	70**	4
245	Single Family Home	67**	67**	70**	3
246-248	Single Family Home	69**	69**	73**	4
249-250	Flamingo Mobile Home	64	64	69**	5
251	Flamingo Mobile Home	68**	68**	72**	4
252	Flamingo Mobile Home	63	63	66*	3
253	Single Family Home	65*	65*	71**	6
254-255	Single Family Home	64	64	69**	5
256	Single Family Home	63	63	68**	5
257	Single Family Home	61	61	67**	6
Total Number of Units Expected To Approach or Exceed Noise Abatement Criteria		154	200	254	

* Noise levels predicted to approach noise abatement criteria.
** Noise levels predicted to exceed noise abatement criteria.



Greiner, Inc.

 Noise Impacted Areas

FLORIDA DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ANALYSIS REPORT
S.R. 45 (U.S. 41) / S.R. 700 (U.S. 98)
From S.R. 52 to C.R. 485B
Pasco and Hernando Counties, Florida

NOISE IMPACTED AREAS

Noise abatement measures evaluated and determined to be unfeasible for this project include roadway alignment, traffic system management, noise barriers and property acquisition. The proposed roadway alignment is primarily within the existing right-of-way and was selected because it minimized property acquisition and relocation. Any alternative on a new alignment is not viable because it does not eliminate the need to improve S.R. 45/S.R. 700. Shifting the alignment along the existing corridor is not effective because it does not substantially reduce noise levels and because sensitive sites are found on both sides of the roadway. Traffic system management alternatives would not be consistent with the project objectives of increasing vehicle flow and capacity. Noise barriers (either walls, berms, or landscaping) would not be effective because of the frequent breaks in the system which would be necessary for access to side streets, homes, and businesses. Property acquisition solely for noise abatement is not considered to be cost-effective. A measure to minimize the potential for future noise impacts would be the implementation of policies by local jurisdictions which would control the future development of noise sensitive uses adjacent to the roadway.

Based on the noise analyses performed, there are no apparent solutions available to mitigate the noise impacts at the identified noise impacted areas. Future noise impacts will be minimized through prudent land use controls implemented by local jurisdictions.

2. Air Quality

The impact of the proposed improvements upon air quality was evaluated. It was determined that the improvements would result in improved air quality in the study area and would not result in an exceedance of the National Ambient Air Quality Standards.

TABLE 9
PREDICTED ONE- AND EIGHT-HOUR, WORST-CASE
CARBON MONOXIDE LEVELS IN THE
VICINITY OF THE S.R. 45 (U.S. 41)/S.R. 50 INTERSECTION

<u>Study Year</u>	<u>Receptor Number</u>	<u>With Improvements</u>		<u>Without Improvements</u>		<u>Receptor Location</u>
		<u>One-Hour Average^a</u>	<u>Eight-Hour Average^a</u>	<u>One-Hour Average^a</u>	<u>Eight-Hour Average^a</u>	
2000	1	5	3	8	4	S.W. quadrant
	2	6	4	7	4	S.W. quadrant
	3	7	4	8	5	S.W. quadrant
	4	7	4	8	4	S.W. quadrant
	5	7	4	8	4	S.W. quadrant
	6	7	4	8	4	S.W. quadrant
	7	7	4	9	5	N.W. quadrant
	8	5	3	6	4	N.W. quadrant
	9	4	3	6	4	N.E. quadrant
	10	4	3	6	4	N.E. quadrant
	11	6	4	8	4	S.E. quadrant
	12	6	3	11	6	S.E. quadrant
2010	1	7	4	9	5	S.W. quadrant
	2	8	4	9	5	S.W. quadrant
	3	8	5	10	5	S.W. quadrant
	4	8	4	9	5	S.W. quadrant
	5	8	4	9	5	S.W. quadrant
	6	8	4	9	5	S.W. quadrant
	7	8	5	10	5	N.W. quadrant
	8	6	4	7	4	N.W. quadrant
	9	5	3	7	4	N.E. quadrant
	10	5	3	7	4	N.E. quadrant
	11	7	4	9	5	S.E. quadrant
	12	7	4	13	7	S.E. quadrant

^a Includes background concentration of 1.5 ppm.

Ambient Air Quality Standards (AAQS) for carbon monoxide--levels considered not to pose any significant health risk:

*One-Hour = 35 parts per million

*Eight-Hour = 9 parts per million

TABLE 10

PREDICTED ONE- AND EIGHT-HOUR, WORST-CASE
CARBON MONOXIDE LEVELS IN THE VICINITY OF THE
S.R. 45 (U.S. 41)/SUMMIT ROAD INTERSECTION

Study Year	Receptor Number	<u>With Improvements</u>		<u>Without Improvements</u>		Receptor Location
		<u>One-Hour Average^a</u>	<u>Eight-Hour Average^a</u>	<u>One-Hour Average^a</u>	<u>Eight-Hour Average^a</u>	
2000	1	7	4	9	5	S.W. quadrant
	2	7	4	7	4	N.W. quadrant
	3	9	5	10	5	N.E. quadrant
	4	9	5	11	6	N.E. quadrant
	5	7	4	9	5	N.E. quadrant
	6	6	4	8	4	S.E. quadrant
	7	5	3	7	4	S.E. quadrant
	8	5	3	6	4	S.E. quadrant
2010	1	8	5	10	5	S.W. quadrant
	2	8	4	9	5	N.W. quadrant
	3	10	5	12	6	N.E. quadrant
	4	10	6	12	6	N.E. quadrant
	5	8	4	10	5	N.E. quadrant
	6	7	4	9	5	S.E. quadrant
	7	6	4	7	4	S.E. quadrant
	8	6	4	7	4	S.E. quadrant

^a Includes background concentration of 1.5 ppm.

Ambient Air Quality Standards (AAQS) for carbon monoxide--levels considered not to pose any significant health risk:

*One-Hour = 35 parts per million

*Eight-Hour = 9 parts per million

moving; cement, asphalt, and aggregate handling; heavy equipment operation; use of haul roads; and wind erosion of exposed areas and materials storage piles. Noise and vibration impacts will result from heavy equipment movements and other construction activities. Both construction noise and air quality impacts will be minimized on this project by adherence to the controls listed in the FDOT's Standard Specifications for Road and Bridge Construction.

Maintenance of traffic will be planned to minimize traffic delays. Accessibility to all businesses will be maintained to the extent practicable throughout the construction phases. Short-term construction impacts will inevitably occur and will be minimized to the greatest degree possible by the contractor. Appropriate Best Management Practices will be implemented to satisfy permit requirements and minimize secondary construction impacts.

4. Hazardous Materials

A hazardous material survey was conducted within the vicinity of S.R. 45 and S.R. 700. The survey identified any known and potential hazardous materials sites within the project study area and evaluated their potential impact to the project. The survey was conducted following FDOT's Project Development and Environmental Study Guidelines, Part 2, Chapter 22.

Survey Methodology

This survey was conducted to identify any known and potential hazardous material sites in the project vicinity and assess their potential impact upon the project. Because no single comprehensive source of information is available which identifies all known

