

# NOISE STUDY REPORT



## I-595 PD&E STUDY

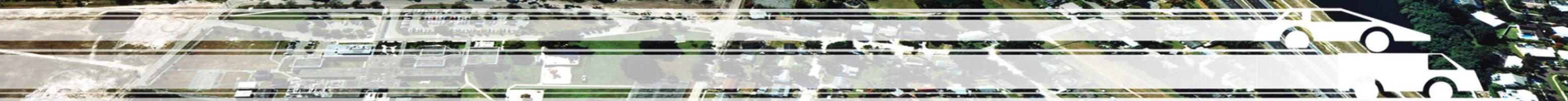
I-595 from I-75 to East of I-95

FM No.: 409354-1-22-01

FAP No.: 5951 539 I



Florida Department of Transportation  
District Four





**I-595 (SR 862)**

**PROJECT DEVELOPMENT & ENVIRONMENT STUDY**

FM No. 409354-1-22-01  
FAP No. 5951 539 I  
From the I-75 Interchange  
To the I-95 Interchange  
Broward County, Florida



Prepared for:

**FDOT District Four**  
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March 13, 2006



**1.0 INTRODUCTION**

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study for proposed improvements to the I-595 corridor in central Broward County, Florida. The PD&E Study limits extend from the I-75/Sawgrass Expressway interchange (Mile Post 0.592) west of SW 136<sup>th</sup> Avenue to the I-95 interchange (Mile Post 10.407) for a total project length of approximately 10 miles. Figure 1-1 illustrates the location and limits of the project.

As part of the PD&E Study for the proposed project, a noise study was conducted in accordance with the Florida Department of Transportation's (FDOT, the Department) Project Development and Environment Manual, Chapter 17, Noise (November 20, 2001) and with Title 23 CFR (Code of Federal Regulations) Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise. The primary objectives of this noise study were to: 1) describe the existing site conditions including noise sensitive land uses within the project study area, 2) document the methodology used to conduct the noise assessment, 3) assess the significance of traffic noise levels on noise sensitive sites for both the No Project and Build Alternatives, and 4) evaluate mitigative measures for those noise sensitive sites "impacted" [i.e., approaching or exceeding Federal Highway Administration's (FHWA) Noise Abatement Criteria (NAC)]. Other objectives of this study include consideration of construction noise and vibration impacts and the development of noise level isopleths, which can be used by Broward County in the future to identify compatible land uses. The methods and results of this noise study are summarized in this report. The information within this report is also intended to provide the technical support for the findings presented in the project's Preliminary Engineering Report (PER) and Type 2 Categorical Exclusion Environmental Determination Form.







2.0 PROJECT DESCRIPTION

The I-595 PD&E Study is a continuation of the I-595 Master Plan Study completed in March 2003. The Master Plan produced a Locally Preferred Alternative (LPA). Public comment on the LPA was received at a Public Hearing conducted on November 16, 2000, the LPA was adopted by the Broward County Metropolitan Planning Organization (MPO) on January 7, 2003, and subsequently was approved by the Federal Highway Administration (FHWA). The major components of the LPA that emerged from the Master Plan process include the following features.

- Reversible lanes at grade level serving express traffic from I-75 to east of SR 7
- Continuous connection of SR 84 between Davie Road and SR 7
- Collector-Distributor (C-D) system between Davie Road and I-95
- Two-lane off-ramps, as needed
- Braided interchange ramps to eliminate mainline weaving segments
- Combined ramps and cross-street bypasses to reduce congestion
- A westbound to northbound (WB-NB<sup>1</sup>) on-ramp at Florida's Turnpike
- Modifications to the I-595/Florida's Turnpike interchange
- Transit element, such as a commuter rail, integrated into the corridor (with details of the concept to be developed in a separate study)

Fifteen different build alternatives were evaluated during Tiers 1 and 2 of the Master Plan Study. The LPA consists of an integrated set of projects. This integration would be compromised if alternatives analyses for the individual projects resulted in design concepts that would necessitate a revisited corridor planning effort. Therefore, the I-595 Master Plan LPA served as the base build alternative for the I-595 PD&E Study.

The objective of the I-595 PD&E Study is to re-examine the original justifications for the Master Plan LPA to assure that federal, state and local policies enacted since initial development of the project concepts have been incorporated into its recommendations. The same is true of the design standards and technologies considered for application or implementation in the corridor. Complementary projects, either in progress or completed since earlier studies of the I-595 corridor were concluded, have also been considered in the development of recommendations. The detailed examination of these issues through the PD&E process assures that FDOT has identified the most cost-feasible, constructable improvements in the final recommended package. In addition to preserving both local and state interests, the PD&E process satisfies National Environmental Policy Act (NEPA) procedures. These measures are a prerequisite for receiving Location Design Concept Acceptance (LDCA) from FHWA, an essential step in qualifying for the federal funds needed to implement the proposed improvements.

<sup>1</sup> Throughout this document the following conventions are used: WB = westbound, NB = northbound, EB = eastbound and SB = southbound. Directional movements are written as shown in the following example: "... westbound to northbound travel ..." will be written as "... WB-NB travel ..."



2.1 PROJECT LOCATION

The I-595 corridor is located in central Broward County, Florida. The western study limits are the I-75/Sawgrass Expressway interchange (Mile Post 0.592); the eastern study limits are the I-95 interchange (Mile Post 10.407). The total project length is approximately 10 miles. The I-595 corridor passes through or lies immediately adjacent to six governmental jurisdictions: the Cities of Sunrise, Davie, Plantation, Ft. Lauderdale and Dania, as well as unincorporated areas of Broward County.

