Xny

florida Department of Transportation
ENVIRONMENTAL DETERMINATION

-	GENERAL INFORMATION:							
	a.	County: Pasco						
		Project Name: SK 54 Project Limits: from US 41 (SK 45) to Cypress Creek Bridge						
	٠.	rioject limits. Itom 50 41 (ok 45) to dypress of each bitage						
	d.	Project Numbers: 14090-1516						
		Scace reserve wed						
Σ.	PROJECT	DESCRIPTION: See page 1 of Attachments						
	a.	Existing:						
	b.	Proposed Improvements:						
ı.	CLUSSS 01	? ACTION:						
	a.	Class of Action b. Other Actions						
		Environmental Impact Statement Section 4(f) Statement						
		Environmental Assessment Section 106 Consultation Endangered Species Assessment						
	c.	Public Involvement						
	1.							
	2.	acceptance of the location and design concepts for this project. (X.) A public hearing was held on August 31, 1989 and a transcript is included with the						
		environmental determination. Approval of this Categorical Exclusion determination constitutes						
		acceptance of the location and design concepts for this project. () An opportunity for a public hearing was afforded and a certification of opportunity is included						
		with the environmental determination. Approval of this Categorical Exclusion determination						
	3.	constitutes acceptance of the location and design concepts for this project. () A public hearing will be held and the public hearing transcript will be provided at a later date						
		Approval of this Categorical Exclusion DOES NOT Constitute acceptance of this project's						
		location and design concepts. () An opportunity for a public hearing will be afforded and a certification of opportunity will be						
		provided at a later date. Approval of this Categorical Exclusion determination DOES NOT constitute acceptance of this project's location and design concepts.						
- !	REVIEWER'	S SIGNATURE BLOCK:						
	Back	Verine B. Greaner 2, 12, 91						
_	FDOT	Project Engineer Date						
	, ,)							
•	H	Springered Spridigt						
Ì	EDOI	Environmental Specialist Date						
	ma	uch Doctor 5,9,91						
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
-	FHW	Area Engineer Date						

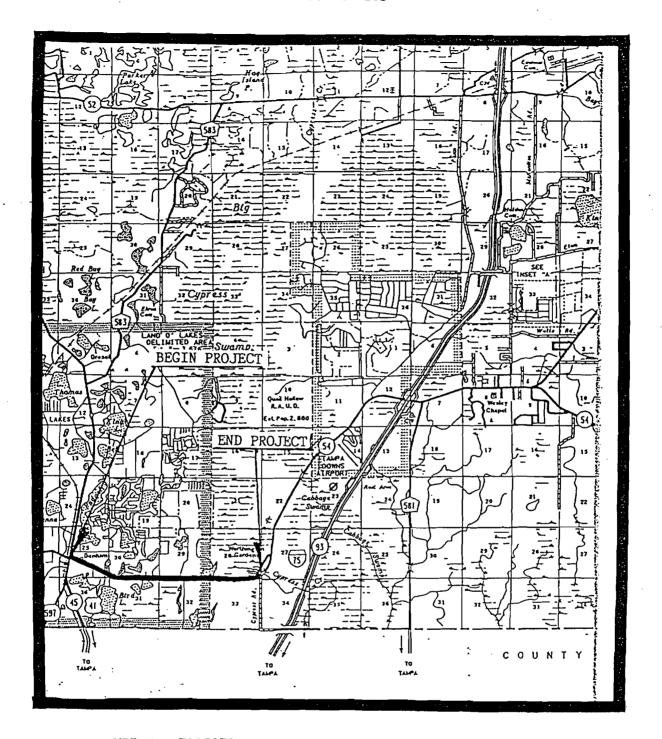
V. FIMA CONCURRENCE BLOCK:

