Noise Study Report Update

US 301 (SR 43)
From North of SR 674 (Sun City Center Boulevard) to South of Gibsonton Drive
Hillsborough County

FPID Nos. 415489-2-52-01 and 415489-3-52-01

Prepared for the
Florida Department of Transportation
District Seven

October, 2006

Noise Study Report Update

US 301 (SR 43)
From North of SR 674 (Sun City Center Boulevard) to South of Gibsonton Drive
Hillsborough County

FPID Nos. 415489-2-52-01 and 415489-3-52-01

Prepared for the
Florida Department of Transportation
District Seven

Prepared by
KB Environmental Sciences, Inc.

October, 2006

EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT) is preparing highway design plans for improvements for two segments of US 301--from south of State Road (SR) 674 (Sun City Center Boulevard) to south of Balm Road (Financial Project ID No. 415489-3-52-01) and from south of Balm Road to north of Gibsonton Road (Financial Project ID 415489-2-52-01) in Hillsborough County. In conjunction with preparation of the project's design plans, the FDOT is updating the traffic noise analysis for the project for those noise sensitive sites that received a building permit prior to the project's Date of Public Knowledge (June 23, 1987). This report presents the results of the traffic noise evaluation performed for this purpose.

The objectives of Design Phase traffic noise evaluation were to:

- Identify noise sensitive sites adjacent to the existing roadway that received a building permit prior to the Date of Public Knowledge for the project (prior to June 23, 1987), and to
- Consider traffic noise abatement measures for the sites meeting the above criteria that are determined to be affected by traffic noise level changes due to the project.

The results of a screening and detailed analysis indicate that with the improvements to US 301, 26 noise sensitive sites (representing 1 church, 19 single-family residences, and 6 mobile home parks) would experience traffic noise levels approach, meeting, or exceeding the FHWA's NAC. The noise abatement measures considered for these sites were traffic management, alternative roadway alignment, and noise barriers. Traffic management and an alternative roadway alignment were not considered to be reasonable measures to reduce the predicted traffic noise levels. And, with the exception of one location (discussed in the next paragraph), noise barriers were not considered to be a feasible and reasonable measure.

The results of the noise barrier analysis indicate that a noise barrier could have been both a feasible and reasonable noise abatement measure to reduce predicted traffic noise at 21 residences within the Oakside Mobile Home Park (MHP) that would be affected by traffic noise with the improvements to US 301. At a height of 10 feet, a barrier would have reduced traffic noise from 5 to 8 dBA for the 21 residences at an estimated cost of $148,250 or $7,060 per benefited noise sensitive site—a cost below the FDOT's cost reasonable guideline. However, one of the FDOT's considerations when evaluating the reasonableness of providing a noise barrier as an abatement measure is the desire of the affected property owner(s) to have a noise barrier located adjacent to their property. By way of a noise barrier survey, the owners of the Oakside MHP indicated that they do not desire a noise barrier.

TABLE OF CONTENTS

Note: Hardcopy and electronic versions of all TNM input/output are available for review at the Florida Department of Transportation, District Seven.

LIST OF TABLES

LIST OF EXHIBITS

1.0 INTRODUCTION

The Florida Department of Transportation (FDOT) is preparing highway design plans for improvements for two segments of US 301--from south of State Road (SR) 674 (Sun City Center Boulevard) to south of Balm Road (Financial Project ID No. 415489-3-52-01) and from south of Balm Road to north of Gibsonton Road (Financial Project ID 415489-2-52-01) in Hillsborough County (**Exhibit 1**). In conjunction with preparation of the project's design plans, the FDOT is updating the traffic noise analysis for the project for those noise sensitive sites that received a building permit prior to the project's Date of Public Knowledge (June 23, 1987) [1].

In March of 1984, the FDOT published an Engineering Alternatives Report[2] (EAR) for the US 301 project. The EAR summarizes the results of the Project Development and Environment (PD&E) Phase traffic noise analysis for the US 301 improvements. The results of the PD&E Phase analysis are also summarized in the FDOT's Finding of No Significant Impact (FONSI) for the project. The FONSI was approved by the Federal Highway Administration (FHWA) on June 23, 1987.

The approval date for a FONSI is also referred to as the Date of Public Knowledge for a roadway improvement project. Following procedures in the FDOT's PD&E Manual[3], the Department does not consider noise abatement (reduction) measures for noise sensitive development(s) which occurred after the Date of Public Knowledge for a project. Consideration and provision of such abatement are the primary responsibility of the local government and/or private developer(s).

This report, a Noise Study Report (NSR) Update, presents the results of the traffic noise evaluation performed for the purpose of updating the noise analysis for the noise sensitive sites that receiving a building permit prior to June 23, 1987. As such, the objectives of this traffic noise evaluation are to:

- Identify noise sensitive sites adjacent to the existing roadway that received a building permit prior to June 23, 1987, and to
- Consider traffic noise abatement measures for the sites meeting the above criteria that are determined to be affected by traffic noise.

---

[1] The date that the FHWA approves a FDOT Type 2 Categorical Exclusion (CE), a FONSI, a Record of Decision (ROD), or when the FDOT approves a State Environmental Impact Report (SEIR) for proposed improvements.
[2] Engineering Alternatives Report - U.S. 301 (S.R. 43) from Bishop Road to Gibsonton Drive, Florida Department of Transportation, March, 1984.
[3] Project Development and Environment Manual, Chapter 17 - Noise, October 6, 2003.

Project Location Map

Financial Project ID Nos: 415489-2-32-01 and 415489-3-32-01
US 301 (SR 43)
From N. of SR 674 (Sun City Center Blvd) to
S. of Gibsonton Dr

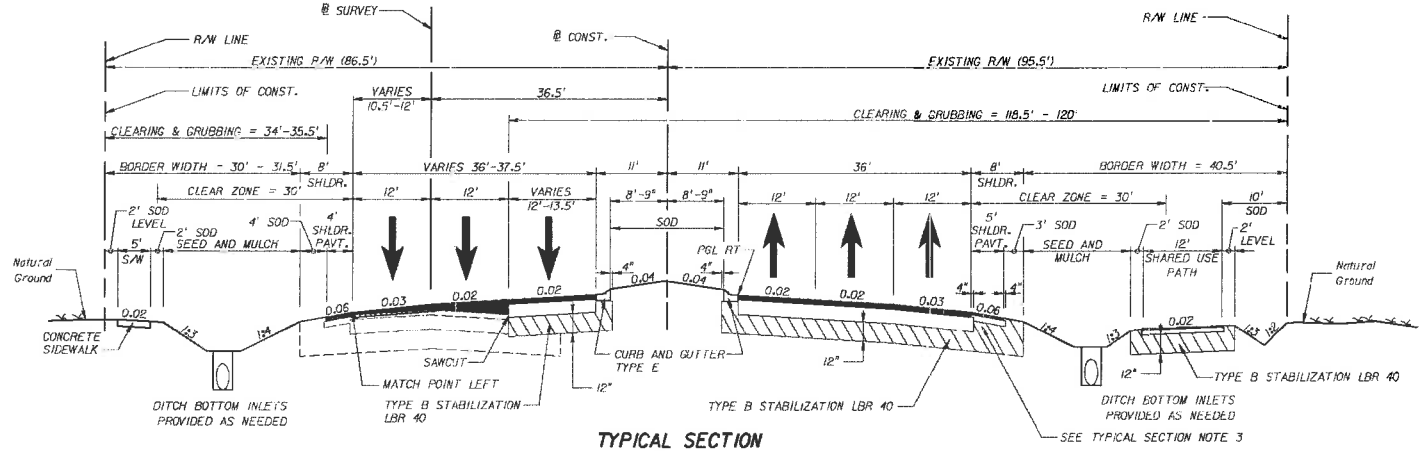
Exhibit 1

2.0 ROADWAY IMPROVEMENTS

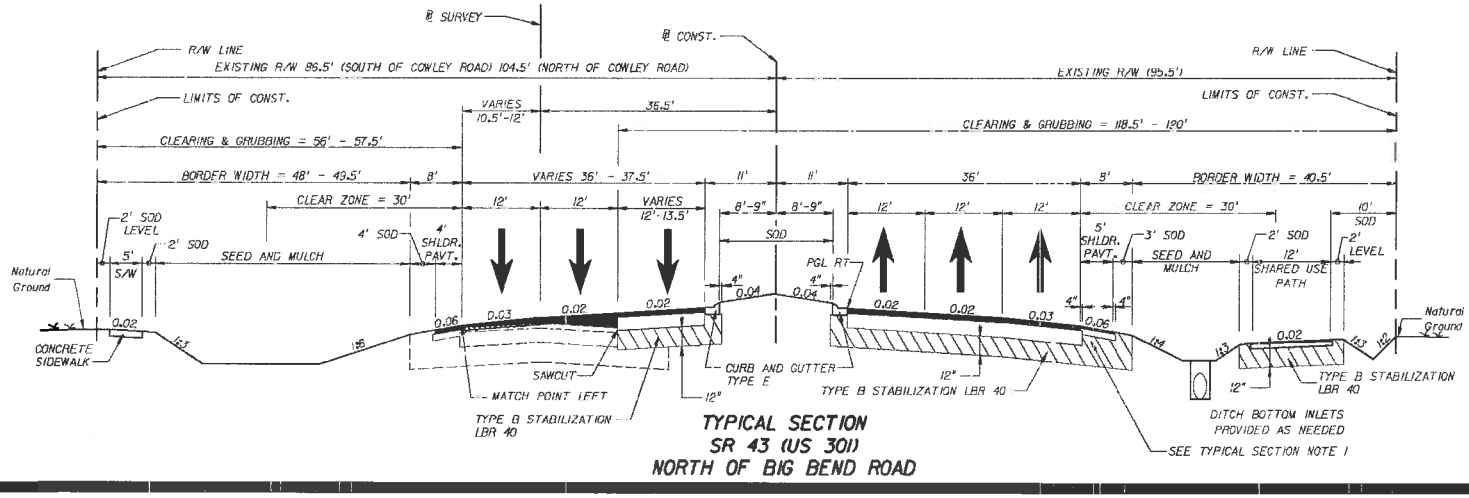
The current design plans for US 301 involve upgrading the existing two-lane roadway to a six-lane divided roadway—the same concept that was evaluated in the EAR for the US 301 improvements. The six-lane roadway will include three northbound and three southbound travel lanes (12-feet in width), with a 22-foot median consisting of curbs, gutters, and raised sod. Additionally, a 12-foot shared-use path (pedestrians and bicycles) will be located east of the northbound travel lanes. The six-lane rural typical sections for the US 301 improvements north and south of Big Bend Road are provided on **Exhibit 2**.

The difference between the two typical sections provided in Exhibit 2 is the width of the right-of-way (ROW). Although the EAR states that the FDOT would require an additional 18 feet of ROW to the west of US 301 from SR 674 northward to the vicinity of Cowley Road (approximately 2 miles north of Big Bend Road), the current proposal does not identify a need for this additional mainline ROW. Therefore, with the exception of stormwater management facilities and floodplain compensation, the improvements will be constructed entirely within the FDOT's existing ROW. South of Big Bend Road, the width of the ROW is 182 feet. North of Big Bend Road, the width varies from 182 to 200 feet.

Typical Sections



TYPICAL SECTION
SR 43 (US 301)
SOUTH OF BIG BEND ROAD



TYPICAL SECTION
SR 43 (US 301)
NORTH OF BIG BEND ROAD

Financial Project ID Nos: 415489-2-32-01 and 415489-3-52-01
US 301 (SR 43)
From N. of SR 674 (Sun City Center Blvd) to
S. of Gibsonton Dr

Exhibit 2

3.0 NOISE SENSITIVE SITES

Noise-sensitive sites are defined as properties where frequent human use occurs and where a lowered noise level would be of benefit (residences, churches, recreational areas, etc.). To evaluate the affect of traffic noise on sensitive sites, the FHWA established NAC. As shown in **Table 1**, the criteria vary according to a site's activity category. When predicted traffic noise levels approach, meet or exceed the NAC at these sites or, when predicted noise levels increase substantially, the FHWA requires that noise abatement measures be considered.

The FDOT interprets the FHWA's requirement to consider noise abatement measures that "approach" the NAC to be within 1 decibel on the "A"-weighted scale (dBA) of the NAC. The FDOT also considers that a substantial increase would occur if future traffic noise levels are predicted to increase 15 or more dBA from existing levels as a direct result of a transportation improvement project. Notably, increases in traffic noise of this magnitude typically do not occur when an existing roadway is being improved. Rather, increases of this magnitude are usually associated with new roadways.