Unlike most interstate corridors in Florida, the majority of the I-595 corridor is comprised of two facilities: I-595 and SR 84. The I-595 portion of the corridor is a six-lane, limited access facility. In addition to interchanges with the two freeway systems at each end of the study corridor, there are nine other interchanges along the corridor at the following crossroads: SW 136th Avenue, Flamingo Road (SR 823), Hiatus Road, Nob Hill Road, Pine Island Road, University Drive (SR 817), Davie Road, Florida's Turnpike (SR 91), and SR 7 (US 441).

The SR 84 portion of the corridor lies both north and south of the I-595 mainline. The two lanes north of the mainline operate one-way WB while the two lanes south of the mainline operate one-way EB. In the area west of the I-75 interchange and continuing east to Davie Road, the SR 84 lanes serve as a collector-distributor system to the I-595 mainline. The SR 84 system is suspended through the I-595 interchanges with Florida's Turnpike and SR 7. East of the SR 7 interchange, the SR 84 and I-595 rights of way separate. The SR 84 alignment veers to the northeast and the I-595 alignment continues nearly due east.

2.2 NEED FOR IMPROVEMENT

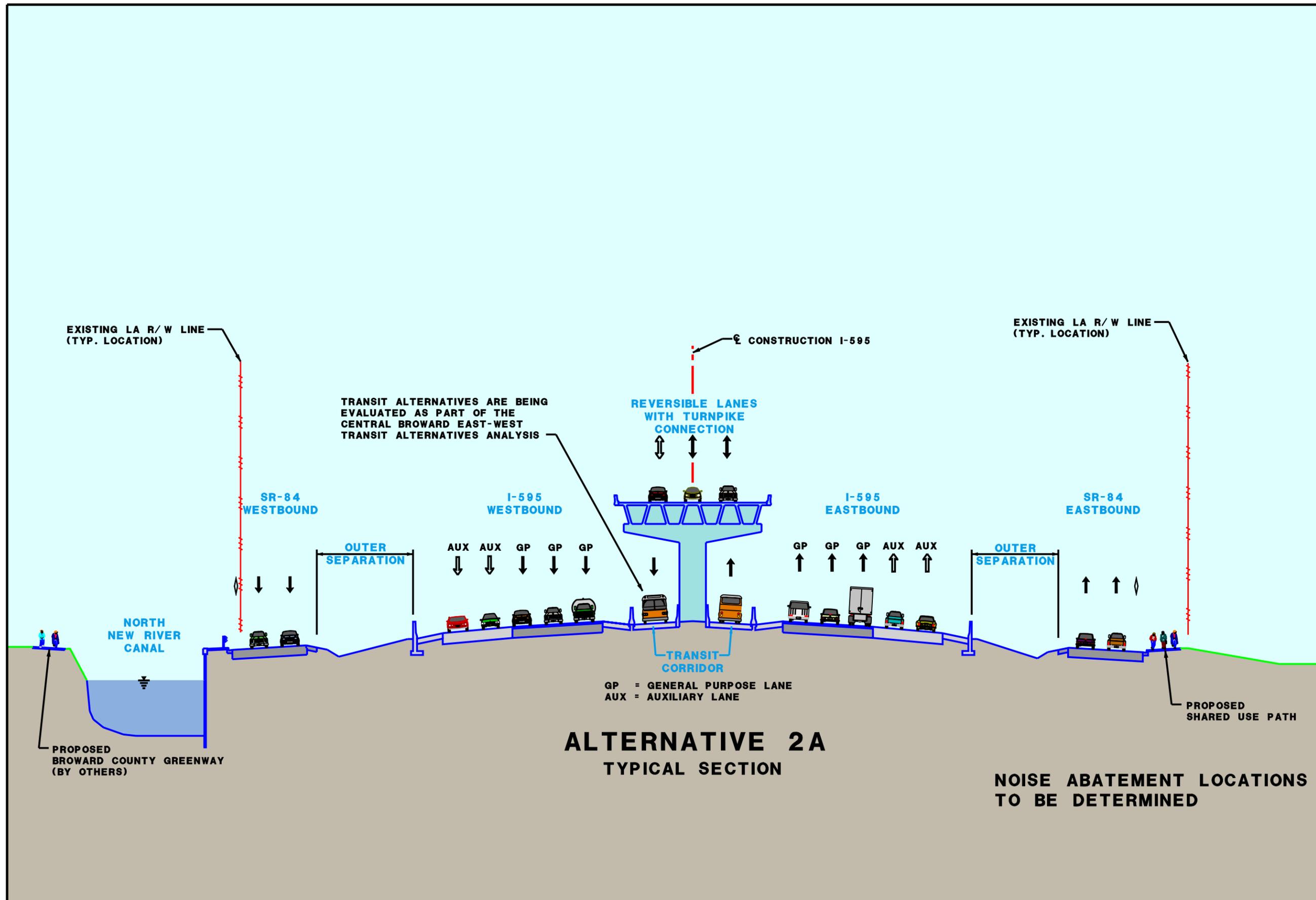
The various improvements that comprise this project address a number of state, regional and corridor-specific needs. The following sections summarize the need for the proposed improvements. A more detailed discussion of the project justification is provided in Section 3.0 NEED FOR IMPROVEMENTS of the PD&E Study's accompanying *Preliminary Engineering Report* (PER).

2.2.1 Statewide Needs

The improvements proposed for the I-595 corridor are directly related to the FDOT Mission Statement.