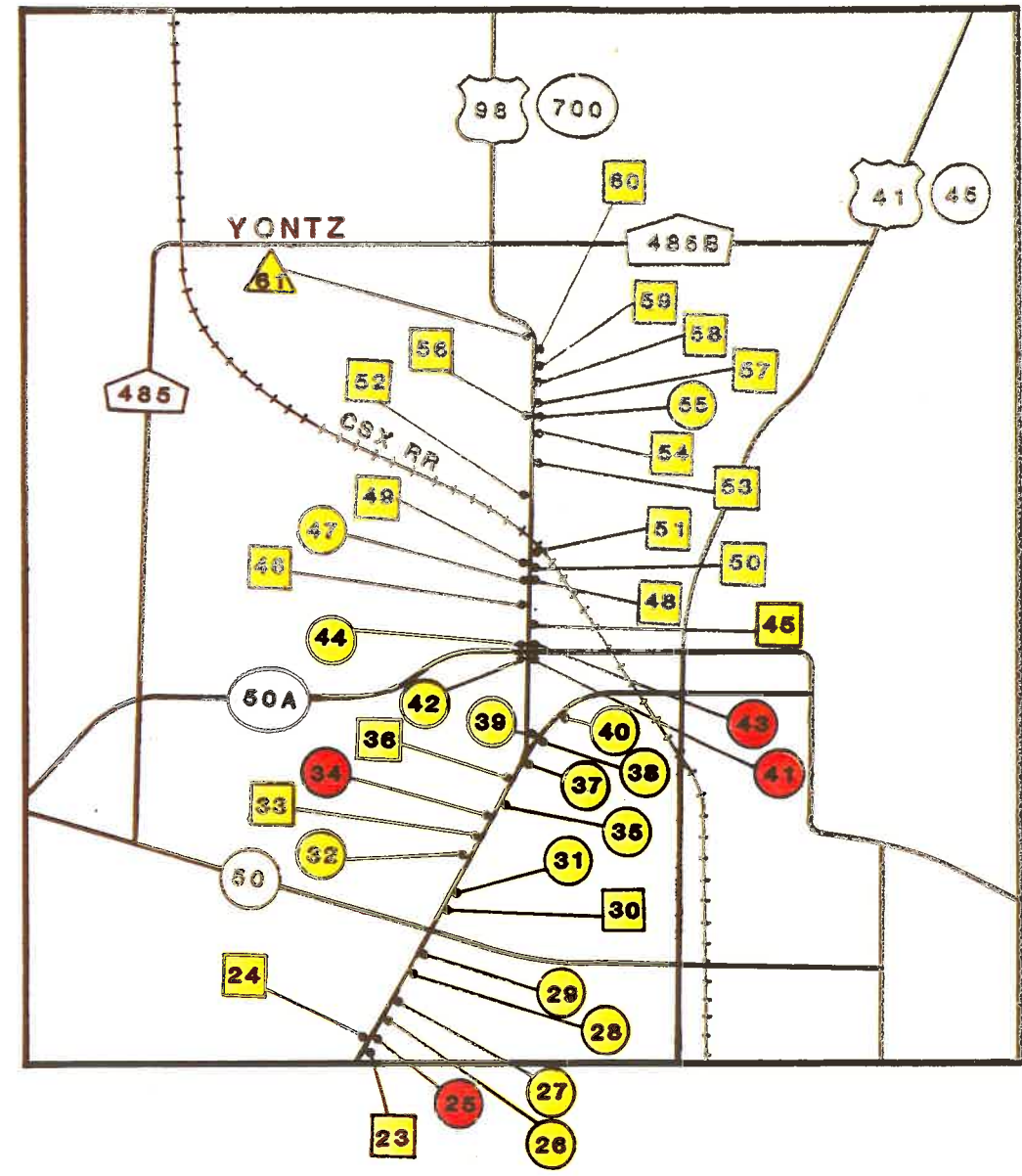
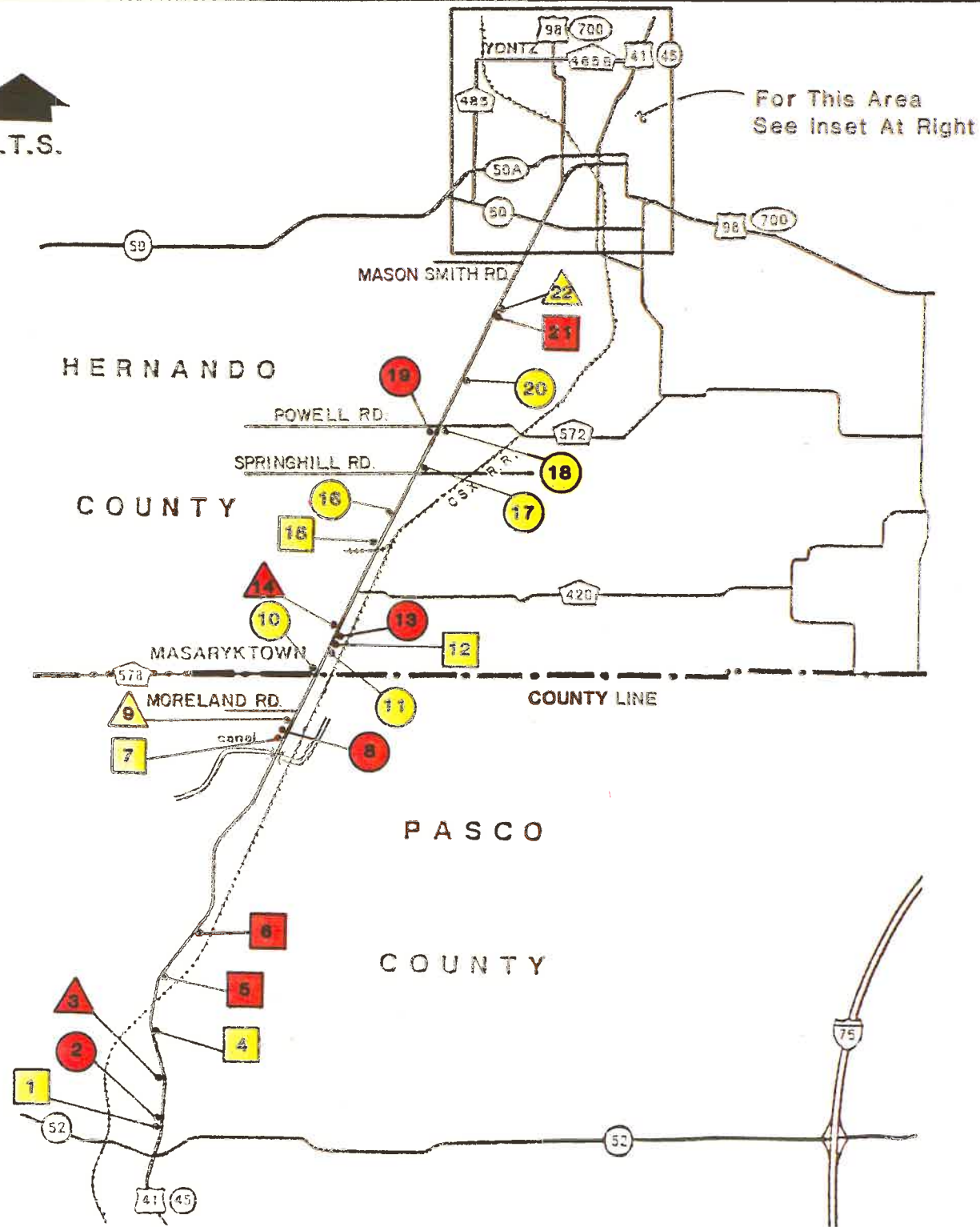
and potential hazardous material sites along the project corridor, this evaluation consisted of the following tasks:

- * Contacting representatives and reviewing files of the Florida Department of Environmental Regulation (FDER).
- * Evaluating aerial photography dated 1965 and 1979 to identify past land uses within the City of Brooksville.
- * Consulting the following publications by the FDER and Tampa Bay Regional Planning Council (TBRPC) for locations of potential environmental contamination:
 - Groundwater Systems Hazardous Waste Quick Look (FDER),
 - Stationary Tank Inventory System (FDER),
 - The Sites List (FDER), and
 - County Government Hazardous Waste Management Assessment for Pasco County.
- * Performing field investigations within the study area focusing on known or suspected sites of underground storage tanks and hazardous material use.
- * Conducting informal interviews, whenever possible, with business personnel to gather additional information on the site's history.
- * Documenting with photographs the current condition of the identified sites.

All of the available information from these various sources was compiled and analyzed to determine the potential for hazardous material site involvement within the proposed project.

Survey Results




The results of the survey identified 61 potential hazardous material sites in the S.R. 45/S.R. 700 project area. Aerial photography showing the exact location of each site is on file at the FDOT-District Seven office in Tampa. The approximate location of each site is shown on Exhibit 13. Following Exhibit 13, site-specific information including the site address and site characteristics is provided in Table 11.



Greiner, Inc.

LEGEND

Site Categories

-  Hazardous Material User
-  Storage Tanks
-  Salvage Yard

Site Ratings

-  High
-  Medium
-  Low

FLORIDA DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL ANALYSIS REPORT
S.R. 45 (U.S. 41)/ S.R. 700 (U.S.98)
From S.R. 52 to C.R. 485B
Pasco and Hernando Counties, Florida

INVESTIGATED HAZARDOUS MATERIAL SITES

TABLE 11

INVESTIGATED SITES
IN THE VICINITY OF
S.R. 45 and S.R. 700

<u>Site Number</u>	<u>Site Name & Address</u>	<u>Nature of Site</u>	<u>FDER ID Number</u>	<u>SIC Codes</u>	<u>Hazardous Material Concern</u>	<u>Storage Tanks^A</u>	<u>Regulatory Enforcement</u>	<u>Distance from Right-of-Way (ft.)^B</u>	<u>Potential for Impacts</u>
1	A & J Automotive Rt. 5, Box 944 Brooksville, Florida	Automotive service	None	7538	Automotive fluids	No	None reported	0	Low
2	Former Gas Station U.S. 41 Brooksville, Florida	Service station	None	5541	Petroleum	Possible	None reported	0	Medium
3	AC Auto Parts 1207 U.S. 41 Land O' Lakes, Florida	Salvage yard	None	5521	Automotive fluids	No	None reported	15	Medium
4	Simmons Construction Co. Rt. 5, Box 8948 Brooksville, Florida	Maintenance yard	None	4214	Automotive fluids	No	None reported	60	Low
5	Bigger's Garage U.S. 41 Brooksville, Florida	Automotive service	None	7538	Automotive fluids	No	None reported	0	Medium
6	B & G Truck Repair and Service Center 9629 U.S. 41 Brooksville, Florida	Truck service	None	7538	Automotive fluids	No	None reported	0	Medium
7	Larry Croan Trucking Rt. 5, Box 685 Brooksville, Florida	Automotive service	None	7538	Automotive fluids	No	None reported	30	Low
8	Jiffy Food Store #136 U.S. 41 and Bowman Rd. Brooksville, Florida	Service station	518514980	5541	Petroleum	Yes	None reported	0	Medium
9	Gillette Recycling U.S. 41 Brooksville, Florida	Salvage yard	None	5093	Automotive fluids	No	None reported	40	Low
10	Pick Kwick Store #122 75 Broad St. Brooksville, Florida	Service station	278520260	5541	Petroleum	Yes	None reported	20	Low

TABLE 11

INVESTIGATED SITES
IN THE VICINITY OF
S.R. 45 and S.R. 700
(Continued)

Site Number	Site Name & Address	Nature of Site	FDER ID Number	SIC Codes	Hazardous Material Concern	Storage Tanks ^A	Regulatory Enforcement	Distance from Right-of-Way (ft.) ^B	Potential for Impacts
11	Handy Food Store-Citgo 120 U.S. 41 North Masarytown, Florida	Service station	278508780	5541	Petroleum	Yes	None reported	30	Low
12	Marren & Collum Automotive 560 Broad St. Masarytown, Florida	Automotive service	None	7538	Automotive fluids	No	None reported	70	Low
13	Sav-U-Gas 562 Broad St. Masarytown, Florida	Service station	278732358	5541	Petroleum	Yes	Contamination of ground water reported to DER on 2-15-85	10	Medium
14	Stan's Garage 1157 Broad St. Brooksville, Florida	Salvage yard	None	5093	Automotive fluids	Possible	None reported	0	Medium
15	The Condenser Products Corp. 2131 Broad St. Brooksville, Florida	Electronics manufacturer	None	3585	Solvents	No	None reported	90	Low
16	American Aviation Hernando County Airport U.S. 41 Brooksville, Florida	Airport	Not reported	5541	Petroleum	Yes	None reported	220	Low
17	Circle K #7508 3275 Broad St. Brooksville, Florida	Service station	278508843	5541	Petroleum	Yes	None reported	20	Low
18	Scotchman #404 U.S. 41 and C.R. 572 Brooksville, Florida	Service station	278508768	5541	Petroleum	Yes	None reported	30	Low
19	P/C Miller, Inc. Sod and Excavating U.S. 41 and Powell Rd. Brooksville, Florida	Maintenance yard with gasoline pumps	278839314	5541	Petroleum	Yes	None reported	0	Medium
20	Floyd Beck Trucking Co, Inc. 5130 Broad St. Brooksville, Florida	Maintenance yard with gasoline pumps	278508741	5541	Petroleum	Yes	None reported	70	Low