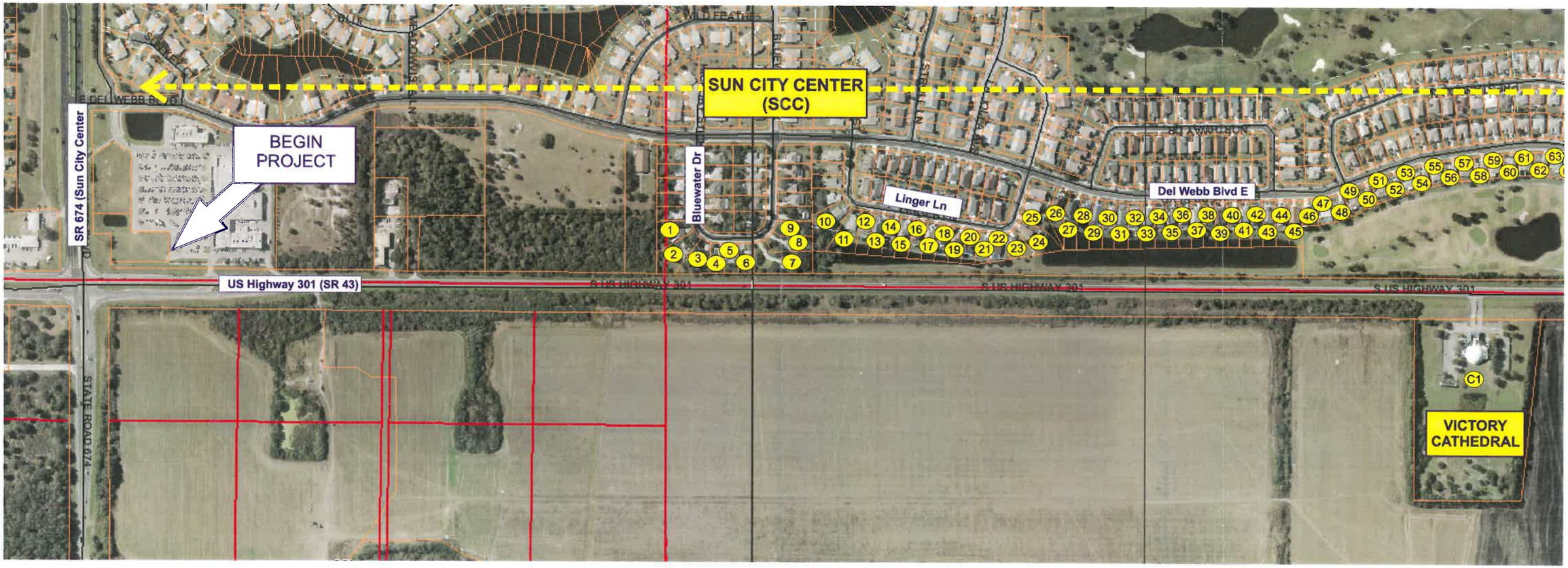
One of the objectives of this Noise Study Report Update is the identification of noise sensitive sites adjacent to US 301 that had a building permit issued before the Date of Public Knowledge for the US 301 project (before June 23, 1987). As illustrated on **Exhibit 3**, there are currently 299 noise sensitive sites and/or sensitive areas adjacent to US 301. These sites/areas consist of 293 single-family residences/multi-family complexes, four religious facilities, one neighborhood park, and one child care facility.

Table 1
FHWA Noise Abatement Criteria

Activity Category	Description	L_{Aeq1h}
A	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.	57 (Exterior)
B	Picnic area, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.	67 (Exterior)
C	Developed lands, properties or activities not included in Categories A or B above.	72 (Exterior)
D	Undeveloped lands.	N/A
E	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals and auditoriums.	52 (Interior)

Source: Code of Federal Regulations, Title 23, Part 772
L_{Aeq1h} - values that contain the same amount of acoustic energy as a time-varying A-weighted sound level over a period of one hour.

NOISE SENSITIVE SITES



N

Scale (feet)
0 500

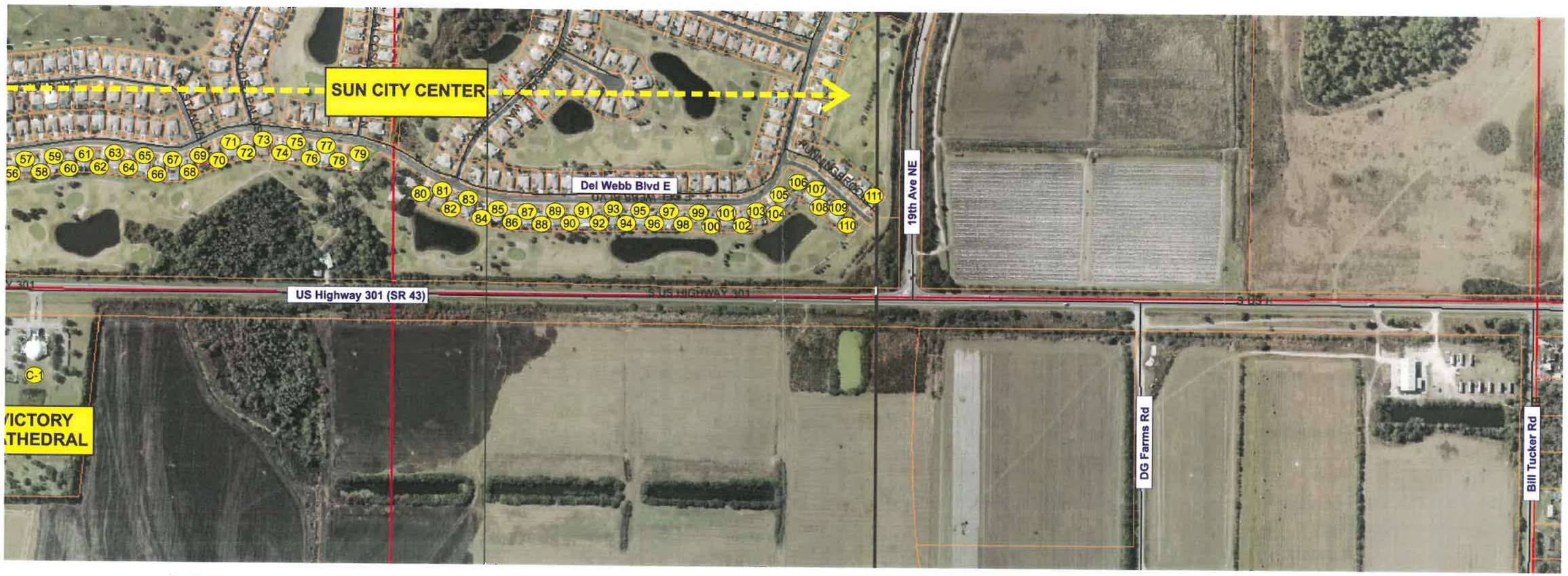
Aerial (with illustrated property lines) was obtained from Hillsborough County Property Appraiser: July 18, 2005.

Financial Project ID Nos.: 415489-2-32-01 and 41589-3-32-01
US301 (SR 43)
From N. of SR 674 (Sun City Center Blvd) to
S. of Gibsonton Dr

Property Line
112 Noise Sensitive Site

Exhibit 3
-Sheet 1 of 8

NOISE SENSITIVE SITES



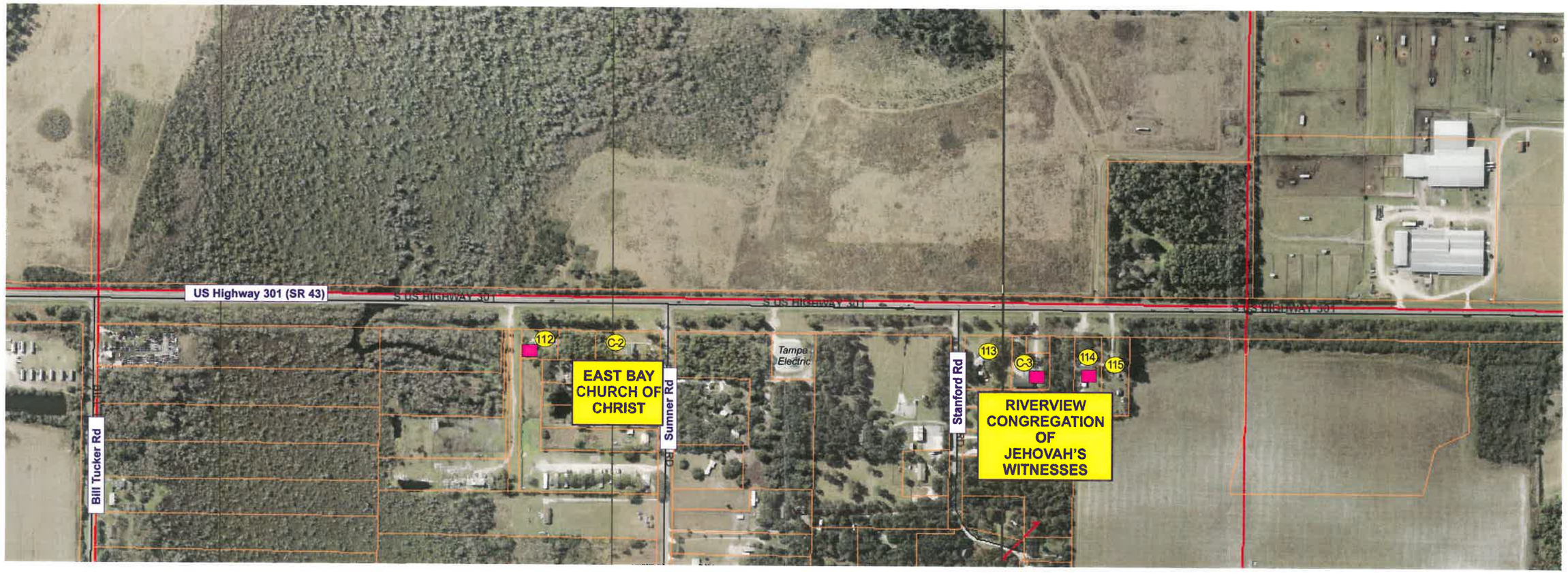
Aerial (with illustrated property lines) was obtained from Hillsborough County Property Appraiser: July 18, 2005.

Financial Project ID Nos.: 415489-2-32-01 and 41589-3-32-01
US301 (SR 43)
From N. of SR 674 (Sun City Center Blvd) to
S. of Gibsonton Dr

Property Line
(112) Noise Sensitive Site

Exhibit 3
-Sheet 2 of 8

NOISE SENSITIVE SITES



N

Scale (feet)

0 500

Aerial (with illustrated property lines) was obtained from Hillsborough County Property Appraiser: July 18, 2005.