*Florida will provide and manage a safe transportation system that ensures the mobility of people and goods, while enhancing economic competitiveness and the quality of our environment and communities.*





Reynolds, Smith and Hills, Inc.  
Architecture, Engineering and Planning

STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION

I-595 PD&E STUDY

ALTERNATIVE 2A TYPICAL SECTION

FIGURE 2-6



### 7.0 CONCLUSIONS AND RECOMMENDATIONS

Following the I-595 PD&E Study Public Hearing, which was held on November 29, 2005, and further engineering evaluation and additional coordination with FDOT and Florida's Turnpike Enterprise, Alternative 2A was selected as the recommended alternative to proceed to the Design phase of the project. Alternative 2A maximizes the efficiency of the corridor by: 1) providing a regional direct connection between I-75, Florida's Turnpike, and I-95; 2) providing additional capacity within the corridor by a third reversible lane; 3) minimizing impacts to adjacent properties by locating the improvements within the existing right of way and in the center of the corridor; and 4) supporting Transit New Start.

For Alternative 2A, noise barriers at 12 of the 19 locations (including the replacement of a planned noise barrier associated with the widening of Florida's Turnpike) are recommended for further consideration during the Final Design phase of the project when more detailed information is available. The general location, dimensions, and costs of the noise barriers recommended for further consideration are summarized in Table 7-1. Figure 7.1 depicts the general location of these noise barriers. Noise barriers at these 12 locations would provide benefit to 17 of the 26 noise sensitive areas affected by traffic noise. These 12 noise barriers are expected to reduce traffic noise levels by at least 5.0 dBA at 541 residences along the project corridor. The number of benefited residences includes 394 of the 672 that are affected by traffic noise. The estimated total cost of these barriers is approximately \$19,471,940 based on standard per square foot construction costs presented in Section 5.0 *Noise Barrier Analysis*. The estimated total cost of these barriers based on the FDOT Long Range Estimate (LRE) method is approximately \$17 million (see Section 9.17.4 of the PER).

FDOT is committed to the construction of feasible noise abatement measures at the locations where noise barriers have been recommended for further consideration during the Final Design phase, contingent upon the following conditions:

- Detailed noise analyses during the final design process supports the need for abatement;
- Reasonable cost analyses indicate that the economic cost of the barrier(s) will not exceed the guidelines;
- Community input regarding desires, types, heights, and locations of barriers has been solicited by the FDOT;
- Preferences regarding compatibility with adjacent land uses, particularly as addressed by officials having jurisdiction over such land uses, has been noted;
- Safety and engineering aspects as related to the roadway user and the adjacent property owner have been reviewed; and
- Any other mitigating circumstances found in Section 17-4.6.1 of FDOT's PD&E Manual have been analyzed.



It is likely that the noise abatement measures for the identified locations will be constructed if found feasible based on the contingencies listed above. If, during the Final Design phase, any of the contingency conditions listed above cause abatement to no longer be considered reasonable or feasible for a given location(s), such determination(s) will be made prior to requesting approval for construction advertisement. Commitments regarding the exact abatement measure locations, heights, and type (or approved alternatives) will be made during project reevaluation and at a time before the construction advertisement is approved.

In addition to the coordination with the property owners adjacent to the noise barriers recommended for further consideration in the Final Design phase, FDOT will also coordinate with the property owners/residents of north of Sewell Lock in the community of Isla del Sol. Because of SFWMD's maintenance requirements for the North New River Canal and Sewell Lock, a ground mounted noise barrier north of Sewell Lock (Station 497+00 to 501+40) was not considered constructible within SFWMD's right of way. An easement from the adjacent property owners would be required to construct a noise barrier north of Sewell Lock. During the Design Phase of the project, FDOT will evaluate the effectiveness of noise barriers and potential of obtaining easements from the adjacent property owners necessary for the construction of a noise barrier in this area.

The cost to construct noise barriers at the remaining seven of 19 locations that were evaluated substantially exceeded FDOT's reasonable cost criteria of \$35,000 per benefited residence. Therefore, noise barriers are not recommended for further consideration or construction at these locations because they are not cost reasonable. Based on the noise analyses performed to date, there appears to be no apparent solutions available to mitigate the noise impacts at the remaining noise sensitive sites along the project corridor. The traffic noise impacts to the 278 of 672 noise sensitive sites affected by the project are an unavoidable consequence of the project. Because of the relatively low number of impacted sites, the traffic noise impacts associated with this project are not considered significant.



Table 6-2 Noise Barrier Summary Evaluation Summary and Recommendations for Alternative 2A

