FEDERAL HIGHWAY ADMINISTRATION
REGION 4

FINAL
PRELIMINARY ENGINEERING REPORT

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
AND
FLORIDA DEPARTMENT OF TRANSPORTATION

State Project Number: 14504-1601
WPA Number: 7125920
FA Number: RS-7810 (A)

SR 54 FROM CYPRESS CREEK
TO ZEPHYRHILLS EAST BYPASS
PASCO COUNTY, FLORIDA

SEPTEMBER 1992

PROFESSIONAL ENGINEER CERTIFICATE

I hereby certify that I am a registered professional engineer in the State of Florida and that I supervised the preparation and approve the evaluation, findings, opinions, conclusions, and technical advice hereby reported for

PROJECT: SR 54

STATE PROJECT NUMBER: 14504-1601

W.P.A. NUMBER: 7125920

F.A.P. NUMBER: RS-7810(A)

LOCATION: SR 54 from Cypress Creek located 1/4 mile west of I-75 to the Zephyrhills East Bypass /Chancey Road intersection in southern Pasco County, Florida

This report includes a summary of data collections efforts, corridor analyses, and conceptual design analyses for SR 54 on new alignment. I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering and planning as applied through professional judgement and experience.

SIGNATURE: Roy Chapman DATE: 2-3-93

NAME: Roy E. Chapman, P.E.

FLORIDA REGISTERED ENGINEER NO.: 34438

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ABSTRACT

The Florida Department of Transportation (FDOT), with concurrence from the Pasco County Board of County Commissioners, proposes the construction of SR 54 on new alignment from Cypress Creek to the Zehpyrhills East Bypass, a distance of approximately 14 miles. The recommended alternative to provide the needed capacity is Alternative 1D. This alternative recommends the construction of a six lane rural divided highway in 250 feet of right-of-way, the construction of a new interchange at the intersection of SR 54 and I-75 and the widening of US 301 to a four lane divided rural highway from the intersection of the new SR 54 to the Zephyrhills East Bypass, a distance of approximately 1.00 mile. This project is consistent with the Pasco County Comprehensive Plan, adopted by the Pasco County Board of County Commissioners on June 16, 1989. This report is one element of a Project Development and Environmental Study which examines in detail the construction of SR 54 on new alignment.

1.0 INTRODUCTION

Existing State Road (SR) 54 is a free-access rural, minor arterial roadway that runs in a predominantly east/west direction from U.S. 19 in west Pasco County to northwestern Polk County. Currently, SR 54 is the only major facility that runs east/west through the southern portion of Pasco County. A traffic report, dated December 1988, was prepared by Hunter, Inc., for the subject roadway. The projected 2010 traffic volumes for existing SR 54 were estimated to be 104,000 vehicles per day (vpd) in the vicinity of I-75 and an estimated 31,600 vpd in Zephyrhills west of U.S. 301. Traffic volumes of this magnitude would require the construction of an 8-lane freeway to a 4-lane arterial roadway to obtain acceptable level of service. Because of the anticipated impacts (right-of-way, access, etc.) associated with a transportation facility of this magnitude, emphasis was placed on the evaluation of a new transportation facility in southern Pasco County. This study considers the location of a second east/west roadway south of the existing corridor. For the purpose of this report, the existing SR 54 will be referred to as SR 54A and the proposed facility will be referred to as the SR 54 extension, or SR 54. Figure 1-1 provides an area map which identifies the location of the study within Pasco County, including the SR 54 corridor.

The purpose of this report is to identify the alternatives considered in the selection of one alignment which would provide an acceptable level of service in the 2010 design year. For the purpose of this study, the project limits are from Cypress Creek on the west to the Zephyrhills East Bypass on the east, a distance of approximately 14 miles. This distance includes a 1-mile segment of U.S. 301 from new SR 54 to the Zephyrhills East Bypass. This report will also provide an economic evaluation of the alternatives considered.

1.1 DESCRIPTION OF THE PROPOSED ACTION

This project involves the identification of a new roadway segment of SR 54, approximately 14 miles long, extending from Cypress Creek on the west to the Zephyrhills East Bypass on the east. Because this is a new alignment, there are no existing highways, except for existing north/south roadways which cross the proposed alignments. These north/south roadways are I-75, CR 581, CR 579, and U.S. 301. Based on projected traffic volumes, current and proposed land uses, no existing right-of-way constraints, and a desire to construct a transportation facility using desirable highway design criteria, a multilane rural typical cross section was selected for evaluation.

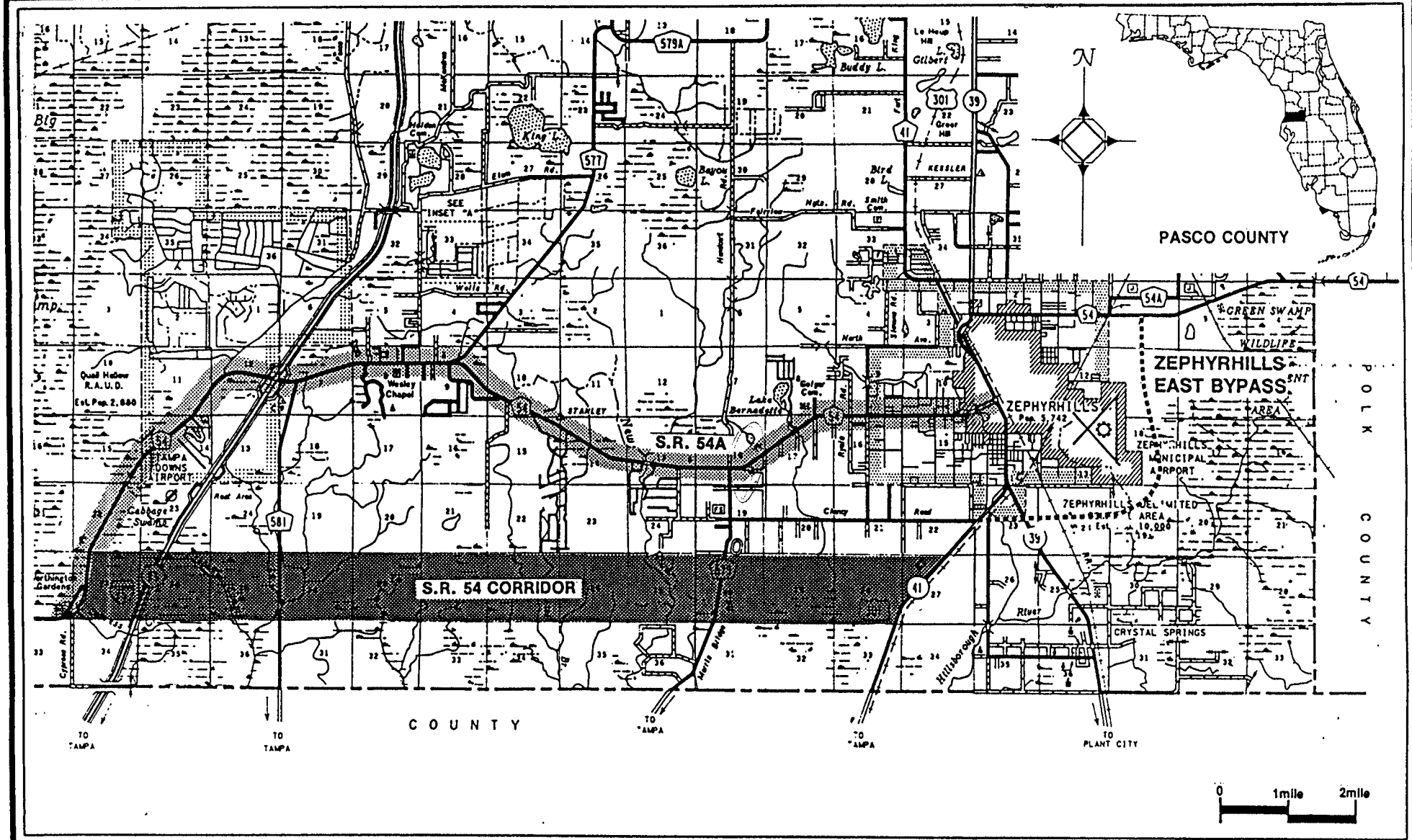


Figure 1-1

AREA LOCATION MAP

SOURCES: FDOT, 1983; HUNTER, 1989.

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

2.0 NEED FOR PROJECT

The following sections identify the need for the proposed project. The projected capacity deficiencies on existing SR 54A and the proposed improvements for the new SR 54 will also be discussed in these sections.

2.1 PLANNING BASIS FOR PROPOSED ACTION

Pasco County has recently experienced rapid suburban development, and this growth is expected to continue as vacant land is developed and existing land use is improved for the highest and best use. At present, there is a considerable amount of land that is either vacant or undeveloped within the study corridor, providing areas for future residential, commercial, institutional, and industrial growth. Currently, there are five large planned developments either under construction or proposed for the area adjacent to I-75 and 6 miles to the east. These five developments cover approximately 9,000 acres and include the development of 17,300 homes with 3.1 million square feet (msf) of light industrial development and a large shopping center.

The above project development within the project limits is in accordance with the Pasco County Land Use Element and the goals established in Pasco County's Comprehensive Plan. Pasco County undated their 1982 adopted Comprehensive Plan to be consistent with the 1985 Local Government Comprehensive Planning and Land Development Regulation Act, Chapter 163, Florida Statutes (FS). The proposed east/west roadway (SR54) is consistent with the Future Land Use Element of the Updated Comprehensive Plan. This identified and projected growth will cause an increase in traffic volumes on SR 54A, creating delays for motorists using the existing 2-lane SR 54A facility. Therefore, another east/west roadway (SR 54) will be required to help carry projected traffic volumes throughout the area. Both facilities would decrease delays to motorists as well as provide alternate routes to travel between I-75 and U.S. 301. This will provide an improved balance to the systems network of southern Pasco County.

In addition, several proposed roadway improvements near the project limits will affect the need for a new east/west roadway. The first improvement is the Zephyrhills East Bypass which is illustrated in Figure 1-1. This bypass, which was developed by Pasco County, was completed in May, 1991 from US 301 to CR 54 East. The bypass provides a 2-lane rural facility from U.S. 301 to SR 54A east of Zephyrhills. At U.S. 301, the bypass will form the eastern leg of the U.S. 301/Chancey Road intersection. The bypass is expected to divert through traffic from existing SR 54A in Zephyrhills to new SR 54 via U.S. 301.

A second improvement, U.S. 301 from Chancey Road north to SR 54 east, is under study by the City of Zephyrhills. A one-way pair system with two travel lanes in each direction is proposed for the majority of US 301 in the downtown Zephyrhills area.

To provide linkage with these roadway improvements in the Zephyrhills area, the SR 54 study limits were expanded to include U.S. 301 from proposed SR 54 to Chancey Road. Required improvements for this section of U.S. 301 have been identified in this report. In addition, design criteria for these improvements will be consistent with criteria being implemented for the proposed improvement on U.S. 301 north of Chancey Road. With the incorporation of the segment of U.S. 301 from new SR 54 to Chancey Road, an improved interconnected roadway network will be established for motorists to travel through or around Zephyrhills.

2.2 CAPACITY

A traffic analysis was conducted along the existing SR 54A to determine 2010 conditions. The results of this analysis are shown in Table 2-1. As indicated in Table 2-1, most segments along SR 54A would need to be improved to a 4- to 8-lane freeway from Cypress Creek to Wesley Chapel Lakes Boulevard and 4 to 6 lane divided highway from Wesley Chapel Lakes to Zephyrhills if the new SR 54 extension were not constructed. However, since the required improvement of converting existing SR 54A to an expressway facility would not be feasible, in terms of monetary and engineering standards, a second

Table 2-1. Projected 2010 Traffic Conditions Along SR 54A

Facility	Link	Existing Laneage	Projected AADT	Laneage Required
SR 54A	Cypress Creek to I-75	2L	57,100	6LE
	I-75 to CR 581	2L	104,100	6-8LE
	CR 581 to CR 577	2L	64,300	6LE
	CR 577 to Wesley Chapel Lakes Boulevard	2L	53,200	4LE
	Wesley Chapel Lakes Boulevard to CR 579	2L	49,000	6LD
	CR 579 to U.S. 301	2L	31,160	4LD

Note:
6LE = 6-lane expressway
6LD = 6-lane divided

Source: Hunter, 1989.

east/west roadway was evaluated. Currently, SR 54A is the only major east/west facility in southern Pasco County. Therefore, the need for a new east/west corridor was established.

The traffic report assumed that both corridors (SR 54A and proposed SR 54) would be in place by the 2010 design year. Figure 2-1 identifies the projected daily traffic volumes on SR 54, SR 54A, and all major intersecting roadways within the project limits.

A detailed intersection analysis (see Appendix A) was performed on all signalized and major unsignalized intersections along SR 54, SR 54A, and U.S. 301 within the project limits. This analysis was performed using the 1985 Highway Capacity Manual (HCM) software. All major intersections along the proposed SR 54 corridor were analyzed as signalized intersections. The results of the analyses indicated that several intersections along SR 54A and U.S. 301 and the proposed intersections along SR 54 will need to be improved in order to operate at acceptable operating standards [level of service (LOS) C or better] by the 2010 design year. These improvements are identified in Table 2-2.

A detailed arterial analysis was also performed for SR 54, SR 54A, and U.S. 301 using the 1985 HCM software and the FDOT Generalized Hourly Level of Service Maximum Volumes tables, dated November 19, 1987. The results of this analysis indicated that, even with construction of the proposed SR 54 facility, all arterial links along SR 54A are projected to operate at LOS E (or worse) by the 2010 design year if no improvements are made. Therefore, SR 54A from I-75 to Zephyrhills will need to be improved to a 4- to 6-lane divided roadway. In addition, SR 54 from I-75 to Zephyrhills will need to be constructed as a 2- to 6-lane facility by 2010 while U.S. 301 will need to be improved to a 4-lane divided roadway. Table 2-3 identifies projected 2010 traffic volumes and required laneage for SR 54 and U.S. 301.

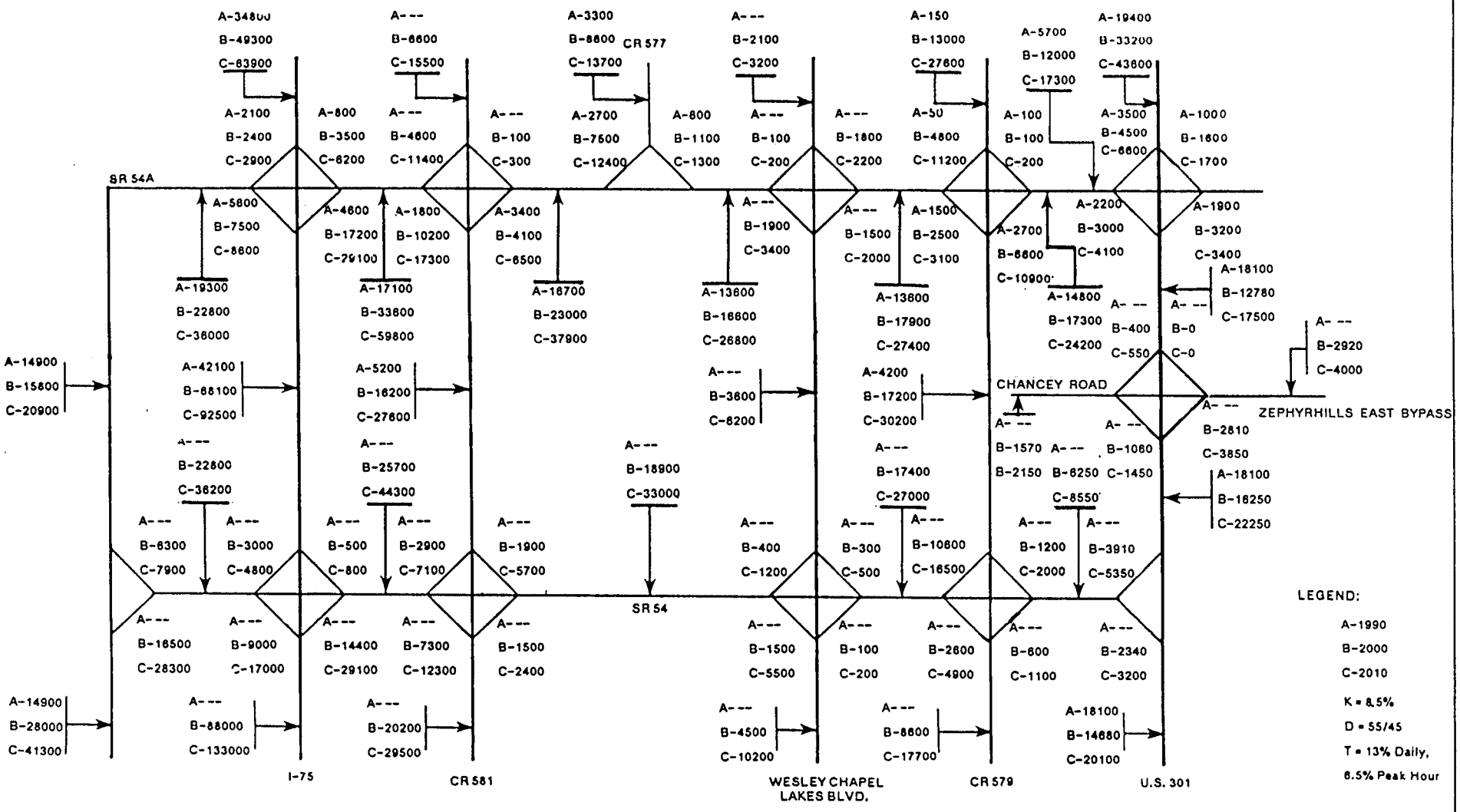


Figure 2-1

AVERAGE ANNUAL DAILY TRAFFIC VOLUMES FOR 1990, 2000, AND 2010

SOURCES: GRIENER, 1988; HUNTER, 1989.

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

Table 2-2. Intersection Geometry and Recommended Intersection Improvements, Cumulative by Year

Intersection	Year	Configuration of Approach Lanes				PM Peak-Hour Level of Service	
		Northbound	Southbound	Eastbound	Westbound	Prior to Improvement	With Improvement
SR 54A/I-75	1988	N/A	L,R	T,R	L,T	E*	B†
(West Ramps)	1990	N/A	L,R	T,R	L,T	B	--
	2000	N/A	L,R	T,R	L,T	B	--
	2010	N/A	L,(L),R	T,(T)(T),R	L,(L),T,T,(T)	F	D**
SR 54A/I-75	1988	L,R	N/A	L,T	T,R	F*	B†
(East Ramps)	1990	L,R	N/A	L,T	T,R	B	--
	2000	L,R	N/A	L,T	T,(T),R	F	B
	2010	L,(L),R,(R)	N/A	L,(L),T,(T),(T)	T,T,(T),R	F	D**
SR 54A/CR 581	1988	L,R	N/A	T,R	L,T	E*	B†
	1990	L,R	N/A	T,R	L,T	B	--
	2000	L,(T),R	(L),(TR)	(L),T,(T),R	L,T,(TR)	D	C
	2010	L,(L),T,(T),R	L,T,(T),(R)	L,(L),T,T,(T),R	L,(L),T,(T),TR	F	C
SR 54A/CR 577	1988	N/A	LR	LT	TR	B*	--
	1990	N/A	LR	LT	TR	E*	B†
	2000	N/A	L,(R)	(L),T	TR	F	B
	2010	N/A	L,R	L,(L),T,(T)	(T),TR	F	B
SR 54A/Wesley Chapel	1988	N/A	N/A	N/A	N/A	--	--
Lakes Boulevard	1990	N/A	N/A	N/A	N/A	--	--
	2000	(LTR)	(LTR)	(L),TR	(L),TR	--	B
	2010	(L),TR	(L),TR	L,(T),TR	L,(T),TR	F	B

Table 2-2. Intersection Geometry and Recommended Intersection Improvements, Cumulative by Year (Continued, Page 2 of 3)

Intersection	Year	Configuration of Approach Lanes				PM Peak-Hour Level of Service	
		Northbound	Southbound	Eastbound	Westbound	Prior to Improvement	With Improvement
SR 54A/CR 579	1988	LTR	LTR	LTR	LTR	C*	--
	1990	LTR	LTR	LTR	LTR	E*	B†
	2000	(L),TR	(L),TR	(L),TR	(L),TR	F	C
	2010	L,T,(T),(R)	L,T,(T),R	L,(T),TR	L,(T),TR	F	C
SR 54A/U.S. 301	1988	L,T,R	L,TR	L,TR	L,T,TR	B	--
	1990	L,T,(TR)	L,(T),TR	L,TR	L,T,TR	F	C
	2000	L,T,TR	L,T,TR	L,TR	L,T,TR	C	--
	2010	L,T,TR	L,T,TR	L,T,(R)	L,T,TR	F	C
SR 54/SR 54A	1988	N/A	N/A	N/A	N/A	--	--
	1990	N/A	N/A	N/A	N/A	--	--
	2000	N/A	(L),(R)	(L),(T),(T)	(T),(T),(R)	--	B
	2010	N/A	L,(L),R	L,(L),T,T	T,T,R	D	C
SR 54/I-75	1988	N/A	N/A	N/A	N/A	--	--
(West Ramps)	1990	N/A	N/A	N/A	N/A	--	--
	2000	N/A	(L),(R)	(T),(T),(R)	(L),(T),(T)	--	B
	2010	N/A	L,R	T,T,(T),R	L,(L),T,T,(T)	F	C
SR 54/I-75	1988	N/A	N/A	N/A	N/A	--	--
(East Ramps)	1990	N/A	N/A	N/A	N/A	--	--
	2000	(L),(L),(R)	N/A	(L),(T),(T)	(T),(T),(R)	--	B
	2010	L,L,R,(R)	N/A	L,T,T,(T)	T,T,(T),R	F	C

Table 2-2. Intersection Geometry and Recommended Intersection Improvements, Cumulative by Year (Continued, Page 3 of 3)

Intersection	Year	Configuration of Approach Lanes				PM Peak-Hour Level of Service	
		Northbound	Southbound	Eastbound	Westbound	Prior to Improvement	With Improvement
SR 54/CR 581	1988	N/A	N/A	N/A	N/A	--	--
	1990	N/A	N/A	N/A	N/A	--	--
	2000	(L),(T),TR	(L),(T),TR	(L),(T),(TR)	(L),(T),(TR)	--	C
	2010	L,(L),T,TR	L,(L),T,T,(R)	L,(L),T,(T),(TR)	L,(L),T,(T),TR	F	C
SR 54/Wesley Chapel Lakes Boulevard	1988	N/A	N/A	N/A	N/A	--	--
	1990	N/A	N/A	N/A	N/A	--	--
	2000	(L),(TR)	(L),(TR)	(L),(T),(TR)	(L),(T),(TR)	--	B
	2010	L,TR	L,TR	L,T,TR	L,T,TR	B	--
SR 54/CR 579	1988	N/A	N/A	N/A	N/A	--	--
	1990	N/A	N/A	N/A	N/A	--	--
	2000	(L),TR	(L),TR	(L),(TR)	(L),(TR)	--	C
	2010	L,(T),TR	L,T,(T),(R)	L,(L),TR	L,TR	F	C
SR 54/U.S. 301	1988	N/A	N/A	N/A	N/A	--	--
	1990	N/A	N/A	N/A	N/A	--	--
	2000	(L),T	TR	(L),(R)	N/A	--	B
	2010	L,T,(T)	(T),TR	L,R	N/A	F	B
Chancey Road (Zephyrhills East Bypass)/ U.S. 301	1988	N/A	N/A	N/A	N/A	--	--
	1990	N/A	N/A	N/A	N/A	--	--
	2000	(L),T,(TR)††	(L),(T),TR††	(L),TR	(L),(TR)	--	B
	2010	L,T,TR	L,T,TR	L, TR	L, TR	B	--

* Level of service of minor street approaches at unsignalized intersection.
† Level of service when signalized (when warranted by MUTCD).
** Analysis based on evaluating both intersections as one single intersection as determined by an urban interchange configuration. Also, reconstruction of the I-75 overpass bridges would be required.
†† Based on programmed improvements on U.S. 301.
L,T,R = Exclusive left-turn, through, and right-turn lanes.
LT, TR, LTR = Shared-lane configurations.
N/A = Approach does not exist.
( ) = Recommended improvement.

Table 2-3. 2010 Traffic Volumes and Laneage Requirements for SR 54 and U.S. 301

Facility	Link	Projected AADT	Laneage Required
SR 54	Cypress Creek to I-75	36,200	4L
	I-75 to CR 581	44,300	6L
	CR 581 to CR 579	33,000	4L
	CR 579 to U.S. 301	8,550	2L
U.S. 301	SR 54 to Chancey Road	22,250	4L

Source: Hunter, 1989.

It should be noted that a complete analysis of the future needs and improvements for existing SR 54A is outside the scope of this study and should be addressed in a separate study at a later date.

2.3 CONSISTENCY WITH TRANSPORTATION PLAN

The proposed construction of SR 54 has been determined to be in accordance with the Traffic Circulation Element of the Pasco County Comprehensive Plan, as submitted to the Department of Community Affairs (DCA) for review on January 1, 1989. The proposed project would provide a second east/west facility to carry the increased projected traffic resulting from the commercial and residential development that is projected in the Pasco County Comprehensive Plan.

2.4 SOCIAL/ECONOMIC DEMAND

According to the University of Florida Bureau of Economic and Business Research (BEBR), Pasco County was the 15th fastest growing county in the state from 1976 to 1986. Pasco County had a 1986 population of 245,696 persons compared to its 1976 population of 149,400, a 64.5-percent increase. Population growth in Pasco County is expected to continue at a rapid rate. This projected growth will continue to cause an increase in traffic volumes on SR 54A, which will increase the delays for motorists traveling on this roadway. Based on these factors, the need exists to construct a second east/west facility. In addition, the construction of a new roadway will have a positive impact on emergency response times.

Pasco County's economic base is predominantly trade and services oriented. An increase in retail trade is anticipated as a result of the proposed project which would be consistent with the project area's current economic base.

3.0 EXISTING CONDITIONS

3.1 MAJOR INTERSECTING ROADWAYS

SR 54 is proposed to be a major east/west arterial extending from Cypress Creek to U.S. 301 south of the Zephyrhills East Bypass. SR 54 will also provide linkage to several significant connecting roadways. These roadways include the following: SR 54A, I-75, CR 581, CR 579, and U.S. 301. Since SR 54 is a proposed roadway, there are no existing roadway characteristics for this facility. However, data is available for intersecting roadways as identified in Table 3-1. The right-of-way widths for all major intersecting roadways range from approximately 100 feet for SR 54A and U.S. 301 to 300 feet for I-75, except for the right-of-way for CR 579, which is approximately 50 feet of maintained right-of-way established by occupation.

Table 3-2 identifies programmed work items for SR 54 and U.S. 301. Based on information provided in Table 3-2, SR 54A, I-75, and U.S. 301 are programmed for preliminary engineering and right-of-way work items within the FDOT 5 year Transportation Improvement Program (TIP).

3.2 EXISTING UTILITY SYSTEMS

3.2.1 Water and Sewer

Currently no water or sewer service exists along the project corridor. However, Pasco County has recently constructed a water force main and a sewer force main along the section line (on an easement) west from CR 581, 1 mile north of the Hillsborough/Pasco County line. This easement is 15 feet in width and is located on the northern property line of the Northwood Development. Based on the location of these utilities within the easement, these utilities will be located along the proposed SR 54 corridor. However, typical cross sections for SR 54 have been developed to accommodate these utilities in the median area of the cross section, thereby minimizing their impact to the roadway.

3.2.2 Electric

The electric service in the project area is provided by the Withlacoochee River Electric Company (WREC). WREC maintains several overhead aerial lines

Table 3-1. Existing Roadway Data for Facilities Connecting SR 54

Facility	Geometrics	Approximate ROW Width
SR 54A	2L	100 Feet
I-75	4L-6L	300 Feet
CR 581	2L	200 Feet
CR 579	2L	50 feet by maintenance
U.S. 301	2L	100 Feet

Source: Hunter, 1989.

Table 3-2. Improvements Listed in Florida Department of Transportation's 1992-93 through 1997-98 5-Year Construction Program for SR 54--Cypress Creek to Zephyrhills East Bypass

Project	Improvement	Year Scheduled to Begin
SR 54 (Cypress Creek to CR 581)	Multilane New Construction	92/93 (Preliminary Engineering) 94/95 (Right-of-Way)
U.S. 301 (Hillsborough County Line to Crystal Springs Road)	Resurface	92/93 (Preliminary Engineering) 92/93 (Construction)

along CR 581, CR 579, and U.S. 301 that cross the SR 54 corridor. An overhead line also exists west of I-75 perpendicular to existing SR 54A.

3.2.3 Telephone

General Telephone Company (GTE) currently maintains a series of buried telephone cables which cross the proposed SR 54 corridor at CR 581, CR 579, and U.S. 301. Cables are located within the existing rights-of-way for these side streets. Buried cables and conduits run along the east side of and parallel to CR 581. Buried cables and conduits run along the west side of and parallel to CR 579, approximately 30 to 34 feet off the center line of pavement. In addition, several buried cables are located on the west side of and perpendicular to CR 579. Buried cables run on both sides of and parallel to U.S. 301. These cables are located approximately 41 to 42 feet off the center line of the existing pavement. Buried cables also exist on the west side of and perpendicular to U.S. 301.

3.2.4 Cable Service

Cable television service is provided by Florida Satellite Network, Inc. (FSN), which maintains an underground cable system along CR 581 which crosses the SR 54 corridor. These cables run on the west side of and parallel to CR 581 and are located within the existing right-of-way along CR 581.

3.3 EXISTING ENVIRONMENTAL CHARACTERISTICS

The study corridor for the SR 54 realignment project traverses roughly 14 miles from SR 54A/Cypress Creek Bridge to U.S. 301 south of Zephyrhills. Through a detailed analysis of numerous factors and considerations, the final study area was reduced to a 2-mile-wide area approximately one mile north of the Hillsborough/Pasco County line. This study area encompasses approximately 26 square miles.

Professional botanists and ecologists have initiated an inventory of the natural features within the study corridor. Utilizing various tools including ground truthing, helicopter flyovers, review of 1"=200' aerial photographs, 1"=2,000' aerial infrared photographs and United States Geological Survey (USGS) maps, the environmental team identified, delineated, and assessed all

natural features, communities, and systems in the project area. This data, combined with socioeconomic information and traffic engineering design criteria was used to formulate the final roadway alignment.

The land use cover categories of the study corridor are characteristic of the rural region of west central Florida. As is typical of this region, the pine palmetto flatwoods community is the most prevalent cover category within the study corridor. This upland community supports a canopy of long leaf pine on the drier sites and slash pine on the wetter areas. The typical understory consists of saw palmetto, wiregrass, wax myrtle, fetterbush, and gallberry. Numerous portions of this community are relatively open due to controlled burning, ranching, and logging activities. Other less prevalent upland cover categories include pasture, xeric oak, and several small orange groves.

Areas of lower relief support relatively small isolated freshwater marshes as well as cypress domes and occasional bayheads. Additionally, several natural drainage ways flow in a southerly direction through the corridor. Cypress Creek, located near the western terminus, is the largest drainage way within the study corridor. Another large system near the western terminus is Cabbage Swamp, which flows southeast under I-75, eventually forming Trout Creek. Three other smaller drainage systems within the corridor include Clay Gulley, New River, and Indian Creek. All of the above-referenced systems flow south, eventually reaching the Hillsborough River.

After preliminary field inspections, helicopter flyovers, and communication with applicable wildlife agencies (FWS and FGFWFC), it was concluded that there is no evidence that the study corridor supports any resident federally protected species. Professional ecologists conducted detailed wildlife reviews of all the potential alignments under consideration to assess potential environmental impacts, including protected species.

3.3.1 Land Use Data

The proposed construction of another east/west roadway (SR 54) is consistent with the Future Land Use Element of the 1982 adopted Comprehensive Plan. Pasco County updated their Comprehensive Plan to be consistent with the 1985

Local Government Comprehensive Planning and Land Development Regulation Act, Chapter 163, Florida Statutes (FS). The updated Comprehensive Plan was submitted to DCA for review prior to the required submission date of January 1, 1989. The updated Comprehensive Plan, as submitted, also is consistent with the proposed construction of another east/west roadway (SR 54).

Pasco County has experienced rapid suburban expansion. Growth is expected to continue as vacant land and agricultural areas are converted into subdivisions and commercial area. Developments to be constructed along the project corridor and in the region at large indicate a trend toward a suburban community. Currently, five developments planned for the vicinity will border the new roadway. They are Saddlebrook Village, Northwood, Trout Creek, Wesley Chapel and Williamsburg (Figure 3-1). Projected development within the project limits is in accordance with the Pasco County Land Use Element and the goals established in Pasco County's Draft Comprehensive Plan. Construction of SR 54 will influence design of developments planned for the corridor, but will not fundamentally change projected land use patterns and zoning.

3.3.2 Cultural Features and Community Services

There are no schools, medical facilities, churches, community service facilities, or police and fire facilities located within 1 mile of the project area. The closest cultural features and community facilities are located in the City of Zephyrhills.

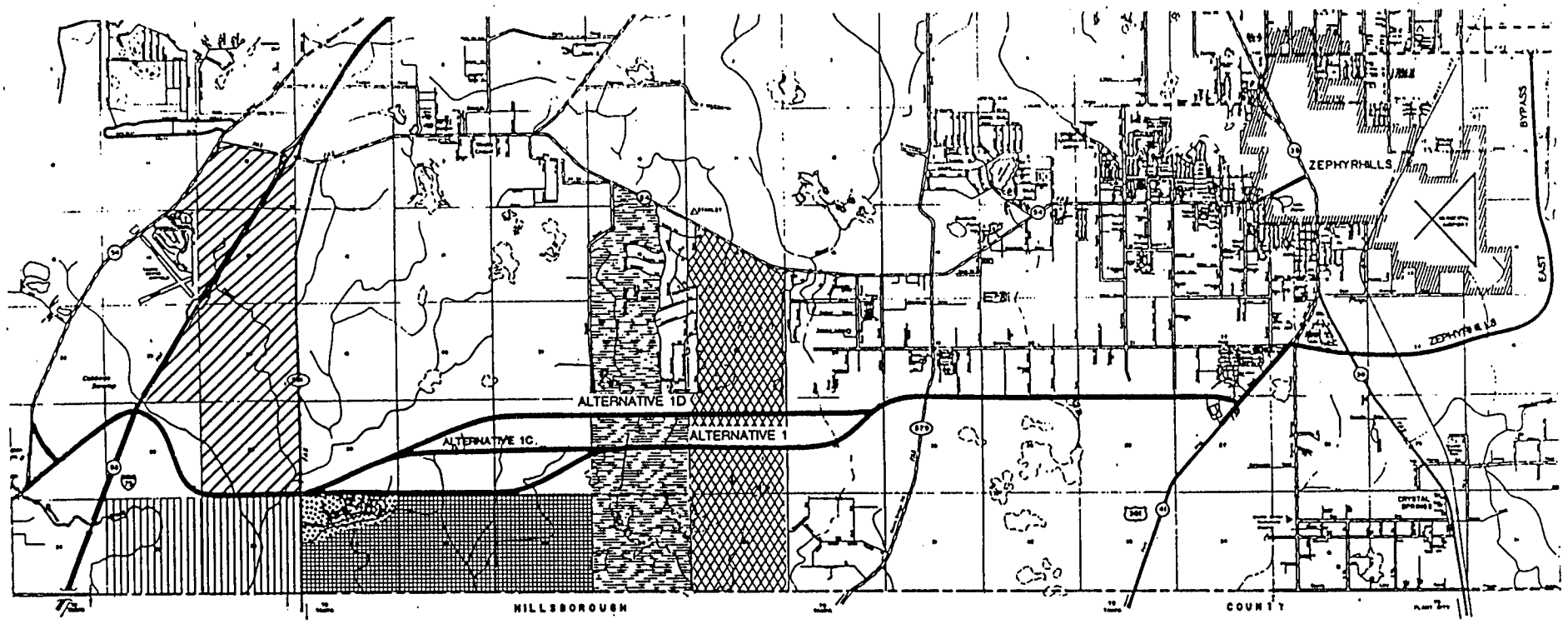


Figure 3-1
PLANNED DEVELOPMENTS ADJACENT TO PROPOSED S R 54 CORRIDOR

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

4.0 CORRIDOR ANALYSIS

4.1 EVALUATION CRITERIA

Figure 4-1 identifies the study corridor selected for evaluation. The evaluation of this corridor was based on the following criteria: 1) environmental impacts, 2) socioeconomic impacts, and 3) engineering design standards. Since the new roadway will traverse through mostly rural, undeveloped land, environmental impacts were critical to the evaluation of the corridor. Preliminary assessment of environmental impacts of the corridor considered wetland systems, floodplains, and wildlife. The second criteria involved socioeconomic impacts which included the relocation of existing residences, businesses, and public buildings. Proposed and planned developments were also considered. The third criteria examined was engineering design standards. Table 4-1 indicates the engineering design standards used for this corridor as established by FDOT.