Financial Project ID Nos.: 415489-2-32-01 and 41589-3-32-01
US301 (SR 43)
From N. of SR 674 (Sun City Center Blvd) to
S. of Gibsonton Dr

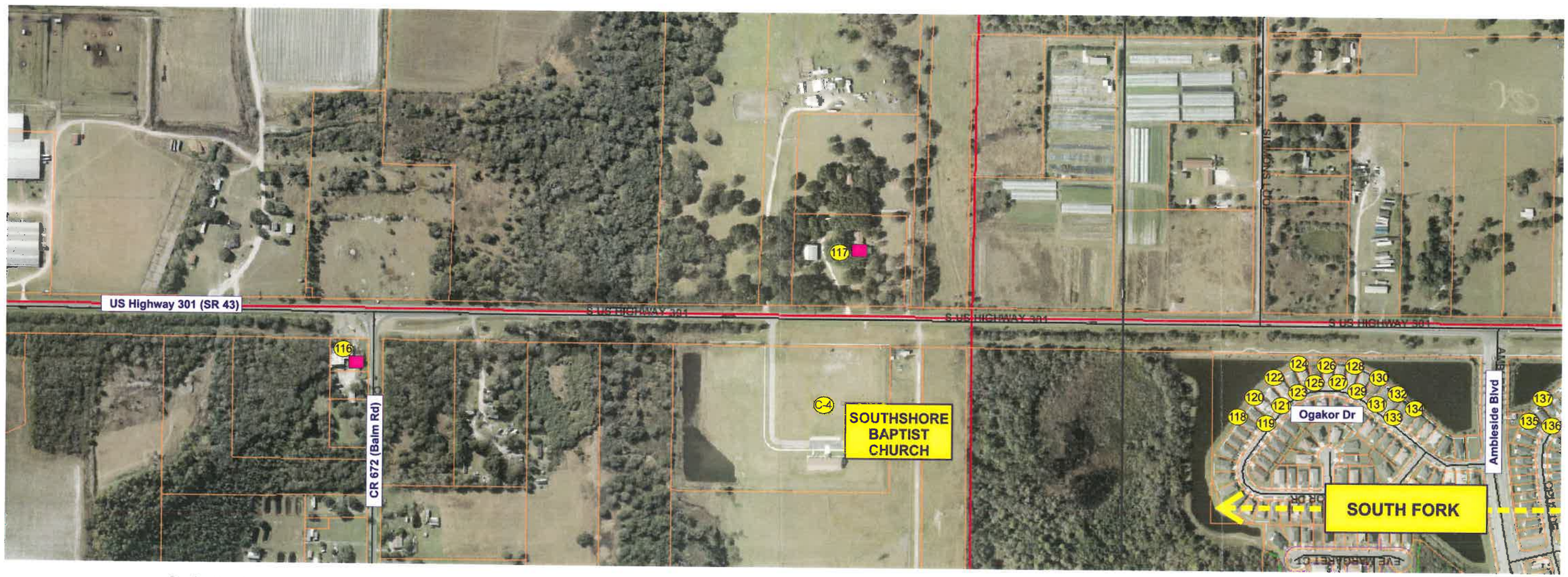
Property Line

112 Noise Sensitive Site

Building Permit Issued Prior to June 23, 1987 (FHWA's Location Design Acceptance)

Exhibit 3
-Sheet 3 of 8

NOISE SENSITIVE SITES



Aerial (with illustrated property lines) was obtained from Hillsborough County Property Appraiser: July 18, 2005.

Financial Project ID Nos.: 415489-2-32-01 and 41589-3-32-01
US301 (SR 43)
From N. of SR 674 (Sun City Center Blvd) to
S. of Gibsonton Dr

Property Line
112 Noise Sensitive Site
Building Permit Issued Prior to June 23, 1987 (FHWA's Location Design Acceptance)

Exhibit 3
-Sheet 4 of 8

NOISE SENSITIVE SITES

Aerial (with illustrated property lines) was obtained from Hillsborough County Property Appraiser: July 18, 2005.

Financial Project ID Nos.: 415489-2-32-01 and 41589-3-32-01
US301 (SR 43)
From N. of SR 674 (Sun City Center Blvd) to
S. of Gibsonton Dr

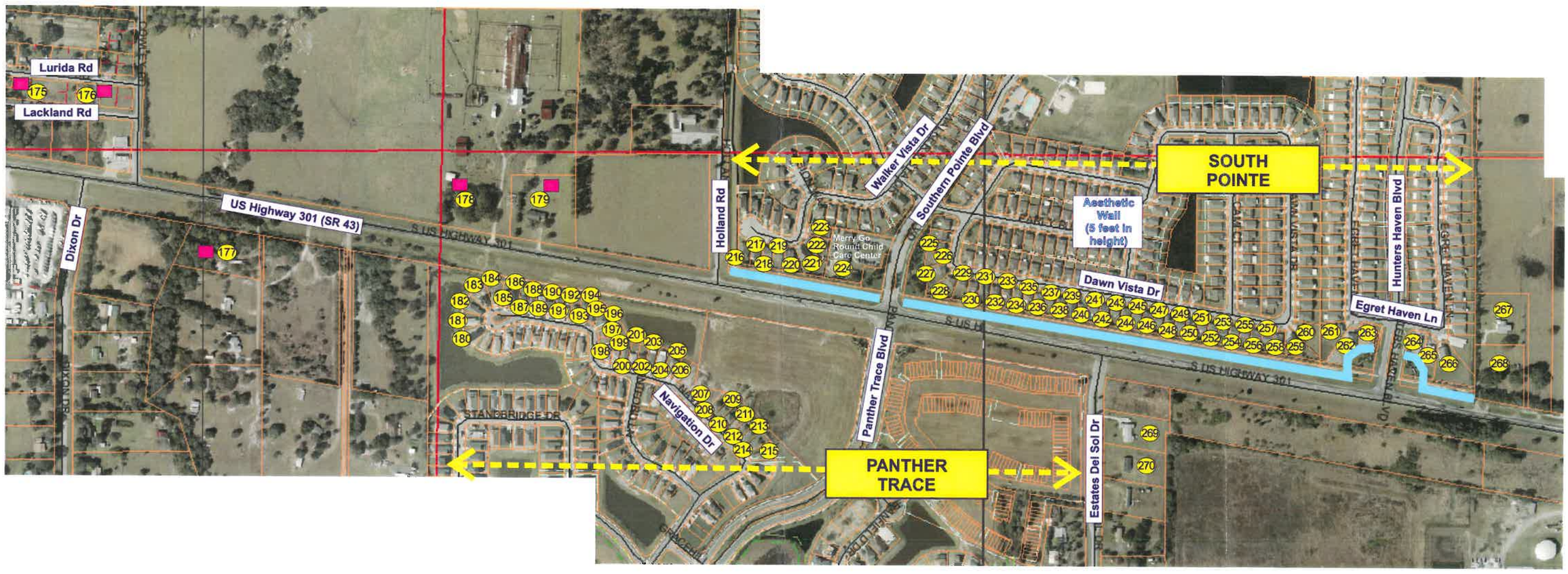
Property Line

(112) Noise Sensitive Site

Building Permit Issued Prior to June 23, 1987 (FHWA's Location Design Acceptance)

Exhibit 3
-Sheet 5 of 8

NOISE SENSITIVE SITES



Aerial (with illustrated property lines) was obtained from Hillsborough County Property Appraiser: July 18, 2005.

Financial Project ID Nos.: 415489-2-32-01 and 41589-3-32-01
US301 (SR 43)
From N. of SR 674 (Sun City Center Blvd) to
S. of Gibsonton Dr

Property Line
Noise Sensitive Site
Building Permit Issued Prior to June 23, 1987 (FHWA's Location Design Acceptance)
Existing Concrete Wall

Exhibit 3
-Sheet 6 of 8

NOISE SENSITIVE SITES

N

Scale (feet)
0 500

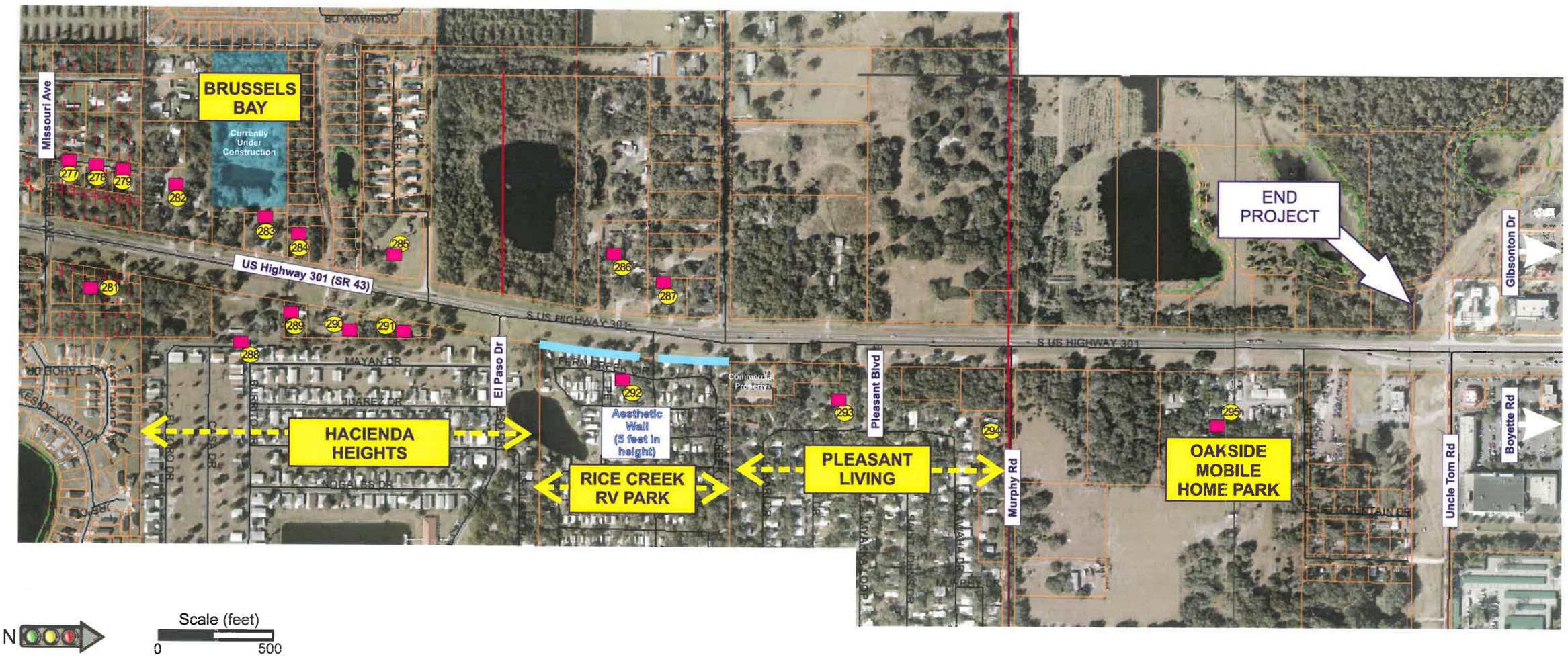
Aerial (with illustrated property lines) was obtained from Hillsborough County Property Appraiser: July 18, 2005.

Financial Project ID Nos.: 415489-2-32-01 and 41589-3-32-01
US301 (SR 43)
From N. of SR 674 (Sun City Center Blvd) to
S. of Gibsonton Dr

Property Line
112 Noise Sensitive Site
Building Permit Issued Prior to June 23, 1987 (FHWA's Location Design Acceptance)

Exhibit 3
-Sheet 7 of 8

NOISE SENSITIVE SITES



Aerial (with illustrated property lines) was obtained from Hillsborough County Property Appraiser: July 18, 2005.

Financial Project ID Nos.: 415489-2-32-01 and 41589-3-32-01
US301 (SR 43)
From N. of SR 674 (Sun City Center Blvd) to
S. of Gibsonton Dr

- Property Line
- (112) Noise Sensitive Site
- Building Permit Issued Prior to June 23, 1987 (FHWA's Location Design Acceptance)
- Existing Concrete Wall

Exhibit 3
-Sheet 8 of 8

Based on data obtained from the Hillsborough County Property Appraisers office, 37 of the 299 sites were issued building permits prior to the project's Date of Public Knowledge (36 single-family residences/multi-family complexes and one religious facility). For these 37 sites, a noise sensitive site identification number, address, land use, and year in which a building permit was issued are provided in **Table 2** (the 37 sites are also highlighted on **Exhibit 3**). This information is also provided for the remaining sites in **Appendix A** of this report.

Notably, a review of historical aerials indicates that Site No. 288 (Hacienda Heights Mobile Home Park (MHP)) was not in its current use in 1982. In 1982, the property was vacant. Because additional aerials could not be located to demonstrate whether the park was in its current use prior to the Date of Public Knowledge, it was conservatively assumed that the MHP was in residential use prior to this date.

3.1 Screening Analysis

Another objective of this Noise Study Report Update is the determination of project affect. To make this determination, a conservative screening analysis was performed. The results of this analysis indicated whether any of the 37 noise sensitive sites identified in **Table 2** would be affected by traffic noise with the US 301 improvements.

The screening analysis was performed using the FHWA's Traffic Noise Model (TNM-Version 2.5). The TNM is FHWA's computer program for highway traffic noise prediction and analysis. Assuming future year traffic data (discussed below) and the typical section for the improved roadway, the TNM produced a traffic noise contour. The contour provides a conservative estimate of the distance away from the roadway where an unshielded[4] traffic noise level would occur. As previously stated, the FDOT considers predicted traffic noise levels that are within 1 dBA of the NAC to "approach" the NAC. Therefore, for the purpose of the US 301 screening analysis, a level of 66 dBA was assumed—a level within 1 dBA of the FHWA's Activity Category "B" criteria. This Activity Category includes residences and religious facilities.

3.1.1 Traffic Data

Because traffic noise levels are low when traffic volumes are low (level-of-service (LOS) "A" or "B") or when traffic is so congested that movement is slow (LOS "D", "E", or "F"), the maximum hourly noise level occurs between these two conditions—when the traffic service volume is at the maximum LOS "C" volume.

