NOISE STUDY REPORT

Florida Department of Transportation
District One

SR 29 Immokalee
Project Development and Environment (PD&E) Study
from Oil Well Road to SR 82
Collier County, Florida

Financial Management Number: 417540-1-22-01
ETDM Number: 3752

July 2018

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by FHWA and FDOT.

EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT) District One is conducting a Project Development and Environment (PD&E) Study, in accordance with the National Environmental Policy Act (NEPA), to assess the need for capacity and traffic operational improvements along a two-lane undivided section of SR 29 extending 15.6 miles from Oil Well Road (southern terminus) to SR 82 (northern terminus) in unincorporated Collier County, Florida. The project section of SR 29 specifically traverses the unincorporated community of Immokalee in eastern Collier County.

Presently, two Build Alternatives and the No Build Alternative are being considered as part of the PD&E Study. The two Build Alternatives (Central Alternative #1 Revised and Central Alternative #2) are the same for much of their alignments, only diverging for approximately 1.3 miles on the east side of Immokalee by Immokalee Regional Airport. From the start of the project at Oil Well Road to north of Seminole Crossing Trail and from north of Westclox Street to the end of the project south of SR 82, both alternatives follow the existing SR 29 corridor. The Build Alternatives differ in the following ways:

- **Central Alternative #1 Revised:** From Seminole Crossing Trail, Central Alternative #1 Revised remains on existing SR 29 to New Market Road. At New Market Road, this alternative follows the eastern portion of New Market Road and provides direct access to the agribusiness/commercial areas of Immokalee and State Farmers Market. This alternative continues just past Flagler Street, then turns northward on new alignment to avoid a residential neighborhood. It then parallels Madison Avenue and New Market Road. At this point, the two Build Alternatives are on the same alignment, traveling along the east side of Collier Health Services Medical Center and the Florida State University College of Medicine, before reconnecting to SR 29 north of Westclox Street. A roundabout is currently being evaluated at SR 29 at Westclox Street/New Market Road as an optional intersection treatment.
- **Central Alternative #2:** From Seminole Crossing Trail, Central Alternative #2 travels north from SR 29 on new alignment along the west side of the Immokalee Regional Airport to avoid the commercial/industrial areas of Immokalee and the State Farmers Market to the west. This alternative then turns to the northwest just past Gopher Ridge Road to parallel Madison Avenue and New Market Road. At this point, the two Build Alternatives are on the same alignment, traveling along the east side of Collier Health Services Medical Center and the Florida State University College of Medicine, before reconnecting to SR 29 north of Westclox Street. A roundabout is currently being evaluated at SR 29 at Westclox Street/New Market Road as an optional intersection treatment.

The No Build Alternative assumes that no lanes will be added to SR 29 from Oil Well Road to SR 82 through the 2045 design year. In other words, it assumes that future traffic volumes will continue to increase but no capacity or operational improvements will be made to SR 29.

For detailed analyses regarding the corridor evaluation and the alternatives selection process, please refer to the Preliminary Engineering Report (PER) for this project.

The objectives of this Noise Study Report (NSR) are to identify noise-sensitive sites adjacent to the project corridor, to evaluate future traffic noise levels at the sites with and without the proposed improvements, and to evaluate the need for and effectiveness of noise abatement measures. Additional objectives include the evaluation of construction noise impacts and the identification of noise impact "contours" adjacent to the corridor.

The analysis was performed following FDOT procedures that comply with Title 23 Code of Federal Regulations (CFR), Part 772, *Procedures for Abatement of Highway Traffic Noise and Construction Noise*. The evaluation uses methodologies established by the FDOT and documented in the FDOT PD&E Manual, Part 2, Chapter 18 (June 2017). The prediction of existing and future traffic noise levels with and without the roadway improvements was performed using the Federal Highway Administration's (FHWA's) Traffic Noise Model (TNM-Version 2.5).

Of the 100 evaluated noise-sensitive receptors, there are 92 residences, two schools, two receptors within one park, one medical facility, two restaurants, and one public institution (fire department).

The results of the analysis indicate that existing (2017) exterior traffic noise levels are predicted to range from 49.0 to 63.2 decibels on the "A"-weighted scale (dB(A)), and interior levels are predicted to be 41.3 dB(A) at the 100 evaluated noise-sensitive receptors. As such, the results of the analysis indicate that existing traffic noise levels do not approach, meet, or exceed the Noise Abatement Criteria (NAC) at any of the evaluated noise-sensitive receptors.

In the future (2045) without the proposed project improvements (No Build Alternative), exterior traffic noise levels are predicted to range from 49.2 to 66.2 dB(A) and interior levels are predicted to be 41.3 dB(A) with levels predicted to approach, meet, or exceed the NAC at one receptor located within Farm Worker Village.

With the proposed project improvements (Build Alternatives), exterior traffic noise levels are predicted to range from 53.3 to 70.9 dB(A) for Central Alternative #1 Revised and 47.1 to 65.7 dB(A) for Central Alternative #2. Interior levels are predicted to be 46.5 and 42.6 dB(A) for Central Alterative #1 Revised and Central Alternative #2, respectively. Levels are predicted to approach, meet, or exceed the NAC at two receptors. The impacted receptors are located within the C&C Rentals Mobile Home Park (Sites 68 and 78).

The results of the analysis also indicate that when compared to existing conditions, traffic noise levels would not increase more than 9.8 dB(A) above existing conditions with the proposed project improvements. As such, the project would not substantially increase traffic noise (i.e., increase traffic noise 15 dB(A) or more) at any of the evaluated receptors.

Noise abatement measures were considered for the two receptors where traffic noise levels were predicted to approach, meet, or exceed the NAC. The measures were traffic management, alternative roadway alignments, buffer zones, and noise barriers. Although feasible, traffic management and alternative roadway alignments are not reasonable methods of reducing predicted traffic noise at the two impacted receptors. Providing a buffer between the highway and future noise sensitive land uses can be implemented as part of the local land use planning process. The results of the analysis indicate that due to constraints on the lengths of the barrier segments because of access requirements, the minimum required noise reduction of 5 dB(A) for two impacted receptors could not be achieved at any of the evaluated barrier heights. Therefore, the barrier is not considered a feasible noise abatement measure.

While traffic noise abatement was considered as part of this project, no feasible and reasonable measures were identified that can be implemented as part of the project to abate traffic noise at the two impacted residences. Therefore, there is no commitment regarding further consideration of noise barriers during the design phase of the project at these locations. Noise barriers will be reevaluated during the design phase for structures permitted between the Final Noise Study Report and the Date of Public Knowledge.

A land use review will additionally be performed during the design phase of the project to ensure that all noise-sensitive land uses that have received a building permit prior to the project's Date of Public Knowledge are evaluated. Notably, there was no ongoing construction observed during field reviews performed when establishing existing land use.

Construction of the proposed roadway improvements is not expected to have any significant noise or vibration impact. If sensitive land uses develop adjacent to the roadway prior to construction, increased potential for noise or vibration impacts could result. It is anticipated that the application of the *FDOT Standard Specifications for Road and Bridge Construction* will minimize or eliminate potential construction noise and vibration impacts. However, should unanticipated noise or vibration issues arise during the construction process, the Project Engineer, in coordination with the District Noise Specialist and the Contractor, will investigate additional methods of controlling these impacts.

Land uses such as residences, motels, medical facilities, schools, churches, recreation areas, and parks are considered incompatible with highway noise levels exceeding the NAC. In order to reduce the possibility of additional noise-related impacts, noise level contours were developed for the future improved roadway facility. These noise contours delineate the distance from the improved roadway's edge-of-travel lane to where 56, 66, and 71 dB(A) (FDOT and FHWA Activity Categories A, B/C, and E, respectively) are expected to occur in the year 2045 with the proposed project improvements. Local officials will be provided a copy of the Final NSR to promote compatibility between land development and SR 29.

TABLE OF CONTENTS

LIST OF APPENDICES

LIST OF FIGURES

LIST OF TABLES

Section 1.0
INTRODUCTION

1.1 PROJECT DESCRIPTION AND NEED

1.1.1 PROJECT DESCRIPTION

The Florida Department of Transportation (FDOT) District One is conducting a Project Development and Environment (PD&E) Study, in accordance with the National Environmental Policy Act (NEPA), to assess the need for capacity and traffic operational improvements along a two-lane undivided section of SR 29 extending 15.6 miles from Oil Well Road (southern terminus) to SR 82 (northern terminus) in unincorporated Collier County, Florida. The project section of SR 29 specifically traverses the unincorporated community of Immokalee in eastern Collier County. **Figure 1-1** shows the location of the project.

This roadway project includes the potential widening of existing two-lane undivided sections of SR 29 up to four lanes, as well as the addition of a new four-lane roadway bypassing the downtown area of Immokalee. No improvements are currently proposed to existing SR 29 between Immokalee Road and New Market Road North.

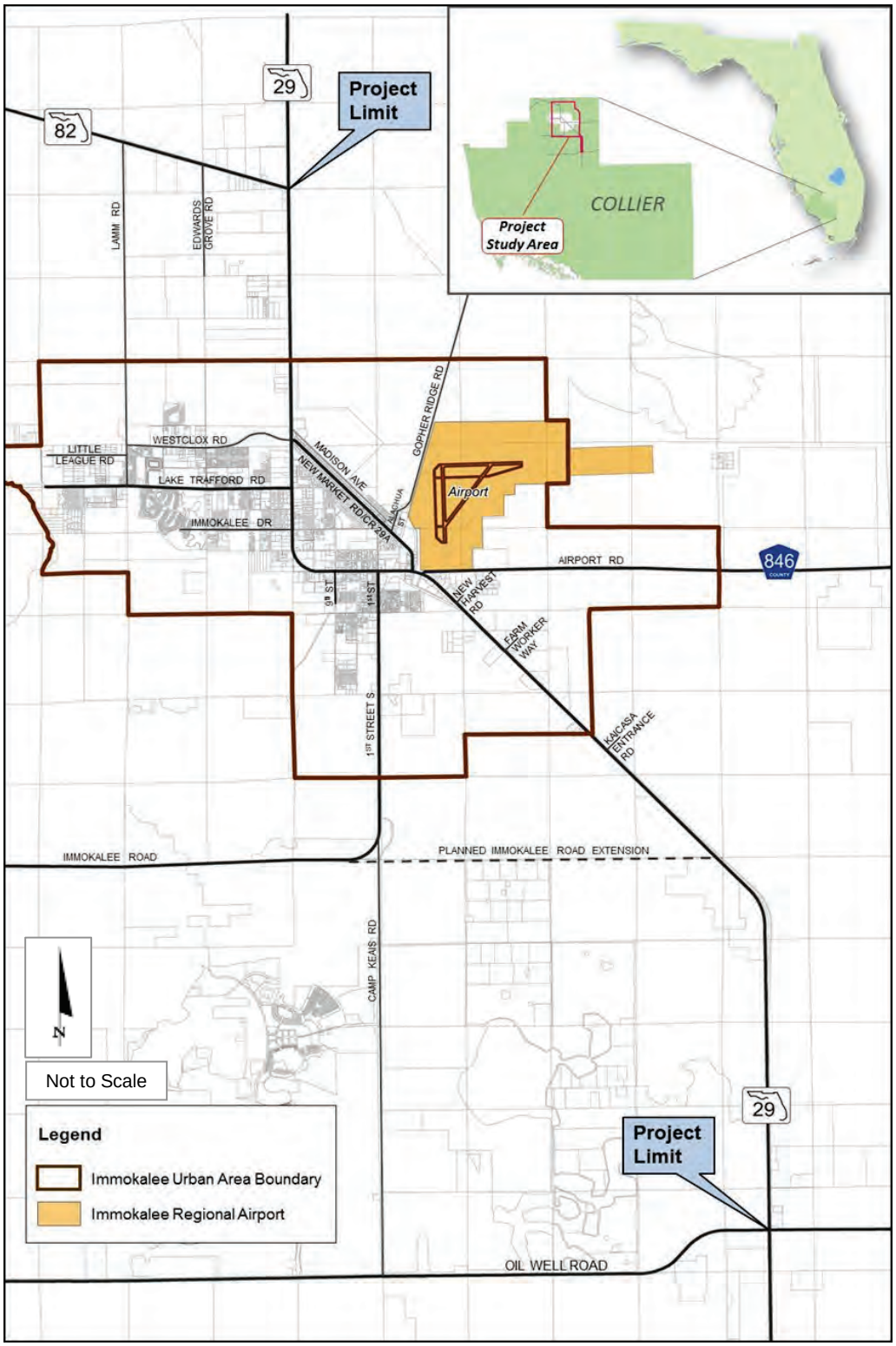
The project segment of SR 29 is designated as an Emerging Strategic Intermodal System (SIS) highway corridor. Additionally, SR 29 is classified as a rural principal arterial from Oil Well Road to south of Farm Worker Way and from north of Westclox Road/CR 29A to SR 82; the roadway is also classified as an urban principal arterial from south of Farm Worker Way to north of Westclox Road/CR 29A. SR 29 is a major north-south corridor as it traverses the eastern portion of Collier County and through the unincorporated community of Immokalee. Speed limits of 40 – 60 miles per hour (mph) are posted for the majority of the corridor. However, the speed limit is 35 mph from south of CR 846/Airport Road to west of 9th Street due to frequent activity of commercial and agricultural trucks, as well as daily activity of pedestrians and bicyclists, using this section of SR 29.

The PD&E Study for this project commenced in 2007. An Environmental Assessment with a Finding of No Significant Impact is being pursued.

1.1.2 PURPOSE AND NEED

The purpose of this project is to improve traffic operational conditions along the SR 29 corridor between Oil Well Road and SR 82 to meet the following needs:

FIGURE 1-1
PROJECT LOCATION MAP



Enhance Economic Competitiveness

On January 26, 2001, Immokalee was designated by Executive Order 04-250 as a Rural Area of Critical Economic Concern (now titled Rural Area of Opportunity). In addition to the Immokalee area being targeted for growth by Collier County, the area surrounding Collier County Immokalee Regional Airport is defined as a Primary Freight Activity Center as it supports industrial activities and agricultural packing and processing functions. A 60-acre portion of this area is a designated Foreign Trade Zone, a designation used to encourage activity and add value at facilities in competition with foreign alternatives. SR 29 also serves as an Emerging Strategic Intermodal System (SIS) highway corridor carrying high volumes of truck traffic and connecting to other SIS facilities [I-75 and SR 82]. This project will:

- Enhance the economic viability of the area by providing the infrastructure needed to bring additional businesses and employers into the area.
- Improve the circulation of goods as SR 29 serves as a key intrastate freight corridor providing access to local agricultural and ranching operations, as well as to fast growing economic regions located in central Florida and the populated coastal areas.

Improve Mobility and Connectivity within the Regional Transportation Network

SR 29 is a major central Florida interregional highway corridor as it traverses Collier, Hendry, and Glades Counties providing access to US 41 and I-75 to the south and SR 82, SR 80, and US 27 to the north. Through the southern portion of the state, SR 29 primarily runs parallel to other major north-south transportation facilities [I-75 and US 27]. In addition to I-75 and SR 82, SR 29 is part of Florida's SIS network serving fast growing economic regions and a Rural Area of Opportunity. SR 29 is also one of four designated Freight Mobility Corridors in Collier County providing a north-south connection between I-75 and regional freight activity centers. The project improvements proposed along SR 29 are intended to:

- Complement plans to widen other sections of the SR 29 corridor to the north and south thereby 1) providing a continuous four-lane connection from I-75 to US 27 in Glades County, 2) alleviating a potential traffic bottleneck that could occur if no improvements take place on SR 29 from Oil Well Road to SR 82, and 3) improving the viability of SR 29 to serve as a parallel north-south alternative to north-south portions of I-75 and US 27.
- Enhance the circulation and movement of goods between existing and emerging freight facilities in south-central Florida. The SR 29 project improvements are an essential component of a unified approach that addresses the critical freight needs of the overall SR 29 corridor.
- Enhance access to major north-south facilities [I-75 and US 27] and connections to major east-west transportation corridors [SR 82], as well as residential and employment centers throughout Collier County.

Correct Current Design Deficiencies

The design of existing SR 29 is deficient given the present use of the roadway and current FDOT standards. The deficiencies include excessive access points, substandard curves limiting sight distances and design speeds, and locations with substandard shoulders and turn lanes. The proposed improvements will:

- Update the roadway to current design standards, increasing overall safety by reducing the potential exposure to conflict points associated with deficient existing design and access issues.
- Increase sight distances along the roadway.
- Provide sidewalks and bicycle lanes where none currently exist.

Reduce Truck Traffic in Downtown Immokalee

Truck traffic currently represents 16.0% of the total volume of daily traffic along the SR 29 project segment. The Design Hour Truck is 8.0%; this is the percentage of trucks expected to use a highway segment during the 30th highest hour of the design year [2045]. Truck traffic in the corridor is projected to increase as a result of growth in the area. The project improvement will:

- Provide an alternative route for regional truck traffic trips.
- Enhance the livability of downtown Immokalee by reducing the conflicts between pedestrians/bicyclists and trucks, creating a more pedestrian friendly environment.
- Enhance the economic viability of downtown Immokalee.

Accommodate Future Growth

Significant growth is anticipated to take place within the greater Immokalee area as indicated by the presence of the Town of Ave Maria Development of Regional Impact and number of Planned Unit Developments. Based on 2010 U.S. Census Bureau data and projections developed for Collier County as part of the Collier Metropolitan Planning Organization's (MPO) 2040 Long Range Transportation Plan (LRTP), population within Collier County is projected to grow from 316,739 in 2010 to 497,702 in 2040 (57.1% increase). Likewise, Collier County employment is projected to grow from 170,862 in 2010 to 241,111 in 2040 (41.1% increase). According to the 2018 Design Traffic Technical Memorandum prepared for the project, the majority of the SR 29 corridor operates at or above the FDOT Levels of Service (LOS) C and D adopted for the roadway; only a small segment of the project corridor [from New Market Road to SR 82] operates below the adopted standard. However, if no improvements occur to the roadway, the majority of the SR 29 corridor is anticipated to operate under deficient conditions [with most segments operating at LOS F] by the 2045 design year. The improvement will:

- Enhance traffic operations and preserve operational capacity to accommodate projected travel demand spurred by increased growth as well as freight and commuter traffic [specifically truck traffic].
- Enhance the projected 2045 LOS for the corridor [with the exception of one segment that is anticipated to remain deficient].

Improve Emergency Evacuation Capabilities

SR 29 is designated as a hurricane evacuation route by the Florida Division of Emergency Management. This facility is critical in evacuating residents of the eastern portion of Collier County. The project improvement will:

- Increase the capacity of traffic that can be evacuated during an emergency event.
- Enhance emergency response times.
- Enhance connections to other major arterials designated on the state evacuation route network, including SR 82 and north to US 27.

1.2 PROJECT ALTERNATIVES

Presently, two Build Alternatives and the No Build Alternative are being considered as part of the PD&E Study.

The two Build Alternatives (Central Alternative #1 Revised and Central Alternative #2) are the same for much of their alignments, only diverging for approximately 1.3 miles on the east side of Immokalee by Immokalee Regional Airport. From the start of the project at Oil Well Road to north of Seminole Crossing Trail and from north of Westclox Street to the end of the project south of SR 82, both alternatives follow the existing SR 29 corridor. The Build Alternatives differ in the following ways:

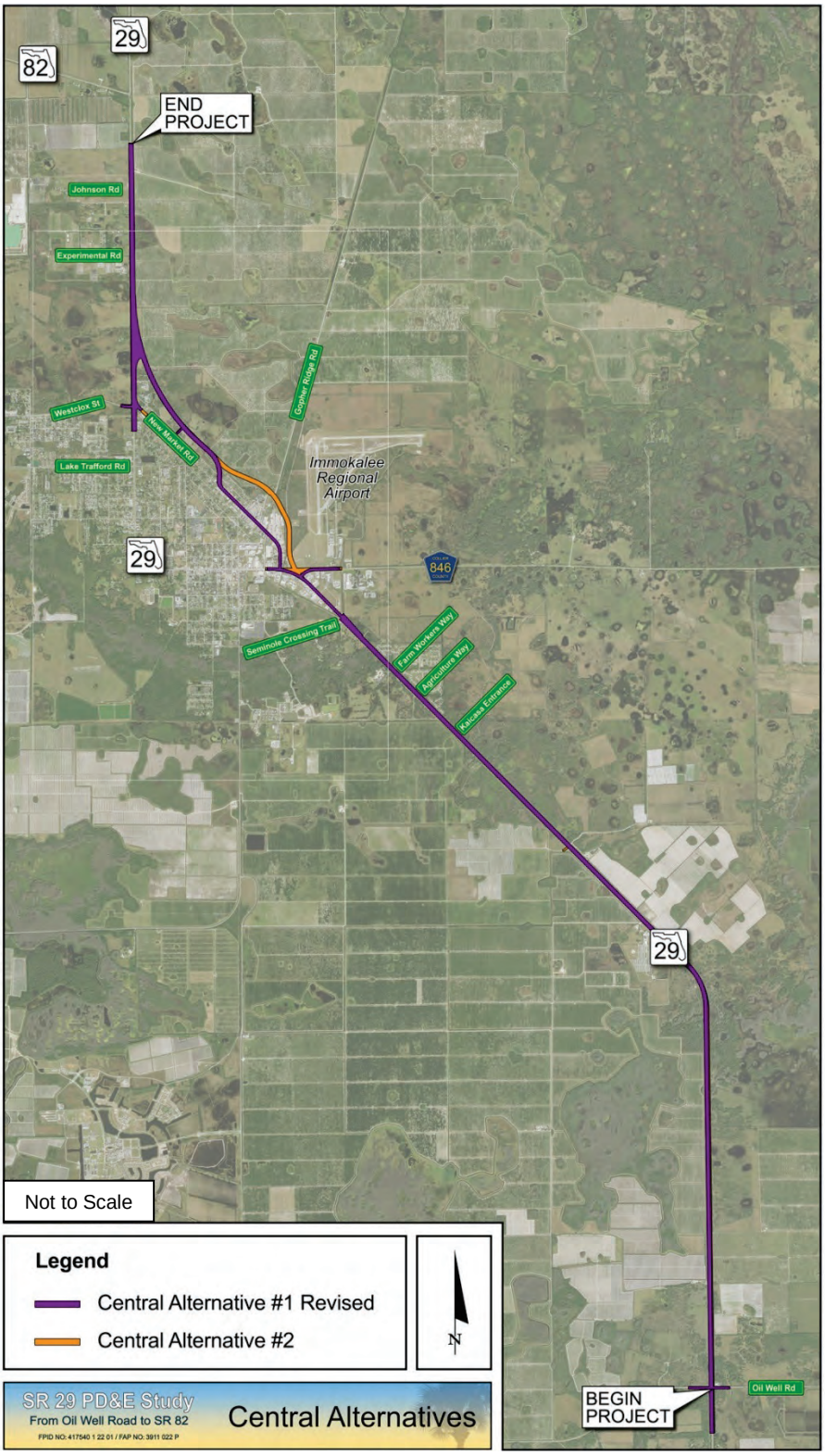
- **Central Alternative #1 Revised:** From Seminole Crossing Trail, Central Alternative #1 Revised remains on existing SR 29 to New Market Road. At New Market Road, this alternative follows the eastern portion of New Market Road and provides direct access to the agribusiness/commercial areas of Immokalee and State Farmers Market. This alternative continues just past Flagler Street, then turns northward on new alignment to avoid a residential neighborhood. It then parallels Madison Avenue and New Market Road. At this point, the two Build Alternatives are on the same alignment, traveling along the east side of Collier Health Services Medical Center and the Florida State University College of Medicine, before reconnecting to SR 29 north of Westclox Street. A roundabout is currently being evaluated at SR 29 at Westclox Street/New Market Road as an optional intersection treatment.
- **Central Alternative #2:** From Seminole Crossing Trail, Central Alternative #2 travels north from SR 29 on new alignment along the west side of the Immokalee Regional Airport to

avoid the commercial/industrial areas of Immokalee and the State Farmers Market to the west. This alternative then turns to the northwest just past Gopher Ridge Road to parallel Madison Avenue and New Market Road. At this point, the two Build Alternatives are on the same alignment, traveling along the east side of Collier Health Services Medical Center and the Florida State University College of Medicine, before reconnecting to SR 29 north of Westclox Street. A roundabout is currently being evaluated at SR 29 at Westclox Street/New Market Road as an optional intersection treatment.

The No Build Alternative assumes that no lanes will be added to SR 29 from Oil Well Road to SR 82 through the 2045 design year. In other words, it assumes that future traffic volumes will continue to increase but no capacity or operational improvements will be made to SR 29. While the No Build alternative does not meet purpose and need for this project as described in **Section 1.1.2** of this report, it requires no capital outlay for construction, causes no substantial increase in operation and maintenance of the existing roadway, and results in minimal environmental impacts. As such, the No Build Alternative will remain a viable alternative throughout the study process.

Figure 1-2 shows the location of the two project Build Alternatives (Central Alternative #1 Revised and Central Alternative #2).

FIGURE 1-2
PROJECT BUILD ALTERNATIVES



Section 2.0
METHODOLOGY

2.1 EVALUATION PROCESS

This traffic noise analysis was prepared in accordance with Title 23 CFR Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise. The evaluation uses methodologies established by FDOT and documented in the FDOT PD&E Manual, Part 2, Chapter 18 (June 2017). The predicted noise levels presented in this report are expressed in dB(A). This scale most closely approximates the response characteristics of the human ear to traffic noise. All noise levels are reported as equivalent levels (Leq(h)), which is the equivalent steady-state sound level that contains the same acoustic energy as a time-varying sound level over a period of one hour.

2.2 NOISE MODEL

The prediction of existing and future traffic noise levels with and without the roadway improvements was performed using the FHWA's computer model for highway traffic noise prediction and analysis - TNM-Version 2.5. The TNM propagates sound energy, in one-third octave bands, between highways and nearby receptors taking the intervening ground's acoustical characteristics/topography and rows of buildings into account.

2.3 TRAFFIC DATA

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; therefore, traffic volume characteristics used in the analysis reflect either the design LOS C volumes or the demand volumes (if forecast demand levels meet the LOS A or B criteria), whichever is less. The traffic volume characteristics used in TNM for the Existing (2017), Future No Build (2045), and Future Design Year (2045) scenarios for each mainline segment of SR 29 are presented in **Table 2-1**.

The traffic data used in the noise analysis are documented in the Traffic Data for Noise Studies - Summary and Detailed Output files and are provided in **Appendix B**. These files provide peak hour directional LOS C and demand volumes, along with directional factors (D-factor), truck factors (T24 and Tpeak), and other vehicle classification factors used to divide hourly volumes between cars, medium trucks, heavy trucks, buses, and motorcycles, as required for the TNM input. Vehicle speeds are based on posted speed limits.

TABLE 2-1
TRAFFIC VOLUMES USED IN TNM

ALTERNATIVE	SEGMENT	EXISTING (2017)	NO BUILD (2045)	BUILD (2045)
Central #1 Revised	SR 29 from Oil Well Road to Farm Worker Way	Demand	Demand	Demand
	SR 29 from Farm Worker Way to CR 846/Airport Road	Demand	LOS C	Demand
	SR 29 from CR 846/Airport Road to New Market Road	Demand	LOS C	Demand
	SR 29 to Charlotte Street	LOS C	LOS C	Demand
	Charlotte Street to Flagler Street	Demand	LOS C	Demand
	Flagler Street to Kissimmee Street	N/A	N/A	Demand
	Kissimmee Street to SR 29	N/A	N/A	Demand
	New Market Road to SR 29 Bypass	LOS C	LOS C	Demand
	SR 29 Bypass to SR 82	LOS C	LOS C	Demand
Central #2	SR 29 from Oil Well Road to Farm Worker Way	Demand	Demand	Demand
	SR 29 from Farm Worker Way to CR 846/Airport Road	Demand	LOS C	Demand
	SR 29 to Flagler Street	N/A	N/A	Demand
	Flagler Street to Kissimmee Street	N/A	N/A	Demand
	Kissimmee Street to SR 29	N/A	N/A	Demand
	New Market Road to SR 29 Bypass	LOS C	LOS C	Demand
	SR 29 Bypass to SR 82	LOS C	LOS C	Demand

Source: VHB Engineers & Planners, Inc., 2018
N/A = Not Applicable. This segment of SR 29 does not exist under the existing and No Build scenarios.

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Section 3.0
NOISE ANALYSIS

3.1 NOISE-SENSITIVE SITES

Noise-sensitive sites, and the receptors (i.e., locations for predicted traffic noise levels) at these sites, are properties where frequent human use occurs and where a lowered noise level would be of benefit. To evaluate traffic noise at these sites/receptors, the FHWA established Noise Abatement Criteria (NAC). As shown in **Table 3-1,** the criteria vary according to the properties' activity category. For comparative purposes, typical noise levels for common indoor and outdoor activities are provided in **Appendix C**.

TABLE 3-1
FHWA/FDOT NOISE ABATEMENT CRITERIA

[Leq(h) expressed in dB(A)]

ACTIVITY CATEGORY	DESCRIPTION OF ACTIVITY CATEGORY	ACTIVITY LEQ(H)[1]	
		FHWA	FDOT
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)	56 (Exterior)
B[2]	Residential	67 (Exterior)	66 (Exterior)
C[2]	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreational areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.	67 (Exterior)	66 (Exterior)
D	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.	52 (Interior)	51 (Interior)
E[2]	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.	72 (Exterior)	71 (Exterior)
F	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.	--	--
G	Undeveloped lands that are not permitted.	--	--

[1] The Leq(h) Activity Criteria values are for impact determination only and are not design standards for noise abatement measures.
[2] Includes undeveloped lands permitted for this activity category.
Source: CFR, Title 23, Part 772.

When predicted traffic noise levels "approach" or exceed the NAC, or when predicted future noise levels increase substantially from existing levels, the FHWA requires that noise abatement measures be considered. FDOT defines the word "approach" to mean within one dB(A) of the NAC. The FDOT's NAC are also shown in **Table 3-1**. Additionally, the FDOT criteria states that a substantial increase would occur if traffic noise levels are predicted to increase 15 dB(A) or more above existing conditions as a direct result of a transportation improvement project.

Within the project limits, 100 noise-sensitive sites were determined to have the potential to be impacted by traffic noise as a result of the proposed project improvements. The land use review, during which these noise-sensitive sites were identified, was completed on April 25, 2018. The 100 sites are comprised of the following:

- Activity Category B – Ninety-two residences (within Farm Worker Village, C&C Rentals Mobile Home Park, the La Vallita Estates and Newmarket Subdivisions, and scattered single family residences).
- Activity Category C – Two schools (Village Oaks Elementary and the University of Florida Agricultural Research Facility), two receptors at one park (Airport Park), and one medical facility.
- Activity Category D – Because there are no frequent outdoor use areas evident, interior traffic noise levels were evaluated at one public institution (the Immokalee Fire Department).
- Activity Category E – Two restaurants with outdoor dining areas (Lozano's Mexican Restaurant and Kountry Kitchen).

Interior traffic noise levels were predicted by applying the noise reduction factor for light frame buildings (20 dB(A)) to the predicted exterior noise levels as recommended by FHWA's *Highway Traffic Noise: Analysis and Abatement Guidance*.

3.2 MEASURED NOISE LEVELS

As previously stated, existing and future noise levels with and without the proposed improvements were modeled using the TNM. To verify the accuracy of the predictions, the computer model was validated using measured noise levels adjacent to the project corridor. Traffic data including motor vehicle volumes, vehicle mix, vehicle speeds, and meteorological conditions were recorded during each measurement period.

The field measurements were conducted in accordance with the FHWA's *Measurement of Highway-Related Noise*. The measurements were obtained using a Larson Davis LxT Type II integrating sound level meter (SLM). The SLM was calibrated before and after the measurement periods with a Larson Davis CAL200 calibrator.

The recorded traffic data were used as input for the TNM to determine if, given the topography and actual site conditions of the area, the computer model could "re-create" the measured levels with the existing roadway. Following FDOT policy, a noise prediction model is considered

within the accepted level of accuracy if the measured and predicted noise levels are within a tolerance standard of 3 dB(A).

Table 3-2 presents the field measurements and the validation results. As shown, the ability of the model to predict noise levels within the FDOT limits of plus or minus 3 dB(A) for the project was confirmed. Note that the measured noise levels were higher than the modeled noise levels because measured levels include both traffic noise from SR 29 and background noise, whereas the modeled levels exclude background noise. Documentation in support of the validation is provided in **Appendix D**.

TABLE 3-2
VALIDATION DATA

LOCATION	MEASUREMENT PERIOD	MODELED	MEASURED	DIFFERENCE
Farm Workers Village	1	58.8	61.2	2.4
	2	58.5	60.3	1.8
	3	55.2	56.1	0.9

Field measurements are required along a new alignment to determine the existing noise levels. Two measurement locations were conducted along Madison Avenue that runs parallel with the new bypass. Three repetitions of 10-minute measurements were obtained in the morning and the afternoon hours, and on separate days, for each measurement location. The description of each location and the measurement results are shown in **Table 3-3**. The average of the measurements was used as the existing and No Build scenario noise levels for noise sensitive land uses along Madison Avenue (Sites 82 - 93).

TABLE 3-3
AMBIENT SOUND LEVELS

LOCATION	NOISE MEASUREMENT PERIOD						AVERAGE NOISE LEVEL
	3/1/2018			4/25/2018			
	AM-1	AM-2	AM-3	PM-1	PM-2	PM-3	
Site #1 – Madison Avenue between Hendry Street and Indian River Street	61.7	58.4	59.2	62.1	59.6	58.6	**59.9**
Site #2 – Madison Avenue at Manatee Street	59.2	57.4	60.0	61.4	61.9	60.2	**60.0**

3.3 RESULTS OF THE NOISE ANALYSIS

Table 3-4 presents the results of the traffic noise analysis for the proposed improvements. As shown, existing (2017) exterior traffic noise levels are predicted to range from 49.0 to 63.2 dB(A), and interior levels are predicted to be 41.3 dB(A).

In the future (2045) without the proposed project improvements (No Build Alternative), exterior traffic noise levels are predicted to range from 49.2 to 66.2 dB(A) and interior levels are

predicted to be 41.3 dB(A) with levels predicted to approach, meet, or exceed the NAC at one receptor located within Farm Worker Village.

Finally, in the future with the proposed project improvements (Build Alternatives), exterior traffic noise levels are predicted to range from 53.3 to 70.9 dB(A) for Central Alternative #1 Revised and 47.1 to 65.7 dB(A) for Central Alternative #2. Interior levels are predicted to be 46.5 and 42.6 dB(A) for Central Alternative #1 Revised and Central Alternative #2, respectively. Levels are predicted to approach, meet, or exceed the NAC at two receptors under Central Alternative #1 Revised. The impacted receptors are located within the C&C Rentals Mobile Home Park (Sites 68 and 78).

Notably, when compared to existing conditions, traffic noise levels are not predicted to increase more than 9.8 dB(A) above existing conditions with the proposed project improvements. As such, the project would not substantially increase traffic noise (i.e., increase traffic noise 15 dB(A) or more) at any of the evaluated receptors.

Noise abatement measures were evaluated for the two receptors that are predicted to experience future traffic noise levels that approach, meet, or exceed the NAC with the proposed project improvements. The results of the evaluation are provided in Section 4.0 of this Noise Study Report (NSR).