4.2 CORRIDOR CONSTRAINTS

Several significant constraints were identified in the evaluation of the corridor. On the western terminus of the corridor, these constraints included the I-75/I-275 junction, the existing SR 54A/I-75 interchange, the new rest stop facilities along I-75 south of the existing SR 54A interchange, and the approved location of the new SR 54/I-75 interchange.

Corridor impacts involving the I-75/I-275 junction, the SR 54A/I-75 interchange, and the rest stop facilities included potential weaving and merging/diverging lane conflicts between the corridor and these existing facilities. In addition, the location of the proposed SR 54/I-75 interchange within the corridor limits was also a significant issue in the evaluation of the corridor. The specific location of the SR 54/I-75 interchange was provided by Greiner, Inc. through the Tampa Interstate Study (TIS).

The major constraints of the central section of the corridor included environmental factors, existing and proposed/planned developments, and spacing between roadway facilities. As previously stated, the identification of wetland systems, wildlife, and drainage areas influenced the location of the corridor. In addition, the existing Williamsburg development and several

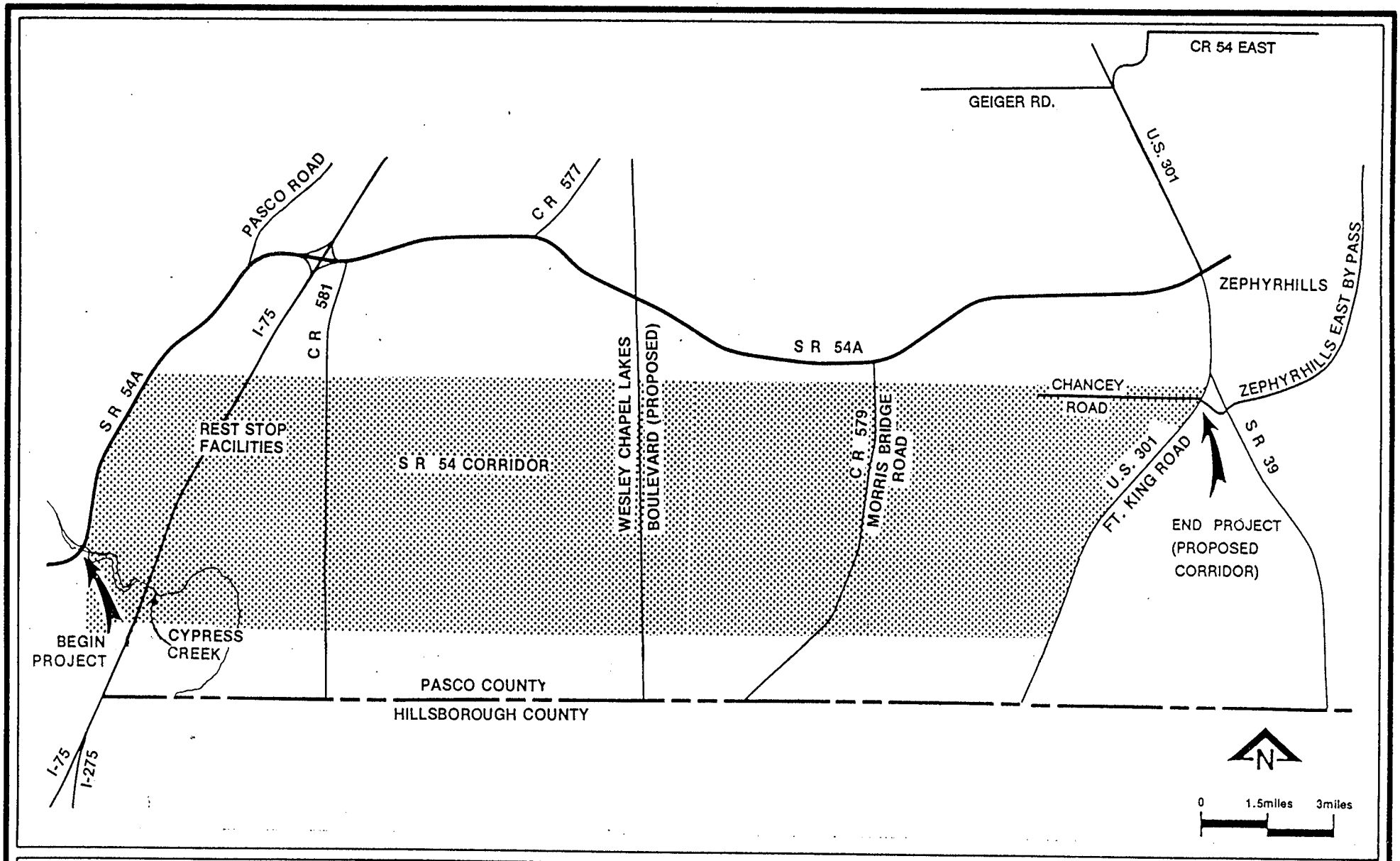


Figure 4-1
STUDY CORRIDOR

SOURCE: HUNTER, 1989.

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

Table 4-1. Engineering Design Standards for the SR 54 Corridor

Type of Facility	Design Elements	Design Standards
Rural	Design Speed	70 mph
	Maximum Superelevation	0.10 foot per foot of roadway
	Maximum Horizontal Curvature	3 degrees 30 minutes
	Minimum Length of Horizontal Curve	1,050 feet
	Required Lateral Clearance (from edge of pavement)	36 feet
	Maximum Grade	3 percent-flat terrain
	Maximum Change in Grade (without using vertical curve)	0.20 percent
	Minimum Stopping Sight Distance	625 feet to 850 feet

Sources: Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways (Green Book, 1986). Hunter, 1989.

approved development orders (DOs), including the Saddlebrook Village and Northwood properties, were identified within the project limits. Spacing was considered between existing SR 54A and proposed SR 54 in order to establish a new roadway corridor at an acceptable distance apart from existing parallel roadways.

The major constraint on the eastern terminus involved the connection of SR 54 to the proposed Zephyrhills East Bypass. As previously stated, final design plans for the bypass, as supplied by Pasco County officials, indicated that this roadway will extend south on the east side of Zephyrhills and turn west to connect with U.S. 301 at the Chancey Road intersection.

4.3 CORRIDOR SELECTION

Based on the evaluation of the above constraints, several specific alignments within this selected corridor were developed. These alignments are discussed in Section 5.0.

5.0 PRELIMINARY ALIGNMENT ANALYSIS

5.1 NO-BUILD ALTERNATIVE

Under the No-Build Alternative, the new SR 54 roadway would not be built and all projected traffic along SR 54 would then have to travel on existing SR 54A. The existing traffic volumes on SR 54A within the project limits vary from 8,100 to 14,300 vpd. This variation is due to the frequent access drives to businesses and residential areas located along SR 54A and the intersection of CR 581 and CR 579 with SR 54A.

As identified in Table 2-1, these volumes are projected to increase substantially in the future. By the 2010 design year, 31,160 to 104,100 vpd are projected to use SR 54A within the project limits. These traffic volumes would greatly exceed the capacity of the existing facility and would cause severe delays to motorists traveling on SR 54A, resulting in higher fuel consumption and increased air pollution. With the increased traffic volumes, a higher accident rate along SR 54A would likely occur. If no improvements were made, SR 54A traffic operations would deteriorate to a point where traffic would slow to a crawl and the system would cease to operate. However, this alternative would save the cost of right-of-way and construction improvements, eliminate any short term disruption to the community that would be experienced during construction and would not have any impacts to the environment. The No-Build Alternative will remain a valid alternative through the public hearing process.

5.2 ALIGNMENTS EVALUATED AND ELIMINATED

Initially, three major alternative alignments were identified within the defined corridor as shown in Figure 5-1. Each alignment was evaluated using the criteria discussed in Section 4.0, Corridor Analysis.

5.2.1 Alignment 1

Alignment 1 is from SR 54A to U.S. 301 the northernmost alignment evaluated and is located approximately 2 miles south of SR 54A. For purposes of evaluation, this alignment was divided into four segments as shown in Figure 5-2. The western terminus of Segment 1 was located approximately halfway between Cypress Creek and the existing SR 54A/I-75 interchange and

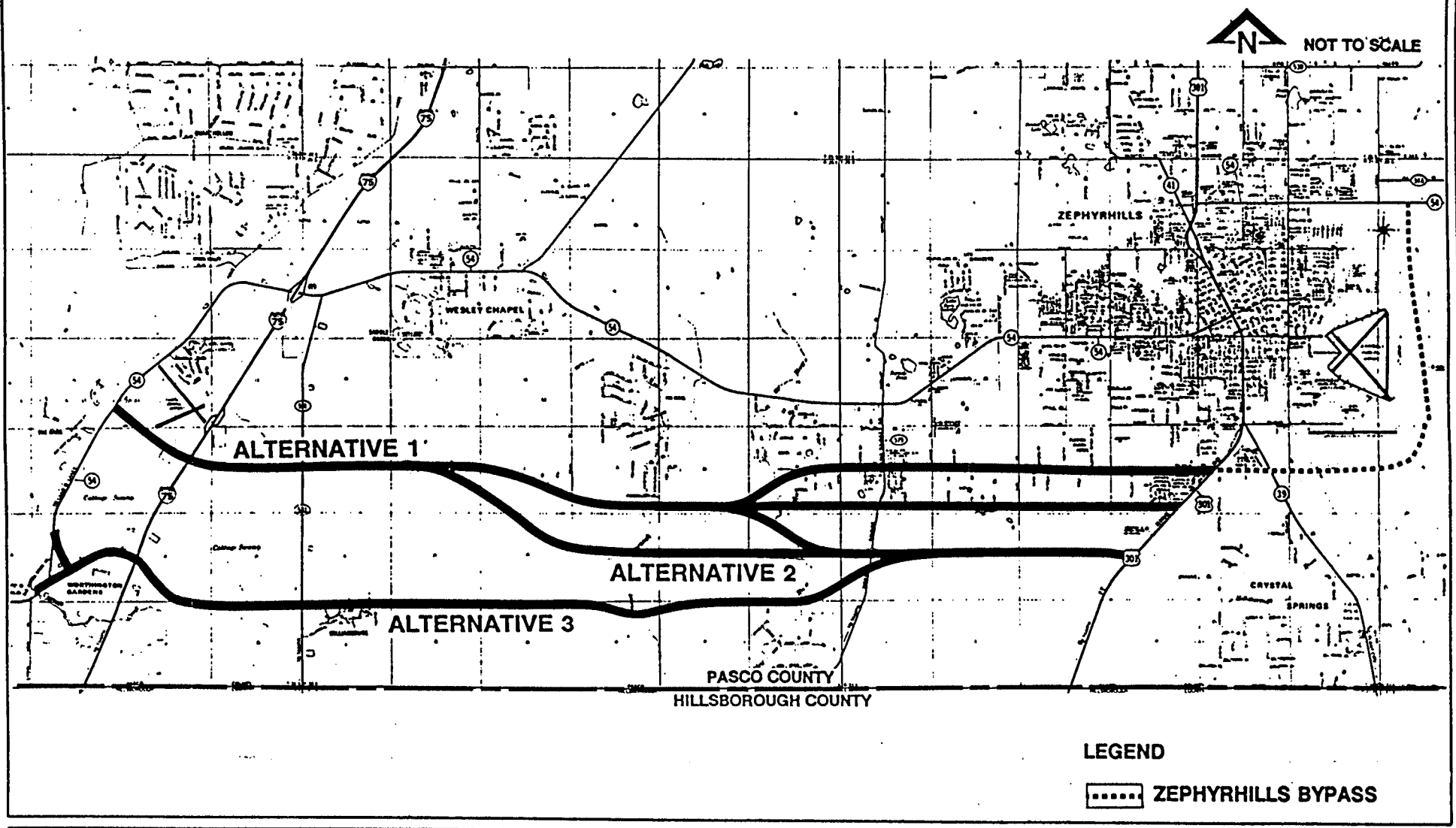


Figure 5-1
S R 54 PRELIMINARY ALIGNMENT ANALYSIS
ALTERNATIVES ONE, TWO, AND THREE

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

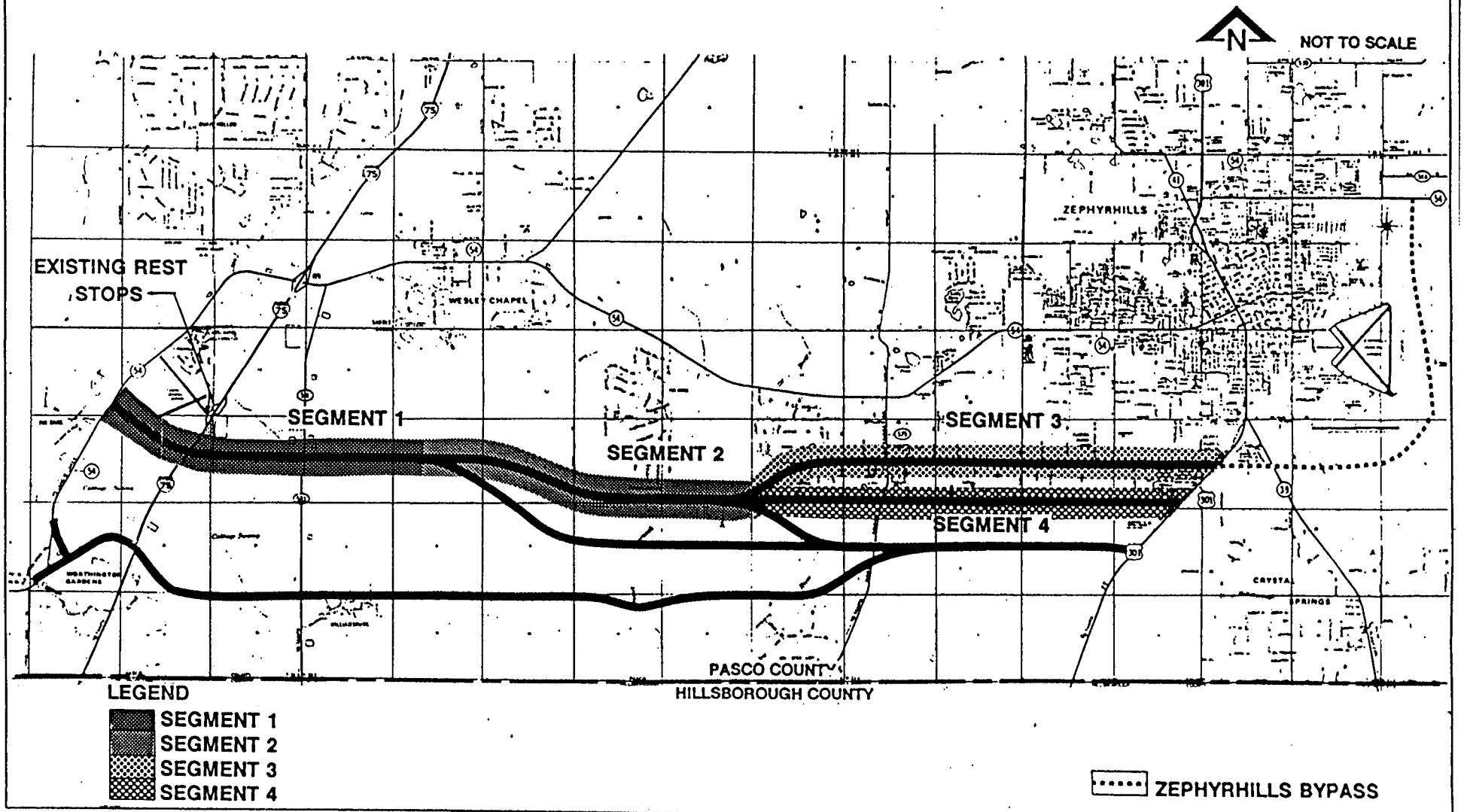


Figure 5-2

S R 54 PRELIMINARY ALIGNMENT ANALYSIS
ALIGNMENT ONE

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

south of the existing Tampa Downs Airport. The proposed alignment crossed I-75 approximately 2 miles south of the existing SR 54A interchange and 1/2 mile south of the existing rest stops and proceeded generally in an easterly direction to U.S. 301 along Chancey Road. A closer evaluation of Segment 1 determined that there would not be sufficient distance to provide proper weaving movements between the proposed north interchange ramps and the existing ramps to the rest stops located on the west and east sides of the interstate. If the interchange was constructed at that location, major modifications or elimination of the newly constructed rest stops would be required. An Interchange Justification Report approved the location of a new interchange on I-75 with the proposed SR 54. The proposed interchange would be located approximately 2.5 miles south of the existing SR 54A. In addition, the proposed alignment between I-75 and CR 581 would bisect Saddlebrook Village Development (see Figure 3-1). This development is currently involved in the construction of an approved infrastructure and corporate park. If this alignment was chosen, Saddlebrook Village would have to undergo major site development modifications. This alignment for a 6-lane divided highway in 250 feet of right-of-way was presented to representatives of the development on August 31, 1988 (see Appendix B) and was met with strong opposition.

Segment 2, which extends from 1 mile east of CR 581 to Chancey Road, is relatively undeveloped pasture land with minimal residential development. An assessment of this segment indicated that there were no potential relocations and minimal environmental impacts. Segment 3 begins at Chancey Road and extends to U.S. 301. Development along Segment 3 is sparse on the west but increases substantially when approaching U.S. 301 in Zephyrhills. This segment would incorporate 60 feet of existing right-of-way along Chancey Road. A left, right, and centered alignment analysis was conducted to determine impacts associated with expanding Chancey Road to 250 feet of right-of-way for a 6-lane divided facility. This would require 190 feet of additional right-of-way. Table 5-1 shows the comparisons of the alignment analysis along Chancey Road. A substantial number of relocations would result if the proposed improvement was constructed along Chancey Road and Segment 3 would bisect established subdivisions located north and south of Chancey Road. Segment 4 begins at approximately 1.5 miles west of CR 579 and extends east to

Table 5-1. Preliminary Right-of-Way and Relocation Estimate for Segment 3, Chancey Road Corridor Alternatives (Western Terminus of Chancey Road to U.S. 301)

Segment 3* Alternative Description	Estimated Right-of-Way Cost ($)	Number of Relocations	
		Business	Residental
A. Acquire 190 Feet North of the Existing Chancey Road Right-of-Way	9,275,000	4 (1 NPO)+	51
B. Acquire 190 Feet South of the Existing Chancey Road Right-of-Way	13,863,000	1	143
C. Acquire 95 Feet on Each Side (North and South) of the Existing Chancey Road Right-of-Way	15,654,000	4 (1 NPO)+	120

* Segment 3 is approximately 5.2 miles in length.
+ NPO = Nonprofit Organization.

Source: Hunter, 1989.

U.S. 301 and is located approximately 1/2 mile south and parallel to Chancey Road (see Figure 5-2). A preliminary evaluation of this segment indicated that there were no relocations and minimal environmental impacts.

5.2.2 Alignment 2

Alignment 2, from SR 54A to U.S. 301 (Figure 5-3), is a combination of Segments 1 and 2 of Alignment 1 and includes Segment 5 which begins at approximately 1.25 miles east of CR 581 and extends to U.S. 301. Segment 5 is located 1 mile south of Chancey Road. A preliminary evaluation of Segment 5 indicated that there were no potential relocations and minimal environmental impacts. Segment 1 of this alignment would require major modifications or elimination of the newly constructed rest stops and require major site development modifications to Saddlebrook Village Development.

5.2.3 Alignment 3

Alignment 3, from existing SR 54A to U.S. 301, was divided into Segments 6 and 7 as shown in Figure 5-4. Segment 6, from SR 54A to CR 581, includes the proposed interchange location as approved in the Interchange Justification Report for SR 54 and I-75. Coordination between Hunter and the Tampa Interstate Study (TIS) team determined that the proposed location of the interchange within Segment 6 remained feasible as originally approved. A detailed evaluation of the location of the proposed I-75 interchange from an engineering viewpoint was conducted by the TIS team.

A review of the Saddlebrook Village and Northwood Development Orders indicated that provisions were made for a donation of right-of-way along the southern and northern property boundaries, respectively. It was determined through an additional field evaluation that Segment 6 could be located parallel to the respective property boundaries. This alignment presented fewer impacts to the proposed developments and to the floodplains/wetlands located between I-75 and CR 581. Segment 7, from CR 581 to U.S. 301, was evaluated and a determination was made that there would be no business or residential relocations and minimal wetland impacts.

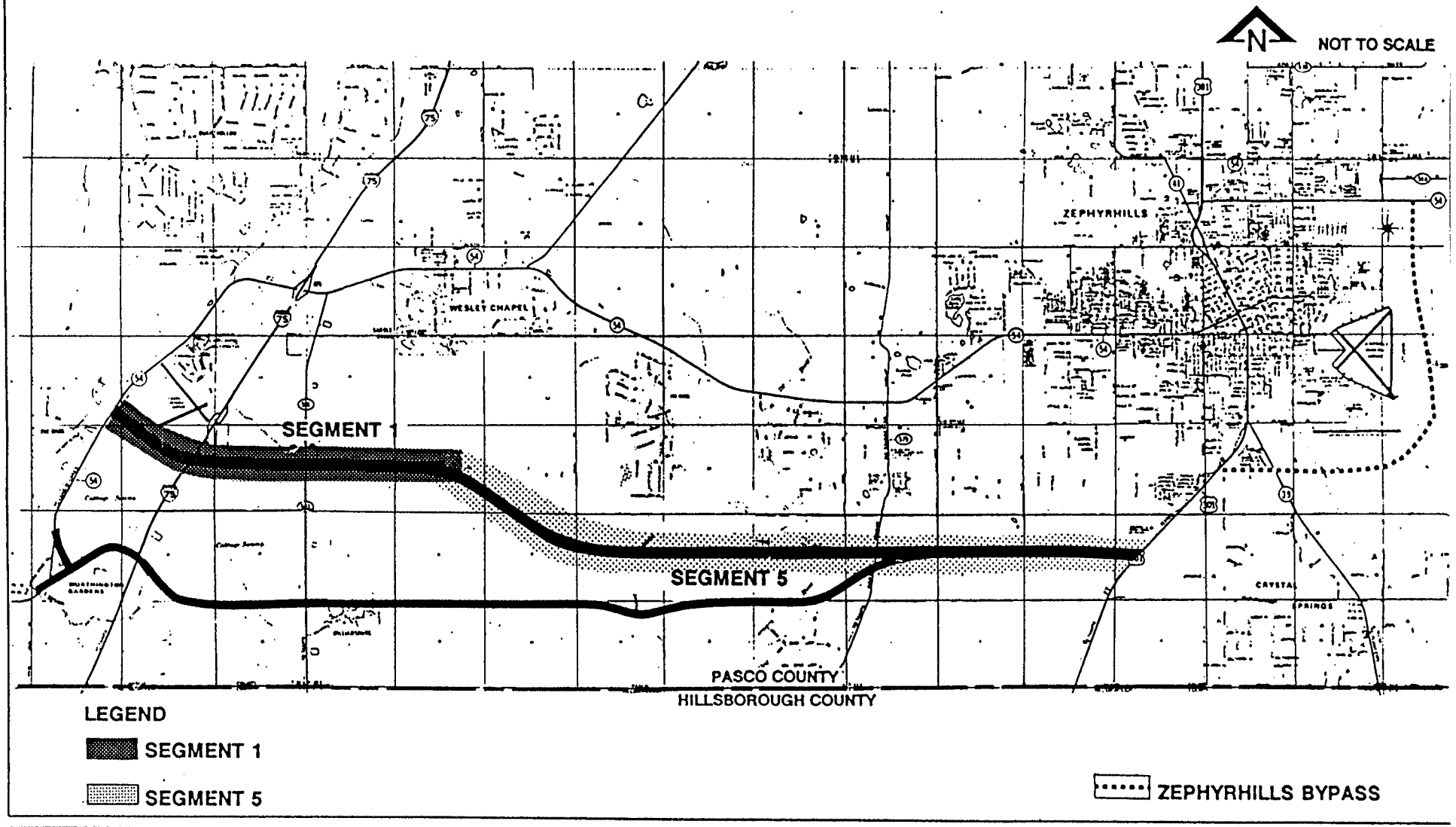


Figure 5-3

S R 54 PRELIMINARY ALIGNMENT ANALYSIS
ALIGNMENT TWO

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

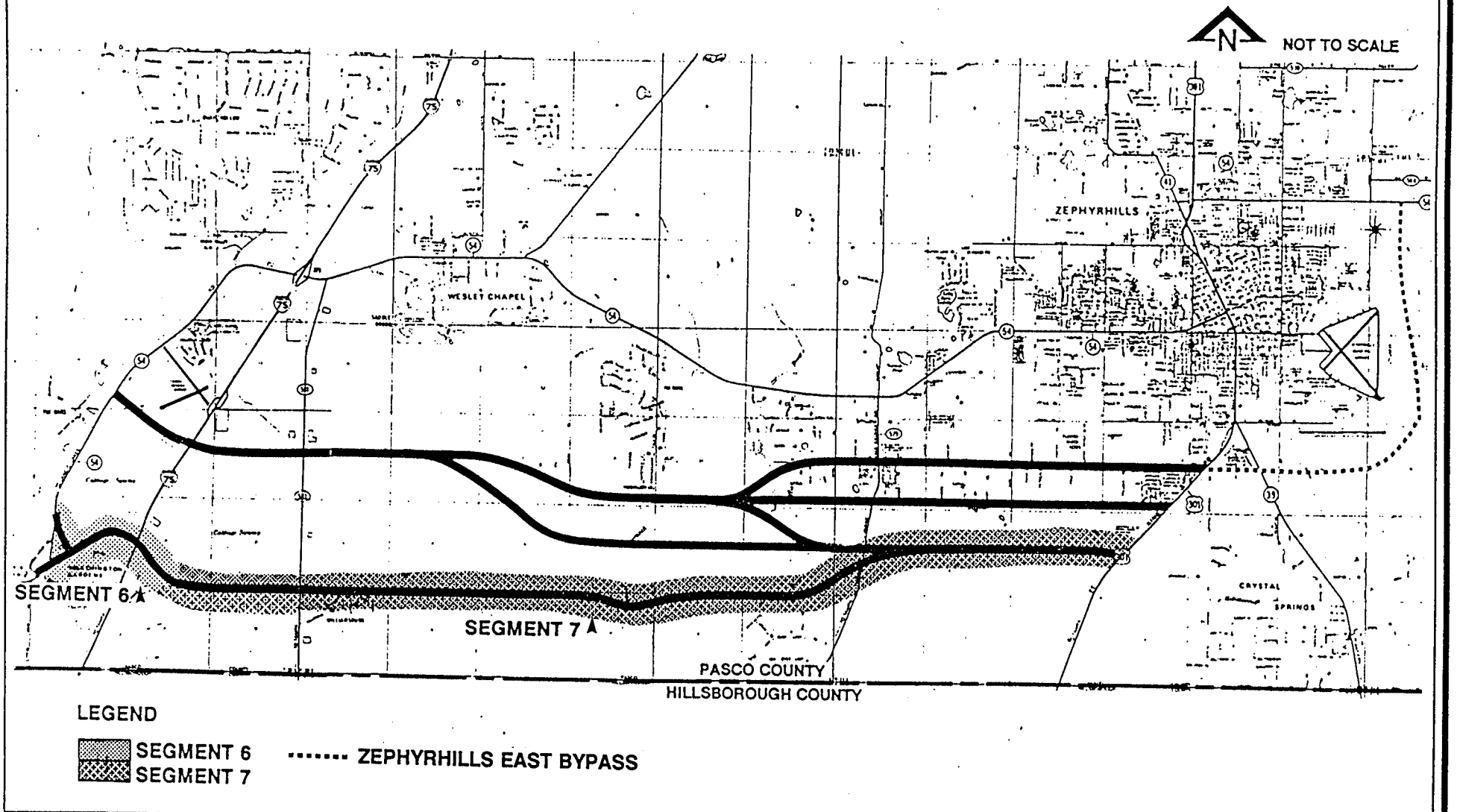


Figure 5-4
SR 54 PRELIMINARY ALIGNMENT ANALYSIS
ALIGNMENT THREE

SOURCE: HUNTER, 1989.

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

5.2.4 Comparative Analysis of Segments

Initially, seven segments were identified and an analysis was conducted to determine the feasibility of combining segments to develop viable alternative alignments. Segments were evaluated based upon the following criteria:

- o Systems linkage,
- o Existing physical constraints on I-75,
- o Existing development,
- o Proposed development,
- o Wetlands,
- o Floodplains, and
- o Relocations.

Segments 1 and 6 were compared to determine the best location for connection to existing SR 54A, the proposed interchange location, and to provide a connection to the other viable segments. As discussed in Section 5.2.1, Segment 1 would require extensive modifications and possible elimination of the existing I-75 rest stops and require Saddlebrook Village Development to undergo major modifications to their approved Development Order. Segment 6 presented fewer impacts to the proposed developments of Saddlebrook Village and Northwood and to the floodplains/wetlands located between I-75 and CR 581. In addition, the location of the proposed interchange on I-75 did not impact the existing I-275/I-75 interchange nor the existing rest stop. For these reasons, Segment 1 was eliminated from further consideration and Segment 6 was retained as a viable segment.

A comparison of impacts was conducted for Segments 3 and 4. As indicated in Section 5.2.1, Segment 3 would incorporate 60 feet of existing right-of-way along Chancey Road. An additional 190 feet of right-of-way would be needed for a 6-lane divided highway in 250 feet of right-of-way. A substantial number of relocations would result if the proposed improvement was constructed using the Chancey Road alignment. In addition, residential communities located north and south of Chancey Road would be bisected which would result in potential disruption of these communities. Segment 4 would require no relocations, have minimal wetland/floodplain impacts, and would not disrupt

community cohesion. For these reasons, Segment 3 was eliminated from future consideration and Segment 4 was retained for possible combination with other viable segments.

Summary

Because of no potential relocations and minimal impacts to wetlands/floodplains, Segments 2, 4, 5, 6 and 7 were retained as viable alignments. These segments were then combined to develop alternative alignments. When combining segments, consideration was given to systems linkage, spacing between segments, and directness of route between I-75 and U.S. 301.

5.2.5 Connection to Zephyrhills East Bypass

The Zephyrhills East Bypass begins at SR 54 east, and extends south, and then turns west to intersect U.S. 301 at Chancey Road (see Figure 5-4). The bypass was constructed as a 2-lane rural roadway in 50 to 80 feet of right-of-way. The bypass was completed in May, 1991.

An additional segment, Segment 8, which would connect the proposed SR 54 roadway with the southern leg of the bypass at Chancey Road (Figure 5-5) was evaluated. Segment 8 would connect Segment 4 to the bypass utilizing a portion of existing right-of-way on Chancey Road.

5.2.6 Coordination with FDOT and Pasco County

The above alignment analysis was presented for review. It was recommended to proceed with a refinement of Segment 6 to minimize impacts to existing development and reduce potential floodplain/wetland impacts. The remaining segments should also be refined and impacts quantified for comparative analysis. It was recommended to contact the respective property owners along the corridor and present an opportunity to review and comment on the proposed alignments.

Improvements to U.S. 301 from the intersection of Segments 4 and 7 to the Zephyrhills East Bypass/Chancey Road were included in the alternative analysis.

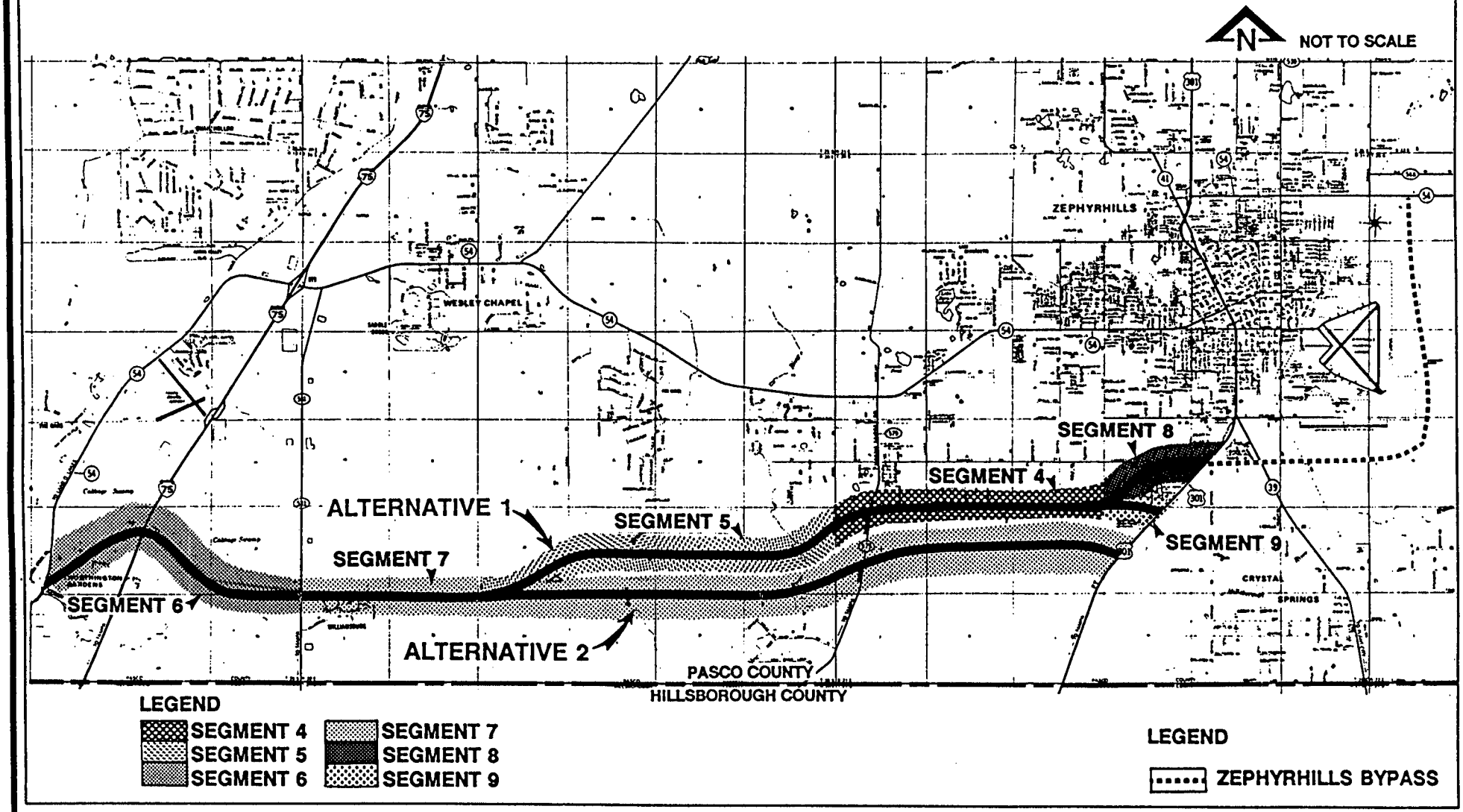


Figure 5-5

SR 54 ALTERNATIVE ALIGNMENTS CARRIED FORWARD FOR PUBLIC REVIEW

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

An addendum to the traffic report was prepared to identify the required improvements for U.S. 301 from the intersection of the proposed SR 54 to Chancey Road for the 2010 design year. The projected traffic volumes for U.S. 301 require the construction of a 4-lane rural divided highway. The recommended typical section for US 301 from the proposed SR 54 to Chancey Road is shown in Section 6, Figure 6-2 of this report.