As documented in the EAR, the traffic data used in the PD&E traffic noise analysis was either the level-of-service (LOS) "C" traffic volume or the forecast peak hour traffic volume, whichever was less. Theoretically, if the forecast peak hour volume is less than the LOS C volume, the LOS C volume would not occur. In this case, the LOS "A" or "B" data is used resulting in a lower predicted traffic noise level.

[4] The screening analysis conservatively assumed that existing structures and walls would not reduce the traffic noise level at any of the evaluated noise sensitive sites.

Table 2 - Noise Sensitive Sites					
NSS No.	Address		Land Use	Building Permit Issued	Affected by Traffic Noise?
C- 3	14608	S. US Highway 301	Religious Facility – Riverview Congregation of Jehovah's Witnesses	1974	Yes
112	14920	S. US Highway 301	SF Residence	1980	Yes
114	14520	S. US Highway 301	SF Residence	1965	Yes
116	10509	CR 672	SF Residence	1975	Yes
117	14011	S. US Highway 301	SF Residence	1973	
151	10306	Old Big Bend Road	MF Residence (MHP)	1982	
171	13009	Lackland Rd	SF Residence	1986	
173	13001	Lackland Rd	SF Residence	1958	
174	12921	Lackland Rd	SF Residence	1958	
175	12914	Lurida Rd	SF Residence	1960	
176	12905	Lackland Rd	SF Residence	1972	
177	UK	S. US Highway 301	SF Residence	1982	Yes
178	12715	S. US Highway 301	SF Residence	1955	Yes
179	12715	S. US Highway 301	SF Residence	1955	Yes
271	11347	S. US Highway 301	SF Residence	1978	Yes
272	11335	S. US Highway 301	SF Residence	1966	Yes
273	11333	S. US Highway 301	SF Residence	1947	Yes
274	11325	S. US Highway 301	SF Residence	1980	Yes
275	11321	S. US Highway 301	SF Residence	1972	Yes
276	11319	S. US Highway 301	SF Residence	1968	Yes
277	10616	Missouri Ave	SF Residence	1970	
279	11302	Pine St	SF Residence	1962	
280	11220	S. US Highway 301	SF Residence	1980	
281	10711	Missouri Ave	MF Residence-MHP	1956	Yes
282	11219	S. US Highway 301	MF Residence-MHP	1950	Yes
283	11203	S. US Highway 301	SF Residence	1961	Yes
284	11021	S. US Highway 301	SF Residence	1965	Yes
285	11005	S. US Highway 301	SF Residence	1958	Yes
286	10715	S. US Highway 301	MF Residence-MHP	1972	
287	10705	S. US Highway 301	SF Residence	1966	Yes
288	10940	S. US Highway 301	MF Residence – Hacienda Heights MHP	1978	Yes
289	11020	S. US Highway 301	SF Residence	1984	Yes
290	11016	S. US Highway 301	SF Residence	1954	Yes
291	11008	S. US Highway 301	SF Residence	1967	Yes
292	10714	S. US Highway 301	MF Residence-Rice Creek RV Park	1981	Yes
293	215	Pleasant Blvd	MF Residence-Pleasant Living MHP	1976	Yes
295	10110	S. US Highway 301	MF Residence-Oakside MHP	1955	Yes
C = Church MHP = Mobile Home Park			RV = Recreational vehicle MH = Mobile home	NSS = Noise sensitive site	

The traffic data used in the US 301 Design Phase traffic noise evaluation is provided in **Table 3** and **Appendix B.** This data reflects the roadway's design level-of-service "C" (LOS C) traffic volumes. Notably, because the roadway's design volumes were used for the future build scenario, the traffic noise predictions are not specific to any given future year. Rather, the noise predictions represent the highest predicted traffic noise levels with the US 301 improvements.

Table 3
Traffic Data

Scenario/ Number of Lanes	LOS C Average Daily Traffic[a]	Direction of Travel	Number of Lanes	LOS C Hourly Traffic Data[b]				Posted Speed (mph)
				Total Volume	TNM Input			
					Cars	MT	HT	
Build / 6	52,100[b]	SB	3	2,161	2,096	39	26	50
		NB	3	3,049	2,957	55	37	50

[a] Source: FDOT 2002 Generalized LOS Tables (Class I State Two-Way Arterials, >0.00 to 1.99 signals per mile in an area transitioning into an urbanized area).
[c] Peak hour factor (K)=10.0%, directional factor (D)=58.52%, truck factor (T)=3.0% (1.8% MT/1.2% HT).
MT = Medium trucks
HT = Heavy trucks

3.1.2 Results of the Screening Analysis

The TNM results indicate that an unshielded traffic noise level of 66 dBA would occur approximately 160 feet from the edge of the nearest travel lane with the US 301 improvements. A review of the distance of each of the 37 sites with building permits issued prior to the Date of Public Knowledge for the US 301 project indicates that 26 of the 37 sites will be less than 160 feet from the improved roadway. These 26 sites (representing 1 church, 19 single-family residences, and 6 mobile home parks) are identified on **Table 2** (presented previously) as being affected by traffic noise.

The following section of this report provides a summary of the consideration of noise abatement measures for the 26 sites.

4.0 NOISE ABATEMENT MEASURES

The noise abatement measures considered for the US 301 project were traffic management, alternative roadway alignment, and noise barriers. The following discusses the feasibility (acoustic and engineering considerations) and reasonableness (appropriateness) of each measure.

4.1 Traffic Management

Traffic management measures that limit motor vehicle speeds and reduce volumes can be effective noise mitigation measures. However, these measures also negate a project's ability to accommodate forecast traffic volumes. As such, reducing the speed limit and restricting certain vehicles from US 301 would negate the project's ability to handle forecast traffic volumes.

4.2 Alternative Roadway Alignment

There are noise sensitive sites located both east and west of the roadway. Re-aligning the roadway to reduce traffic noise on one side of the road would increase traffic noise on the other side of the road. For this reason, re-aligning the roadway is not considered a reasonable noise mitigation measure.

4.3 Noise Barriers

Noise barriers reduce sound levels by blocking the path of the sound between the source (roadway) and the receiver (listener). In order to effectively reduce traffic noise, a noise barrier must be relatively long, continuous (without intermittent openings), and of sufficient height to break the line-of-sight between the source and the receiver. Following procedures outlined in FDOT's PD&E manual, the minimum requirements for a noise barrier to be considered feasible and economically reasonable are:

- The barrier must provide at least a 5 dBA reduction in traffic noise with a design goal of 10 dBA or more desired.

- The barrier should cost no more than $35,000 per benefited site. For a site to be considered benefited, the barrier must provide at least a 5 dBA reduction in noise. Notably, the FDOT does consider costs that exceed $35,000 per benefited receiver, when the higher cost can be justified by other circumstances. The current estimated cost to construct a noise barrier (materials and labor) is $25.00 per square foot ($ft^2$).

Additional factors considered when evaluating noise barriers as a potential noise abatement measure include the feasibility of constructing a barrier at the desired location, driver/pedestrian sight distance, ingress and egress requirements to and from affected properties, ROW requirements including access rights/easements for construction and maintenance, drainage, land use stability (are the noise sensitive sites likely to remain for an indefinite period of time), antiquity, the desires of the affected property owners to have a barrier adjacent to their property, and aesthetics.

The TNM accounts for the shielding effect of a noise barrier, the diffraction of sound over a noise barrier, and the effects of the ground between a barrier and a receiver (i.e., sound absorption). The net effect of the barrier shielding is referred to as "insertion loss". Insertion loss is the difference in the sound level before and after the installation of the barrier.

As previously stated, in order for a barrier to effectively reduce traffic noise, a barrier must be relatively long and continuous (without intermittent openings). Using aerials the potential to construct a continuous barrier of sufficient length was determined for each of the applicable noise sensitive sites. The results of this desktop review indicate that noise barriers would not be a feasible noise abatement measure at a majority of the sites affected by traffic noise because the sites are isolated single-family residences with minimal US 301 frontage that require access (driveways) to/from US. 301. Additionally, some of the sites are in close proximity to intersections and/or cross streets. Based on the results of the desktop review, noise barriers were only considered potentially feasible and reasonable at the following locations:

- NSS No. 288: Hacienda Heights MHP
- NSS No. 292: Rice Creek MHP
- NSS No. 293: Pleasant Living MHP
- NSS No 295: Oakside MHP

The following discusses the results of a detailed traffic noise and noise barrier analysis that was performed for the above sites.

4.3.1. Outdoor Sound Propagation

There are numerous factors that affect the propagation of sound in the outdoors from a source to a receiver (listener). These factors include meteorological conditions, the amount and type of vegetation between the source (roadway) and the receiver, the existence of intervening structures, the elevation of the source and/or the receiver, the surrounding topography and the type of ground surface between the source and the receiver. The attenuation (reduction) of sound levels due to intervening structures occurs when a receiver's view (line-of-sight) is obstructed or partially obstructed by dense objects (i.e., rows of buildings, residences, and barriers). The attenuation provided by a row of buildings depends on the number of buildings, the length and height of the buildings, and the amount of space between the buildings.

Rice Creek RV Park has an aesthetic wall, approximately six feet in height, along the entire length of their property. This wall would reduce the level of traffic noise for the first row of homes within the Park. The second row of homes would also benefit from reduced traffic noise from the wall as well as from the intervening first row of residences. As such, the "shielding" affect of the aesthetic wall and the first row of houses were considered in the TNM for the evaluation of traffic noise within Rice Creek RV Park.

4.3.2 Measured Noise Levels

To provide an indication of the accuracy of the TNM in predicting traffic noise levels at the evaluated sites, the TNM was validated using measured sound levels at two of the sites: Rice Creek RV Park and Oakside MHP.

The measured sound levels were obtained using calibrated Metrosonics dB-3100 sound level meters. During each measurement period, traffic volumes, vehicle mix, vehicle speeds, and meteorological conditions were recorded. Following procedures in the FDOT PD&E Manual, if

the TNM-predicted and field measured levels are within 3 dBA of one another, the TNM is within an acceptable level of accuracy for the project. As shown in **Table 4**, these values were within the acceptable range. Additional details regarding the field measurements are provided in **Appendix C** of this report.

Table 4
TNM Validation Results

Location	Test Period & Meter Location (a=1st row, b=2nd row)	Noise Level (dBA)			Validates?
		Measured	Modeled	Difference (Measured –Modeled)	
Rice Creek RV Park	1a	56.0	56.8	-0.8	Yes
	1b	53.3	54.1	-0.8	Yes
	2a	55.1	57.3	-2.2	Yes
	2b	52.5	54.7	-2.2	Yes
	3a	54.6	56.3	-1.7	Yes
	3b	52.1	53.9	-1.8	Yes
Oakside MHP	1a	62.5	60.8	1.7	Yes
	1b	57.8	57.5	0.3	Yes
	2a	62.4	60.5	1.9	Yes
	2b	57.3	57.1	0.2	Yes
	3a	61.9	60.8	1.1	Yes
	3b	56.7	57.5	-0.8	Yes

4.3.3 Results of the Detailed Traffic Analysis

Table 5 presents the results of the detailed traffic noise analysis for the evaluated residences. As shown, with the US 301 improvements and based on the results of the detailed analysis, traffic noise levels are predicted to approach, meet, or exceed the NAC at 4 residences within Hacienda Heights MHP, at one residence within Rice Creek RV Park, and at 28 residences within Oakside MHP. Notably, although the results of the screening analysis indicated a potential affect at residences within the Pleasant Living MHP, the results of the detailed analysis indicate that traffic noise levels would be below the NAC. As such, the feasibility and reasonableness of providing noise barriers as an abatement measure was evaluated for the affected residences within Hacienda Heights MHP (Site No. HH10-HH13), Rice Creek RV Park (Site No. RC1), and Oakside MHP (Site No. OS1 – OS28).

4.3.4. Results of the Noise Barrier Analysis

Using TNM, noise barriers were evaluated at a location five feet within the FDOT's ROW at heights from eight to 22 feet in increments of two feet. Notably, the evaluated barriers were extended to, but did not cross, the property lines of the affected properties. Additionally, openings (gaps) were modeled, where necessary, to accommodate driveways to/from the affected properties.

The following discusses the results of the noise barrier analysis at each of the evaluated locations.