General Location (Cross Streets)	Relative Location to I-595 or Florida's Turnpike	Community Name	Area ID Number	Type of Noise Sensitive Site	Optimal Conceptual Barrier Design Number	Barrier Type	Height (feet)	Length (feet)	Begin Station Number	End Station Number	Number of Affected Receivers	Average Noise Reduction for Affected Receivers (dBA)	Number of Affected/Benefited Receivers	Number of Benefited Receivers/Not Affected	Total Number of Benefited Receivers	Average Noise Reduction for all Benefited Receivers (dBA)	Cost	Average Cost/Site Benefited	Optimal Barrier Design Meets FDOT's Reasonable Noise Abatement Cost Criteria of \$35,000 per Benefited Receiver Site	Noise Barrier Recommended for Further Consideration and Community Input	Estimated Cost of Noise Barriers	Total Number of Benefited Receivers	Average Cost per Site Benefited
Between SW 136 <sup>th</sup> Avenue and Flamingo Road	North of I-595	Sunshine City	A-1	Residential (Mobile Home Park)	CD13	Shoulder Mounted on MSE Wall (I-595)	8	240	153+20	155+60	61	8.8	54	25	79	8.5	\$1,782,780	\$22,567	Yes	Yes	\$1,782,780	79	\$22,567
						Shoulder Mounted on Bridge (I-595)	8	340	155+60	159+00													
						Shoulder Mounted on MSE Wall (I-595)	8	1,120	159+00	170+00													
						Shoulder Mounted (I-595)	8	800	170+00	178+00													
						Ground Mounted	22	1,690	157+15 166+25	165+50 174+80													
	South of I-595	Sunshine Village	A-5	Residential (Mobile Home Park)	CD4	Shoulder Mounted on MSE Wall	8	280	153+00	155+80	4	2.0	0	2	2	5.3	\$1,591,980	\$795,990	No	No	---	---	---
						Shoulder Mounted on Bridge	14	330	155+80	159+10													
						Shoulder Mounted on MSE Wall	8	890	159+10	168+00													
						Shoulder Mounted	14	460	168+00	172+60													
						Shoulder Mounted	14	1,260	174+40	187+00													
Western Hills	A-6	Residential (Mobile Home Park)	CD4	Shoulder Mounted	14	1,760	176+40	194+00	7	5.5	7	1	8	5.4	\$1,108,800	\$138,600	No	No	---	---	---		
Paradise Village	A-7	Residential (Mobile Home Park)	CD4	Ground Mounted	22	1,540	190+00	194+00	71	5.1	43	0	43	7.4	\$847,000	\$19,698	Yes	Yes	\$847,000	43	\$19,698		
Kings Manor Estates	A-8	Residential (Mobile Home Park)					194+60	206+00															
Between Flamingo Road and Hiatus Road	North of I-595	Plantation Acres	A-9	Residential (Single Family)	CD10	Ground Mounted	22	4,740	217+60	265+00	39	7.6	30	1	31	8.6	\$2,607,000	\$84,097	No	Yes	\$2,607,000	31	\$84,097
		Acres South Park	A-10	Park (Passive Recreation)																			
	South of I-595	Village at Pine Lake	A-11	Multi-Family Residential (Two Story Quadrplexes)	CD6	Ground Mounted	22	700	226+05 233+00	232+05 234+00	10	2.5	2	0	2	5.3	\$385,000	\$192,500	No	No	---	---	---
Between Hiatus Road and Nob Hill Road	North of I-595	Hawks Landing	A-13	Residential (Single Family)	CD6	Ground Mounted	22	4,900	269+00	318+00	42	5.7	36	19	55	7.2	\$2,695,000	\$49,000	No	Yes	\$2,695,000	55	\$49,000
	South of I-595	The Palms Apartment Homes	A-14	Multi-Family Residential (Multi-Story Apartment Buildings)	CD2	Shoulder Mounted	8/14	3,900	265+00	304+00	104	2.1	0	0	0	---	\$1,658,120	---	No	No	---	---	---
Between Nob Hill Road and Pine Island Road	North of I-595	The Trellises Condos	A-17	Multi-Family Residential (Two Story Townhomes)	CD4	Ground Mounted	22	5,000	322+00	372+00	65	6.2	57	7	64	7.0	\$2,750,000	\$42,969	No	Yes	\$2,750,000	64	\$42,969
		Daive Isles	A-18	Single Family Residential																			
		Jacaranda Villas	A-19	Multi-Family Residential (Multi-Story Condominium Buildings)																			
South of I-595	Evergreen Place	A-21	Multi-Family Residential (Multi-Story Condominium Buildings)	CD6	Ground Mounted	22	1,100	340+00	351+00	41	4.3	19	0	19	5.6	\$605,000	\$31,842	Yes	Yes	\$605,000	19	\$31,842	
Between Pine Island Road and University Drive	North of I-595	Plantation Colony Apartments	A-22	Multi-Family Residential (Multi-Story Apartment Buildings)	CD4	Ground Mounted	22	1,180	391+80	403+60	1	4.4	0	5	5	5.9	\$649,000	\$129,800	No	No	---	---	---
	South of I-595	Park City Estates	A-23	Residential (Mobile Home Park)	CD4	Shoulder Mounted on Bridge (Ramp Lane)	14	360	375+20	378+80	19	2.1	0	0	0	---	\$1,276,160	---	No	No	---	---	---
						Shoulder Mounted on MSE Wall (Ramp Lane)	8	1,090	378+80	389+70													
						Shoulder Mounted (I-595 Mainline)	14	1,240	388+70	401+10													
	Arrowhead Golf and Tennis Club	A-24	Multi-Family Residential (Multi-Story Apartment Buildings)	CD3	Ground Mounted	22	330	410+20	413+50	21	7.9	21	2	23	7.8	\$511,500	\$22,239	Yes	Yes	\$511,500	23	\$22,239	
Valencia Village	A-25	Multi-Family Residential (Multi-Story Apartment Buildings)	Ground Mounted		22	600	414+40	420+40															
Between University Drive and Florida's Turnpike	North of I-595	Lake View Estates	A-26	Residential (Single Family)	CD4	Ground Mounted	20	5,400	431+00	485+00	54	8.8	52	33	85	8.0	\$2,700,000	\$31,765	Yes	Yes	\$2,700,000	85	\$31,765
		Isla del Sol	A-27	Residential (Single Family)	CD1	Ground Mounted	14	1,100	486+00	497+00	12	4.2	6	1	7	7.4	\$385,000	\$55,000	No	Yes	\$385,000	7	\$55,000
		Sewell Lock Park	A-28	Park (Passive Recreation)																			
		Plantation Landings	A-29	Residential (Single Family)	CD5	Shoulder	8	560	491+50	497+10	40	3.5	3	0	3	5.0	\$3,075,200	\$1,025,067	No	No	---	---	---
						Shoulder Mounted on MSE	8	1,080	497+10	507+90													
						Shoulder Mounted on MSE	8	1,000	509+20	519+20													
Plantation Harbor	A-30	Residential (Single Family)	CD5	Shoulder Mounted on Bridge	8	130	507+90	509+20	40	3.5	3	0	3	5.0	\$3,075,200	\$1,025,067	No	No	---	---	---		
				Shoulder Mounted	14	3,400	502+00	536+00															
Between SR 7 and I-95	North of I-595	Archstone Apartments	A-36	Multi-Family Residential (Multi-Story Apartment Buildings)	CD4	Shoulder Mounted on MSE Wall	8	400	624+00	628+00	28	3.2	10	33	43	6.9	\$1,756,000	\$40,837	No	Yes	\$1,756,000	43	\$40,837
						Ground Mounted	22	2,960	595+40	626+80													
Between Griffin Road and I-595	West of Florida's Turnpike	Everglades Lakes	A-40	Residential (Mobile Home Park)	CD10	Shoulder Mounted	8	1,090	4761+00	4772+00	31	9.5	31	12	43	8.6	\$1,352,160	\$31,446	Yes	Yes	\$1,352,160	43	\$31,446
						Ground Mounted	20	1,780	4752+00	4769+00													
Between I-595 and Peters Road	West of Florida's Turnpike	Plantation Harbor	A-42	Residential (Single Family)	CD3	Shoulder Mounted	12	2,625	4815+00	4841+25	23	9.2	23	6	29	8.8	\$1,480,500	\$51,052	No	Yes	\$1,480,500	29	\$51,052