5.3 ALTERNATIVE ALIGNMENTS EVALUATED AND CARRIED FORWARD

After coordination with FDOT, Pasco County, and affected property owners, segments which were evaluated and discussed in Section 5.2 were combined to develop viable alternative alignments. Two viable alternative alignments were identified and carried forward. Each alignment was evaluated regarding construction cost, right-of-way and relocation costs, wetland/floodplain impacts, and compatibility with existing/planned development. Figure 5-5 shows the proposed alignments carried to the public workshop for review and comment.

5.3.1 Alternative Alignment 1

Alternative alignment 1 from Cypress Creek to U.S. 301 is a combination from west to east of Segment 6, a portion of Segment 7, Segment 5, and Segment 4 of the initial alignment analysis. The eastern terminus of Segment 4 was further divided into two sub-segments. Segments 8 and 9 were developed as viable alternatives and associated impacts were compared. The eastern terminus of Segment 8 would provide a direct connection of SR 54 to the proposed Zephyrhills East Bypass along Chancey Road. Segment 8 would require the relocation of 16 residences and 1 business at an estimated cost of $216,000. The construction of this segment would result in a direct connection to the Zephyrhills bypass and would require the construction of only one major intersection on U.S. 301. The eastern terminus of Segment 9 would connect SR 54 to U.S. 301 approximately 0.76 mile south of Chancey Road. This would require approximately 4,000 feet of improvements to U.S. 301. Existing

right-of-way along U.S. 301 is 100 feet. An additional 150 feet of right-of-way would be required. Proposed right-of-way to improve U.S. 301 would be acquired from the east and would result in no relocations. Both Segments 8 and 9 were carried forward to the public informational workshop for review and comment by the affected property owners.

For Alternative Alignment 1 with Segment 8, a 250-foot typical section (see Section 6.0, Figures 6-1 through 6-3) was evaluated for the 13.62-mile alignment. Some modification in the alignment was required to transition from Segment 7 to 5, 5 to 4, and 4 to 8. Alignment 1 with Segment 8 would require the purchase of 412.7 acres, 16 single-family residences and 1 business for a total of 17 relocations, and clearing of an estimated 39.45 acres of affected wetlands, representing 14.75 acres of forested and 24.7 acres of nonforested wetlands. This alternative would require no improvements to U.S. 301

For Alternative Alignment 1 with Segment 9, a 250-foot typical section was evaluated for the 13.66-mile alignment. Alignment 1 with Segment 9 would require the purchase of 413.9 acres, no business or residential relocations, and clearing of an estimated 39.45 acres of affected wetlands, representing 14.75 acres of forested and 24.7 acres of nonforested wetlands. This alternative would require 0.76 mile of improvements to U.S. 301.

5.3.2 Alternative Alignment 2

Alternative Alignment 2 is a combination of Segments 6 and 7 of the initial comparative analysis. The 250-foot typical section was evaluated for the 12.79-mile alignment. This alternative would require the purchase of 387.64 acres, no business or residential relocations, and the clearing of an estimated 38.65 acres of affected wetlands, representing 17.15 acres of forested and 21.5 acres of nonforested wetlands. This alternative would require 1.5 miles of improvements to U.S. 301.

A cost comparison of alternatives is summarized in Table 5-2. Table 5-3 shows the comparison of impacts between alternatives. Both Alternative Alignments 1 and 2 were carried forward to the public informational workshop.

Table 5-2. Estimated Costs for Alternatives 1 and 2--SR from Cypress Creek to U.S. 301 in Pasco County, Florida

	Construction	Right-of-Way	Design	Relocations	Total
			Estimated Costs		
Alternative 1					
With Segment 8	$21,947,000	$14,614,200	$2,194,700	$216,000 17**	$38,971,900
With Segment 9	$23,033,000	$11,686,400	$2,303,300	$0 0	$37,022,700
Alternative 2	$23,910,200	$13,536,000	$2,391,000	0 0	$39,837,200
			Scheduled Improvements*		
			(FDOT 5-Year Work Program)		
From Cypress Creek to CR 581	1992-93 Preliminary Engineering		1994-95 Right-of-Way		

* No scheduled improvements for SR 54 from CR 581 to U.S. 301 in current 5-Year Work Program
** 16 Residential and 1 Business

Sources: FDOT, 1988.
Hunter, 1989.

SR54/92-10/2/2

Table 5-3. Alternative Comparison: SR 54 from Cypress Creek to U.S. 301

	Total Estimated Cost ($)	Relocations (No.)	Forested and Nonforested Affected Wetlands (acres)
Alternative 1			
With Segment 8	38,971,900	17*	39.45
With Segment 9	37,022,700	0	39.45
Alternative 2	39,837,200	0	38.65

* 16 Residential and 1 Business.

Source: Hunter, 1989.

(Alternative 1 with Segment 9 was identified as Alternative 1 with 1A and Alternative 1 with Segment 8 was identified as Alternative 1 with 1B.)

5.4 PUBLIC INFORMATIONAL WORKSHOP

On January 19, 1989, a public informational workshop was conducted at the Alice Hall Community Center, Zephyrhills, Florida, for the purpose of presenting Alternative Alignments 1 and 2 (Figure 5-6) to the general public for review and comment. Approximately 120 individuals attended the workshop. Comments were obtained through the use of written statements, a court reporter and conversations with attendees. Twelve individuals provided statements to the court reporter and 78 written statements were received following the public workshop.

The overwhelming majority of written statements received were from residents of the Williamsburg subdivision located just east of CR 581 and south of the proposed alignment. Williamsburg is a residential subdivision consisting of approximately 230 lots with 178 existing homes. Residents of Williamsburg expressed concern regarding potential air and noise pollution and potential depreciation of property value as a result of the construction of the highway adjacent to their subdivision. The proposed alignment (Segment 7) presented at the workshop is located adjacent to the north property line of the subdivision. As a result of the comments received from residents of Williamsburg, an alternative alignment was developed which would reduce potential impacts to the subdivision.

5.5 ALTERNATIVE ALIGNMENT 1C FROM CR 581 TO CR 579

As indicated above, several comments were received from residents of the Williamsburg subdivision expressing concern about Alternative Alignment 1 (Figure 5-7). As proposed, the south right-of-way line for Alternative Alignment 1 would be the north property line of the Williamsburg subdivision. Alternative Alignment 1C (see Figure 5-8) was developed from CR 581 to CR 579. This alignment would move the proposed SR 54 highway further to the north of the Williamsburg subdivision. The primary concern of the residents pertained to potential noise impacts. A noise analysis was conducted to determine potential noise impacts for both Alternative 1 and 1C. The noise model

SR 54
ALTERNATIUVE ALIGNMENTS
PRESENTED AT PUBLIC WORKSHOP
JANUARY 19, 1989

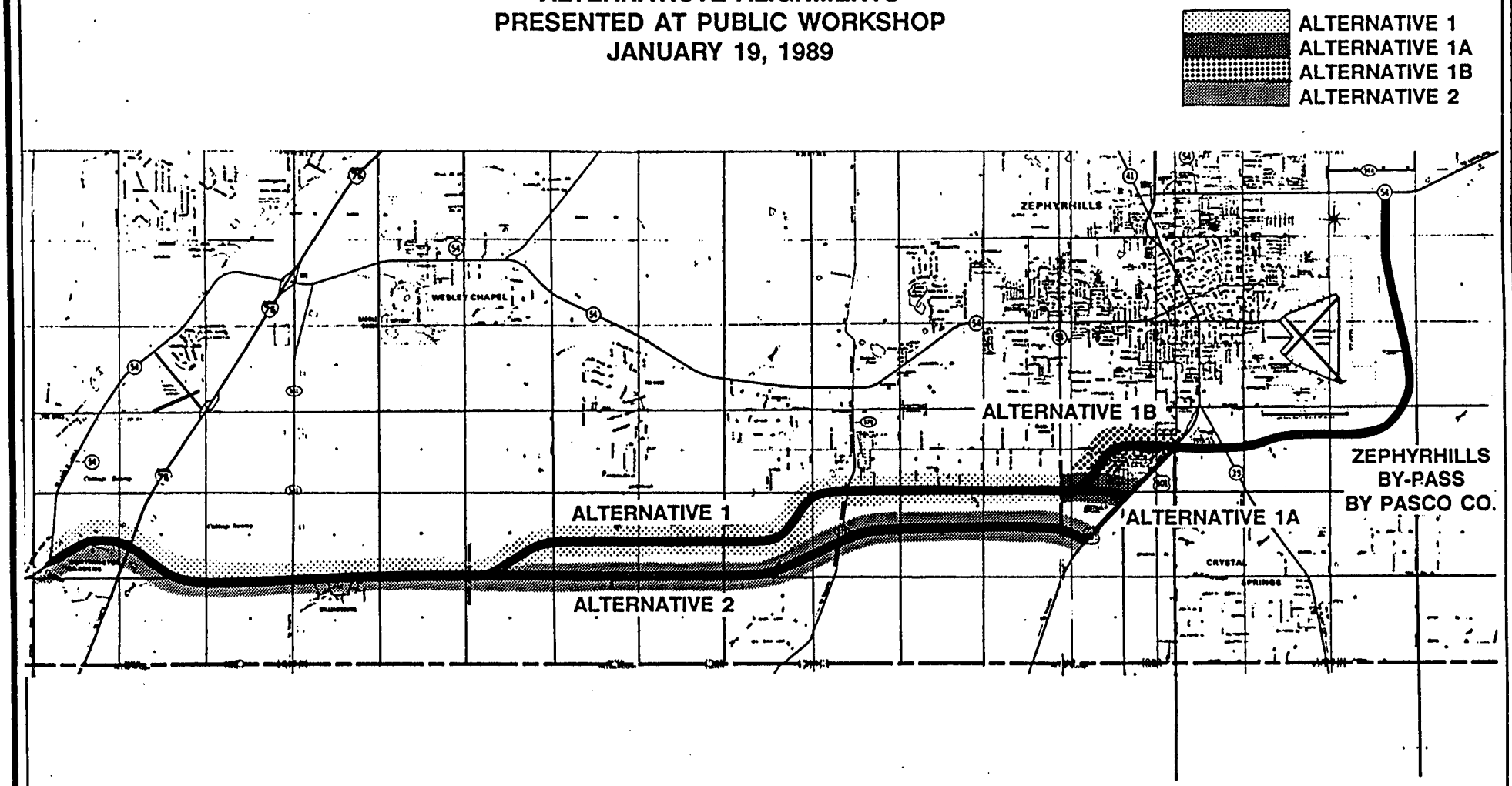


Figure 5-6
ALTERNATIVE ALIGNMENTS 1 AND 2

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

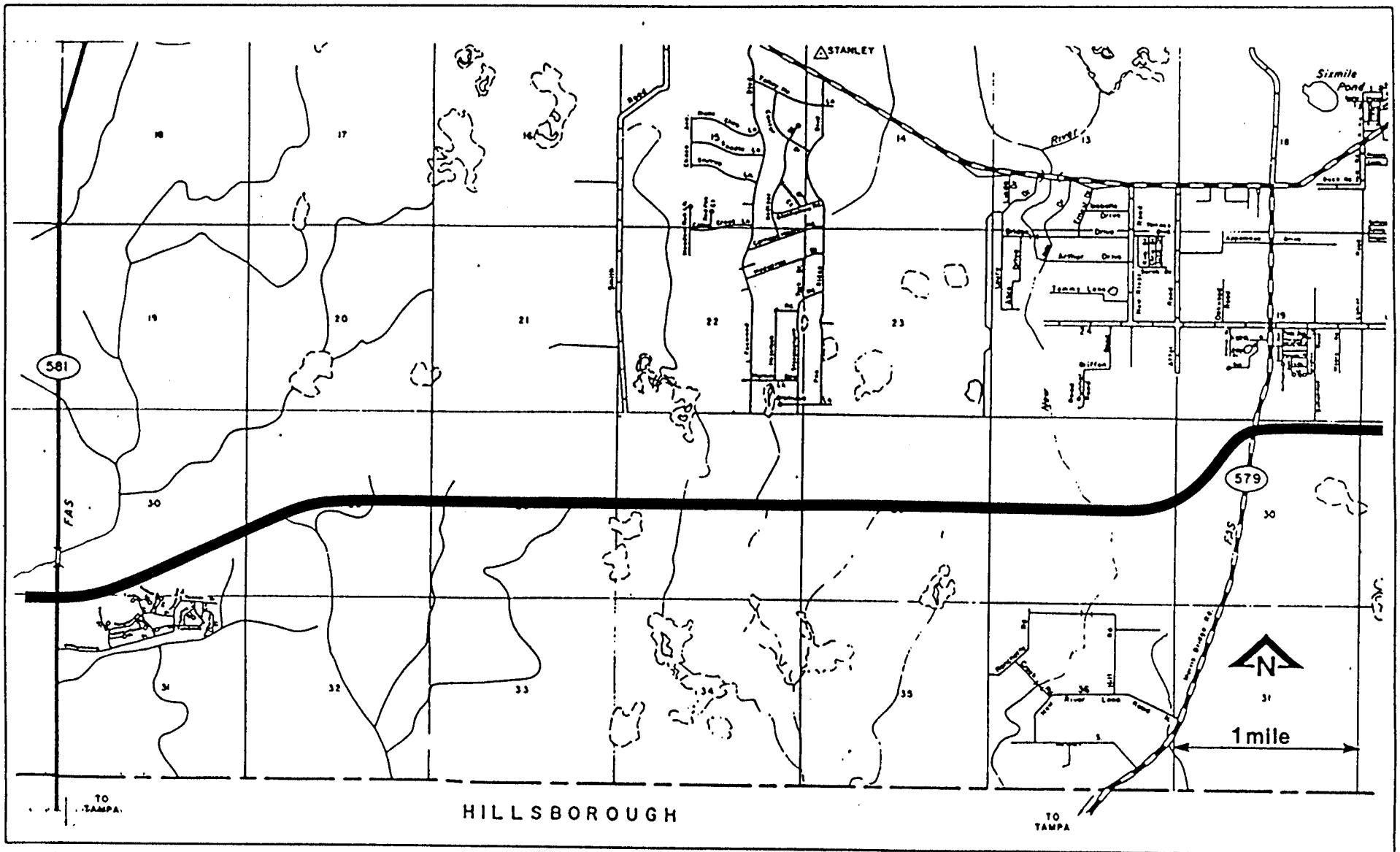


Figure 5-8
ALTERNATIVE ALIGNMENT 1C
BETWEEN CR 581 AND CR 579

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

indicated that Alternative Alignment 1C would have less noise impacts on the Williamsburg development than Alignment 1. Results of the analysis are included in a separate noise report.

Approximately, 25 acres of affected wetlands, composed of 8.2 acres of forested and 16.8 acres of nonforested wetlands, would have to be cleared for Alternative Alignment 1 from CR 581 to CR 579, a distance of 6.82 miles. Approximately 12.66 acres of affected wetlands, composed of 3.0 acres of forested and 9.66 acres of nonforested wetlands, would have to be cleared for Alternative Alignment 1C. Therefore, Alternative 1C has 50 percent less wetland area impacts than Alternative 1. In addition, Alternative 1C has 63 percent less areal impacts to forested wetlands than Alternative 1. For these reasons, Alternative Alignment 1C, from CR 581 to CR 579, was retained for further analysis.

5.6 COORDINATION WITH AFFECTED PROPERTY OWNERS

Alternative Alignment 1C was presented to the affected property owners on February 15, 1989. Strong opposition was expressed in a prior coordination meeting with the affected property owner, Wiregrass Ranch, Inc., regarding any alternative alignment which would bisect and disrupt a ranching operation. The owner again expressed strong opposition to Alternative Alignment 1C and expressed support for Alternative Alignment 1 because of the lower impacts to the ranching operation.

Alternative Alignment 1C was presented to residents of the Williamsburg subdivision in a meeting on February 15, 1989. Approximately 125 residents attended the meeting, which was held in the subdivision's clubhouse. Hunter Services, Inc. and FDOT representatives presented the proposed Alternative Alignment 1C. This alternative was met with less opposition than Alternative 1.

As a result of the public informational workshop, two additional property owners expressed concern regarding the proposed alignment of Alternatives 1 and 2. Representatives from the Wesley Chapel Lakes and the New River, LTD Properties met with representatives of Hunter to review the proposed

alternative alignments. Both properties are located to the east of Wiregrass Ranch, Inc. and each represent approximately 1 mile of frontage on the proposed SR 54. Representatives of the Wesley Chapel Lakes property indicated that a southern alignment (Alternative Alignment 2) would affect proposed residential and recreational development. Both property owners are involved in the early stages of their Development of Regional Impacts (DRIs), however, neither developer has an approved DRI. The Wesley Chapel Lakes property has been zoned for commercial and residential use for several years.

5.7 EVALUATION OF ALTERNATIVE ALIGNMENTS FROM CR 581 TO CR 579

As a result of this coordination with affected property owners between CR 581 to CR 579, additional alternative alignments were evaluated to determine the most feasible alignment. For the purpose of comparing impacts, Alternative Alignment 1 (see Figure 5-7), which was presented at the January 19, 1989 public informational meeting, was retained. Alternative Alignment 1C (see Figure 5-8) was retained because of the reduced noise impacts to the Williamsburg Development and reduced wetland impacts. Two additional alternative alignments were developed as a result of coordination with the Wesley Chapel Lakes and New River, LTD developments. Alternative Alignments 1D and 1E (see Figures 5-9 and 5-10) were developed as a result of coordination with the affected property owners. Alternative Alignments 1D and 1E were assessed based upon criteria established for this study (see Section 4.0). Alternative Alignment 1D (see Figure 5-9) would require the purchase of 202.12 acres, no relocations, and the clearing of an estimated 16.2 acres of affected wetlands, representing a combination of 8.0 acres of forested and 8.2 of nonforested wetlands. Alternative Alignment 1E (see Figure 5-10) would require the purchase of 204.24 acres, no relocations, and the clearing of an estimated 28.1 acres of affected wetlands, representing 12.0 acres of forested and 16.1 acres of nonforested wetlands. Because of the large acreage of wetland impacts and the potential noise impacts to the Williamsburg Development, Alternative 1E was eliminated from further review. Table 5-4 provides a comparison of impacts associated with Alternative Alignments 1, 1C, 1D, and 1E for SR 54 from CR 581 to CR 579. Because of the less impacts identified for Alternative Alignments 1, 1C, and 1D, these alternative alignments are recommended to be carried forward for further analysis and review by the public.

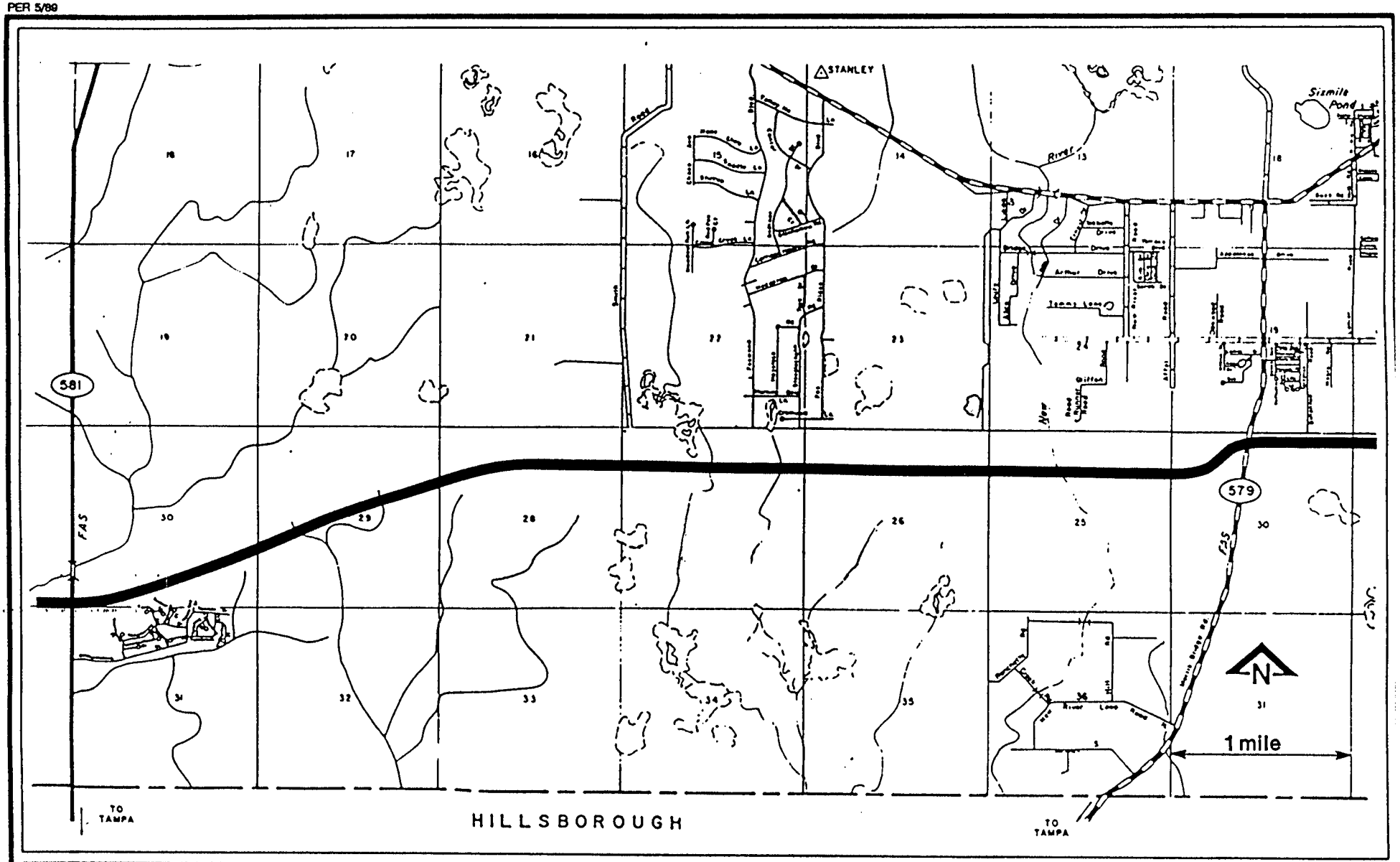


Figure 5-9

ALTERNATIVE ALIGNMENT 1D BETWEEN CR 581 AND CR 579

SOURCE: HUNTER, 1989

SR 54/SR 54A CYPRESS CREEK TO ZEPHYRHILLS EAST BYPASS

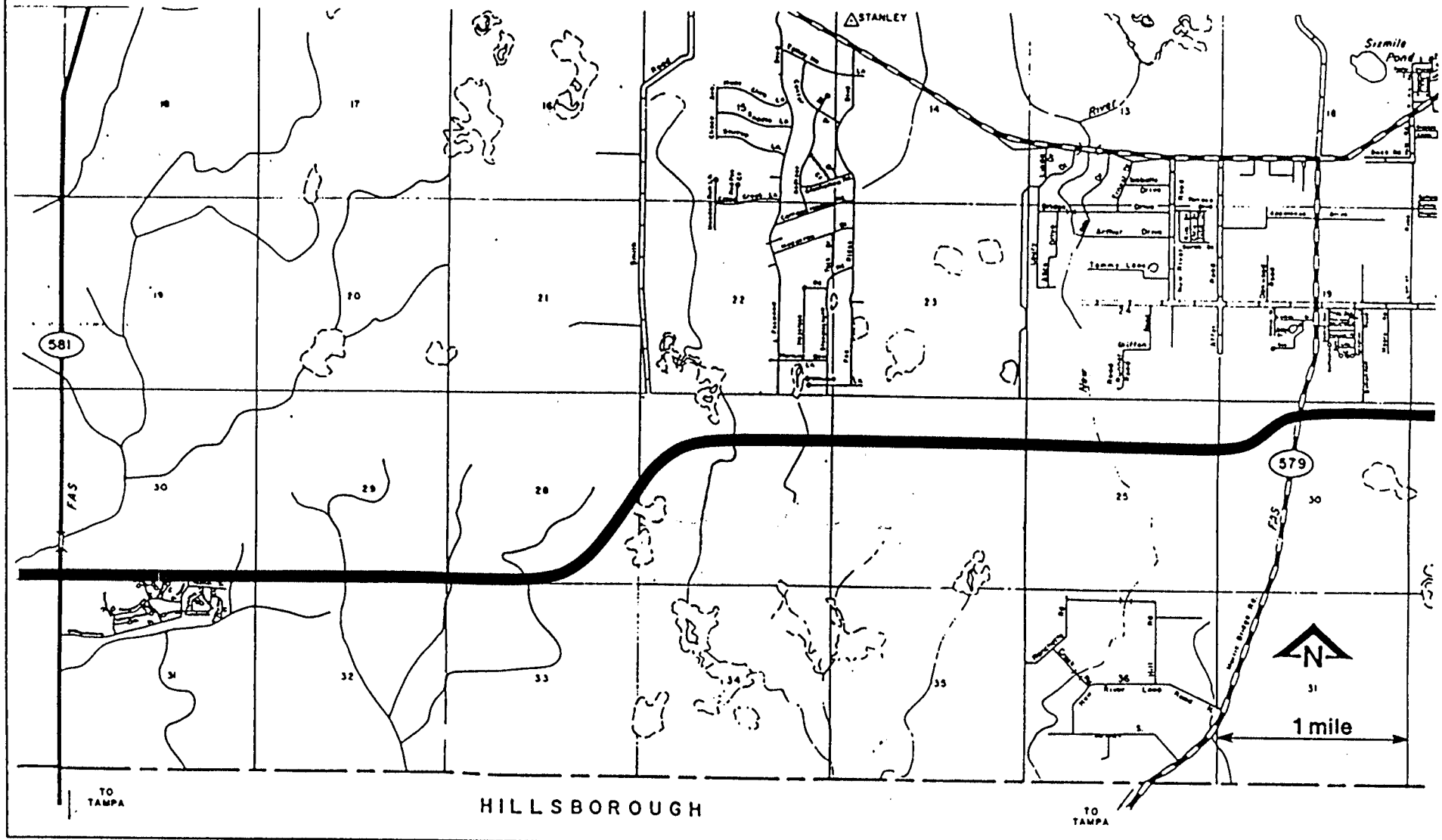


Figure 5-10

ALTERNATIVE ALIGNMENT 1E
BETWEEN CR 581 AND CR 579

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

Table 5-4. Alternative Comparison: From CR 581 to CR 579 (Morris Bridge Road)

Alignments	Length	Construction Cost	Right-of-Way Cost	Affected Wetland		Created Wetland*		Total†	Total Cost**
				Forested	Nonforested	Forested	Nonforested		
1	6.82	$13,503,600	$ 4,233,500	8.2	16.80	20.5	25.2	45.7	$17,737,100
1C	6.83	13,523,400	3,657,500	3.0	9.66	7.5	14.5	22.0	17,180,900
1D	6.67	13,206,600	3,657,500	8.0	8.20	20.0	12.3	32.3	16,864,100
1E	6.74	13,345,200	4,233,500	12.0	16.10	30.0	24.2	54.2	17,578,700

* Mitigation is based on an average ratio of 2.5:1 for forested and 1.5:1 for nonforested wetlands.
† Total includes affected and created wetlands.
** Cost does not include Wetland Mitigation Cost

Source: Hunter, 1989.

5.8 PROPOSED ALTERNATIVE SOLUTIONS

As discussed in Section 5.0, several alternative alignments were identified and analyzed to determine the most feasible alternative(s) to provide a new transportation facility for south Pasco County. Alternative Alignments 1 and 2 were developed and presented at a public informational workshop held on January 19, 1989. Public comment received at and following the workshop led to modification and development of additional alignments between CR 581 and CR 579. Table 5-5 is a summary of all alternative alignments identified during the course of this study and associated impacts.

It is recommended that Alternative Alignments 1, 1C, and 1D be carried forward for further analysis and presentation in the environmental assessment document and presented at the public hearing for review and comments.

Table 5-5. Summary of Alternative Alignments for SR 54: From Cypress Creek to the Zephryhills East Bypass, Pasco County, FI

Alternatives	Length (miles)	Construction Cost	Design Cost	Right-of-Way		Relocations	Created Wetland Acres*			Wetland Mitigation Cost†			Total Cost
				Acres	Cost		Forested	Nonforested	Total	Forested	Nonforested	Total	
1	13.66	$23,033,000	$2,303,000	413.9	$11,686,400	0	36.87	37.05	73.92	$1,825,300	$1,667,200	$3,492,500	$40,514,900
1A	13.66	$23,033,000	$2,303,000	413.9	$11,686,400	0	36.87	37.05	73.92	$1,825,300	$1,667,200	$3,492,500	$40,514,900
1B	13.62	$21,947,000	$2,194,000	412.7	$14,614,200	17	36.87	37.05	73.92	$1,825,300	$1,667,200	$3,492,500	$42,247,700
1C	13.67	$23,052,800	$2,305,000	414.2	$11,283,700	0	23.87	26.34	50.21	$1,181,800	$1,185,300	$2,367,100	$39,008,600
1D	13.50	$22,736,000	$2,273,000	409.1	$11,110,300	0	36.37	24.15	60.52	$1,800,500	$1,086,700	$2,887,200	$39,006,500
1E	13.58	$22,874,600	$2,287,000	411.5	$11,686,300	0	46.37	36.0	82.37	$2,295,500	$1,620,000	$3,915,500	$40,763,400
2	12.79	$23,910,200	$2,391,000	387.6	$13,536,000	0	42.87	32.25	75.12	$2,122,300	$1,451,200	$3,573,500	$43,410,700

* Created wetland mitigation is based on an average ratio of 2.5:1 for forested and 1.5:1 for nonforested wetlands.
† This is an estimated cost and may vary at the time of obtaining appropriate permits.

Source: Hunter, 1989.

6.0 PRELIMINARY DESIGN ANALYSIS

6.1 DESIGN TRAFFIC VOLUMES

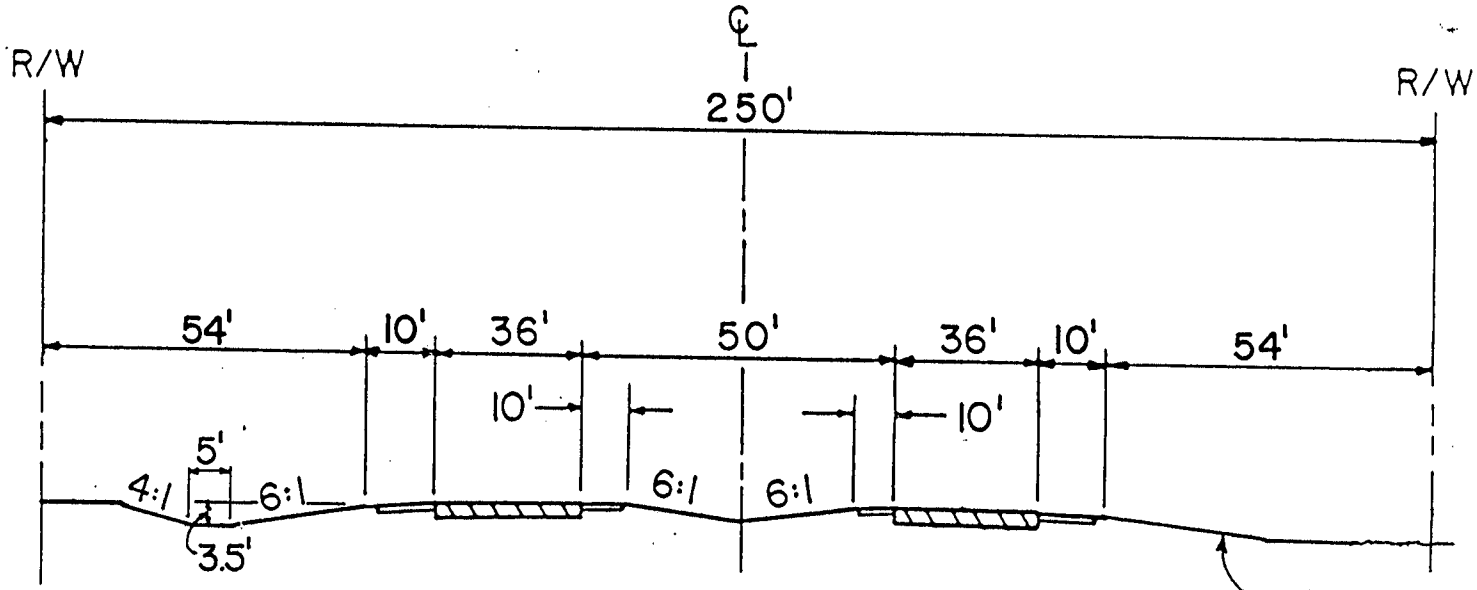
Projected 2010 traffic volumes along SR 54 vary from 8,550 vehicles per day (vpd) between CR 579 and U.S. 301 to 44,300 vpd between I-75 and CR 581. The magnitude of these volumes indicate that SR 54 will need to be constructed as a 2- to 6-lane facility (see Table 2-3). The wide variation between the projected volumes near I-75 versus the volumes east of CR 579 can be attributed to proposed developments on the western section of the new roadway while little or no development is expected on the eastern section of SR 54 between CR 579 and U.S. 301.

6.2 TYPICAL CROSS SECTIONS

The selection of a typical section for SR 54 was based upon the desire to develop a principle arterial highway with partial controlled access features. Because the current corridor is relatively undeveloped and open pasture, a rural typical section was selected for analysis. A 70-mph design speed was selected and used to establish desirable design standards based upon FDOT Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways (Green Book, 1986) (see Table 4-1). Utilizing FDOT desirable design standards for rural design, a 250-foot typical section was developed for all cross sections. The ultimate 6-lane section will be composed of three 12-foot travel lanes in each direction, a 50-foot grassed median, and 10-foot-wide inside and outside shoulders, with 4 feet of the outside shoulder paved adjacent to the outside lane. A 54-foot ditch section will be provided for stormwater treatment and clear recovery areas on each side (see Figure 6-1).