TABLE 3-4
PREDICTED TRAFFIC NOISE LEVELS

Site ID	Activity Category	Type	Description	Leq(h) (dB(A))				Approaches, Meets, or Exceeds the NAC?
				Existing (2017)[1]	No Build (2045)[1]	Build (2045)[2]	Increase from Existing[2]	
1	B	Residential	SFR on west side of SR 29	56.3	60.6	62.4	6.1	
2	B	Residential	SFR on west side of SR 29	52.8	57.2	58.6	5.8	
3	B	Residential	SFR on west side of SR 29	50.8	55.2	56.7	5.9	
4	B	Residential	SFR on west side of SR 29	53.1	57.5	58.7	5.6	
5	B	Residential	Farm Worker Village	58.0	62.4	61.9	3.9	
6	B	Residential	Farm Worker Village	61.8	66.2	64.9	3.1	
7	B	Residential	Farm Worker Village	60.4	64.7	63.6	3.2	
8	B	Residential	Farm Worker Village	60.3	64.6	63.5	3.2	
9	B	Residential	Farm Worker Village	60.9	65.3	64.1	3.2	
10	B	Residential	Farm Worker Village	60.9	65.3	64.1	3.2	
11	B	Residential	Farm Worker Village	60.4	64.7	63.7	3.3	
12	B	Residential	Farm Worker Village	60.2	64.5	63.6	3.4	
13	B	Residential	Farm Worker Village	60.5	64.9	64.0	3.5	
14	B	Residential	Farm Worker Village	60.8	65.1	64.3	3.5	
15	B	Residential	Farm Worker Village	60.1	64.5	63.8	3.7	
16	B	Residential	Farm Worker Village	60.0	64.4	63.8	3.8	

TABLE 3-4
PREDICTED TRAFFIC NOISE LEVELS (CONTINUED)

Site ID	Activity Category	Type	Description	Leq(h) (dB(A))				Approaches, Meets, or Exceeds the NAC?
				Existing (2017)[1]	No Build (2045)[1]	Build (2045)[2]	Increase from Existing[2]	
17	B	Residential	Farm Worker Village	60.7	65.0	64.5	3.8	
18	B	Residential	Farm Worker Village	54.7	59.1	59.1	4.4	
19	B	Residential	Farm Worker Village	53.0	57.4	57.9	4.9	
20	B	Residential	Farm Worker Village	53.3	57.7	58.1	4.8	
21	B	Residential	Farm Worker Village	53.8	58.2	58.2	4.4	
22	B	Residential	Farm Worker Village	53.9	58.3	58.2	4.3	
23	B	Residential	Farm Worker Village	54.9	59.3	59.0	4.1	
24	B	Residential	Farm Worker Village	56.1	60.4	60.0	3.9	
25	B	Residential	Farm Worker Village	50.9	55.2	56.0	5.1	
26	B	Residential	Farm Worker Village	57.3	61.6	61.4	4.1	
27	B	Residential	Farm Worker Village	57.3	61.7	61.6	4.3	
28	B	Residential	Farm Worker Village	57.3	61.7	61.6	4.3	
29	B	Residential	Farm Worker Village	57.0	61.4	61.2	4.2	
30	B	Residential	Farm Worker Village	57.0	61.4	61.2	4.2	
31	B	Residential	Farm Worker Village	57.6	61.9	62.0	4.4	
32	B	Residential	Farm Worker Village	57.6	61.9	62.1	4.5	
33	B	Residential	Farm Worker Village	57.1	61.5	61.3	4.2	
34	B	Residential	Farm Worker Village	57.1	61.5	61.4	4.3	
35	B	Residential	Farm Worker Village	57.7	62.0	62.2	4.5	
36	B	Residential	Farm Worker Village	57.5	61.9	62.0	4.5	
37	B	Residential	Farm Worker Village	56.3	60.7	60.3	4.0	
38	B	Residential	Farm Worker Village	54.7	59.0	58.8	4.1	
39	B	Residential	Farm Worker Village	52.8	57.2	57.3	4.5	
40	B	Residential	Farm Worker Village	53.6	58.0	57.9	4.3	
41	B	Residential	Farm Worker Village	54.5	58.9	58.7	4.2	
42	B	Residential	Farm Worker Village	56.1	60.4	60.1	4.0	
43	B	Residential	Farm Worker Village	57.8	62.1	62.4	4.6	
44	B	Residential	Farm Worker Village	57.6	61.9	62.1	4.5	
45	B	Residential	Farm Worker Village	53.5	57.8	57.6	4.1	
46	B	Residential	Farm Worker Village	51.4	55.8	56.4	5.0	
47	B	Residential	Farm Worker Village	51.8	56.2	56.6	4.8	
48	B	Residential	Farm Worker Village	50.3	54.6	55.6	5.3	
49	B	Residential	Farm Worker Village	54.6	58.9	58.6	4.0	
50	B	Residential	Farm Worker Village	49.2	53.4	53.8	4.6	
51	B	Residential	Farm Worker Village	50.2	54.2	54.9	4.7	

TABLE 3-4
PREDICTED TRAFFIC NOISE LEVELS (CONTINUED)

Site ID	Activity Category	Type	Description	Leq(h) (dB(A))				Approaches, Meets, or Exceeds the NAC?
				Existing (2017)[1]	No Build (2045)[1]	Build (2045)[2]	Increase from Existing[2]	
52	B	Residential	Farm Worker Village	56.0	59.9	59.8	3.8	
53	B	Residential	Farm Worker Village	57.9	61.8	62.3	4.4	
54	B	Residential	Farm Worker Village	57.8	61.7	61.9	4.1	
55	B	Residential	Farm Worker Village	57.6	61.5	61.5	3.9	
56	B	Residential	Farm Worker Village	57.7	61.6	61.6	3.9	
57	B	Residential	Farm Worker Village	57.9	61.8	62.0	4.1	
58	B	Residential	Farm Worker Village	58.5	62.4	62.9	4.4	
59	B	Residential	Farm Worker Village	58.4	62.4	62.9	4.5	
60	B	Residential	Farm Worker Village	55.1	59.0	58.8	3.7	
61	B	Residential	Farm Worker Village	49.3	53.2	53.8	4.5	
62	B	Residential	Farm Worker Village	50.2	54.1	54.5	4.3	
63	C	School	Village Oaks Elementary	53.3	57.3	59.9	6.6	
64	C	Park	Airport Park[1]	57.5	58.3	65.1/64.6	7.6/7.1	
65	C	Park	Airport Park[1]	57.8	58.6	65.7/64.2	7.9/6.4	
66	B	Residential	Residential_C&C Rentals RV	56.8	56.9	65.3/54.6	8.5/-2.2	
67	B	Residential	Residential_C&C Rentals RV	51.5	51.7	59.8/53.2	8.3/1.7	
68	B	Residential	Residential_C&C Rentals RV	59.3	59.3	69.1/54.8	9.8/-4.5	Y (Alt #1R)
69	B	Residential	Residential_C&C Rentals RV	55.7	55.8	64.2/54.4	8.5/-1.3	
70	B	Residential	Residential_C&C Rentals RV	53.6	53.7	61.4/54.0	7.8/0.4	
71	B	Residential	Residential_C&C Rentals RV	51.6	51.7	59.4/53.7	7.8/2.1	
72	B	Residential	Residential_C&C Rentals RV	51.0	51.2	59.0/53.3	8.0/2.3	
73	B	Residential	Residential_C&C Rentals RV	50.5	50.7	58.6/53.0	8.1/2.5	
74	B	Residential	Residential_C&C Rentals RV	52.2	52.3	59.8/52.7	7.6/0.5	
75	B	Residential	Residential_C&C Rentals RV	49.0	49.2	56.8/53.0	7.8/4.0	
76	B	Residential	Residential_C&C Rentals RV	53.8	53.9	61.6/53.5	7.8/-0.3	
77	B	Residential	Residential_C&C Rentals RV	54.4	54.4	62.1/53.6	7.7/-0.8	
78	B	Residential	Residential_C&C Rentals RV	58.8	58.9	68.3/54.6	9.5/-4.2	Y (Alt #1R)
79	D	Public Institution	Fire Department (Interior)	41.3	41.3	46.5/42.6	5.2/1.3	
80	E	Restaurant	Lozano's Mexican Restaurant	63.2	63.3	70.9/49.1	7.7/-14.1	
81	E	Restaurant	Kountry Kitchen	60.0	60.3	64.7/47.1	4.7/-12.9	
82	B	Residential	Residential_La Vallita Estates	59.9	59.9	59.9/59.9	0.0/0.0	
83	B	Residential	Residential_La Vallita Estates	59.9	59.9	60.6/59.9	0.7/0.0	
84	B	Residential	Residential_Newmarket	59.9	59.9	63.7/59.9	3.8/0.0	
85	B	Residential	Residential_Newmarket	59.9	59.9	60.6/59.9	0.7/0.0	

TABLE 3-4
PREDICTED TRAFFIC NOISE LEVELS (CONTINUED)

Site ID	Activity Category	Type	Description	Leq(h) (dB(A))				Approaches, Meets, or Exceeds the NAC?
				Existing (2017)[1]	No Build (2045)[1]	Build (2045)[2]	Increase from Existing[2]	
86	B	Residential	Residential_Newmarket	59.9	59.9	59.9/59.9	0.0/0.0	
87	B	Residential	Residential_Newmarket	59.9	59.9	61.5/59.9	1.6/0.0	
88	B	Residential	Residential_Newmarket	59.9	59.9	63.1/59.9	3.2/0.0	
89	B	Residential	Residential_Newmarket	59.9	59.9	60.3/59.9	0.4/0.0	
90	B	Residential	Residential_Newmarket	59.9	59.9	59.9/59.9	0.0/0.0	
91	B	Residential	Residential_Newmarket	59.9	59.9	59.9/59.9	0.0/0.0	
92	B	Residential	Residential_Newmarket	60.0	60.0	60.0/60.0	0.0/0.0	
93	B	Residential	Residential_Newmarket	60.0	60.0	60.0/60.0	0.0/0.0	
94	C	Medical Facility	Medical Facility (exterior benches)	49.5	49.5	55.2/55.1	5.7/5.6	
95	B	Residential	SF Residential	57.9	57.9	53.3/48.5	-4.6/-9.4	
96	B	Residential	SF Residential	53.3	53.3	56.3	3.0	
97	C	School	U of F Agriculture Research	56.8	56.8	61.2	4.4	
98	B	Residential	SF Residential	60.0	60.0	64.0	4.0	
99	B	Residential	SF Residential	60.5	60.5	64.8	4.3	
100	B	Residential	SF Residential	60.5	60.5	65.7	5.2	

Note: Site locations are illustrated on the project aerials in Appendix A of this report.
1 Receptors 82-93 existing and No Build Alternative levels are based on ambient noise measurements.
2 Receptors with two values represent the different levels associated with the two Build Alternatives (Central Alternative #1 Revised and Central Alternative #2).

Section 4.0
EVALUATION OF ABATEMENT ALTERNATIVES

FDOT considers noise abatement alternatives (measures) when predicted traffic noise levels approach or exceed the NAC or when levels increase substantially. The measures considered for SR 29 were traffic management, alternative roadway alignment, buffer zones, and noise barriers. The following discusses the feasibility (e.g., amount of noise reduction, engineering considerations) and cost reasonableness of the measures.

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 forecasted traffic volumes. For example, if the posted speed were reduced, the capacity of the roadway to handle the forecasted motor vehicle demand would also be reduced. Therefore, reducing traffic speeds and/or traffic volumes is inconsistent with the goal of improving the ability of the roadway to handle the forecasted volumes. As such, traffic management measures are not considered a reasonable noise mitigation measure for the project.

4.2 ALTERNATIVE ROADWAY ALIGNMENT

The proposed project improvements will generally follow the same alignment as the existing roadway to minimize the need for additional right-of-way (ROW) within the project corridor. Maintaining the alignment within the existing ROW, where feasible, will minimize impacts to surrounding noise-sensitive sites located both east and west of the roadway.

4.3 NOISE BUFFER ZONES

Providing a buffer between a roadway and future noise-sensitive land uses is an abatement measure that can minimize/eliminate noise impacts in areas of future development. To encourage use of this abatement measure through local land use planning, noise contours have been developed and are further discussed in Section 5.0 of this NSR.

4.4 NOISE BARRIERS

Noise barriers have the potential to reduce traffic noise levels by blocking the sound path between the motor vehicles on the roadway (the source) and the noise-sensitive sites adjacent to the roadway. However, in order to effectively reduce traffic noise, a noise barrier must be relatively long, continuous (without intermittent openings), and sufficiently tall. Following

FDOT policy, the minimum requirements for a noise barrier to be considered both acoustically feasible and reasonable and cost reasonable are:

- A barrier must provide at least a 5 dB(A) reduction in traffic noise for two or more impacted noise-sensitive receptors and also provide at least a 7 dB(A) reduction (i.e., the FDOT's noise reduction design goal) for at least one impacted receptor, and
- A barrier should not cost more than $42,000 per benefited noise-sensitive receptor (a benefited receptor is a receptor that receives at least a 5 dB(A) reduction in noise from a mitigation measure).

The current estimated cost to construct a noise barrier (materials and labor) is $30.00 per square foot. After considering the amount of reduction that may be provided and the cost reasonableness, additional factors may also be considered when evaluating a noise barrier as a potential noise abatement measure. These additional factors address both the feasibility of a barrier and the reasonableness of a barrier. Additional noise barrier-related feasibility factors include factors that relate to design and construction (i.e., can a barrier actually be constructed given site-specific details), safety, access to and from adjacent properties, ROW requirements, maintenance, and impacts on utilities and drainage. Besides the cost and noise reduction design goal described above, the only other reasonableness factor is the viewpoint of the impacted property owners and renters, if applicable, who may or may not desire a noise barrier as an abatement measure.

The TNM (Version 2.5) was used to evaluate the effectiveness of noise barriers to reduce traffic noise levels at the impacted noise-sensitive receptors. The noise barrier lengths were optimized to maintain at least a 5 dB(A) reduction for two or more impacted receptors and a 7 dB(A) reduction for at least one impacted receptor.

As previously stated, during the design year (2045) for Central Alternative #1 Revised, traffic noise levels are predicted to approach, meet, or exceed the NAC at two receptors (Sites 68 and 78) located within the C&C Rentals Mobile Home Park. The barrier was evaluated five feet inside the FDOT ROW and in two segments to accommodate access to/from the property. Due to constraints on the lengths of the barrier segments because of access requirements, the minimum required noise reduction of 5 dB(A) for two impacted receptors could not be achieved at any of the evaluated barrier heights. Therefore, the barrier is not considered a feasible noise abatement measure.

While traffic noise abatement was considered as part of this project, no feasible and reasonable measures were identified that can be implemented as part of the project to abate traffic noise at the two impacted residences. Therefore, there is no commitment regarding further consideration of noise barriers during the design phase of the project at these locations. Noise barriers will be reevaluated during the design phase for structures permitted between the Final Noise Study Report and the Date of Public Knowledge.

A land use review will additionally be performed during the design phase of the project to ensure that all noise-sensitive land uses that have received a building permit prior to the project's Date of Public Knowledge are evaluated. Notably, there was no ongoing construction observed during field reviews performed when establishing existing land use.

Section 5.0
NOISE CONTOURS

Land uses such as residences, motels, medical facilities, schools, churches, recreation areas, and parks are considered incompatible with highway noise levels exceeding the NAC. In order to reduce the possibility of additional traffic noise-related impacts, noise level contours were developed for the future improved roadway facility. These noise contours delineate the distance from the improved roadway's edge-of-travel lane to where 56, 66, and 71 dB(A) (FDOT and FHWA Activity Categories A, B/C, and E, respectively) are expected to occur in the future (2045) with the proposed project improvements (Build Alternatives).

The contours for Central Alternative #1 Revised and Central Alternative #2 are shown in **Tables 5-1** and **5-2** and on **Figures 5-1** and **5-2**, respectively. Within the project limits, the contours for Central Alternative #1 Revised extend from 25 to 610 feet from the improved roadway's edge-of-travel lane. The contours for Central Alternative #2 extend from 40 to 610 feet from the improved roadway's edge-of-travel lane. Local officials will be provided a copy of the Final NSR to promote compatibility between land development and SR 29.

TABLE 5-1
NOISE CONTOURS – CENTRAL ALTERNATIVE #1 REVISED

ROADWAY SEGMENT	DISTANCE FROM IMPROVED ROADWAY'S EDGE-OF-TRAVEL LANE (FT)*		
	ACTIVITY CATEGORY A 56 DB(A)	ACTIVITY CATEGORY B/C 66 DB(A)	ACTIVITY CATEGORY D/E 71 DB(A)
Oil Well Road to Farm Worker Way	355	125	55
Farm Worker Way to CR 846/Airport Road	310	95	35
CR 846/Airport Road to New Market Road	345	105	45
SR 29 to Charlotte Street	280	75	25
Charlotte Street to Flagler Street	395	130	55
Flagler Street to Kissimmee Street	395	130	55
Kissimmee Street to SR 29	345	110	45
New Market Road/Westclox Road to SR 29 Bypass	325	100	40
SR 29 Bypass to SR 82	610	190	105

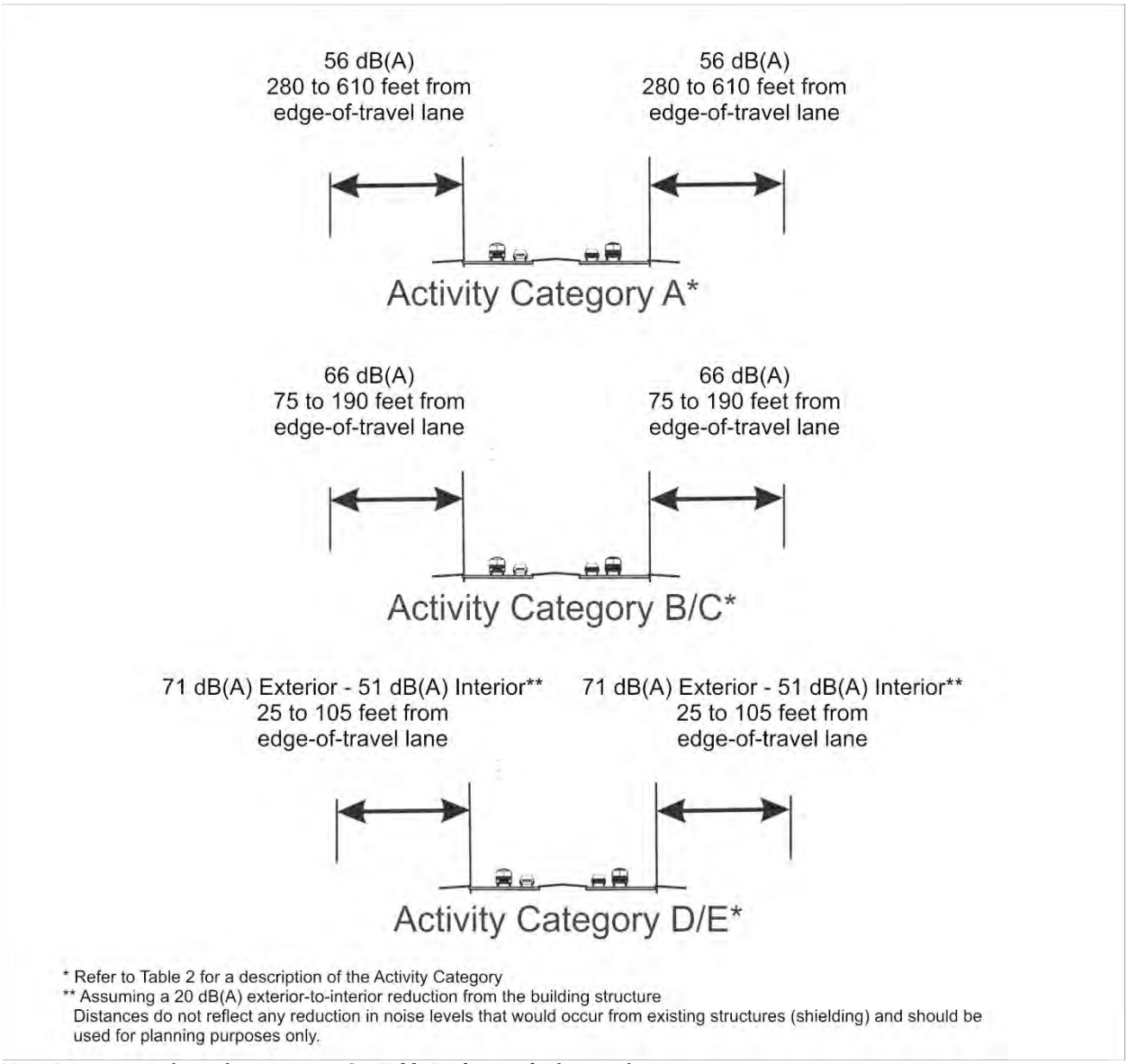
* See **Table 3-1** for a description of the activities that occur within each category. Distances do not reflect any reduction in noise levels that would occur from existing structures (shielding) and should be used for planning purposes only.

TABLE 5-2
NOISE CONTOURS – CENTRAL ALTERNATIVE #2

ROADWAY SEGMENT	DISTANCE FROM IMPROVED ROADWAY'S EDGE-OF-TRAVEL LANE (FT)*		
	ACTIVITY CATEGORY A 56 DB(A)	ACTIVITY CATEGORY B/C 66 DB(A)	ACTIVITY CATEGORY D/E 71 DB(A)
Oil Well Road to Farm Worker Way	400	125	55
Farm Worker Way to CR 846/Airport Road	330	95	40
SR 29 to Flagler Street	380	110	45
Flagler Street to Kissimmee Street	525	160	80
Kissimmee Street to SR 29	390	115	50
New Market Road/Westclox Road to SR 29 Bypass	345	100	40
SR 29 Bypass to SR 82	610	195	110

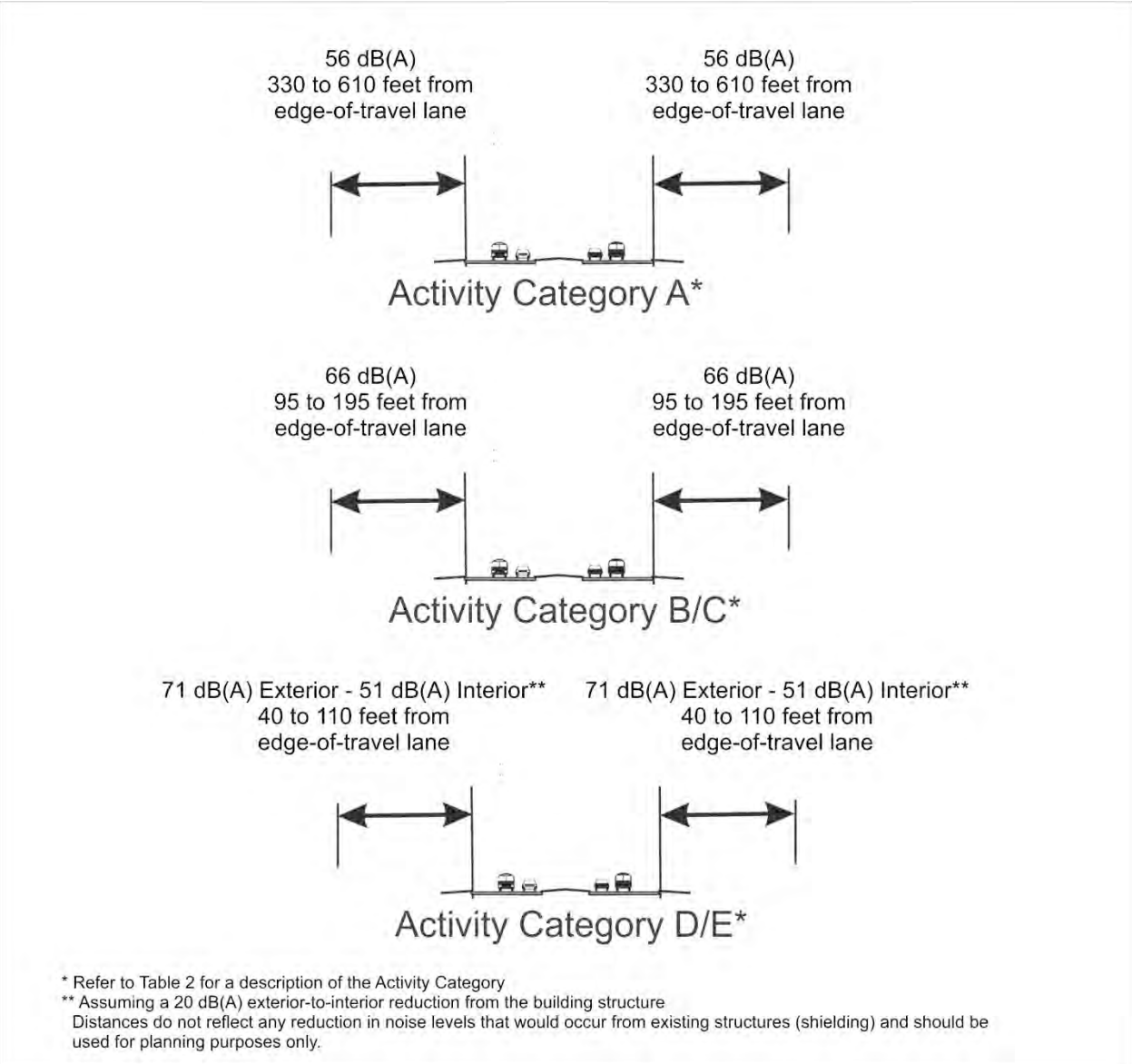
* See **Table 3-1** for a description of the activities that occur within each category. Distances do not reflect any reduction in noise levels that would occur from existing structures (shielding) and should be used for planning purposes only.

FIGURE 5-1
NOISE CONTOURS – CENTRAL ALTERNATIVE #1 REVISED



Note: Distances vary by roadway segment. See **Table 5-1** for specific distances by segment.

FIGURE 5-2
NOISE CONTOURS – CENTRAL ALTERNATIVE #2



Note: Distances vary by roadway segment. See **Table 5-2** for specific distances by segment.

Section 6.0
CONSTRUCTION NOISE AND VIBRATION

Construction of the proposed roadway improvements is not expected to have any significant noise or vibration impact. If sensitive land uses develop adjacent to the roadway prior to construction, increased potential for noise or vibration impacts could result. It is anticipated that the application of the *FDOT Standard Specifications for Road and Bridge Construction* will minimize or eliminate potential construction noise and vibration impacts. However, should unanticipated noise or vibration issues arise during the construction process, the Project Engineer, in coordination with the District Noise Specialist and the Contractor, will investigate additional methods of controlling these impacts.

Section 7.0
PUBLIC INVOLVEMENT

The FDOT conducted two alternatives public workshops for the SR 29 Immokalee PD&E Study. The first alternatives public workshop was held on Thursday, April 3, 2014 at the Immokalee One-Stop Career Center. The second alternatives public workshop took place on Thursday, November 9, 2017 at the UF/IFAS Southwest Florida Research Education Center. A Public Hearing will also be scheduled at a later date. The hearing will inform the public of the results of the PD&E Study and to provide the opportunity for the public to express their views regarding specific location, design, socio-economic effects, and environmental impacts associated with the recommended Build Alternative and the No Build Alternative.

Section 8.0
REFERENCES

Federal Highway Administration. U.S. Department of Transportation. July 13, 2010. Title 23 CFR, Part 772. *Procedures for Abatement of Highway Traffic Noise and Construction Noise.*

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Florida Department of Transportation. 2018. *Standard Specifications for Road and Bridge Construction.*

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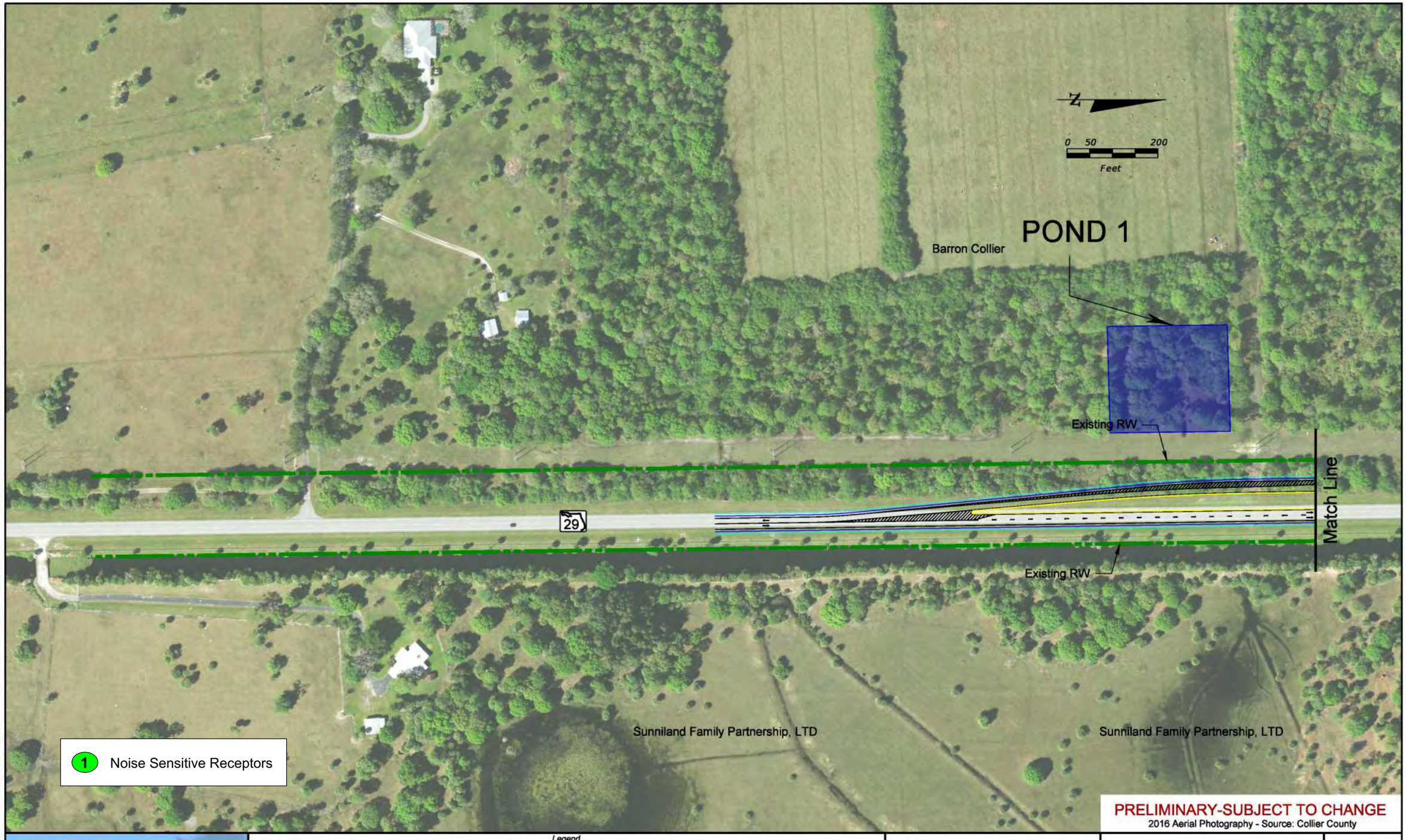
APPENDIX A

Project Aerials



SR 29 PD&E Study
From Oil Well Road to SR 82
FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

- Existing Right-of-Way
- Parcels
- Proposed Right-of-Way
- Water/Canal
- Seminole Land
- Forested Wetland
- Non-Forested Wetland
- Traffic Signal
- Proposed Pavement
- Proposed Median/Border
- Proposed Sidewalks
- Proposed Structure
- Proposed Guardrail
- Potential Business Relocation
- Potential Contamination (Low)
- Potential Contamination (Medium or High)

H. W. Lochner, Inc.
4350 W. Cypress St., Suite 800
Tampa, Florida 33607
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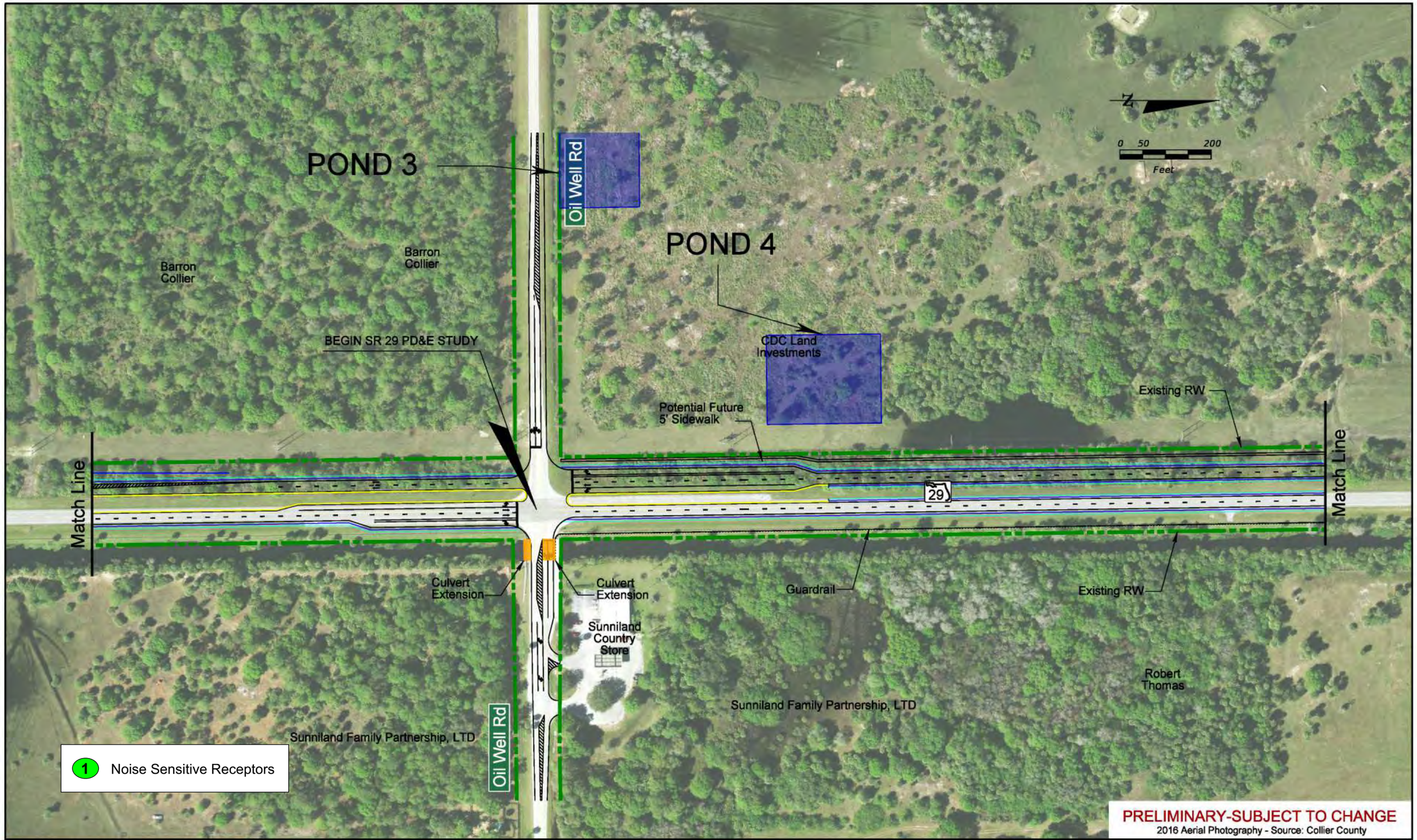
Central Alternative 1R