Table 5 - Predicted Traffic Noise Levels							
Location	**NSS No.**	**Traffic Noise Level (dBA)**	**≥ 66 dBA?**	**Location**	**NSS No.**	**Traffic Noise Level (dBA)**	**≥ 66 dBA?**
Hacienda Heights MHP	HH1	64.0		Rice Creek RV Park	RC34	63.0	
	HH2	65.6			RC35	62.2	
	HH3	61.5			RC36	62.1	
	HH4	61.9			RC37	62.4	
	HH5	62.0			RC38	62.5	
	HH6	62.2			RC39	62.7	
	HH7	62.5			RC40	62.5	
	HH8	62.7		Pleasant Living MHP	PL1	60.9	
	HH9	65.6			PL2	61.9	
	HH10	66.2	Yes		PL3	62.2	
	HH11	66.9	Yes		PL4	64.2	
	HH12	67.8	Yes		PL5	63.9	
	HH13	69.0	Yes		PL6	63.3	
	HH14	63.9			PL7	63.5	
	HH15	63.0			PL8	63.3	
Rice Creek RV Park	RC1	67.0	Yes		PL9	63.3	
	RC2	64.2			PL10	64.0	
	RC3	63.5			PL11	62.4	
	RC4	63.4			PL12	60.3	
	RC5	61.5			PL13	62.1	
	RC6	64.4		Oakside MHP	OS1	70.5	Yes
	RC7	63.8			OS2	71.2	Yes
	RC8	63.5			OS3	70.8	Yes
	RC9	64.8			OS4	70.5	Yes
	RC10	64.7			OS5	70.8	Yes
	RC11	63.4			OS6	70.9	Yes
	RC12	65.8			OS7	70.9	Yes
	RC13	65.2			OS8	71.2	Yes
	RC14	63.7			OS9	70.9	Yes
	RC15	64.3			OS10	71.5	Yes
	RC16	64.7			OS11	71.5	Yes
	RC17	63.6			OS12	71.5	Yes
	RC18	65.2			OS13	71.5	Yes
	RC19	65.6			OS14	71.5	Yes
	RC20	64.8			OS15	70.1	Yes
	RC21	61.0			OS16	69.1	Yes
	RC22	64.5			OS17	66.8	Yes
	RC23	62.3			OS18	67.1	Yes
	RC24	61.7			OS19	67.6	Yes
	RC25	61.3			OS20	67.6	Yes
	RC26	61.6			OS21	67.8	Yes
	RC27	61.3			OS22	67.3	Yes
	RC28	61.7			OS23	67.6	Yes
	RC29	61.6			OS24	67.1	Yes
	RC30	61.3			OS25	67.8	Yes
	RC31	62.5			OS26	68.2	Yes
	RC32	63.4			OS27	68.1	Yes
	RC33	63.2			OS28	66.9	Yes

Hacienda Heights MHP

At Hacienda Heights MHP, four residences (HH10-13) would be affected by traffic noise. The residences are located near the community's entrance. The results of the noise barrier analysis for Hacienda Heights MHP are provided in **Table 6**. As shown, at a height of 12 feet or more, a noise barrier would provide at least a 5 dBA insertion loss for two of the residences. However, the cost of the barrier exceeds the FDOT's $35,000 per benefited site cost criteria. As such, although potentially feasible, a noise barrier is not considered a reasonable noise mitigation measure for the affected residences within the Hacienda Heights MHP.

Rice Creek RV Park

Only one resident (RC1) within Rice Creek RV Park was predicted to be affected by traffic noise. This residence is located at the southern end of the property. Because the barrier could not be extended beyond the property line for the Park, the results of the noise barrier analysis indicate that the minimum required insertion loss of 5 dBA could not be achieved at any of the evaluated barrier heights. Therefore, a noise barrier is not considered to be a feasible noise abatement measure for the residence.

Oakside MHP

As shown in **Table 5**, 28 residences within Oakside MHP are predicted to be affected by traffic noise with the improvements to US 301. The results of the noise barrier analysis for these residences are provided in **Table 7**. The location and extents of the evaluated barrier are illustrated on **Exhibit 4**. As shown, depending on barrier height, 16 to 23 of the affected residences would benefit from a noise barrier at a cost below the FDOT's cost reasonable guideline. Because the results indicate that a barrier would provide at least the minimum required insertion loss at a cost below the FDOT's cost reasonable guideline, the barrier was considered further.

Table 8 provides a summary of the additional considerations as they relate to a noise barrier for Oakside MHP. As shown, there are no safety concerns (accident clear zone or line-of-sight) associated with the potential barrier. However, an existing entrance to the MHP, located on the south side of the property, would possibly have to be closed to accommodate the barrier. Additionally, the barrier would be located beneath an existing power line which would require consideration of special construction methods and/or the need to temporarily disconnect and/or to re-route the lines. Finally, there is a buried telephone line that would potentially have to be relocated to accommodate a barrier. These factors were to be considered in an engineering feasibility review for the barrier if the property owner desired a noise barrier.

One of the FDOT's considerations when evaluating the reasonableness of providing a noise barrier as an abatement measure is the desire of the affected property owner(s) to have a noise barrier located adjacent to their property. By way of a noise barrier survey (**Appendix D**), the owners of the Oakside MHP indicated that they do not desire a noise barrier. Therefore, the Department is not further considering the construction of a noise barrier for Oakside MHP.

Table 6
Noise Barrier Results for Hacienda Heights

Barrier Height (ft)	Affected Receivers With Insertion Loss of (dBA)						Avg. Insertion Loss of Affected/ Benefited Receivers	Number of Benefited Receivers			Total Estimated Barrier Cost	Cost Per Benefited Receiver	Cost Reasonable[b] (Yes/No)
	5.0 -5.9	6.0 -6.9	7.0 -7.9	8.0 -8.9	9.0 -9.9	10 or >		Affected	Other[a]	Total			
8	1	0	0	0	0	0	5.0	1	0	1	$90,800	$90,800	No
10	0	1	0	0	0	0	6.3	1	0	1	$113,500	$113,500	No
12	1	0	1	0	0	0	6.2	2	0	2	$136,200	$68,100	No
14	1	0	1	0	0	0	6.7	2	0	2	$158,900	$79,450	No
16	1	0	0	1	0	0	7.0	2	0	2	$181,600	$90,800	No
18	1	0	0	1	0	0	7.2	2	0	2	$204,300	$102,150	No
20	1	0	0	1	0	0	7.4	2	0	2	$227,000	$113,500	No
22	0	1	0	0	1	0	7.6	2	0	2	$249,700	$124,850	No

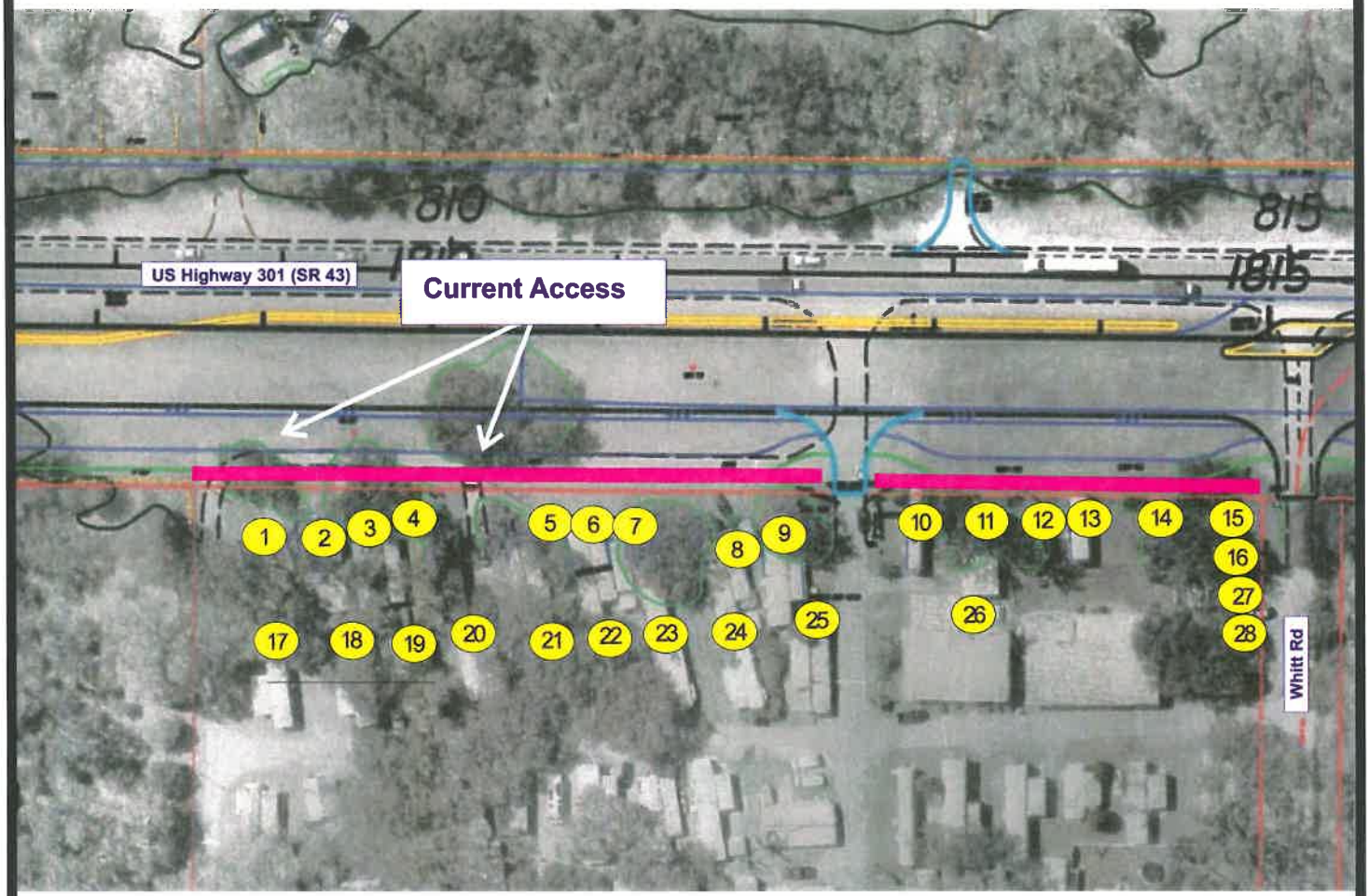
[a] Other = Receivers determined to be unaffected by the project (traffic noise levels less than 66 dBA) but benefited by the noise barrier.
[b] Barriers are considered cost reasonable if the cost per benefited receiver is less than $35,000.

Table 7
Noise Barrier Results for Oakside Mobile Home Park

Barrier Height (ft)	Affected Receivers With Insertion Loss of (dBA)						Avg. Insertion Loss of Affected/ Benefited Receivers	Number of Benefited Receivers			Total Estimated Barrier Cost	Cost Per Benefited Receiver	Cost Reasonable[b] (Yes/No)
	5.0 -5.9	6.0 -6.9	7.0 -7.9	8.0 -8.9	9.0 -9.9	10 or >		Affected	Other[a]	Total			
8	9	7	0	0	0	0	5.8	16	0	16	$123,000	$7,688	Yes
10	8	6	7	0	0	0	6.4	21	0	21	$148,250	$7,060	Yes
12	5	7	5	4	0	0	6.9	21	0	21	$177,900	$8,471	Yes
14	3	8	4	5	1	0	7.2	21	0	21	$203,700	$9,700	Yes
16	4	5	7	4	3	0	7.2	23	0	23	$232,800	$10,122	Yes
18	4	5	7	3	4	0	7.4	23	0	23	$261,900	$11,387	Yes
20	3	4	8	3	4	1	7.6	23	0	23	$291,000	$12,652	Yes
22	3	4	7	3	3	3	7.7	23	0	23	$320,100	$13,917	Yes

[a] Other = Receivers determined to be unaffected by the project (traffic noise levels less than 66 dBA) but benefited by the noise barrier.
[b] Barriers are considered cost reasonable if the cost per benefited receiver is less than $35,000.