It should be noted that even though this right-of-way width will accommodate an ultimate 6-lane section, SR 54 will be stage constructed based upon the number of lanes required to accommodate 2010 traffic volumes for each section of SR 54. For the segment of SR 54 from SR 54A to the I-75 West Ramps, CR 581 to CR 579, and along U.S. 301 from SR 54 to Chancey Road, a 4-lane rural cross section is required for projected 2010 traffic volumes. Figure 6-2 illustrates the proposed cross section. This typical cross section consists of four 12-foot-wide travel lanes, two for each direction of travel, separated

PROPOSED TYPICAL CROSS SECTION (250' R/W)



6-LANE RURAL SECTION (50' MEDIAN)

(2010 DESIGN YEAR)

Figure 6-1

PROPOSED 6-LANE RURAL CROSS SECTION: FROM I-75 WEST RAMPS TO CR 581

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

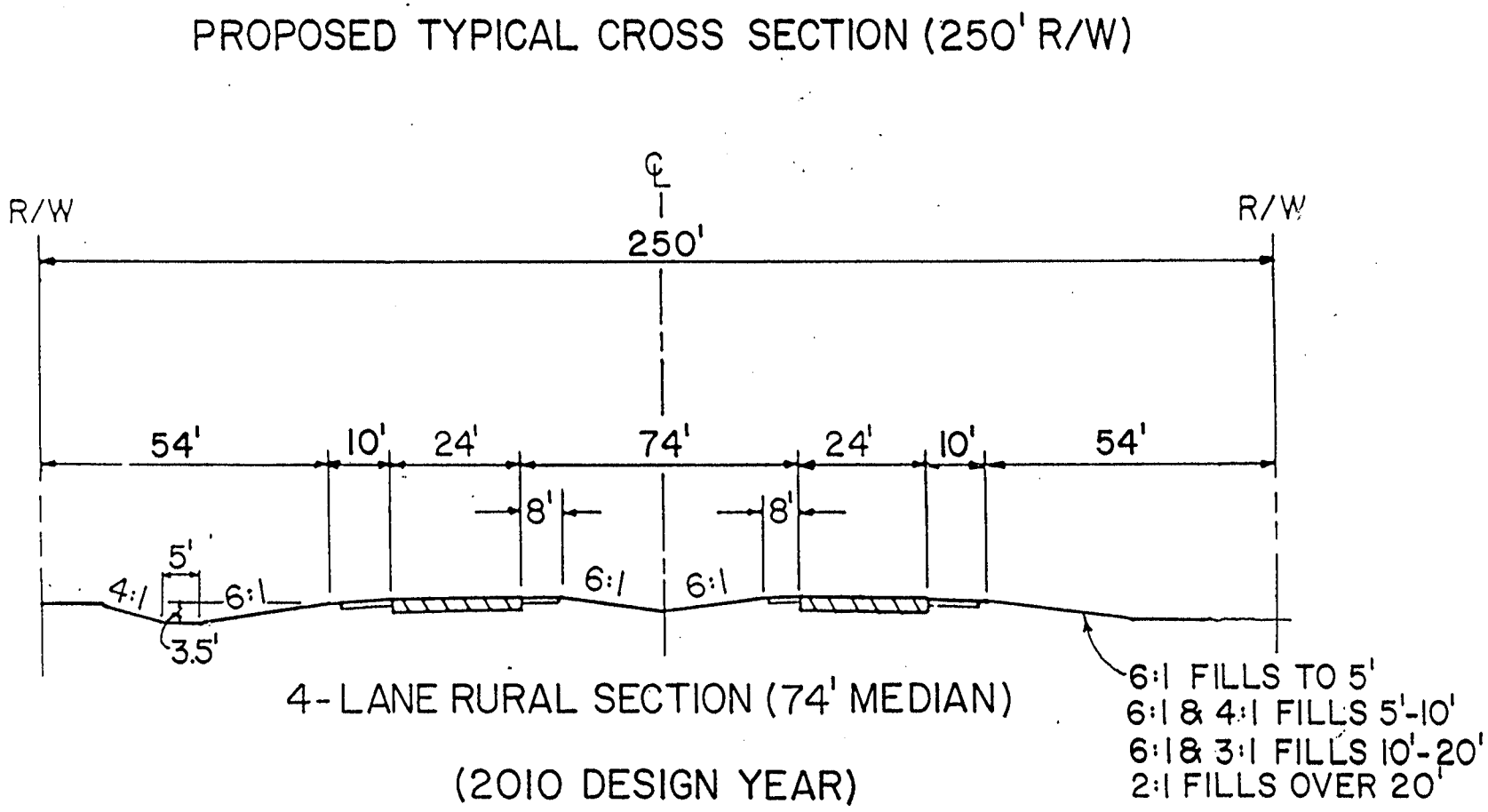


Figure 6-2

PROPOSED 4-LANE RURAL CROSS SECTION: FROM SR 54A TO I-75 WEST RAMPS, FROM CR 581 TO CR 579, AND FROM SR 54 TO CHANCEY ROAD

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

by a 74-foot-wide grass median. Inside shoulders would be 8 feet wide and unpaved. Ten-foot-wide outside shoulders with a 4-foot-wide paved portion would be provided. Grassed swales would be located on both sides of the roadway in order to provide for adequate stormwater treatment within existing right-of-way and for the clear recovery area. The 74-foot-wide grassed median can be used for future expansion when additional travel lanes are required.

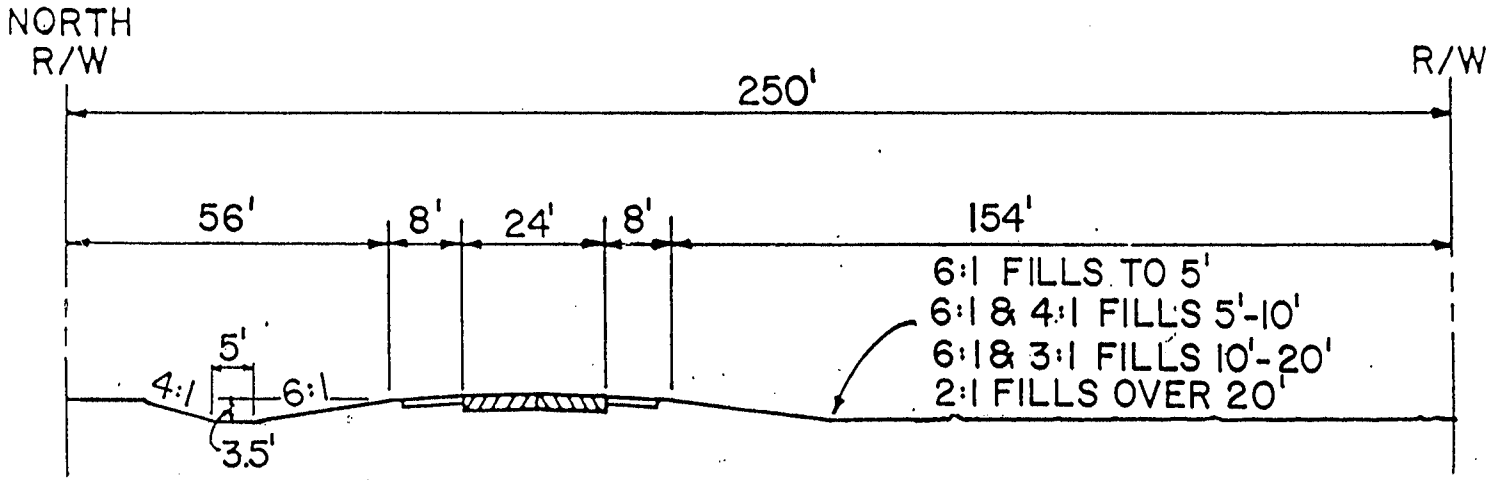
The next cross section developed was for the segment of SR 54 from the I-75 West Ramps to CR 581. 2010 traffic volumes require the construction of a 6-lane highway. Figure 6-1 depicts the proposed 6-lane rural cross section. This typical cross section includes six 12-foot-wide travel lanes, three for each direction of travel, separated by a 50-foot-wide grass median. Both the inside and outside shoulders would be 10 feet wide. In addition, a 4-foot-wide paved portion of the outside shoulders next to the outside lanes would be provided. Grassed swales located on both sides of the roadway would be provided for stormwater treatment and clear recovery areas. Drainage would also be aided through the use of the 50-foot-wide grass median.

For the segment of SR 54 from CR 579 to U.S. 301, a 2-lane rural cross section is required. Figure 6-3 shows this proposed cross section. This typical cross section includes two 12-foot-wide travel lanes, one for each direction of travel, and 8-foot side shoulders. Grass swales, located on both sides of the roadway, would be provided for stormwater treatment. This 2-lane section will be constructed on the northern half of the right-of-way and provide for the expansion of the roadway on the southern half without interfering with the flow of traffic on the initial 2-lane facility.

6.3 INTERSECTION CONCEPTS

As discussed in Section 2.0, several proposed intersections along SR 54 and U.S. 301 were analyzed for 2010 conditions in order to determine appropriate geometry at each intersection. These analyzed intersections include the following: SR 54A, I-75 Ramps, CR 581, CR 579, U.S. 301, and Chancey Road. Figures 6-4 through 6-9 illustrate the required geometry at each of these intersections. It should be noted that the analysis of the I-75 ramps at

PROPOSED TYPICAL CROSS SECTION (250' R/W)



2-LANE RURAL SECTION

Figure 6-3
PROPOSED 2-LANE RURAL CROSS SECTION: FROM CR 579 TO U.S. 301

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

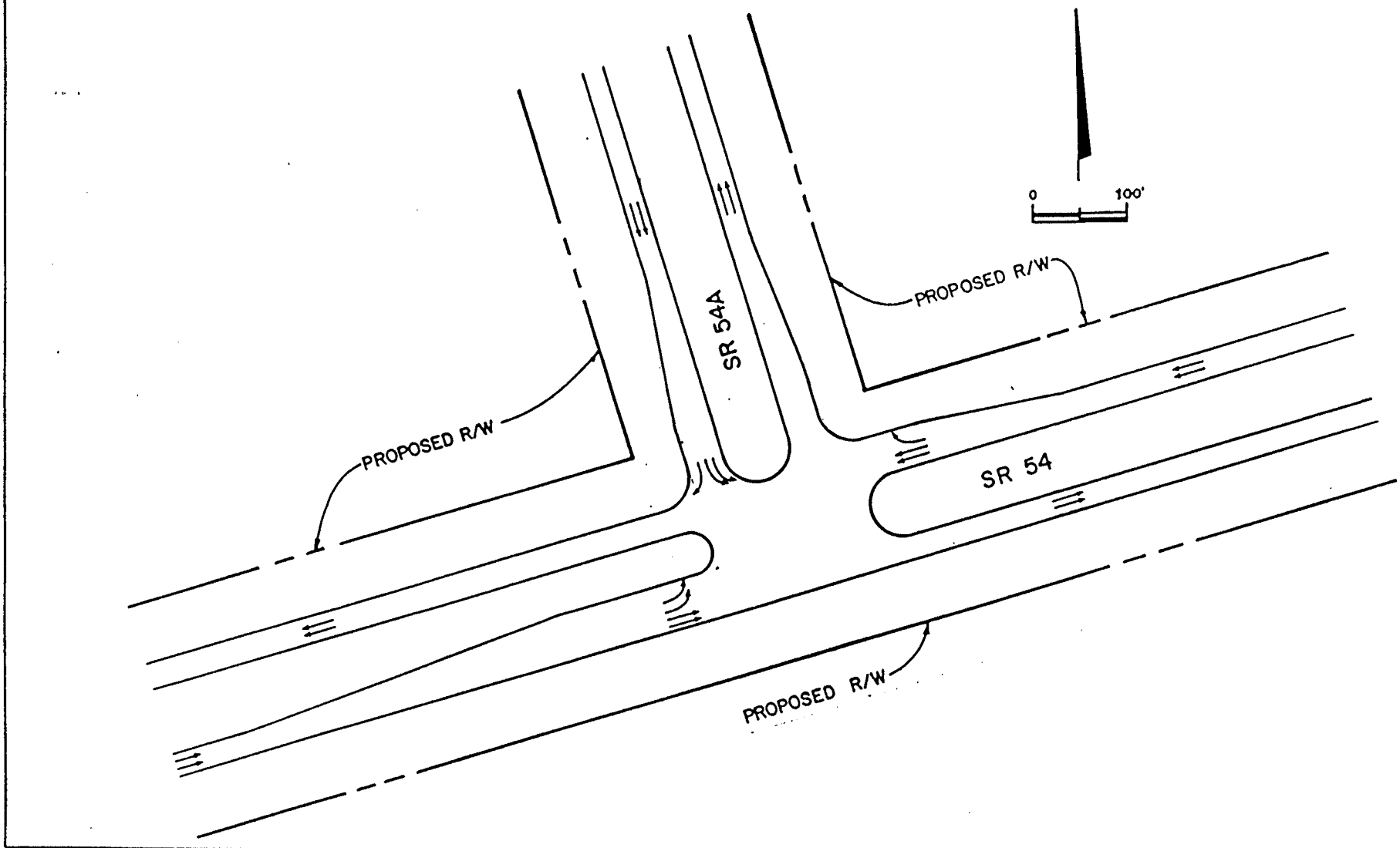


Figure 6-4

PROPOSED SR 54/SR 54A INTERSECTION GEOMETRICS FOR YEAR 2010
PM PEAK HOUR

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

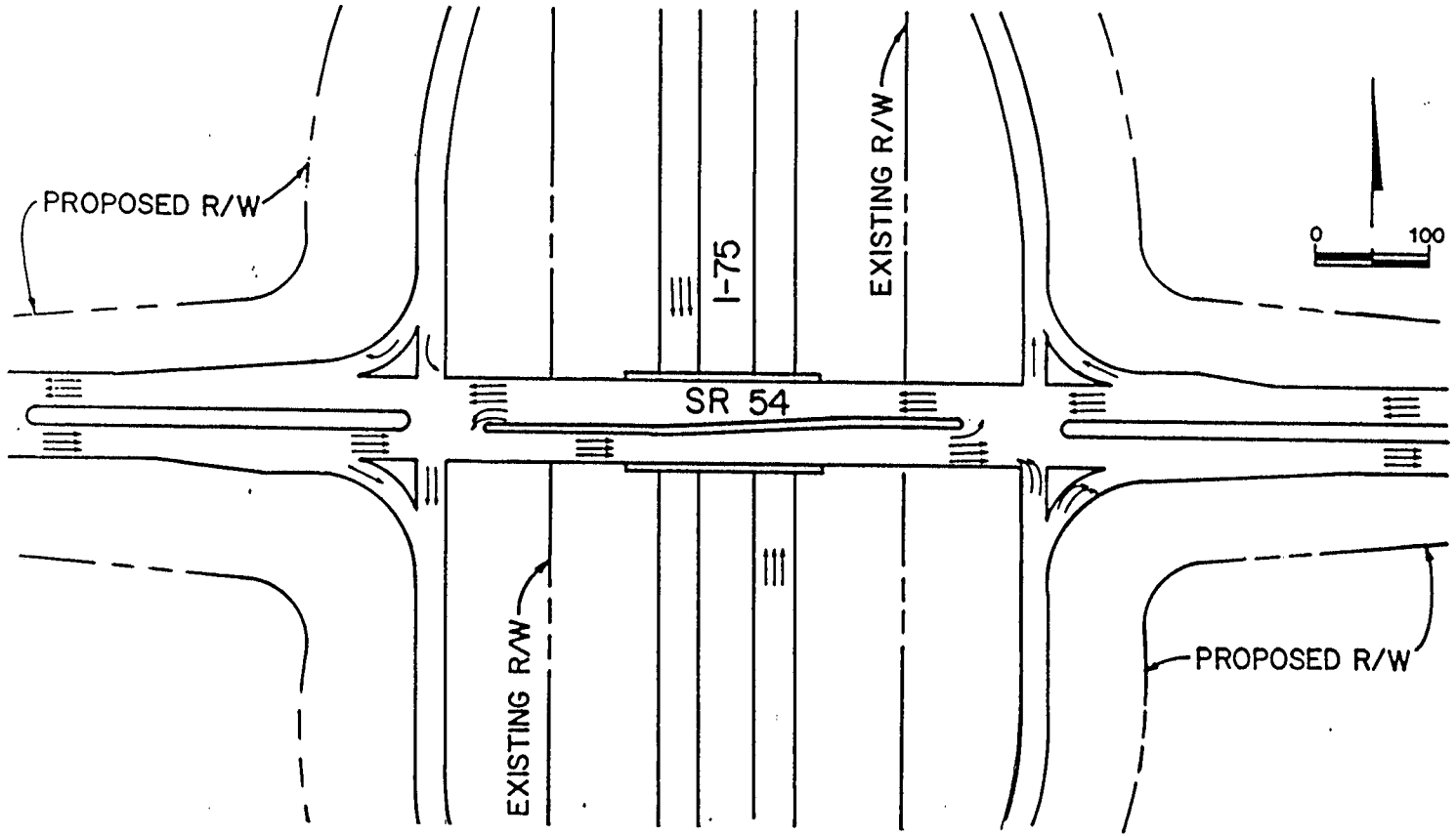


Figure 6-5

PROPOSED SR 54/I-75 INTERSECTION GEOMETRICS FOR YEAR 2010
PM PEAK HOUR

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

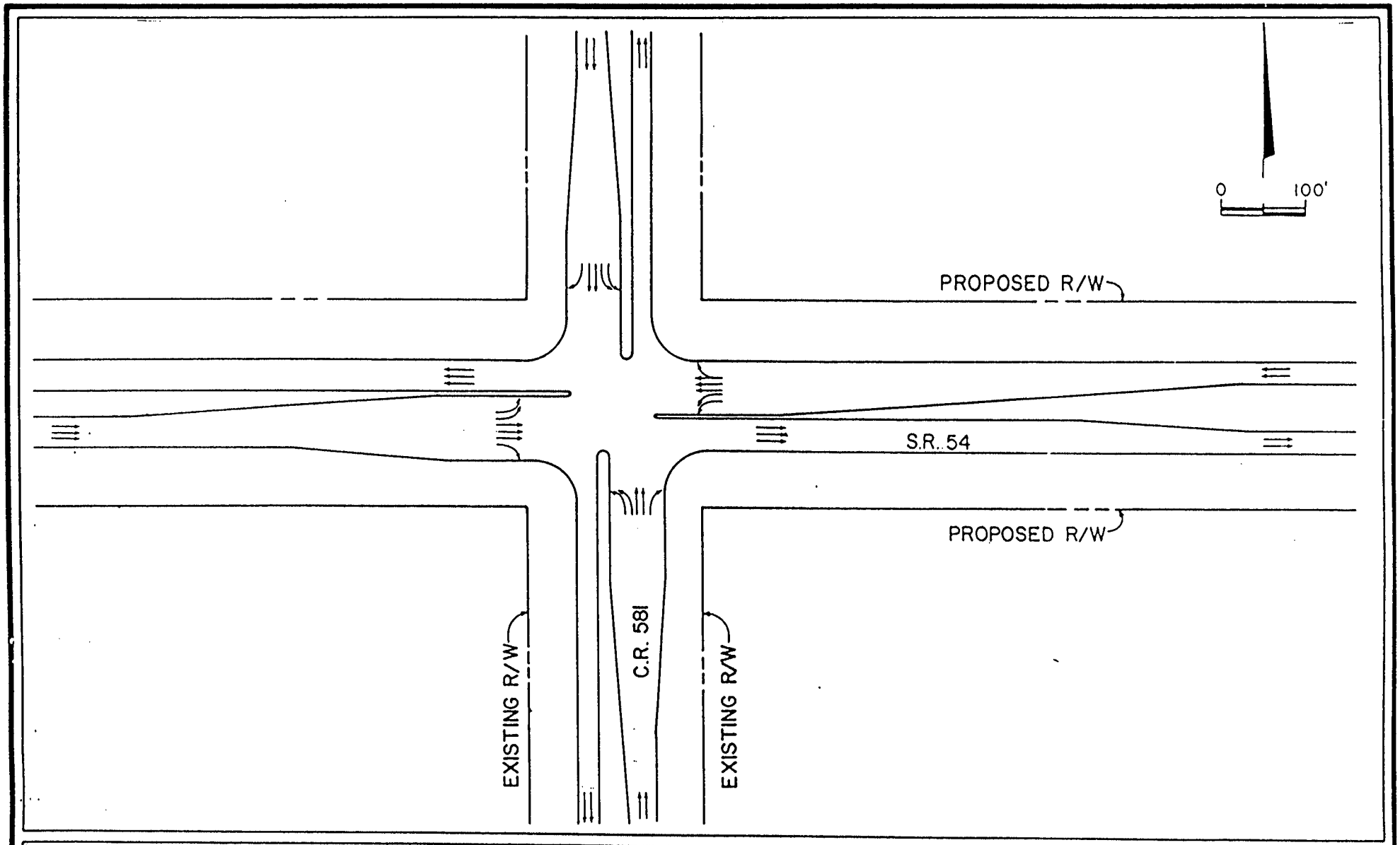


Figure 6-6

PROPOSED SR 54/CR 581 INTERSECTION GEOMETRICS FOR YEAR 2010
PM PEAK HOUR

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

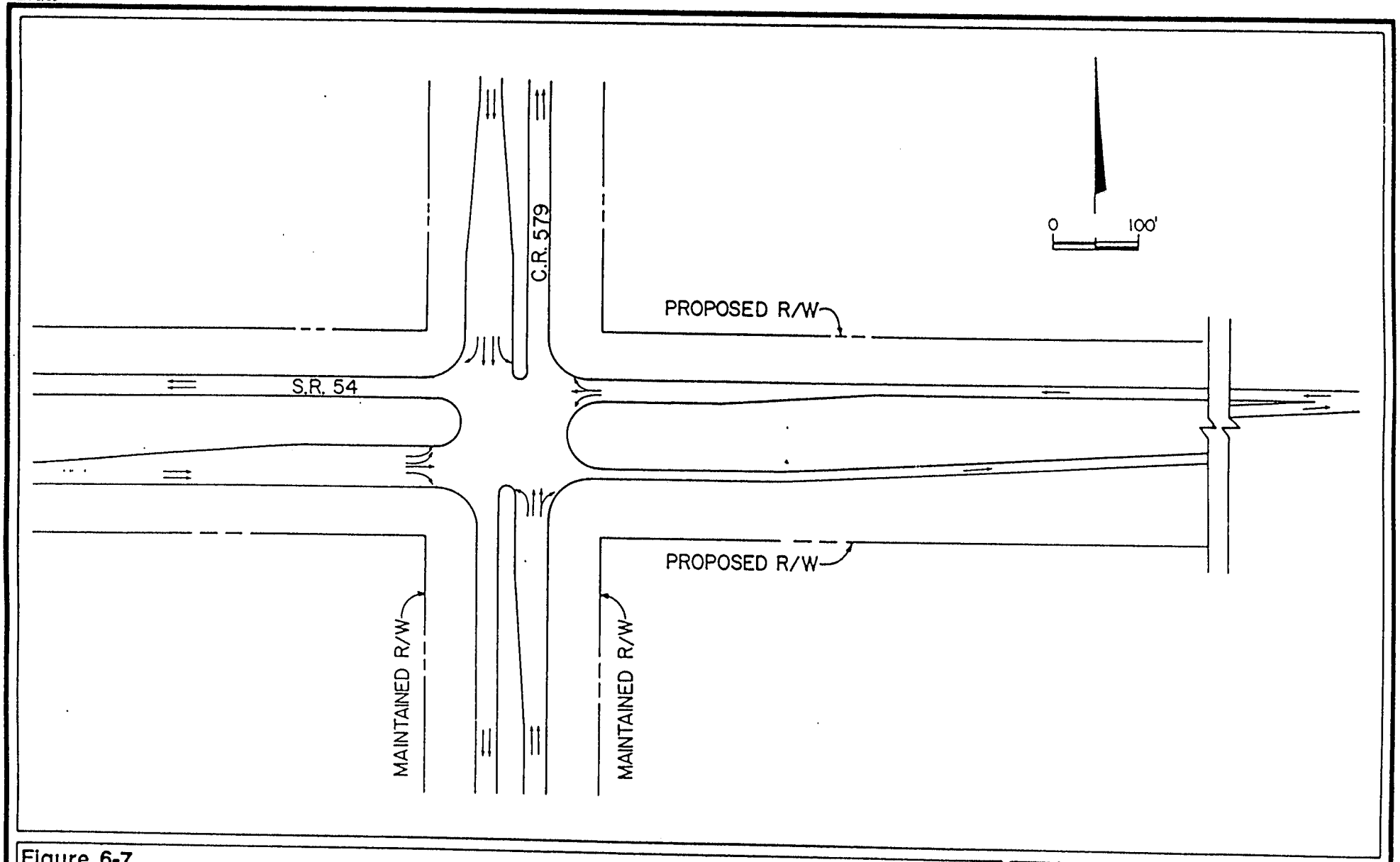


Figure 6-7

PROPOSED SR 54/CR 579 INTERSECTION GEOMETRICS FOR YEAR 2010
PM PEAK HOUR

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

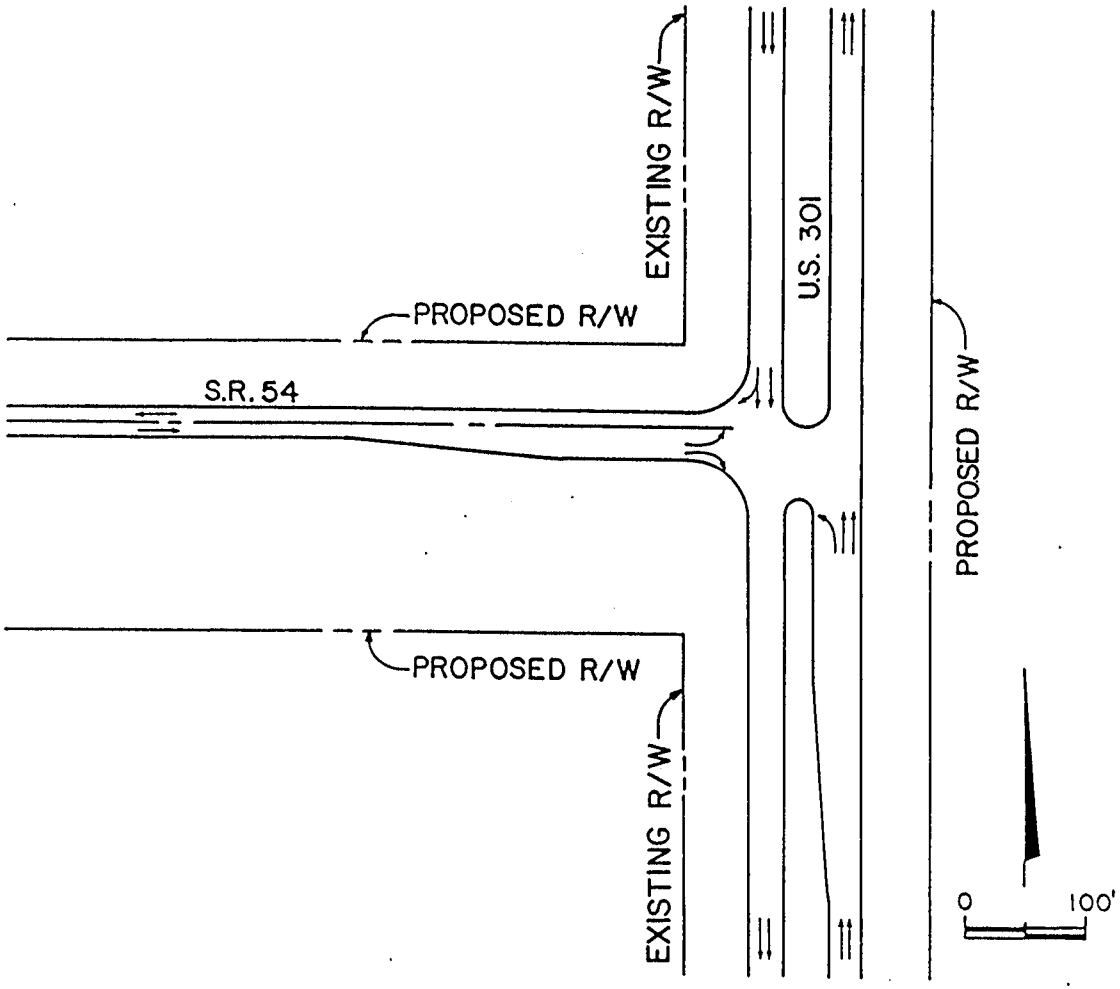


Figure 6-8

PROPOSED SR 54/U.S. 301 INTERSECTION GEOMETRICS FOR YEAR 2010
PM PEAK HOUR

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

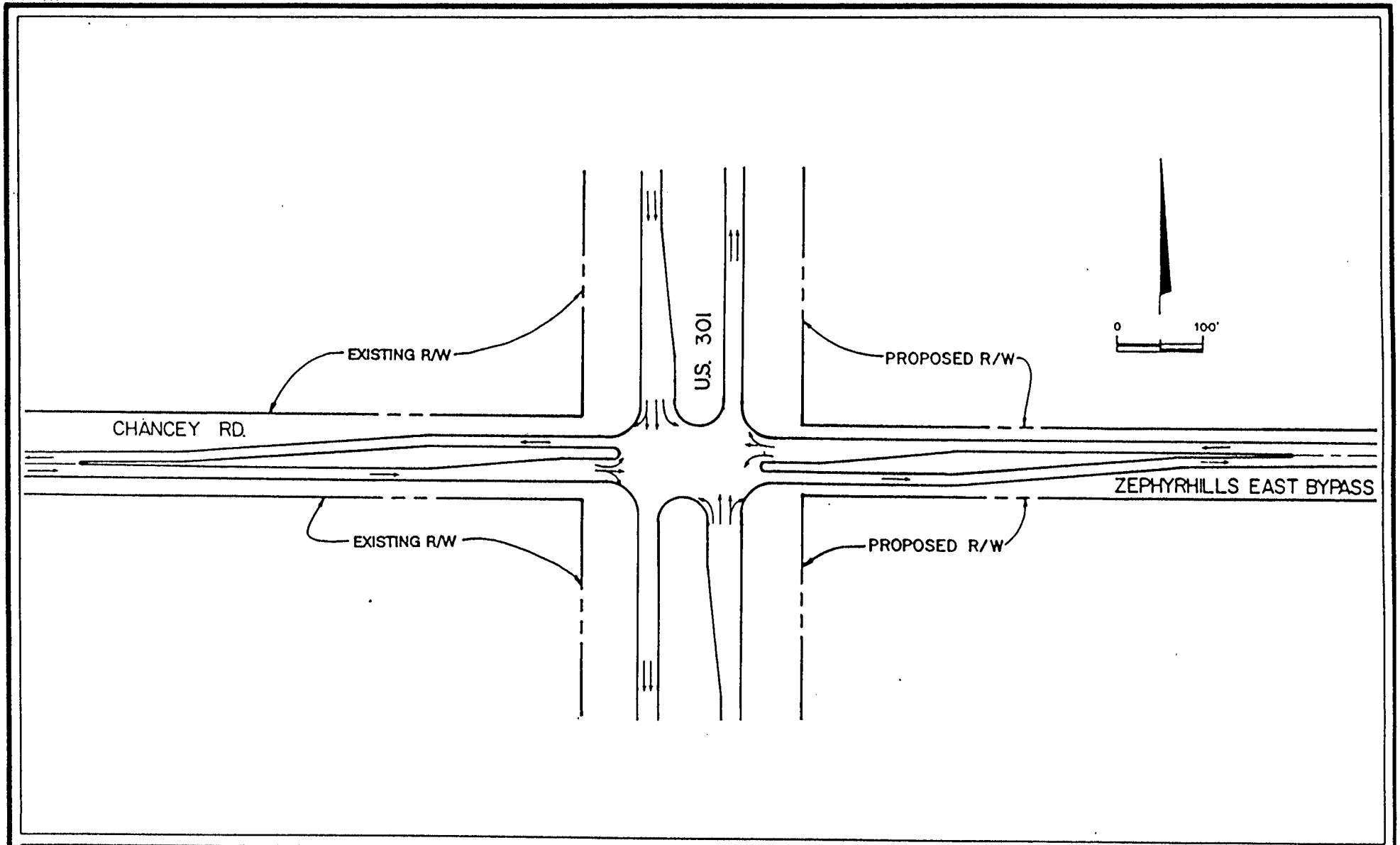


Figure 6-9

PROPOSED U.S. 301/CHANCEY ROAD INTERSECTION GEOMETRICS FOR YEAR 2010 PM PEAK HOUR

SOURCE: HUNTER, 1989

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

SR 54 was conducted in coordination with the TIS team, which is currently evaluating improvements to I-75 in southern Pasco County.

6.4 PRELIMINARY ENGINEERING, RIGHT-OF-WAY, CONSTRUCTION, AND RELOCATION COSTS

Construction costs for the SR 54 roadway were developed based on a FDOT 1988 cost-per-mile table for Pasco County for 2-, 4-, and 6-lane new construction. Cost estimates included preliminary engineering, construction, right-of-way, and business/residential relocation costs. A preliminary estimate of the costs is provided in Table 5-2.

6.5 PEDESTRIAN AND BICYCLE FACILITIES

SR 54 is expected to be a principal arterial highway with partially controlled access. No provisions have been made in the preliminary design of this roadway to accommodate pedestrian and bicycle traffic. However, proposed major intersections along SR 54 (at CR 581, CR 579, and U.S. 301) may be designed to accommodate pedestrian and bicycle traffic traveling across SR 54.

6.6 UTILITY IMPACTS

All companies maintaining utility lines near the proposed SR 54 roadway were contacted to locate existing utilities. Based on the location of these utilities, impacts and relocations were identified for all alternatives. Table 6-1 lists these impacts, including approximate planning costs of relocation incurred to the utility companies or FDOT. Since SR 54 is a proposed roadway, the incurrence of costs by either the utility companies or FDOT was primarily determined through conversations with utility company officials. As shown in Table 6-1, utility impacts caused by the new roadway will be minimal and will only exist at major connecting roadways.

6.7 MAINTENANCE OF TRAFFIC

Since SR 54 will be constructed as a new facility, maintenance of traffic will only be significant at major connecting roadways along this facility. Maintenance of traffic for these connecting roadways will conform to FDOT's roadway and traffic design standards.

Table 6-1. Utility Relocation for Alternative Alignments 1, 1C, and 1D

Location of Utility Impact	Impacted Utilities	Estimated Utility Relocation Cost By Utility Company	By FDOT
SR 54 West of I-75	WREC	--	$960.00
SR 54 at CR 581	FSN Cable	$875.00	--
	WREC	--	$500.00
	GTE	$10,000.00	--
SR 54 at CR 579	WREC	--	$19,640.00
	GTE	$1,500.00	--
U.S. 301 from SR 54 to Chancey Road	WREC	--	$8,000.00
	GTE	$24,000.00*	--
	TOTAL	$36,375.00	$29,100.00

* Excludes material costs for this GTE item only.

Sources: Florida Satellite Network Cable, 1989.
Withlacoochee River Electric Company, 1989.
General Telephone Company, 1989.
Hunter, 1989.

7.0 COMMENTS AND COORDINATION

A public involvement plan has been developed and is being carried out as an integral part of this project. The purpose of this program is to establish and maintain communication with individuals and agencies concerned with the project and its potential impacts. To ensure open communication and agency and public input, FDOT has provided an early notification package to state and federal agencies and other interested parties defining the project and describing anticipated issues and impacts. In addition, in order to expedite the project development, eliminate unnecessary work, and identify issues which may require attention, FDOT has provided other opportunities for local and regional agency involvement. This section of the document details FDOT's efforts to fully identify, address, and resolve all project-related issues identified through the public involvement program.

7.1 ADVANCE NOTIFICATION PROCESS

FDOT, through the advance notification process, informed a number of federal, state, and local agencies of the initiation of this project and its scope. An Advance Notification Package was distributed to the Office of Planning and Budgeting. Individual packages were also sent directly to local government. The following agencies/personnel received advance notification packages. Those agencies that responded to the package are indicated by an asterisk. The responses are included in Appendix A of the Environmental Assessment document.