Sheet No. 1



SR 29 PD&E Study

From Oil Well Road to SR 82

FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

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- Parcels
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- Potential Contamination (Low)
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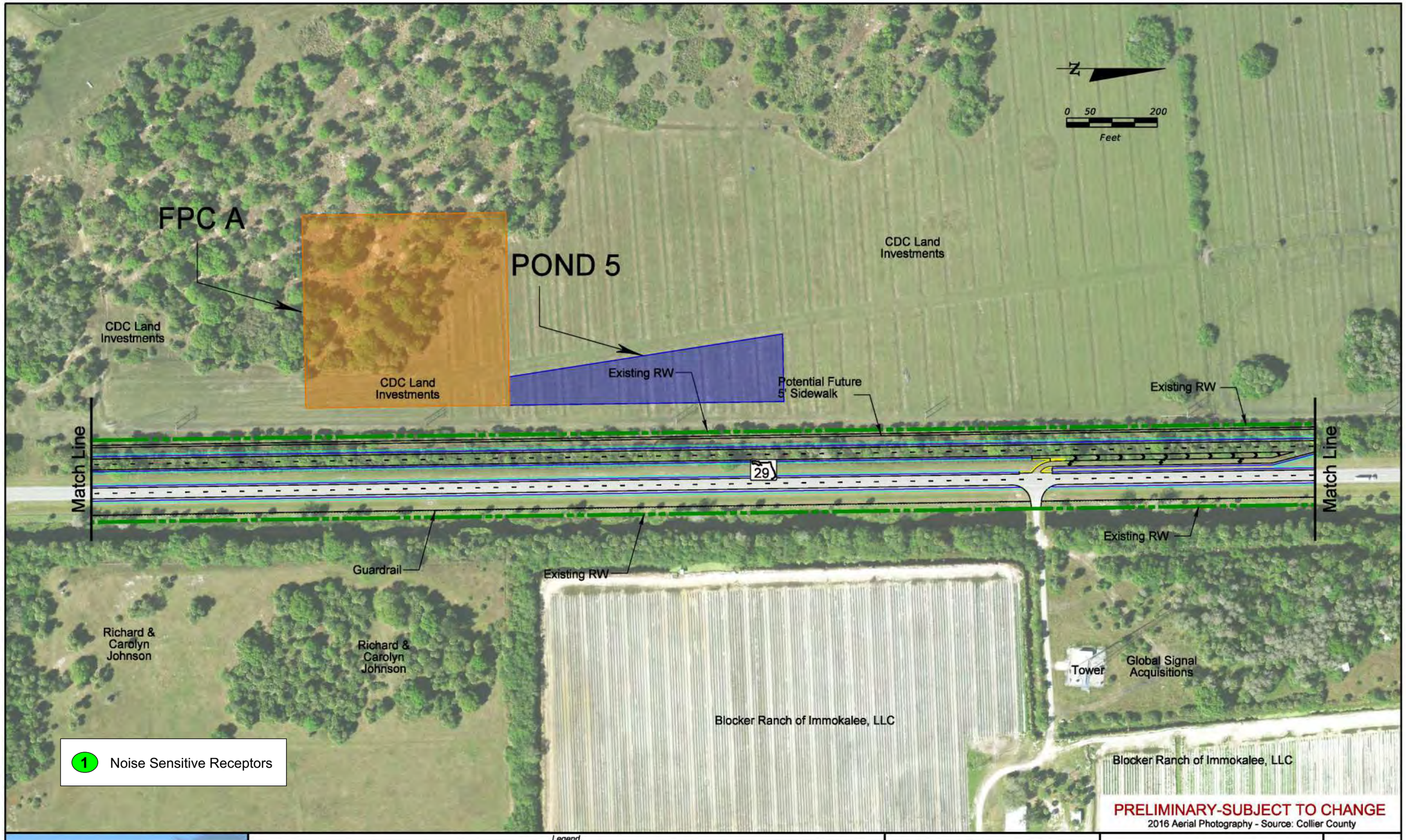
Central Alternative 1R

Sheet No. 2



PRELIMINARY-SUBJECT TO CHANGE

2016 Aerial Photography - Source: Collier County

SR 29 PD&E Study

From Oil Well Road to SR 82

FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

- Existing Right-of-Way
- Parcels
- Proposed Right-of-Way
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- Potential Contamination (Low)
- Potential Contamination (Medium or High)

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Central Alternative 1R

Sheet No. 3

SR 29 PD&E Study
From Oil Well Road to SR 82
FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

- Existing Right-of-Way
- Parcels
- Proposed Right-of-Way
- Water/Canal
- Seminole Land
- Forested Wetland
- Non-Forested Wetland
- Traffic Signal
- Proposed Pavement
- Proposed Median/Border
- Proposed Sidewalks
- Proposed Structure
- Proposed Guardrail
- Potential Business Relocation
- Potential Contamination (Low)
- Potential Contamination (Medium or High)

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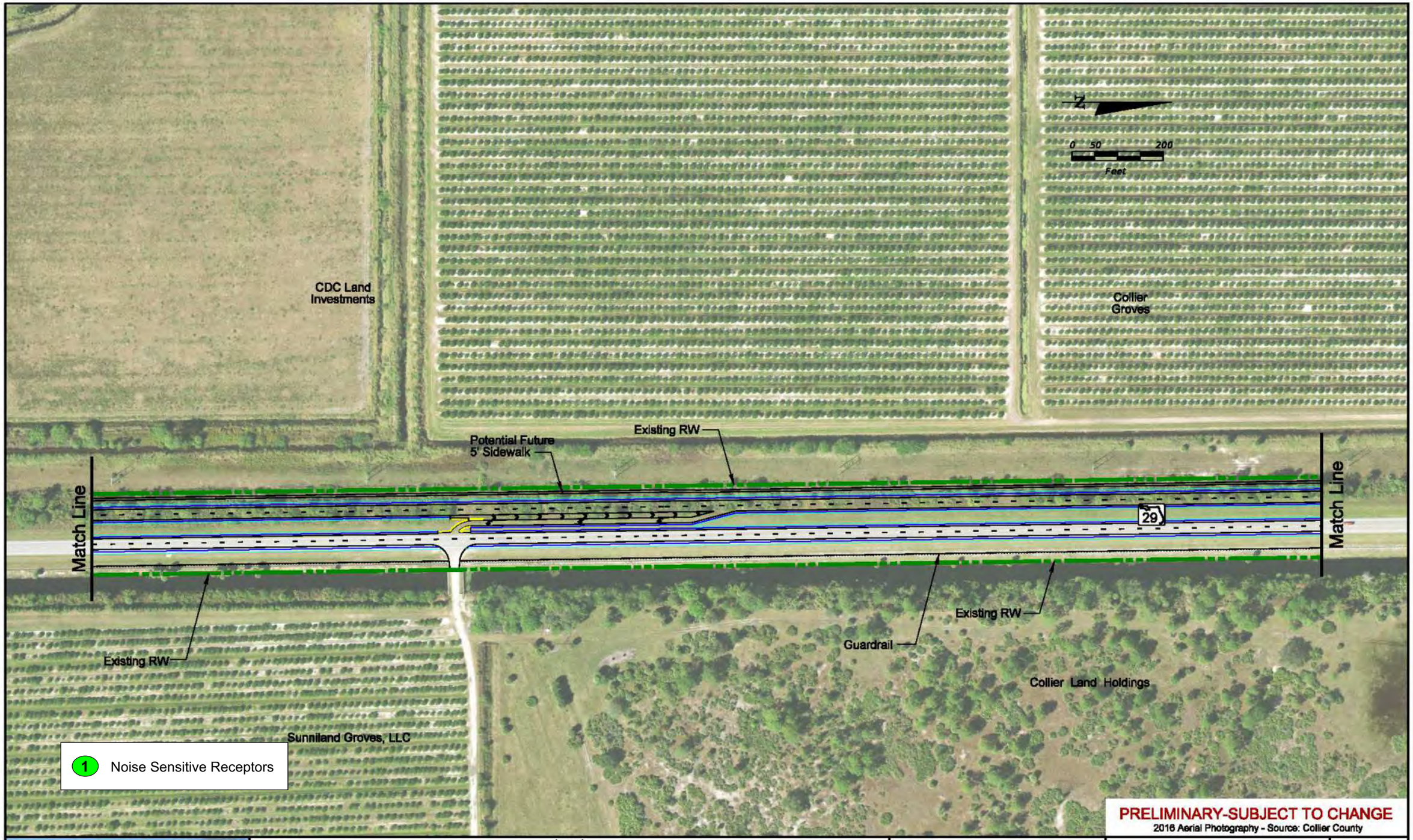
Central Alternative 1R

Sheet No. 4



SR 29 PD&E Study

From Oil Well Road to SR 82

FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

- Existing Right-of-Way
- Parcels
- Proposed Right-of-Way
- Water/Canal
- Seminole Land
- Forested Wetland
- Non-Forested Wetland
- Traffic Signal
- Proposed Pavement
- Proposed Median/Border
- Proposed Sidewalks
- Proposed Structure
- Proposed Guardrail
- Potential Business Relocation
- Potential Contamination (Low)
- Potential Contamination (Medium or High)

H. W. Lochner, Inc.
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Tampa, Florida 33607
FBPR Certificate of Auth. #894

Central Alternative 1R

Sheet No. 5

SR 29 PD&E Study

From Oil Well Road to SR 82

FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

- Existing Right-of-Way
- Parcels
- Proposed Right-of-Way
- Water/Canal
- Seminole Land
- Forested Wetland
- Non-Forested Wetland
- Traffic Signal
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Central Alternative 1R

Sheet No. 6

SR 29 PD&E Study
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FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

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FBPR Certificate of Auth. #894

Central Alternative 1R

Sheet No. 7

PRELIMINARY-SUBJECT TO CHANGE

2016 Aerial Photography - Source: Collier County

SR 29 PD&E Study

From Oil Well Road to SR 82

FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

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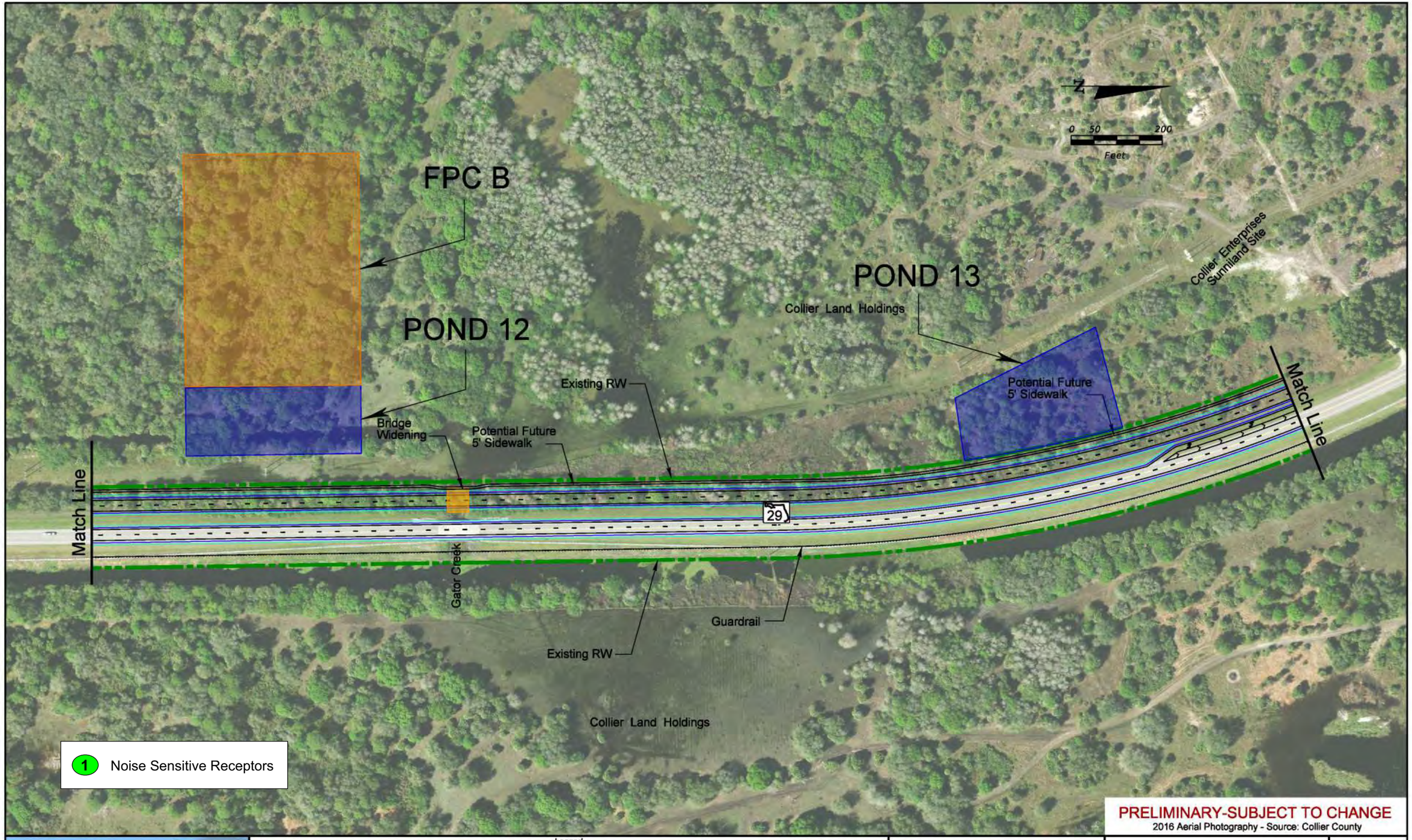
Central Alternative 1R

Sheet No. 8



SR 29 PD&E Study
From Oil Well Road to SR 82
FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

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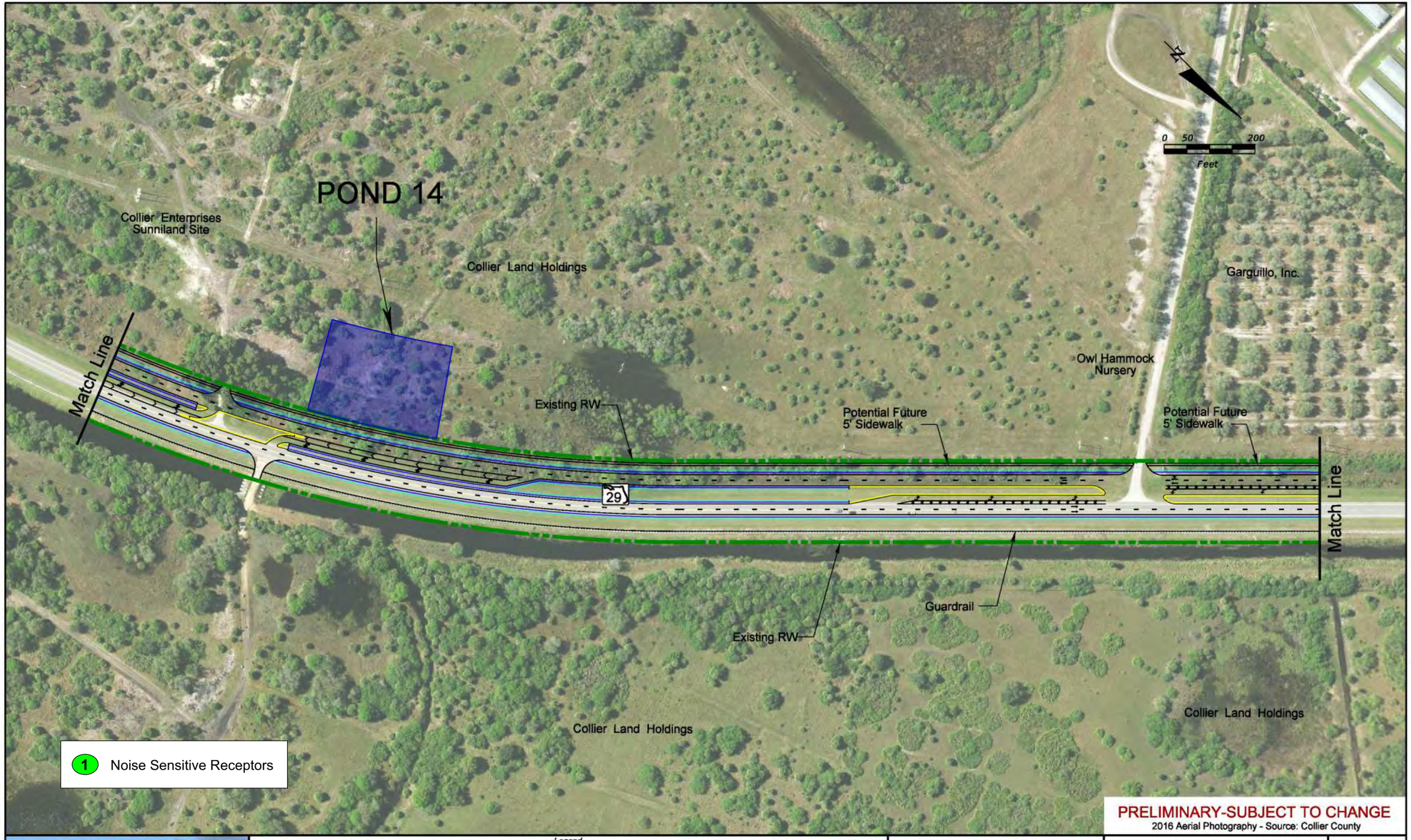
Central Alternative 1R

Sheet No. 9



SR 29 PD&E Study

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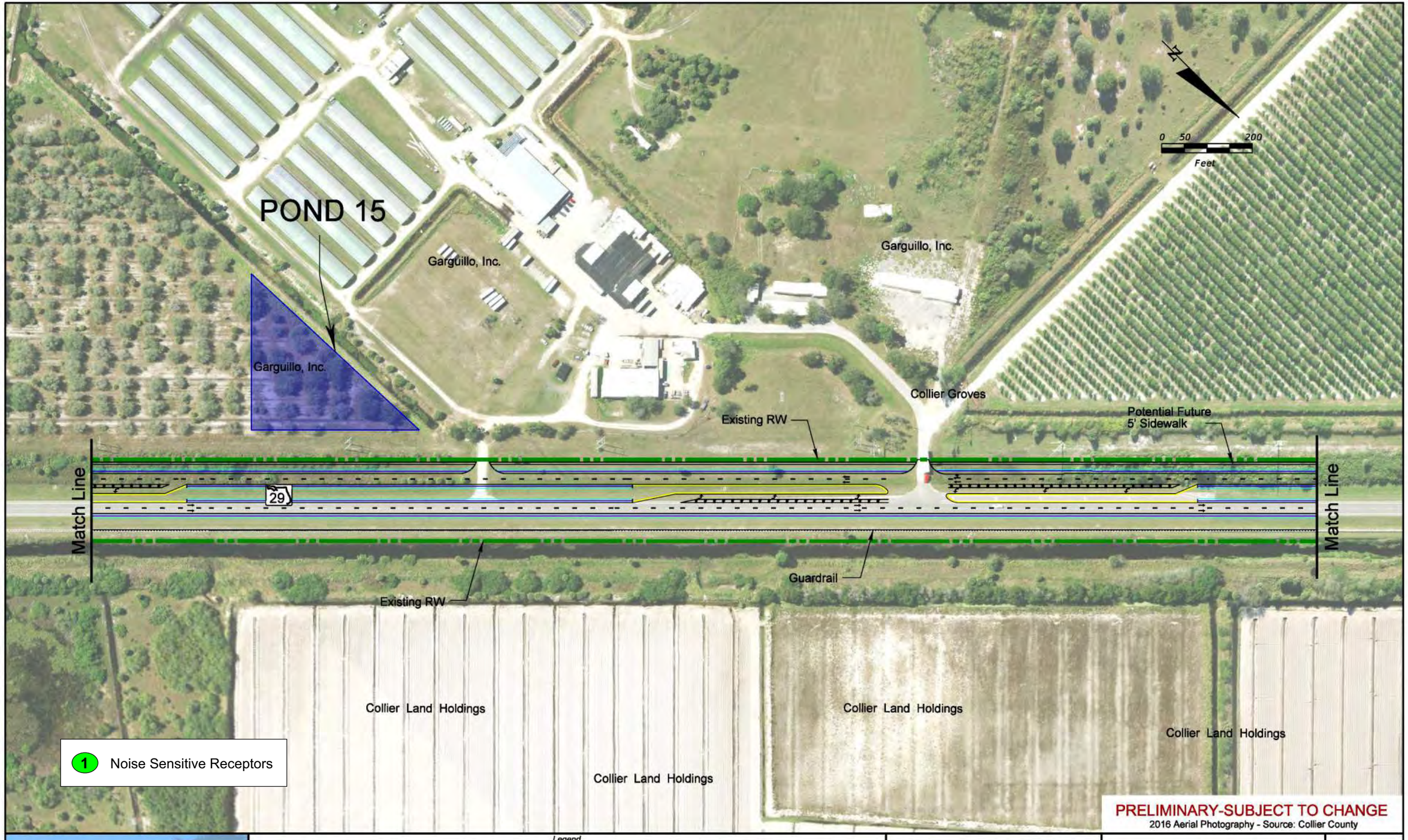
Sheet No. 10



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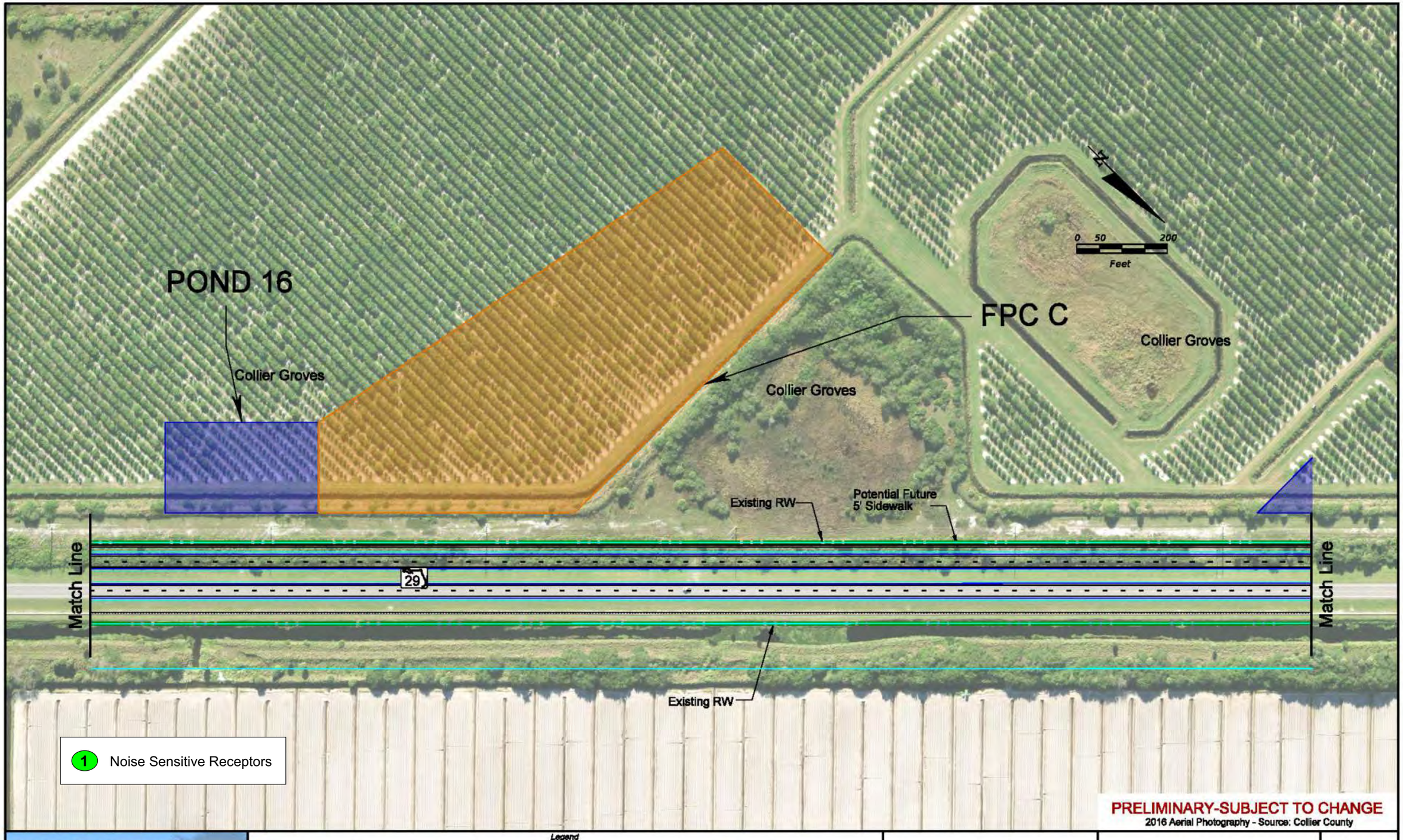
Sheet No. 11



SR 29 PD&E Study
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FBPR Certificate of Auth. #894

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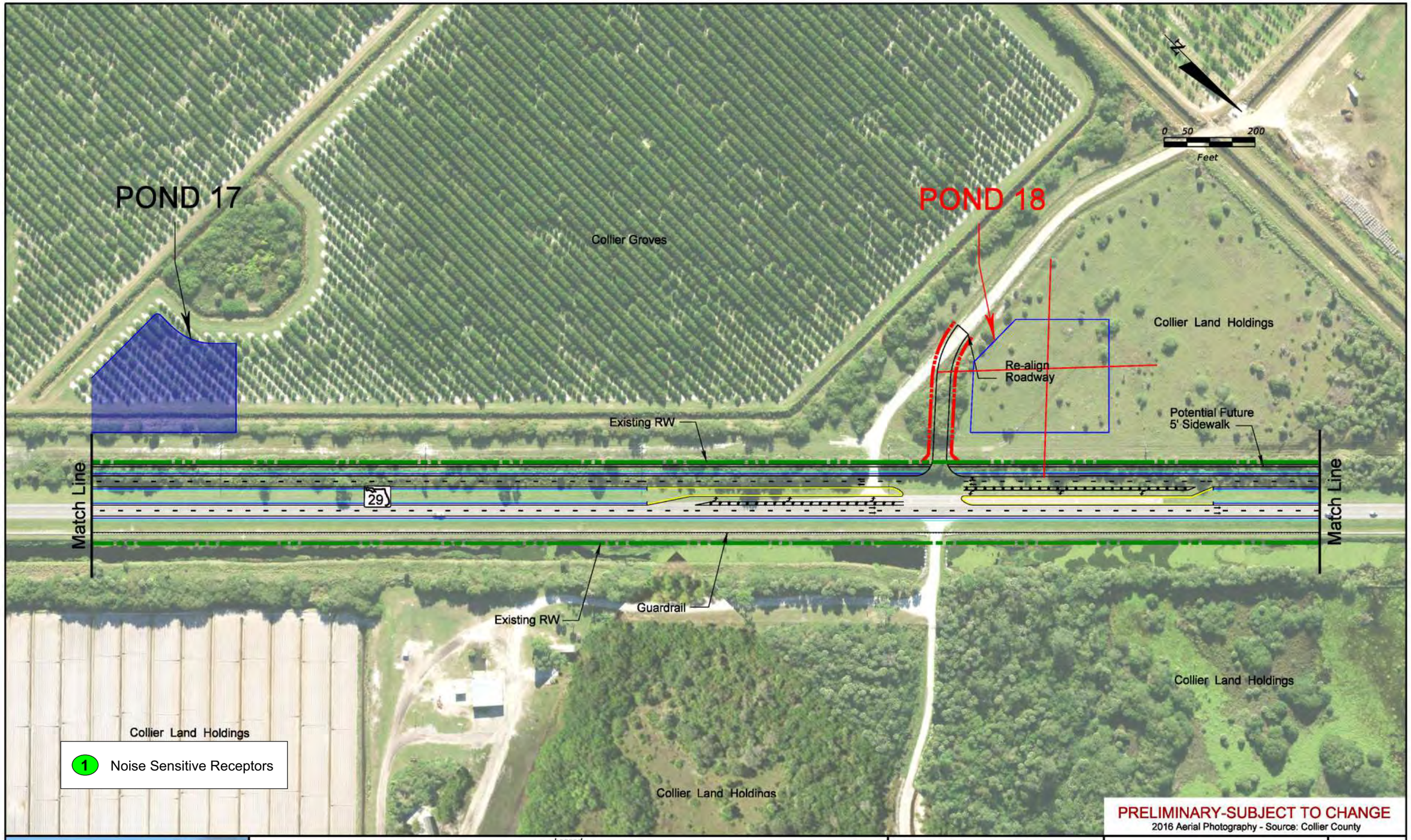
Sheet No. 12



PRELIMINARY-SUBJECT TO CHANGE
2016 Aerial Photography - Source: Collier County

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FBPR Certificate of Auth. #894

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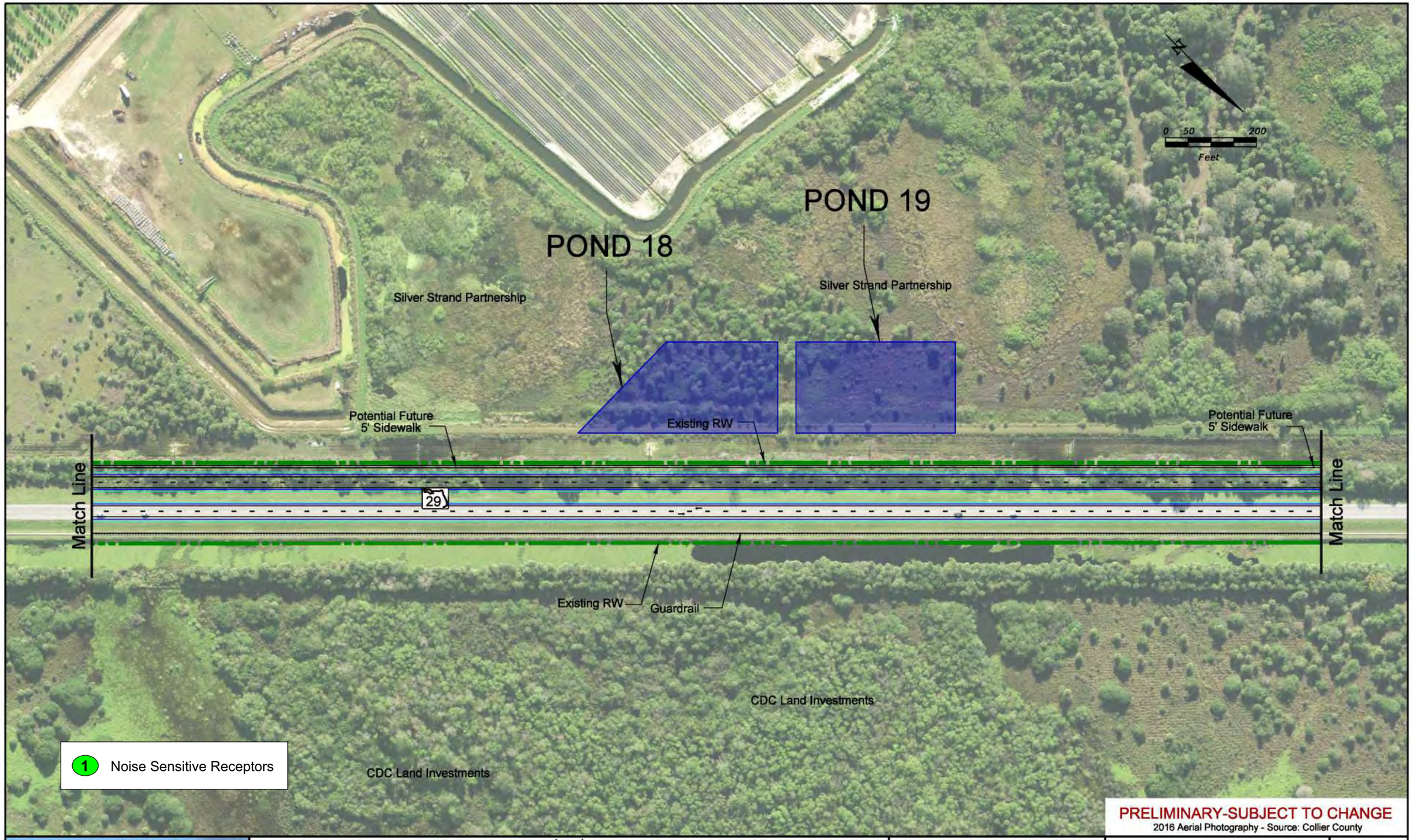
Sheet No. 13



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Tampa, Florida 33607
FBPR Certificate of Auth. #894

Central Alternative 1R

Sheet No. 14

SR 29 PD&E Study

From Oil Well Road to SR 82

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Central Alternative 1R

Sheet No. 15

POND 21

Carroll McSwain

Silver Strand Partnership

Silver Strand Partnership

& Anita Crapse

Joy Mullins

Potential Future 5' Sidewalk

Existing RW

Match Line

Match Line

29

Guardrail

Existing RW

Future Entrance to Kaicasa (Habitat for Humanity)

Habitat for Humanity

Habitat for Humanity

CDC Land Investments

1 Noise Sensitive Receptors

0 50 200

Feet

PRELIMINARY-SUBJECT TO CHANGE

2016 Aerial Photography - Source: Collier County

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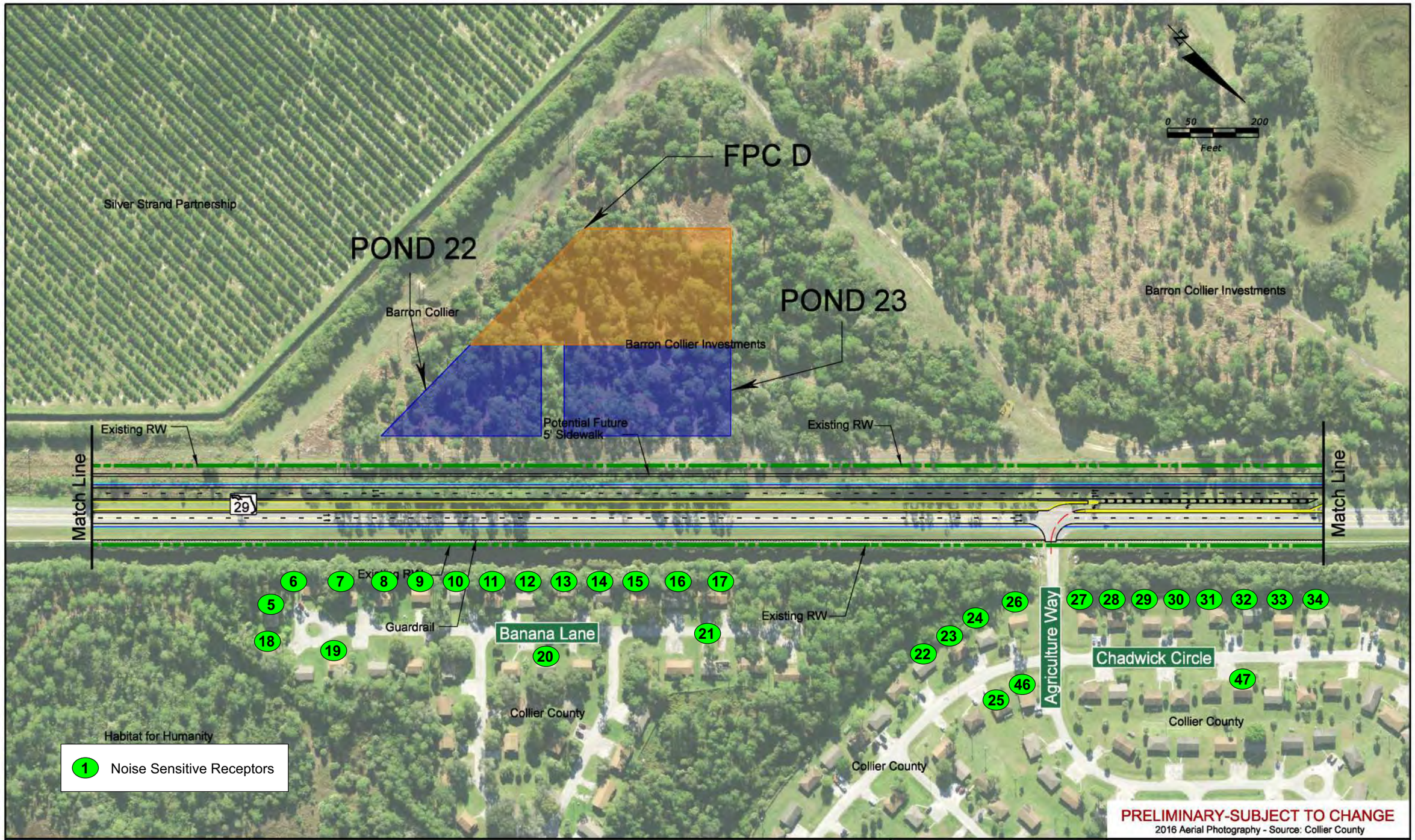