TABLE 11

INVESTIGATED SITES
IN THE VICINITY OF
S.R. 45 and S.R. 700
(Continued)

<u>Site Number</u>	<u>Site Name & Address</u>	<u>Nature of Site</u>	<u>FDER ID Number</u>	<u>SIC Codes</u>	<u>Hazardous Material Concern</u>	<u>Storage Tanks^A</u>	<u>Regulatory Enforcement</u>	<u>Distance from Right-of-Way (ft.)^B</u>	<u>Potential for Impacts</u>
21	P.T.L. Trucking 6230 Broad St. Brooksville, Florida	Maintenance yard	278626851	5541	Petroleum	Yes	None reported	0	Medium
22	Salvage Yard Broad St. Brooksville, Florida	Salvage yard	None	5093	Automotive fluids	No	None reported	0	Low
23	Eastham Radiator Service Broad St. Brooksville, Florida	Automotive service	None	7538	Radiator fluid	No	None reported	70	Low
24	Auto Exchange 7059 Broad St. Brooksville, Florida	Automotive service	None	7538	Automotive fluids	No	None reported	30	Low
25	Denny's Tires 1819 Broad St. Brooksville, Florida	Automotive service & former gas station	None	7538	Petroleum	Yes	None reported	0	Medium
26	Minnie's Auto Parts and Service - Gulf 1806 Broad St. Brooksville, Florida	Service station	278508807	5541	Petroleum	Yes	None reported	10	Low
27	United Parcel Service 1775 Broad St. Brooksville, Florida	Shipping facility	278732322	5541	Petroleum	Yes	None reported	200	Low
28	Presto 1441 Broad St. Brooksville, Florida	Service station	278508830	5541	Petroleum	Yes	None reported	0	Low
29	Oasis 1305 Broad St. Brooksville, Florida	Service station	278508815	5541	Petroleum	Yes	None reported	0	Low
30	Don Olson Firestone 925 Broad St. Brooksville, Florida	Automotive service	None	7538	Automotive fluids	Yes	None reported	90	Low

TABLE 11

INVESTIGATED SITES
IN THE VICINITY OF
S.R. 45 and S.R. 700
(Continued)

<u>Site Number</u>	<u>Site Name & Address</u>	<u>Nature of Site</u>	<u>FDER ID Number</u>	<u>SIC Codes</u>	<u>Hazardous Material Concern</u>	<u>Storage Tanks^A</u>	<u>Regulatory Enforcement</u>	<u>Distance from Right-of-Way (ft.)^B</u>	<u>Potential for Impacts</u>
31	Hobby Shop 912 Broad St. Brooksville, Florida	Retail store & former gas station	278508822	5541	Petroleum	Removed	None reported	30	Low
32	Texaco-Nationwide 822 U.S. 41 S Brooksville, Florida	Service station	278841460	5541	Petroleum	Yes	None reported	20	Low
33	Airdrome Tire U.S. 41 Brooksville, Florida	Automotive service	None	7538	Automotive fluids	No	None reported	30	Low
34	Citgo-Charter Food Store 802 U.S. 41 Brooksville, Florida	Service station	278521963	5541	Petroleum	Yes	None reported	0	Medium
35	Speedway-Starvin Marvin 785 Broad St. Brooksville, Florida	Service station	278508792	5541	Petroleum	Yes	None reported	0	Low
36	Goodyear 740 U.S. 41 S Brooksville, Florida	Automotive service	None	7538	Automotive fluids	Yes	None reported	0	Low
37	Amoco #84-Jim Brooks #2 717 Broad St. Brooksville, Florida	Service station	278508857	5541	Petroleum	Yes	None reported	10	Low
38	Shell 709 Broad St. Brooksville, Florida	Service station	278508753	5541	Petroleum	Yes	None reported	20	Low
39	Wilkerson's Phillip 66 700 Broad St. Brooksville, Florida	Service station	278508869	5541	Petroleum	Yes	None reported	10	Low
40	Colson's Discount Auto Air Conditioning 708 Broad St. Brooksville, Florida	Automotive service & former gas station	None	7538	Petroleum	Yes	None reported	0	Low

TABLE 11

INVESTIGATED SITES
IN THE VICINITY OF
S.R. 45 and S.R. 700
(Continued)

Site Number	Site Name & Address	Nature of Site	FDER ID Number	SIC Codes	Hazardous Material Concern	Storage Tanks ^A	Regulatory Enforcement	Distance from Right-of-Way (ft.) ^B	Potential for Impacts
41	Mad Hatter Mufflers 695 Jefferson St. Brooksville, Florida	Automotive service & former gas station	None	7538	Automotive fluids	Yes	None reported	10	Medium
42	Circle K 703 Jefferson St. Brooksville, Florida	Service station	278521095	5541	Petroleum	Yes	None reported	0	Low
43	Chevron 100 U.S. 98 North Brooksville, Florida	Service station	278508751	5541	Petroleum	Yes	None reported	0	Medium
44	Fina #2-Wilkes U.S. 98 & S.R. 50 Brooksville, Florida	Service station	278508761	5541	Petroleum	Yes	None reported	5	Low
45	Snapper 640 W. Fort Dade Brooksville, Florida	Lawn mower service	None	7699	Motor fluids	No	None reported	1	Low
46	Hernando Rental Center 321 U.S. 98 North Brooksville, Florida	Rental and service facility	None	7699	Automotive fluids	No	None reported	30	Low
47	Presto 351 U.S. 98 North Brooksville, Florida	Service station	278508859	5541	Petroleum	Yes	None reported	5	Low
48	Glenn Miller BF Goodrich Tires 414 U.S. 98 Brooksville, Florida	Automotive service	None	7538	Automotive fluids	No	None reported	40	Low
49	Bray's Pest Control 413 U.S. 98 North Brooksville, Florida	Pesticide service	None	7342	Pesticides	No	None reported	50	Low
50	Beck's Radiator 420 U.S. 98 North Brooksville, Florida	Automotive service	None	7538	Automotive fluids	No	None reported	20	Low

TABLE 11

INVESTIGATED SITES
IN THE VICINITY OF
S.R. 45 and S.R. 700
(Continued)

Site Number	Site Name & Address	Nature of Site	FDER ID Number	SIC Codes	Hazardous Material Concern	Storage Tanks ^A	Regulatory Enforcement	Distance from Right-of-Way (ft.) ^B	Potential for Impacts
51	Sami's Wrecker Service and Auto Parts 422 U.S. 98 North Brooksville, Florida	Automotive service	None	7538	Automotive fluids	No	None reported	90	Low
52	R.V. Medic 701 U.S. 98 North Brooksville, Florida	Recreation vehicle service	None	7538	Automotive fluids	No	None reported	60	Low
53	CTI, Central Trucks and Industrial Parts 922 U.S. 98 North Brooksville, Florida	Truck service	None	7538	Automotive fluids	No	None reported	30	Low
54	Bresemann Motors and Garage 1122 U.S. 98 North Brooksville, Florida	Automotive service	None	7538	Automotive fluids	No	None reported	110	Low
55	John Grubbs 1155 U.S. 98 North Brooksville, Florida	Service station	Not reported	5541	Petroleum	Yes	None reported	40	Low
56	Tri-County Cycle 1147 U.S. 98 North Brooksville, Florida	Motorcycle service	None	7699	Automotive fluids	No	None reported	60	Low
57	Midas Mufflers 1204 U.S. 98 North Brooksville, Florida	Automotive service & former salvage yard	None	7538	Automotive fluids	No	None reported	30	Low
58	AAMCO Transmission 1212 U.S. 98 North Brooksville, Florida	Automotive service	None	7538	Automotive fluids	No	None reported	30	Low
59	Mike's Yamaha Sales and Service 1300 U.S. 98 North Brooksville, Florida	Motorcycle service	None	7699	Automotive fluids	No	None reported	30	Low
60	Young's Auto Service 10070 Ponce de Leon Brooksville, Florida	Automotive service	None	7538	Automotive fluids	No	None reported	30	Low

TABLE 11

INVESTIGATED SITES
IN THE VICINITY OF
S.R. 45 and S.R. 700
(Continued)

Site Number	Site Name & Address	Nature of Site	FDER ID Number	SIC Codes	Hazardous Material Concern	Storage Tanks ^A	Regulatory Enforcement	Distance from Right-of-Way (ft.) ^B	Potential for Impacts
61	J's Auto Salvage 10091 Ponce de Leon Brooksville, Florida	Salvage yard	None	5521	Automotive fluids	No	None reported	20	Low

^A See Site Review Sheets in Appendix for additional storage tank information.

^B Distance in feet from the proposed right-of-way to the potential hazardous material source. A "0" (zero) indicates that the source would be within the proposed right-of-way and would require relocation.

Definition of Ratings:

No: After review of all available information, there is nothing to indicate hazardous material would be a problem. It is possible that hazardous material could have been handled on the parcel; however, all information (DER reports, monitoring wells, water and soil samples, etc.) indicate problems should not be expected.

Low: The operation has a hazardous waste generator ID number, or deals with hazardous materials; however, based on all available information, there is no reason to believe there would be any involvement with hazardous materials.