Mailing List

Florida Planning and Environmental Clearinghouse, Office of the Governor
Federal Highway Administration (FHWA)
Bureau of Indian Affairs
Department of Agriculture (DOA)
Federal Emergency Management Agency (FEMA)
Department of Interior (DOI)
National Marine Fisheries Service
U.S. Geological Survey (USGS)
Bureau of Land Management
U.S. Department of Housing and Urban Development
U.S. Environmental Protection Agency (EPA)
U.S. Fish & Wildlife Service (FWS)

U.S. Army Corps of Engineers (COE)
National Park Services
Department of State - Environment, Health and Natural Resources
Federal Railroad Administration
National Oceanic and Atmospheric Administration (NOAA)
*Office of Cultural Resource Preservation - Historic Preservation
Federal Aviation Administration (FAA)
Department of Energy
Department of Health and Human Services
Commander - Seventh Coast Guard District
Marine Fisheries Commission
*Florida Department of Environmental Regulation (DER)
*Tampa Bay Regional Planning Council (TBRPC)
Southwest Florida Water Management District (SWFWMD)
Florida Recreational Council
Florida Game and Fresh Water Fish Commission (FGFWFC)
Florida Department of Natural Resources (DNR)

7.1.1 Government Agency Responses

Florida Department of Environmental Regulation.

Comment: Concerns were expressed regarding permitting, coordination with DER staff, and impacts to water quality and sensitive wildlife habitats.

Response: Appropriate DER permits will be applied for and obtained. A field inspection (with DER staff) of all the wetlands within the project corridor will be conducted prior to permit application submittal. The proposed project has been designed to minimize impacts to water quality and wildlife habitats to the greatest extent feasible.

Tampa Bay Regional Planning Council

Comment: Concerns were expressed regarding water quality, wetland and floodplain encroachment, and protection of sensitive wildlife habitats, and archaeological and historic resources.

Response: The proposed project has been designed to minimize impacts to water quality, wetlands, floodplains, wildlife habitats, and archaeological and historic sites to the greatest extent feasible.

7.2 PUBLIC INVOLVEMENT

A public involvement plan was developed and implemented at appropriate stages throughout development of the project. The plan involved the public through notification and meetings which included:

1. State, local, regional, and federal agencies, and public and private groups having a concern in the project being contacted at the outset of the project's study.
2. The local news media being utilized for carrying public notices and news releases concerning the project.
3. A public information workshop being held at a location near the project area.
4. Additional individual and group meetings being held as warranted.
5. A public hearing being held at a location near the project area.

Public coordination for this project was primarily directed towards three groups of individuals or agencies: Pasco County officials; regulatory and permitting agencies; and affected property owners. The following sections will discuss the meetings conducted with each group.

7.2.1 Coordination with Pasco County

Coordination with Pasco County representatives was conducted through regularly scheduled monthly project meetings with FDOT. These meetings allowed Pasco County representatives to participate in the decision-making process of this project. In addition to these meetings, presentations concerning the status of this project were made to several county organizations, including the Pasco County Technical Advisory Committee (TAC) on January 11, 1989 and July 14, 1992, and to the Pasco County Board of County Commissioners on February 28, 1989 and May 14, 1992. No major comments were expressed by either organization concerning this project.

7.2.2 Coordination with Regulatory Agencies

During the early stage of this project, meetings were conducted with several regulatory agencies regarding potential environmental impacts which would

result from this project. Each of these meetings are summarized below.

On January 25, 1989, Hunter Services, Inc. met with a COE representative to discuss the proposed project. After presentation and discussion of the proposed corridor, the COE representative provided the following comments:

- Expansion of the present 250-foot-wide typical section to incorporate frontage roads could result in additional wetland impacts, which should be minimized,
- The proposed, unavoidable crossing of the Cabbage Swamp/Trout Creek tributary (located west of SR 581) could interfere with wildlife movement. Provisions for adequate wildlife crossings would be recommended. Potentially, drainage provisions (e.g., large culverts, pilings, etc.) could be satisfactory for this purpose depending on their size and design,
- The roadway width should be constricted as much as possible at areas of major wetlands, and
- A field review with COE staff should be conducted for the proposed corridor prior to the submittal of the Permit Coordination Report.

On January 23, 1989, DER representatives met to discuss the proposed project. After a brief overview and status of the project, a discussion ensued concerning the environmental impacts along the corridor. Several comments made by DER representatives regarding impacts included the following items:

- Median widths should be reduced in those areas where culverts/bridge crossings would be required; and
- Consideration should be given to rehydration of wetlands from stormwater runoff from the project.

On February 7, 1989, SWFWMD representatives discussed the proposed project. After presentation and discussion of the proposed corridor, SWFWMD representatives provided the following comments:

- Consider narrow roadway width at areas of wetland crossings,
- Use large contiguous areas for mitigation purposes. If possible, mitigate adjacent to large systems proposed to be impacted,
- At the Cabbage Swamp crossing incorporate provisions for wildlife crossings,
- Mitigation areas should have provisions for sandhill crane and woodstork

habitat,

- Mitigation within wet detention systems should not be considered due to the drastic change in water levels, and
- 100-year floodplain encroachment must be mitigated.

In September 1989, a Permit Coordination Report was prepared in order to identify potential sites that may require environmental and regulatory permits from federal and state agencies and to coordinate with local agencies. This report lists the various types of permits anticipated for the proposed project; describes the wetland involvement for each of the proposed alternatives and the proposed mitigative measures to minimize wetland impacts; and provides an assessment of the project impacts to federally listed plant and wildlife species. The agencies who were sent this report are listed below. Those agencies who responded are denoted with an asterisk (*).

Mailing List

- NMF, Environmental Assessment Branch
- EPA, Regional Administrator
- SWFWMD, Mr. John Post
- DER, Mr. Bob Stetler
- TBRPC, Assistant Director for Development Implementation*
- DNR, Regional Biologist
- FGFWFC, Executive Director
- COE, District Engineer
- FWS, Field Supervisor
- COE, Gulf Coast Area Office
- DNR, Bureau of Lands Management*

The responses are included in Appendix A of the Environmental Assessment Document. The pertinent comments from these responses are summarized below.

Tampa Bay Regional Planning Council

Comment: Concerns were expressed regarding wetlands, water quality, flora and fauna impacts, archaeological and historical resources floodplains, air pollution, noise levels, relocation and neighborhood disruption, property values, access to public

facilities, Access Management Plan, Land Use Management Plan, and alternative modal investments. Recommended that the above concerns be considered during the project development to be consistent with the Council's Future of the Region, A Comprehensive Policy Plan for the Tampa Bay Region.

Response: The proposed project has been socioeconomically, environmentally and physically designed to minimize the project's impacts to the greatest extent feasible (see Section 4.0). Consistency with local Transportation Plans and Access Management Plans are addressed in Section 2.0 of the EA. Multi-modal System is addressed in Section 4.3.

Department of Natural Resources

Comment: State-owned lands in Sections 22 and 27, Township 26 South, Range 31 East would be traversed by the proposed route. There is insufficient evidence in our files to determine the sovereignty of the crossing site of the New River.

Response: None required.

7.2.3 Coordination With Affected Property Owners

On November 16, 1988, a meeting was held with large tract property owners located adjacent to the proposed corridor. Two alternative alignments (1 and 2) which would be presented at the January 19, 1989, public informational workshop, were shown to the affected property owners. Based on these meetings, a majority of the property owners were in favor of constructing the new roadway. One property owner, Wiregrass Ranch, Inc., expressed strong opposition to the roadway because it would bisect and disrupt a ranching operation. Despite the overall agreement on the need for a new roadway, the property owners had several concerns regarding the alternative alignments. These concerns include the following:

- Impacts to existing cattle and ranching operations along the corridor,
- Impacts to existing utility facilities,
- Floodplain encroachment, and
- Current zoning impacts.

These comments were incorporated in the review of the alternative alignments prior to and after the public informational workshop.

7.3 PUBLIC INFORMATIONAL WORKSHOP

A public informational workshop concerning new SR 54 from Cypress Creek to U.S. 301 was held on Thursday, January 19, 1989, from 4:00 to 7:00 PM at the Alice Hall Community Center located in Zephyrhills, Florida. An open format was used in which residents and any interested parties were able to see the project displayed and talk with FDOT representatives who were available to answer any questions. Approximately 120 individuals attended the workshop. The attendees consisted mainly of residents and property and business owners who reside near the proposed project.

All persons attending the public informational workshop were afforded the opportunity to comment about the project and have their comments included in the official transcript of the public informational workshop. This could be achieved in three ways: 1) a court reporter was present at the hearing to record any oral comments, 2) comment sheets were provided for any written comments, and/or 3) interested parties could write a letter addressed to Mr. James G. Kennedy of FDOT concerning any comments about the project. All of these comments are included as a part of the official transcript of the public workshop. Oral and written comments from the public informational workshop are listed below:

MR. GEORGE SCHACK

Comment: "Again, DOT has shown very little compassion to the senior citizens of our area. Any half-wit can look at your proposed map of SR 54 and CR 581 and can easily see how the homeowners were ignored in favor of the big landowners..."

Response: The proposed project has been designed to minimize impacts, including environmental and socioeconomic, to the greatest extent feasible. Impacts to all property owners near the proposed corridor were considered in the conceptual design process.

MR. HANS J. CASTENDYK

Comment: "Please keep me informed on this DOT project and all meetings."

Response: The general public will be notified well in advance of any future meetings concerning this project.

MS. EDITH MOSKOVITZ AND MR. ARTHUR MOSKOVITZ

Comment: "...Surely moving the road 75-100 feet more to the north should not present too much of a hardship. This way we could have a berm and a wall and trees to keep the noise and air pollution levels down..."

Response: Consideration was given to moving the proposed roadway away from existing residences, resulting in the development of Alternatives 1C and 1D.

MR. JAMES J. NUTTALL

Comment: "With 3 1/2 miles of open farmlands between the Williamsburg development and SR 54, why do they have to make a 40° turn to the south after the interchange with I-75 in order to put the proposed SR 54 Section 30-31-32, T26, R20 right on the northern border of Williamsburg..."

Response: The roadway has been designed to minimize encroachment to the Cabbage Swamp area. This area is considered the most sensitive of all large, wetland systems which this new roadway will cross. To receive the appropriate permits/approvals from regulatory agencies for this project, the roadway had to be designed to minimize environmental impacts.

MR. JOHN SOKOL

Comment: "I love the peace and quiet of my small Town of Zephyrhills. If this 6-lane roadway comes through our town it would change everything..."

Response: The purpose of constructing this 2- to 6-lane roadway is to relieve future traffic demand projected for existing SR 54 which runs through Zephyrhills. By accomplishing this, the new roadway will provide motorists an alternate route to travel in southeast Pasco County, and therefore, minimize the potential for high

growth along existing SR 54 near Zephyrhills.

MR. STANLEY ORING

Comment: "...As a real estate salesman, I have been in the backyards of homes on Long Island that were this close to an expressway. Because of the traffic noise, conversation could not be held outdoors. These homes were eventually sold at a great loss. We will be looking forward to the same problem. Mine is the seventh house from the one closest to the new road. We will see it from our window, which is not the worst thing, but we will also be kept awake by the noise of trucks which travel 24 hours a day..."

Response: The proposed roadway has been designed to minimize impacts to the greatest extent feasible. A noise study was conducted to determine the noise impacts caused by the proposed project (see Section 4.3.3, Noise). Noise abatement measures were considered for all noise-sensitive sites that approach or exceed the Federal Highway Noise Abatement Criteria (see Noise Study Report).

MR. ROY T. HAZELWOOD

Comment: "I wish to express my extreme disapproval to the proposed SR 54 Section 30-31-32, T26, R20. This proposed roadway would pass within 110 feet of my residence in the Williamsburg subdivision along with several other residences. This would reduce the quality of life from quiet and peacefulness that we moved here for, to a noisy, tense, and polluted existence..."

Response: The roadway has been designed to minimize impacts to the greatest extent feasible. Air and noise studies were conducted to determine impacts caused by the proposed project. The results of the air quality study indicated that the project would not significantly impact air quality. Pollutant emissions were well below federal standards. Noise abatement measures have been considered for all noise-sensitive sites (see Noise Study Report).

MR. WILLIAM SOKOL

Comment: "Surely, there must be a better place to have this 6-lane road

coming through Zephyrhills. I don't like any of the proposed plans!..."

Response: The purpose of constructing this 2- to 6-lane roadway is to relieve future traffic demand projected for existing SR 54 which runs through Zephyrhills. By accomplishing this, the new roadway will provide motorists an alternate route to travel in southeast Pasco County, and therefore, minimize the potential for high growth along existing SR 54 near Zephyrhills.

MR. JOHN R. SIERRA, JR.

Comment: "We own the east 3/4 of Section 27, Township 26, Range 19, Pasco County, basically, at the start of the proposed project. Our 600± acres would be cut in half by the proposed SR 54 realignment. We are very much in favor of the proposed road, provided our land (future development) will have access to the new road..."

Response: FDOT is currently developing an access management plan for the proposed project which would provide limited access to affected property owners. Prior to the design stage of this project, FDOT will contact property owners in order to discuss this plan.

MS. PAULINE K. CECICH

Comment: "...I am not against the road per se, only the uneven route which touches our backyards..."

Response: Consideration was given to moving the proposed roadway away from existing residences, resulting in the development of Alternatives 1C and 1D.

MS. JOANN SOKOL AND MR. JOHN SOKOL

Comment: "...You know as well as we do that there would be quick, tremendous growth in this area if this "new proposed highway" is passed. We don't want that to happen! We don't want this community to become a 'suburb' of Tampa! Why don't you people worry about widening and fixing the roads you already have...!!!"

Response: Significant growth is projected for the southern portion of Pasco County regardless of whether this roadway is constructed or not. Currently, there are five large planned developments either under construction or proposed for areas east of I-75. Due to this identified growth, a second east-west roadway will be required to handle this future traffic demand.

MS. SYBELLE K. BERLIN AND MR. PAUL D. BERLIN

Comment: "We wish to take exception to the proposed route of SR 54 Section 30-31-32, T26, R20 since it will pass within 25 feet of the northwest to east boundary of the Williamsburg development where we reside and will cause us a loss in the value of the property, as well as the inconvenience of the noise and pollution caused by the traffic generated in the future... If there is any way in which the proposed road could be moved further back or if an alternate way could be found to either widen the existing route 54 or in building a new road, it would mean more peace of mind, better health, and avoid the loss of our money, again due to depreciation of property in which we have invested our savings in good faith that it would bring us a home to relax in the final years of our life..."

Response: Consideration was given to moving the proposed roadway away from existing residences, resulting in the development of Alternatives 1C and 1D.

MR. CHARLES B. MALLON

Comment: "There is an old but indisputable mathematical principal to the effect that the shortest distance between two points is a straight line. In locating the route of the new, proposed SR 54 along the southerly border of the Porter property, which is also the northerly border of the Williamsburg development (on Route 581), the DOT has chosen to ignore that principal..."

Response: The roadway has been designed to minimize encroachment to the Cabbage Swamp area. This area is considered the most sensitive of all large wetland systems which this roadway will cross. To

receive the appropriate permits/approvals from regulatory agencies for this project, the roadway had to be designed to minimize the environmental impacts.

MS. GRACE ERRICO AND MR. JOSEPH ERRICO

Comment: "We understand with the tremendous growth of Pasco County that projects like the improvement of SR 54 are necessary. We only ask that you take into consideration the problems that the new road will create for the people that live in the Williamsburg (Trout Creek) development. In Section 25, SR 54 proposed route makes a 40° turn to the south, then turns east and runs right along our community boundary line; passing within 109 feet of existing homes. This surely will cause intolerable noise pollution levels, coupled with a sizable depreciation in our property values..."

Response: The proposed roadway has been designed to minimize impacts to the greatest extent feasible. A noise study was conducted to determine impacts caused by the proposed project (see Section 4.3.3, Noise). Noise abatement measures were considered for all noise-sensitive sites that approach or exceed the Federal Highway Noise Abatement Criteria (see Noise Study Report).

MR. LEONARD P. BROWN

Comment: "...To disrupt a 5,000-acre wildlife preserve with another concrete highway to transport people is unthinkable. To create a possible flood condition in an already flood area is also hard to believe. To displace wildlife, to destroy a beautiful peaceful environment with more concrete is hard to understand..."

Response: The proposed roadway has been designed to minimize impacts to the greatest extent feasible. The project is traversing mostly rangeland, much of which is planned for residential or business development. No designated wildlife preserves will be affected by the project.

MS. ROSALIND KASS AND MR. JOSEPH KASS

Comment: "This letter is to protest the proposed route of SR 54, which

takes the road 109 feet or 37 yards from homes in the senior village of Williamsburg. There is 3 miles of land from present route 54 to the proposed new route on which there are no homes. Why not use part of this land and not endanger the value of retirement homes of senior citizens?"

Response: Consideration was given to moving the proposed roadway away from existing residences, resulting in the development of Alternatives 1C and 1D.

The following property owners all shared similar views in regard to the proposed SR 54 alignment traversing adjacent to the Williamsburg development. Their comment is provided at the end of this list.

Mr. & Mrs. James H. Landis
Mr. Joseph R. Maggio
Ms. Margaret Maggio
Mr. Kenneth Maggire
Ms. Claire Maggire
Mr. Ralph E. Wallace
Ms. Lena H. Wallace
Mr. E. Kephart Emenheiser
Ms. Kathryn Emenheiser
Mr. Joseph J. Ray
Mr. James A. Mayberry
Ms. Martha H. Mayberry
Mr. & Mrs. Samuel Edwards
Mr. Earl Padonsky
Ms. Edythe Padonsky
Mr. & Mrs. Leonard Paster
Ms. Dorothy A. Boehning
Ms. Cecelia Lieberman
Mr. Ignazio Sciuto
Ms. Domenica Sciuto
Mr. Martin Winter
Ms. Laura Winter
Mr. Sheldon Rosenthal

Ms. Annette Rosenthal
Mr. Max Frouman
Ms. Rita Frouman
Mr. Harry A. DeBold
Ms. Bella E. DeBold
Mr. & Mrs. L.A. Gottesfeld
Mr. Murray R. Hersh
Mr. Thomas L. Rhodes
Ms. Mary M. Rhodes
Ms. Margaret Harloff
Mr. Allan S. Kane
Ms. Rhoda H. Kane
Ms. Mary E. Foley
Mr. W.V. Chilenski
Ms. Elizabeth P. McCooey
Ms. Virginia Partee
Mr. John D. Greaney
Mr. Michael Warocha
Mr. & Mrs. James H. Watts
Mr. & Mrs. George J. Kozlowski
Mr. Robert R. Larry
Mr. Leo Lichtenstein
Ms. Anna Lichtenstein
Mr. John Budd
Mr. William J. Kontoft
Ms. Anne L. Kontoft
Mr. Harold W. Knudson
Mr. & Mrs. Martin Hartman
Ms. Frances L. Rakow
Mr. Christopher Quinn
Mr. & Mrs. Harold DeBlaker
Mr. Jerome Wishner
Ms. Florence Wishner
Mr. & Mrs. H.R. Sankey
Ms. Shirley Chresman
Mr. David H. Hans
Ms. Dorothy L. Hans

Mr. David E. Wunderlin
Mr. Edwin J. Heathcoe
Mr. James R. Blachwell
Mr. Eugene Hufko
Ms. Evelyn Hufko
Mr. Roger Schlieder
Ms. Gerri Schlieder
Mr. & Mrs. Frank Tobar
Mr. Robert J. Englander
Ms. Ruth Feivelson
Mr. John T. Rauche
Ms. Nelda Rauche
Ms. Myrna Deutsch
Mr. Alexander Simmons
Mr. F.J. Foore
Mr. Charles Hazekamp

Comment: "The proposed route of SR 54, Section 30-31-32, T26, R20 will pass within 25 feet of the northwest to east boundary of the Williamsburg (Trout Creek) development. High speed traffic lanes will be 109 feet from existing homes. This will cause intolerable noise levels in these homes, especially for senior citizens. The close proximity of this road will cause a severe depreciation of the resale value, representing a large loss to the life's savings of these citizens who bought their homes in good faith for the peaceful enjoyment of their golden years. In Section 25, the road makes a 40° turn south, then east (unnecessary and possibly dangerous). The elimination of said turn in favor of a straight line would solve the problem. Williamsburg contains 231 lots and 178 homes have been completed with an assessed value totaling over $9,000,000. The land to the north is farmland. Also, what percentage of our losses would be reimbursed?"

Response: The above comments, as well as many others preceding it, were expressed by residents of the Williamsburg subdivision located east of CR 581 and south of the proposed alignment. Residents of Williamsburg expressed concern regarding potential air and noise

pollution and potential depreciation of property value as a result of the construction of the highway adjacent to their subdivision. As a result of the comments received from residents of Williamsburg, an alternative alignment was developed which would reduce potential impacts to the subdivision.

7.4 ADDITIONAL MEETINGS WITH PROPERTY OWNERS

As stated above, a third Alternative Alignment (1C) was developed which would traverse farther north of the Williamsburg subdivision. Alternative Alignment 1C was presented to the affected property owners on February 15, 1989. Strong opposition was expressed in a prior coordination meeting with the affected property owner, Wiregrass Ranch, Inc., regarding any alternative alignment which would bisect and disrupt a ranching operation. The owner again expressed strong opposition to Alternative Alignment 1C and expressed support for Alternative Alignment 1A because of the lower impacts to the ranching operation.

Alternative Alignment 1C was presented to residents of the Williamsburg subdivision in a meeting on February 15, 1989. Approximately 125 residents attended the meeting, which was held in the subdivision's clubhouse. Hunter Services, Inc. and FDOT representatives presented the proposed Alternative Alignment 1C, which was met with less opposition than Alternative 1A.

As a result of the public informational workshop, two additional property owners subsequently expressed concern regarding the proposed alignment of Alternatives 1A (see Section 3.3.2) and 2 (see Section 3.3.3). Representatives from the Lee Arnold Trust and the New River, LTD properties met with representatives of Hunter to review the proposed alternative alignments. Both properties are located to the east of Wiregrass Ranch, Inc. and each represent approximately 1 mile of frontage on the proposed SR 54. Representatives of the Lee Arnold Trust indicated that a southern alignment (Alternative Alignment 2) would affect proposed residential and recreational development. Both property owners are involved in the early stages of their DRIs, however, neither developer has an approved DRI. The Lee Arnold Trust property has been zoned for commercial and residential use for several years.

7.5 PUBLIC HEARING

A public hearing was held on Thursday, June 4, 1992 in the Alice Hall Community Center, 38116 S.R. 54, Zephyrhills, Florida at 4:00 P.M. to 8:00 P.M. The hearing was held to inform the public, and the Pasco County Board of County Commissioners (BCC) about the on-going results of the project, the construction alternatives, and give the concerned parties an opportunity to express their opinions for the public record concerning the project. All persons in attendence were given a handout (see Appendix C) with pertinent information about the project. From 4:00 to 6:30 P.M., the public was able to review drawings of the conceptual design plans for three alternatives (Alternative 1A, 1C, and 1D) and the possible impacts to the project area. FDOT and its consultants were on hand during the hearing to discuss the project, answer any questions and to listen to any comments. According to the sign-in sheet, a total of one hundred and sixty (160) people attended the hearing. A formal presentation was given by FDOT at 6:30 P.M. This was followed by an opportunity for attendees to give public comment which was recorded into the public record.

Individuals expressed several specific concerns and asked questions of FDOT during the informal phase of the hearing. Fifteen individuals gave public comment to the court reporter during the informal portion of the public hearing. An additional fifty (50) individuals gave pubic comment during the formal portion of the public hearing. A total of one hundred and ninety seven (197) written statements and four petitions were received during the 10 day public comment period which followed the public hearing.

The following is a summary of the comments received during the public hearing and the public comment period. Comments have been grouped by subject and are not direct quotes.

Comment 1: Individuals stated that the road should not be built, "don't need it, don't want it", opposed proposed SR 54 By Pass, did not support any of the alternatives proposed. (13 comments during hearing, 27 written comments)

Response 1: A traffic study was conducted to determine 2010 design year traffic conditions along existing SR 54A assuming that the proposed SR 54 would not be constructed. The results of this analysis determined that

segments of the existing SR 54A would have to be improved to a 4 to 8 lane expressway from Cypress Creek to Wesley Chapel Lakes Boulevard and 4 to 6 lane divided highway from Wesley Chapel Lakes to Zephryhills. Because of the magnitude of the required improvements to the existing SR 54A, it was determined that a new east/west highway would need to be constructed. The proposed SR 54 will provide an improved balance to the transportation systems network for southern Pasco County. The proposed new east/west roadway is consistent with the Traffic Circulation Element of the Pasco County Comprehensive Plan and the State Transportation Plan.

Comment 2: Opposed the construction of Alternative 1A to the close proximity of the Williamsburg development. Supported selection of either Alternative 1C or 1D. (19 comments during hearing, 26 written comments)

Response 2: The recommended alternative is Alternative 1D.

Comment 3: Individuals requested that the proposed roadway be moved away from the northern boundary of Williamsburg a reasonable distance (75 to 100 feet) north of the subdivision or select either Alternative 1C or 1D. (7 comments during hearing, 18 written comments)

Response 3: Alternative 1D, the preferred alternative, will move the proposed roadway to the north of the Williamsburg Subdivision by a distance of 400 feet from the closest residental property.

Comment 4: Residents of both the Williamsburg Subdivision and the Timber Lakes Estates Mobile Home Park expressed concern regarding potential noise impacts to their homes. (23 comments during hearing, 71 written comments)

Response 4: Potential noise impacts to residences of both Williamsburg Subdivision and Timber Lakes Estates Mobile Home Park were evaluated as part of the noise study conducted for the proposed project (see Section 4.3.3, Noise). A Noise Study Report dated September 1989, has been prepared which contains the detailed methodology and results of the noise impact study. This report was revised in February 1992 and included all platted properties in both the Williamsburg Subdivision and the Timber Lake

Estates Mobile Home Park. The noise analysis for the Preferred Build Alternative (Alignment 1D) indicates that both developments would have some residences with projected noise levels that approach or exceed the FHWA-Noise Abatement Criteria.

Noise abatement measures were evaluated for each of these residences. For those residences in Williamsburg Subdivision, the proposed alignment of the Preferred Build Alternative would minimize noise impacts. The edge of proposed pavement would be approximately 400 feet from the nearest residence. A vegetative barrier was the only abatement measure considered feasible. Development of vegetative barriers in the area between Williamsburg Subdivision and the proposed roadway will be further analyzed/considered during the final design phase of the project. In the vicinity of Timber Lakes Estates Mobile Home Park, structural barriers were found feasible. Construction of structural barriers along the proposed right-of-way line in the vicinity of this development will be further analyzed/considered during the final design phase of the project.

Comment 5: Residents of both the Williamsburg Subdivision and the Timber Lakes Estates Mobile Home Park expressed concern regarding potential air pollution due to the construction of the road and the future or proposed traffic, especially trucks when in operation. (22 comments during hearing, 64 written comments)

Response 5: Air quality impacts of the proposed project including the Preferred Build Alternative (Alignment 1D) were evaluated (see Section 4.3.2, Air). The results of this evaluation indicated the project would not significantly impact air quality. Pollutant emissions in the vicinity of Williamsburg Subdivision and Timber Lakes Estates Mobile Home Park would be below federal standards. Air quality impacts were minimized by the alignment of the proposed roadway. The edge of the proposed pavement would be approximately 400 feet from the nearest residence of Williamsburg and 94 feet from the nearest residence of Timber Lakes Estates Mobile Home Park. At these distances, carbon monoxide, the primary pollutant would be well dispersed and concentrations would be no higher than the background levels generally experienced in suburban areas which is approximately 2.0 parts per million (ppm) versus 1.0 ppm typically found in rural areas. These levels are well

below the 1-hour (35.0 ppm) and 8-hour (9.0 ppm) National Ambient Air Quality Standards for Carbon Monoxide.

Comment 6: Residents of both the Williamsburg Subdivision and the Timber Lakes Estates Mobile Home Park expressed concern regarding the potential increase in crime due to the proposed roadway being located adjacent to the respective homes. (10 comments during hearing, 30 written comments)

Response 6: No response required.

Comment 7: Residents of both the Williamsburg Subdivision and the Timber Lakes Estates Mobile Home Park expressed concern regarding the potential devaluing of their residential property because of the construction of a major roadway adjacent to their property. (14 comments during hearing, 47 written comments)

Response 7: No response required.

Comment 8: Individuals expressed concern regarding potential flooding in the residential areas due to the construction of the roadway. (10 comments during hearing, 19 written comments)

Response 8: A Location Hydraulic Report was prepared for the proposed project. The results of the study concluded that the proposed roadway will not involve any significant floodplain encroachment. The proposed rural typical section includes a ditch system which will be designed to accommodate all roadway runoff.

Comment 9: Individuals indicated that the aerials displayed at the public hearing were dated 1985 and that new aerials should have been used to evaluate the impacts to both Williamsburg and Timber Lakes Estates. (5 comments during hearing, 9 written comments)

Response 9: Aerials which were obtained from Pasco County in 1985 were used to display the feasible alternatives during the public hearing. However, development which occurred between 1985 and 1991 was identified and this data was used to update the analysis. The noise analysis was updated in

February 1992 and included all platted parcels in the existing developments. New 1991 aerials were provided by FDOT and were reviewed to determine any changes which would affect the proposed alternative. No changes were found which would cause a change from the recommended Alternative 1D.

Comment 10: A number of residents of both the Williamsburg Subdivision and Timber Lakes Estates Mobile Home Park stated that they did not receive written notification regarding the scheduled public hearing. Other individuals stated that all residents of the respective developments should have received notification. (12 comments during hearing, 15 written comments)

Response 10: In accordance with Chapter 339.155 of the Florida Statutes, property owners located within 300 feet left and right of the proposed centerline of construction are to be notified by letter. In addition, the public hearing is to be advertised in local newspapers with the greatest circulation in the project area. For the Timber Lake Estates Mobile Home Park, twenty-three residents were required to receive a property owner letter. All twenty-three residents were mailed a letter of notification of the public hearing. For the Williamsburg Subdivision, a total of 32 residents were to have received a property owners letter. A total of 20 were sent. Of the twelve (12) residents that did not receive a letter of notification, seven (7) attended the public hearing and five (5) gave public comment. A legal notice was placed in four local newspaper in the project area. They were: The Pasco County edition of the Tampa Tribune, The Pasco County edition of the St. Petersburg Times, The Zephryhills News, and the East Pasco County Shopper.

Comment 11: Individuals expressed concern regarding the amount of wetlands that would be impacted by the proposed alternatives. (4 comments during hearing, 15 written comments)

Response 11: The avoidance and minimization of wetland impacts were considered in the development of the project alternatives. The environmental staffs of federal, state, and regional permitting agencies (see Section 5.2.2, Coordination with Regulatory Agencies) were consulted in the development of the alignments. Complete avoidance of wetlands is not possible due to the abundance and configuration of wetlands and the required engineering design standards. Of the alignments considered, the Preferred Build Alternative

(Alignment 1D), would have the fewest acres of wetland impacts. Approximately 56 acres of wetlands at 42 sites will be impacted by this alternative. The wetland impacts will be mitigated by the creation or enhancement of wetlands. The purpose of the mitigation is to replace the function and values of the wetland being impacted. Mitigation ratios will be determined during the final design phase of the project through the permitting process. Based on preliminary coordination with the regulatory agencies the mitigation ratios would probably be 2:1 and 1:1 for forested wetland impacts and herbaceous wetland impacts, respectively.

Comment 12: Residents of Timber Lake Estates Mobile Home Park objected to the proposed roadway being too close to their park and did not support any of the alternatives being proposed. Requested that the proposed roadway be moved further south of the park (1 comment during hearing, 23 written comments).

Response 12: The northern right-of-way line for the recommended Alternative 1D will be located approximately fifty (50) feet from the southern property line of the mobile home park. Alternative 1D does not require right-of-way acquisition or result in the relocation of property owners from the park.

Comment 13: Residents of Timber Lake Estates Mobile Home Park expressed concern regarding the potential increase of traffic congestion on Morris Bridge Road (CR 579) after the construction of the proposed roadway (22 written comments).

Response 13: Morris Bridge Road (CR 579) provides a connection between the existing SR 54 and I-75 to the south and to major business and commercial developments location in the Tampa Palms area and north Tampa, a distance of approximately ten (10) miles. Traffic will increase along Morris Bridge Road regardless if the proposed roadway is constructed due to the connection the roadway provides between existing residential development, the business and commercial development, and the growth projected from these areas. Because of future business, commercial and residential development in the area, Morris Bridge Road will need to be improved to provide acceptable Level of Service for the projected traffic.

Comment 14: Residents of Timber Lake Estates Mobile Home Park expressed concern regarding the safety of school children at the bus stop due to the increase in traffic along Morris Bridge Road following the construction of the proposed roadway (6 written comments).

Response 14: Full consideration will be given to the safety of school children at the bus stop located at the Timber Lake Estates Mobile Home Park during the final design of the project. Design of this segment of the roadway is not programmed in the approved FDOT five year work program at this time.

Comment 15: Relocating SR 54 to the south of the existing roadway will hurt businesses on existing SR 54. (3 written comments)

Response 15: It is anticipated that the relocation of SR 54 to the south will not significantly impact businesses that are on existing SR 54. Without the proposed improvement, traffic congestion will increase on existing SR 54 making the existing businesses less accessible. With the proposed improvement, motorist will be able to better access these businesses because through traffic will be taken off existing SR 54.

Comment 16: Individuals expressed concern to the wildlife and their habitat due to the proposed roadway. (3 during public hearing, 9 written comments)

Response 16: Minimizing impacts to wildlife and their habitat was considered in the development of the project alternatives (see Section 4.3.10, Threatened and Endangered Species). To minimize impacts, the proposed alignments were located within previously disturbed areas and away from those areas with higher wildlife values. At least 78.5 percent of the Preferred Build Alternative (Alignment 1D) consists of previously disturbed land currently in use as pasture or range land. The results of the analysis indicated that no significant impacts to endangered, threatened, or species of special concern are anticipated from the proposed roadway. Appropriate coordination with FGFWFC and FWS will be maintained during the design and construction phases of the project to ensure that disturbance of listed species is minimized or avoided.

Comment 17: Residents of the Timber Lakes Estates Mobile Home Park expressed concern regarding the operation of their sewage treatment plant if the proposed roadway is constructed (9 written comments).

Response 17: The sewage treatment plant for the Timber Lake Estates Mobile Home Park is located approximately 100 feet from the right-of-way line of the proposed roadway. The proposed roadway will not require any modification to the existing sewage treatment plant and will have no affect on its operation.

Comment 18: A number of individuals suggested that existing SR 54 be widened or improved to accommodated the projected traffic (13 comments during hearing, 68 written comments).

Response 18: A traffic study based upon Pasco County Metropolitan Planning Organizations approved socio-economic data was conducted to determine the 2010 projected traffic volumes on the existing SR 54 without the recommended relocation of SR 54 to the south (No Build Alternative). This study determined that the existing SR 54 would have to be improved to a 4 to 8 lane expressway from Cypress Creek to Wesley Chapel Lakes Boulevard to accommodate projected traffic volumes. The Florida Department of Transportation's policy regarding capacity improvements to an existing arterial highway is limited to six lanes. If the existing SR 54 were improved to a four or six lane divided highway, a second east/west facility in southern Pasco County would need to be constructed to accommodate the remaining traffic volumes. This is based upon the traffic projections determined during the study.