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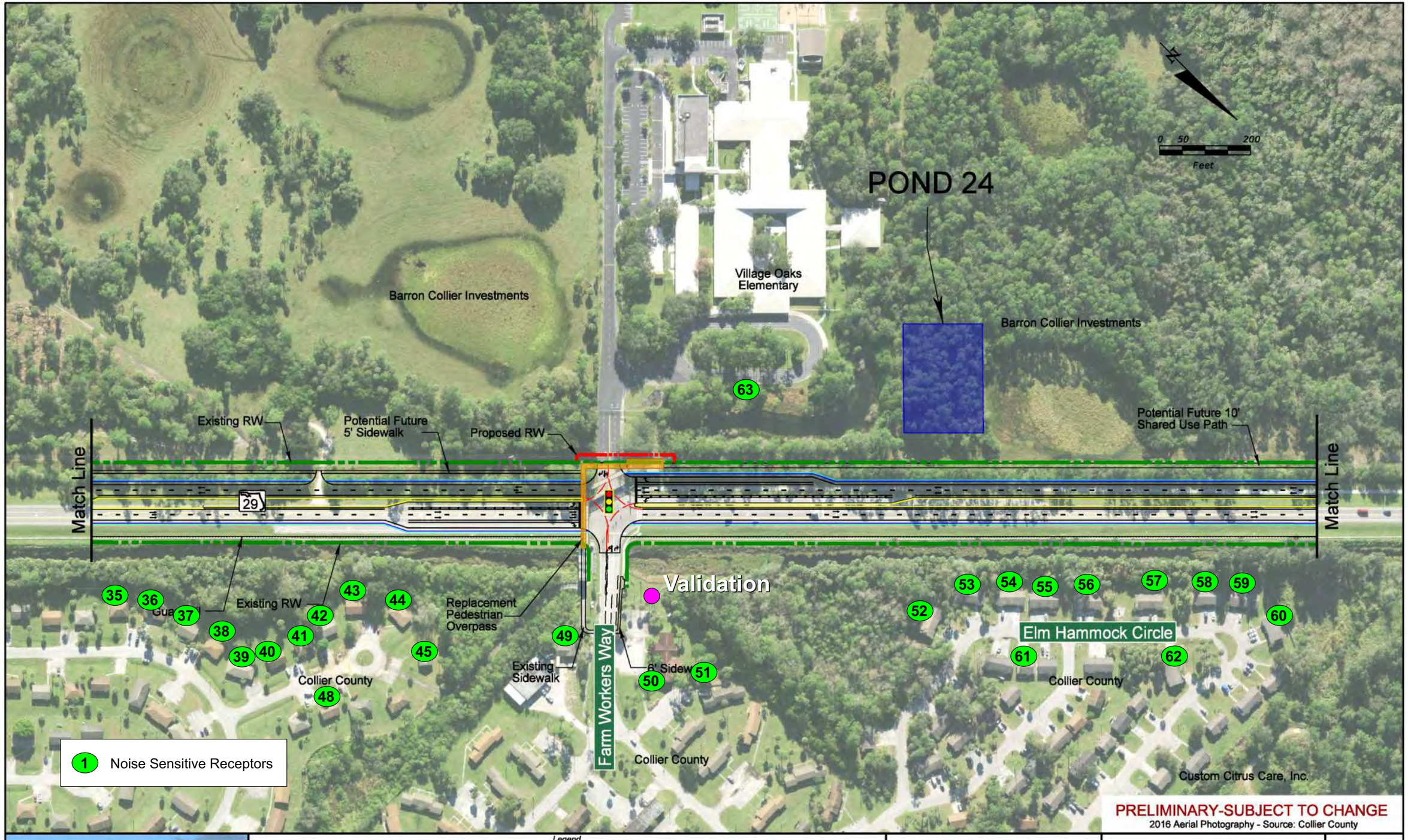

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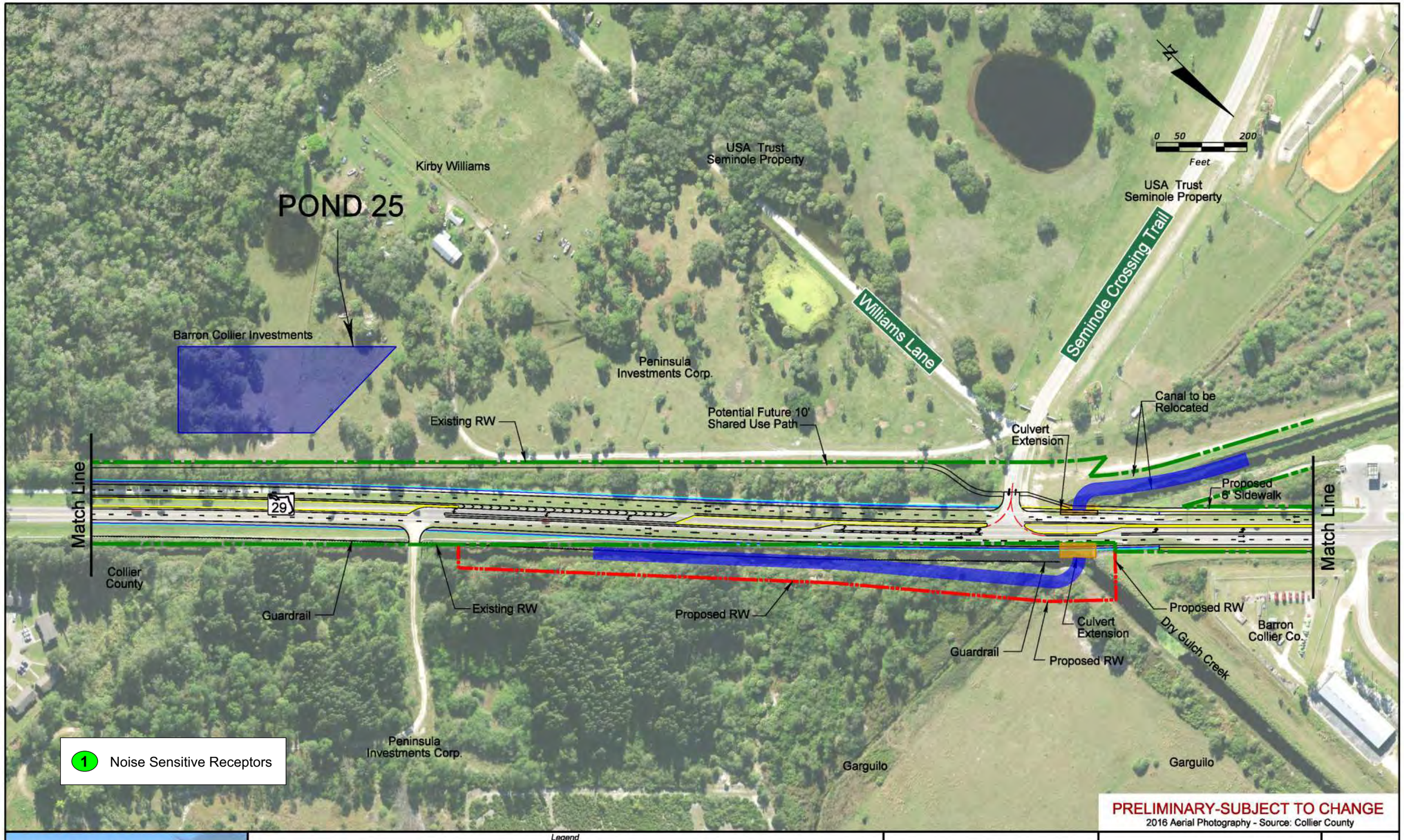

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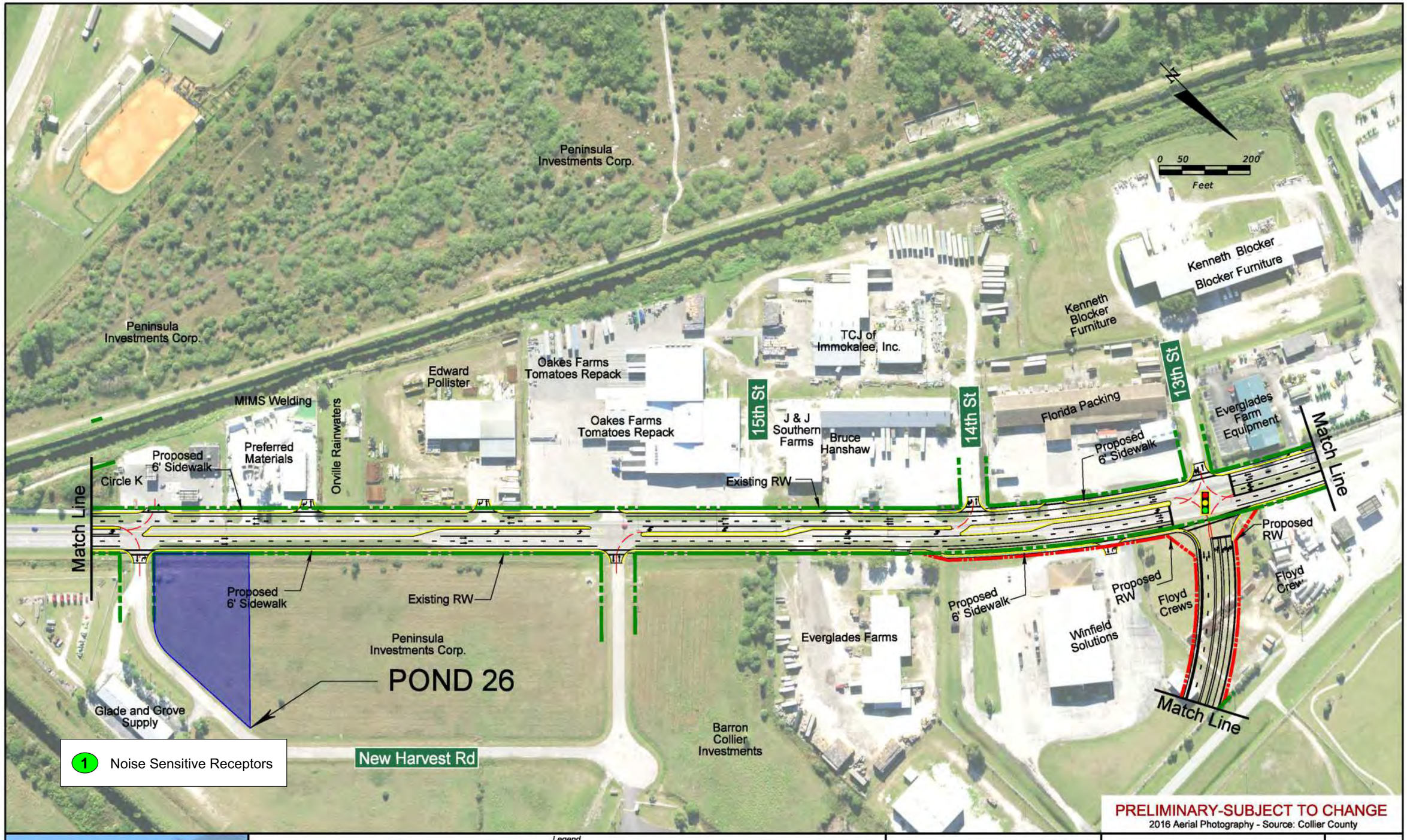

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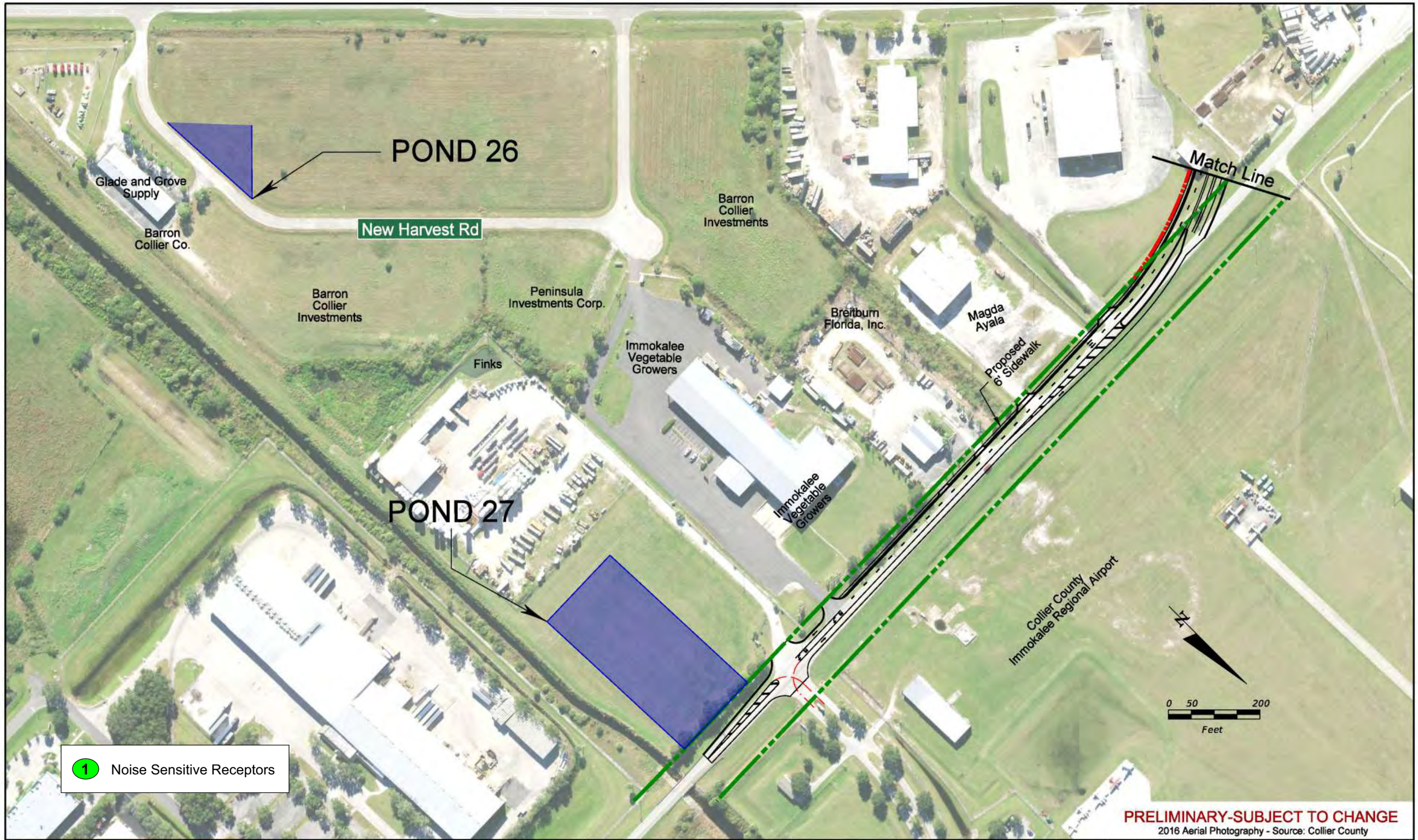

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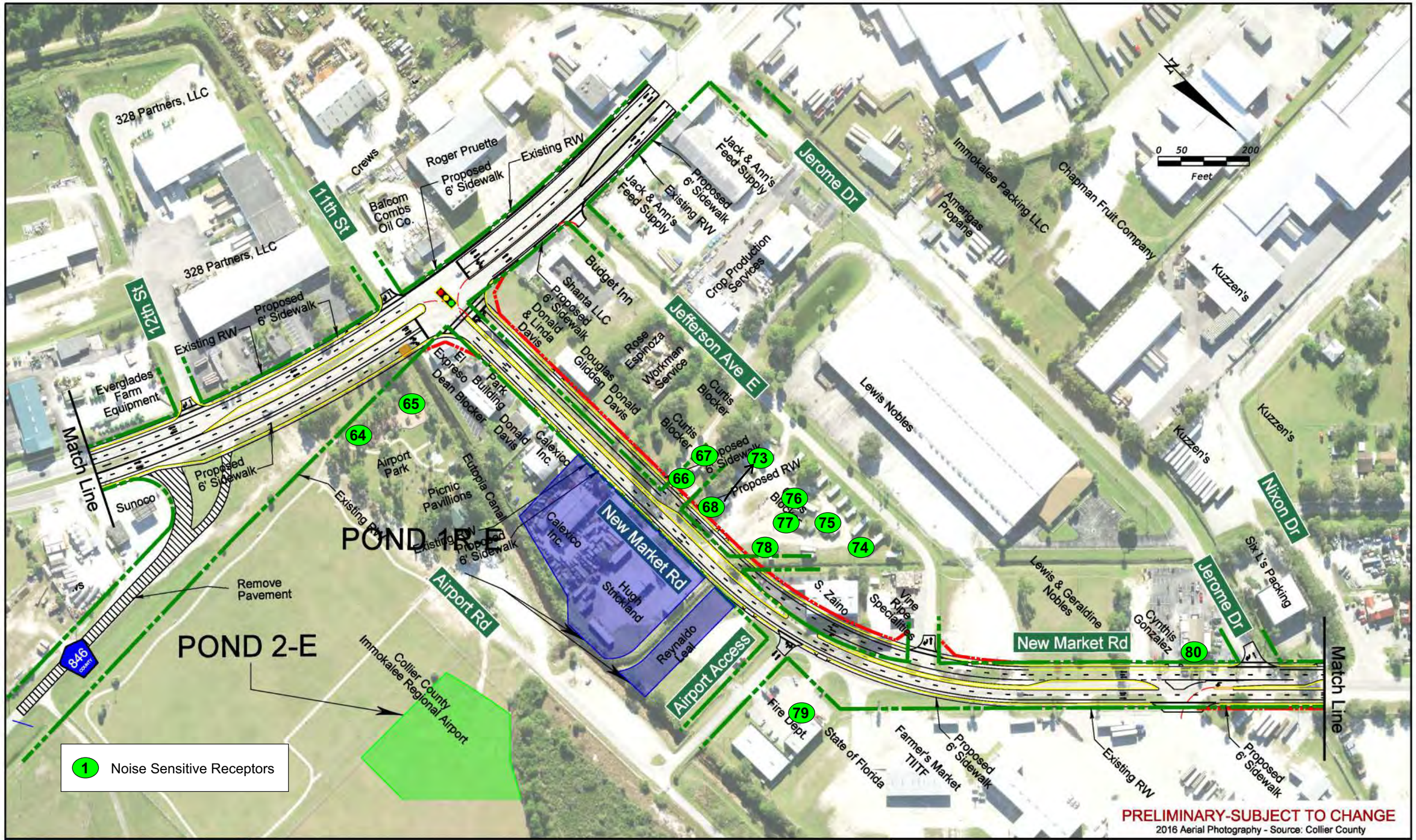

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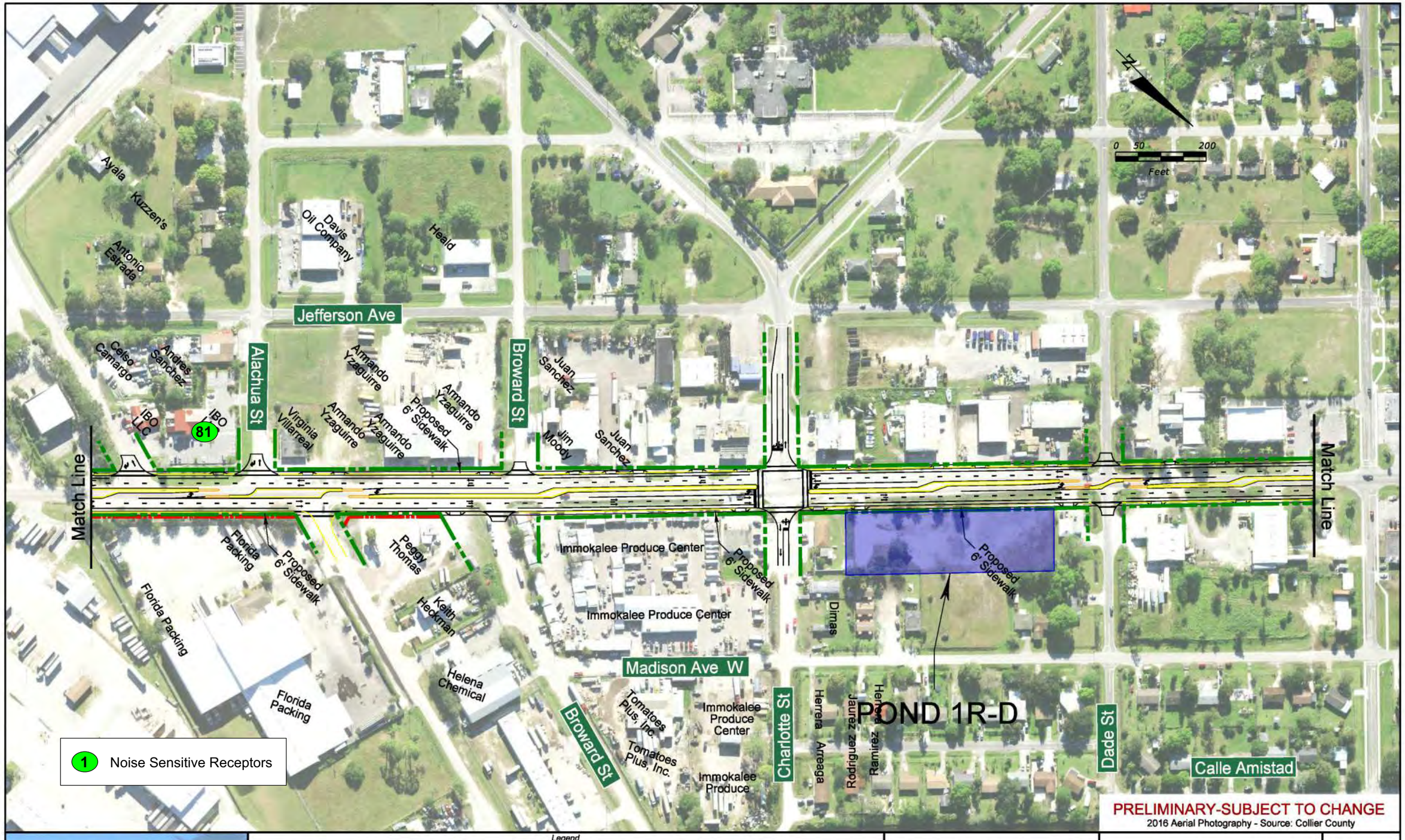

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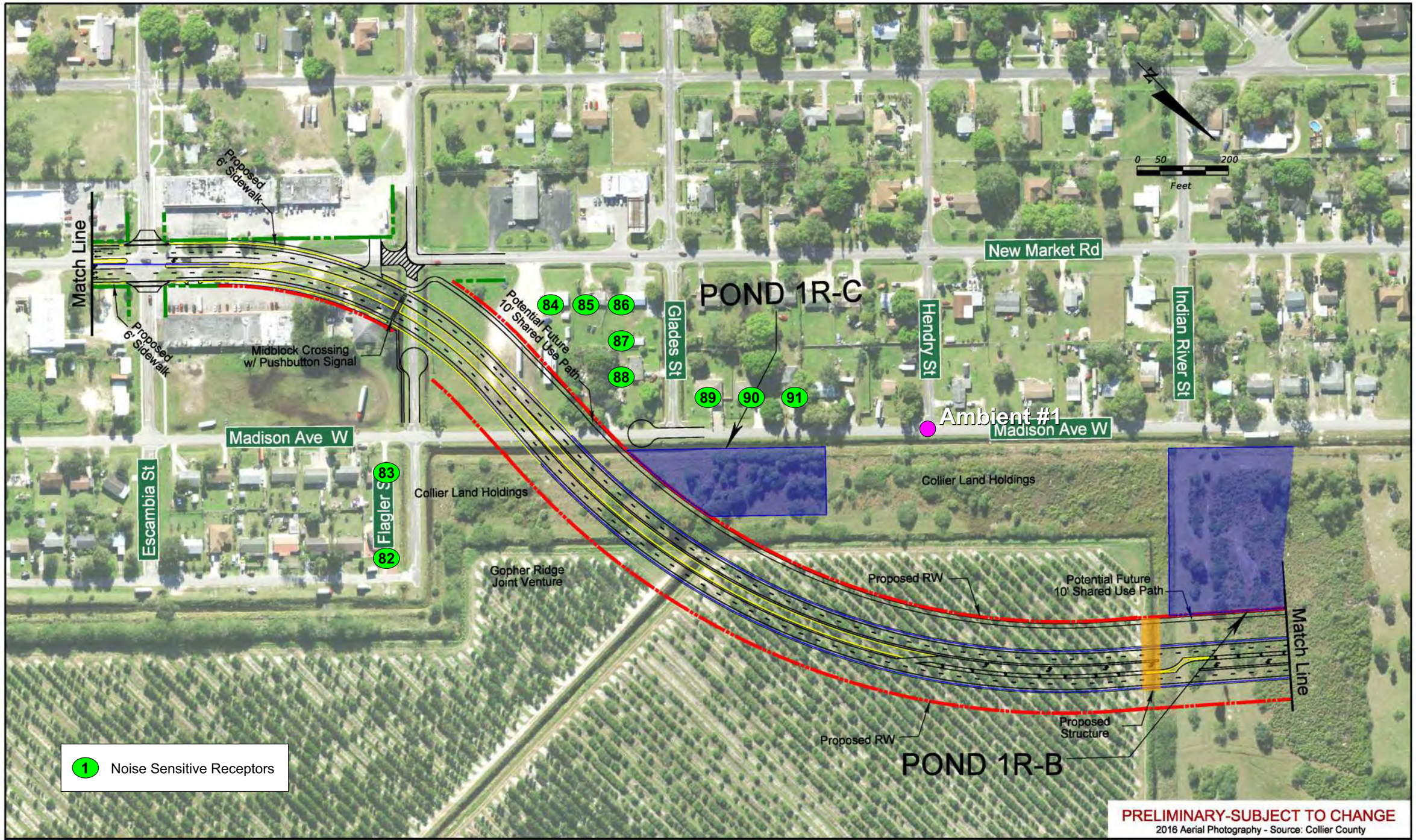

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FBPR Certificate of Auth. #894

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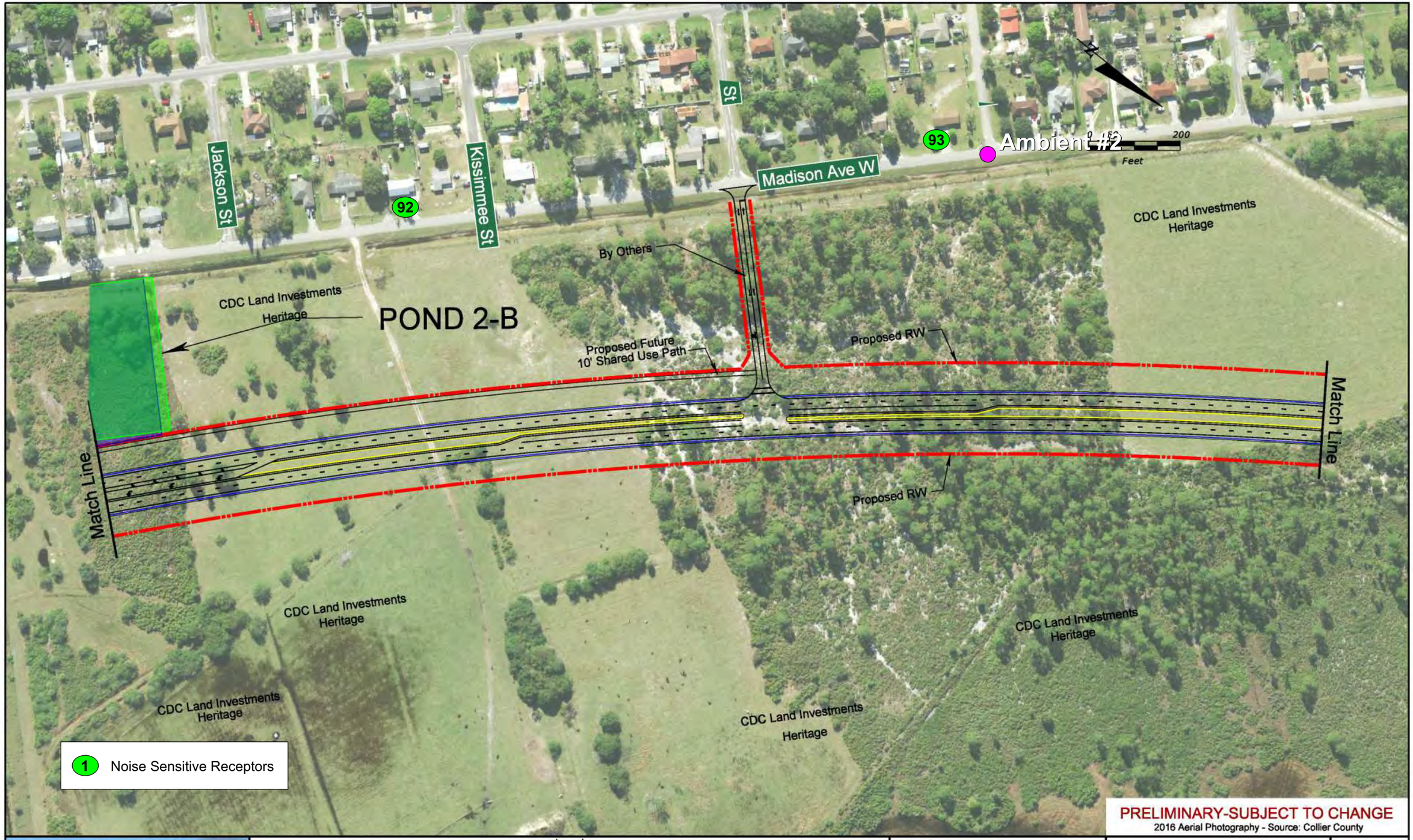

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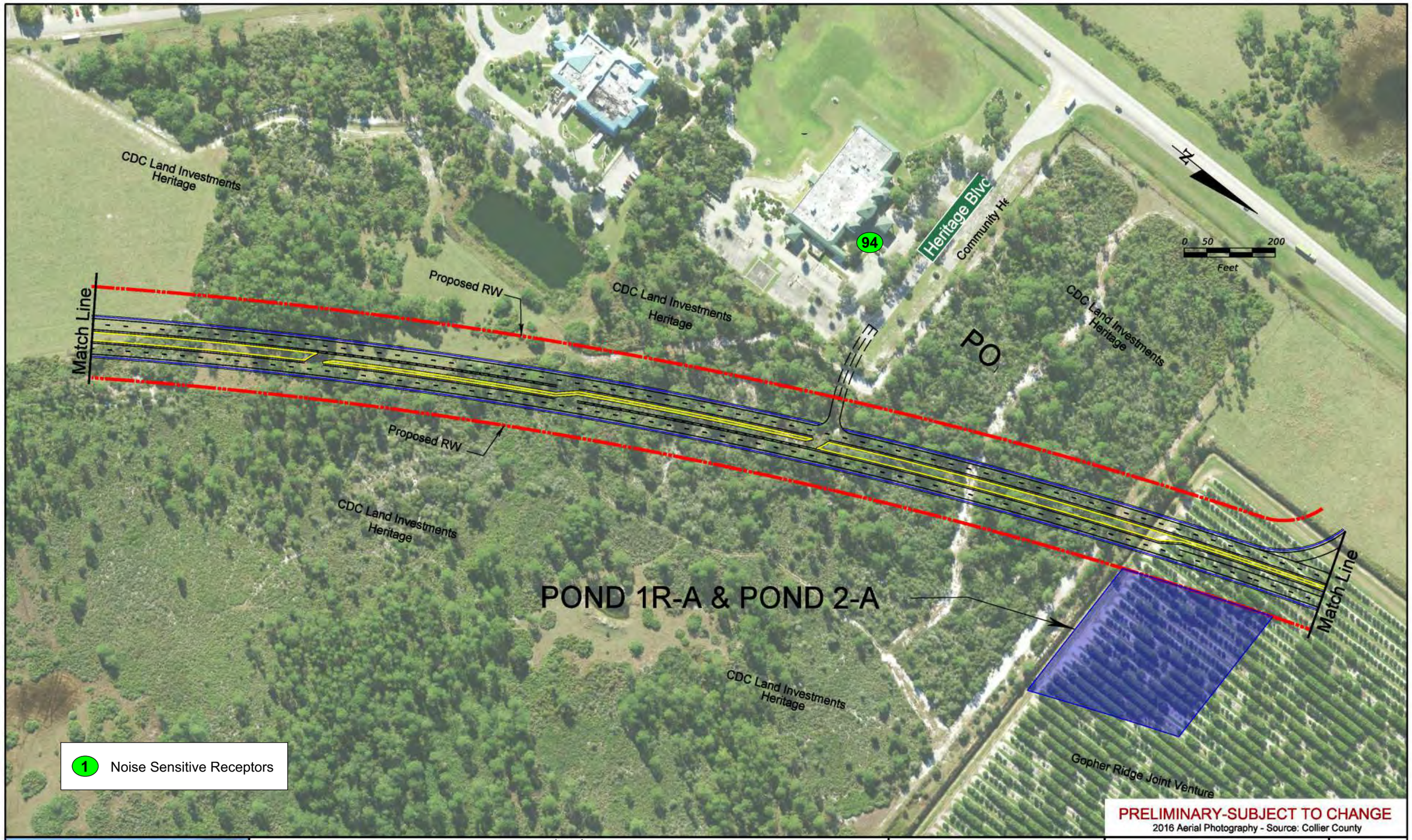

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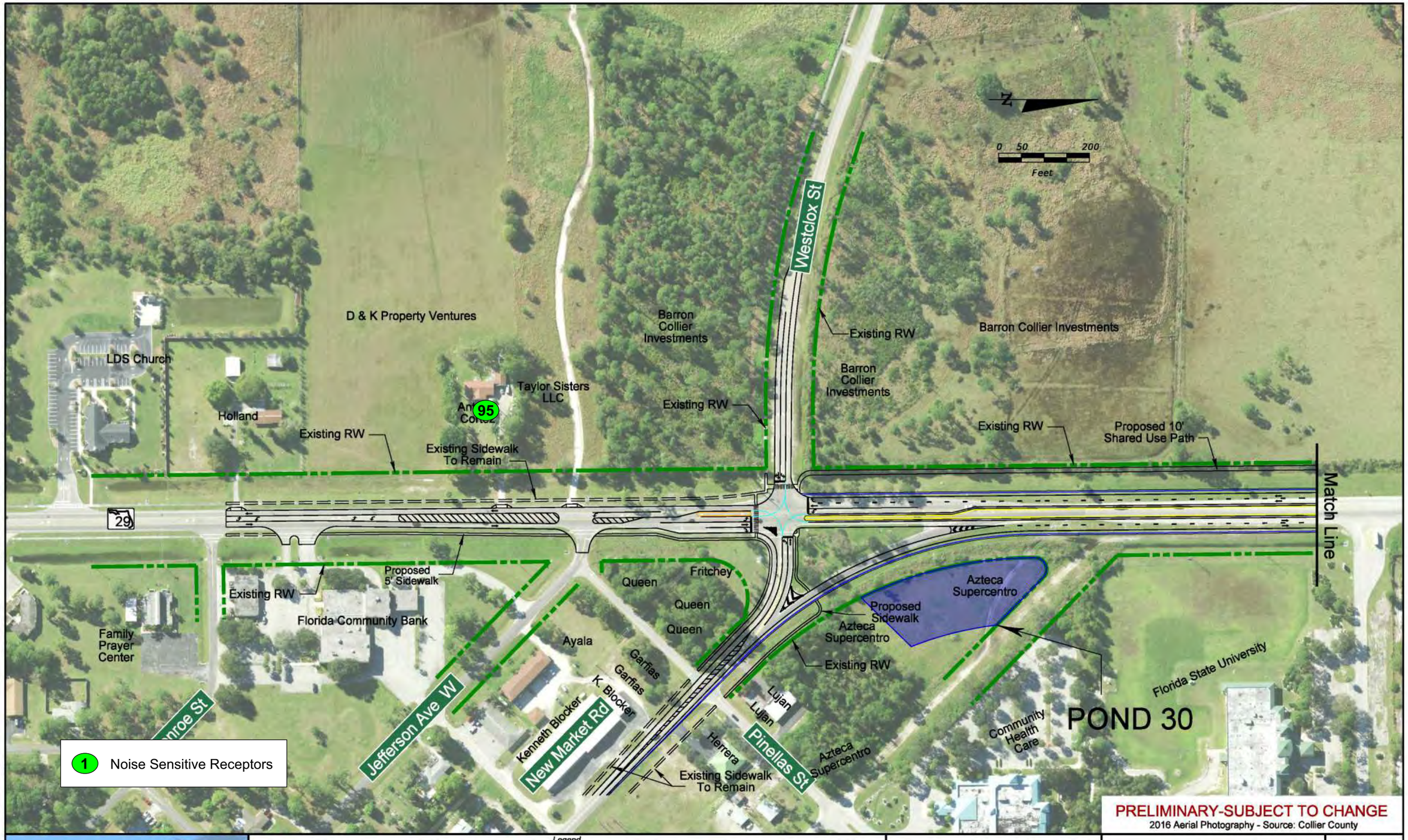