Medium: After a review of all available information, indications are (reports, Notice of Violation, consent order, etc.) that known soil and/or water contamination and that the problem does not need remediation, is being remediated (i.e., air stripping or the ground water, etc.) or that continued monitoring is required.

High: After a review of all available information, there is a potential for hazardous material problems on the parcel. Further assessment will be required after alignment selection to determine the actual presence and/or levels of hazardous materials and the need for remedial action.

Upon compiling the survey data and considering right-of-way requirements, each site was rated either "Low," "Medium," or "High" according to FDOT criteria. This rating assesses the potential for each site to impact the proposed project.

The "Low" rating is assigned to 48 of the 61 identified sites. This rating was assigned to sites of hazardous material use, storage tanks, or salvage yards; however, no known contamination is present or suspected at these sites.

The remaining 13 sites are each rated "Medium." This rating is assigned to a site based on one or more of the following FDOT criteria: 1) does not currently comply with environmental regulations, 2) known to contain contamination, 3) on-site conditions appear to present environmental hazards, 4) previous land use history associated with environmental contamination, or 5) known to contain sources of hazardous materials within the proposed right-of-way.

The following three of the 13 "Medium" sites are former gas stations that will require right-of-way acquisition: Site Nos. 2 (former gas station), 25 (Denny's Tires), and 41 (Mad Hatter Mufflers). These sites are not registered with the FDER Stationary Tank Inventory System and the status of the underground storage tanks is not known. Therefore, it is difficult to determine if any environmental contamination exists at these sites.

Site No. 13 (Sav-U-Gas) is registered with the FDER Stationary Tank Inventory System; however, this site is rated "Medium" because petroleum contamination has been reported by the owner and has been confirmed by FDER. Funds for remedial action at the site have been granted and cleanup is scheduled to begin soon. No right-of-way acquisition is proposed at this site.

The following six of the 13 "Medium" sites will require right-of-way acquisition and have on-site conditions such as strong petroleum odors and oil-stained dirt surfaces or pavement: Site Nos. 3 (AC Auto Parts), 5 (Bigger's Garage), 6 (B&G Truck Repair), 14 (Stan's Garage), 21 (P.T.L. Trucking) and 43 (Chevron). On-site conditions at these sites indicate careless or incorrect methods of handling petroleum product which can lead to soil and groundwater contamination.

Sites known to contain sources of hazardous material within the proposed right-of-way are rated "Medium" because property directly in contact with the source has the highest risk for contamination. The following sites all have facilities within the proposed right-of-way and are therefore rated "Medium." Site Nos. 8 (Jiffy Food Store #136) and 34 (Citgo-Charter Food Stores) are currently operating gas stations and in compliance with FDER regulations. Site No. 19 (P/C Miller, Inc.) is registered with FDER, but has storage tanks constructed with non-compliant materials. Site Nos. 2 (former gas station) and 43 (Chevron) are previously discussed in this section. In addition to the source location, movement or disruption of the facilities at these sites may also contribute to the potential involvement with petroleum contamination in the right-of-way.

Recommendations

If the 13 "Medium" sites cannot be avoided during the design and construction of the proposed project, then additional investigations consisting of more detailed field inspections and subsurface analyses should be conducted.

FDOT should conduct limited subsurface investigations at 12 of the 13 "Medium" sites to evaluate the potential for environmental contamination. These 12 sites are No. 2

(former gas station), No. 3 (AC Auto Parts), No. 5 (Bigger's Garage), No. 6 (B&G Truck Repair), No. 8 (Jiffy Food Store #136), No. 14 (Stan's Garage), No. 19 (P/C Miller), No. 21 (P.T.L. Trucking), No. 25 (Denny's Trucking), No. 34 (Citgo-Charter Food Store), No. 41 (Mad Hatter Mufflers), and No. 43 (Chevron). If these site inspections cannot confirm the absence of contamination, then limited subsurface investigations should be conducted by FDOT at these sites. These preliminary subsurface investigations should consist of sampling and analyzing soil and groundwater for volatile organics within the areas of right-of-way acquisition or utility relocation.

If no contamination is detected during the preliminary subsurface field investigations, then no further analyses are recommended. If contamination is found, then additional soil and groundwater investigations should be conducted to determine the extent of contamination and to estimate the cost of remediation. If possible, FDOT should encourage the site owner to begin remediation before right-of-way acquisition. If FDOT purchases the property before remediation is complete, the remaining remediation costs should be considered in the purchase price.

The remaining "Medium" site, Site No. 13 (Sav-U-Gas), should be evaluated for the status of its petroleum contamination remediation prior to beginning construction.

The recommendations in this report are based on preliminary information only and are not meant to replace the results of more detailed studies which deal with subsurface field investigations. Rather, this information should be used only as a guide in identifying potential hazardous material sites that may require technical studies to determine the existence of contamination prior to right-of-way acquisition.

Finally, it should be noted that hazardous material sites may extend beyond those identified in this survey because of illegal dumping practices and a possible lack of compliance with FDER's Stationary Tank Inventory System.

5. Navigation

There is no involvement with navigational requirements within the study area.

V. COMMENTS AND COORDINATION

A Public Involvement Program was developed and carried out as an integral part of this project. The purpose of this program was to establish and maintain communication with the public at large and individuals and agencies concerned with the project and its potential impacts.

Advance Notification

To ensure open communication and agency and public input, the Department provided an early notification package to State and Federal agencies and other interested parties which defined the project and, in cursory terms, described anticipated issues and impacts. Agencies provided with advance notification are listed on Table 12.

In an effort to resolve all issues identified, the Department concluded an extensive interagency coordination and consultation effort and public participation process. This section of the document details the Department's program to fully identify, address and resolve all project-related issues identified through the public involvement program.

Public Information Workshop

A Public Information Workshop was conducted on January 26, 1988. The meeting was held in an open format style in which interested citizens could discuss the project directly with representatives from the FDOT. Preliminary conceptual plans of the proposed improvements were displayed for public inspection.

Public Hearing

A Public Hearing was conducted for this project on June 6, 1989. Written notification of the Public Hearing was sent to adjacent property owners, interested parties, and elected and appointed officials. All property owners within 300 feet of the centerline of the proposed improvements, as well as other interested parties, were mailed the written notification of the meeting. Elected and appointed officials with jurisdiction in the study area were mailed a personal notification. All mailings were postmarked at least 21 days prior to the Public Hearing.

Eighty-one people signed in at the reception desk at the hearing. This represented a total of 96 people. Seventeen comments from 16 people were received. This included 5 oral comments taken by the court reporter, 6 written comments submitted at the hearing, and 6 comments received by mail. One person submitted both an oral and written comment. Some comments endorsed the proposed improvements. The primary reason for their endorsement was the need to relieve the traffic congestion on the existing roadway. Other less frequent comments were related to medians, access, right-of-way, safety, and business damages.

TABLE 12
AGENCIES PROVIDED WITH ADVANCE NOTIFICATION

Federal Agencies

Federal Highway Administration	No Response
United States Department of the Interior - Geological Survey	No Response
United States Department of Housing and Urban Development	No Response
United States Department of the Interior - Office of Environmental Project Review	No Response
United States Fish and Wildlife Service - Endangered Species Field Office	No Response
United States Army Corps of Engineers	No Response
United States Department of the Interior	No Response
Federal Railroad Administration	No Response
Federal Emergency Management Agency	No Response
National Marine Fisheries Service	No Response
United States Department of the Interior - Bureau of Land Management	No Response
United States Department of the Interior - National Park Service	No Response
United States Department of Energy	No Response
United States Department of Health and Human Services	No Response
United States Coast Guard (7th Coast Guard District)	No Response
United States Marine Fisheries Commission	No Response
United States Department of Agriculture - Regional Forester	No Response
Advisory Council on Historic Preservation	No Response
United States Department of State	No Response
Federal Aid Program Coordinator	No Response
United States Environmental Protection Agency	No Response

TABLE 12
AGENCIES PROVIDED WITH ADVANCE NOTIFICATION
(Continued)

State Agencies

Florida Game and Fresh Water Fish Commission	Appendix A
Florida Recreational Trails Council	No Response
Resource Preservation Advisory Council on Historic Preservation	No Response
Office of the Governor	Appendix A
Southwest Florida Regional Planning Council	No Response
Florida Department of State - Division of Historical Resources	Appendix B
Southwest Florida Water Management District	No Response
Florida Department of Environmental Regulation	Appendix A

Local Agencies

Tampa Bay Regional Planning Council	Appendix A
Withlacoochee Regional Planning Council	Appendix A
City of Brooksville Police Department	No Response
City of Brooksville Fire and Rescue Department	No Response
City of Brooksville	No Response

Comments and Responses

Stated below are the pertinent comments from the agencies which responded to the Advance Notification. The letters from these agencies are contained in the Appendix.

Tampa Bay Regional Planning Council (7/30/84)

COMMENT #1: "The Technical Review Committee and the Executive Board of the Tampa Bay Regional Planning Council have reviewed the project and found it to be in accordance with regional and local plans, programs and objections."

RESPONSE: "The project is consistent with local Comprehensive Plans and the Transportation Cost-Feasible Plan."

COMMENT #2: This agency encourages the maintenance and reconstruction of an existing highway facility, such as S.R. 45 and S.R. 700 to maintain an acceptable level-of-service.

Florida Department of Environmental Regulation (8/17/84)

COMMENT #1: "The proposed construction can be expected to cause or increase stormwater runoff. Adverse impacts should be minimized as much as possible. Licenses may be required for the discharge of stormwater associated with the proposed construction, pursuant to Chapter 17-25, Florida Administrative Code."

RESPONSE: The Florida Department of Transportation will prepare needed permit applications at the appropriate stage of project development to comply with Florida Statutes.

COMMENT #2: "... erosion and siltation should be controlled during all construction activities. Disturbed soil surfaces should be revegetated promptly to prevent erosion."