(For) Division Administrator

5 /10 /91 Date

6. IMPACT EVALUATION					
	•	S M	(N	N	
Topical Categories	•	i i			REMARKS
Topical Chippen		gn		_	1400.00
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A SOCIAL IMPACTS					•
				4.	0 1
1. Land Use Changes	ļ	IX	T.	[]	See Attachment A
2. Community Cohesion	[][]	X	[]	See Attachment A
3. Relocation Potential	[) k)	[]	[]	<u> See Attachment A</u>
4. Churches and Schools	(][]	[]	[X	<u> </u>
5. Title VI Considerations	(] []	[x]	[]	See Attachment A
6. Controversy Potential	ĺ] [X]	[]	[]	See Attachment A
7. Energy	(1 []	[]	(×)	
8. Utilities and Railroads	ſ] k]	[]	[]	See Attachment A
B. CULTURAL IMPACTS					·
L Section 4(f) lands	ſ	1 [1	[]	[x]k]	
2. Historic Sites	ĺ] []	[X]	[]_	See Attachment B
3. Archaeological Sites	ſ	1 []	[X]		See Attachment B
4. Recreation Areas	(1 []	[]	[]	<u> </u>
C. NATURAL ENVIRONM	ENT				
L Wetlands	ſ] [x]	[]	[]	See Attachment C
2. Aquatic Preserves	[] []	[]	[X]	·
3. Water Quality	[] k]	[]	[]	See Attachment C
4. Outstanding Fla. Waters	[][]	[]	[x]	
5. Wild/Scenic Rivers	ſ	1 []		[x]	
6. Floodplains	Ĩ] k]	Ü	[]	See Attachment C
7. Coastal Zone Consistency	· i	iïi	[2]	i	See Attachment C
8. Coastal Barrier Island	í	iii	ii		
9. Wildlife and Habitat	, 1] [x]	ri	[]	See Attachment C
10. Farmlands	(וו ו	IJ	11	See Letter 8/2/89
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D. PHYSICAL IMPACTS					
1. Noise	[]] [3]	[]	[]	See Attachment D
2. Air		1 (24		[]	See Attachment D
3. Construction	[]	l (xi	[]	[]	See Attachment D
4. Hazardous Materials	Ĩ	[_x]	ij	11	See Attachment D
5. Navigation	ì		ii	[4	Streams are not navigable
<u>-</u>	ed that a Coast Go	ard Pe	rmit I	SNOT	quired in accordance with 23 CFR 650, Subpart H.
b.[] FHWA has determin	ed that a Coast G	uard Pe	rmit I	S required	in accordance with 23 CFR 650, Subpart H.
E. PERMITS REQUIRED	SWFWMD - : DER - Dre COE - Dre	dge	and	Fill	r Management Stormwater Management
7. WEILANDS FINDING: (A					

See Attachment C- Natural Environment



WPI No. 7115973

State Project No. 14090-1516

FAP No. RS-7810(4)

SR 54 from US 41 (SR 45) to Cypress Creek Bridge

County: Pasco

2. PROJECT DESCRIPTION

a. Existing: The length of the existing roadway segment within the project limits is 4 miles from the east right-of-way of U.S. 41 to the west right-of-way of Cypress Creek Bridge. Within the study area, SR 54 is predominantly a two-lane rural roadway which has been widened in certain urban areas to provide for left-turn lanes. The existing right-of-way width varies from 100-feet to 115-feet in certain areas, but the predominant width is 100-feet. The existing roadway is projected to operate at a level of service (LOS) F before the year 2010. Existing drainage is accomplished primarily through surface ditches and swales. There are nine (9) cross drains, one (1) box culvert and a bridge within the project limits. Site investigations indicate many drains are functioning properly, but there are many in poor condition. Cypress Creek Bridge is located on the eastern termini of the project. This structure is approximately 120 feet in length and 11 feet in width. The bridge is in good condition with no structural deficiencies.

b. Proposed Improvements: The proposed improvements to SR 54 include the construction of additional travel lanes, intersection improvements and new bridge structures. A rural four-lane divided typical section has been proposed, two 12-foot lanes in each direction, separated by a 74-foot grassed median. A 4-foot paved shoulder on each outside lane is included with this typical. This shoulder may accommodate bicycle traffic. Drainage will be provided by open ditches and swales. The existing two-lane Cypress Creek Bridge would be replaced with two new two-lane bridges north of the existing location. These proposed improvements will require 250-feet of right-of-way. Approximately 92-acres of property will be necessary for additional roadway right-of-way. Right-of-way acquisition is estimated to result in the displacement of approximately eight (8) businesses and six (6) residences. The proposed improvements comply with all 13 AASHTO Controlling Design Criteria. The proposed improvements will result in improved capacity and increased safety. With these improvements, the projected volumes during the design year 2010 are anticipated to be LOS C or better.