Oakside Mobile Home Park



N

Scale (feet)
0 100

Property Line
18 Evaluated Noise Sensitive Site
Location/Extent of Evaluated Noise Barrier

Financial Project ID Nos: 415489-2-32-01 and 41589-3-52-01
US 301 (SR 43)
From N. of SR 674 (Sun City Center Blvd) to
S. of Gibsonton Dr

Exhibit 4

Table 8 Additional Barrier Considerations for Oakside Mobile Home Park	
Evaluation Criteria	Notes
1. Relationship of future levels to abatement criteria	Future traffic noise levels with the improvements to US 301 are predicted to approach the NAC at one residence and exceed the NAC at 27 residences (ranging from 67.1 to 71.6 dBA).
2. Amount of noise reduction	The amount of noise reduction varies with height. An average of 5.8 dBA of noise reduction is achieved at the minimum barrier height of eight feet and an average of 7.7 dBA is achieved at the maximum height of 22 feet.
3. Safety	There are no significant safety concerns. The wall is an adequate distance from the travel lanes to provide both an accident clear zone and sufficient sight distance.
4. Community desires	By way of a noise barrier survey, the owners of the Oakside MHP indicated that they do not desire a noise barrier.
5. Accessibility	The barrier would be constructed in two segments to accommodate the community's entrance. An existing entrance, located on the south side of the MHP would have to be closed to accommodate a barrier.
6. Land use stability	The property is currently in a noise sensitive use but, based on the location and land uses in the vicinity could be rezoned to a commercial, non-sensitive use in the future.
7. Local controls	The property is located within Hillsborough County. During site development, the owner of the property was not required to provide any noise reduction measures.
8. Views of local officials	If the property owner desires a noise barrier, views of local officials may be considered .
9. Antiquity	The building permit date (1955) precedes the Date of Public Knowledge for the US 301 project (June 23, 1987).
10. Constructability	The barrier would be located beneath an existing power line which may require special construction methods. This, and other factors will be considered further if the property owner desires a noise barrier.
11. Maintainability	The barrier would be located 5 feet within the FDOT's ROW and sufficient ROW would exist for barrier maintenance.
12. Aesthetics	If a property owner desires a noise barrier, barrier aesthetics (texture and color) are coordinated with the owner.
13. ROW needs (access rights, easements for construction/ maintenance, and additional land	The noise barrier can be constructed within the existing ROW.
14. Cost	At all of the evaluated barrier heights, the cost is below the FDOT's guideline of $35,000 per benefited site.
15. Utilities	The constructability issue above may require temporary adjustment measures to the power line. In addition, there is a buried telephone line that may need to be relocated to accommodate the barrier. These, and other factors will be considered further if the property owner desires a noise barrier.
16. Drainage	There are no drainage issues associated with construction of the wall.
17. Special land use considerations	Not applicable.
18. Other environmental considerations	None.

5.0 REFERENCES

Federal Highway Administration, Traffic Noise Model, Version 2.5, February 2004.

Title 23 CFR, Part 772, Federal Highway Administration, U.S. Department of Transportation, Procedures for Abatement of Highway Traffic Noise and Construction Noise, April 1, 1992 Edition.

Florida Department of Transportation, PD&E Manual, Part 2/Chapter 17 – Noise, October 6, 2003.

Florida Department of Transportation, Standard Specifications for Road and Bridge Construction, 2000.

Federal Highway Administration, Measurement of Highway-Related Noise: Final Report, October 2003.

APPENDICES

Appendix A – Noise Sensitive Sites

Appendix B – Traffic Data Sheet

Appendix C – Noise Measurement Data Sheets

Appendix D – Noise Barrier Survey

APPENDIX A

Existing Noise Sensitive Sites (see Exhibit 3)

NSS Number	Address	Land Use	Building Permit Issued	Notes
C- 1	16110 S. US Highway 301	Religious Facility	1988	Victory Cathedral Christian Center
C- 2	14902 S. US Highway 301	Religious Facility	1994	East Bay Church of Christ
C- 3	14608 S. US Highway 301	Religious Facility	1974	Riverview Congregation of Jehovah's Witnesses
C- 4	14036 S. US Highway 301	Religious Facility	2002	Southshore Baptist Church
SCC- 1	1428 Bluewater Dr	SF Residence	1998	Sun City Center
SCC- 2	1426 Bluewater Dr	SF Residence	1997	Sun City Center
SCC- 3	1424 Bluewater Dr	SF Residence	1997	Sun City Center
SCC- 4	1422 Bluewater Dr	SF Residence	1998	Sun City Center
SCC- 5	1420 Bluewater Dr	SF Residence	1997	Sun City Center
SCC- 6	1418 Bluewater Dr	SF Residence	1998	Sun City Center
SCC- 7	1416 Bluewater Dr	SF Residence	1997	Sun City Center
SCC- 8	1414 Bluewater Dr	SF Residence	1998	Sun City Center
SCC- 9	1412 Bluewater Dr	SF Residence	1997	Sun City Center
SCC- 10	209 Linger Ln	SF Residence	1989	Sun City Center
SCC- 11	211 Linger Ln	SF Residence	1989	Sun City Center
SCC- 12	213 Linger Ln	SF Residence	1989	Sun City Center
SCC- 13	215 Linger Ln	SF Residence	1988	Sun City Center
SCC- 14	217 Linger Ln	SF Residence	1988	Sun City Center
SCC- 15	219 Linger Ln	SF Residence	1990	Sun City Center
SCC- 16	221 Linger Ln	SF Residence	1989	Sun City Center
SCC- 17	223 Linger Ln	SF Residence	1988	Sun City Center
SCC- 18	225 Linger Ln	SF Residence	1989	Sun City Center
SCC- 19	227 Linger Ln	SF Residence	1989	Sun City Center
SCC- 20	229 Linger Ln	SF Residence	1989	Sun City Center
SCC- 21	231 Linger Ln	SF Residence	1989	Sun City Center
SCC- 22	233 Linger Ln	SF Residence	1989	Sun City Center
SCC- 23	235 Linger Ln	SF Residence	1989	Sun City Center
SCC- 24	237 Linger Ln	SF Residence	1989	Sun City Center
SCC- 25	239 Linger Ln	SF Residence	1989	Sun City Center
SCC- 26	1803 Del Webb Blvd E	SF Residence	1989	Sun City Center
SCC- 27	1805 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 28	1807 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 29	1809 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 30	1811 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 31	1813 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 32	1815 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 33	1817 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 34	1819 Del Webb Blvd E	SF Residence	1989	Sun City Center
SCC- 35	1821 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 36	1823 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 37	1825 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 38	1827 Del Webb Blvd E	SF Residence	1991	Sun City Center

NSS Number	Address	Land Use	Building Permit Issued	Notes
SCC- 39	1829 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 40	1831 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 41	1833 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 42	1835 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 43	1901 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 44	1903 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 45	1905 Del Webb Blvd E	SF Residence	1990	Sun City Center
SCC- 46	1907 Del Webb Blvd E	SF Residence	1991	Sun City Center
SCC- 47	1909 Del Webb Blvd E	SF Residence	1991	Sun City Center
SCC- 48	1911 Del Webb Blvd E	SF Residence	1991	Sun City Center
SCC- 49	2001 Del Webb Blvd E	SF Residence	1991	Sun City Center
SCC- 50	2003 Del Webb Blvd E	SF Residence	1991	Sun City Center
SCC- 51	2005 Del Webb Blvd E	SF Residence	1991	Sun City Center
SCC- 52	2007 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 53	2009 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 54	2011 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 55	2013 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 56	2015 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 57	2017 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 58	2019 Del Webb Blvd E	SF Residence	Not Available	Sun City Center
SCC- 59	2021 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 60	2023 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 61	2025 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 62	2027 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 63	2029 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 64	2031 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 65	2033 Del Webb Blvd E	SF Residence	1991	Sun City Center
SCC- 66	2035 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 67	2037 Del Webb Blvd E	SF Residence	1991	Sun City Center
SCC- 68	2039 Del Webb Blvd E	SF Residence	1991	Sun City Center
SCC- 69	2041 Del Webb Blvd E	SF Residence	1991	Sun City Center
SCC- 70	2043 Del Webb Blvd E	SF Residence	1991	Sun City Center
SCC- 71	2101 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 72	2103 Del Webb Blvd E	SF Residence	1993	Sun City Center
SCC- 73	2105 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 74	2109 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 75	2111 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 76	2113 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 77	2115 Del Webb Blvd E	SF Residence	1993	Sun City Center
SCC- 78	2117 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 79	2201 Del Webb Blvd E	SF Residence	1992	Sun City Center
SCC- 80	2213 Del Webb Blvd E	SF Residence	1993	Sun City Center
SCC- 81	2215 Del Webb Blvd E	SF Residence	1994	Sun City Center
SCC- 82	2301 Del Webb Blvd E	SF Residence	1993	Sun City Center
SCC- 83	2303 Del Webb Blvd E	SF Residence	1993	Sun City Center

NSS Number	Address	Land Use	Building Permit Issued	Notes
SCC- 84	2305 Del Webb Blvd E	SF Residence	1993	Sun City Center
SCC- 85	2307 Del Webb Blvd E	SF Residence	1993	Sun City Center
SCC- 86	2309 Del Webb Blvd E	SF Residence	1994	Sun City Center
SCC- 87	2311 Del Webb Blvd E	SF Residence	1994	Sun City Center
SCC- 88	2313 Del Webb Blvd E	SF Residence	1994	Sun City Center
SCC- 89	2315 Del Webb Blvd E	SF Residence	1994	Sun City Center
SCC- 90	2317 Del Webb Blvd E	SF Residence	1995	Sun City Center
SCC- 91	2319 Del Webb Blvd E	SF Residence	1994	Sun City Center
SCC- 92	2321 Del Webb Blvd E	SF Residence	1995	Sun City Center
SCC- 93	2323 Del Webb Blvd E	SF Residence	1995	Sun City Center
SCC- 94	2325 Del Webb Blvd E	SF Residence	1995	Sun City Center
SCC- 95	2327 Del Webb Blvd E	SF Residence	1996	Sun City Center
SCC- 96	2329 Del Webb Blvd E	SF Residence	1995	Sun City Center
SCC- 97	2321 Del Webb Blvd E	SF Residence	1995	Sun City Center
SCC- 98	2333 Del Webb Blvd E	SF Residence	1994	Sun City Center
SCC- 99	2334 Del Webb Blvd E	SF Residence	1997	Sun City Center
SCC- 100	2337 Del Webb Blvd E	SF Residence	1997	Sun City Center
SCC- 101	2339 Del Webb Blvd E	SF Residence	1996	Sun City Center
SCC- 102	2341 Del Webb Blvd E	SF Residence	1997	Sun City Center
SCC- 103	2343 Del Webb Blvd E	SF Residence	1997	Sun City Center
SCC- 104	2345 Del Webb Blvd E	SF Residence	1996	Sun City Center
SCC- 105	2347 Del Webb Blvd E	SF Residence	1996	Sun City Center
SCC- 106	2503 Runningbrooke Wy	SF Residence	1997	Sun City Center
SCC- 107	2505 Runningbrooke Wy	SF Residence	1997	Sun City Center
SCC- 108	2507 Runningbrooke Wy	SF Residence	1996	Sun City Center
SCC- 109	2509 Runningbrooke Wy	SF Residence	1996	Sun City Center
SCC- 110	2511 Runningbrooke Wy	SF Residence	1997	Sun City Center
SCC- 111	2512 Runningbrooke Wy	SF Residence	1996	Sun City Center
112	14920 S. US Highway 301	SF Residence	1980	
113	10500 Stanford Road	SF Residence	1989	
114	14520 S. US Highway 301	SF Residence	1965	
115	14530 S. US Highway 301	SF Residence	1994	
116	10509 CR 672	SF Residence	1975	
117	14011 S. US Highway 301	SF Residence	1973	
SF- 118	13739 Ogakor Dr	SF Residence	2002	South Fork
SF- 119	13737 Ogakor Dr	SF Residence	2002	South Fork
SF- 120	13735 Ogakor Dr	SF Residence	2002	South Fork
SF- 121	13733 Ogakor Dr	SF Residence	2003	South Fork
SF- 122	13731 Ogakor Dr	SF Residence	2003	South Fork
SF- 123	13729 Ogakor Dr	SF Residence	2003	South Fork
SF- 124	13727 Ogakor Dr	SF Residence	2003	South Fork
SF- 125	13725 Ogakor Dr	SF Residence	2003	South Fork
SF- 126	13723 Ogakor Dr	SF Residence	2003	South Fork
SF- 127	13721 Ogakor Dr	SF Residence	2004	South Fork
SF- 128	13719 Ogakor Dr	SF Residence	2003	South Fork