RESPONSE: All applicable Best Management Practices included in the Department's "Standard Specifications for Road and Bridge Construction" will be used on this project. Specific problems will be field reviewed and alternative controls developed and provided as needed on site specific basis.

Withlacoochee Regional Planning Council (9/11/84)

COMMENT: In accordance with staff findings, and the subsequent concurrence of the Council's Executive Committee, the Withlacoochee Regional Planning Council recommends approval of the project.

Florida Game and Fresh Water Fish Commission (9/11/84)

COMMENT: The principal concerns are impacts of the project on existing wetland resources and the type and extent of mitigation required to compensate for wetland loss. There was also concern about impacts to the habitats for endangered and threatened species, especially three wood stork rookeries within the general project area.

RESPONSE: The Department will work closely with the Commission to resolve any problems related to wetland taking and any disruption to endangered and threatened species. Presently, the Department, with its consultant, is in the

process of developing a mitigation plan. This plan will be circulated to all interested and jurisdictional agencies for comment and concurrence prior to the Department committing to any mitigation effort.

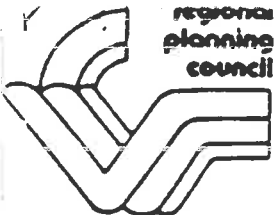
Office of the Governor (10/15/84)

COMMENT: This office transmitted the various agency comments to the advance notification.

RESPONSE: Addressed for each specific agency above.

APPENDIX A
ADVANCE NOTIFICATION RESPONSES

<u>Page</u>	<u>Agency</u>	<u>Date</u>
A-2	Tampa Bay Regional Planning Council	7/30/84
A-5	Florida Department of Environmental Regulation	8/17/84
A-7	Withlacoochee Regional Planning Council	9/11/84
A-11	Florida Game and Fresh Water Fish Commission	9/11/84
A-13	Office of the Governor	10/15/84



regional
planning
council

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Petersburg FL 33702-2491
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Mr. Michael Zagorac, Jr.

City of Pinellas Park
Councillorwoman William Vannatta

City of St. Petersburg
Councillorwoman William Bond, Jr.

City of St. Petersburg Beach
Commissioner Heier Ericus

City of Sarasota
Commissioner Dean Mason

City of Tampa
Councillorwoman Thomas Vann

City of Tarpon Springs
Commissioner Charles Roberts

City of Temple Terrace
Councillorwoman

July 30, 1984

Mr. J.C. Kraft, Chief
Bureau of Environment
Florida Department of Transportation
605 Suwannee Street, MS 37
Tallahassee, FL 32304



Dear Mr. Kraft:

Subject: IC&R #141-84; Location and Design Study for State Road
45, State Project Nos. 14010-1514, 08010-1519 and
2100-1504

The enclosed agenda item regarding the above referenced matter was considered and approved by the Clearinghouse Review Committee of the Tampa Bay Regional Planning Council at its July 30, 1984 meeting.

Please contact the Council staff if further information regarding this item is desired.

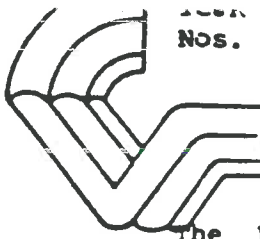
Sincerely,


Joe McFarland
Chairman
Clearinghouse Review Committee

JM/lk

Enclosure

cc: Wendy Giesy ✓
Ron Fahs



CLEARINGHOUSE REVIEW



The Florida Department of Transportation (FDOT) has requested review and comment on an early notification package (ENP) for a location and design study which will lead to capacity improvements on SR 45 (US 41) from SR 52 in Pasco County to SR 700 (US 98) in Hernando County to SR 55 (US 19) in Citrus County, a distance of approximately 31 miles. The general alignment will follow that of the existing roadway.

The estimated cost of the entire project is \$65 million and it would be funded 75 percent by FHWA and 25 percent by FDOT. Construction of the project is not currently scheduled by FDOT. Location: Pasco, Hernando and Citrus Counties; Agencies: Federal Highway Administration/FDOT.

Local Comments Requested From:

Pasco County Planning Department: No comments received as of July 27, 1984.

Council Comments and Recommendations:

This project has been reviewed for consistency with the Council's adopted growth policy, the Future of the Region. The proposal has been found to be consistent with Council policy that the region's highway system shall be planned, developed and maintained to provide and preserve a stable traffic flow (Level of Service C).

Based on projected average daily traffic (ADT) figures the construction of a four-lane divided arterial facility is already necessary along one segment (SR 518 - SR 700) in the vicinity of Brooksville and will be necessary along the remainder of the project corridor prior to the year 2010. It is uncertain from review of the ENP if traffic generated by developments of regional impact located in northern Pasco, Hernando and Citrus counties have been included in the projected ADT for the years 2000 and 2010. If not it is recommended that trips which would be generated by these projects be included or the projections increased to reflect their (DRIs) impact.

It is also recommended that FDOT consider the percentage of heavy trucks in the ADT during the design of this road. It is further recommended that FDOT consider the incorporation of bicycle paths in the design of SR 45, especially in and around Brooksville, Masaryktown and other urban areas along the project corridor.

FDOT should require the use of best management practices to minimize disruption of local ecosystems, including the numerous water bodies and wetlands, as a result of project development.

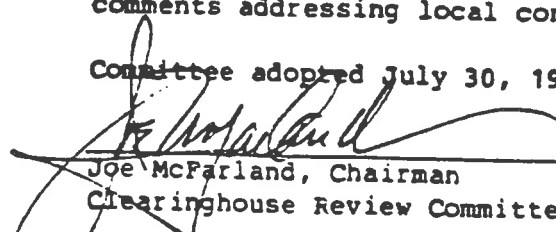
tampa bay regional planning council

9465 Roger Boulevard, St. Petersburg, Fl 33702 (813) 577-5151 Tampa 224-9360

In order to minimize environmental impacts it is recommended that FDOT upgrade and widen SR 45 along the existing alignment rather than consider any re-alignment.

Provided the above issues are resolved, it is recommended that this proposal be approved. Further, it is recommended that any additional comments addressing local concerns be considered prior to approval.

Committee adopted July 30, 1984.

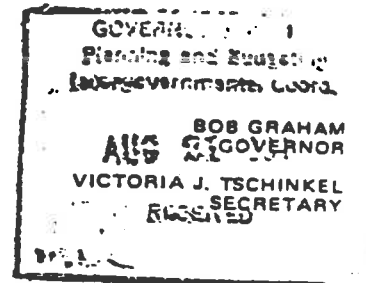
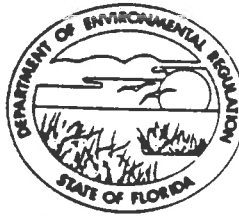


Joe McFarland, Chairman
Clearinghouse Review Committee

Please note: Unless otherwise notified, action by the Clearinghouse Review Committee is final. Please append a copy to your application to indicate compliance with clearinghouse requirements. The committee's comments constitute compliance with Florida's Intergovernmental Coordination and Review process only.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



August 17, 1984

Mr. Ron Fahs, Director
Intergovernmental Coordination
State Planning and Development
Clearinghouse
Office of the Governor
421 Carlton Building
Tallahassee, Florida 32301

Dear Ron:

Re: Department of Transportation, Advance Notification of Intent to Apply for Federal Assistance for State Projects 14010-1514, 08010-1519, 08080-1509 and 02100-1504, Improvements to S.R. 45 (U.S. 41) from S.R. 52 in Pasco County to S.R. 700 in Hernando County and S.R. 700 from S.R. 45 in Hernando County to S.R. 55 in Citrus County, SAI No. FL8407190085C

The Department of Transportation proposes to upgrade the referenced two-laned facility to a multilane highway to improve the level of traffic service for the present and future traffic volumes. It is difficult to assess specific environmental impacts since the early notification contains no information on alternatives for proposed roadway improvements. Nevertheless, a review of U.S.G.S. Quadrangle and Flood Prone Maps reveals that the roadway corridor is largely undeveloped and characterized by numerous lakes, streams, wetlands and other flood prone areas, particularly at the northern terminus of the roadway (Chassahowitzka National Wildlife Refuge) and along U.S. 41 from S.R. 52 north through Masaryktown. According to the biological assessment provided in the AN most of the wetlands and lakes along the corridor are in a relatively natural condition and provide quality fish and wildlife habitat.

As any roadway improvements will adversely impact these regional aquatic resources we recommend that an Environmental Impact Statement be prepared under the guidance of the National Environmental Policy Act. Of primary interest to this department will be dredge and fill activities, noise impacts, air quality and stormwater management associated with the roadway improvements. Accordingly, we recommend that any roadway

Mr. Ron Fahs
Page Two
August 17, 1984

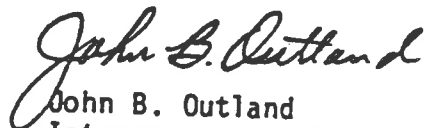
Improvement minimize impacts to adjacent wetlands, streams, lakes, and flood prone areas. Impacts to these valuable resources can be reduced by bridging, steeper side slopes and eliminating or reducing the median width.

Fill in floodplains and flood prone areas should be avoided since fill reduces natural storage capacity and results in increased flood heights or flooding in areas normally not inundated. Moreover, filling in floodplains or flood prone areas often requires dredging in streams and other natural drainage features to provide for "compensating volume" These activities often result in degraded water quality as stormwater runoff is shunted downstream without receiving adequate treatment.

We encourage ongoing coordination with our Southwest Florida District Office in Tampa since the roadway improvements will require permits from the department pursuant to Chapters 253 and 403, Florida Statutes and under Public Law 92-500.

Federal assistance to the proposed study to determine the feasibility of upgrading alternatives is not considered inconsistent with this department's statutory authority in Florida's Coastal Management Program. This consistency decision is not intended to bias future consistency reviews of these projects at subsequent stages of environmental assessment, design and funding. Future consistency decisions will be predicated, in part, on an adequate responsiveness to recommendations offered in this review and subsequent reviews.