ATTACHMENT A: SOCIAL IMPACTS

Land Use Changes - The proposed improvements are consistent with the Pasco County Comprehensive plan, MPO and TIP. Improvements are not anticipated to have a substantial effect on land use within the project area. State Road 54 serves as a primary east/west route in south Pasco County. The land uses along the corridor include undeveloped areas, agricultural, residential, commercial and industrial uses. Most of the agricultural land is used for cattle grazing, dairy farming and citrus groves. The commercial land use consists of commercial conversion of residences, strip commercial and small and medium-sized shopping centers, concentrated mainly around the SR 54/US 41 intersection. Scattered commercial establishments along SR 54 also exist. The proposed improvements will not significantly induce new development but will respond to existing development and growth trends. Improvements serve an existing need for increased capacity, therefore minimal impacts to land use are expected with this project

<u>Community Cohesion</u> - The proposed improvements will not have any measurable effect on the neighborhood values or quality of life in the study area. State Road 54 is an existing primary arterial which delineates boundaries between existing neighborhoods.

Socioeconomic and demographic factors such as population, employment and ethnic distribution will not be substantially affected by these proposed improvements.

<u>Relocation Potential</u> - The proposed roadway improvements will require the acquisition of approximately 92-acres, 69-acres or 75% of which are undeveloped areas or lands used for agricultural purposes. This will result in the displacement of approximately six (6) residences and eight (8) businesses. The right-of-way and relocation estimates are approximated since the roadway design is still preliminary.

The areas in which relocations may be necessary are not considered unique or extraordinary in nature. Homes and vacant commercial properties are available in the study area of comparable value and character in the vicinity of the relocations. The businesses which may be relocated are not major employers and the temporary closing of businesses during relocation will not have a substantial effect of 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).

<u>Title VI Considerations</u> - The proposed improvements will not affect any particular organization or group within the study area 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.

<u>Controversy Potential</u> - An Advanced 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 November 15, 1988, for the purpose of informing the public of the proposed SR 54 improvements, to answer questions and to receive comments. Between 400-500 people attended the workshop. Both verbal and written comments were received. Most of the comments were related to the effects the alternatives would have on individual properties, concerns regarding drainage and flooding and the preferences for the alternatives. There were no negative comments concerning the need for the improvements or the effects it would generally have. There were several positive comments on the need for the project.

A public hearing was held on August 31, 1989, for the purpose of informing the public of the proposed improvement. The conceptual design plans, technical reports and staff were available to answer questions and receive comments. Approximately 240 people were recorded as attending the hearing. A public involvement report (including public hearing transcripts) has been prepared for this project. A court reporter was available and 25 oral comments were recorded. In addition, written comments were received at the hearing and subsequent to the hearing from concerned citizens.

<u>Utilities and Railroads</u> - Some utilities adjacent to the existing roadway will require relocation. Utility owners located in the affected areas include: Florida Power Corporation, Withlacoochee River Electric Corporation, General Telephone Company of Florida and Mad Hatter Utility Corporation. Coordination between the Department and the utility companies will be maintained throughout the project. Specific relocation requirements shall be determined by the FDOT Utility Engineer during final engineering and design. Utility relocations will not substantially impact the area residents or the utility companies.