Comment 19: A number of individuals suggested that County Line Road intersection with I-75 be improved to include an interchange connection and that County Line Road be extended east to U.S. 301. (10 comments during hearing, 29 written comments)

Response 19: County Line Road was eliminated from further consideration as a viable corridor following the completion of the Tampa Interstate Study. This study evaluated the feasibility of adding an additional interchange at the apex of I-75 and I-275. The feasibility of

adding directional ramps at County Line Road was evaluated. The operation of the proposed improved interchange at County Line Road was compared to the feasibility of adding a new interchange between the apex of I-75 and I-275 and the existing SR 54 interchange. An Interchange Justification Report (IJR) was prepared which determined that a new interchange location would provide better capacity to the surrounding systems network. The IJR recommended that a new interchange be constructed to the north of County Line Road. With this recommendation, alternative alignments were evaluated to connect the new interchange location to U.S. 301 and provide a new east-west roadway in south Pasco County. The circuitous route from I-75 down to County Line road and back to Zephyrhills would add an additional three miles to the proposed project resulting in substantial additional construction costs. In addition, the corridor chosen would have similar wetland impacts to Alternative 2. This alternative was eliminated during the initial alternative design analysis due to wetland impacts. Wetland impacts for Alternative 2 were greater than Alternatives 1A, 1C and 1D.

Comment 20: Use the public service property located along the existing power line located north of the Williamsburg Subdivision. (1 written comment)

Response 20: The existing power line is located approximately 2.5 miles north of the WIlliamsburg Subdivision and approximately 1 mile south of the existing SR54. Based upon the proposed development planned for south Pasco County, the location of the proposed improvement along the power line would not adequately service the projected traffic patterns for the area.

Comment 21: A number of individuals expressed concern regarding the impact the proposed roadway would have on their quality of life and the risk of potential health problems. The roadway would affect the country living, peace and quiet (6 comments during hearing, 27 written comments).

Response 21: No response required.

Comment 22: Use money for other projects. (2 written comments)

Response 22: No response required.

Comment 23: A resident of the Tippecanoe Mobile Home Park objected to the roadway being constructed against the southern boundary of the park. (1 written comment)

Response 23: The Tippecanoe Mobile Home Park is located approximately 1/2 miles north of the proposed alignment for SR 54. None of the alternatives will impact the mobile home park.

Comment 24: One individual expressed support for the proposed roadway. (1 written comment)

Response 24: No response required.

Comment 25: Residents of the Timber Lake Estates Mobile Home Park expressed concern about the possibility of having to connect to city water and sewer after the roadway is constructed. (3 written comments)

Response 25: No response required.

Comment 26: Several individuals recommended that the alignment from I-75 to CR 581 be moved north and go straight across the Saddlebrook development. This would move the roadway approximately 1 mile north of Williamsburg Subdivision. (4 comments during hearing, 5 written comments)

Response 26: The Saddlebrook development is an approved Development of Regional Impact (DRI). Moving the proposed roadway approximately 1 mile north of the Williamsburg Subdivision would impact the proposed development. A preliminary evaluation of the potential impacts to the DRI was completed. This evaluation determined that major modifications would have to be made to the approved DRI. The realignment through the DRI would eliminate a hotel, four fairways of the golf course and two areas planned for low density homes. This would result in a substantial increase in the right-of-way cost for this segment of the roadway. The realignment would also impact a major high quality wetland system located within the DRI. Moving the proposed roadway approximately 1 mile north of the Williamsburg Subdivision would impact a large, high-quality circular wetland. This circular wetland is an herbaceous wetland containing soft rush (Juncus effuscus), an obligate wetland species.

It is surrounded by a forested fringe of red maples, sweet bay, and turkey oaks, all wetland facultative species. This wetland appears to be a functional wetland and would be severly impacted by roadway construction.

Comment 27: Four individuals supported the No Build Alternative. (2 comments during hearing, 2 written comments)

Response 27: No response required.

Comment 28: Use Alternative 1C or 1D to miss the Williamsburg Subdivision. (1 comment during hearing, 2 written comments)

Response 28: The preferred alternative is Alternative 1D and will move the proposed roadway to the north of the Williamsburg Subdivision approximately 400 feet at the closet point.

Comment 29: If Alternative 1A is constructed, build a berm or retaining wall to stop traffic noise. (1 comment during hearing, 2 written comments)

Response 29: See Response 4.

Comment 30: The construction of the proposed roadway will result in commercial development in the areas immediately adjacent to the residential area. (1 written comment)

Response 30: The type of future land use adjacent to the proposed roadway is controlled by Pasco County.

Comment 31: Questioned the selection of the connection to I-75 at the proposed location. (1 written comment)

Response 31: The selection of the proposed new interchange with I-75 was the subject of both the Tampa Interstate Study and an Interchange Justification Report. Both reports concluded that a new interchange was needed between the apex of I-75 and I-275 and the existing SR 54 interchange. Site selection was based upon the I-75 and I-275 apex, the existing SR 54/I-75

interchange, the new rest areas along I-75 south of the existing SR 54 interchange and wetland constraints. Based upon these constraints, the proposed location was recommended and approved in the Interchange Justification Report (See response 19).

Comment 32: Safety for the area will deteriorate due to the construction of the roadway. (1 written comment)

Response 32: No response required.

Comment 33: Mr. Randy S. Charlot representing the concerned residents of Williamsburg Subdivision provided a letter dated June 13, 1992 which presented the following comments:

Comment 33-1: Air Pollution Impact - "concern of air pollution emanating from traffic along proposed alignment 1A" to Williamsburg residents.

Response 33-1: See Repsonse 5.

Comment 33-2: Noise Impact - "proposed Alignment 1A designed to have 33,000 cars per day would cause excessive noise to the residents of Williamsburg".

Response 33-2: See response 4

Comment 33-3: Declining Property Values - "Property values to many Williamsburg residents will fall dramatically if the proposed alternative Alignment 1A is built".

Response 33-3: Alternative 1D is the recommended alternative.

Comment 33-4: Environmental Impact - Flood Risk - "Three major wetlands bordering Williamsburg's north edge would be impacted by the proposed alignment Alternative 1A; wetland sites #12, #13, & #14. These wetlands are effective in providing floodwater attenuation to the

residents of Williamsburg." Loss of Wetland Social Value - "Residents with homes along the north edge of Williamsburg, including myself, use these wetlands (#12, #13, & #14) for our personal enjoyment". Water Quality - "They failed to identify and consider the public water well that supplies drinking water for Williamsburg and the other planned developments in the area. This well is located less than 900 yards south of the proposed alignment 1A".

Response 33-4: Flood Risk - See response 8.
Loss of Wetland Social Value - See response 16.
Water Quality - Section 4.3.5 Water Quality - The proposed SR 54 is not expected to have any significant impacts on ground water, recharge areas, on public water supplies. This will be affected by adherance to Chapter 17-3 and 17-25, FAC and Section 104 of FDOT's "Standard Specifications for Road and Bridge Construction".

Comment 33-5: Errors in the DOT Environmental Assessment Report - Wet II analysis: "All of the above example show that wetland along alignment 1A, bordering Williamsburg, were omitted in favor of wetlands north of Williamsburg along alternative 1C that shoud not have been included". See Appendix I of the Environmental Assessment Document for Mr. Charlot's letter for specific comments.

Response 33-5: See Appendix I for FDOT's response to Mr. Charlot's comments regarding the Wet II Analysis. Recommended revisions to the "Finding of No Significant Impact" (FONSI) will be made.

Comment 33-6: Traffic Studies - "The average annual daily traffic volumes for 1990, 2000, and 2010 have been grossly inflated and over exaggerated". "Highway laneage

requirements have also been exaggerated to encourage support for a new SR 54."

Response: 33-6: See response 18.

Comment 33-7: Notification - "advance notification were not sent to the affected property owners in Williamsburg".

Response 33-7: See Response 10.

Comment 33-8: Miscellaneous -

A. Aerial Photos - "used 7 year old aerial photos"

B. "Existing Land Use" map has the proposed alignments 1A, 1C, 1D more than 1 mile west of where they should be".

C. "The DOT report fails to acknowledge and consider the fact that there are current plans to widen SR 54 to four lanes".

D. "The DOT also does not address the effect that a new SR 54 would have on all of the businesses located along the current SR 54.

E. Comparison of Alignment Alternative 1A & 1C (see letter for specific comment in Appendix I of the Environmental Assessment Document).

Response 33-8A: See Response 9.

Response 33-8B: Figure 4-2 (1 of 2), Existing Land Use, has been corrected.

Response 33-8C: The traffic study acknowledges that improvements will need to be made to the existing SR 54.

Response 33-8D: See Response 15.

Response 33-8E: The recommended alternative 1D has the least environmental impacts.

Commment 34: Mr. Thomas H. Dyer, representing Two Rivers Ranch, Inc. provided a letter dated June 11, 1992. The letter expressed concerns regarding impacts to the

Hickory Hills Land Company property located between CR 579 (Morris Bridge Road) and US 301. See Appendix I of the Environmental Assessment Document for specific comments.

Response 34: A response was prepared and is contained in Appendix I of the Environmental Assessment Document.

A total of four petitions were submitted following the public hearing. They were submitted by the following groups:

Petition 1: We, The citizens of Williamsburg, Wesley Chapel, Florida, oppose the proposed realignment of State Route 54 along the northern boundary of our community. This road construction (with east-west traffic running only 64 feet behind properties) would directly affect every person and property in Williamsburg, creating and causing noise and air pollution, higher crime rates, and loss of home values. (226 signatures)

Petition 2: We, The citizens of Timber Lake Estates, Zephyrhills, Florida, oppose the proposed realignment of State Route 54 along the southern boundary of our community. This road construction would directly affect every person and property in Timber Lake Estates, creating and causing noise and air pollution, higher crime rates, and loss of home values. (197 signatures)

Petition 3: We, The citizens of Tippecanoe Village, Zephyrhills, Florida, oppose the proposed realignment of State Route 54 along the southern boundary of our community. This road construction would directly affect every person and property in Tippecanoe Village, creating and causing noise and air pollution, higher crime rates, and loss of home values. (86 signatures)

Petition 4: As an owner or manager of a business along State Road 54, I oppose the proposed construction of a new SR 54 along any of the proposed alignments located 3 to 4 1\2 miles south of the existing SR 54. Our business location along SR 54 provides high exposure and easy access to many of our present and future patrons. We feel FDOT money is better spent on improvements to the current SR 54. (46 signatures)

7.6 ADDITIONAL COORDINATION

7.6.1 Pasco County/West Pasco Metropolitan Planning Organization (M.P.O.)

Representatives of FDOT and the consultant attended the May 14, 1992 M.P.O. meeting. The purpose of the meeting was to inform the M.P.O. about the June 4, 1992 public hearing and give a brief overview of the information to be presented at the public hearing.

7.6.2 Timber Lake Estates Mobile Home Park

Representatives from Pasco County and the consultant met with residents of the Timber Lake Estates Mobile Home Park on June 9, 1992 at the community center to discuss the proposed project. Approximately 150 people attended the meeting. Mr. Robert Steinle of Pasco County and the Consultant answered questions residents had regarding impacts to their development. Residents were concerned about noise, air quality, pollution, increased crime rates, traffic congestion, impact to existing sewage treatment plant and potential devaluing of residential property.

7.6.3 Two Rivers Ranch

Representatives from FDOT and the consultant met with Mr. Robert Thomas, owner of the Hickory Hills Land Company, and Mr. Tom Dyer, Two Rivers Ranch representative, to discuss the proposed project on July 7, 1992. Mr. Dyer expressed concerns regarding potential impacts to the operation of the ranch and the amount of property proposed for acquisition by a variety of public agencies. Mr. Thomas also expressed the same concerns. Two Rivers Ranch is a 14,000 acre conservation district which operates a low impact ranch. The elimination of approximately 3 miles of property concerned the owners. FDOT indicated that a proposed alignment of SR 54 located approximately 1/2 mile south of Alternative 1D had been eliminated from further consideration due to early coordination with Mr. Thomas on August 31, 1988. The alignment was moved to the northern property line to reduce impacts to the ranch.

7.6.4 Pasco County Board of County Commissioners Public Hearing

The Pasco County Board of County Commissioners conducted a public hearing on July 14, 1992 to obtain comments from the public regarding the proposed project. Residents primarily from Williamsburg Subdivision and Timber Lake Estates Mobile Home Park expressed the same concerns

which were made during the June 4, 1992 Public Hearing and the meeting with the residents of the Timber Lake Estates Mobile Home Park. The Board took no action.

7.6.5 Informal Meeting with Residents of Williamsburg Subdivision

It became apparent following the June 4, 1992 Public Hearing that eleven property owners within the Williamsburg Subdivision did not receive a property owners letter notifying the owners of the Public Hearing. A review of the transcript of the public hearing and the petitions submitted following the hearing indicated that all eleven residents either participated in the hearing or signed a petition. It was decided that those residents should be afforded an opportunity to attend a meeting with FDOT to allow them to express their concerns regarding the proposed improvement.

An informal meeting was held on September 15, 1992 to afford these residents an opportunity to review the materials which were displayed during the June 4, 1992 Public Hearing. A registered letter was sent to each of the eleven residents extending an invitation to attend a September 15, 1992 meeting between 4:30 p.m. and 5:30 p.m. in the main conference room of Reynolds, Smith and Hills, Inc., at 1715 North Westshore Boulevard, Suite 500, Tampa, Florida.

Of the eleven residents who received notification regarding the meeting, only Mr. Randy Charlot of 28703 Tanner Drive attended the meeting. Mr. Charlot indicated that he had been selected as the spokes person for the eleven residents. Mr. Charlot reiterated his concerns regarding the proposed project that he had expressed in his June 13, 1992 letter (see Comments 33-1 through 33-7). FDOT representatives present responded to his concerns. Mr. Charlot did inquire about the possibility of Tampa Bay Drive being extended to the north to connect with SR54. FDOT indicated that it is a possibility and is dependent upon the type of land development to be allowed north of Williamsburg. The extension of Tampa Bay Drive could be done by Pasco County. However it is not proposed as part of the SR 54 project. The property adjacent to Williamsburg is currently zoned agricultural. Each resident was

notificed that a comment period would remain open until September 25, 1992 to allow the residents to submit written comments to FDOT. No additional comments were received.

8.0 COMMITMENTS AND RECOMMENDATIONS

The construction of SR 54 on new alignment has been developed in accordance with current federal and state policies and procedures governing the development of transportation facilities. This process produced a considerable amount of technical data concerning the traffic service, engineering, social, and environmental consequences of the alternatives considered. Through a program of public and agency involvement, additional input was obtained. After careful evaluation of all these inputs, the following commitments and recommendations are made concerning the location and conceptual design of the construction of SR 54 on new alignment.

8.1 COMMITMENTS

The following commitments have been included in the SR 54 improvement proposal in order to minimize impacts and to mitigate those impacts that are unavoidable.

8.1.1 Land Use

The Wiregrass Ranch is a privately owned and operated cattle ranch and a single family residence. The property outside the residential area is used as open grazing land for cattle. Within the study limits, there are no feed lots or structures on the property. Impacts to the Wiregrass Ranch would be limited to restricted access to property bisected by the proposed improvements. The property owner will be contacted to determine if cattle crossings should be provided.

8.1.2 Noise

Since noise abatement measures were found feasible, FDOT and Pasco County will consider the construction of feasible noise abatement measures at the noise-impacted locations identified in the analysis contingent upon the following conditions.

* Detailed noise analyses during the final design process;
* Cost-effectiveness analysis based on final design;
* Community input regarding types and locations;

* Preferences regarding compatibility with adjacent land uses, particularly as addressed by officials having jurisdiction over such land uses; and
* Safety and engineering aspects as related to the roadway user and the adjacent property owner.

In accordance with Federal Aid Highway Program Manual, Volume 7, Chapter 7, Section 3 (FHPM 7-7-3), Procedures for Abatement of Highway Traffic Noise, copies of the noise study will be sent to Pasco County Department of Planning and local officials.

8.1.3 Wetlands

Although wetlands of the project corridor vary with respect to quality and agency jurisdiction, it is expected that the majority will be subject to mitigation requirements at the permitting stage. Collective policy and regulations at the federal, state and regional level warrant preliminary mitigation ratios of 2:1 and 1:1 for forested wetland impacts and herbaceous wetland impacts, respectively. These ratios are subject to change based upon individual aspects of each wetland. Where possible, required wetland creation will be incorporated into stormwater facilities or into areas of required storage compensation for floodplain impacts.

8.1.4 Water Quality

The Department is developing a stormwater treatment system for the project in accordance with Chapter 17-25, Florida Administrative Code (FAC), the Department will continue the coordination effort during subsequent project development stages to ensure compliance with Chapter 17-25, FAC.

8.1.5 Floodplains

WSPRO (H4-7) will be used during design to estimate the water surface elevations and all cross drains will include an evaluation of the one foot backwater structure.

8.1.6 Threatened and Endangered Species

The impacts to the gopher tortoise populations are unavoidable, since the occurrence of wetlands adjacent to colony sites precludes any shifting of alignments. However, these impacts are not considered substantial for any site or for the total project. Gopher tortoise are common in upland areas of the region and the loss of gopher tortoise habitat due to the project would be insignificant on a regional scale. Coordination with the FGFWFC will continue throughout final design stages of the project. Relocation of any affected tortoises may be recommended. This relocation should take place immediately prior to the clearing of areas for roadway construction.

The eastern indigo snake may occur in wetlands and upland habitats along the project corridor, although the prevalence of open rangeland and residential areas within the region probably restricts utilization of habitat by this species. To minimize impacts to individual indigo snakes during construction, a special provision will be included in the contract to advise the contractor of the potential presence of this specie and its protected status. If an indigo snake is sighted during construction, the contractor will be required to cease any operation(s) which might cause harm to the snake. If the snake does not move away from construction area, FGFWFC will be contacted to capture and relocate it to other suitable habitat.

Appropriate coordination with FGFWFC and FWS will be maintained throughout final design and construction phases to ensure that disturbance of listed species minimized or avoided.

8.1.7 Construction

Maintenance of traffic and sequence of construction will be planned and scheduled so as to minimize traffic delays throughout the project. Since SR 54 will be constructed as a new facility, maintenance of traffic will only be significant at major connecting roadways along this facility.

Signs will be used as appropriate to provide notice of road closures and other pertinent information to the traveling public. The local news media will be notified in advance of road closings and other construction-related activities which could excessively inconvenience the community so that motorists, residents, and business persons can plan travel routes in advance.

A sign providing the name, address, and telephone of a FDOT contact person will be displayed onsite to assist the public in obtaining immediate answers to questions and logging complaints about project activity.

8.2 RECOMMENDATIONS

The proposed construction of SR 54 on new alignment is from Cypress Creek to the Zephryhills East Bypass, a distance of approximately 14 miles. A traffic analysis was conducted along the existing SR 54A to determine 2010 conditions. The results of the analysis indicated that most segments along SR 54A would need to be improved to a 4- to 8- lane freeway from Cypress Creek to Wesley Chapel Lakes Boulevard and 4 to 6 lane divided highway from Wesley Chapel Lakes Boulevard to Zephyrhills if the new SR 54 extension was not constructed. Since the required improvement of converting existing SR 54A to an expressway facility would not be feasible, in terms of monetary and engineering standards, a second east/west roadway was evaluated. Several viable alternative alignments were identified and evaluated for the construction of the new transportation facility in south Pasco County. The identification of alternative alignments was based on criteria set forth in Section 3.0 of this report as well as coordination with affected property owners and the general public.

The recommended alternative to provide the needed capacity is Alternative 1D. This alternative recommends the ultimate construction of a six lane rural divided highway in 250 feet of right-of-way, the construction of a new interchange at the intersection of SR 54 and I-75 and the widening of US 301 to a four lane divided rural highway from the intersection of the new SR 54 to the Zephryhills East Bypass, a distance of approximately 1.00 mile.

APPENDICES

APPENDIX A

INTERSECTION ANALYSIS
COMPUTER PRINTOUTS

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IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET..... 40

PEAK HOUR FACTOR..... 1

AREA POPULATION..... 150000

NAME OF THE EAST/WEST STREET..... SR 54A

NAME OF THE NORTH/SOUTH STREET..... I-75 WEST RAMP

NAME OF THE ANALYST..... RA

DATE OF THE ANALYSIS (mm/dd/yy)..... 8/16/88

TIME PERIOD ANALYZED..... 1988 PM PEAK

OTHER INFORMATION:

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: 4-LEG

MAJOR STREET DIRECTION: EAST/WEST

CONTROL TYPE NORTHBOUND: STOP SIGN

CONTROL TYPE SOUTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	0	145	0	35
THRU	376	650	0	0
RIGHT	0	0	0	0

NUMBER OF LANES AND LANE USAGE

	EB	WB	NB	SB
LANES	1	2	0	1
LANE USAGE				LR

ADJUSTMENT FACTORS

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	0.00	90	20	N

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	7	0	0
WESTBOUND	7	0	0
NORTHBOUND	7	0	0
SOUTHBOUND	7	0	0

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS				
NB	5.90	5.90	0.00	5.90
SB	5.90	5.90	0.00	5.90
MAJOR LEFTS				
WB	5.20	5.20	0.00	5.20
EB	5.20	5.20	0.00	5.20
MINOR THROUGHS				
NB	6.60	6.60	0.00	6.60
SB	7.10	7.10	0.00	7.10
MINOR LEFTS				
NB	7.10	7.10	0.00	7.10
SB	7.60	7.60	0.00	7.60

MOVEMENT	FLOW-RATE v(pcph)	POTENTIAL CAPACITY c_p (pcph)	ACTUAL MOVEMENT CAPACITY c_M (pcph)		SHARED CAPACITY c_{SH} (pcph)		RESERVE CAPACITY $c_R = c_{SH} - v$		LOS
MINOR STREET									
NB LEFT	0	147	127		127		127		D
THROUGH	0	179	154	>	154	>	154	>	D
RIGHT	0	642	642	> 0	642	> 0	642	>	A
MINOR STREET									
SB LEFT	39	122	105	>	105	>	66	>	E
THROUGH	0	147	127	> 105	127	> 66	127	>E	D
RIGHT	0	688	688	>	688	>	688	>	A
MAJOR STREET									
EB LEFT	0	598	598		598		598		A
WB LEFT	160	818	818		818		658		A

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

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INTERSECTION..SR 54A/I-75 WEST RAMP
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........1988 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY					
	EB	WB	NB	SB		EB		WB	NB		SB
LT	0	145	0	35	T	12.0	L	12.0	12.0	L	12.0
TH	376	650	0	0		12.0	T	12.0	12.0		12.0
RT	0	0	0	0		12.0		12.0	12.0		12.0
RR	0	0	0	0		12.0		12.0	12.0		12.0
						12.0		12.0	12.0		12.0
						12.0		12.0	12.0		12.0

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.90	0	N	8.3	3
WB	0.00	7.00	N	0	0	0.90	0	N	8.3	3
NB	0.00	7.00	N	0	0	0.90	0	N	16.8	3
SB	0.00	7.00	N	0	0	0.90	0	N	16.8	3

SIGNAL SETTINGS — CYCLE LENGTH = 60.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT					NB	LT				
	TH		X				TH				
	RT						RT				
	PD						PD				
WB	LT	X	X			SB	LT	X			
	TH	X	X				TH				
	RT						RT				
	PD						PD				
GREEN		10.0	25.0	0.0	0.0	GREEN		13.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	T	0.555	0.433	8.8	B	8.8	B
WB	L	0.026	0.667	2.6	A	4.0	A
	T	0.624	0.667	4.3	A		
SB	L	0.101	0.233	13.7	B	13.7	B

INTERSECTION: Delay = 5.8 (sec/veh) V/C = 0.488 LOS = B

****

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET..... 40

PEAK HOUR FACTOR..... 1

AREA POPULATION..... 150000

NAME OF THE EAST/WEST STREET..... SR 54A

NAME OF THE NORTH/SOUTH STREET..... I-75 EAST RAMP

NAME OF THE ANALYST..... RA

DATE OF THE ANALYSIS (mm/dd/yy)..... 8/16/88

TIME PERIOD ANALYZED..... 1988 PM PEAK

OTHER INFORMATION:

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: 4-LEG

MAJOR STREET DIRECTION: EAST/WEST

CONTROL TYPE NORTHBOUND: STOP SIGN

CONTROL TYPE SOUTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	73	0	204	0
THRU	338	591	0	0
RIGHT	0	0	0	0

NUMBER OF LANES AND LANE USAGE

	EB	WB	NB	SB
LANES	2	1	1	1
LANE USAGE			LTR	LTR

ADJUSTMENT FACTORS

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	0.00	90	20	N

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	7	0	0
WESTBOUND	7	0	0
NORTHBOUND	7	0	0
SOUTHBOUND	7	0	0

CRITICAL GAPS

		TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS					
	NB	5.90	5.90	0.00	5.90
	SB	5.90	5.90	0.00	5.90
MAJOR LEFTS					
	WB	5.70	5.70	0.00	5.70
	EB	5.70	5.70	0.00	5.70
MINOR THROUGHS					
	NB	7.10	7.10	0.00	7.10
	SB	6.60	6.60	0.00	6.60
MINOR LEFTS					
	NB	7.60	7.60	0.00	7.60
	SB	7.10	7.10	0.00	7.10

MOVEMENT	FLOW-RATE v(pcph)	POTEN-TIAL CAPACITY c_p (pcph)	ACTUAL MOVEMENT CAPACITY c_M (pcph)		SHARED CAPACITY c_{SH} (pcph)		RESERVE CAPACITY $c_R = c_{SH} - v$		LOS
MINOR STREET									
NB LEFT	211	160	146	>	146	>	-66	>	F
THROUGH	0	190	173	>	146	>	-66	>F	D
RIGHT	0	826	826	>	826	>	826	>	A
MINOR STREET									
SB LEFT	0	190	173	>	173	>	173	>	D
THROUGH	0	229	209	>	0 209	>	0 209	>	C
RIGHT	0	486	486	>	486	>	486	>	A
MAJOR STREET									
EB LEFT	76	562	562		562		486		A
WB LEFT	0	756	756		756		756		A

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/I-75 EAST RAMP
AREA TYPE.....OTHER
ANALYST.....RA
DATE.....8/16/88
TIME.....1988 PM PEAK
COMMENT.....

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	73	0	204	0	L	12.0	T	12.0	L	12.0	L	12.0	
TH	338	591	0	0	T	12.0		12.0		12.0		12.0	
RT	0	0	0	0		12.0		12.0		12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.90	0	N	5.5	3
WB	0.00	7.00	N	0	0	0.90	0	N	5.5	3
NB	0.00	7.00	N	0	0	0.90	0	N	11.5	3
SB	0.00	7.00	N	0	0	0.90	0	N	11.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 60.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X	X			NB	LT	X			
	TH	X	X				TH				
	RT						RT				
	PD						PD				
WB	LT					SB	LT				
	TH		X				TH				
	RT						RT				
	PD						PD				
GREEN		8.0	24.0	0.0	0.0	GREEN		16.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.030	0.617	3.4	A	3.7	A
	T	0.351	0.617	3.7	A		
WB	T	0.907	0.417	19.9	C	19.9	C
NB	L	0.485	0.283	14.2	B	14.2	B

INTERSECTION: Delay = 13.4 (sec/veh) V/C = 0.579 LOS = B

****

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET..... 40

PEAK HOUR FACTOR..... 1

AREA POPULATION..... 150000

NAME OF THE EAST/WEST STREET..... SR 54A

NAME OF THE NORTH/SOUTH STREET..... CR 581

NAME OF THE ANALYST..... RA

DATE OF THE ANALYSIS (mm/dd/yy)..... 8/16/88

TIME PERIOD ANALYZED..... 1988 PM PEAK

OTHER INFORMATION:

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION

MAJOR STREET DIRECTION: EAST/WEST

CONTROL TYPE NORTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	0	104	109	--
THRU	477	417	0	--
RIGHT	36	0	189	--

NUMBER OF LANES

	EB	WB	NB	SB
LANES	2	2	2	--

ADJUSTMENT FACTORS

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	-----	---	---	-

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	7	0	0
WESTBOUND	7	0	0
NORTHBOUND	7	0	0
SOUTHBOUND	---	---	---

CRITICAL GAPS

		TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS	NB	5.90	5.90	0.00	5.90
MAJOR LEFTS	WB	5.70	5.70	0.00	5.70
MINOR LEFTS	NB	7.60	7.60	0.00	7.60

CAPACITY AND LEVEL-OF-SERVICE Page-3

MOVEMENT	FLOW-RATE v(pcph)	POTENTIAL CAPACITY c_p (pcph)	ACTUAL MOVEMENT CAPACITY c_M (pcph)	SHARED CAPACITY c_{SH} (pcph)	RESERVE CAPACITY $c_R = c_{SH} - v$	LOS
MINOR STREET						
NB LEFT	113	156	138	138	25	E
RIGHT	196	747	747	747	551	A
MAJOR STREET						
WB LEFT	108	618	618	618	510	A

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/CR 581
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........1988 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	0	104	109	0	T	12.0	L	12.0	L	12.0	L	12.0	
TH	477	417	0	0	R	12.0	T	12.0	R	12.0		12.0	
RT	36	0	189	0		12.0		12.0		12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.90	0	N	5.5	3
WB	0.00	7.00	N	0	0	0.90	0	N	5.5	3
NB	0.00	7.00	N	0	0	0.90	0	N	11.5	3
SB	0.00	7.00	N	0	0	0.90	0	N	11.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 60.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT					NB	LT	X			
	TH	X					TH				
	RT	X					RT	X			
	PD						PD				
WB	LT	X				SB	LT				
	TH	X					TH				
	RT						RT				
	PD						PD				
GREEN		32.0	0.0	0.0	0.0	GREEN		20.0	0.0	0.0	0.0
YELLOW		4.0	0.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	T	0.555	0.550	6.1	B	6.0	B
	R	0.049	0.550	4.0	A		
WB	L	0.297	0.550	5.6	B	5.6	B
	T	0.485	0.550	5.6	B		
NB	L	0.210	0.350	10.4	B	10.0	B
	R	0.406	0.350	9.8	B		

INTERSECTION: Delay = 6.7 (sec/veh) V/C = 0.497 LOS = B

****

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET..... 40

PEAK HOUR FACTOR..... 1

AREA POPULATION..... 150000

NAME OF THE EAST/WEST STREET..... SR 54A

NAME OF THE NORTH/SOUTH STREET..... CR 577

NAME OF THE ANALYST..... RA

DATE OF THE ANALYSIS (mm/dd/yy)..... 8/16/88

TIME PERIOD ANALYZED..... 1988 PM PEAK

OTHER INFORMATION:

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION

MAJOR STREET DIRECTION: EAST/WEST

CONTROL TYPE SOUTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	124	104	--	17
THRU	404	332	--	0
RIGHT	36	24	--	94

NUMBER OF LANES

	EB	WB	NB	SB
LANES	1	1	--	1

ADJUSTMENT FACTORS

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	-----	---	---	-
SOUTHBOUND	0.00	90	20	N

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	7	0	0
WESTBOUND	7	0	0
NORTHBOUND	---	---	---
SOUTHBOUND	7	0	0

CRITICAL GAPS

		TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS	SB	5.90	5.90	0.00	5.90
MAJOR LEFTS	EB	5.20	5.20	0.00	5.20
MINOR LEFTS	SB	7.10	7.10	0.00	7.10

MOVEMENT	FLOW-RATE v(pcph)	POTENTIAL CAPACITY c_p (pcph)	ACTUAL MOVEMENT CAPACITY c_M (pcph)	SHARED CAPACITY c_{SH} (pcph)	RESERVE CAPACITY $c_R = c_{SH} - v$	LOS
MINOR STREET						
SB LEFT	18	238	214	214	196	D
				505	390	B
RIGHT	97	670	670	670	573	A
MAJOR STREET						
EB LEFT	128	837	837	837	708	A

****

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET..... 40

PEAK HOUR FACTOR..... 1

AREA POPULATION..... 150000

NAME OF THE EAST/WEST STREET..... SR 54A

NAME OF THE NORTH/SOUTH STREET..... CR 579

NAME OF THE ANALYST..... RA

DATE OF THE ANALYSIS (mm/dd/yy)..... 8/16/88

TIME PERIOD ANALYZED..... 1988 PM PEAK

OTHER INFORMATION:

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: 4-LEG

MAJOR STREET DIRECTION: EAST/WEST

CONTROL TYPE NORTHBOUND: STOP SIGN

CONTROL TYPE SOUTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	3	112	43	3
THRU	307	354	6	5
RIGHT	68	8	97	1

NUMBER OF LANES AND LANE USAGE

	EB	WB	NB	SB
LANES	1	1	1	1
LANE USAGE			LTR	LTR

ADJUSTMENT FACTORS

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	0.00	90	20	N

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	7	0	0
WESTBOUND	7	0	0
NORTHBOUND	7	0	0
SOUTHBOUND	7	0	0

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS				
NB	5.90	5.90	0.00	5.90
SB	5.90	5.90	0.00	5.90
MAJOR LEFTS				
WB	5.20	5.20	0.00	5.20
EB	5.20	5.20	0.00	5.20
MINOR THROUGHS				
NB	6.60	6.60	0.00	6.60
SB	6.60	6.60	0.00	6.60
MINOR LEFTS				
NB	7.10	7.10	0.00	7.10
SB	7.10	7.10	0.00	7.10

MOVEMENT	FLOW-RATE v(pcph)	POTENTIAL CAPACITY c_p (pcph)	ACTUAL MOVEMENT CAPACITY c_M (pcph)		SHARED CAPACITY c_{SH} (pcph)		RESERVE CAPACITY $c_R = c_{SH} - v$		LOS
MINOR STREET									
NB LEFT	45	256	229	>	229	>	184	>	D
THROUGH	6	303	274	> 413	274	> 261	268	>C	C
RIGHT	100	673	673	>	673	>	573	>	A
MINOR STREET									
SB LEFT	3	208	168	>	168	>	165	>	D
THROUGH	5	291	263	> 234	263	> 225	258	>C	C
RIGHT	1	658	658	>	658	>	657	>	A
MAJOR STREET									
EB LEFT	3	831	831		831		828		A
WB LEFT	116	819	819		819		703		A

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 544/US 301
AREA TYPE.....OTHER
ANALYST.....RA
DATE.....8/16/88
TIME.....1988 PM PEAK
COMMENT.....