Sincerely,



John B. Outland
Intergovernmental Programs
Review Section

JBO/jb

cc: Bill Kutash

OFFICERS
~~XXXXXXXXXXXX~~
CHAIRMAN
KATHRYN P. HARRIS
VICE CHAIRMAN
EUGENE POOLE
SECRETARY

FRANK FISH



1241 SW 10th Street
OCALA, FLORIDA 32674-2798
Telephone 904/732-3307

JAMES D. MIMS
EXECUTIVE DIRECTOR
LORENE J. FINCH
ADMINISTRATIVE ASSISTANT



September 11, 1984

J.G. Kraft, Chief
Bureau of Environment, FDOT
605 Suwannee Street, MS 37
Tallahassee, Florida 32304

SUBJECT: Withlacoochee Regional Planning Council
A-95 Clearinghouse Review No.: 25-R5-84-FHWA

APPLICANT: FDOT

PROJECT: Roadway Improvements/Hernando and Citrus Counties


Dear Mr. Kraft:

Pursuant to the provisions of the Office of Management and Budget Circular A-95 (revised) and WRPC Rules Ch. 29E-6 FAC, the staff of the Withlacoochee Regional Planning Council has reviewed the above-mentioned project proposal. Staff findings and recommendations are presented in the attached Staff Statement of Review.

In accordance with staff findings, and the subsequent concurrence of the Council's Executive Committee, the Withlacoochee Regional Planning Council recommends approval of the project.

A copy of this letter and the attached Staff Statement of Review should be appended to your application.

Sincerely,


James D. Mims
Executive Director

Enclosure

A-95 Form 5

cc: State Clearinghouse
Wendy J. Giesy, District Environmental Administrator
FDOT, P.O. Box 1249, Bartow, FL 33830

WRPC STAFF STATEMENT OF REVIEW
A-95 REVIEW NO.: 25-R5-84-FHWA

DATE: September 5, 1984
TO: Board of Directors, Withlacoochee Regional Planning Council
FROM: James D. Mims, Executive Director *JDM*
PROJECT: Roadway Improvements/Hernando and Citrus Counties

According to the provisions of the Office of Management and Budget Circular A-95 and WRPC Rules Ch. 29E-6 FAC, the staff of the Withlacoochee Regional Planning Council has reviewed the above-referenced project.

PROJECT DESCRIPTION

The Florida Department of Transportation is in the process of soliciting early review and comments on the proposed Federal Aid Project No. F-888-(27) and F-8889-(2). The project is located in Pasco, Hernando and Citrus Counties and involves the upgrading of SR 45 (US 41) from SR 52 in Pasco County to SR 700 (US 98) in Hernando County; and, SR 700 (US98) from SR 45 in Hernando County to SR 55 (US 19) in Citrus County, a distance of some 31 miles. The general alignment will follow that of the existing roadway with the proposed cost being 65 million dollars. 75% of the funding is proposed to come from the Federal Highway Administration. The remaining 25% is proposed to be provided by the Florida Department of Transportation.

The proposed improvements will upgrade the existing two-lane highway and provide a multilane, divided highway capable of handling anticipated traffic volumes. Construction of the project is not currently scheduled by FDOT. (see attached map)

COMMENTS RECEIVED

Comments concerning the proposed project were solicited from the local and regional officials listed below. The responses received are represented by the letter designations shown below.

- A - Project consistent with local plans and policies.
- B - Project not consistent with local plans and policies.
- C - Project duplicative.
- D - Project of no interest.
- E - Additional comments received.
- F - No response.

<u>NAME</u>	<u>AGENCY</u>	<u>RESPONSE</u>
Craig Hunter	Citrus Co. Administrator	A,E
S.H. Kennedy	Mun. Rep.	A,E
Frank Fish	Hernando Co. Commissioner	A,E
Larry Jennings	Hernando Co. Planning & Development Dept.	A,E
David Greene	Hernando Co. Administrator	A,E
Wilbur Langley, Sr.	Citrus Co. Commissioner	F
Pat Fagan	Mun. Rep.	F
John Barnes	Citrus Co. Commissioner	F

Comments from local officials indicated that the project is consistent with local plans, programs, and objectives. Hernando County Commissioner, Frank Fish remarked that as a result of continued growth in Hernando County, the need to move people from southern counties to northern counties and vice versa will increase and that road developments are needed in the region. S.H. Kennedy, stated that "road improvements are welcomed throughout the 5 county district." Larry Jennings, Hernando County Planning and Development Department, reported that "the projects are needed. All efforts available should be made to expedite the projects."

STAFF REVIEW

The purpose of this proposal is to solicit early comments prior to the preparation of an environmental assessment for the proposed project.

The number of lanes for the proposed facility has not been finalized, but probably will be four.

The project appears to be consistent with applicable local and regional plans.

Since the project has not been programmed by FDOT, construction dates have not been finalized, nor has a detailed budget been prepared.

It appears that the use of the existing road alignment should mitigate adverse environmental impacts.

RECOMMENDATIONS

Based on the local comments received and the information available to the staff, it appears that the proposed project is consistent with local and regional plans and policies, is not duplicative of existing programs, will not create undue negative impact on existing communities and generally meets the review criteria established by WRPC. Consequently, the staff recommends that the Withlacoochee Regional Planning Council endorse the project.

State Project No.
02100-1501

State Project No.
08080-1509

State Project No.
08010-1519

State Project No.
14010-1514

BROOKSVILLE

ALLEN WACHNE

Review No.: 25-R5-84-FHMA

State Project No. 14010-1514, 08010-1519, 08080-1509, 02100-1504
W.P.I. No. 1115924, 1112085, 1112086, 5111589
S.R. 45 (U.S. 41) from S.R. 52 in Pasco County to S.R. 50 in
Hernando County, and S.R. 700 (U.S. 98) from S.R. 50 to

FLORIDA GAME AND FRESH WATER FISH COMMISSION

C. TOM RAINEY, D.V.M.
Chairman, Miami

THOMAS L. HIRES, SR.
Vice-Chairman, Lake Wales

WILLIAM G. BOSTICK, JR.
Winter Haven

J.H. BAROCO
Pensacola

MRS. GILBERT W. HUMPHREY
Miccosukee

ROBERT M. BRANTLY, Executive Director
F.G. BANKS, Assistant Executive Director



FARRIS BRYANT BUILDING
620 South Meridian Street
Tallahassee, Florida 32301
(904) 488-1960

September 11, 1984



Mr. Ron Fahs, Director
Intergovernmental Coordination
State Planning and Development
Clearinghouse
Executive Office of the Governor
Room 302, Carlton Building
Tallahassee, FL 32301

Re: SAI FL8407190085C, Department of
Transportation, Pasco, Hernando and
Citrus Counties, State Project
Numbers 14010-1514, 08010-1519,
08080-1509, and 02100-1504

Dear Mr. Fahs:

The Office of Environmental Services of the Florida Game and Fresh Water Fish Commission has reviewed the referenced Advanced Notification regarding impacts on fish and wildlife resources.

Our primary concern regarding this project involves potential impacts to wetlands and habitats for endangered and threatened species. In particular, we note the occurrence of three wood stork rookeries within the general project area, two in eastern Pasco County and one in eastern Hernando County, and one Southern bald eagle nest located in northwestern Pasco County approximately 1.5 miles west of SR 41. Regarding the occurrence of these species, no direct construction-related impacts are anticipated due to their relative distance from the project. Wetlands in the project area do provide forage areas for these species, however, and water flow patterns over the entire region are undoubtedly critical to the continued survival of these rookeries.

Because of the strong association between most species listed as threatened and endangered and wetlands in the project area, we recommend that the project be designed and constructed such that existing natural water

Mr. Ron Fahs
September 11, 1984
Page 2

drainage and flow patterns are not disrupted and wetlands are preserved. In addition, to assist in our assessment of project-related impacts on upland communities, we request that the applicant identify areas of roadway improvements that will not utilize the existing alignment. Due to the preliminary nature of this Advanced Notification, we will reserve final comments on specific design features affecting wetlands until permits are requested from the Department of Environmental Regulation and the Southwest Florida Water Management District.

We appreciate the opportunity to comment on this Advanced Notification. Please contact us if we may provide you with any additional information.

Sincerely,



F. G. Banks
Assistant Executive Director

E507dr170
ENV 1-3-2
MA



BOB GRAHAM
GOVERNOR

STATE OF FLORIDA

Office of the Governor

THE CAPITOL
TALLAHASSEE 32301



October 15, 1984

Mr. J. C. Kraft, Chief
Bureau of Environment
Department of Transportation
MS 37 Burns Building
Tallahassee, Florida 32301

RE: State Project #14019-1514 - 08010-1519 - 08080-1509 and 02100-1504
SR 45 from SR 52 in Pasco County to SR 50 in Hernando County, and
SR 700 from SR 50 in Hernando County to SR 55 in Citrus County

SAI: FL8407190085C

Dear Mr. Kraft:

The State Clearinghouse in compliance with Presidential Executive Order #12372, the Governor's Executive Order 85-150, the Coastal Zone Management Act, and the National Environmental Policy Act has coordinated a review of your notification of intent to apply for federal assistance in the amount of \$48,750,000.

During the review process we received comments from the Departments of Community Affairs, Environmental Regulation, Natural Resources, State, Game and Fresh Water Fish Commission, and the Governor's Natural Resources Policy Unit. The Governor's Natural Resources Policy Unit states that although this project may be needed it will have significant impacts on the environment throughout its 31 mile length. By improving access to the area, growth and community development will be impacted. To understand these impacts and project alternatives, an environmental impact statement that analyzes all factors is needed. It should be recognized that all or parts of these counties are rural in nature and are beginning to experience growth related impacts from the Tampa Bay Area.