ATTACHMENT B: CULTURAL IMPACTS

<u>Historic and Archaeological Sites</u> - In accordance with procedures contained in 36 CFR, Part 800, a Cultural Resource Assessment, including background research and a field survey coordinated with the State Historic Preservation Officer (SHPO), was performed for the project, inclusive of SR 54 from US 19 to 1-75. As a result of the assessment, within the limits of US 41 to Cypress Creek Bridge, five (5) previously unrecorded prehistoric archaeological sites (Florida Master Site File 8Pa291 through 295), one (1) historic archaeological site (Florida Master Site File 8Pa298) and two (2) historic structures (Florida Master Site File 8Pa305 and 8Pa306), were recorded during the investigation. Of the eight (8) sites located within this segment none are considered significant for listing on the <u>National Register of Historic Places</u>. Further archaeological testing or preservation of sites, as defined within the boundaries of the proposed right-of-way, should not be required. Based on the fact that no additional historical sites are expected to be encountered during subsequent project development, the FHWA has determined that no other National Register Properties would be impacted (Letter from Division of Historical Resources and State Historic Preservation Officer, December 8, 1988).

ATTACHMENT C: NATURAL ENVIRONMENT

Wetlands - Twenty-two wetland sites totaling approximately 75-acres were identified during field reviews, along with aerial and USGS topog map review. Approximately 19.4-acres of the total wetland sites were delineated within the proposed right-of-way. The quality of the wetland sites affected include 3.03-acres of low quality, 8.94-acres of moderate quality and 7.07-acres of high quality. Depending upon final design these locations within the proposed right-of-way will be partially or totally displaced by the proposed improvements. These wetland sites include mixed wetland hardwoods, cypress swamps, freshwater marshes, wet prairies, open lakes and ditches. Most of these wetlands occur in natural wet depressions and connect stormwater ditches with natural lakes or excavated ponds. The project is located in an area with poor natural drainage. Depressions which exist are generally isolated basins which overflow into each other during heavy rains. Wetland communities in the study provide valuable wildlife habitat, particularly for water birds. Since extensive suitable habitat exists adjacent to the study area, only minimal impacts to wildlife are expected. The proposed project includes all practical measures to minimize harm to wetlands which may result during construction and after the roadway is completed.

Mitigation will be required for the impacted wetlands by the Army Corps of Engineers, Florida Department of Environmental Regulation and the Southwest Florida Water Management District. A mitigation plan will be developed utilizing existing right-of-way followed by areas adjacent to the right-of-way and as a last resort, off-site areas. The plan should consist of any combination of creation, enhancement, restoration and/or preservation of wetlands. All wetlands mitigation types and ratios will be coordinated with the above agencies at the permit application stage.

<u>Water Quality</u> - The existing drainage is accomplished primarily by open roadway ditches and swales. The proposed improvements are not anticipated to adversely affect surface water quality, although short-term impacts to surface water quality which may occur during construction will be minimized through the use of Best Management Practices.

The project is not expected to result in any impacts to groundwater quality. There is little potential involvement with wells or underground storage tanks. Public water supply wells and areas of significant groundwater recharge value will not be substantially affected by the proposed improvements.

The Florida Department of Transportation has coordinated with the Florida Department of Environmental Regulation/Southwest Florida Water Management District regarding 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 17-25, F.A.C., nor does the preliminary review ensure a favorable permitting review.

Floodplains - A floodplain evaluation (inclusive of SR 54 from US 19 to I-75) was conducted to determine the encroachment of the proposed improvements on the floodplains. Federal Emergency Management Agency's (FEMA) flood Insurance Rate Maps for Pasco County (Community No. 120230, Panel Nos. 353C, 354C, 360C, 400C and 450C) indicate that there are several areas where the existing grade of SR 54 falls below the 100-year floodplain. The proposed alternative will not substantially change the 100-year base floodplain elevation.

Through coordination with Flood Insurance Studies, Flood Insurance Rate Maps and Floodway Maps for the Federal Emergency Management Agency, the proposed improvements will not impact a designated floodway.