I:\I-595PD&E\Study\Noise Study\Report Draft\Table6-1\_NoiseBarrier Summary Table110505.xls\Alt 2A

Conceptual noise barrier design that meets FDOT's reasonable cost criteria  
 Conceptual noise barrier design that does not meet FDOT's reasonable cost criteria but considered a priority location for cost averaging

Table 7-1 Locations Recommended for Further Consideration for Noise Barriers During the Final Design Phase of the Project (Alternative 2A)

Noise Barrier Number (Area ID Number)	General Location	Community Name (Area ID Number)	Type of Noise Sensitive Site	Optimal Conceptual Barrier Design Number	Barrier Type	Height (feet)	Length (feet)	Begin Station Number	End Station Number	Number of Affected Receivers	Average Noise Reduction for Affected Receivers (dBA)	Number of Affected/Benefited Receivers	Number of Benefited Receivers/Not Affected	Total Number of Benefited Receivers	Average Noise Reduction for all Benefited Receivers (dBA)	Cost	Average Cost/Site Benefited	Optimal Barrier Design Meets FDOT's Reasonable Noise Abatement Cost Criteria of \$35,000 per Benefited Receiver Site	Noise Barrier Recommended for Further Consideration and Community Input	Estimated Cost of Noise Barriers	Total Number of Benefited Receivers	Average Cost per Site Benefited
B-1 (A-1)	Between SW 136 <sup>th</sup> Avenue and Flamingo Road - North of I-595	Sunshine City (A-1)	Residential (Mobile Home Park)	CD13	Shoulder Mounted on MSE Wall (I-595)	8	240	153+20	155+60	61	8.8	54	25	79	8.5	\$1,782,780	\$22,567	Yes	Yes	\$1,782,780	79	\$22,567
					Shoulder Mounted on Bridge (I-595)	8	340	155+60	159+00													
					Shoulder Mounted on MSE Wall (I-595)	8	1,120	159+00	170+00													
					Shoulder Mounted (I-595)	8	800	170+00	178+00													
					Ground Mounted	22	1,690	157+15	165+50													
							166+25	174+80														
B-2 (A-7, A-8)	Between SW 136 <sup>th</sup> Avenue and Flamingo Road - South of I-595	Paradise Village (A-7)	Residential (Mobile Home Park)	CD4	Ground Mounted	22	1,540	190+00	194+00	71	5.1	43	0	43	7.4	\$847,000	\$19,698	Yes	Yes	\$847,000	43	\$19,698
		Kings Manor Estates (A-8)	Residential (Mobile Home Park)					194+60	206+00													
B-3 (A-9, A-10)	Between Flamingo Road and Hiatus Road - North of I-595	Plantation Acres (A-9)	Residential (Single Family)	CD10	Ground Mounted	22	4,740	217+60	265+00	39	7.6	30	1	31	8.6	\$2,607,000	\$84,097	No	Yes	\$2,607,000	31	\$84,097
		Acres South Park (A-10)	Park (Passive Recreation)																			
B-4 (A-13)	Between Hiatus Road and Nob Hill Road - North of I-595	Hawks Landing (A-13)	Residential (Single Family)	CD6	Ground Mounted	22	4,900	269+00	318+00	42	5.7	36	19	55	7.2	\$2,695,000	\$49,000	No	Yes	\$2,695,000	55	\$49,000
B-5 (A-17, A-18, A-19)	Between Nob Hill Road and Pine Island Road - North of I-595	The Trellises Condos (A-17)	Multi-Family Residential (Two Story Townhomes)	CD4	Ground Mounted	22	5,000	322+00	372+00	65	6.2	57	7	64	7.0	\$2,750,000	\$42,969	No	Yes	\$2,750,000	64	\$42,969
		Davide Isles (A-18)	Single Family Residential																			
		Jacaranda Villas (A-19)	Multi-Family Residential (Multi-Story Condominium Buildings)																			
B-6 (A-21)	Between Nob Hill Road and Pine Island Road - South of I-595	Evergreen Place (A-21)	Multi-Family Residential (Multi-Story Condominium Buildings)	CD6	Ground Mounted	22	1,100	340+00	351+00	41	4.3	19	0	19	5.6	\$605,000	\$31,842	Yes	Yes	\$605,000	19	\$31,842
B-7 (A-24, A-25)	Between Pine Island Road and University Drive - South of I-595	Arrowhead Golf and Tennis Club (A-24)	Multi-Family Residential (Multi-Story Apartment Buildings)	CD3	Ground Mounted	22	330	410+20	413+50	21	7.9	21	2	23	7.8	\$511,500	\$22,239	Yes	Yes	\$511,500	23	\$22,239
		Valencia Village (A-25)	Multi-Family Residential (Multi-Story Apartment Buildings)																			
B-8 (A-26)	Between University Drive and Florida's Turnpike - North of I-595	Lake View Estates (A-26)	Residential (Single Family)	CD4	Ground Mounted	20	5,400	431+00	485+00	54	8.8	52	33	85	8.0	\$2,700,000	\$31,765	Yes	Yes	\$2,700,000	85	\$31,765
B-9 (A-27)	Between University Drive and Florida's Turnpike - North of I-595	Isla del Sol (A-27)	Residential (Single Family)	CD1	Ground Mounted	14	1,100	486+00	497+00	12	4.2	6	1	7	7.4	\$385,000	\$55,000	No	Yes	\$385,000	7	\$55,000
B-10 (A-36)	Between SR 7 and I-95 - North of I-595	Archstone Apartments (A-36)	Multi-Family Residential (Multi-Story Apartment Buildings)	CD4	Shoulder Mounted on MSE Wall	8	400	624+00	628+00	28	3.2	10	33	43	6.9	\$1,756,000	\$40,837	No	Yes	\$1,756,000	43	\$40,837
					Ground Mounted	22	2,960	595+40	626+80													
B-11 (A-40)	Between Griffin Road and I-595 - West of Florida's Turnpike	Everglades Lakes (A-40)	Residential (Mobile Home Park)	CD10	Shoulder Mounted	8	1,090	4761+00	4772+00	31	9.5	31	12	43	8.6	\$1,352,160	\$31,446	Yes	Yes	\$1,352,160	43	\$31,446
					Ground Mounted	20	1,780	4752+00	4769+00													
B-12 (A-42)	Between I-595 and Peters Road - West of Florida's Turnpike	Plantation Harbor (A-42)	Residential (Single Family)	CD3	Shoulder Mounted	12	2,625	4815+00	4841+25	23	9.2	23	6	29	8.8	\$1,480,500	\$51,052	No	Yes	\$1,480,500	29	\$51,052