NSS Number	Address	Land Use	Building Permit Issued	Notes
SF- 129	13717 Ogakor Dr	SF Residence	2003	South Fork
SF- 130	13715 Ogakor Dr	SF Residence	2003	South Fork
SF- 131	13713 Ogakor Dr	SF Residence	2003	South Fork
SF- 132	13711 Ogakor Dr	SF Residence	2003	South Fork
SF- 133	13709 Ogakor Dr	SF Residence	2002	South Fork
SF- 134	13707 Ogakor Dr	SF Residence	2002	South Fork
SF- 135	10545 Opus Dr	SF Residence	2002	South Fork
SF- 136	10543 Opus Dr	SF Residence	2002	South Fork
SF- 137	10541 Opus Dr	SF Residence	2002	South Fork
SF- 138	10539 Opus Dr	SF Residence	2002	South Fork
SF- 139	10537 Opus Dr	SF Residence	2003	South Fork
SF- 140	10535 Opus Dr	SF Residence	2003	South Fork
SF- 141	10533 Opus Dr	SF Residence	2003	South Fork
SF- 142	10531 Opus Dr	SF Residence	2003	South Fork
SF- 143	10529 Opus Dr	SF Residence	2003	South Fork
SF- 144	10527 Opus Dr	SF Residence	2003	South Fork
SF- 145	10525 Opus Dr	SF Residence	2003	South Fork
SF- 146	10523 Opus Dr	SF Residence	2003	South Fork
SF- 147	10521 Opus Dr	SF Residence	2003	South Fork
SF- 148	10519 Opus Dr	SF Residence	2003	South Fork
SF- 149	10520 Opus Dr	SF Residence	2003	South Fork
SF- 150	10511 Opus Dr	SF Residence	2003	
151	10306 Old Big Bend Road	MF Residence - MHP	1982	
SO- 152	10419 Summerview Cir	SF Residence	2003	Summerview Oaks
SO- 153	10417 Summerview Cir	SF Residence	2004	Summerview Oaks
SO- 154	10415 Summerview Cir	SF Residence	2005	Summerview Oaks (Vacant)
SO- 155	10413 Summerview Cir	SF Residence	2003	Summerview Oaks
SO- 156	10420 Summerview Cir	SF Residence	2005	Summerview Oaks (Vacant)
SO- 157	10418 Summerview Cir	SF Residence	2004	Summerview Oaks
SO- 158	10416 Summerview Cir	SF Residence	2003	Summerview Oaks
SO- 159	10414 Summerview Cir	SF Residence	2004	Summerview Oaks
SO- 160	10412 Summerview Cir	SF Residence	2004	Summerview Oaks
SO- 161	10207 Summerview Cir	SF Residence	2003	Summerview Oaks
SO- 162	10209 Summerview Cir	SF Residence	2005	Summerview Oaks (Vacant)
SO- 163	10211 Summerview Cir	SF Residence	2004	Summerview Oaks
SO- 164	10213 Summerview Cir	SF Residence	2004	Summerview Oaks
SO- 165	10215 Summerview Cir	SF Residence	2003	Summerview Oaks
SO- 166	10217 Summerview Cir	SF Residence	2003	Summerview Oaks
SO- 167	10219 Summerview Cir	SF Residence	2004	Summerview Oaks
SO- 168	10221 Summerview Cir	SF Residence	2004	Summerview Oaks
SO- 169	10223 Summerview Cir	SF Residence	2004	Summerview Oaks
SO- 170	10225 Summerview Cir	SF Residence	2005	Summerview Oaks (Vacant)
171	13009 Lackland Rd	SF Residence	1986	
172	13005 Lackland Rd	SF Residence	1997	
173	13001 Lackland Rd	SF Residence	1958	

NSS Number	Address	Land Use	Building Permit Issued	Notes
174	12921 Lackland Rd	SF Residence	1958	
175	12914 Lurida Rd	SF Residence	1960	
176	12905 Lackland Rd	SF Residence	1972	
177	UK S. US Highway 301	SF Residence	1982	
178	12715 S. US Highway 301	SF Residence	1955	
179	12715 S. US Highway 301	SF Residence	1955	
PT- 180	10603 Navigation Dr	SF Residence	2004	Panther Trace
PT- 181	10601 Navigation Dr	SF Residence	2003	Panther Trace
PT- 182	10602 Navigation Dr	SF Residence	2003	Panther Trace
PT- 183	10604 Navigation Dr	SF Residence	2004	Panther Trace
PT- 184	10606 Navigation Dr	SF Residence	2004	Panther Trace
PT- 185	10608 Navigation Dr	SF Residence	2003	Panther Trace
PT- 186	10610 Navigation Dr	SF Residence	2003	Panther Trace
PT- 187	10612 Navigation Dr	SF Residence	2003	Panther Trace
PT- 188	10614 Navigation Dr	SF Residence	2003	Panther Trace
PT- 189	10616 Navigation Dr	SF Residence	2003	Panther Trace
PT- 190	10618 Navigation Dr	SF Residence	2003	Panther Trace
PT- 191	10620 Navigation Dr	SF Residence	2003	Panther Trace
PT- 192	10622 Navigation Dr	SF Residence	2004	Panther Trace
PT- 193	10624 Navigation Dr	SF Residence	2004	Panther Trace
PT- 194	10626 Navigation Dr	SF Residence	2003	Panther Trace
PT- 195	10628 Navigation Dr	SF Residence	2004	Panther Trace
PT- 196	10630 Navigation Dr	SF Residence	2003	Panther Trace
PT- 197	10632 Navigation Dr	SF Residence	2004	Panther Trace
PT- 198	10646 Navigation Dr	SF Residence	2003	Panther Trace
PT- 199	10648 Navigation Dr	SF Residence	2004	Panther Trace
PT- 200	10650 Navigation Dr	SF Residence	2003	Panther Trace
PT- 201	10652 Navigation Dr	SF Residence	2003	Panther Trace
PT- 202	10702 Navigation Dr	SF Residence	2004	Panther Trace
PT- 203	10704 Navigation Dr	SF Residence	2003	Panther Trace
PT- 204	10706 Navigation Dr	SF Residence	2003	Panther Trace
PT- 205	10708 Navigation Dr	SF Residence	2003	Panther Trace
PT- 206	10710 Navigation Dr	SF Residence	2003	Panther Trace
PT- 207	10712 Navigation Dr	Recreational	2005	Neighborhood Park (not currently used as such)
PT- 208	10720 Navigation Dr	SF Residence	2003	Panther Trace
PT- 209	10722 Navigation Dr	SF Residence	2003	Panther Trace
PT- 210	10724 Navigation Dr	SF Residence	2003	Panther Trace
PT- 211	10726 Navigation Dr	SF Residence	2004	Panther Trace
PT- 212	10728 Navigation Dr	SF Residence	2004	Panther Trace
PT- 213	10730 Navigation Dr	SF Residence	2004	Panther Trace
PT- 214	10732 Navigation Dr	SF Residence	2003	Panther Trace
PT- 215	10734 Navigation Dr	SF Residence	2003	Panther Trace
SP- 216	10638 Walker Vista Dr	SF Residence	1999	South Pointe
SP- 217	10636 Walker Vista Dr	SF Residence	1999	South Pointe
SP- 218	10634 Walker Vista Dr	SF Residence	1999	South Pointe

NSS Number	Address	Land Use	Building Permit Issued	Notes
SP- 219	10632 Walker Vista Dr	SF Residence	1999	South Pointe
SP- 220	10630 Walker Vista Dr	SF Residence	1999	South Pointe
SP- 221	10628 Walker Vista Dr	SF Residence	1998	South Pointe
SP- 222	10626 Walker Vista Dr	SF Residence	1999	South Pointe
SP- 223	10624 Walker Vista Dr	SF Residence	1999	South Pointe
SP- 224	10615 Southern Pointe Blvd	Child Care Center	2000	South Pointe
SP- 225	12438 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 226	12436 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 227	12434 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 228	12432 Dawn Vista Dr	SF Residence	1998	South Pointe
SP- 229	12430 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 230	12428 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 231	12426 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 232	12424 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 233	12422 Dawn Vista Dr	SF Residence	1998	South Pointe
SP- 234	12420 Dawn Vista Dr	SF Residence	1998	South Pointe
SP- 235	12418 Dawn Vista Dr	SF Residence	1998	South Pointe
SP- 236	12416 Dawn Vista Dr	SF Residence	2001	South Pointe
SP- 237	12414 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 238	12412 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 239	12410 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 240	12408 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 241	12406 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 242	12404 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 243	12402 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 244	12320 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 245	12318 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 246	12316 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 247	12314 Dawn Vista Dr	SF Residence	2000	South Pointe
SP- 248	12312 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 249	12310 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 250	12308 Dawn Vista Dr	SF Residence	2000	South Pointe
SP- 251	12306 Dawn Vista Dr	SF Residence	2000	South Pointe
SP- 252	12304 Dawn Vista Dr	SF Residence	2000	South Pointe
SP- 253	12302 Dawn Vista Dr	SF Residence	2000	South Pointe
SP- 254	12260 Dawn Vista Dr	SF Residence	2000	South Pointe
SP- 255	12258 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 256	12256 Dawn Vista Dr	SF Residence	2000	South Pointe
SP- 257	12254 Dawn Vista Dr	SF Residence	1999	South Pointe
SP- 258	12252 Dawn Vista Dr	SF Residence	2000	South Pointe
SP- 259	12250 Dawn Vista Dr	SF Residence	2000	South Pointe
SP- 260	12248 Dawn Vista Dr	SF Residence	2000	South Pointe
SP- 261	10549 Egret Haven Ln	SF Residence	2001	South Pointe
SP- 262	15551 Egret Haven Ln	SF Residence	2004	South Pointe
SP- 263	10553 Egret Haven Ln	SF Residence	2004	South Pointe

NSS Number	Address	Land Use	Building Permit Issued	Notes
SP- 264	10601 Egret Haven Ln	SF Residence	2004	South Pointe
SP- 265	10603 Egret Haven Ln	SF Residence	2004	South Pointe
SP- 266	10605 Egret Haven Ln	SF Residence	2001	South Pointe
267	12235 S. US Highway 301	SF Residence	1993	
268	12231 S. US Highway 301	SF Residence	1994	
269	10704 Estates Del Sol Dr	SF Residence	1999	
270	10706 Estates Del Sol Dr	SF Residence	1999	
271	11347 S. US Highway 301	SF Residence	1978	
272	11335 S. US Highway 301	SF Residence-MH	1966	
273	11333 S. US Highway 301	SF Residence	1947	
274	11325 S. US Highway 301	SF Residence-MH	1980	
275	11321 S. US Highway 301	SF Residence-MH	1972	
276	11319 S. US Highway 301	SF Residence-MH	1968	
277	10616 Missouri Ave	SF Residence	1970	
278	11308 Pine St	SF Residence-MH	1997	
279	11302 Pine St	SF Residence	1962	
280	11220 S. US Highway 301	SF Residence-MH	1980	
281	10711 Missouri Ave	MF Residence-MHP	1956	
282	11219 S. US Highway 301	MF Residence-MHP	1950	
283	11203 S. US Highway 301	SF Residence	1961	
284	11021 S. US Highway 301	SF Residence	1965	
285	11005 S. US Highway 301	SF Residence	1958	
286	10715 S. US Highway 301	MF Residence-MHP	1972	
287	10705 S. US Highway 301	SF Residence-MH	1966	
288	10940 S. US Highway 301	MF Residence-MHP	1978	Hacienda Heights (HH)
289	11020 S. US Highway 301	SF Residence-MH	1984	
290	11016 S. US Highway 301	SF Residence	1954	
291	11008 S. US Highway 301	SF Residence-MH	1967	
292	10714 S. US Highway 301	MF Residence-RV Park	1981	Rice Creek RV Park (RC)
293	215 Pleasant Blvd	MF Residence-MHP	1976	Pleasant Living MHP (PL)
294	UK	MF Residence-MHP	UK	
295	10110 S. US Highway 301	MF Residence-MHP	1955	Oakside MHP (OS)

C= Church
SCC = Sun City Center
SF = South Fork
SO = Summerview Oaks
SP = South Pointe
MHP = Mobile Home Park
UK = Unknown
MH = Mobile home
PT = Panther Trace
NSS = Noise Sensitive Site

APPENDIX B

TRAFFIC DATA FOR NOISE STUDIES

DATE: 06-29-06 PREPARED BY: Steve Gordilo, P.E.

Work Program Item Segment Number(s):

Financial Project ID Number: 415489-1-52-01

Federal Aid Number(s):

Project Description: US 301 Segment Description: North of Big Bend Road

(Data sheets are to be filled out for every segment having a change in traffic parameters such as volumes, posted speeds, typical sections, etc.)

NOTE: ADT is the LOS(C) volume reference in the FDOT tables or Demand, whichever is less.