The Game and Fresh Water Fish Commission have concerns about the water flow pattern in the area and their contribution to the rookeries of the wood stork and bald eagle. They recommend that the project be designed and constructed such that existing natural water drainage and flow patterns are not disrupted and wetlands are preserved. Additionally, they request the Department of Transportation identify areas of roadway improvements if it will not utilize the existing alignment as stated in the advanced notification.

Mr. J. C. Kraft
Page two

The Department of Environmental Regulation has similar concerns about the wetlands and recommend an environmental impact statement be prepared, and encourages ongoing coordination with their Southwest Florida District Office in Tampa. Based on comments received from reviewing agencies federal assistance to the proposed study to determine the feasibility of upgrading alternatives is not considered inconsistent with Florida's Coastal Management Program. This consistency decision is not intended to bias future consistency review of these projects at subsequent stages of environmental assessment, design and funding.

The Department of State corresponded directly with you on June 5, 1984, concerning archaeological sites located in the area. They request a professional archaeological and historical survey be performed on the project prior to initiating any land clearing or ground disturbing activities. The survey report should be submitted to their office for final review.

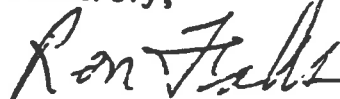
The Departments of Natural Resources, and Community Affairs have "no adverse comment" on the project.

The project will only be in accord with State plans, programs, procedures, and objectives when action has been taken on the requests and comments of our reviewing agencies. We have enclosed those comment letters for your files.

Please append a copy of this letter to your application, and on Item 3a of the SF424 form insert the above referenced State Application Identifier (SAI) number. Completion of these requirements will assure the federal agency of your compliance with the provisions of Florida's Intergovernmental Coordination and Review Process, and will assist the federal agency in preparing the Notification of Grant-In-Aid Action in accordance with Federal Assistance Award Data System (FAADS). Accommodating this request will reduce the chance of unnecessary delays in processing your application.

Thank you for your cooperation.

Sincerely,



Ron Fahs, Director
Intergovernmental Coordination

RF/mt
Enclosure
CC: DER
GFWFC
DOS
Walt Kolb
Wendy Giesy

APPENDIX B
HISTORIC AND ARCHAEOLOGICAL RESOURCE FINDINGS

Executive Office of the Governor
The Capitol
Tallahassee, Florida 32301
(904) 488-8114

FROM: DOS

SUBJECT/SAI#: FL8407190085C

DIVISION/BUREAU: DAHRM/BHP

REVIEWER: Frederick Gaske, Historic Sites Specialist

DATE: July 31, 1984

NO COMMENT

COMMENTS ATTACHED

INSUFFICIENT INFORMATION
(list specific information items needed)

CONSISTENCY
 Conditionally CONSISTENT
(comments attached)

NOT CONSISTENT
(comments attached)

(904) 487-2555

Mr. J.C. Kraft, Chief
Bureau of Environment
Department of Transportation
605 Suwannee Street
Tallahassee, Florida 32301

RE: Cultural Resource Assessment Request
State Project Nos. 02100-1504, 08010-1519, 08080-1509 and
14010-1514; State Road 45/U.S. Highway 41 from State Road
52 to State Road 50 and State Road 700/U.S. Highway 98
from State Road 50 to State Road 55/U.S. Highway 19,
Citrus, Hernando and Pasco Counties, Florida

Dear Mr. Kraft:

In accordance with the procedures contained in 36 C.F.R., Part 800 ("Procedures for the Protection of Historic and Cultural Properties"), we have reviewed the above referenced project for possible impact to archaeological and historical sites or properties listed, or eligible for listing, in the National Register of Historic Places. The authorities for these procedures are the National Historic Preservation Act of 1966 (Public Law 89-665) as amended by P.L. 91-243, P.L. 93-54, P.L. 94-422, P.L. 94-458 and P.L. 96-515, and Presidential Executive Order 11593 ("Protection and Enhancement of the Cultural Environment").

A review of the Florida Master Site File indicates that four archaeological sites (8Cil33, 8Cil34, 8He28 and 8He29) are recorded within the project area (see enclosed maps). Site 8Cil33 is defined as an artifact scatter dating to the Weeden Island period (c. 300 - 1200 A.D.). Sites 8Cil34, 8He28 and 8He29 are defined as lithic scatters dating to the Archaic period (c. 8000 - 1000 B.C.).

FLORIDA-State of the Arts

Mr. J.C. Kraft
June 5, 1984
Page Two

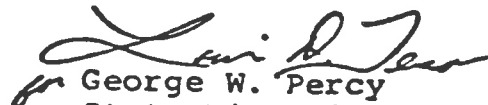
Information contained in our files is insufficient to assess the significance of these four archaeological sites. Furthermore, data from environmentally similar areas in these counties indicate that other, presently unrecorded archaeological and historic sites may also be present within the project area. It is, therefore, the opinion of this office that there is a reasonable probability of project activities impacting archaeological and historic sites and properties potentially eligible for listing in the National Register of Historic Places, or otherwise of national, state or local significance.

Since potentially significant archaeological sites are present and other, presently unrecorded but potentially significant archaeological and historic sites may also be present, it is our recommendation that, prior to initiating any land clearing or ground disturbing activities, the project area should be subjected to a systematic, professional archaeological and historical survey. The purpose of this survey will be to locate and assess the significance of the identified sites and any other cultural resources present. The resultant survey report should be forwarded to this agency in order to complete the process of reviewing the impact of this project on archaeological and historic resources.

If you have any questions concerning our comments, please do not hesitate to contact us.

Your interest and cooperation in helping to protect Florida's archaeological and historical resources are appreciated.