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	205	69	88	37		L	12.0	L	12.0	L	12.0	L	12.0
TH	204	148	395	358		TR	12.0	T	12.0	T	12.0	TR	12.0
RT	68	39	75	71			12.0	TR	12.0	R	12.0		12.0
RR	0	0	0	0			12.0		12.0		12.0		12.0
							12.0		12.0		12.0		12.0
							12.0		12.0		12.0		12.0

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.90	0	N	14.5	3
WB	0.00	7.00	N	0	0	0.90	0	N	14.5	3
NB	0.00	7.00	N	0	0	0.90	0	N	14.5	3
SB	0.00	7.00	N	0	0	0.90	0	N	14.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 65.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X	X			NB	LT	X			
	TH		X				TH	X			
	RT		X				RT	X			
	PD						PD				
WB	LT	X	X			SB	LT	X			
	TH		X				TH	X			
	RT		X				RT	X			
	PD						PD				
GREEN		10.0	18.0	0.0	0.0	GREEN		25.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.028	0.508	6.1	B	10.8	B
	TR	0.618	0.292	14.3	B		
WB	L	0.028	0.508	6.1	B	9.9	B
	TR	0.222	0.292	11.3	B		
NB	L	0.361	0.400	10.8	B	10.7	B
	T	0.632	0.400	11.2	B		
	R	0.141	0.400	8.0	B		
SB	L	0.173	0.400	9.6	B	12.2	B
	TR	0.704	0.400	12.5	B		

INTERSECTION: Delay = 11.0 (sec/veh) V/C = 0.516 LOS = B

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/I-75 WEST RAMP
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........1990 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	0	184	0	37	T	12.0	L	12.0		12.0	L	12.0	
TH	594	671	0	0		12.0	T	12.0		12.0		12.0	
RT	0	0	0	0		12.0		12.0		12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.90	0	N	8.3	3
WB	0.00	7.00	N	0	0	0.90	0	N	8.3	3
NB	0.00	7.00	N	0	0	0.90	0	N	16.8	3
SB	0.00	7.00	N	0	0	0.90	0	N	16.8	3

SIGNAL SETTINGS — CYCLE LENGTH = 60.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT					NB	LT				
	TH		X				TH				
	RT						RT				
	PD						PD				
WB	LT	X	X			SB	LT	X			
	TH	X	X				TH				
	RT						RT				
	PD						PD				
GREEN		10.0	25.0	0.0	0.0	GREEN		13.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	T	0.877	0.433	16.9	C	16.9	C
WB	L	0.026	0.667	2.6	A	4.1	A
	T	0.644	0.667	4.5	A		
SB	L	0.107	0.233	13.7	B	13.7	B

INTERSECTION: Delay = 9.5 (sec/veh) V/C = 0.505 LOS = B

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/I-75 EAST RAMP
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........1990 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	77	0	232	0	L	12.0	T	12.0	L	12.0	L	12.0	
TH	554	623	0	0	T	12.0		12.0		12.0		12.0	
RT	0	0	0	0		12.0		12.0		12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.90	0	N	5.5	3
WB	0.00	7.00	N	0	0	0.90	0	N	5.5	3
NB	0.00	7.00	N	0	0	0.90	0	N	11.5	3
SB	0.00	7.00	N	0	0	0.90	0	N	11.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 62.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X	X			NB	LT	X			
	TH	X	X				TH				
	RT						RT				
	PD						PD				
WB	LT					SB	LT				
	TH		X				TH				
	RT						RT				
	PD						PD				
GREEN		8.0	26.0	0.0	0.0	GREEN		16.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.031	0.629	3.3	A	4.5	A
	T	0.563	0.629	4.7	A		
WB	T	0.915	0.435	20.2	C	20.2	C
NB	L	0.570	0.274	16.0	C	16.0	C

INTERSECTION: Delay = 12.9 (sec/veh) V/C = 0.621 LOS = B

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/CR 581
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........1990 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	0	105	110	0	T	12.0	L	12.0	L	12.0	L	12.0	
TH	621	509	0	0	R	12.0	T	12.0	R	12.0		12.0	
RT	37	0	190	0		12.0		12.0		12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.90	0	N	5.5	3
WB	0.00	7.00	N	0	0	0.90	0	N	5.5	3
NB	0.00	7.00	N	0	0	0.90	0	N	11.5	3
SB	0.00	7.00	N	0	0	0.90	0	N	11.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 60.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT					NB	LT	X			
	TH	X					TH				
	RT	X					RT	X			
	PD						PD				
WB	LT	X				SB	LT				
	TH	X					TH				
	RT						RT				
	PD						PD				
GREEN		32.0	0.0	0.0	0.0	GREEN		20.0	0.0	0.0	0.0
YELLOW		4.0	0.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	T	0.722	0.550	8.1	B	7.9	B
	R	0.051	0.550	4.0	A		
WB	L	0.429	0.550	6.7	B	6.5	B
	T	0.592	0.550	6.4	B		
NB	L	0.212	0.350	10.4	B	10.0	B
	R	0.409	0.350	9.8	B		

INTERSECTION: Delay = 7.8 (sec/veh) V/C = 0.600 LOS = B

****

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET..... 40

PEAK HOUR FACTOR..... 1

AREA POPULATION..... 150000

NAME OF THE EAST/WEST STREET..... SR 54A

NAME OF THE NORTH/SOUTH STREET..... CR 577

NAME OF THE ANALYST..... RA

DATE OF THE ANALYSIS (mm/dd/yy)..... 8/16/88

TIME PERIOD ANALYZED..... 1990 PM PEAK

OTHER INFORMATION:

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION

MAJOR STREET DIRECTION: EAST/WEST

CONTROL TYPE SOUTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	127	104	--	23
THRU	608	497	--	0
RIGHT	36	28	--	103

NUMBER OF LANES

	EB	WB	NB	SB
LANES	1	1	--	1

ADJUSTMENT FACTORS

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	-----	---	---	-
SOUTHBOUND	0.00	90	20	N

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	7	0	0
WESTBOUND	7	0	0
NORTHBOUND	---	---	---
SOUTHBOUND	7	0	0

CRITICAL GAPS

		TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS	SB	5.90	5.90	0.00	5.90
MAJOR LEFTS	EB	5.20	5.20	0.00	5.20
MINOR LEFTS	SB	7.10	7.10	0.00	7.10

MOVEMENT	FLOW-RATE v(pcph)	POTEN-TIAL CAPACITY c (pcph) p	ACTUAL MOVEMENT CAPACITY c (pcph) M	SHARED CAPACITY c (pcph) SH	RESERVE CAPACITY c = c - v R SH	LOS
MINOR STREET						
SB LEFT	24	132	115	> 115	> 91	> E
				> 322	> 192	>D
RIGHT	107	542	542	> 542	> 436	> A
MAJOR STREET						
EB LEFT	131	692	692	692	560	A

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/CR 577
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........1990 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY					
	EB	WB	NB	SB		EB		WB		NB	SB
LT	127	0	0	23	LT	12.0	TR	12.0		12.0	LR 12.0
TH	608	497	0	0		12.0		12.0		12.0	12.0
RT	0	28	0	103		12.0		12.0		12.0	12.0
RR	0	0	0	0		12.0		12.0		12.0	12.0
						12.0		12.0		12.0	12.0
						12.0		12.0		12.0	12.0

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.90	0	N	8.3	3
WB	0.00	7.00	N	0	0	0.90	0	N	8.3	3
NB	0.00	7.00	N	0	0	0.90	0	N	13.8	3
SB	0.00	7.00	N	0	0	0.90	0	N	13.8	3

SIGNAL SETTINGS — CYCLE LENGTH = 63.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X	X			NB	LT				
	TH	X	X				TH				
	RT						RT				
	PD						PD				
WB	LT					SB	LT	X			
	TH		X				TH				
	RT		X				RT	X			
	PD						PD				
GREEN		10.0	26.0	0.0	0.0	GREEN		15.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	LT	0.881	0.651	11.8	B	11.8	B
WB	TR	0.878	0.429	18.3	C	18.3	C
SB	LR	0.459	0.254	13.5	B	13.5	B

INTERSECTION: Delay = 14.4 (sec/veh) V/C = 0.763 LOS = B

****

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET..... 40

PEAK HOUR FACTOR..... 1

AREA POPULATION..... 150000

NAME OF THE EAST/WEST STREET..... SR 54A

NAME OF THE NORTH/SOUTH STREET..... CR 579

NAME OF THE ANALYST..... RA

DATE OF THE ANALYSIS (mm/dd/yy)..... 8/16/88

TIME PERIOD ANALYZED..... 1990 PM PEAK

OTHER INFORMATION:

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: 4-LEG

MAJOR STREET DIRECTION: EAST/WEST

CONTROL TYPE NORTHBOUND: STOP SIGN

CONTROL TYPE SOUTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	3	124	50	3
THRU	432	528	7	6
RIGHT	78	9	106	1

NUMBER OF LANES AND LANE USAGE

	EB	WB	NB	SB
LANES	1	1	1	1
LANE USAGE			LTR	LTR

ADJUSTMENT FACTORS

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	0.00	90	20	N

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	7	0	0
WESTBOUND	7	0	0
NORTHBOUND	7	0	0
SOUTHBOUND	7	0	0

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS				
NB	5.90	5.90	0.00	5.90
SB	5.90	5.90	0.00	5.90
MAJOR LEFTS				
WB	5.20	5.20	0.00	5.20
EB	5.20	5.20	0.00	5.20
MINOR THROUGHS				
NB	6.60	6.60	0.00	6.60
SB	6.60	6.60	0.00	6.60
MINOR LEFTS				
NB	7.10	7.10	0.00	7.10
SB	7.10	7.10	0.00	7.10

CAPACITY AND LEVEL-OF-SERVICE Page-3

MOVEMENT	FLOW-RATE v(pcph)	POTEN-TIAL CAPACITY c_p (pcph)	ACTUAL MOVEMENT CAPACITY c_M (pcph)		SHARED CAPACITY c_{SH} (pcph)		RESERVE CAPACITY $c_R = c_{SH} - v$		LOS
MINOR STREET									
NB LEFT	52	155	132	>	132	>	80	>	E
THROUGH	7	190	165	> 268	165	>	99 158	>E	D
RIGHT	110	570	570	>	570	>	461	>	A
MINOR STREET									
SB LEFT	3	126	93	>	93	>	90	>	E
THROUGH	6	179	156	> 138	156	>	127 150	>D	D
RIGHT	1	527	527	>	527	>	526	>	A
MAJOR STREET									
EB LEFT	3	682	682		682		679		A
WB LEFT	128	704	704		704		576		A

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 544/CR 579
AREA TYPE.....OTHER
ANALYST.....RA
DATE.....8/16/88
TIME.....1990 PM PEAK
COMMENT.....

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	3	124	50	3	LTR	12.0	LTR	12.0	LTR	12.0	LTR	12.0	
TH	432	528	7	6		12.0		12.0		12.0		12.0	
RT	78	9	106	1		12.0		12.0		12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.90	0	N	8.5	3
WB	0.00	7.00	N	0	0	0.90	0	N	8.5	3
NB	0.00	7.00	N	0	0	0.90	0	N	8.5	3
SB	0.00	7.00	N	0	0	0.90	0	N	8.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 63.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X				NB	LT	X			
	TH	X					TH	X			
	RT	X					RT	X			
	PD						PD				
WB	LT	X				SB	LT	X			
	TH	X					TH	X			
	RT	X					RT	X			
	PD						PD				
GREEN		40.0	0.0	0.0	0.0	GREEN		15.0	0.0	0.0	0.0
YELLOW		4.0	0.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	LTR	0.573	0.651	4.5	A	4.5	A
WB	LTR	0.890	0.651	13.0	B	13.0	B
NB	LTR	0.505	0.254	13.8	B	13.8	B
SB	LTR	0.029	0.254	11.4	B	11.4	B

INTERSECTION: Delay = 9.9 (sec/veh) V/C = 0.782 LOS = B

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 544/US 301
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........1990 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	223	76	105	41	L	12.0	L	12.0	L	12.0	L	12.0	
TH	226	164	743	608	TR	12.0	T	12.0	T	12.0	T	12.0	
RT	82	43	83	74		12.0	TR	12.0	TR	12.0	TR	12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.90	0	N	19.8	3
WB	0.00	7.00	N	0	0	0.90	0	N	19.8	3
NB	0.00	7.00	N	0	0	0.90	0	N	19.8	3
SB	0.00	7.00	N	0	0	0.90	0	N	19.8	3

SIGNAL SETTINGS — CYCLE LENGTH = 74.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X	X			NB	LT	X	X		
	TH		X				TH		X		
	RT		X				RT		X		
	PD						PD				
WB	LT	X	X			SB	LT	X	X		
	TH		X				TH		X		
	RT		X				RT		X		
	PD						PD				
GREEN		10.0	18.0	0.0	0.0	GREEN		10.0	20.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	4.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.032	0.446	8.8	B	16.8	C
	TR	0.799	0.257	22.6	C		
WB	L	0.032	0.446	8.8	B	12.8	B
	TR	0.279	0.257	14.3	B		
NB	L	0.032	0.473	7.9	B	31.7	D
	TR	0.992	0.284	34.5	D		
SB	L	0.032	0.473	7.9	B	18.8	C
	TR	0.820	0.284	19.4	C		

INTERSECTION: Delay = 22.6 (sec/veh) V/C = 0.543 LOS = C

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/I-75 WEST RAMP
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2000 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	0	658	0	163	: T	12.0	L	12.0		12.0	L	12.0	
TH	696	853	0	0	:	12.0	T	12.0		12.0		12.0	
RT	0	0	0	0	:	12.0		12.0		12.0		12.0	
RR	0	0	0	0	:	12.0		12.0		12.0		12.0	
					:	12.0		12.0		12.0		12.0	
					:	12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	5.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	5.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	11.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	11.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 60.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT					NB	LT				
	TH		X				TH				
	RT						RT				
	PD						PD				
WB	LT	X	X			SB	LT	X			
	TH	X	X				TH				
	RT						RT				
	PD						PD				
GREEN		13.0	26.0	0.0	0.0	GREEN		9.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	T	0.937	0.450	21.7	C	21.7	C
WB	L	0.839	0.733	13.1	B	7.9	B
	T	0.705	0.733	3.9	A		
SB	L	0.624	0.167	20.7	C	20.7	C

INTERSECTION: Delay = 12.8 (sec/veh) V/C = 0.848 LOS = B

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/I-75 EAST RAMP
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2000 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	92	0	350	0	L	12.0	T	12.0	L	12.0	L	12.0	
TH	767	1151	0	0	T	12.0	T	12.0		12.0		12.0	
RT	0	0	0	0		12.0		12.0		12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	5.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	5.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	11.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	11.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 69.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X	X			NB	LT	X			
	TH	X	X				TH				
	RT						RT				
	PD						PD				
WB	LT					SB	LT				
	TH		X				TH				
	RT						RT				
	PD						PD				
GREEN		7.0	30.0	0.0	0.0	GREEN		20.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.038	0.609	4.1	A	7.9	B
	T	0.764	0.609	8.4	B		
WB	T	0.815	0.449	12.8	B	12.8	B
NB	L	0.734	0.304	20.1	C	20.1	C

INTERSECTION: Delay = 12.1 (sec/veh) V/C = 0.754 LOS = B

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/CR 581
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2000 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	215	157	390	5	: L	12.0	L	12.0	L	12.0	L	12.0	
TH	879	719	72	88	: T	12.0	T	12.0	T	12.0	TR	12.0	
RT	0	4	0	176	: T	12.0	TR	12.0		12.0		12.0	
RR	0	0	0	0	:	12.0		12.0		12.0		12.0	
					:	12.0		12.0		12.0		12.0	
					:	12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	14.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	14.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	20.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	20.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 90.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X	X			NB	LT	X	X		
	TH		X				TH	X	X		
	RT						RT				
	PD						PD				
WB	LT	X	X			SB	LT		X		
	TH		X				TH		X		
	RT		X				RT		X		
	PD						PD				
GREEN		7.0	42.0	0.0	0.0	GREEN		8.0	17.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	4.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.050	0.600	5.6	B	10.3	B
	T	0.585	0.478	11.3	B		
WB	L	0.050	0.600	5.6	B	9.6	B
	TR	0.481	0.478	10.4	B		
NB	L	0.846	0.333	38.2	D	34.4	D
	T	0.131	0.333	13.5	B		
SB	L	0.018	0.200	22.0	C	37.4	D
	TR	0.889	0.200	37.6	D		

INTERSECTION: Delay = 16.7 (sec/veh) V/C = 0.617 LOS = C

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/CR 577
AREA TYPE.....OTHER
ANALYST.....RA
DATE.....8/16/88
TIME.....2000 PM PEAK
COMMENT.....

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	351	0	0	51	: L	12.0	TR	12.0		12.0	L	12.0	
TH	725	593	0	0	: T	12.0		12.0		12.0		12.0	
RT	0	42	0	0	:	12.0		12.0		12.0		12.0	
RR	0	0	0	0	:	12.0		12.0		12.0		12.0	
					:	12.0		12.0		12.0		12.0	
					:	12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	5.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	5.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	11.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	11.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 57.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X	X			NB	LT				
	TH	X	X				TH				
	RT						RT				
	PD						PD				
WB	LT					SB	LT	X			
	TH		X				TH				
	RT		X				RT				
	PD						PD				
GREEN		10.0	25.0	0.0	0.0	GREEN		10.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.088	0.702	2.1	A	3.1	A
	T	0.626	0.702	3.5	A		
WB	TR	0.947	0.456	23.1	C	23.1	C
SB	L	0.169	0.193	14.6	B	14.6	B

INTERSECTION: Delay = 10.6 (sec/veh) V/C = 0.543 LOS = B

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54/WESLEY CHAPEL LAKES BLVD.
AREA TYPE.....OTHER
ANALYST.....RA
DATE.....8/16/88
TIME.....2000 PM PEAK
COMMENT.....

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	5	57	73	84	L	12.0	L	12.0	LTR	12.0	LTR	12.0	
TH	683	558	8	9	TR	12.0	TR	12.0		12.0		12.0	
RT	89	69	70	3		12.0		12.0		12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	8.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	8.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	8.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	8.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 63.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X				NB	LT	X			
	TH	X					TH	X			
	RT	X					RT	X			
	PD						PD				
WB	LT	X				SB	LT	X			
	TH	X					TH	X			
	RT	X					RT	X			
	PD						PD				
GREEN		35.0	0.0	0.0	0.0	GREEN		20.0	0.0	0.0	0.0
YELLOW		4.0	0.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.015	0.571	4.4	A	10.9	B
	TR	0.833	0.571	10.9	B		
WB	L	0.256	0.571	5.3	B	7.1	B
	TR	0.676	0.571	7.2	B		
NB	LTR	0.328	0.333	10.3	B	10.3	B
SB	LTR	0.225	0.333	9.8	B	9.8	B

INTERSECTION: Delay = 9.2 (sec/veh) V/C = 0.647 LOS = B

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/CR 579
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2000 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	184	309	117	3	L	12.0	L	12.0	L	12.0	L	12.0	
TH	405	496	310	379	TR	12.0	TR	12.0	TR	12.0	TR	12.0	
RT	96	5	252	224		12.0		12.0		12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	14.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	14.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	14.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	14.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 63.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X	X			NB	LT	X			
	TH		X				TH	X			
	RT		X				RT	X			
	PD						PD				
WB	LT	X	X			SB	LT	X			
	TH		X				TH	X			
	RT		X				RT	X			
	PD						PD				
GREEN		7.0	20.0	0.0	0.0	GREEN		24.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.035	0.508	5.9	B	21.9	C
	TR	0.938	0.333	27.7	D		
WB	L	0.119	0.508	6.2	B	17.4	C
	TR	0.911	0.333	24.3	C		
NB	L	0.766	0.397	25.5	D	23.5	C
	TR	0.920	0.397	23.0	C		
SB	L	0.017	0.397	8.8	B	30.4	D
	TR	0.975	0.397	30.5	D		

INTERSECTION: Delay = 22.8 (sec/veh) V/C = 0.796 LOS = C

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/US 301
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2000 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	210	122	115	75	L	12.0	L	12.0	L	12.0	L	12.0	
TH	211	171	982	803	TR	12.0	T	12.0	T	12.0	T	12.0	
RT	140	61	150	172		12.0	TR	12.0	TR	12.0	TR	12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	19.8	3
WB	0.00	7.00	N	0	0	0.95	0	N	19.8	3
NB	0.00	7.00	N	0	0	0.95	0	N	19.8	3
SB	0.00	7.00	N	0	0	0.95	0	N	19.8	3

SIGNAL SETTINGS — CYCLE LENGTH = 82.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X	X			NB	LT	X	X		
	TH		X				TH		X		
	RT		X				RT		X		
	PD						PD				
WB	LT	X	X			SB	LT	X	X		
	TH		X				TH		X		
	RT		X				RT		X		
	PD						PD				
GREEN		8.0	20.0	0.0	0.0	GREEN		8.0	30.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	4.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.041	0.402	11.3	B	23.3	C
	TR	0.883	0.256	30.5	D		
WB	L	0.041	0.402	11.3	B	14.4	B
	TR	0.300	0.256	15.9	C		
NB	L	0.041	0.524	7.2	B	26.2	D
	TR	0.972	0.378	28.1	D		
SB	L	0.041	0.524	7.2	B	17.5	C
	TR	0.843	0.378	18.2	C		

INTERSECTION: Delay = 21.6 (sec/veh) V/C = 0.654 LOS = C

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54 EXTENSION/SR 54
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2000 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	363	0	0	241	: L	12.0	T	12.0		12.0	L	12.0	
TH	634	776	0	0	: T	12.0	T	12.0		12.0	R	12.0	
RT	0	0	0	444	: T	12.0		12.0		12.0		12.0	
RR	0	0	0	0	:	12.0		12.0		12.0		12.0	
					:	12.0		12.0		12.0		12.0	
					:	12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	8.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	8.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	17.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	17.5	3

SIGNAL SETTINGS CYCLE LENGTH = 72.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X	X			NB	LT				
	TH	X	X				TH				
	RT						RT				
	PD						PD				
WB	LT					SB	LT	X			
	TH		X				TH				
	RT						RT	X			
	PD						PD				
GREEN		15.0	30.0	0.0	0.0	GREEN		15.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.301	0.694	3.4	A	3.0	A
	T	0.290	0.694	2.7	A		
WB	T	0.573	0.431	10.4	B	10.4	B
SB	L	0.692	0.222	23.3	C	16.4	C
	R	0.712	0.444	12.6	B		

INTERSECTION: Delay = 9.0 (sec/veh) V/C = 0.701 LOS = B

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54 EXTENSION/I-75 WEST RAMP
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2000 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	0	551	0	23	T	12.0	L	12.0		12.0	L	12.0	
TH	620	834	0	0	T	12.0	T	12.0		12.0		12.0	
RT	0	0	0	0		12.0	T	12.0		12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	5.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	5.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	17.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	17.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 62.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT					NB	LT				
	TH		X				TH				
	RT						RT				
	PD						PD				
WB	LT	X	X			SB	LT	X			
	TH	X	X				TH				
	RT						RT				
	PD						PD				
GREEN		10.0	28.0	0.0	0.0	GREEN		12.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	T	0.422	0.468	7.2	B	7.2	B
WB	L	0.618	0.694	6.1	B	3.9	A
	T	0.383	0.694	2.6	A		
SB	L	0.070	0.210	14.9	B	14.9	B

INTERSECTION: Delay = 5.1 (sec/veh) V/C = 0.389 LOS = B

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54 EXTENSION/I-75 EAST RAMP
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2000 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	115	0	421	0	L	12.0	T	12.0	L	12.0	L	12.0	
TH	528	964	0	0	T	12.0	T	12.0	L	12.0		12.0	
RT	0	0	0	0	T	12.0		12.0		12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	8.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	8.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	17.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	17.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 62.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X	X			NB	LT	X			
	TH	X	X				TH				
	RT						RT				
	PD						PD				
WB	LT					SB	LT				
	TH		X				TH				
	RT						RT				
	PD						PD				
GREEN		10.0	20.0	0.0	0.0	GREEN		20.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.027	0.565	4.5	A	4.6	A
	T	0.298	0.565	4.6	A		
WB	T	0.905	0.339	18.8	C	18.8	C
NB	L	0.430	0.339	12.2	B	12.2	B

INTERSECTION: Delay = 13.0 (sec/veh) V/C = 0.507 LOS = B

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54 EXTENSION/CR 581
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2000 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	136	57	279	89	L	12.0	L	12.0	L	12.0	L	12.0	
TH	725	593	436	533	T	12.0	T	12.0	T	12.0	T	12.0	
RT	341	73	70	111	TR	12.0	TR	12.0	TR	12.0	TR	12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	20.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	20.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	20.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	20.5	3

SIGNAL SETTINGS CYCLE LENGTH = 93.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X	X			NB	LT	X	X		
	TH		X				TH		X		
	RT		X				RT		X		
	PD						PD				
WB	LT	X	X			SB	LT	X	X		
	TH		X				TH		X		
	RT		X				RT		X		
	PD						PD				
GREEN		10.0	35.0	0.0	0.0	GREEN		10.0	22.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	4.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.040	0.538	7.7	B	22.5	C
	TR	0.920	0.387	24.2	C		
WB	L	0.040	0.538	7.7	B	14.2	B
	TR	0.557	0.387	14.7	B		
NB	L	0.463	0.398	16.7	C	19.9	C
	TR	0.665	0.247	21.6	C		
SB	L	0.040	0.398	13.0	B	25.0	C
	TR	0.850	0.247	26.5	D		

INTERSECTION: Delay = 20.7 (sec/veh) V/C = 0.687 LOS = C

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54 EXTENSION/WESLEY CHAPEL LAKES BLVD.
AREA TYPE.....OTHER
ANALYST.....RA
DATE.....8/16/88
TIME.....2000 PM PEAK
COMMENT.....

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	19	3	57	14	L	12.0	L	12.0	L	12.0	L	12.0	
TH	795	650	111	136	T	12.0	T	12.0	TR	12.0	TR	12.0	
RT	70	11	5	15	TR	12.0	TR	12.0		12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	19.8	3
WB	0.00	7.00	N	0	0	0.95	0	N	19.8	3
NB	0.00	7.00	N	0	0	0.95	0	N	25.8	3
SB	0.00	7.00	N	0	0	0.95	0	N	25.8	3

SIGNAL SETTINGS — CYCLE LENGTH = 63.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X				NB	LT	X			
	TH	X					TH	X			
	RT	X					RT	X			
	PD						PD				
WB	LT	X				SB	LT	X			
	TH	X					TH	X			
	RT	X					RT	X			
	PD						PD				
GREEN		30.0	0.0	0.0	0.0	GREEN		25.0	0.0	0.0	0.0
YELLOW		4.0	0.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.055	0.492	6.3	B	7.5	B
	TR	0.566	0.492	7.6	B		
WB	L	0.012	0.492	6.2	B	6.7	B
	TR	0.428	0.492	6.7	B		
NB	L	0.112	0.413	8.7	B	7.9	B
	TR	0.171	0.413	7.6	B		
SB	L	0.026	0.413	8.3	B	7.8	B
	TR	0.225	0.413	7.8	B		

INTERSECTION: Delay = 7.3 (sec/veh) V/C = 0.411 LOS = B

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54 EXTENSION/CR 579
AREA TYPE.....OTHER
ANALYST.......RA
DATE.........8/16/88
TIME.........2000 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	405	28	122	46	L	12.0	L	12.0	L	12.0	L	12.0	
TH	161	196	252	207	TR	12.0	TR	12.0	TR	12.0	TR	12.0	
RT	99	56	23	496		12.0		12.0		12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	14.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	14.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	14.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	14.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 70.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X				NB	LT	X			
	TH	X					TH	X			
	RT	X					RT	X			
	PD						PD				
WB	LT	X				SB	LT	X			
	TH	X					TH	X			
	RT	X					RT	X			
	PD						PD				
GREEN		30.0	0.0	0.0	0.0	GREEN		32.0	0.0	0.0	0.0
YELLOW		4.0	0.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.890	0.443	26.6	D	19.6	C
	TR	0.377	0.443	8.6	B		
WB	L	0.062	0.443	8.5	B	8.5	B
	TR	0.357	0.443	8.4	B		
NB	L	0.781	0.471	25.8	D	13.3	B
	TR	0.358	0.471	7.7	B		
SB	L	0.098	0.471	7.8	B	34.3	D
	TR	1.011	0.471	36.0	D		

INTERSECTION: Delay = 22.2 (sec/veh) V/C = 0.952 LOS = C

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54 EXTENSION/US 301
AREA TYPE.....OTHER
ANALYST.....RA
DATE.....2/23/89
TIME.....2000 PM PEAK
COMMENT.....

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	183	0	90	0	L	12.0	L	12.0	L	12.0	TR	12.0	
TH	0	0	577	472	R	12.0	TR	12.0	T	12.0		12.0	
RT	109	0	0	149		12.0		12.0		12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	11.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	11.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	8.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	8.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 67.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X				NB	LT	X	X		
	TH						TH	X	X		
	RT	X					RT				
	PD						PD				
WB	LT					SB	LT				
	TH						TH		X		
	RT						RT		X		
	PD						PD				
GREEN		15.0	0.0	0.0	0.0	GREEN		10.0	30.0	0.0	0.0
YELLOW		4.0	0.0	0.0	0.0	YELLOW		4.0	4.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.489	0.239	17.5	C	16.1	C
	R	0.325	0.239	13.8	B		
NB	L	0.029	0.672	2.8	A	3.7	A
	T	0.521	0.672	3.9	A		
SB	TR	0.937	0.463	23.6	C	23.6	C

INTERSECTION: Delay = 13.8 (sec/veh) V/C = 0.611 LOS = B

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/I-75 RAMPS
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2010 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	111	1113	402	290	L	12.0	L	12.0	L	12.0	L	12.0	
TH	1256	937	0	0	L	12.0	L	12.0	L	12.0	L	12.0	
RT	0	0	1360	0	T	12.0	T	12.0	R	12.0		12.0	
RR	0	0	0	0	T	12.0	T	12.0	R	12.0		12.0	
					T	12.0	T	12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. ARR. TYPE min T
EB	0.00	7.00	N	0	0	0.95	0	N	20.5 3
WB	0.00	7.00	N	0	0	0.95	0	N	20.5 3
NB	0.00	7.00	N	0	0	0.95	0	N	32.5 3
SB	0.00	7.00	N	0	0	0.95	0	N	32.5 3

SIGNAL SETTINGS — CYCLE LENGTH = 111.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X				NB	LT	X			
	TH			X			TH				
	RT						RT				
	PD						PD				
WB	LT	X	X			SB	LT	X			
	TH		X	X			TH				
	RT						RT				
	PD						PD				
GREEN		24.0	26.0	28.0	0.0	GREEN		17.0	0.0	0.0	0.0
YELLOW		4.0	4.0	4.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.167	0.230	26.0	D	34.4	D
	T	0.955	0.266	35.2	D		
WB	L	0.770	0.500	18.8	C	14.6	B
	T	0.388	0.536	9.8	B		
NB	L	0.794	0.167	39.4	D	58.8	E
	R	1.099	0.500	64.5	F		
SB	L	0.602	0.167	33.9	D	33.9	D

INTERSECTION: Delay = 34.3 (sec/veh) V/C = 1.274 LOS = D

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/CR 581
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2010 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	533	249	662	14	L	12.0	L	12.0	L	12.0	L	12.0	
TH	1454	1190	145	178	L	12.0	L	12.0	L	12.0	T	12.0	
RT	0	11	0	0	T	12.0	T	12.0	T	12.0	T	12.0	
RR	0	3	0	0	T	12.0	T	12.0	T	12.0		12.0	
					T	12.0	TR	12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	23.5	4
WB	0.00	7.00	N	0	0	0.95	0	N	23.5	2
NB	0.00	7.00	N	0	0	0.95	0	N	32.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	32.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 84.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X				NB	LT	X			
	TH		X				TH	X	X		
	RT						RT				
	PD						PD				
WB	LT	X				SB	LT		X		
	TH		X				TH		X		
	RT		X				RT				
	PD						PD				
GREEN		16.0	29.0	0.0	0.0	GREEN		17.0	7.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	3.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.843	0.208	31.0	D	21.3	C
	T	0.890	0.363	18.1	C		
WB	L	0.413	0.208	22.1	C	19.0	C
	TR	0.733	0.363	18.3	C		
NB	L	0.990	0.220	48.6	E	41.8	E
	T	0.136	0.339	12.4	B		
SB	L	0.104	0.089	26.7	D	26.4	D
	T	0.634	0.089	26.4	D		

INTERSECTION: Delay = 24.3 (sec/veh) V/C = 0.878 LOS = C

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 544/CR 577
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2010 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	580	0	0	61	: L	12.0	T	12.0		12.0	L	12.0	
TH	1192	975	0	0	: L	12.0	TR	12.0		12.0		12.0	
RT	0	50	0	0	: T	12.0		12.0		12.0		12.0	
RR	0	0	0	0	: T	12.0		12.0		12.0		12.0	
					:	12.0		12.0		12.0		12.0	
					:	12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	5.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	5.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	20.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	20.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 62.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X				NB	LT				
	TH	X	X				TH				
	RT						RT				
	PD						PD				
WB	LT					SB	LT	X			
	TH		X				TH				
	RT		X				RT				
	PD						PD				
GREEN		15.0	25.0	0.0	0.0	GREEN		10.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.777	0.258	19.5	C	8.1	B
	T	0.523	0.726	2.6	A		
WB	TR	0.783	0.419	11.8	B	11.8	B
SB	L	0.219	0.177	16.7	C	16.7	C

INTERSECTION: Delay = 9.6 (sec/veh) V/C = 0.664 LOS = B

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/WESLEY CHAPEL LAKES BLVD.
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2010 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	9	76	130	103	L	12.0	L	12.0	L	12.0	L	12.0	
TH	1085	887	31	37	T	12.0	T	12.0	TR	12.0	TR	12.0	
RT	159	84	94	8	TR	12.0	TR	12.0		12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	19.8	3
WB	0.00	7.00	N	0	0	0.95	0	N	19.8	3
NB	0.00	7.00	N	0	0	0.95	0	N	25.8	3
SB	0.00	7.00	N	0	0	0.95	0	N	25.8	3

SIGNAL SETTINGS — CYCLE LENGTH = 63.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X				NB	LT	X			
	TH	X					TH	X			
	RT	X					RT	X			
	PD						PD				
WB	LT	X				SB	LT	X			
	TH	X					TH	X			
	RT	X					RT	X			
	PD						PD				
GREEN		30.0	0.0	0.0	0.0	GREEN		25.0	0.0	0.0	0.0
YELLOW		4.0	0.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.044	0.492	6.3	B	10.8	B
	TR	0.820	0.492	10.8	B		
WB	L	0.625	0.492	15.2	C	8.6	B
	TR	0.636	0.492	8.1	B		
NB	L	0.218	0.413	9.1	B	8.4	B
	TR	0.207	0.413	7.7	B		
SB	L	0.194	0.413	9.0	B	8.5	B
	TR	0.068	0.413	7.2	B		

INTERSECTION: Delay = 9.6 (sec/veh) V/C = 0.545 LOS = B

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/CR 579
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2010 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	428	510	145	8	L	12.0	L	12.0	L	12.0	L	12.0	
TH	501	612	620	757	T	12.0	T	12.0	T	12.0	T	12.0	
RT	119	9	0	0	TR	12.0	TR	12.0	T	12.0	T	12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	20.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	20.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	20.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	20.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 80.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X	X			NB	LT	X			
	TH		X				TH	X			
	RT		X				RT				
	PD						PD				
WB	LT	X	X			SB	LT	X			
	TH		X				TH	X			
	RT		X				RT				
	PD						PD				
GREEN		15.0	28.0	0.0	0.0	GREEN		25.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.459	0.600	7.3	B	11.1	B
	TR	0.560	0.363	13.6	B		
WB	L	0.679	0.600	11.4	B	12.6	B
	TR	0.546	0.363	13.4	B		
NB	L	0.929	0.325	55.3	E	22.6	C
	T	0.607	0.325	15.3	C		
SB	L	0.039	0.325	14.0	B	17.1	C
	T	0.741	0.325	17.1	C		

INTERSECTION: Delay = 15.2 (sec/veh) V/C = 0.720 LOS = C

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54A/US 301
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2010 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	308	130	157	79	L	12.0	L	12.0	L	12.0	L	12.0	
TH	309	252	1262	1033	T	12.0	T	12.0	T	12.0	T	12.0	
RT	0	65	159	253		12.0	TR	12.0	TR	12.0	TR	12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	19.8	3
WB	0.00	7.00	N	0	0	0.95	0	N	19.8	3
NB	0.00	7.00	N	0	0	0.95	0	N	19.8	3
SB	0.00	7.00	N	0	0	0.95	0	N	19.8	3

SIGNAL SETTINGS — CYCLE LENGTH = 79.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X	X			NB	LT	X	X		
	TH		X				TH		X		
	RT						RT		X		
	PD						PD				
WB	LT	X	X			SB	LT	X	X		
	TH		X				TH		X		
	RT		X				RT		X		
	PD						PD				
GREEN		8.0	15.0	0.0	0.0	GREEN		7.0	33.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	4.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.405	0.361	15.0	B	24.5	C
	T	0.897	0.209	33.9	D		
WB	L	0.040	0.361	12.4	B	16.4	C
	TR	0.474	0.209	18.1	C		
NB	L	0.323	0.576	6.9	B	27.8	D
	TR	1.003	0.437	30.2	D		
SB	L	0.044	0.576	5.5	B	18.7	C
	TR	0.919	0.437	19.5	C		

INTERSECTION: Delay = 22.9 (sec/veh) V/C = 0.900 LOS = C

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54 EXTENSION/SR 54
AREA TYPE.....OTHER
ANALYST.......RA
DATE.........8/16/88
TIME.........2010 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	497	0	0	302	: L	12.0	T	12.0		12.0	L	12.0	
TH	1085	1328	0	0	: L	12.0	T	12.0		12.0	L	12.0	
RT	0	0	0	608	: T	12.0		12.0		12.0	R	12.0	
RR	0	0	0	0	: T	12.0		12.0		12.0		12.0	
					:	12.0		12.0		12.0		12.0	
					:	12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	8.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	8.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	20.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	20.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 67.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X				NB	LT				
	TH	X	X				TH				
	RT						RT				
	PD						PD				
WB	LT					SB	LT	X			
	TH		X				TH				
	RT						RT	X			
	PD						PD				
GREEN		17.0	28.0	0.0	0.0	GREEN		10.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.640	0.269	17.6	C	7.0	B
	T	0.463	0.746	2.2	A		
WB	T	0.976	0.433	23.4	C	23.4	C
SB	L	0.636	0.164	21.7	C	31.0	D
	R	1.001	0.433	35.9	D		

INTERSECTION: Delay = 18.3 (sec/veh) V/C = 1.187 LOS = C

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54 EXTENSION/I-75 WEST RAMP
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2010 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	0	1113	0	37	T	12.0	L	12.0		12.0	L	12.0	
TH	674	1345	0	0	T	12.0	L	12.0		12.0		12.0	
RT	0	0	0	0	T	12.0	T	12.0		12.0		12.0	
RR	0	0	0	0		12.0	T	12.0		12.0		12.0	
						12.0	T	12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	5.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	5.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	20.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	20.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 68.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT					NB	LT				
	TH		X				TH				
	RT						RT				
	PD						PD				
WB	LT	X				SB	LT	X			
	TH	X	X				TH				
	RT						RT				
	PD						PD				
GREEN		25.0	20.0	0.0	0.0	GREEN		11.0	0.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	T	0.485	0.309	12.5	B	12.5	B
WB	L	1.007	0.382	37.4	D	17.7	C
	T	0.406	0.735	2.2	A		
SB	L	0.134	0.176	18.0	C	18.0	C

INTERSECTION: Delay = 16.6 (sec/veh) V/C = 0.643 LOS = C

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54 EXTENSION/I-75 EAST RAMP
AREA TYPE.....OTHER
ANALYST.......RA
DATE..........8/16/88
TIME..........2010 PM PEAK
COMMENT.......