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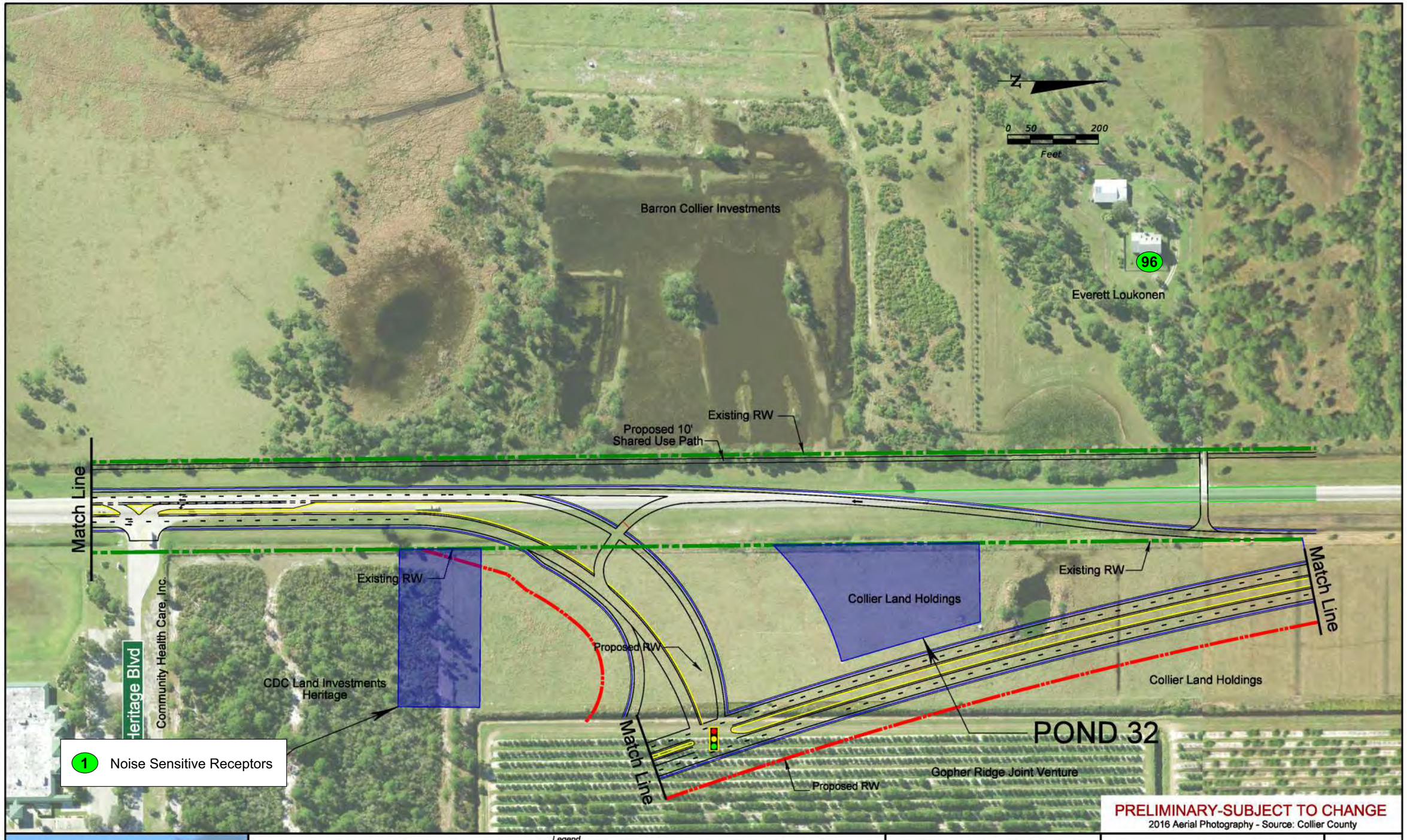

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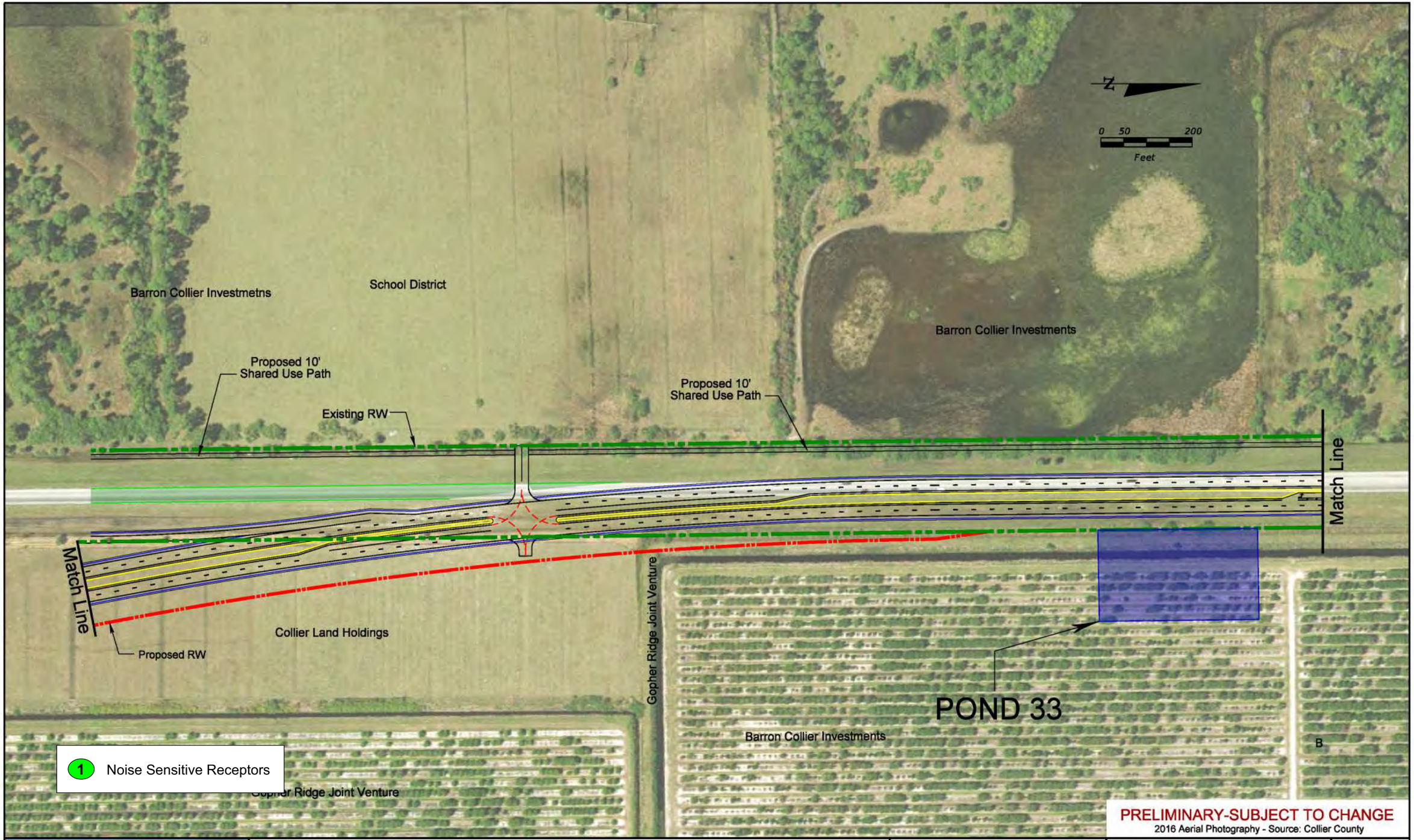

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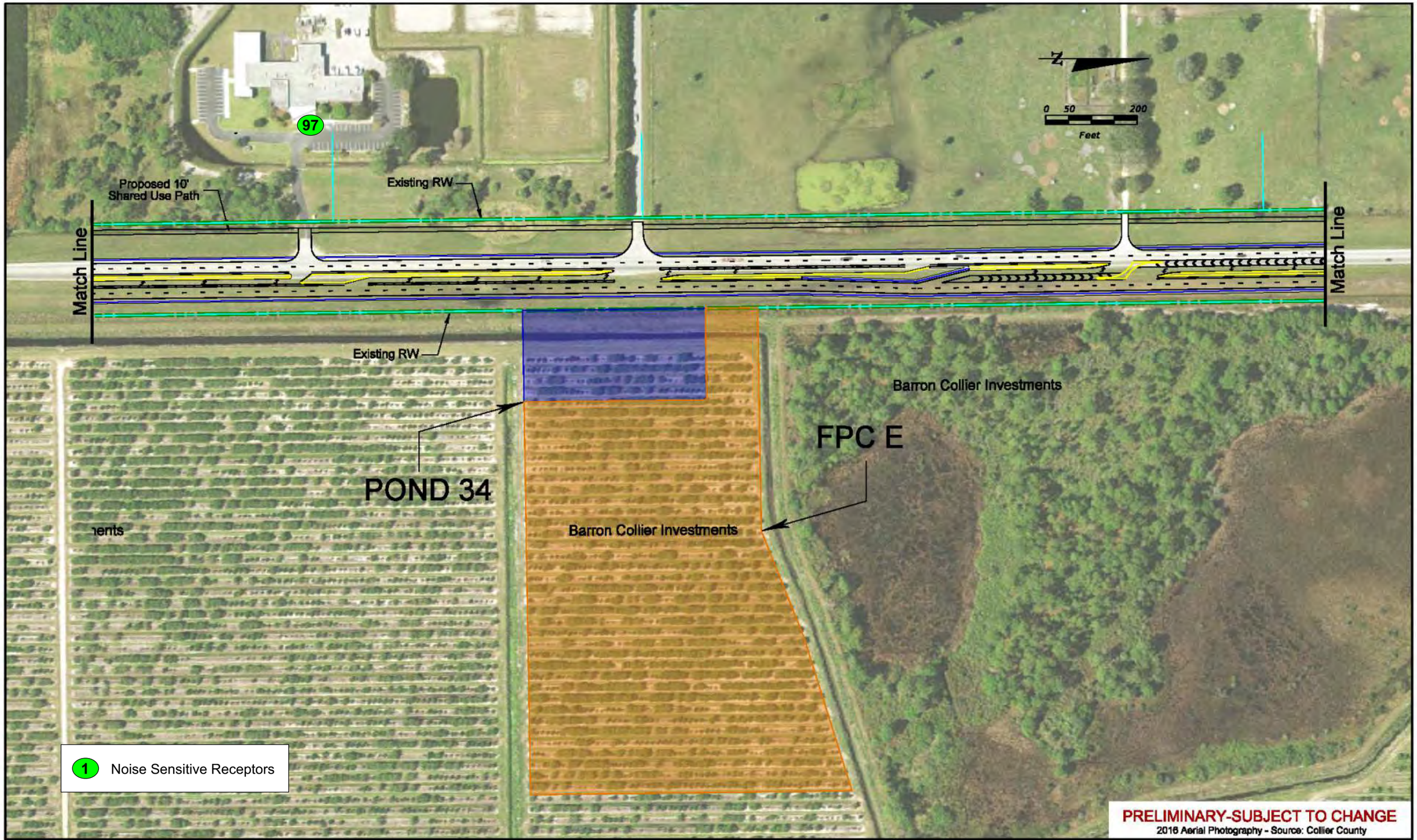
Sheet No. 29



SR 29 PD&E Study

From Oil Well Road to SR 82

FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

- Existing Right-of-Way
- Parcels
- Proposed Right-of-Way
- Water/Canal
- Seminole Land
- Forested Wetland
- Non-Forested Wetland
- Traffic Signal
- Proposed Pavement
- Proposed Median/Border
- Proposed Sidewalks
- Proposed Structure
- Proposed Guardrail
- Potential Business Relocation
- Potential Contamination (Low)
- Potential Contamination (Medium or High)

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Central Alternative 1R

Sheet No. 30

PRELIMINARY-SUBJECT TO CHANGE
2016 Aerial Photography - Source: Collier County

SR 29 PD&E Study
From Oil Well Road to SR 82
FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

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FBPR Certificate of Auth. #894

Central Alternative 1R

Sheet No. 31

SR 29 PD&E Study
From Oil Well Road to SR 82
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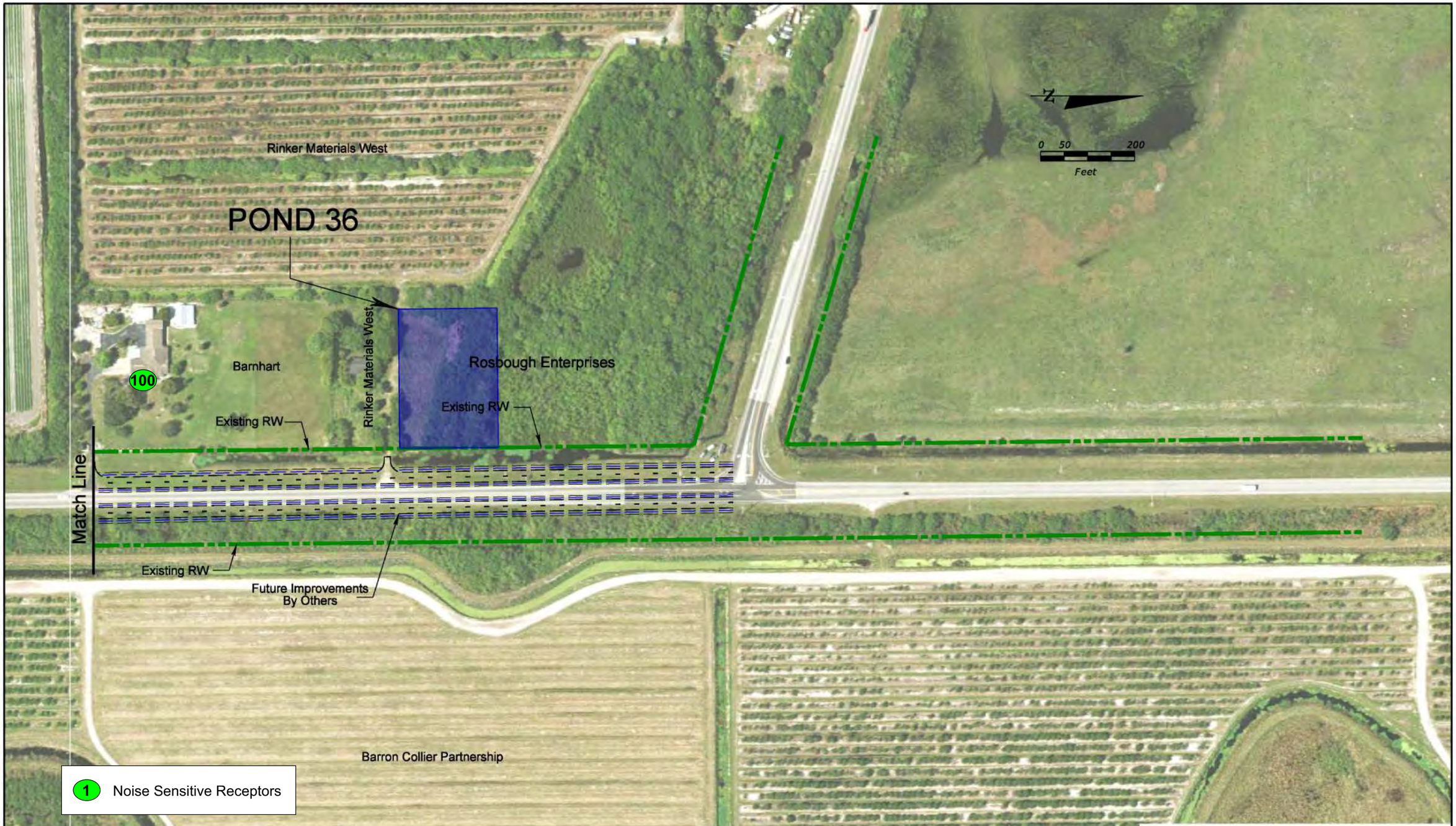
Central Alternative 1R

Sheet No. 32



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FBPR Certificate of Auth. #894

Central Alternative 1R

Sheet No. 33

SR 29 PD&E Study

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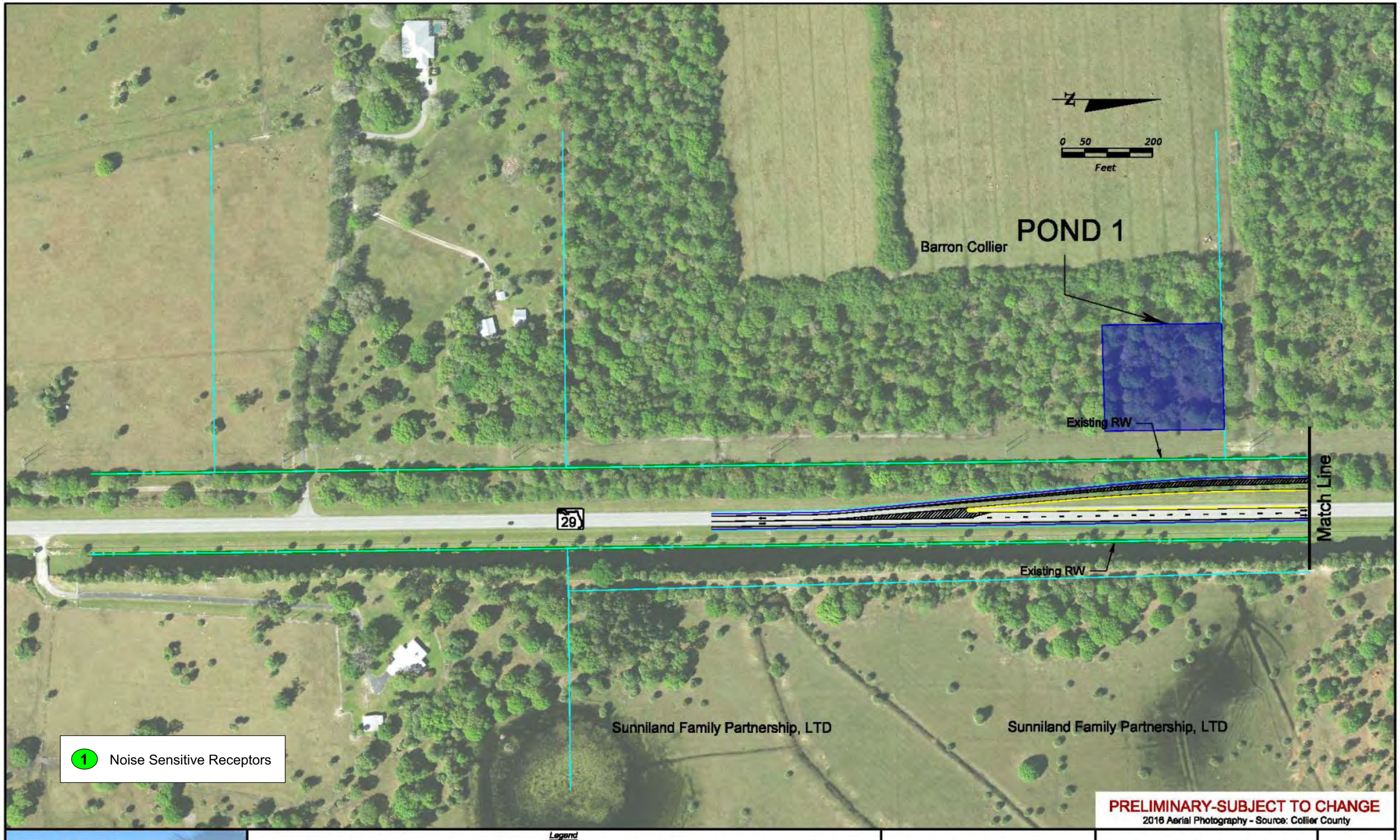
Central Alternative 1R

Sheet No. 34



SR 29 PD&E Study

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Central Alternative C2

Sheet No. 1

POND 3

Barron Collier

POND 4

CDC Land Investments

Oil Well Rd

BEGIN SR 29 PD&E STUDY

Potential Future
5' Sidewalk

Existing RW

Match Line

Match Line

29

Sunniland Family Partnership, LTD

Culvert
Extension

Culvert
Extension

Sunniland
Country
Store

Existing RW

Robert
Thomas

Sunniland Family Partnership, LTD

Oil Well Rd

0 50 200
Feet

1 Noise Sensitive Receptors

PRELIMINARY-SUBJECT TO CHANGE
2016 Aerial Photography - Source: Collier County

SR 29 PD&E Study

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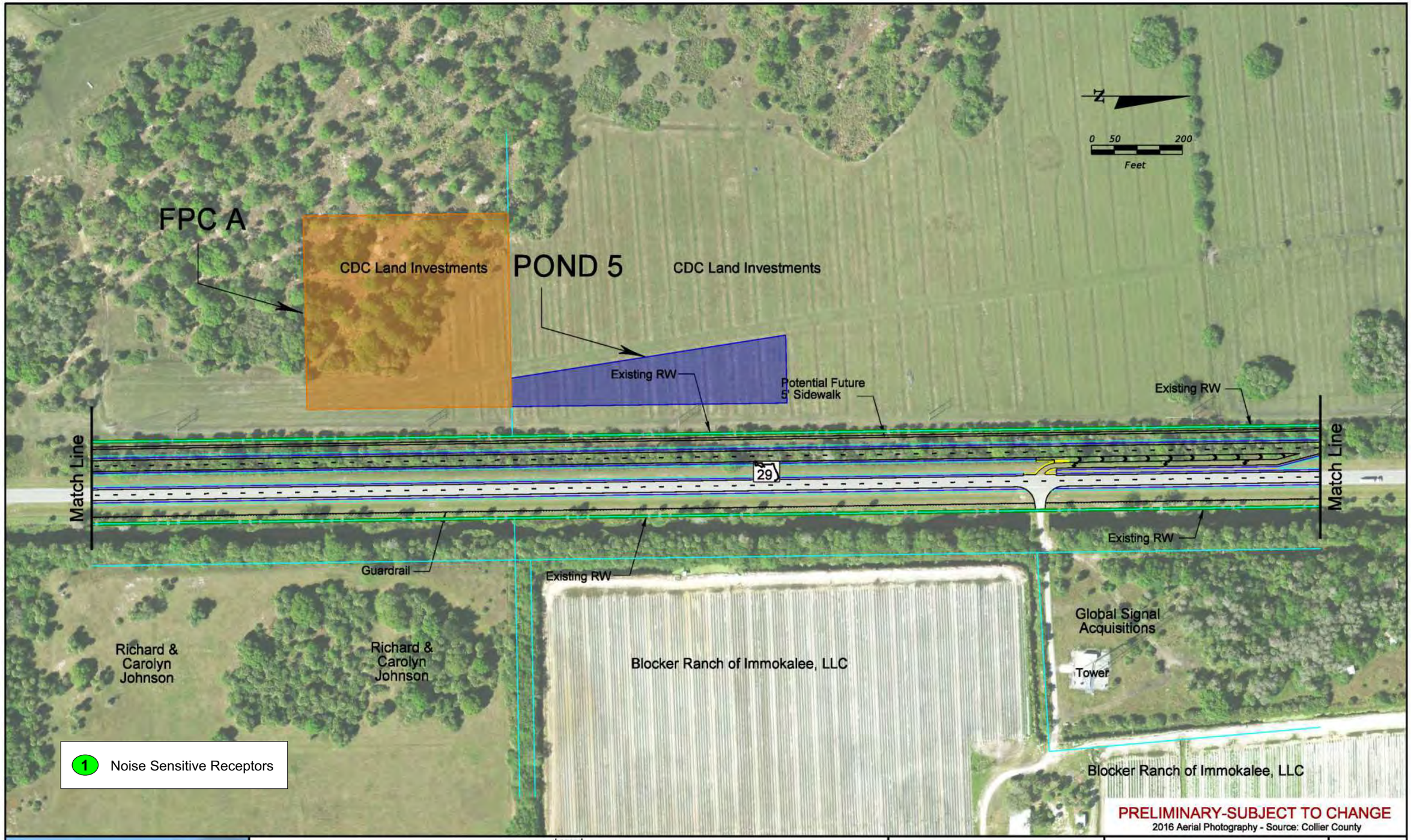
Central Alternative C2

Sheet No. 2



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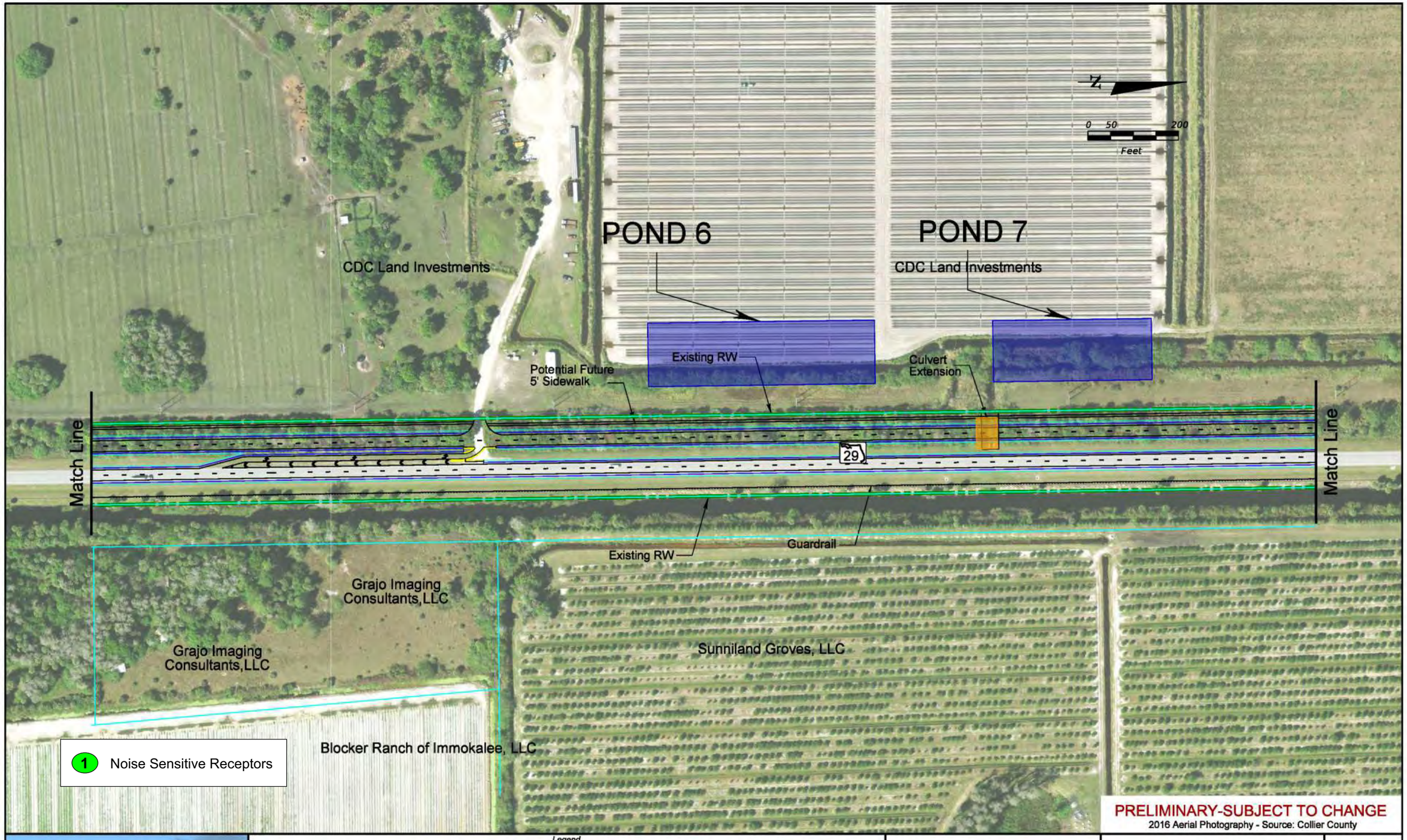

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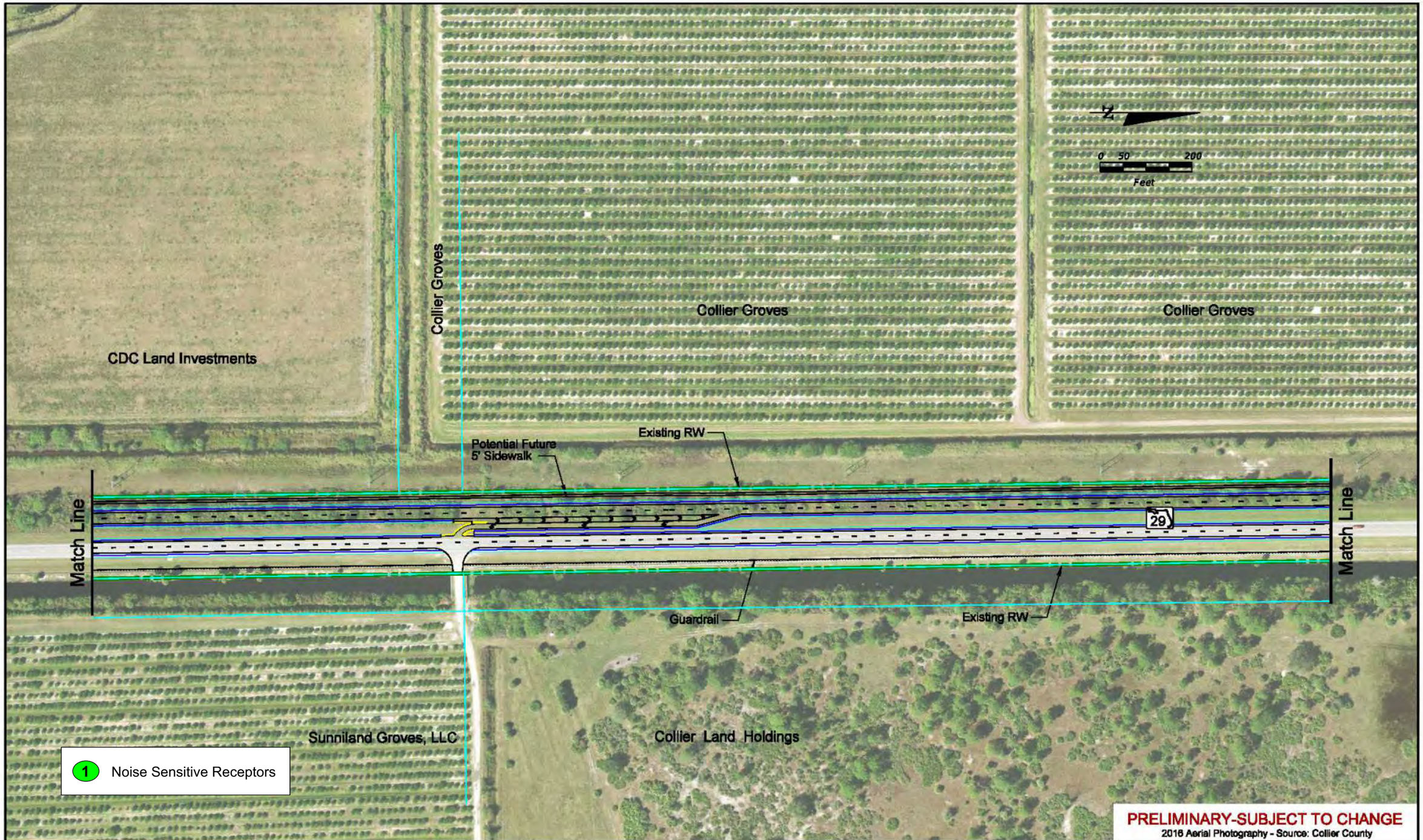
Sheet No. 4



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Sheet No. 5

SR 29 PD&E Study

From Oil Well Road to SR 82

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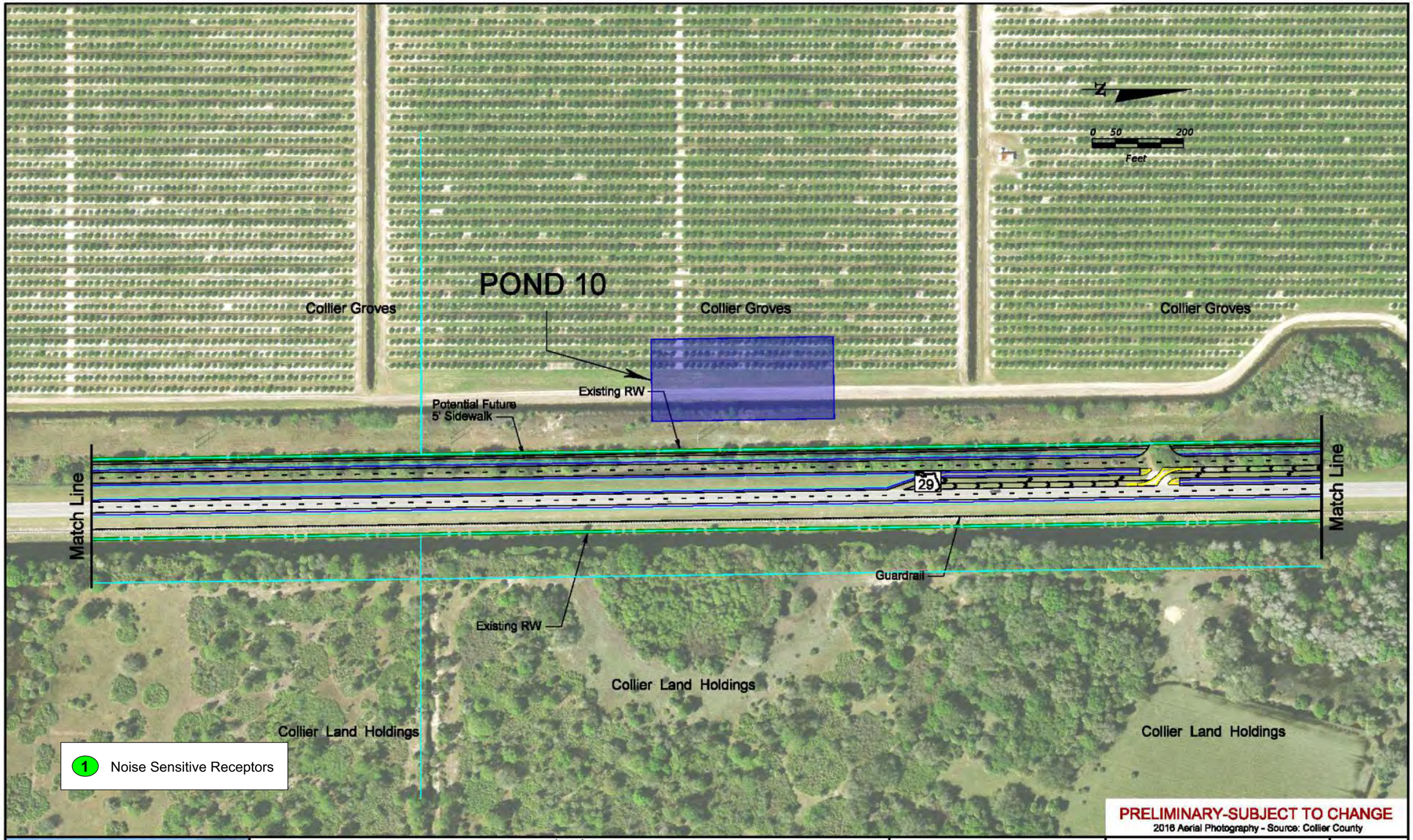
Sheet No. 6