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- Conceptual noise barrier design that meets FDOT's reasonable cost criteria and recommended for further consideration during the Final Design phase of the project
- Conceptual noise barrier design that does not meet FDOT's reasonable cost criteria but considered a priority location for cost averaging during the Final Design phase of the project

**LEGEND**

**NOISE BARRIERS ANALYZED**

- GROUND MOUNTED NOISE BARRIER
- SHOULDER MOUNTED NOISE BARRIER

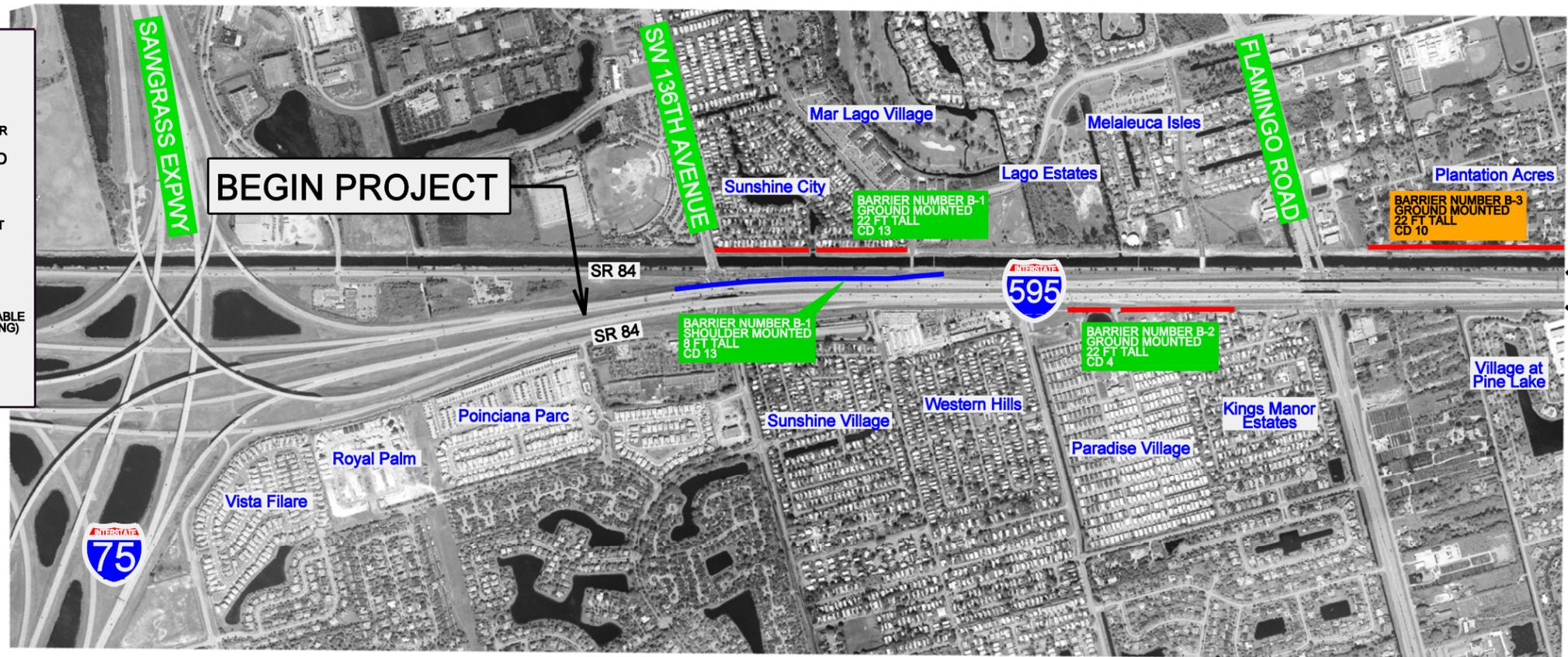
NOISE BARRIER LOCATION RECOMMENDED FOR FURTHER CONSIDERATION AND COMMUNITY INPUT DURING FINAL DESIGN PHASE