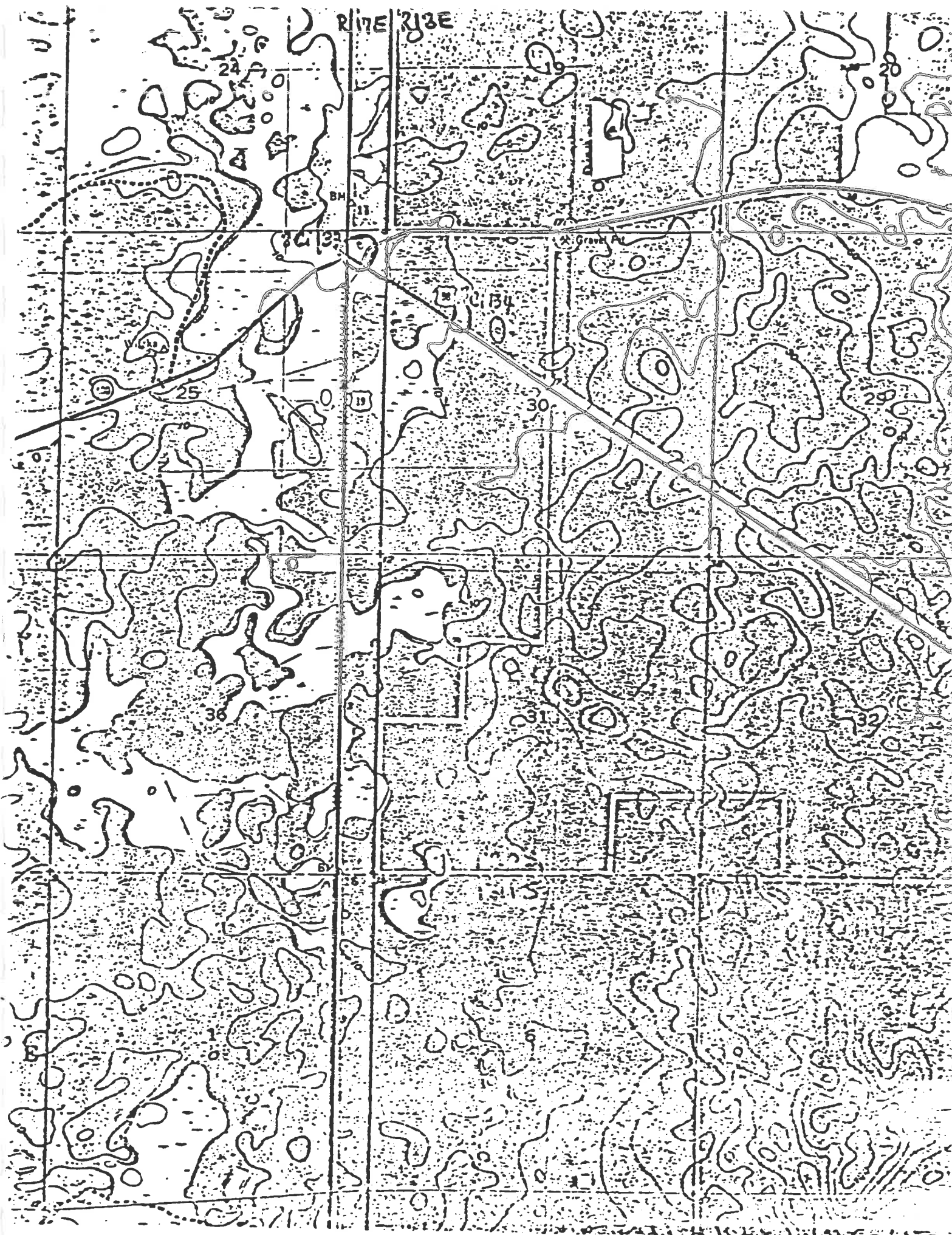
Sincerely,

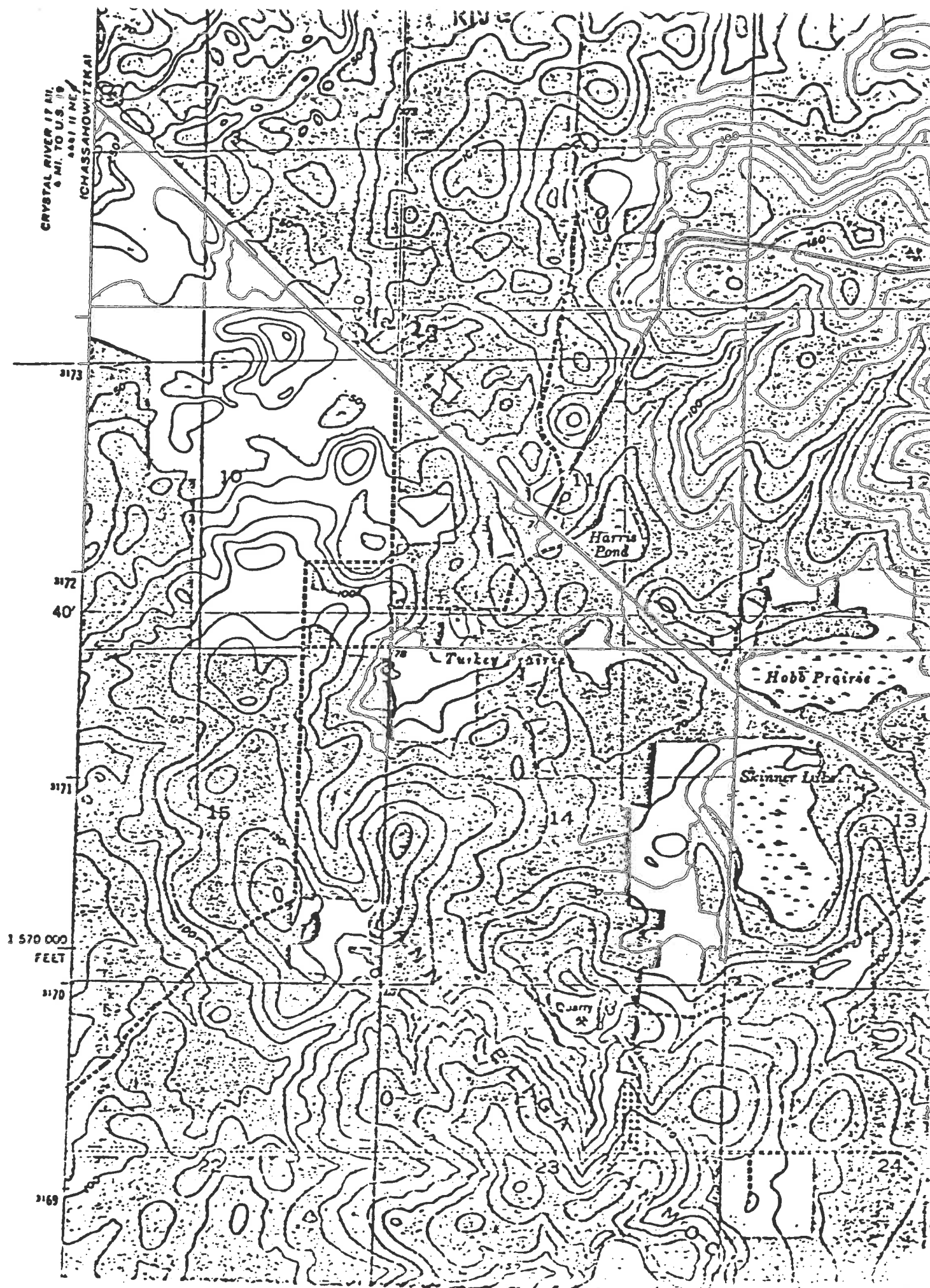

George W. Percy
State Historic
Preservation Officer

GWP/Tkp

Enclosures

R17E R3E





BROOKSVILLE Q
FLORIDA—HERI
7.5 MINUTE SERIES

CRYSTAL RIVER 23 MI.
11 MI TO U.S. 19

DN 11 MI.
OUS 99

25'

370 000 FEET

R19E

154

Bank Lake

Simmons Prairie
Lake

Willow Prairie
Lake

Rock Pond

Tris
Lars

SEAVOARD

CUNNINGHAM

APPENDIX C
LIST OF IDENTIFIED FLORA

LIST OF IDENTIFIED SPECIES OF FLORA*
U.S. 41 NORTH: S.R. 52 (PASCO COUNTY) TO
YONTZ ROAD (HERNANDO COUNTY)
January 1989

MIXED WETLAND HARDWOODS COMMUNITIES

SCIENTIFIC NAME	COMMON NAME
<i>Acer rubrum</i>	red maple
<i>Andropogon virginicus</i>	broom sedge
<i>Baccharis angustifolia</i>	salt bush
<i>Bidens</i> spp.	begger-ticks
<i>Belchnum serrulatum</i>	swamp fern
<i>Cinnamonum camphora</i>	camphor-tree
<i>Cyperus</i> spp.	flat sedge
<i>Dichromena</i> spp.	star-rush
<i>Dioscorea bulbifera</i>	air potato
<i>Fuirena</i> sp.	umbrellagrass
<i>Hydrocotyle</i> spp.	water pennywort
<i>Hypericum</i> spp.	St. John's-wort
<i>Juncus effusus</i>	soft rush
<i>Lantana</i> sp.	lantana
<i>Lemna</i> spp.	duckweed
<i>Liquidambar styraciflua</i>	sweet gum
<i>Ludwigia</i> spp.	water primrose
<i>Magnolia grandiflora</i>	southern magnolia
<i>Magnolia virginiana</i>	sweet bay
<i>Melia azedarach</i>	chinaberry
<i>Myrica cerifera</i>	wax myrtle
<i>Nephrolepsis exaltata</i>	Boston fern
<i>Osmunda cinnamonea</i>	cinnamon fern
<i>Osmunda regalis</i>	royal fern
<i>Pinus taeda</i>	loblolly pine
<i>Prunus caroliniana</i>	Carolina cherry
<i>Prunus serotina</i>	black cherry
<i>Quercus laurifolia</i>	laurel oak
<i>Quercus nigra</i>	water oak
<i>Rubus</i> spp.	blackberry
<i>Sabal palmetto</i>	cabbage palm
<i>Salix caroliniana</i>	Carolina willow
<i>Sambucus canadensis</i>	elderberry
<i>Schinus terebinthifolius</i>	Brazilian pepper
<i>Scirpus</i> spp.	bulrush
<i>Serenoa repens</i>	saw-palmetto
<i>Smilax</i> spp.	briar
<i>Thelypteris</i> spp.	shield fern
<i>Ulmus</i> sp.	elm
<i>Viburnum obovatum</i>	black-haw
<i>Vitis</i> spp.	fox grape

CYPRESS SWAMP COMMUNITIES

SCIENTIFIC NAME	COMMON NAME
<i>Acer rubrum</i>	red maple
<i>Andropogon virginicus</i>	broom sedge
<i>Baccharis angustifolia</i>	salt bush
<i>Bacopa</i> spp.	water-hyssops
<i>Blechnum serrulatum</i>	swamp fern
<i>Dichromena</i> spp.	star-rush
<i>Hydrocotyle</i> spp.	water pennywort
<i>Hypericum</i> spp.	St. John's-wort
<i>Juncus effusus</i>	soft rush
<i>Lachnocaulon</i> spp.	bog button
<i>Lemna</i> spp.	duckweed
<i>Ludwigia</i> spp.	water primrose
<i>Magnolia virginiana</i>	sweet bay
<i>Myrica cerifera</i>	wax myrtle
<i>Osmunda cinnamomea</i>	cinnamon fern
<i>Osmunda regalis</i>	royal fern
<i>Pontederia</i> spp.	pickerelweed
<i>Salix caroliniana</i>	Carolina willow
<i>Sambucus canadensis</i>	elderberry
<i>Scirpus</i> spp.	bulrush
<i>Taxodium distichum</i>	bald cypress
<i>Typha</i> spp.	cattail

FRESHWATER MARSH COMMUNITIES

SCIENTIFIC NAME	COMMON NAME
<i>Acer rubrum</i>	red maple
<i>Andropogon virginicus</i>	broom sedge
<i>Bacopa</i> spp.	water-hyssops
<i>Baccharis angustifolia</i>	salt bush
<i>Bidens</i> spp.	begger-ticks
<i>Cladium jamaicense</i>	saw-grass
<i>Cyperus</i> spp.	flat sedge
<i>Dichromena</i> spp.	star-rush
<i>Eleocharis</i> sp.	spikerush
<i>Equisetum</i> sp.	scouring rush
<i>Eupatorium</i> spp.	dog fennel
<i>Fuirena</i> spp.	umbrellagrass
<i>Hydrocotyle</i> spp.	water pennywort
<i>Hypericum</i> spp.	St. John's-wort
<i>Hygrophila lacustris</i>	lake hygrophila
<i>Juncus effusus</i>	soft rush
<i>Juncus</i> spp.	rush
<i>Lachnocaulon</i> sp.	bog button
<i>Liquidambar styraciflua</i>	sweet gum
<i>Ludwigia peruviana</i>	primrose willow
<i>Ludwigia</i> spp.	water primrose
<i>Lygodium japonicum</i>	Japanese climbing fern
<i>Myrica cerifera</i>	wax myrtle

Nuphar spp.	yellow water-lily
Nymphaea	water-lily
Osmunda regalis	royal fern
Oxypolis filiformis	water-dropwort
Panicum hemitomom	maidencane
Panicum repens	torpedo grass
Paspalum notatum	bahiagrass
Polygonum hydropiperoides	smartweed
Pontederia spp.	pickerelweed
Quercus nigra	water oak

WET PRAIRIE COMMUNITIES

SCIENTIFIC NAME	COMMON NAME
Andropogon virginicus	broom sedge
Baccharis angustifolia	salt bush
Hydrocotyle spp.	water pennywort
Hypericum spp.	St. John's-wort
Juncus effusus	soft rush
Myrica cerifera	wax myrtle
Oxypolis filiformis	water-dropwort
Panicum repens	torpedo grass
Scirpus spp.	bulrush
Xyris spp.	yellow-eyed grass

* All species identified by Greiner personnel.