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Central Alternative C2

Sheet No. 7

PRELIMINARY-SUBJECT TO CHANGE

2016 Aerial Photography - Source: Collier County

SR 29 PD&E Study

From Oil Well Road to SR 82

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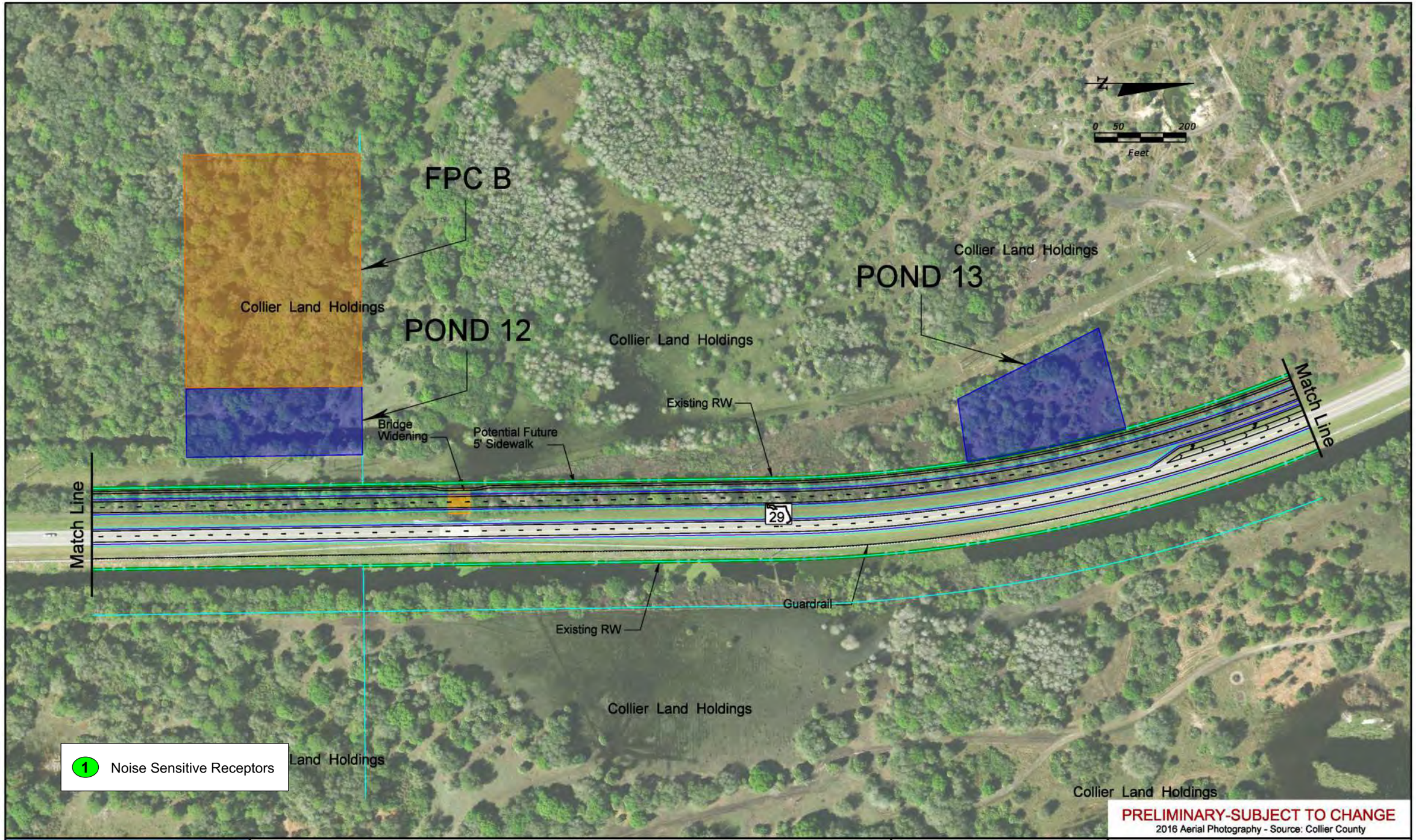
Central Alternative C2

Sheet No. 8



PRELIMINARY-SUBJECT TO CHANGE
2016 Aerial Photography - Source: Collier County

SR 29 PD&E Study
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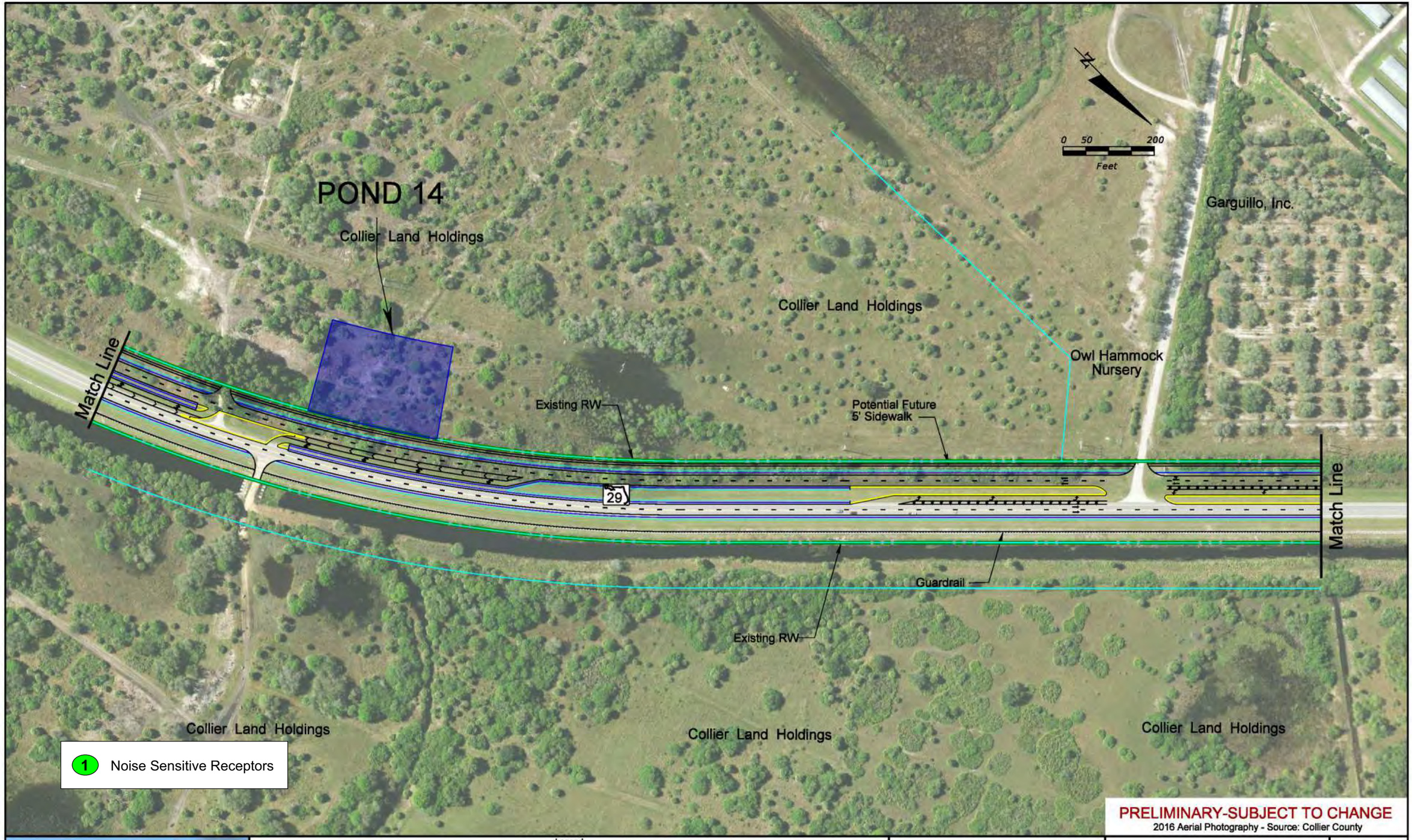
Sheet No. 9



PRELIMINARY-SUBJECT TO CHANGE
2016 Aerial Photography - Source: Collier County

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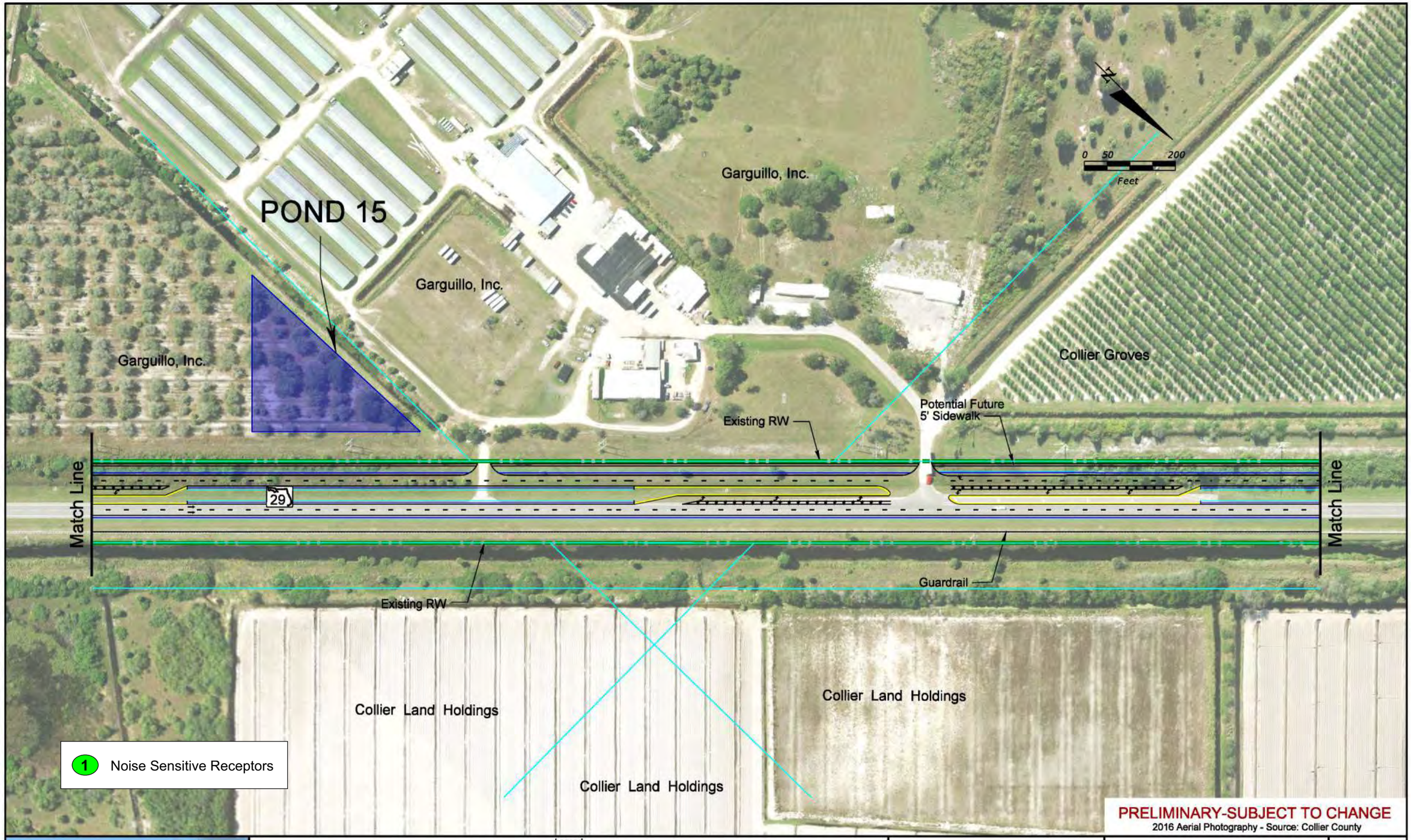
Central Alternative C2

Sheet No. 10



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Central Alternative C2

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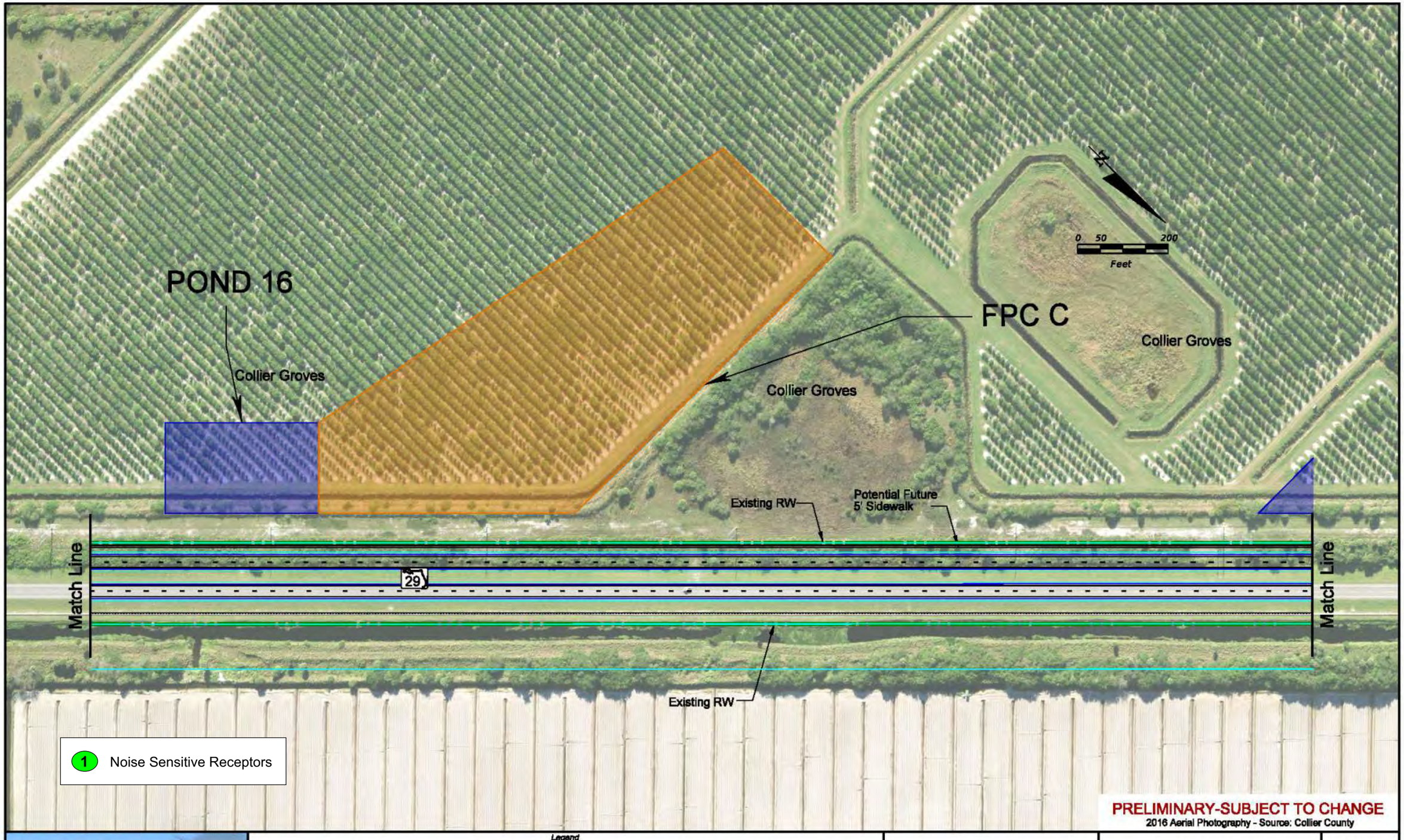

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Central Alternative C2

Sheet No. 12

POND 17

POND 18

Collier Groves

Collier Land Holdings

Realign Roadway

Existing RW

Potential Future 5' Sidewalk

Match Line

29

Match Line

Guardrail

Existing RW

Collier Land Holdings

Collier Land Holdings

0 50 200

Feet

1 Noise Sensitive Receptors

PRELIMINARY-SUBJECT TO CHANGE

2016 Aerial Photography - Source: Collier County

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FBPR Certificate of Auth. #894

Central Alternative C2

Sheet No. 13

POND 18

POND 19

Silver Strand Partnership

Silver Strand Partnership

Existing RW

Potential Future
5' Sidewalk

Potential Future
5' Sidewalk

Match Line

Match Line

29

Guardrail

Existing RW

CDC Land Investments

CDC Land Investments

1 Noise Sensitive Receptors

0 50 200
Feet

PRELIMINARY-SUBJECT TO CHANGE
2016 Aerial Photography - Source: Collier County

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FBPR Certificate of Auth. #894

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FBPR Certificate of Auth. #894

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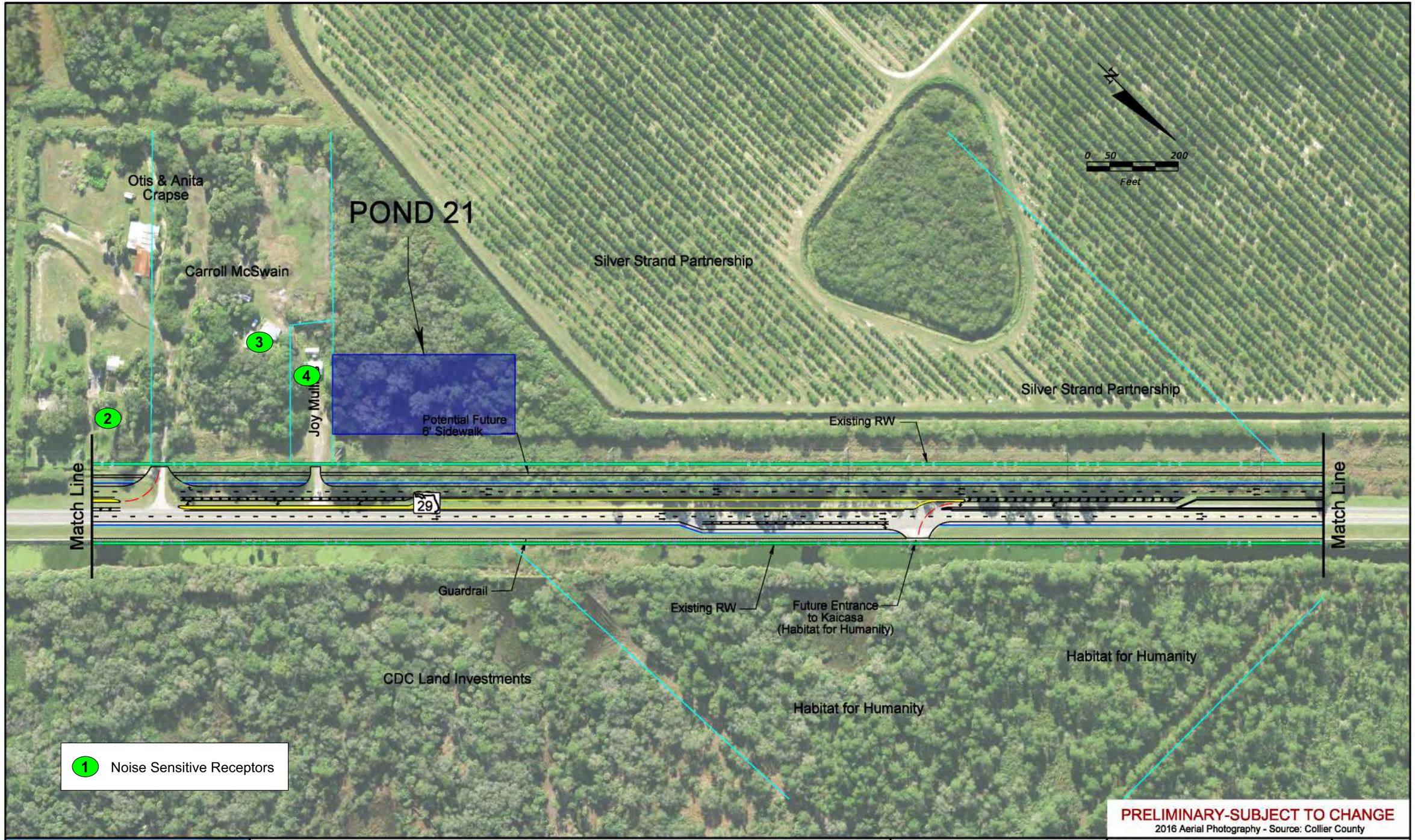
Sheet No. 15



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FBPR Certificate of Auth. #894

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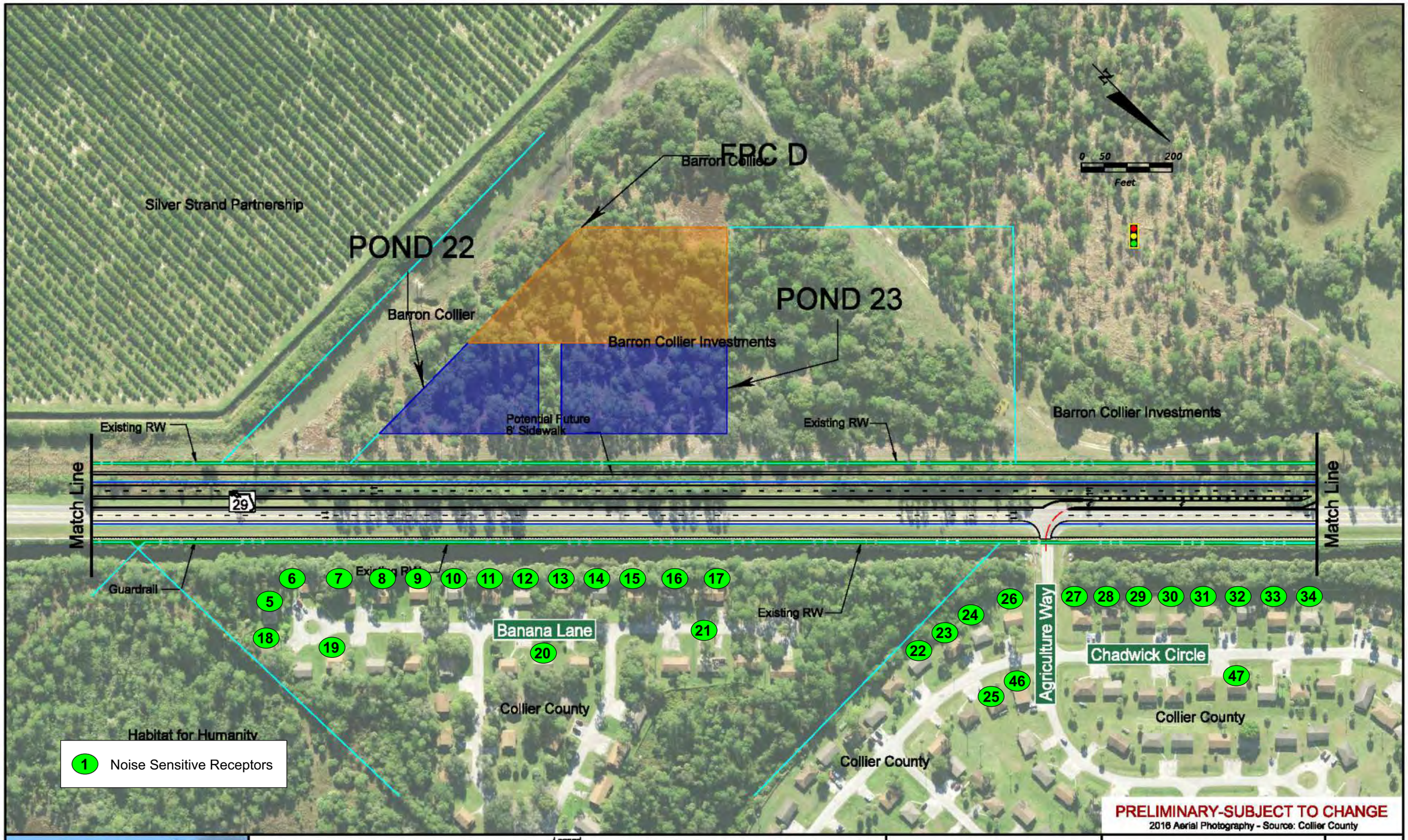

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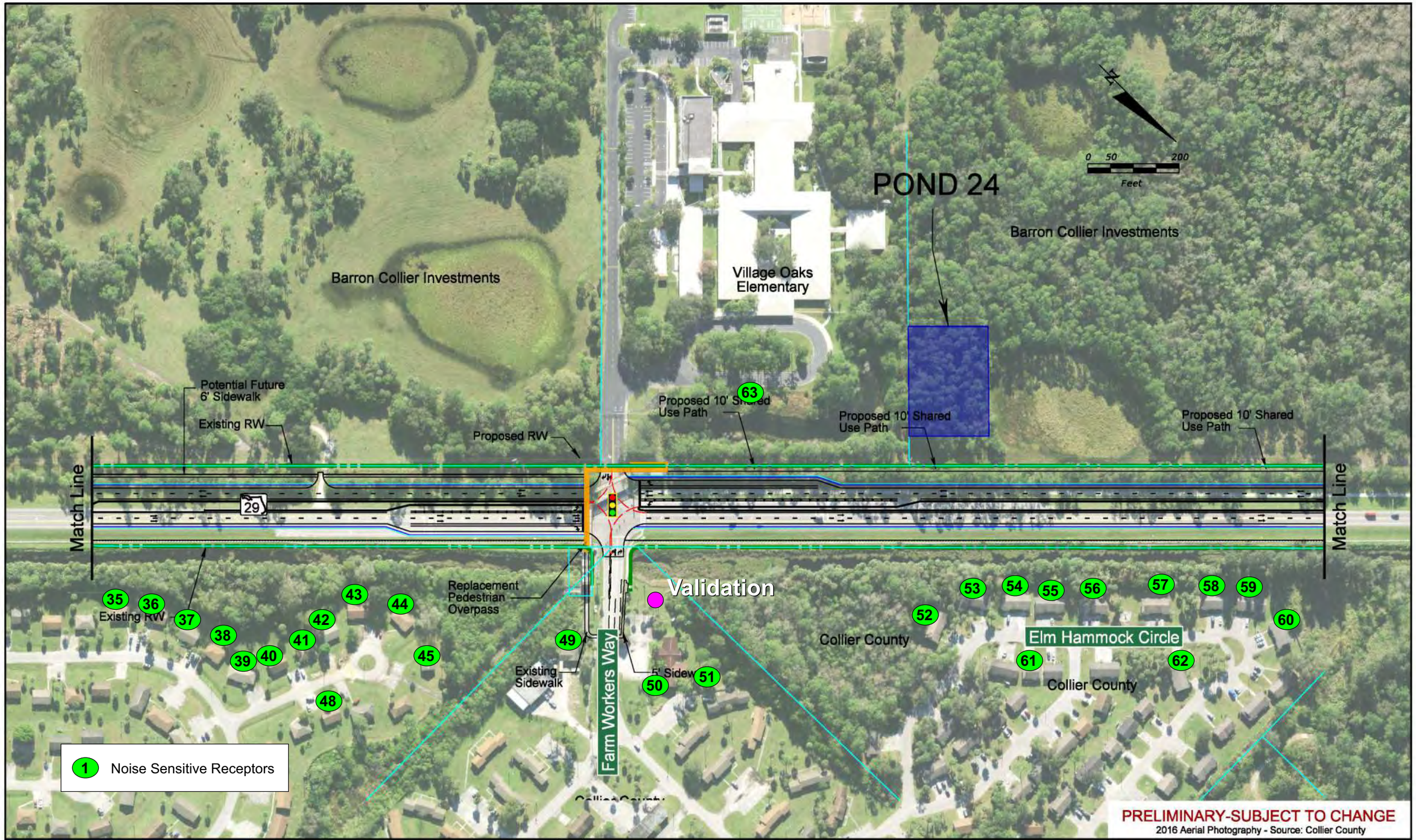

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FBPR Certificate of Auth. #894

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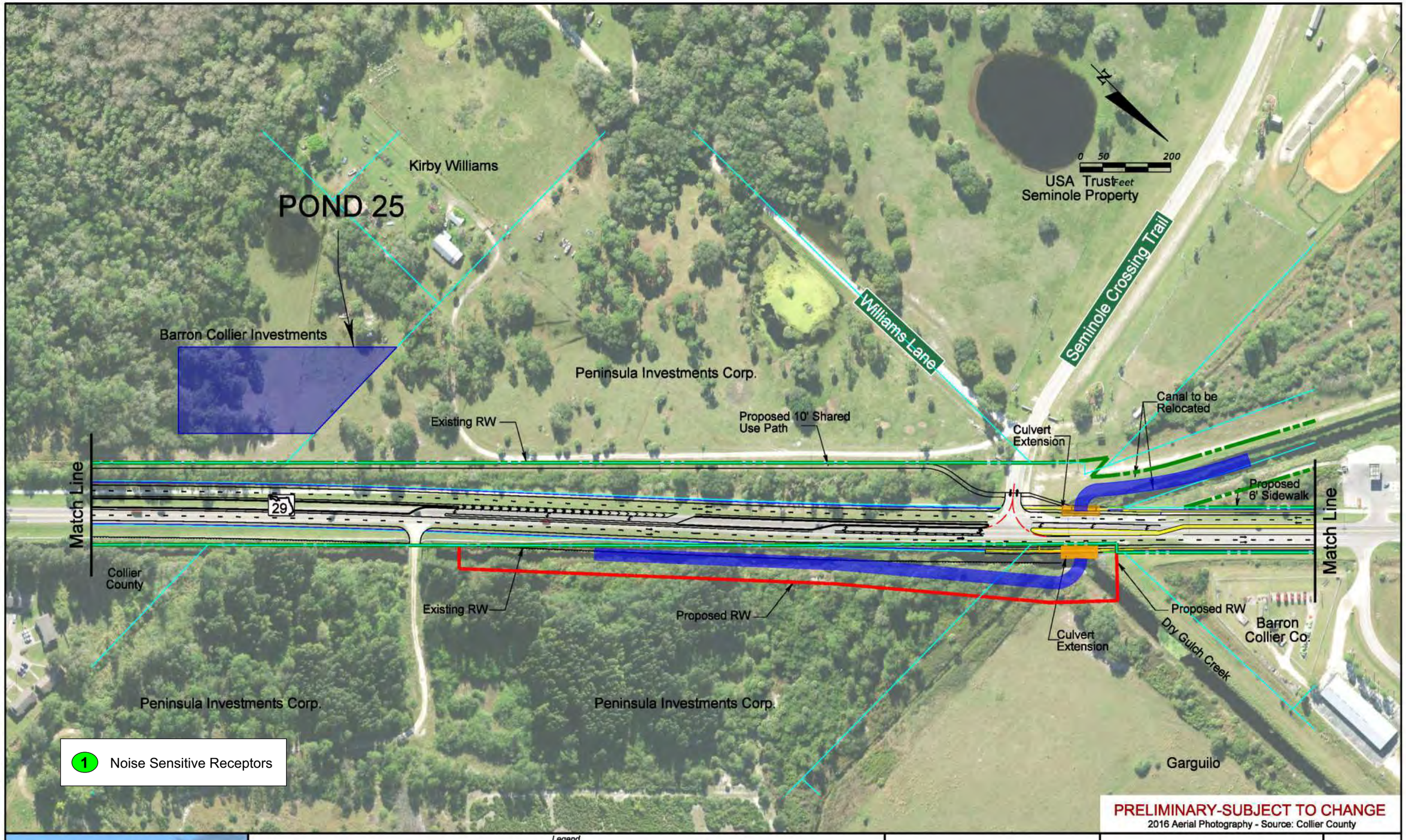

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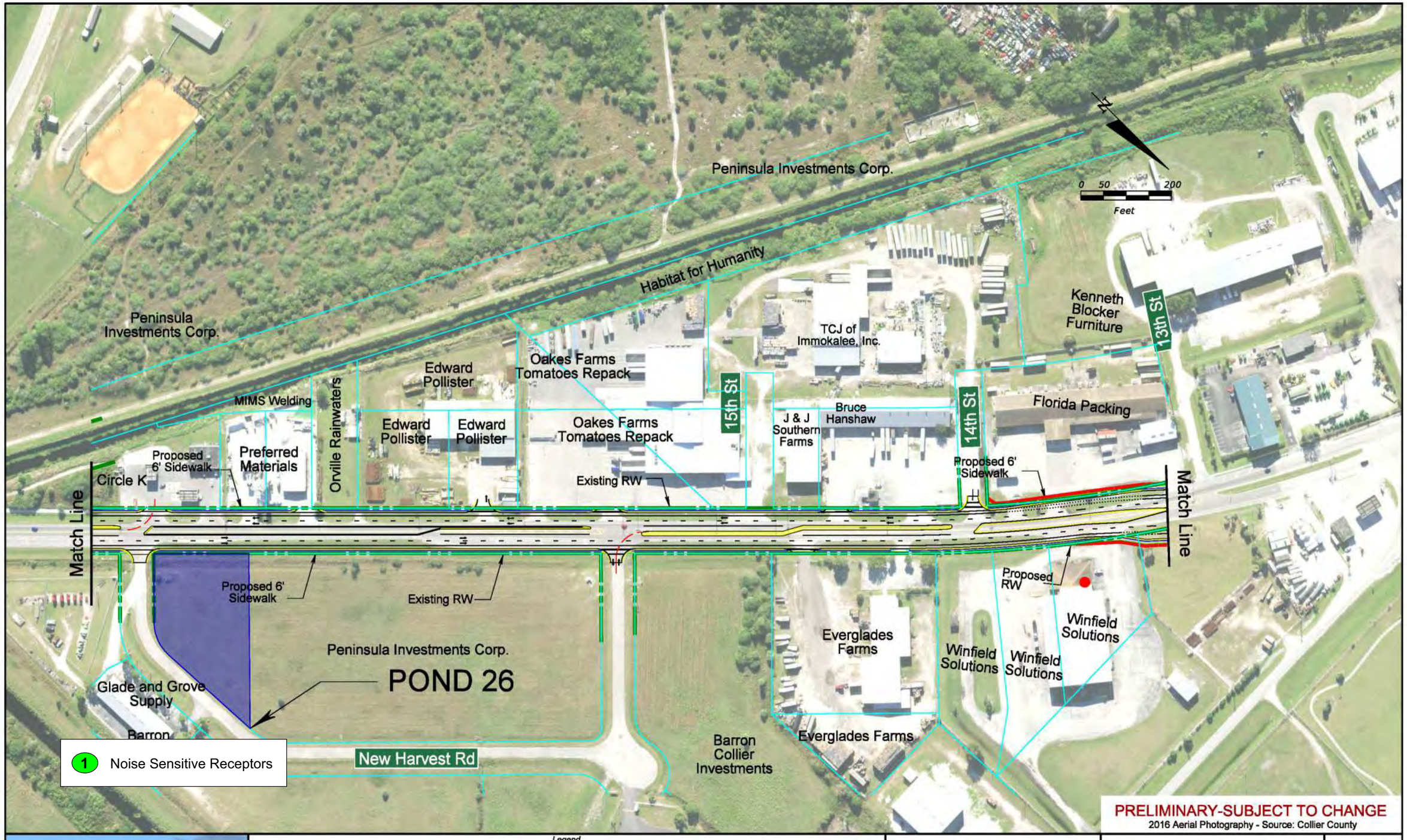

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Central Alternative C2

Sheet No. 20

Match Existing

Proposed 6' Sidewalk

Roger Pruette

Existing RW

Balcom Combs Oil Co.

328 Partners, LLC

1St Ln21

Everglades Farm Equipment

Everglades Farm Equipment

Existing RW

Jack & Ann's Feed Supply

Existing RW

Jack & Ann's Feed Supply

Crop Production Services

Shanta LLC

Donald & Linda Davis

Budget Inn

Jefferson Ave E

Rose Espinoza

Douglas Glidden

Workman Service

Donald Davis

Curtis Blocker

Park

El Building

Expreso

Dean Blocker

Donald Davis

Calexico Inc.

Curtis Blocker

Proposed RW

Curtis Blocker

Curtis Blocker

Airport Park

Eutopia Canal

Picnic Pavillions

Calexico Inc.

New Market Rd

Sunoco

Match Line

POND 1R-E

Floyd Crews

Floyd Crews

Hugh Strickland

Reynaldo Leal

Airport Access

By Others

Fire Dept.