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	184	0	795	0	L	12.0	T	12.0	L	12.0	L	12.0	
TH	711	1663	0	0	T	12.0	T	12.0	L	12.0		12.0	
RT	0	0	1360	0	T	12.0	T	12.0	R	12.0		12.0	
RR	0	0	0	0	T	12.0		12.0	R	12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	14.5	4
WB	0.00	7.00	N	0	0	0.95	0	N	14.5	2
NB	0.00	7.00	N	0	0	0.95	0	N	23.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	23.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 71.5

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X	X			NB	LT	X			
	TH		X				TH				
	RT						RT	X			
	PD						PD				
WB	LT					SB	LT				
	TH		X				TH				
	RT						RT				
	PD						PD				
GREEN		9.0	26.0	0.0	0.0	GREEN		26.0	0.0	0.0	0.0
YELLOW		3.5	3.5	0.0	0.0	YELLOW		3.5	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.322	0.554	6.8	B	7.6	B
	T	0.417	0.379	7.8	B		
WB	T	0.975	0.379	26.0	D	26.0	D
NB	L	0.725	0.379	16.0	C	31.8	D
	R	1.056	0.520	41.5	E		

INTERSECTION: Delay = 25.0 (sec/veh) V/C = 1.046 LOS = C

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54 EXTENSION/CR 581
AREA TYPE.....OTHER
ANALYST.....RA
DATE.....8/16/88
TIME.....2010 PM PEAK
COMMENT.....

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	332	92	470	266	: L	12.0	L	12.0	L	12.0	L	12.0	
TH	1164	952	566	692	: L	12.0	L	12.0	L	12.0	L	12.0	
RT	0	218	112	0	: T	12.0	T	12.0	T	12.0	T	12.0	
RR	0	0	0	0	: T	12.0	T	12.0	TR	12.0	T	12.0	
					: T	12.0	TR	12.0		12.0		12.0	
					:	12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	26.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	26.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	26.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	26.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 75.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X				NB	LT	X			
	TH		X				TH		X		
	RT						RT		X		
	PD						PD				
WB	LT	X				SB	LT	X			
	TH		X				TH		X		
	RT		X				RT				
	PD						PD				
GREEN		7.0	23.0	0.0	0.0	GREEN		12.0	17.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	4.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.965	0.113	53.2	E	24.0	C
	T	0.792	0.327	16.4	C		
WB	L	0.281	0.113	23.3	C	17.5	C
	TR	0.819	0.327	17.0	C		
NB	L	0.903	0.180	35.4	D	29.4	D
	TR	0.897	0.247	25.2	D		
SB	L	0.511	0.180	21.8	C	23.9	C
	T	0.893	0.247	24.7	C		

INTERSECTION: Delay = 23.5 (sec/veh) V/C = 0.878 LOS = C

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54 EXTENSION/WESLEY CHAPEL LAKES BLVD.
AREA TYPE.....OTHER
ANALYST.....RA
DATE.....8/16/88
TIME.....2010 PM PEAK
COMMENT.....

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	56	8	210	23	L	12.0	L	12.0	L	12.0	L	12.0	
TH	1230	1006	172	210	T	12.0	T	12.0	TR	12.0	TR	12.0	
RT	257	19	9	46	TR	12.0	TR	12.0		12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	14.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	14.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	20.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	20.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 61.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X				NB	LT	X			
	TH	X					TH	X			
	RT	X					RT	X			
	PD						PD				
WB	LT	X				SB	LT	X			
	TH	X					TH	X			
	RT	X					RT	X			
	PD						PD				
GREEN		29.0	0.0	0.0	0.0	GREEN		24.0	0.0	0.0	0.0
YELLOW		4.0	0.0	0.0	0.0	YELLOW		4.0	0.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.296	0.492	7.3	B	21.7	C
	TR	0.988	0.492	22.2	C		
WB	L	0.074	0.492	6.2	B	8.1	B
	TR	0.665	0.492	8.2	B		
NB	L	0.494	0.410	10.8	B	9.4	B
	TR	0.270	0.410	7.8	B		
SB	L	0.047	0.410	8.2	B	8.3	B
	TR	0.389	0.410	8.3	B		

INTERSECTION: Delay = 14.8 (sec/veh) V/C = 0.763 LOS = B

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION: SR 54 EXTENSION/CR 579
AREA TYPE.....OTHER
ANALYST.....RA
DATE.....8/16/88
TIME.....2010 PM PEAK
COMMENT.....

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	631	51	229	76	L	12.0	L	12.0	L	12.0	L	12.0	
TH	214	262	547	448	L	12.0	TR	12.0	T	12.0	T	12.0	
RT	187	94	42	0	TR	12.0		12.0	TR	12.0	T	12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	8.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	8.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	8.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	8.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 81.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X				NB	LT	X	X		
	TH	X	X				TH		X		
	RT	X	X				RT		X		
	PD						PD				
WB	LT		X			SB	LT	X	X		
	TH		X				TH		X		
	RT		X				RT				
	PD						PD				
GREEN		19.0	21.0	0.0	0.0	GREEN		8.0	12.0	0.0	0.0
YELLOW		4.0	4.0	0.0	0.0	YELLOW		4.0	4.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.884	0.247	30.6	D	21.8	C
	TR	0.470	0.556	7.3	B		
WB	L	0.408	0.272	19.5	C	24.3	C
	TR	0.827	0.272	25.0	C		
NB	L	0.142	0.370	12.9	B	21.8	C
	TR	0.852	0.222	25.0	D		
SB	L	0.041	0.370	12.4	B	18.6	C
	T	0.641	0.222	19.6	C		

INTERSECTION: Delay = 21.5 (sec/veh) V/C = 0.735 LOS = C

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

****

INTERSECTION..SR 54 EXTENSION/US 301
AREA TYPE.....OTHER
ANALYST.....RA
DATE.....2/23/89
TIME.....2010 PM PEAK
COMMENT.....

	VOLUMES					GEOMETRY							
	EB	WB	NB	SB		EB		WB		NB		SB	
LT	250	0	122	0	L	12.0	L	12.0	L	12.0	T	12.0	
TH	0	0	790	647	R	12.0	TR	12.0	T	12.0	TR	12.0	
RT	150	0	0	205		12.0		12.0	T	12.0		12.0	
RR	0	0	0	0		12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	
						12.0		12.0		12.0		12.0	

ADJUSTMENT FACTORS

	GRADE (%)	HV (%)	ADJ Y/N	PKG Nm	BUSES Nb	PHF	PEDS	PED. Y/N	BUT. min T	ARR. TYPE
EB	0.00	7.00	N	0	0	0.95	0	N	11.5	3
WB	0.00	7.00	N	0	0	0.95	0	N	11.5	3
NB	0.00	7.00	N	0	0	0.95	0	N	8.5	3
SB	0.00	7.00	N	0	0	0.95	0	N	8.5	3

SIGNAL SETTINGS — CYCLE LENGTH = 67.0

		PH-1	PH-2	PH-3	PH-4			PH-1	PH-2	PH-3	PH-4
EB	LT	X				NB	LT	X	X		
	TH						TH	X	X		
	RT	X					RT				
	PD						PD				
WB	LT					SB	LT				
	TH						TH		X		
	RT						RT		X		
	PD						PD				
GREEN		15.0	0.0	0.0	0.0	GREEN		10.0	30.0	0.0	0.0
YELLOW		4.0	0.0	0.0	0.0	YELLOW		4.0	4.0	0.0	0.0

LEVEL OF SERVICE

	LANE GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	0.668	0.239	20.5	C	18.3	C
	R	0.448	0.239	14.6	B		
NB	L	0.029	0.672	2.8	A	3.1	A
	T	0.374	0.672	3.2	A		
SB	TR	0.608	0.463	9.1	B	9.1	B

INTERSECTION: Delay = 8.2 (sec/veh) V/C = 0.491 LOS = B

APPENDIX B

Minutes of Meeting with Saddlebrook Development

MEMORANDUM

DATE: September 2, 1988

TO: SR 54 File

FROM: Bob Agrusa

SUBJ: SR 54 PD&E Study

A meeting between RS&H staff and Saddlebrook developers commenced at 11:15 a.m. on August 31, 1988, at the RS&H headquarters in Tampa, Florida. Those in attendance included Mr. Harry Rice and Mr. Frank Stringer, from the Saddlebrook development, Ms. Christina Barrett, from Greiner, Inc., Ms. Jean Dorzback, from FDOT, Mr. Oscar Gazi, from Pasco County, and Dr. Brian Ormiston, Mr. Mark Vincent, Ms. K.C. Connolly, and Mr. Bob Agrusa, from RS&H.

The major topic of discussion was the proposed alternatives of the SR 54 extension and how each alternative will affect the Saddlebrook development. Dr. Ormiston first presented the two potential alternatives near Saddlebrook. The advantages and disadvantages of each alternative was discussed. Mr. Stringer elaborated that the north alternative, which will traverse through the center of the Saddlebrook development, would be devastating to the development. Mr. Stringer commented that a wastewater plant and water and wastewater pipes were being implemented on site at this time and, therefore, will affect the northern alternative. Mr. Stringer stated that the southern alternative would be more appealing to him because Saddlebrook has already dedicated 105' near its south section line for the new roadway. Dr. Ormiston pointed out that the northern alternative would be kept in the preliminary engineering report as an alternative. However, it will probably be eliminated based on socioeconomic issues involving the Saddlebrook development. Mr. Stringer stated that he would send RS&H the updated site plan for Saddlebrook.

Other issues, including frontage roads and public agency coordination, were also discussed.

The meeting adjourned at 11:45 a.m.

/rm/C8-022

cc: Brian Ormiston

APPENDIX C

June 4, 1992 Public Hearing Handout

PUBLIC HEARING

S.R. 54

FROM CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS/CHANCEY ROAD

WORK PROGRAM NO. 7125920
STATE PROJECT NO. 14504-1601
FEDERAL AID PROJECT NO. RS-7810(4)
PASCO COUNTY NO. 003000.20/001512

FLORIDA DEPARTMENT OF TRANSPORTATION
AND
PASCO COUNTY

FLORIDA DEPARTMENT OF TRANSPORTATION
AND
PASCO COUNTY

PUBLIC HEARING

S.R. 54
FROM CYPRESS CREEK TO THE ZEPHYRHILLS EAST BYPASS/
CHANCEY ROAD INTERSECTION
PASCO COUNTY, FLORIDA

Work Program Item Number: 7125920

State Project Number: 14504-1601

Federal Aid Project Number: RS-7810(4)

Description: The project considers the construction of a new multilane divided rural roadway that would ultimately provide for a 6-lane divided highway within 250 feet of right-of-way for S.R. 54 on new alignment, a distance of approximately 14.0 miles. The project includes the proposed construction of a new I-75 interchange for the proposed S.R. 54 project and improvements of U.S. 301 to a 4-lane rural divided highway from the new S.R. 54 alignment intersection to the Zephyrhills East Bypass/Chancey Road Intersection.

Thursday, June 4, 1992, 4:00 - 8:00 p.m.
Alice Hall Community Center
38116 S.R. 54
Zephyrhills, Florida

AGENDA

OPEN HOUSE: 4:00 p.m. to 6:30 p.m.
7:30 p.m. to 8:00 p.m.

- General Inspection of display materials

FORMAL PRESENTATION: 6:30 p.m. - 7:30 p.m.

- Mr. David A. Twiddy, Jr., P.E.
  District PD&E Engineer

- Public Comment Session

WELCOME!

Welcome to the public hearing on the proposed new alignment of S.R. 54 from Cypress Creek to the Zephyrhills East Bypass/Chancey Road Intersection, a distance of approximately 14.0 miles. During this public hearing, we are seeking comments from the public concerning the proposed improvements. We encourage your input into the engineering and environmental studies.

This hearing is being held to receive comments and to explain to interested persons the proposed improvements. There are four methods by which you can present your comments to the Florida Department of Transportation (FDOT). Comments received in any of the four ways will become a part of the public hearing transcript and will be considered during the futher evaluation of the alternatives.

First, you may make a statement to the court reporter in a one-to-one setting during the "open house" portion of this meeting between 4:00 p.m. to 6:30 p.m. and 7:30 p.m. to 8:00 p.m.

Second, you may fill out one of the Statement Forms attached to the back of this handout or located at the Registration Desk. The completed forms can be placed in boxes marked "Statements" at the Registration Desk.

Third, you will be given the opportunity to comment publicly following the Department's presentation at 6:30 p.m.

Fourth, The public hearing will remain open for 10 days. If you would prefer to write a letter or send in a completed Statement Form or exhibits that will become part of the official transcript of public hearing proceedings, mail to Mr. David A. Twiddy, Jr., P.E., District 7 PD&E Engineer, Florida Department of Transportation, 4950 W. Kennedy Blvd., Suite 409, Tampa, Florida, 33609. All comments need to be postmarked by June 14, 1992 to become a part of the official transcript.

The complete official transcript will be available for public inspection and copying in approximately 3 weeks after June 14, 1992 in the Zephyrhills Public Library and FDOT District Seven PD&E Office. The mailing address is the same as mentioned earlier.

We hope that you will take time to study the proposed new alignment of S.R. 54. If you have any questions or need additional information, please contact the project manager, Ms. Lynn Hybarger or me at (813) 871-7740. Thank you for attending this public hearing.

David A. Twiddy, Jr., P.E.
District PD&E Engineer

FEDERAL-STATE
PARTNERSHIP IN HIGHWAYS

Since 1916, much of the highway construction in the various states has been done under a very successful federal-state partnership, a pooling of funds and technical know-how that exemplifies the cooperation possible between two levels of government.

Although the system has changed and expanded from time to time to meet new conditions, the basic principle has remained the same: the state proposes, and the federal government consults and reviews.

The U.S. Department of Transportation, Federal Highway Administration (FHWA), represents the interest of the federal government in each individual state highway program. In Florida, the State Department of Transportation is the principal highway agency.

The improvements of interstate and other federal aid highways is financed from the proceeds of federal motor fuel and other highway user excise taxes deposited in the Federal Highway Trust Fund. Grant-in-aid funds for use in highway improvements are then allotted to the states in accordance with formulas that give weight to population, area and postal route mileage; allotments for the interstate system are based on the relative costs to complete the system.

Well in advance of a fiscal year, the states are informed of the amount of federal aid they will be receiving. Hence, they are able to schedule their preliminary engineering, right-of-way purchases and construction accordingly.

The amount of funds contributed by each partner varies according to the type of highway on which they are expended. On primary, secondary, and urban routes, the federal share is roughly 75 percent. (The actual percentage varies from state to state according to the acreage of federal land within the state boundaries.) On interstate highways the shares are approximately 90 percent federal, 10 percent state.

In the use of federal aid for highway construction, the states determine the systems to be improved, the projects to be built and the design and construction standards to be used. The states are responsible for the planning and design of the facilities. They let the contracts and supervise the construction. When completed, the roads remain under the administrative control of the states, which are then responsible for operation and maintenance of the roads. At appropriate stages, the states consult with regional and local agencies and officials and obtain their approvals as necessary. Similarly, at specified steps, the states must consult with and obtain the approval of FHWA, which acts for the Federal Government.

Federal aid procedures provide for two public hearings during planning and design of a project. The "corridor" hearing allows a medium for free and open discussion of alternative general corridor locations. The "design" hearing allows a medium for discussion of alternative specific alignments and major design features. These procedures also provide for holding a single combined corridor location and design hearing when it is felt that this type of hearing would be in the best public interest.

In Florida, FDOT is responsible for highway development for routes designated by the State Legislature.

SUMMARY OF STUDY

Pasco County, in cooperation with the Florida Department of Transportation (FDOT) has been studying the feasibility of the construction of State Road (S.R.) 54 on new alignment. FDOT has conducted environmental studies to evaluate social, economic, and environmental impacts associated with the proposed improvements. This public hearing is an integral part of those studies. Comments received during the public hearing will become part of the data from which final recommendations will be made.

NEED

Pasco County, like many other counties in the State of Florida, is experiencing phenomenal growth. The population in 1970 was 76,000 people, today it stands at 245,700 and by the year 2010 Pasco County's population is projected to reach 416,000. Because of this projected growth, existing S.R. 54 will experience a substantial increase in traffic volumes over the next 20 years. The average daily traffic for the existing S.R. 54 is 12,000 vehicles per day (vpd). By the year 2010 it is anticipated that the traffic volumes on the existing S.R. 54 will increase to an estimated 57,100 vpd from Cypress Creek Bridge to I-75, 104,000 vpd from I-75 to County Road 581, 64,000 vpd from County Road 581 to County Road 579 (Morris Bridge Road) and an estimated 31,000 vpd from County Road 579 to U.S. 301. Without roadway improvements, these anticipated traffic volumes will create severe traffic problems throughout existing S.R. 54 by 2010.

The Florida Department of Transportation and Pasco County have agreed on the need to construct a new multilane divided rural roadway that would ultimately provide for a 6-lane divided highway within 250 feet of right-of-way for S.R. 54 on new alignment. The proposed improvements are in compliance with the adopted Pasco County Comprehensive Plan.

NO-ACTION ALTERNATIVE

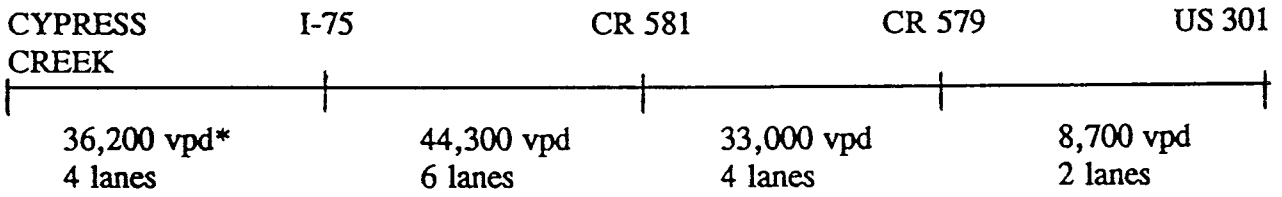
The No-Action Alternative would allow the existing S.R. 54 to remain without substantial improvements. There are advantages and disadvantages to the No-Action Alternative. The advantages include: 1) no inconvenience to the public during construction ; 2) no right-of-way acquisition or relocation of residences and businesses; 3) no construction costs; and 4) no environmental impacts. The disadvantages include: 1) increased traffic congestion resulting in increased road user costs; 2) inadequate traffic service resulting in increased road user cost; 3) incompatibility with the overall future transportation network as defined by the Pasco County comprehensive plan; and 4) a potential increase in accidents due to increased traffic congestion. The No-Action Alternative will remain a viable alternative until a final recommendation can be made following this public hearing.

CONSTRUCTION ALTERNATIVES

Due to current and proposed land use, minimal right-of-way constraints, and a desire to construct a roadway using desirable highway design criteria, a rural typical cross section was selected for evaluation. This typical cross section requires 250 feet of right-of-way and provides for the ultimate expansion to a 6-lane divided highway, with a 50 foot grassed median. Figure 1 is a graphic representation of the proposed typical section. This typical section will ultimately provide sufficient capacity for the projected increase in traffic volumes by providing three travel lanes in each direction.

The 2010 design year traffic volumes require the construction of either two, four, or six lanes for segments through the proposed project. The required lanes per segment are shown below:

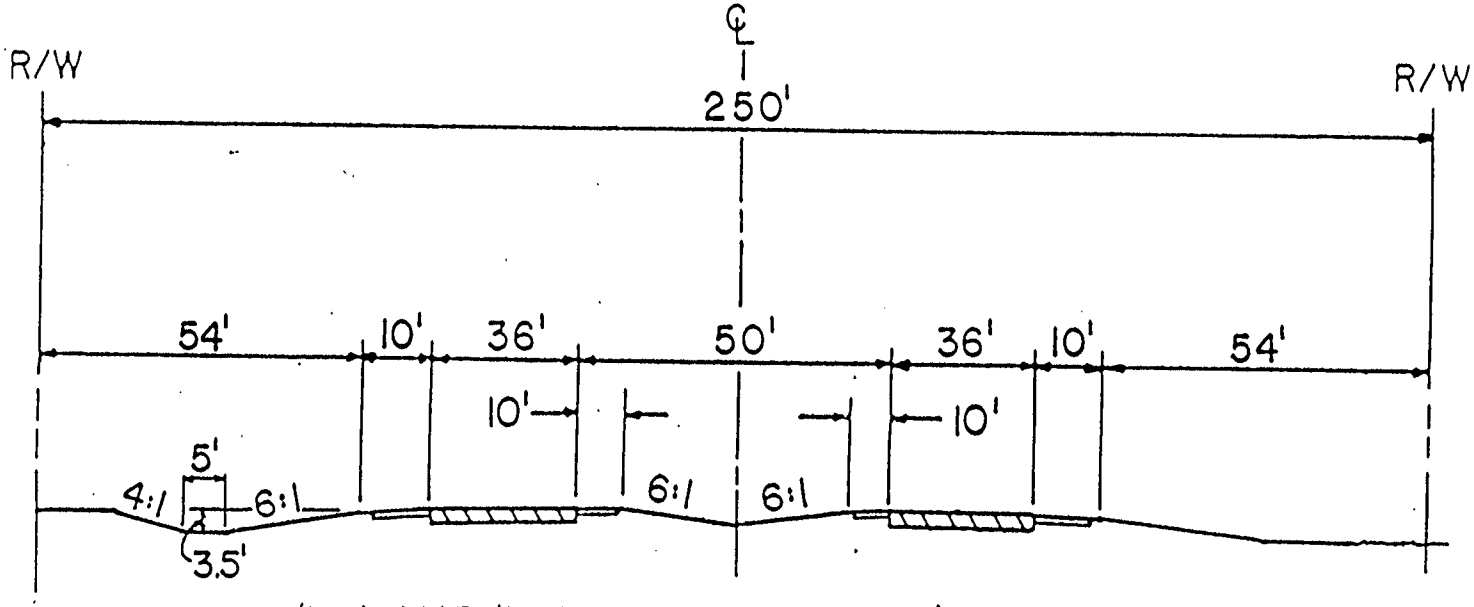
2010 TRAFFIC VOLUMES AND LANEAGE REQUIREMENTS



* vehicles per day

Several alignments were identified within the study corridor using the proposed typical section. Each alignment was reviewed and assessed regarding the engineering, environmental, and socioeconomic impacts. The Preliminary Engineering Report provides a discussion of all alternatives developed throughout the life of this study and is available for review. As a result of the review and analysis of the impacts, three alignments were identified as viable alternatives and are being presented this evening for your review and comments. In addition, the No-Action Alternative will remain a viable alternative until conclusive recommendations can be made.

All three alternatives share a common alignment for the proposed improvements from east of Cypress Creek to County Road 581 and from County Road 579 (Morris Bridge Road) to U. S. 301 (See Figure 2). All three alternatives recommend improvements to U.S. 301 to a 4-lane rural divided highway from the new S. R. 54 alignment intersection to the Zephyrhills East Bypass/ Chancey Road Intersection, a distance of approximately 0.76 mile. The project also includes the proposed construction of a new I-75 interchange for the proposed S.R.54 project, located approximately 2 miles south of the existing I-75/S.R. 54 (old) interchange.



6-LANE RURAL SECTION (50' MEDIAN)

(2010 DESIGN YEAR)

FIGURE 1

PROPOSED TYPICAL CROSS SECTION (250' R/W)

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

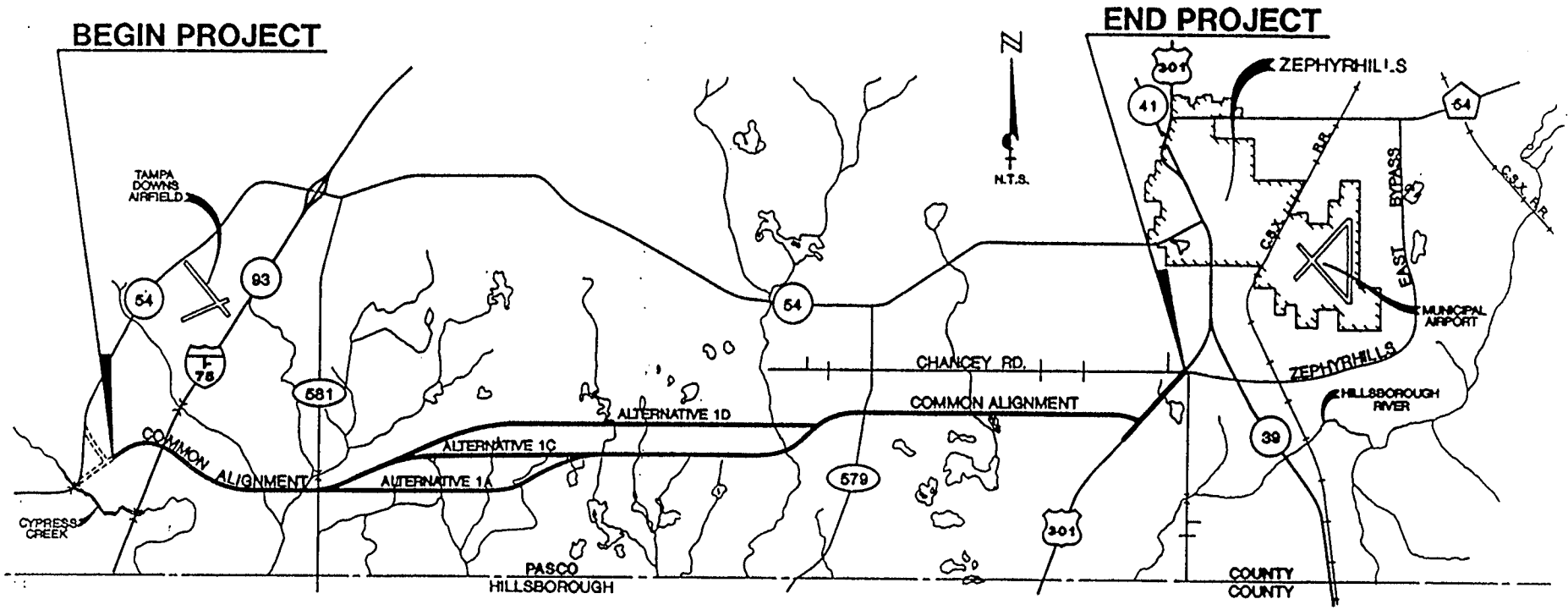


FIGURE 2

PROJECT LOCATION MAP

SR 54/SR 54A
CYPRESS CREEK TO
ZEPHYRHILLS EAST BYPASS

ALTERNATIVE ALIGNMENT 1A:

Alternative Alignment 1A (See Figure 2) would require the purchase of 413.9 acres of right-of-way, no business or residential relocations, and the clearing of an estimated 65.00 acres of affected wetlands, consisting of 29.26 acres of forested and 35.74 acres of nonforested wetlands. This alternative is 13.66 miles long.

ALTERNATIVE ALIGNMENT 1C:

Alternative Alignment 1C was developed to alleviate potential noise impacts to the Williamsburg development. This alignment would move the proposed S.R.54 highway further to the north of the Williamsburg subdivision. Alternative Alignment 1C (See Figure 2) would require the purchase of 414.2 acres of right-of-way, no relocations, and the clearing of an estimated 56.68 acres of affected wetlands, consisting of a combination of 18.74 acres of forested and 37.94 acres of nonforested wetlands. This alternative is 13.67 miles long.

ALTERNATIVE ALIGNMENT 1D:

Alternative Alignment 1D was developed as a result of coordination with affected property owners. Alternative Alignment 1D (See Figure 2) would require the purchase of 409.10 acres of right-of-way, no relocations, and the clearing of an estimated 55.96 acres of wetlands, consisting of a combination of 21.31 acres of forested and 34.65 of nonforested wetlands. This alternative is 13.50 miles long.

SUMMARY OF COSTS FOR ALTERNATIVE ALIGNMENTS FOR S.R. 54:

The estimated costs (1989 dollars) and relocations for each of the Alternatives are listed below:

Alternatives	Const. Cost	Design Cost	R/W Cost	Wetland Mitigation Total Cost*	Total Cost**
1A	$23,033,000	$2,303,000	$11,686,400	$3,492,500	**$40,514,900**
1C	$23,052,800	$2,305,000	$11,282,700	$2,367,100	**$39,008,600**
1D	$22,736,000	$2,273,000	$11,110,300	$2,887,200	**$39,006,500**

There are no residential or business relocations associated with Alternatives 1A, 1C or 1D.

* Mitigation is based on an average ratio of 2.5:1 for forested and 1.5:1 for nonforested. This is an estimated cost and may vary at the time of obtaining appropriate permits.

** Does not include the cost of noise abatement. Section 4.3.3. Noise, included in the Draft Environmental Assessment Document, includes cost estimates for the noise abatement measures found feasible for those alternative alignments recommended to be carried forward (i.e., 1A, 1C, and 1D).

IMPACT SUMMARY

Social, Cultural, Natural and Physical Impacts were evaluated for each alternative. None of the alternatives presented here this evening will adversely impact housing, commercial, employment, or economic conditions of the surrounding area. No Section 4(f) land or Recreation Areas, Archaeological, or Historic sites will be affected by any of the alternatives. No prime or unique Farmlands occur within the limits of the respective alternatives. Impacts to Water Quality and Floodplains will be minimal.

There are no substantial differences among the three alternatives with regard to anticipated overall wildlife impacts or habitat losses. The proposed roadway will not cause significant impacts to threatened or endangered wildlife populations potentially occurring in the vicinity.

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.

Noise impacts varied between alternatives. Alternative 1A will impact 143 dwelling units. Alternative 1C will impact 102 residences and Alternative 1D will impact 111 residences. Noise abatement measures were evaluated for each of the noise impacted sites. These receptor sites had projected noise levels that approached or exceeded FHWA-NAC (Noise Abatement Criteria)

of 67dBA or warranted abatement consideration based on projected noise level increases. Noise abatement measures were found to be feasible in some locations. Further analyses and evaluations of noise abatement measures will be made during the final design process.

Wetland impacts were evaluated for each of the Alternatives. Alternative 1A will impact a total of 65.00 acres of wetland involving 41 wetland sites. Alternative 1C will impact a total of 56.68 acres of wetlands involving 42 wetland sites. Alternative 1D will impact a total of 55.96 acres of wetlands at 42 wetland sites. A Permit Coordination Report has been prepared and discusses each wetland site impacted by the proposed alternatives in detail. It is anticipated that the majority of the wetlands impacted will be subject to mitigation requirements at the permitting stage. Mitigation of the impacts to these wetland sites will be accomplished via wetland creation or enhancement.

ACCESS MANAGEMENT PLAN

Median openings and driveway connections will be addressed in the final design process and will follow the State Access Management Rules 14-96 and 14-97.

RIGHT-OF-WAY AND RELOCATIONS

Due to the absesnce of residential and business relocations, the Florida Department of Transportation will not develop a Right-of-Way Relocation Plan for this project. Property owners concerned about the use of their property for right-of-way may receive information on the right-of-way acquisition process by contacting:

Mr. Bobby Atwell
District Right-of-Way Administrator
Florida Department of Transportation
4800 Lemon Street
Tampa, Florida 33609

WHAT HAPPENS NEXT?

The public hearing on this project comes after months of environmental and engineering studies. Included in the development of these studies is consultation at various stages with regional and local agencies and with the Federal Highway Administration (FHWA).

During this public hearing and the following 10 day comment period, members of the public will be given the opportunity to present their views concerning the project. All such statements will be entered into the official record of the project.

Following receipt and evaluation of all comments from this Public Hearing, a Finding of No Significant Impacts document will be prepared. The Department will then make a final evaluation of all the elements of the study. Design concepts and the Finding of No Significant Impacts document will be finalized and submitted to the FHWA for approval.

The current schedule for improvements, which is subject to change based on the annual re-evaluation of priorities by the FDOT, is as follows:

Work Phase	Fiscal Year
Cypress Creek to County Road 581 (including I-75 interchange)	
Design	1992-93
Right-of-Way Acquisition	1994-95
Construction (I-75 interchange)	Unfunded
Construction (roadway)	Unfunded
Cypress Road 581 to Zephyrhills East Bypass/Chancey Road Intersection	
Design	Not programmed in current five year FDOT work program
Right-of-Way Acquisition	
Construction	

Thank you for your interest in this project.

FLORIDA DEPARTMENT OF TRANSPORTATION
STATEMENT
Official Transcript of Public Hearing Proceedings
June 4, 1992
S.R. 54 From Cypress Creek to
Zephyrhills East Bypass/Chancey Road Intersection
Work Program Item Number: 7125920
State Project Number: 14504-1601
Federal Aid Project Number: RS-7810(4)
Pasco County

(More Space on other side)

(NAME)

(ADDRESS)

NOTE: Please sign and place into box marked Statements or mail to Mr. David A. Twiddy, Jr., P.E., District Seven PD&E Engineer, Florida Department of Transportation, 4950 W. Kennedy Blvd., Suite 409, Tampa, Florida 33609. All statements postmarked on or before June 14, 1992 will become part of the public record and will be available for viewing by the public and the media.