There are seven cross-drains within the limits of this study area. A worst-case analysis was performed to estimate the increase in headwater depth caused by extended cross-drains of 24", 36" and 48" diameters from their existing lengths of approximately 50' to proposed lengths of 185'. The result of this analysis indicate that the worst-case extension of an existing cross-drain will cause a 0.5' increase in headwater depth. However, extension of the existing cross-drains were not considered to be feasible because these structures have been in place for several decades and cannot be expected to remain in satisfactory structural condition for the duration of the design life of the proposed facility. Therefore it is recommended that all existing cross-drains be replaced by new cross-drains, the size of which shall be determined during the final design when detailed survey data becomes available.

According to Floodplain Evaluation Criteria developed by FDOT in consultation with the FHWA, this project segment falls within floodplain evaluation Category 4 (projects on existing alignment involving replacement of existing drainage structures with no record of drainage problems). The proposed replacement structure included in Category 4 in this project will be designed to perform hydraulically in a manner equal to or greater than the existing structure and backwater surface elevation is not expected to increase. As a result, there will be no significant adverse impacts on natural and beneficial floodplain values. There will be no significant change in flood risks, and 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 these encroachments are not significant.

<u>Coastal Zone Consistency</u> - The Office of Planning and Budget, Office of the Governor has determined that the project is consistent with the Florida Coastal Zone Management Plan (Letter dated September 13, 1988).

<u>Wildlife and Habitat</u> - A field investigation indicated that some threatened and endangered species do occur within the project area. Confirmed species include the Florida Sandhill crane (Grus Canadensis Pratensis) and the wood stork (Mycterria Americana). However, these species are transient and appear to only use the available habitats as foraging or resting areas. No significant breeding populations or evidence of breeding were observed during spot checks and random inspections during the field review. Due to the large amount of suitable habitat in the project area, impacts from the proposed improvements are expected to be minimal.

<u>Farmlands</u> - The 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).

ATTACHMENT D: PHYSICAL IMPACTS

<u>Moise</u> - A noise impact evaluation was conducted which indicated the proposed improvements (inclusive of SR 54 from US 19 to I-75) will result in noise levels which approach or exceed FHWA Noise Abatement Criteria. The approximate number of noise sensitive sites which will experience noise levels which approach or exceed the criteria (SR 54 from US 41 to Cypress Creek Bridge) is eleven (11) for existing conditions, eleven (11) in the year 2010 with no improvements and nineteen (19) in the year 2010 with the proposed improvements. Noise levels are projected to increase over existing conditions by up to 9 dBA with the most substantial increase in noise levels occurring at homes west of the curve at Cypress Creek.

Because noise levels are projected to approach or exceed the Noise Abatement Criteria, several noise abatement measures were considered. A review of the abatement measures indicates that for most noise affected sites there is no prudent or feasible alternative. Noise barriers were considered to mitigate the noise impacts. Noise barriers of sufficient length to be effective cannot be constructed. The lack of continuity in noise barriers greatly decreases their effectiveness.

However, the FDOT is committed to the construction of feasible noise abatement measures at the three noise impacted locations, identified in the Noise Report for this project, contingent upon the following conditions:

1) detailed noise analyses during the final design process; 2) reasonable cost analyses; 3) community input regarding desires, types, heights and locations; 4) preferences regarding compatibility with adjacent land uses, particularly as addressed by officials having jurisdiction over such land uses; and 5) safety and engineering aspects as related to the roadway user and the adjacent property owner.

<u>Air Quality</u> - In accordance with 23 CFR, Part 770 directives, a study was conducted to evaluate the effect of the proposed project upon air quality. The results of the evaluation indicate that in the years 1995 and 2010, the proposed improvements will result in carbon monoxide concentrations which are within the National Ambient Air Quality Standards. Because of the enhanced traffic flow, it is estimated that the proposed project will result in significantly improved air quality in the project area over the no build alternative.

This project is in an area where the State Implementation Plan does not contain any transportation control measures. Therefore, the conformity procedures of 23 CFR 770 do not apply to this project. This project is in conformance with the State Implementation Plan because it will not cause violations of air quality standards and will not interfere with any transportation control measures.