Existing Facility		**No-Build (Design Year)**		**Build (Design Year)**	
Year: 2004		Year:		Year: 2031	
Number of Lanes: 2		Number of Lanes:		Number of Lanes: 6	
ADT	LOS(C): 13,100	ADT	LOS(C):	ADT	LOS(C): 52,100
	Demand: 22,900		Demand:		Demand: TBD
Posted Speed (mph): 50		Posted Speed (mph):		Posted Speed (mph): 50	
K% = 8.63		K% =		K% = 10.0%	
D% = 54.04		D% =		D% = 58.52%	
T%=	24 hrs: 7.6	T%=	24 hrs:	T%=	24 hrs: 6.0%
	Design hr: 3.8		Design hr:		Design hr: 3.0%
DHV	% Heavy Trucks: 1.5	DHV	% Heavy Trucks:	DHV	% Heavy Trucks: 1.2
	% Medium Trucks: 2.3		% Medium Trucks:		% Medium Trucks: 1.8
	% Buses: 0		% Buses:		% Buses: 0
	% Motorcycles: 0		% Motorcycles:		% Motorcycles: 0

Source of Traffic Data:
Assumed based on engineering judgment.

APPENDIX C

NOISE MEASUREMENT DATA SHEET

Measurements Taken By: Wayne Arner, Sarah Sloan Date: 6/21/06
Time Study Started: 1230 Time Study Ended: 1240
Project Identification:
Financial Project ID: 415489-1-52-01
Project Location: US 301 at Rice Creek RV Park

Site Identification: Site1/Run1

Weather Conditions:
Sky: Clear ____ Partly Cloudy x Cloudy ____ Other ____
Temperature 91F Wind Speed 1mph Wind Direction NW Humidity 56%
Equipment:
Sound Level Meter:
Type: Metrosonics db- 3100 Serial Number(s): 4874 (1st row)/4875 (2nd row)
Did you check the battery? Yes X No ____
Calibration Reading: Start 102.0 End 102.0
Response Settings: Fast ____ Slow X
Weighting: A X Other ____
Calibrator:
Type: Metrosonics CL304 Serial Number: 3219
Did you check the battery? Yes X No ____

TRAFFIC DATA

Roadway Identification	US 301 Northbound		US 301 Southbound	
	Roadway 1		Roadway 2	
Vehicle Type	Volume	Speed (mph)	Volume	Speed (mph)
Autos	116	46.2	118	46.0
Medium Trucks	8	48.3	4	41.0
Heavy Trucks	4	43.0	3	47.0
Buses	1	48.3	1	41.0
Motorcycles	1	46.2	2	46.0
Duration	10 minutes		10 minutes	

RESULTS [dB(A)] (1st row/2nd row)

L_{EQ} 56.0/53.3 L_{MAX} 67.1/64.3

Background Noise: ____
Major Sources: US 301
Unusual Events: ____

KB Environmental Sciences

NOISE MEASUREMENT DATA SHEET

Measurements Taken By: Wayne Arner, Sarah Sloan Date: 6/21/06
Time Study Started: 1250 Time Study Ended: 1300
Project Identification:
Financial Project ID: 415489-1-52-01
Project Location: US 301 at Rice Creek RV Park

Site Identification: Site1/Run2

Weather Conditions:
Sky: Clear ____ Partly Cloudy X Cloudy ____ Other ____
Temperature 91F Wind Speed 1mph Wind Direction NW Humidity 56%
Equipment:
Sound Level Meter:
Type: Metrosonics db- 3100 Serial Number(s): 4874 (1st row)/4875 (2nd row)
Did you check the battery? Yes X No ____
Calibration Reading: Start 102.0 End 102.0
Response Settings: Fast ____ Slow X
Weighting: A X Other ____
Calibrator:
Type: Metrosonics CL304 Serial Number: 3219
Did you check the battery? Yes X No ____

TRAFFIC DATA

Roadway Identification	US 301 Northbound		US 301 Southbound	
	Roadway 1		Roadway 2	
Vehicle Type	Volume	Speed (mph)	Volume	Speed (mph)
Autos	118	46.2	127	50.6
Medium Trucks	6	43.9	14	45.0
Heavy Trucks	7	42.3	0	-
Buses	1	43.9	1	45.0
Motorcycles	1	46.2	2	50.6
Duration	10 minutes		10 minutes	

RESULTS [dB(A)] (1st row/2nd row)

L_{EQ} 55.1/52.5 L_{MAX} 63.8/59.4

Background Noise: Bird Chirping Throughout
Major Sources: US 301
Unusual Events: Vehicle drove by microphone.

NOISE MEASUREMENT DATA SHEET

KB Environmental Sciences

Measurements Taken By: Wayne Arner, Sarah Sloan Date: 6/21/06
Time Study Started: 1309 Time Study Ended: 1319
Project Identification:
Financial Project ID: 415489-1-52-01
Project Location: US 301 at Rice Creek RV Park

Site Identification: Site1/Run3

Weather Conditions:
Sky: Clear ____ Partly Cloudy X Cloudy ____ Other ____
Temperature 91F Wind Speed 1mph Wind Direction NW Humidity 56%
Equipment:
Sound Level Meter:
Type: Metrosonics db- 3100 Serial Number(s): 4874 (1st row)/4875 (2nd row)
Did you check the battery? Yes X No ____
Calibration Reading: Start 102.0 End 102.0
Response Settings: Fast ____ Slow X
Weighting: A X Other ____
Calibrator:
Type: Metrosonics CL304 Serial Number: 3219
Did you check the battery? Yes X No ____

TRAFFIC DATA

Roadway Identification	US 301 Northbound		US 301 Southbound	
	Roadway 1		Roadway 2	
Vehicle Type	Volume	Speed (mph)	Volume	Speed (mph)
Autos	118	46.1	139	49.6
Medium Trucks	7	44.2	6	41.7
Heavy Trucks	2	44.5	3	44.0
Buses	0	-	0	-
Motorcycles	0	-	0	-
Duration	10 minutes		10 minutes	

RESULTS [dB(A)] (1st row/2nd row)
L_{EQ} 54.6/52.1 L_{MAX} 62.1/59.9

Background Noise: ____
Major Sources: US 301
Unusual Events: Two vehicles drove past microphone.

NOISE MEASUREMENT DATA SHEET

KB Environmental Sciences

Measurements Taken By: Wayne Arner, Sarah Sloan Date: 6/21/06
Time Study Started: 1545 Time Study Ended: 1555
Project Identification:
Financial Project ID: 415489-1-52-01
Project Location: US 301 at Oakside Mobile Home Park

Site Identification: Site2/Run1

Weather Conditions:
Sky: Clear ____ Partly Cloudy X Cloudy ____ Other ____
Temperature 95F Wind Speed 1mph Wind Direction NW Humidity 39%
Equipment:
Sound Level Meter:
Type: Metrosonics db- 3100 Serial Number(s): 4874 (1st row)/4875 (2nd row)
Did you check the battery? Yes X No ____
Calibration Reading: Start 102.0 End 102.0
Response Settings: Fast ____ Slow X
Weighting: A X Other ____
Calibrator:
Type: Metrosonics CL304 Serial Number: 3219
Did you check the battery? Yes X No ____

TRAFFIC DATA

Roadway Identification	US 301 Northbound		US 301 Southbound	
	Roadway 1		Roadway 2	
Vehicle Type	Volume	Speed (mph)	Volume	Speed (mph)
Autos	123	46.6	150	44.9
Medium Trucks	3	48.2	2	42.0
Heavy Trucks	4	53.0	7	37.0
Buses	0	-	0	-
Motorcycles	0	-	1	44.9
Duration	10 minutes		10 minutes	

RESULTS [dB(A)] (1st row/2nd row)

L_{EQ} 62.5/57.8 L_{MAX} 73.5/71.9

Background Noise: ____
Major Sources: US 301
Unusual Events: Vehicle drove by microphone.

KB Environmental Sciences

NOISE MEASUREMENT DATA SHEET

Measurements Taken By: Wayne Arner, Sarah Sloan Date: 6/21/06
Time Study Started: 1603 Time Study Ended: 1613
Project Identification:
Financial Project ID: 415489-1-52-01
Project Location: US 301 at Oakside Mobile Home Park

Site Identification: Site2/Run2

Weather Conditions:
Sky: Clear ____ Partly Cloudy X Cloudy ____ Other ____
Temperature 95F Wind Speed 1 Wind Direction NW Humidity 39%
Equipment:
Sound Level Meter:
Type: Metrosonics db- 3100 Serial Number(s): 4874 (1st row)/4875 (2nd row)
Did you check the battery? Yes X No ____
Calibration Reading: Start 102.0 End 102.0
Response Settings: Fast ____ Slow X
Weighting: A X Other ____
Calibrator:
Type: Metrosonics CL304 Serial Number: 3219
Did you check the battery? Yes X No ____

TRAFFIC DATA

Roadway Identification	US 301 Northbound		US 301 Southbound	
	Roadway 1		Roadway 2	
Vehicle Type	Volume	Speed (mph)	Volume	Speed (mph)
Autos	134	46.9	165	41.4
Medium Trucks	2	44.9	8	39.3
Heavy Trucks	5	44.5	4	37.0
Buses	0	-	0	-
Motorcycles	2	46.9	0	-
Duration	10 minutes		10 minutes	

RESULTS [dB(A)] (1st row/2nd row)

L_{EQ} 62.4/57.3 L_{MAX} 74.4/67.4

Background Noise: ____
Major Sources: US 301
Unusual Events: Vehicle drove by microphone.

NOISE MEASUREMENT DATA SHEET

KB Environmental Sciences

Measurements Taken By: Wayne Arner, Sarah Sloan Date: 6/21/06
Time Study Started: 1620 Time Study Ended: 1630
Project Identification:
Financial Project ID: 415489-1-52-01
Project Location: US 301 at Oakside Mobile Home Park

Site Identification: Site2/Run3

Weather Conditions:
Sky: Clear ____ Partly Cloudy X Cloudy ____ Other ____
Temperature 95F Wind Speed 1 mph Wind Direction NW Humidity 39%
Equipment:
Sound Level Meter:
Type: Metrosonics db- 3100 Serial Number(s): 4874 (1st row)/4875 (2nd row)
Did you check the battery? Yes X No ____
Calibration Reading: Start 102.0 End 102.0
Response Settings: Fast ____ Slow X
Weighting: A X Other ____
Calibrator:
Type: Metrosonics CL304 Serial Number: 3219
Did you check the battery? Yes X No ____

TRAFFIC DATA

Roadway Identification	US 301 Northbound		US 301 Southbound	
	Roadway 1		Roadway 2	
Vehicle Type	Volume	Speed (mph)	Volume	Speed (mph)
Autos	116	46.9	170	37.1
Medium Trucks	8	44.7	7	37.3
Heavy Trucks	11	44.3	1	30.0
Buses	0	-	0	-
Motorcycles	1	46.9	1	37.1
Duration	10 minutes		10 minutes	

RESULTS [dB(A)] (1st row/2nd row)

L_{EQ} 61.9/56.7 L_{MAX} 70.3/66.4

Background Noise: ____
Major Sources: US 301
Unusual Events: Idling vehicle in driveway near microphone.

KB Environmental Sciences

APPENDIX D

NOISE BARRIER SURVEY
U.S. 301 (SR 43) from North of SR 674 to South of Gibsonton Drive
Hillsborough County

Collins, David Phillip
10110 US Highway S #70
Riverview, Florida 33569-5961
PIN: U-20-30-20-ZZZZ-000003-02350.0
Folio No: 076546-0000

The Florida Department of Transportation (FDOT) is soliciting your opinion on the construction of a traffic noise barrier that would be associated with improvements to U.S. 301 that is currently being designed.

The noise barrier would be located 5 feet within the FDOT's eastern right-of-way for U.S. 301 and adjacent to the property referenced above by folio number. If you desire the barrier, the final height will be determined by the FDOT. Based on our analysis to date, the final height could be from 8 to 12 feet.

By way of this survey, FDOT is requesting that you officially record your support for, or opposition to, construction of the traffic noise barrier described above. Notably, if you indicate that you do not want a traffic noise barrier, FDOT will suspend any further evaluation of such a barrier for the referenced property.

Are you in favor of a noise barrier as described above?

_____ **Yes** ✓ **No**

9/13/04
Date

David P. Collins
Printed Name of Property Owner or Legal Representative

David P Collins
Signature of Property Owner or Legal Representative

Mailing Address (if different from above address): _____

_____

_____