Proposed Structure

Collier County Immokalee Regional Airport

Match Line

Match Line

64 65 66 67 68 73 74 75 76 77 78 79

0 50 200

Feet

N

1 Noise Sensitive Receptors

PRELIMINARY-SUBJECT TO CHANGE

2016 Aerial Photography - Source: Collier County

Central Alternative G2

SR 29 PD&E Study

From Oil Well Road to SR 82

Legend

- Existing Right-of-Way
- Parcels
- Proposed Right-of-Way
- Water/Canal
- Forested Wetland
- Non-Forested Wetland
- Traffic Signal
- Proposed Pavement
- Proposed Median/Border
- Proposed Sidewalks
- Proposed Structure
- Potential Business Relocation
- Potential Contamination (Low)
- Potential Contamination

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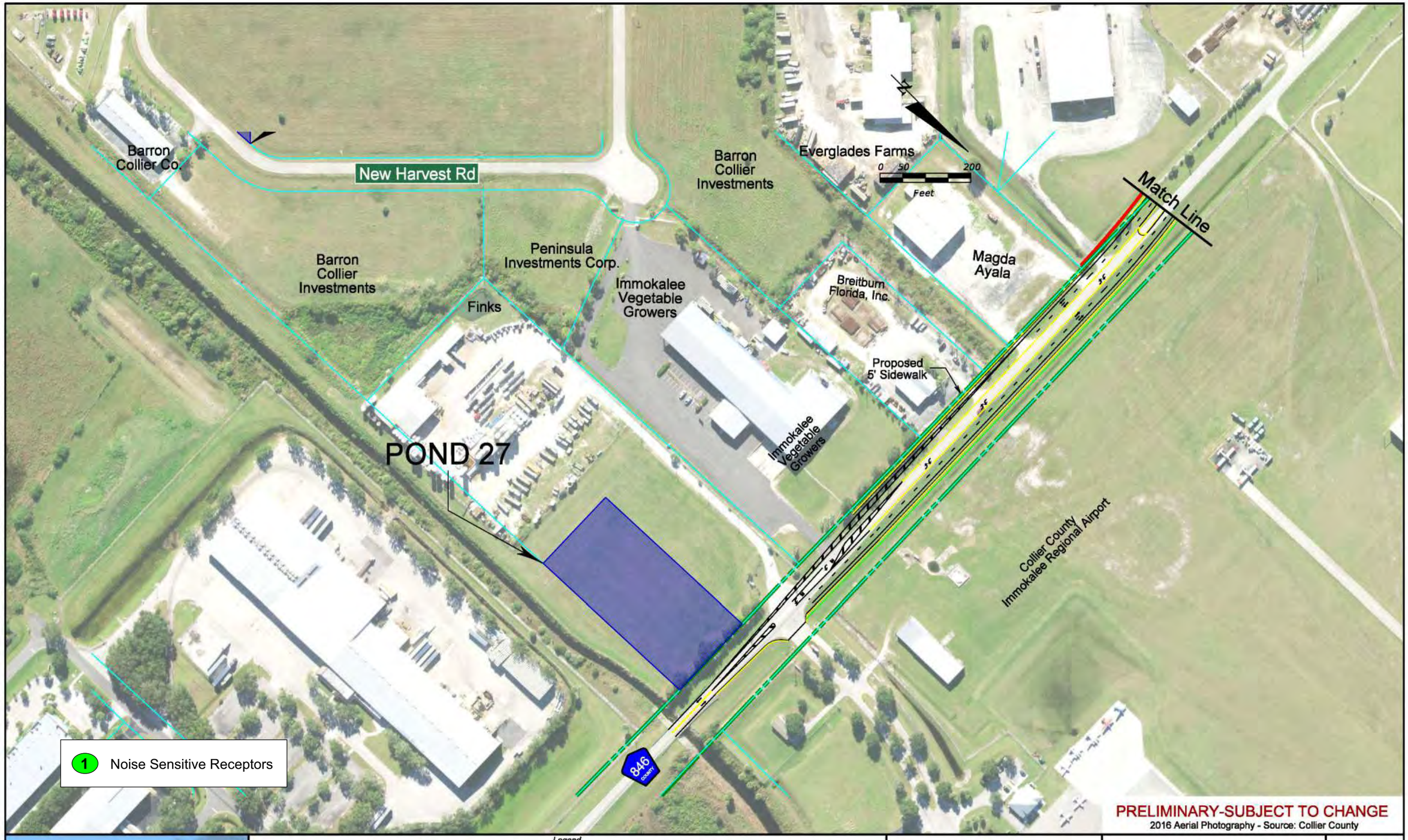
Sheet No. 2.1



SR 29 PD&E Study

From Oil Well Road to SR 82

FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

- Existing Right-of-Way
- Parcels
- Proposed Right-of-Way
- Water/Canal
- Seminole Land
- Forested Wetland
- Non-Forested Wetland
- Traffic Signal
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- Proposed Sidewalks
- Proposed Structure
- Proposed Guardrail
- Potential Business Relocation
- Potential Contamination (Low)
- Potential Contamination (Medium or High)

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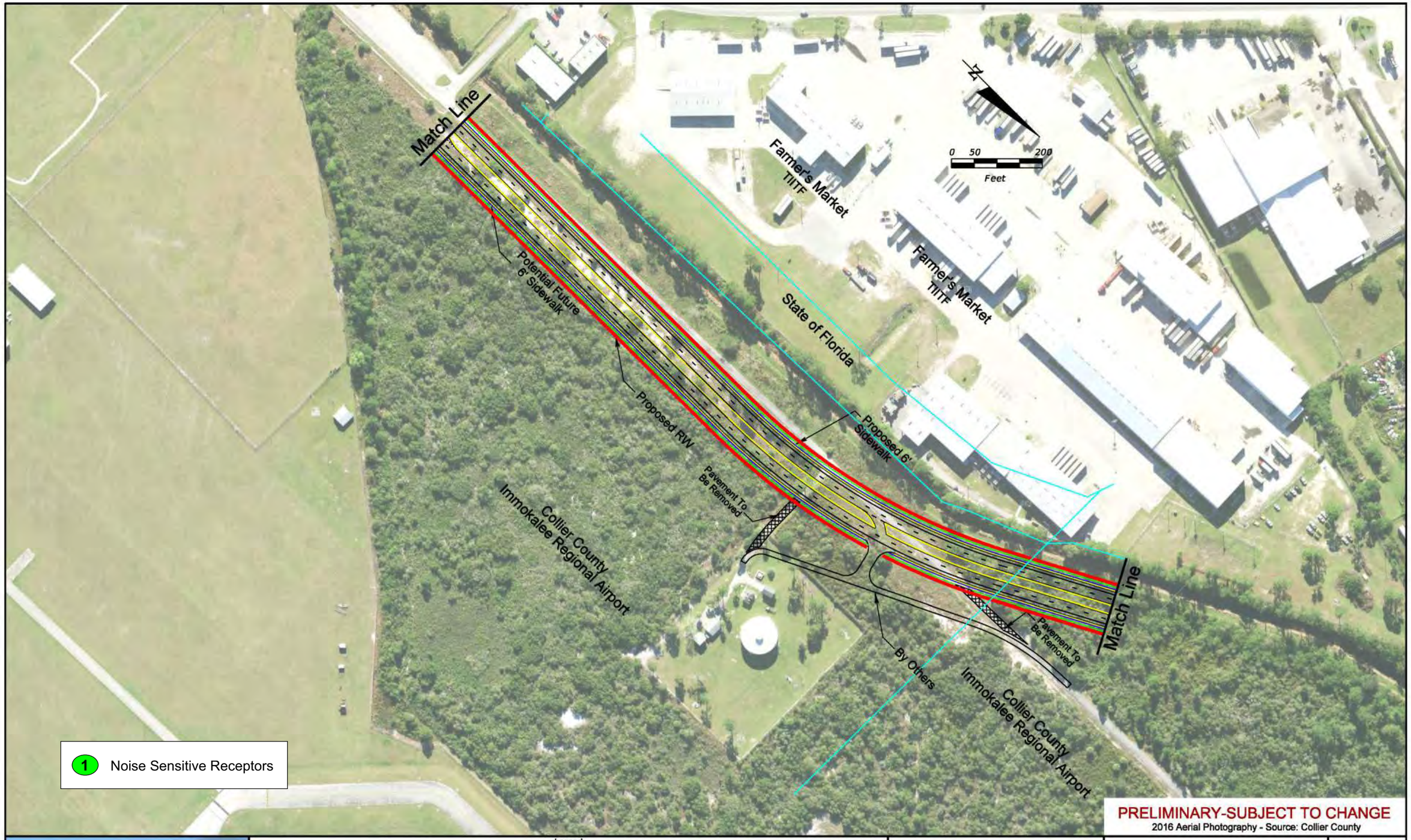
Central Alternative C2

Sheet No. 22



PRELIMINARY-SUBJECT TO CHANGE

2016 Aerial Photography - Source: Collier County

SR 29 PD&E Study

From Oil Well Road to SR 82

FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

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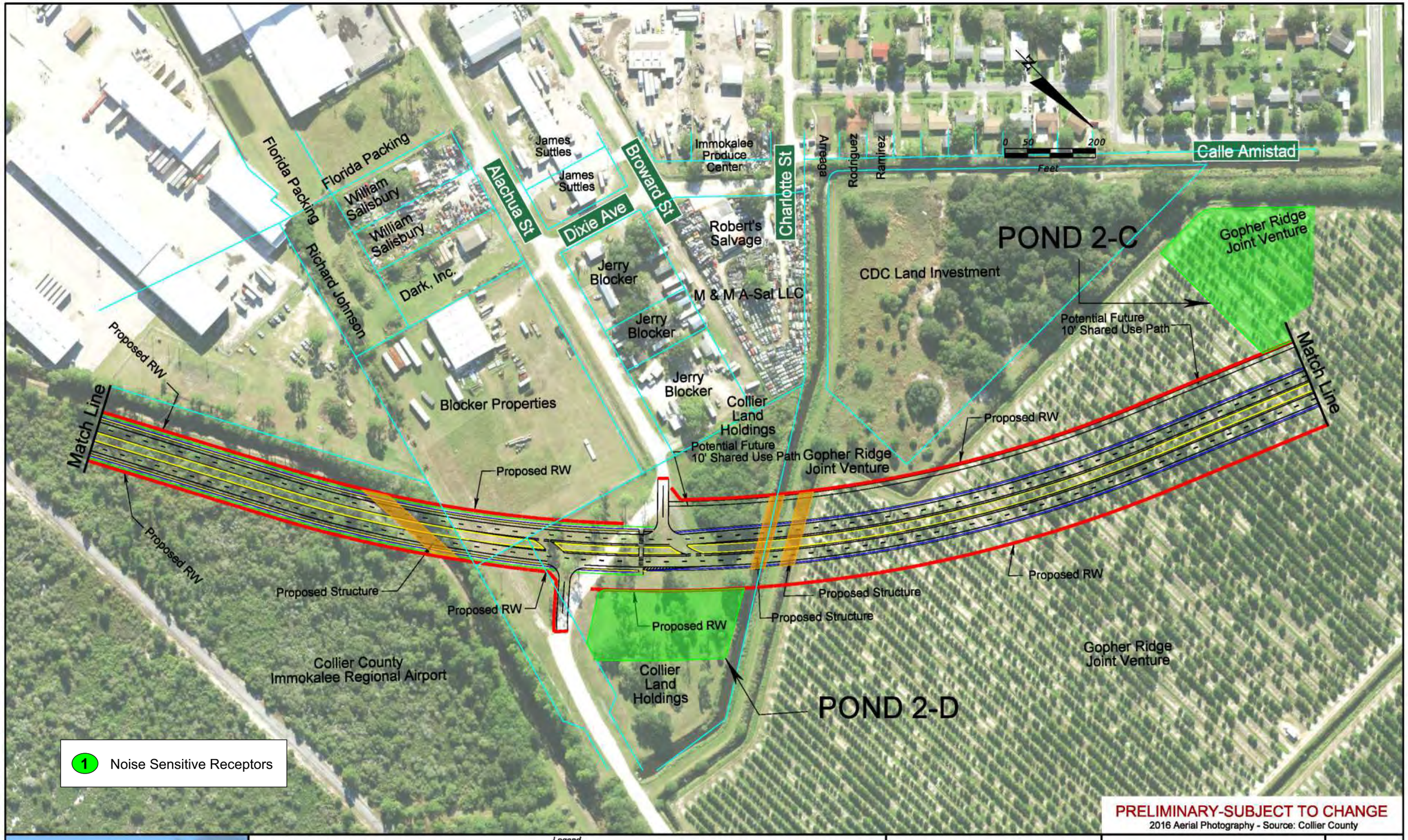
Sheet No. 23



PRELIMINARY-SUBJECT TO CHANGE
2016 Aerial Photography - Source: Collier County

SR 29 PD&E Study
From Oil Well Road to SR 82
FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

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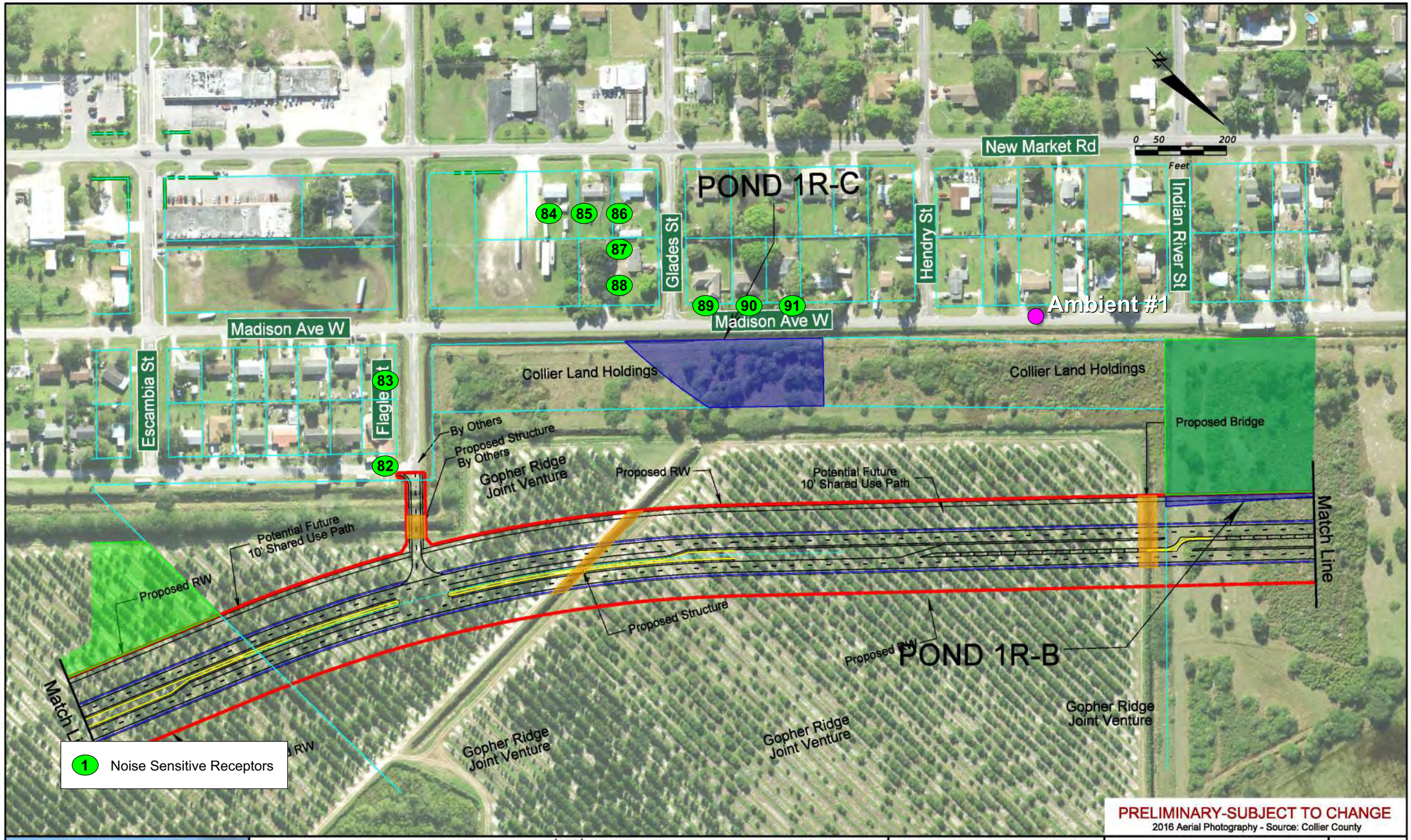
Sheet No. 24



SR 29 PD&E Study

From Oil Well Road to SR 82

FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

- Existing Right-of-Way
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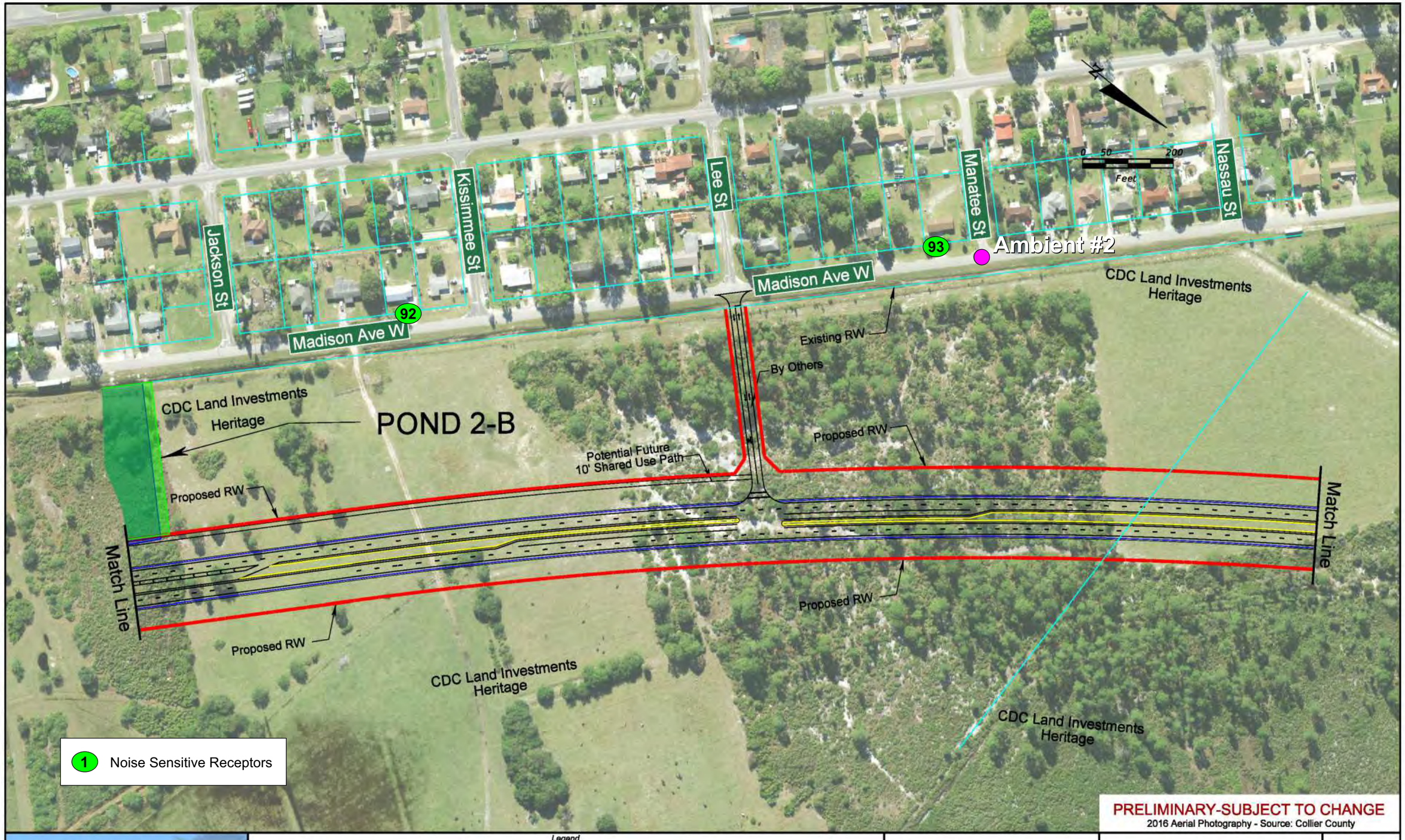
Sheet No. 25



SR 29 PD&E Study

From Oil Well Road to SR 82

FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

- Existing Right-of-Way
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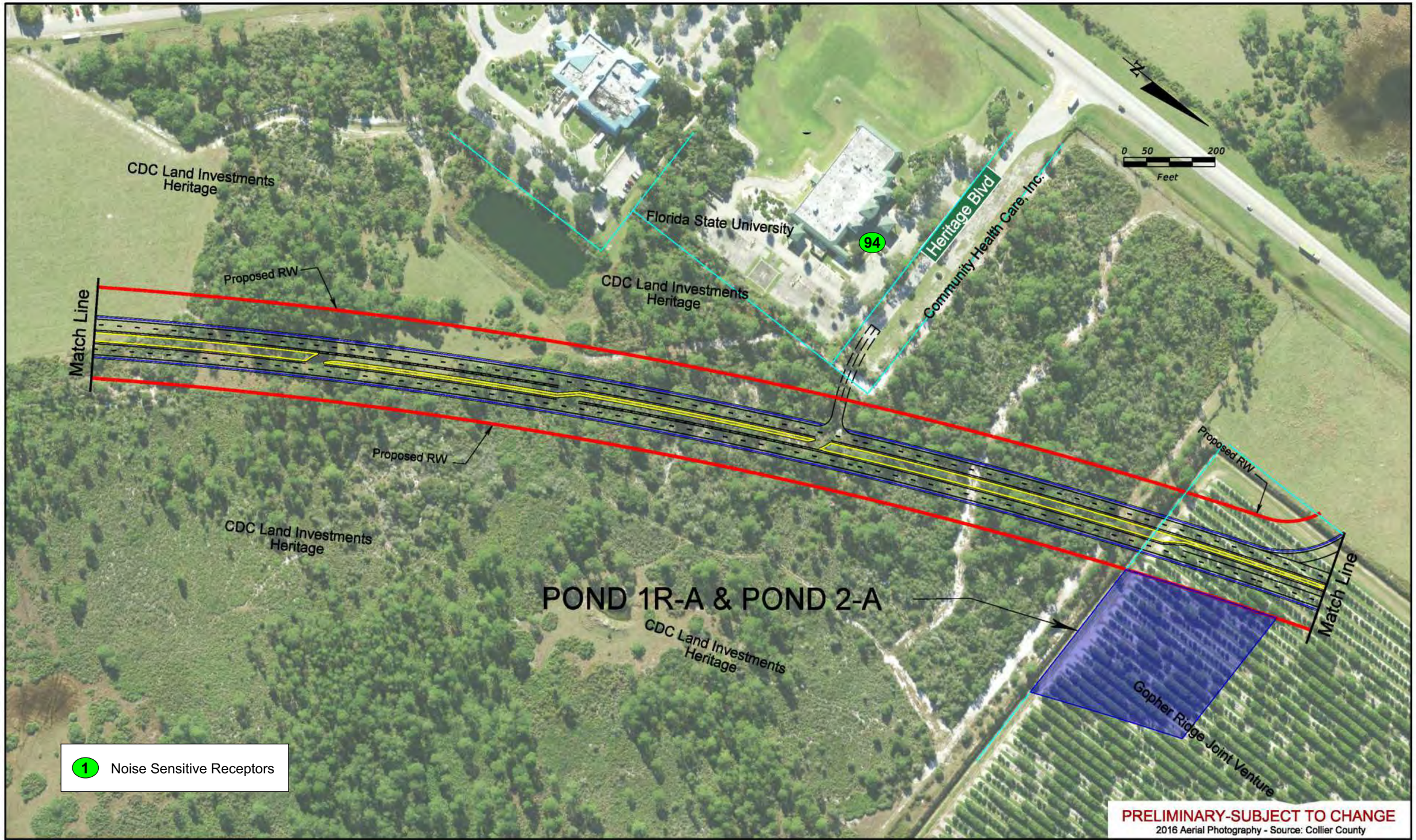
Sheet No. 26



SR 29 PD&E Study

From Oil Well Road to SR 82

FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

- Existing Right-of-Way
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Sheet No. 27

PRELIMINARY-SUBJECT TO CHANGE
2016 Aerial Photography - Source: Collier County

SR 29 PD&E Study

From Oil Well Road to SR 82

FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

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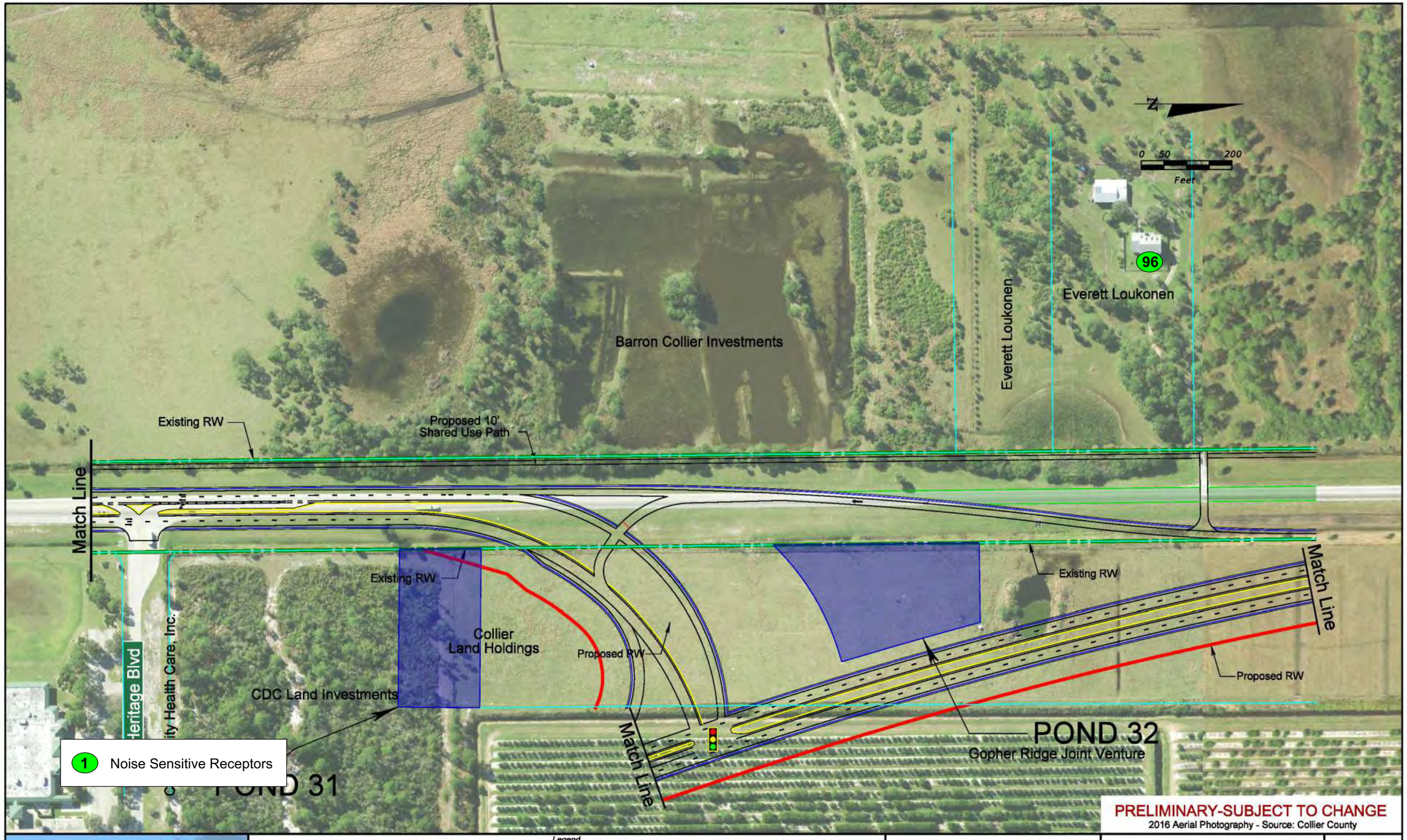
Sheet No. 28



SR 29 PD&E Study
From Oil Well Road to SR 82
FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

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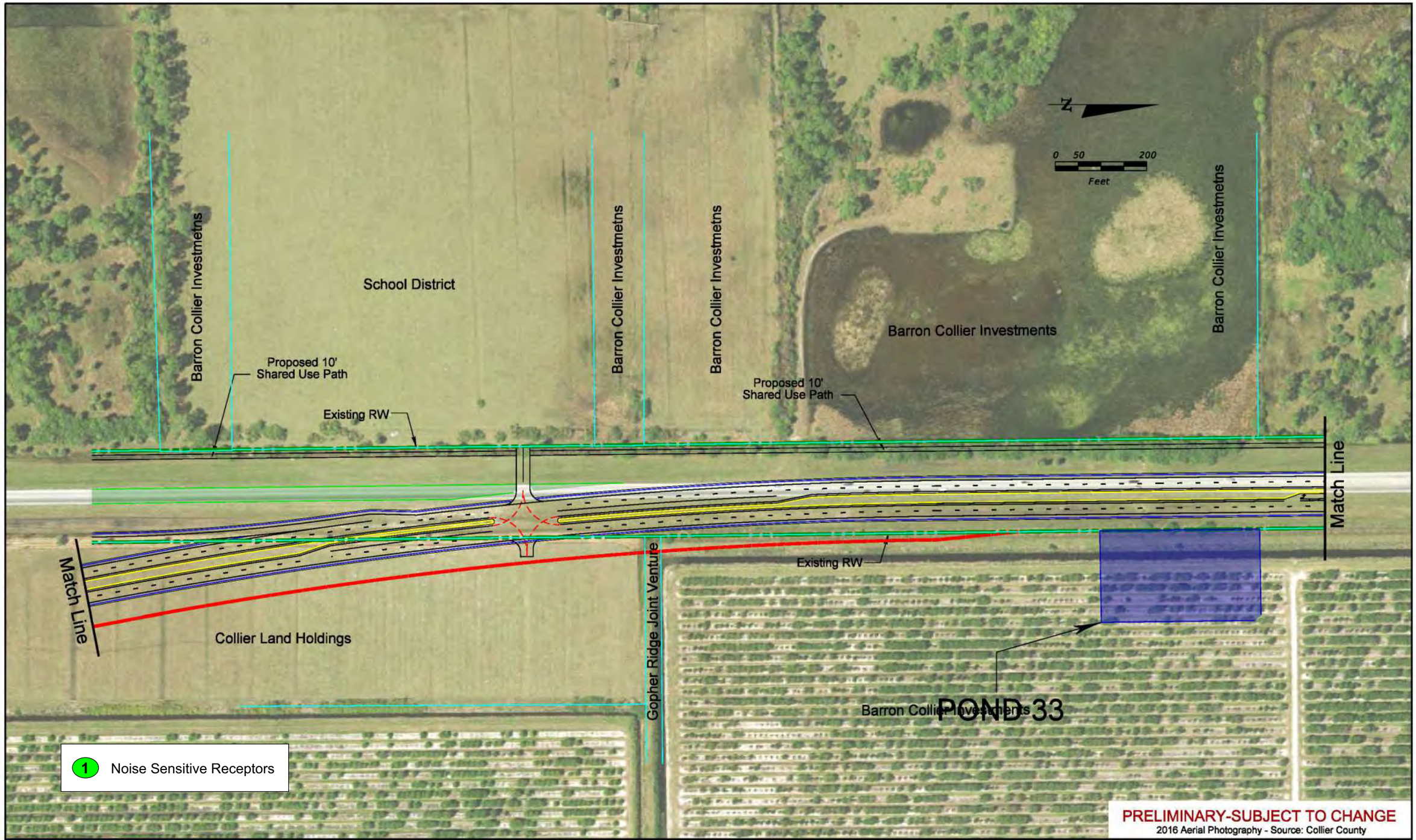
Sheet No. 29



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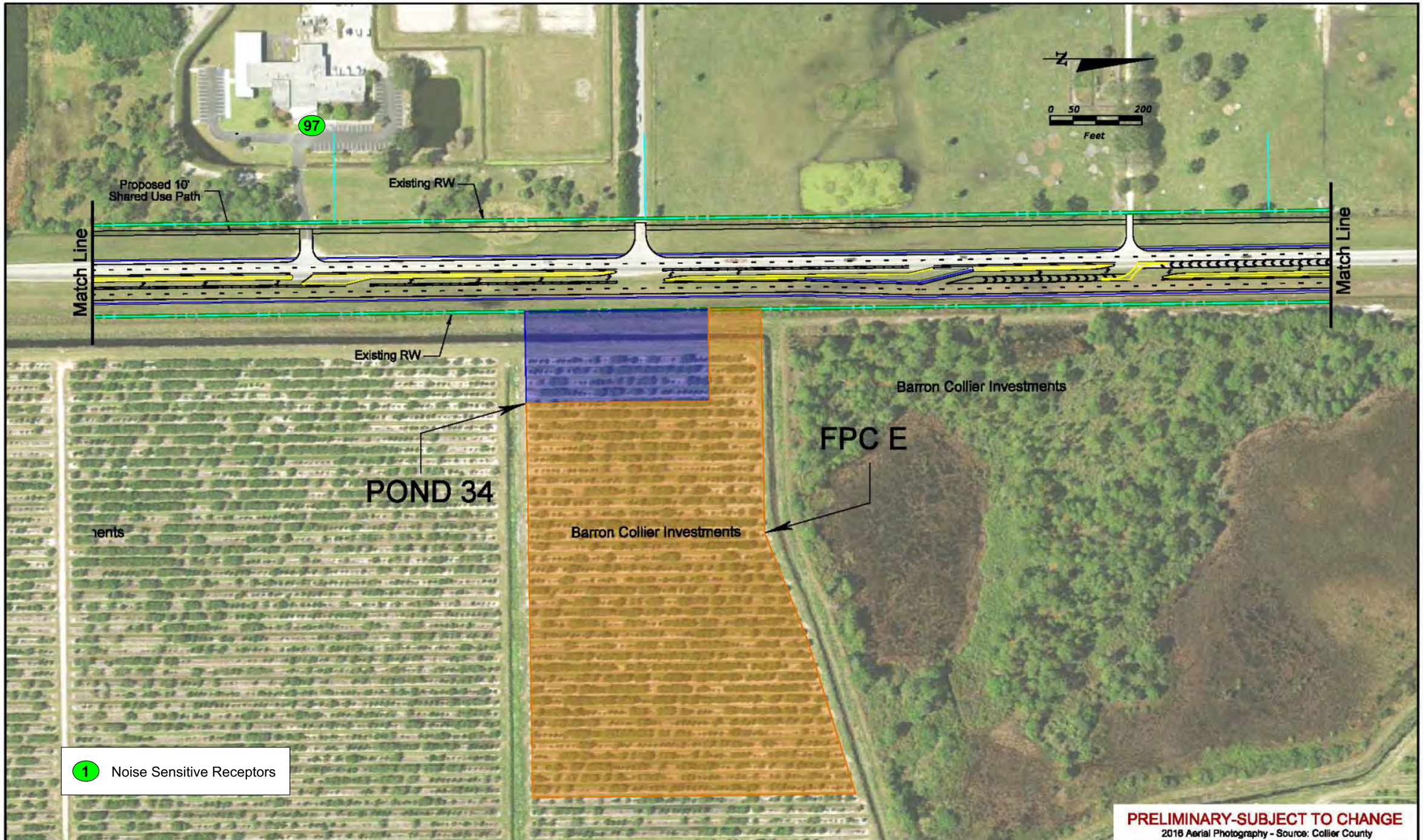
Sheet No. 30



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Sheet No. 31

PRELIMINARY-SUBJECT TO CHANGE
2016 Aerial Photography - Source: Collier County

SR 29 PD&E Study
From Oil Well Road to SR 82
FPID NO: 417540 1 22 01 / FAP NO: 3911 023P

Legend

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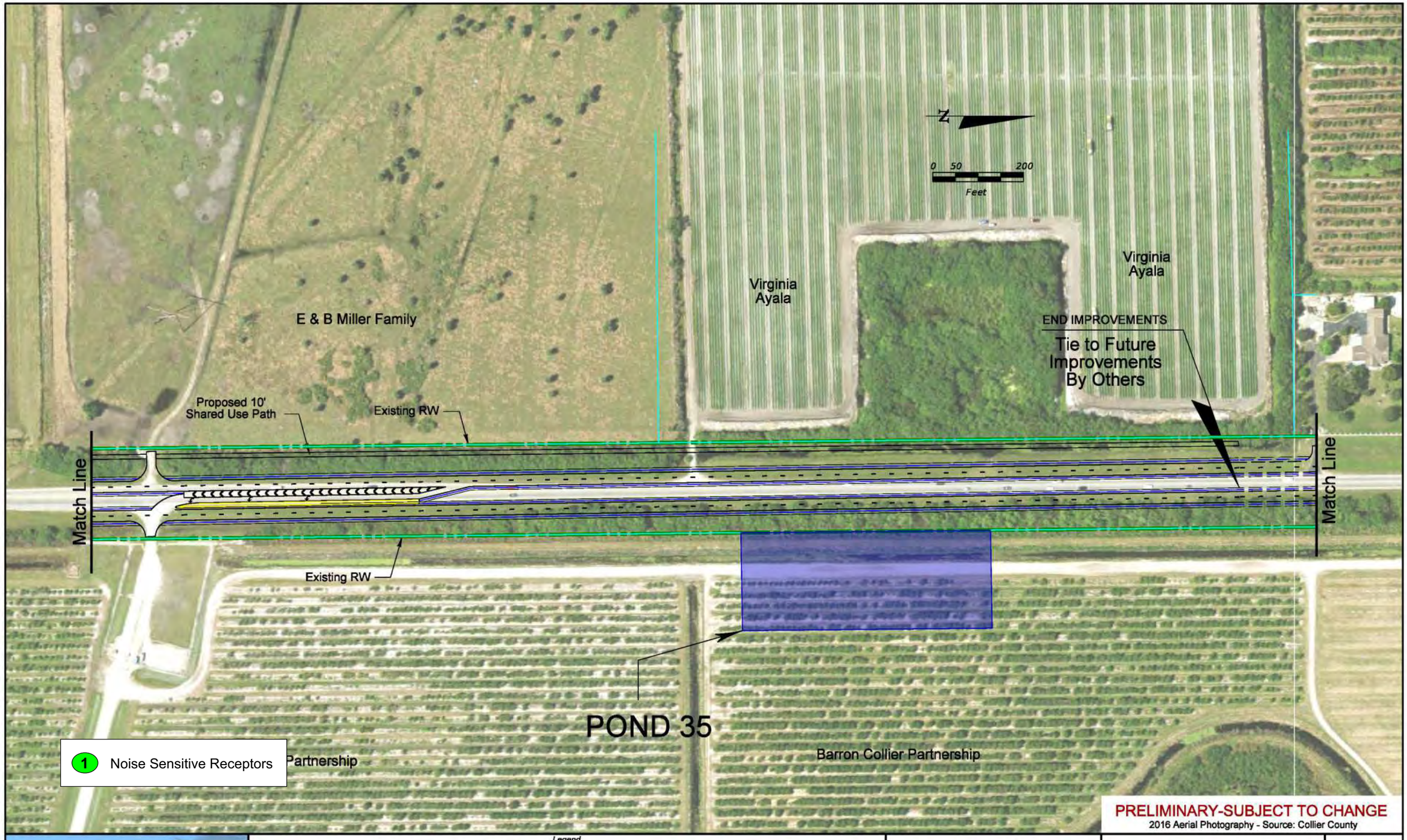
Sheet No. 32