<u>Construction</u> - Construction activities may have air, noise, water quality, traffic flow and visual impacts for those residents and travelers within the immediate vicinity of the project. These temporary effects will be controlled with adherence to FDOT's "Standard Specifications for Road and Bridge Construction" and the use of Best Management Practices.

<u>Hazardous Materials</u> - A hazardous materials site inventory and evaluation was conducted to identify sites of known or potential hazardous materials involvement. There were ten (10) sites identified within the proposed project area. Of the ten (10) sites identified, four (4) sites may require further environmental investigation prior to right-of-way acquisition. The type of additional investigation recommended varies from coordinating with the Florida Department of Environmental Regulation (FDER) on sites already under investigation to installing monitoring wells and collecting water and soil samples. The level of detail required at each site will depend upon site-specific conditions.

Neither the existing or proposed right-of-way for the proposed improvements contains any known hazardous materials. The proposed project contains no known significant hazardous material involvement.

WETLAND IMPACTS SR 54/US 41 > CYPRESS CREEK BRIDG

WETLANI	USFWS WETLANDS	WETLAND ACREAGE	TOTAL WETLAND	TYPEOF
SITE#	CLASSIFICATION	WITHIN RAW	ACREAGE	IMPACT
74D	PEMIA	0.25	0.59	LOW QULAITY
				CLEAR R/W, FILL (1LN)
75	PAB3H, PUBH	0.49	SYSTEM	MODERATE QUALITY
				CLEAR R/W, FILL (1LN)
76	PSSIF	2.21	SYSTEM	MODERATE QUALITY
	55005 55:40		01/07-1/	CLEAR R/W, FILL (1LN)
77	PFO2F, PEMIC	0.89	SYSTEM	LOW QUALITY
70	Decis Dangu	0.13	CVCTEM	CLEAR R/W,FILL (1LN)
78	PSSIF, PAB3H	0.13	SYSTEM	MODERATE QUALITY
				CLEAR (R/W,MED.) FILL (1LN)
79	PEMIF, PSSIF	0.14	4.10	HIGH QUALITY
13	i Livili , i Soli	_0.14	7.10	CLEAR (R/W)
80	PEMIF, PSSIF	0.21	3.99	MODERATE QUALITY
	,			CLEAR (R/W)
81	PAB3H, PSSIC	4.29	SYSTEM	HIGH QUALITY
	·		· · , -	CLEAR (R/W, MED.)
:				FILL (2LNS)
82	PEMIF, PUBH	1.36	18.39	MODERATE QUALITY
				. CLEAR (R/W, MED.)
				FILL (2LNS)
83	PEMIC		2.00	NO EFFECT
84	PEMIC, PUBH		0.68	NO EFFECT
85	UPLAND		4.05	
86	PFO2F	3.48	4.67	MODERATE QUALITY
				CLEAR (R/W,MD.)
87	PSSIF, PFO2F	1.64	SYSTEM	FILL (1LN) HIGH QUALITY
01	F331F, FF02F	1.04	STSTEIVI	CLEAR (R/W), FILL 1LN)
87A	PEMIF		7.97	NO EFFECT
88	PEMIF	0.46	0.77	CLEAR (R/W), FILL (1LN)
89	PAB3H, PUBH	0.83	26.70	MODERATE QUALITY
90	PEMIF	0.08	0.28	LOW QUALITY
91	PEMIF	0.23	0.68	MODERATE QUALITY
				CLEAR (R/W, MED.),
	_			FILL (1LN)
92	PEMIC	1.04	1.65	LOW QUALITY
				CLEAR (RW, MED.)
				FILL (1LN)
93	PEMIC	0.31	0.80	LOW QUALITY
				CLEAR (R/W, MED.)
				FILL (1LN)
94	PFO2F, R2UBH, PFO2C	1.00	SYSTEM	HIGH QUALITY
	CYPRESS CREEK			NEW BRIDGE; ASSOCIATED
		·		CLEARING & PILINGS