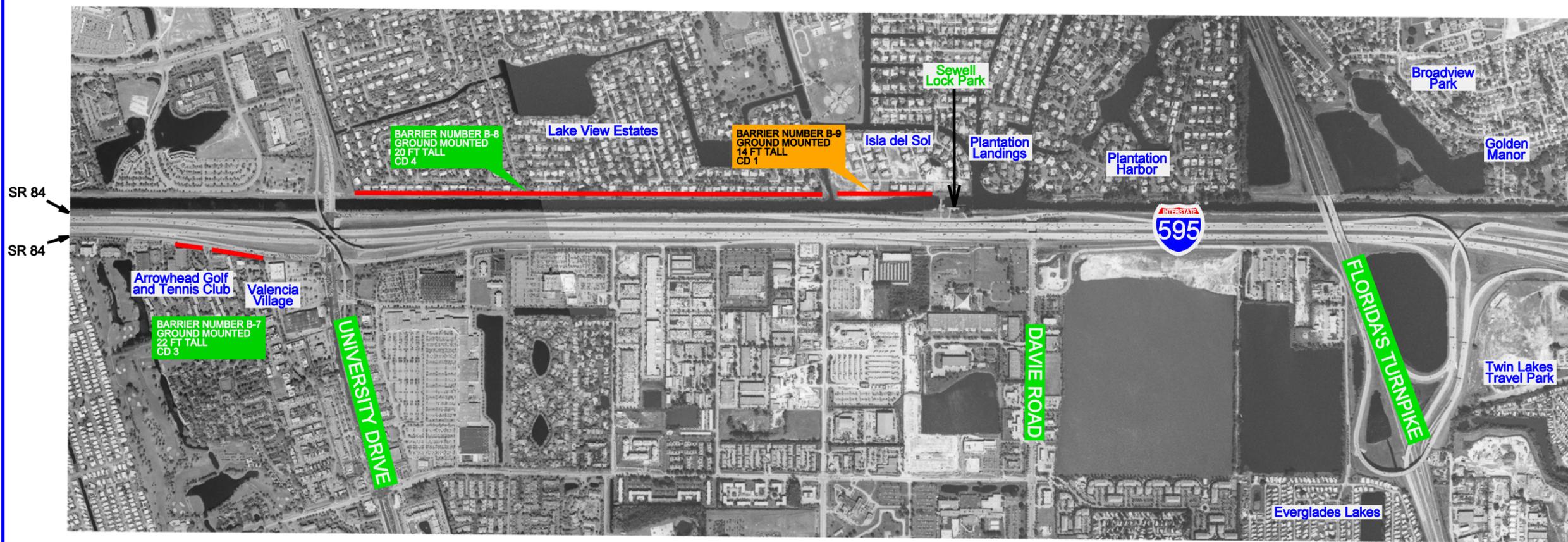
BARRIER DESIGN MEETS FDOT'S REASONABLE COST CRITERIA

BARRIER NUMBER  
BARRIER TYPE  
BARRIER HEIGHT  
CONCEPTUAL DESIGN NUMBER

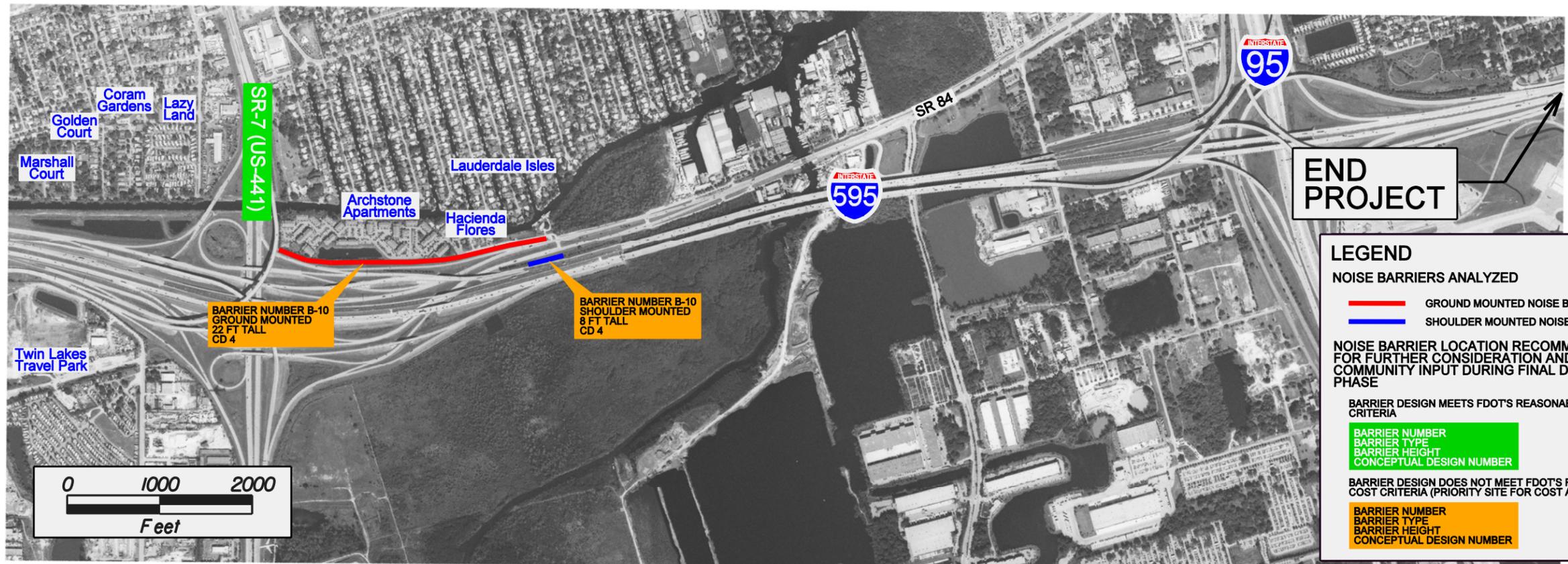
BARRIER DESIGN DOES NOT MEET FDOT'S REASONABLE COST CRITERIA (PRIORITY SITE FOR COST AVERAGING)

BARRIER NUMBER  
BARRIER TYPE  
BARRIER HEIGHT  
CONCEPTUAL DESIGN NUMBER





(See Sheet 3 of 3)



**LEGEND**

**NOISE BARRIERS ANALYZED**

- GROUND MOUNTED NOISE BARRIER
- SHOULDER MOUNTED NOISE BARRIER

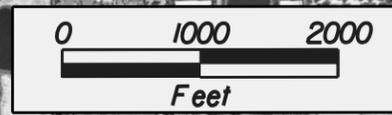
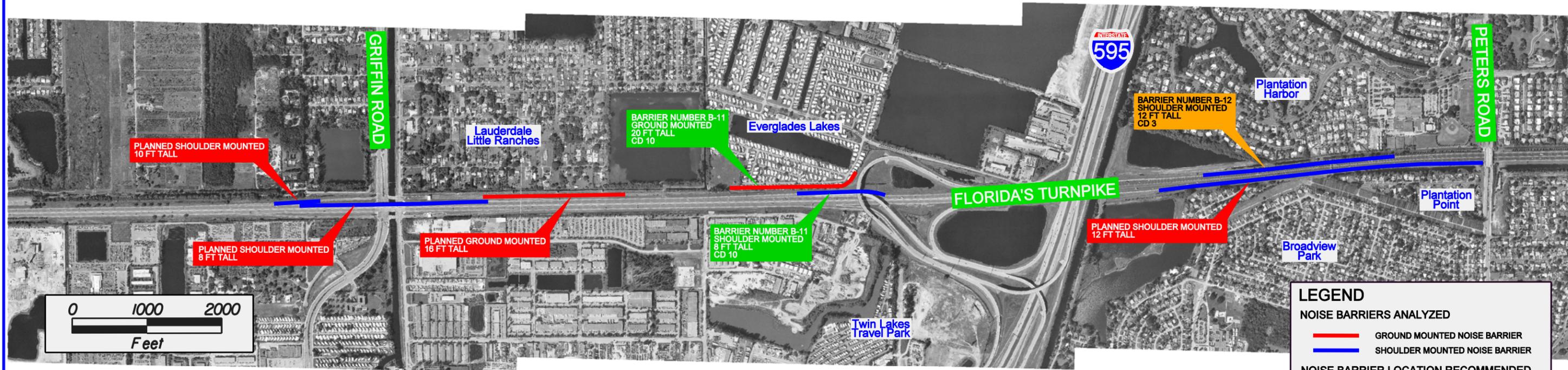
**NOISE BARRIER LOCATION RECOMMENDED FOR FURTHER CONSIDERATION AND COMMUNITY INPUT DURING FINAL DESIGN PHASE**

**BARRIER DESIGN MEETS FDOT'S REASONABLE COST CRITERIA**

- BARRIER NUMBER
- BARRIER TYPE
- BARRIER HEIGHT
- CONCEPTUAL DESIGN NUMBER

**BARRIER DESIGN DOES NOT MEET FDOT'S REASONABLE COST CRITERIA (PRIORITY SITE FOR COST AVERAGING)**

- BARRIER NUMBER
- BARRIER TYPE
- BARRIER HEIGHT
- CONCEPTUAL DESIGN NUMBER



**LEGEND**

**NOISE BARRIERS ANALYZED**

- GROUND MOUNTED NOISE BARRIER
- SHOULDER MOUNTED NOISE BARRIER

**NOISE BARRIER LOCATION RECOMMENDED FOR FURTHER CONSIDERATION AND COMMUNITY INPUT DURING FINAL DESIGN PHASE**

- BARRIER DESIGN MEETS FDOT'S REASONABLE COST CRITERIA
- BARRIER DESIGN DOES NOT MEET FDOT'S REASONABLE COST CRITERIA (PRIORITY SITE FOR COST AVERAGING)

**BARRIER NUMBER  
BARRIER TYPE  
BARRIER HEIGHT  
CONCEPTUAL DESIGN NUMBER**

**BARRIER TYPE  
BARRIER HEIGHT**

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