SR 29 PD&E Study
From Oil Well Road to SR 82
FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

- Existing Right-of-Way
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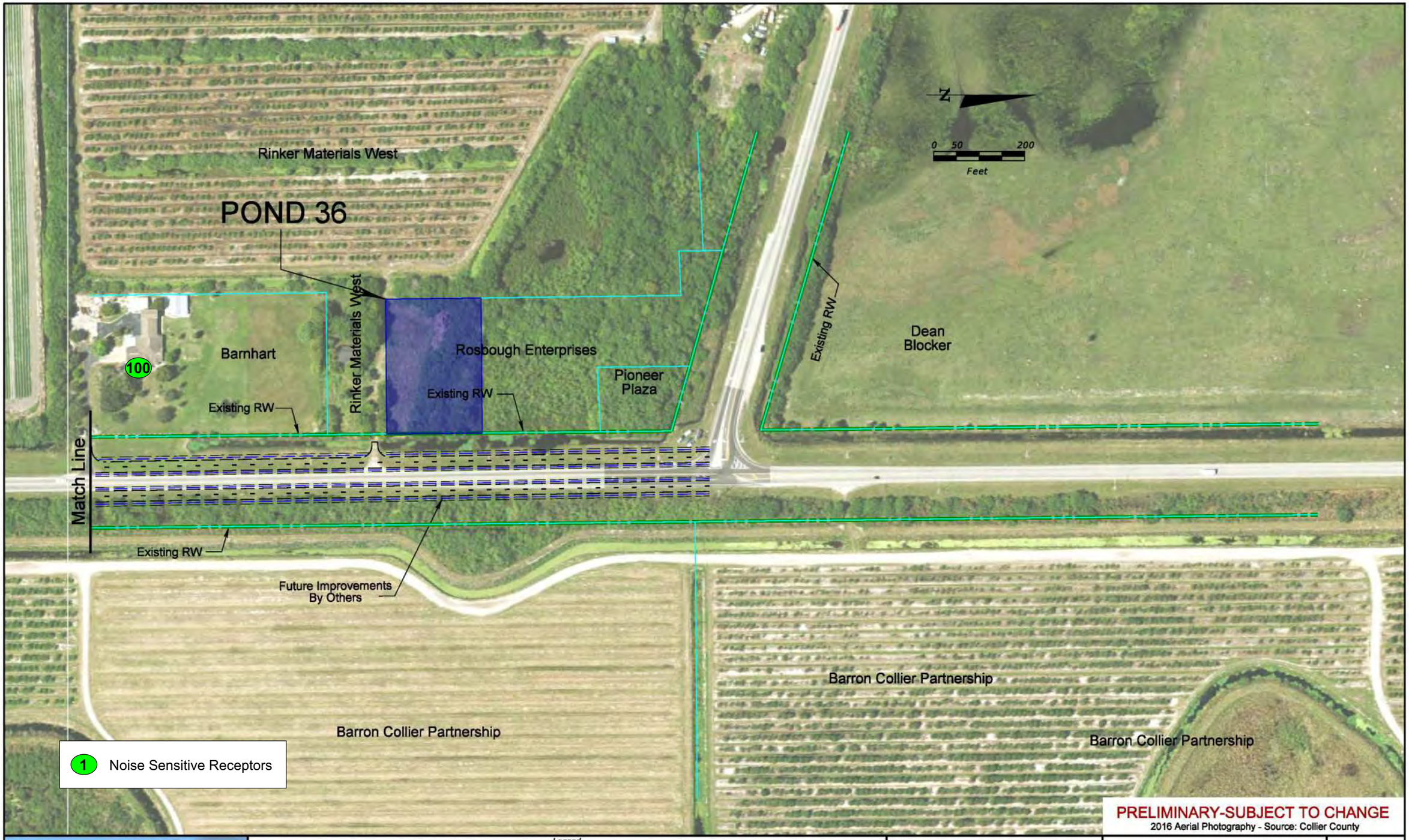
Sheet No. 33



PRELIMINARY-SUBJECT TO CHANGE
2016 Aerial Photography - Source: Collier County

SR 29 PD&E Study
From Oil Well Road to SR 82
FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

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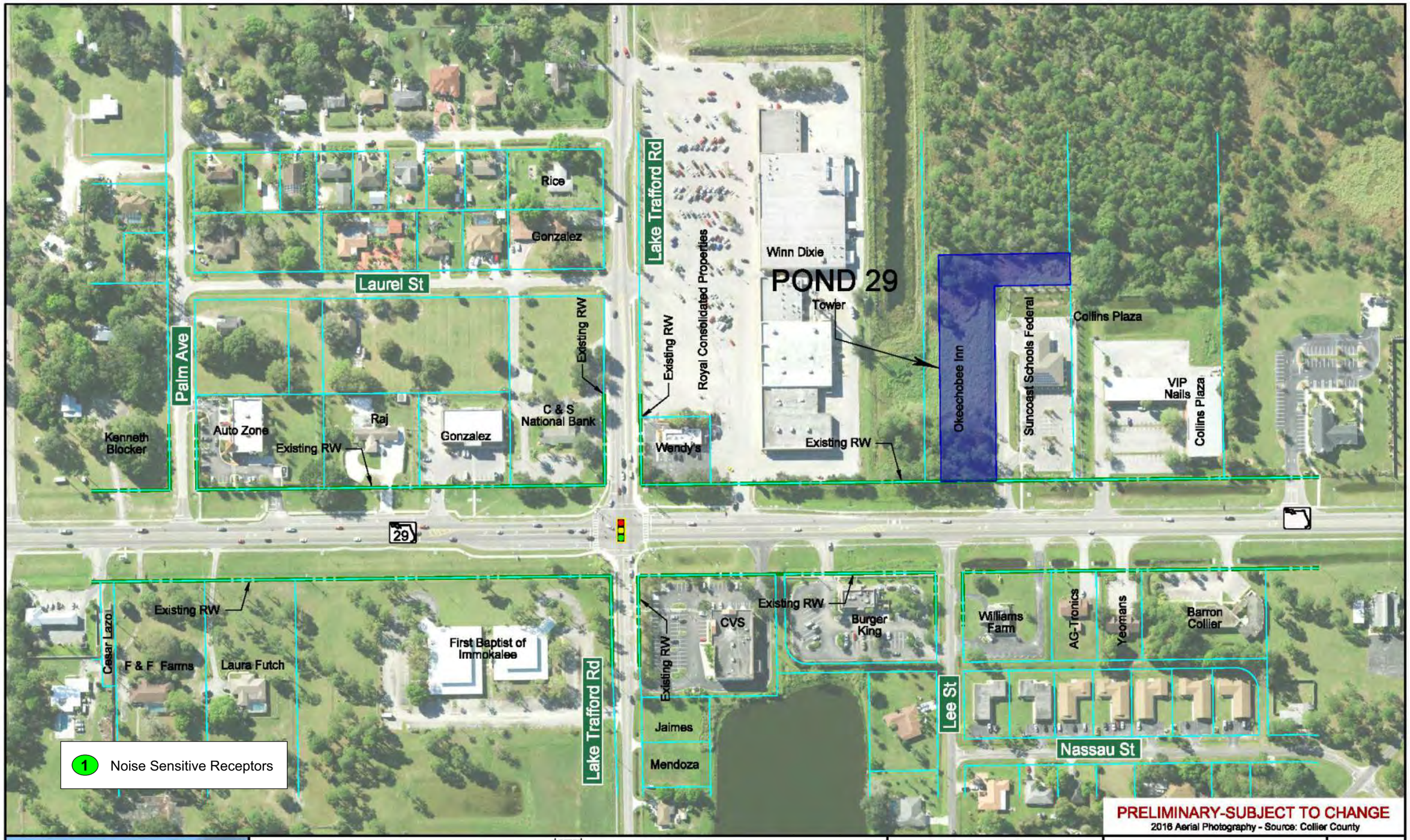
Central Alternative C2

Sheet No. 34



SR 29 PD&E Study

From Oil Well Road to SR 82

FPID NO: 417540 1 22 01 / FAP NO: 3911 022P

Legend

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Central Alternative C2

Sheet No. 35

APPENDIX B

Traffic Data for Noise Studies

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29
Project Description:	Alternative #1
Segment Description:	Oil Well Road to Farm Worker Way
Section Number:	1
Mile Post To/From:	From MP 27.208 to MP 35.416

Existing Facility:

Year:	2017
LOS C Peak Hour Directional Volume:	850
Demand Peak Hour Volume:	291
Posted Speed:	60

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	5.08%	% of Design Hour Volume
HT =	2.92%	% of Design Hour Volume
B =	3.45%	% of Design Hour Volume
MC =	1.11%	% of Design Hour Volume

No Build Alternative (Design Year):

Year:	2045
LOS C Peak Hour Directional Volume:	850
Demand Peak Hour Volume:	785
Posted Speed:	60

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	5.08%	% of Design Hour Volume
HT =	2.92%	% of Design Hour Volume
B =	3.45%	% of Design Hour Volume
MC =	1.11%	% of Design Hour Volume

Build Alternative (Design Year):

Year:	2045
LOS C Peak Hour Directional Volume:	2120
Demand Peak Hour Volume:	841
Posted Speed:	60

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	5.08%	% of Design Hour Volume
HT =	2.92%	% of Design Hour Volume
B =	3.45%	% of Design Hour Volume
MC =	1.11%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) Date: January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) Date: 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29

Project Description: Alternative #1

Segment Description: Oil Well Road to Farm Worker Way

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 60 Number of Travel Lanes: 1	No Build (Design Year) Year: 2045 Posted Speed: 60 Number of Travel Lanes: 1	Build (Design Year) Year: 2045 Posted Speed: 60 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use Demand Volumes	Use Demand Volumes	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	255	686	735
		Med Trucks	15	40	43
		Heavy Trucks	8	23	25
		Buses	10	27	29
		Motorcycles	3	9	9
		Total	291	785	841
	Off-Peak Direction	Autos	178	476	511
		Med Trucks	10	28	30
		Heavy Trucks	6	16	17
		Buses	7	19	20
		Motorcycles	2	6	6
		Total	203	545	584
LOS C	Peak Direction	Autos	744	744	1853
		Med Trucks	43	43	108
		Heavy Trucks	25	25	62
		Buses	29	29	73
		Motorcycles	9	9	24
		Total	850	850	2120
	Off-Peak Direction	Autos	744	744	1853
		Med Trucks	43	43	108
		Heavy Trucks	25	25	62
		Buses	29	29	73
		Motorcycles	9	9	24
		Total	850	850	2120

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29
Project Description:	Alternative #1
Segment Description:	Farm Worker Way to CR 846/Airport Rd
Section Number:	2
Mile Post To/From:	From MP 35.416 to MP 36.770

Existing Facility:		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2017	Tpeak =	8.00%	% of Design Hour Volume
		MT =	5.08%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	915	HT =	2.92%	% of Design Hour Volume
Demand Peak Hour Volume:	462	B =	3.45%	% of Design Hour Volume
Posted Speed:	45	MC =	1.11%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2045	Tpeak =	8.00%	% of Design Hour Volume
		MT =	5.08%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	915	HT =	2.92%	% of Design Hour Volume
Demand Peak Hour Volume:	1168	B =	3.45%	% of Design Hour Volume
Posted Speed:	45	MC =	1.11%	% of Design Hour Volume

Build Alternative (Design Year):		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2045	Tpeak =	8.00%	% of Design Hour Volume
		MT =	5.08%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	1910	HT =	2.92%	% of Design Hour Volume
Demand Peak Hour Volume:	1221	B =	3.45%	% of Design Hour Volume
Posted Speed:	45	MC =	1.11%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) **Date:** January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) **Date:** 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29

Project Description: Alternative #1

Segment Description: Farm Worker Way to CR 846/Airport Rd

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 45 Number of Travel Lanes: 1	No Build (Design Year) Year: 2045 Posted Speed: 45 Number of Travel Lanes: 1	Build (Design Year) Year: 2045 Posted Speed: 45 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use Demand Volumes	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	405	1022	1067
		Med Trucks	23	59	62
		Heavy Trucks	13	34	36
		Buses	16	40	42
		Motorcycles	5	13	14
		Total	462	1168	1221
	Off-Peak Direction	Autos	281	710	743
		Med Trucks	16	41	43
		Heavy Trucks	9	24	25
		Buses	11	28	29
		Motorcycles	4	9	9
		Total	321	812	849
LOS C	Peak Direction	Autos	800	800	1670
		Med Trucks	46	46	97
		Heavy Trucks	27	27	56
		Buses	32	32	66
		Motorcycles	10	10	21
		Total	915	915	1910
	Off-Peak Direction	Autos	800	800	1670
		Med Trucks	46	46	97
		Heavy Trucks	27	27	56
		Buses	32	32	66
		Motorcycles	10	10	21
		Total	915	915	1910

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29
Project Description:	Alternative #1
Segment Description:	CR 846/Airport Rd to New Market Rd
Section Number:	3
Mile Post To/From:	From MP 36.770 to MP 36.902

Existing Facility:

Year:	2017	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	766	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	690	MT =	5.08%	% of Design Hour Volume
Posted Speed:	35	HT =	2.92%	% of Design Hour Volume
		B =	3.45%	% of Design Hour Volume
		MC =	1.11%	% of Design Hour Volume

No Build Alternative (Design Year):

Year:	2045	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	766	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	1859	MT =	5.08%	% of Design Hour Volume
Posted Speed:	35	HT =	2.92%	% of Design Hour Volume
		B =	3.45%	% of Design Hour Volume
		MC =	1.11%	% of Design Hour Volume

Build Alternative (Design Year):

Year:	2045	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2005	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	1912	MT =	5.08%	% of Design Hour Volume
Posted Speed:	40	HT =	2.92%	% of Design Hour Volume
		B =	3.45%	% of Design Hour Volume
		MC =	1.11%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) Date: January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) Date: 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29

Project Description: Alternative #1

Segment Description: CR 846/Airport Rd to New Market Rd

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 35 Number of Travel Lanes: 2	No Build (Design Year) Year: 2045 Posted Speed: 35 Number of Travel Lanes: 2	Build (Design Year) Year: 2045 Posted Speed: 40 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use Demand Volumes	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	603	1626	1672
		Med Trucks	35	94	97
		Heavy Trucks	20	54	56
		Buses	24	64	66
		Motorcycles	8	21	21
		Total	690	1859	1912
	Off-Peak Direction	Autos	420	1129	1161
		Med Trucks	24	66	67
		Heavy Trucks	14	38	39
		Buses	17	45	46
		Motorcycles	5	14	15
		Total	480	1292	1328
LOS C	Peak Direction	Autos	670	670	1753
		Med Trucks	39	39	102
		Heavy Trucks	22	22	59
		Buses	26	26	69
		Motorcycles	9	9	22
		Total	766	766	2005
	Off-Peak Direction	Autos	670	670	1753
		Med Trucks	39	39	102
		Heavy Trucks	22	22	59
		Buses	26	26	69
		Motorcycles	9	9	22
		Total	766	766	2005

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29 Bypass
Project Description:	Alternative #1
Segment Description:	SR 29 to Charlotte St
Section Number:	4
Mile Post To/From:	N/A

Existing Facility:		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2017	Tpeak =	8.00%	% of Design Hour Volume
		MT =	3.74%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	266	HT =	4.26%	% of Design Hour Volume
Demand Peak Hour Volume:	361	B =	1.44%	% of Design Hour Volume
Posted Speed:	35	MC =	0.49%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2045	Tpeak =	8.00%	% of Design Hour Volume
		MT =	3.74%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	266	HT =	4.26%	% of Design Hour Volume
Demand Peak Hour Volume:	850	B =	1.44%	% of Design Hour Volume
Posted Speed:	35	MC =	0.49%	% of Design Hour Volume

Build Alternative (Design Year):		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2045	Tpeak =	8.00%	% of Design Hour Volume
		MT =	3.74%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	1910	HT =	4.26%	% of Design Hour Volume
Demand Peak Hour Volume:	1221	B =	1.44%	% of Design Hour Volume
Posted Speed:	40	MC =	0.49%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) Date: January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) Date: 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29 Bypass

Project Description: Alternative #1

Segment Description: SR 29 to Charlotte St

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 35 Number of Travel Lanes: 1	No Build (Design Year) Year: 2045 Posted Speed: 35 Number of Travel Lanes: 1	Build (Design Year) Year: 2045 Posted Speed: 40 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use LOS C	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	325	766	1099
		Med Trucks	14	32	46
		Heavy Trucks	15	36	52
		Buses	5	12	18
		Motorcycles	2	4	6
		Total	361	850	1221
	Off-Peak Direction	Autos	226	532	765
		Med Trucks	9	22	32
		Heavy Trucks	11	25	36
		Buses	4	8	12
		Motorcycles	1	3	4
		Total	251	590	849
LOS C	Peak Direction	Autos	240	240	1721
		Med Trucks	10	10	71
		Heavy Trucks	11	11	81
		Buses	4	4	28
		Motorcycles	1	1	9
		Total	266	266	1910
	Off-Peak Direction	Autos	240	240	1721
		Med Trucks	10	10	71
		Heavy Trucks	11	11	81
		Buses	4	4	28
		Motorcycles	1	1	9
		Total	266	266	1910

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29 Bypass
Project Description:	Alternative #1
Segment Description:	Charlotte St to Flagler St
Section Number:	5
Mile Post To/From:	N/A

Existing Facility:

Year:	2017	D =	59.00%	%
LOS C Peak Hour Directional Volume:	597	T24 =	16.00%	% of 24 Hour Volume
Demand Peak Hour Volume:	483	Tpeak =	8.00%	% of Design Hour Volume
Posted Speed:	35	MT =	3.75%	% of Design Hour Volume
		HT =	4.25%	% of Design Hour Volume
		B =	1.44%	% of Design Hour Volume
		MC =	0.49%	% of Design Hour Volume

No Build Alternative (Design Year):

Year:	2045	D =	59.00%	%
LOS C Peak Hour Directional Volume:	597	T24 =	16.00%	% of 24 Hour Volume
Demand Peak Hour Volume:	1168	Tpeak =	8.00%	% of Design Hour Volume
Posted Speed:	35	MT =	3.75%	% of Design Hour Volume
		HT =	4.25%	% of Design Hour Volume
		B =	1.44%	% of Design Hour Volume
		MC =	0.49%	% of Design Hour Volume

Build Alternative (Design Year):

Year:	2045	D =	59.00%	%
LOS C Peak Hour Directional Volume:	1910	T24 =	16.00%	% of 24 Hour Volume
Demand Peak Hour Volume:	1487	Tpeak =	8.00%	% of Design Hour Volume
Posted Speed:	50	MT =	3.75%	% of Design Hour Volume
		HT =	4.25%	% of Design Hour Volume
		B =	1.44%	% of Design Hour Volume
		MC =	0.49%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) Date: January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) Date: 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29 Bypass

Project Description: Alternative #1

Segment Description: Charlotte St to Flagler St

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 35 Number of Travel Lanes: 1	No Build (Design Year) Year: 2045 Posted Speed: 35 Number of Travel Lanes: 1	Build (Design Year) Year: 2045 Posted Speed: 50 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use Demand Volumes	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	435	1051	1340
		Med Trucks	18	44	56
		Heavy Trucks	21	50	63
		Buses	7	17	21
		Motorcycles	2	6	7
		Total	483	1168	1487
	Off-Peak Direction	Autos	302	731	930
		Med Trucks	13	30	39
		Heavy Trucks	14	35	44
		Buses	5	12	15
		Motorcycles	2	4	5
		Total	336	812	1033
LOS C	Peak Direction	Autos	538	538	1720
		Med Trucks	22	22	72
		Heavy Trucks	25	25	81
		Buses	9	9	28
		Motorcycles	3	3	9
		Total	597	597	1910
	Off-Peak Direction	Autos	538	538	1720
		Med Trucks	22	22	72
		Heavy Trucks	25	25	81
		Buses	9	9	28
		Motorcycles	3	3	9
		Total	597	597	1910

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29 Bypass
Project Description:	Alternative #1
Segment Description:	Flagler St to Kissimmee St
Section Number:	5a
Mile Post To/From:	N/A

Existing Facility:		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2017	Tpeak =	8.00%	% of Design Hour Volume
		MT =	3.75%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	0	HT =	4.25%	% of Design Hour Volume
Demand Peak Hour Volume:	1	B =	1.44%	% of Design Hour Volume
Posted Speed:	0	MC =	0.49%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2045	Tpeak =	8.00%	% of Design Hour Volume
		MT =	3.75%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	0	HT =	4.25%	% of Design Hour Volume
Demand Peak Hour Volume:	1	B =	1.44%	% of Design Hour Volume
Posted Speed:	0	MC =	0.49%	% of Design Hour Volume

Build Alternative (Design Year):		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2045	Tpeak =	8.00%	% of Design Hour Volume
		MT =	3.75%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	1910	HT =	4.25%	% of Design Hour Volume
Demand Peak Hour Volume:	1487	B =	1.44%	% of Design Hour Volume
Posted Speed:	50	MC =	0.49%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) **Date:** January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) **Date:** 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29 Bypass

Project Description: Alternative #1

Segment Description: Flagler St to Kissimmee St

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 0 Number of Travel Lanes: 0	No Build (Design Year) Year: 2045 Posted Speed: 0 Number of Travel Lanes: 0	Build (Design Year) Year: 2045 Posted Speed: 50 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use LOS C	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	-3	-3	1340
		Med Trucks	1	1	56
		Heavy Trucks	1	1	63
		Buses	1	1	21
		Motorcycles	1	1	7
		Total	1	1	1487
	Off-Peak Direction	Autos	-3	-3	930
		Med Trucks	1	1	39
		Heavy Trucks	1	1	44
		Buses	1	1	15
		Motorcycles	1	1	5
		Total	1	1	1033
LOS C	Peak Direction	Autos	-4	-4	1720
		Med Trucks	1	1	72
		Heavy Trucks	1	1	81
		Buses	1	1	28
		Motorcycles	1	1	9
		Total	0	0	1910
	Off-Peak Direction	Autos	-4	-4	1720
		Med Trucks	1	1	72
		Heavy Trucks	1	1	81
		Buses	1	1	28
		Motorcycles	1	1	9
		Total	0	0	1910

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29 Bypass
Project Description:	Alternative #1
Segment Description:	Kissimmee St to SR 29
Section Number:	6
Mile Post To/From:	N/A

Existing Facility:

Year:	2017
LOS C Peak Hour Directional Volume:	0
Demand Peak Hour Volume:	1
Posted Speed:	0

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	3.75%	% of Design Hour Volume
HT =	4.25%	% of Design Hour Volume
B =	1.44%	% of Design Hour Volume
MC =	0.49%	% of Design Hour Volume

No Build Alternative (Design Year):

Year:	2045
LOS C Peak Hour Directional Volume:	0
Demand Peak Hour Volume:	1
Posted Speed:	0

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	3.75%	% of Design Hour Volume
HT =	4.25%	% of Design Hour Volume
B =	1.44%	% of Design Hour Volume
MC =	0.49%	% of Design Hour Volume

Build Alternative (Design Year):

Year:	2045
LOS C Peak Hour Directional Volume:	1910
Demand Peak Hour Volume:	1168
Posted Speed:	50

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	3.75%	% of Design Hour Volume
HT =	4.25%	% of Design Hour Volume
B =	1.44%	% of Design Hour Volume
MC =	0.49%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) Date: January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) Date: 1/14/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29 Bypass

Project Description: Alternative #1

Segment Description: Kissimmee St to SR 29

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 0 Number of Travel Lanes: 0	No Build (Design Year) Year: 2045 Posted Speed: 0 Number of Travel Lanes: 0	Build (Design Year) Year: 2045 Posted Speed: 50 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use LOS C	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	-3	-3	1051
		Med Trucks	1	1	44
		Heavy Trucks	1	1	50
		Buses	1	1	17
		Motorcycles	1	1	6
		Total	1	1	1168
	Off-Peak Direction	Autos	-3	-3	731
		Med Trucks	1	1	30
		Heavy Trucks	1	1	35
		Buses	1	1	12
		Motorcycles	1	1	4
		Total	1	1	812
LOS C	Peak Direction	Autos	-4	-4	1720
		Med Trucks	1	1	72
		Heavy Trucks	1	1	81
		Buses	1	1	28
		Motorcycles	1	1	9
		Total	0	0	1910
	Off-Peak Direction	Autos	-4	-4	1720
		Med Trucks	1	1	72
		Heavy Trucks	1	1	81
		Buses	1	1	28
		Motorcycles	1	1	9
		Total	0	0	1910

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29
Project Description:	Alternative #1
Segment Description:	New Market Rd/Westclox Rd to SR 29 Bypass
Section Number:	7
Mile Post To/From:	From MP 39.761 to MP 40.861 (Approx.)

Existing Facility:		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2017	Tpeak =	8.00%	% of Design Hour Volume
		MT =	4.08%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	850	HT =	3.92%	% of Design Hour Volume
Demand Peak Hour Volume:	956	B =	1.06%	% of Design Hour Volume
Posted Speed:	45	MC =	0.65%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2045	Tpeak =	8.00%	% of Design Hour Volume
		MT =	4.08%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	850	HT =	3.92%	% of Design Hour Volume
Demand Peak Hour Volume:	2230	B =	1.06%	% of Design Hour Volume
Posted Speed:	45	MC =	0.65%	% of Design Hour Volume

Build Alternative (Design Year):		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2045	Tpeak =	8.00%	% of Design Hour Volume
		MT =	4.08%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	2005	HT =	3.92%	% of Design Hour Volume
Demand Peak Hour Volume:	1062	B =	1.06%	% of Design Hour Volume
Posted Speed:	50	MC =	0.65%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) **Date:** January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) **Date:** 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: New Market Rd

Project Description: Alternative #1

Segment Description: New Market Rd/Westclox Rd to SR 29 Bypass

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 45 Number of Travel Lanes: 1	No Build (Design Year) Year: 2045 Posted Speed: 45 Number of Travel Lanes: 1	Build (Design Year) Year: 2045 Posted Speed: 50 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use LOS C	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	864	2014	959
		Med Trucks	39	91	43
		Heavy Trucks	37	87	42
		Buses	10	24	11
		Motorcycles	6	14	7
		Total	956	2230	1062
	Off-Peak Direction	Autos	600	1400	666
		Med Trucks	27	63	30
		Heavy Trucks	26	61	29
		Buses	7	16	8
		Motorcycles	4	10	5
		Total	664	1550	738
LOS C	Peak Direction	Autos	767	767	1810
		Med Trucks	35	35	82
		Heavy Trucks	33	33	79
		Buses	9	9	21
		Motorcycles	6	6	13
		Total	850	850	2005
	Off-Peak Direction	Autos	767	767	1810
		Med Trucks	35	35	82
		Heavy Trucks	33	33	79
		Buses	9	9	21
		Motorcycles	6	6	13
		Total	850	850	2005

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29
Project Description:	Alternative #1
Segment Description:	SR 29 Bypass to SR 82
Section Number:	8
Mile Post To/From:	From MP 40.861 (Approx) to MP 42.798

Existing Facility:

Year:	2017
LOS C Peak Hour Directional Volume:	850
Demand Peak Hour Volume:	956
Posted Speed:	55

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	4.08%	% of Design Hour Volume
HT =	3.92%	% of Design Hour Volume
B =	1.06%	% of Design Hour Volume
MC =	0.65%	% of Design Hour Volume

No Build Alternative (Design Year):

Year:	2045
LOS C Peak Hour Directional Volume:	850
Demand Peak Hour Volume:	2230
Posted Speed:	55

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	4.08%	% of Design Hour Volume
HT =	3.92%	% of Design Hour Volume
B =	1.06%	% of Design Hour Volume
MC =	0.65%	% of Design Hour Volume

Build Alternative (Design Year):

Year:	2045
LOS C Peak Hour Directional Volume:	2450
Demand Peak Hour Volume:	2177
Posted Speed:	60

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	4.08%	% of Design Hour Volume
HT =	3.92%	% of Design Hour Volume
B =	1.06%	% of Design Hour Volume
MC =	0.65%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) Date: January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) Date: 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29

Project Description: Alternative #1

Segment Description: SR 29 Bypass to SR 82

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 55 Number of Travel Lanes: 1	No Build (Design Year) Year: 2045 Posted Speed: 55 Number of Travel Lanes: 1	Build (Design Year) Year: 2045 Posted Speed: 60 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use LOS C	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	864	2014	1966
		Med Trucks	39	91	89
		Heavy Trucks	37	87	85
		Buses	10	24	23
		Motorcycles	6	14	14
		Total	956	2230	2177
	Off-Peak Direction	Autos	600	1400	1366
		Med Trucks	27	63	62
		Heavy Trucks	26	61	59
		Buses	7	16	16
		Motorcycles	4	10	10
		Total	664	1550	1513
LOS C	Peak Direction	Autos	767	767	2212
		Med Trucks	35	35	100
		Heavy Trucks	33	33	96
		Buses	9	9	26
		Motorcycles	6	6	16
		Total	850	850	2450
	Off-Peak Direction	Autos	767	767	2212
		Med Trucks	35	35	100
		Heavy Trucks	33	33	96
		Buses	9	9	26
		Motorcycles	6	6	16
		Total	850	850	2450

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29
Project Description:	Alternative #2
Segment Description:	Oil Well Road to Farm Worker Way
Section Number:	1
Mile Post To/From:	From MP 27.208 to MP 35.416

Existing Facility:

Year:	2017	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	850	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	291	MT =	5.08%	% of Design Hour Volume
Posted Speed:	60	HT =	2.92%	% of Design Hour Volume
		B =	3.45%	% of Design Hour Volume
		MC =	1.11%	% of Design Hour Volume

No Build Alternative (Design Year):

Year:	2045	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	850	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	785	MT =	5.08%	% of Design Hour Volume
Posted Speed:	60	HT =	2.92%	% of Design Hour Volume
		B =	3.45%	% of Design Hour Volume
		MC =	1.11%	% of Design Hour Volume

Build Alternative (Design Year):

Year:	2045	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2120	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	841	MT =	5.08%	% of Design Hour Volume
Posted Speed:	60	HT =	2.92%	% of Design Hour Volume
		B =	3.45%	% of Design Hour Volume
		MC =	1.11%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) **Date:** January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simmons (Print Name) _____ (Signature) **Date:** 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29

Project Description: Alternative #2

Segment Description: Oil Well Road to Farm Worker Way

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 60 Number of Travel Lanes: 1	No Build (Design Year) Year: 2045 Posted Speed: 60 Number of Travel Lanes: 1	Build (Design Year) Year: 2045 Posted Speed: 60 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use Demand Volumes	Use Demand Volumes	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	255	686	735
		Med Trucks	15	40	43
		Heavy Trucks	8	23	25
		Buses	10	27	29
		Motorcycles	3	9	9
		Total	291	785	841
	Off-Peak Direction	Autos	178	476	511
		Med Trucks	10	28	30
		Heavy Trucks	6	16	17
		Buses	7	19	20
		Motorcycles	2	6	6
		Total	203	545	584
LOS C	Peak Direction	Autos	744	744	1853
		Med Trucks	43	43	108
		Heavy Trucks	25	25	62
		Buses	29	29	73
		Motorcycles	9	9	24
		Total	850	850	2120
	Off-Peak Direction	Autos	744	744	1853
		Med Trucks	43	43	108
		Heavy Trucks	25	25	62
		Buses	29	29	73
		Motorcycles	9	9	24
		Total	850	850	2120

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29
Project Description:	Alternative #2
Segment Description:	Farm Worker Way to CR 846/Airport Rd
Section Number:	2
Mile Post To/From:	From MP 35.416 to MP 36.770

Existing Facility:

Year:	2017
LOS C Peak Hour Directional Volume:	915
Demand Peak Hour Volume:	462
Posted Speed:	45

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	5.08%	% of Design Hour Volume
HT =	2.92%	% of Design Hour Volume
B =	3.45%	% of Design Hour Volume
MC =	1.11%	% of Design Hour Volume

No Build Alternative (Design Year):

Year:	2045
LOS C Peak Hour Directional Volume:	915
Demand Peak Hour Volume:	1168
Posted Speed:	45

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	5.08%	% of Design Hour Volume
HT =	2.92%	% of Design Hour Volume
B =	3.45%	% of Design Hour Volume
MC =	1.11%	% of Design Hour Volume

Build Alternative (Design Year):

Year:	2045
LOS C Peak Hour Directional Volume:	1910
Demand Peak Hour Volume:	1221
Posted Speed:	45

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	5.08%	% of Design Hour Volume
HT =	2.92%	% of Design Hour Volume
B =	3.45%	% of Design Hour Volume
MC =	1.11%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) Date: January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) Date: 1/14/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29

Project Description: Alternative #2

Segment Description: Farm Worker Way to CR 846/Airport Rd

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 45 Number of Travel Lanes: 1	No Build (Design Year) Year: 2045 Posted Speed: 45 Number of Travel Lanes: 1	Build (Design Year) Year: 2045 Posted Speed: 45 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use Demand Volumes	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	405	1022	1067
		Med Trucks	23	59	62
		Heavy Trucks	13	34	36
		Buses	16	40	42
		Motorcycles	5	13	14
		Total	462	1168	1221
	Off-Peak Direction	Autos	281	710	743
		Med Trucks	16	41	43
		Heavy Trucks	9	24	25
		Buses	11	28	29
		Motorcycles	4	9	9
		Total	321	812	849
LOS C	Peak Direction	Autos	800	800	1670
		Med Trucks	46	46	97
		Heavy Trucks	27	27	56
		Buses	32	32	66
		Motorcycles	10	10	21
		Total	915	915	1910
	Off-Peak Direction	Autos	800	800	1670
		Med Trucks	46	46	97
		Heavy Trucks	27	27	56
		Buses	32	32	66
		Motorcycles	10	10	21
		Total	915	915	1910

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29 Bypass
Project Description:	Alternative #2
Segment Description:	SR 29 to Flagler St
Section Number:	3
Mile Post To/From:	N/A

Existing Facility:

Year:	2017	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	0	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	1	MT =	3.74%	% of Design Hour Volume
Posted Speed:	0	HT =	4.26%	% of Design Hour Volume
		B =	1.44%	% of Design Hour Volume
		MC =	0.49%	% of Design Hour Volume

No Build Alternative (Design Year):

Year:	2045	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	0	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	1	MT =	3.74%	% of Design Hour Volume
Posted Speed:	0	HT =	4.26%	% of Design Hour Volume
		B =	1.44%	% of Design Hour Volume
		MC =	0.49%	% of Design Hour Volume

Build Alternative (Design Year):

Year:	2045	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	1910	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	1168	MT =	3.74%	% of Design Hour Volume
Posted Speed:	50	HT =	4.26%	% of Design Hour Volume
		B =	1.44%	% of Design Hour Volume
		MC =	0.49%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) Date: January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpron (Print Name) _____ (Signature) Date: 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29 Bypass

Project Description: Alternative #2

Segment Description: SR 29 to Flagler St

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 0 Number of Travel Lanes: 0	No Build (Design Year) Year: 2045 Posted Speed: 0 Number of Travel Lanes: 0	Build (Design Year) Year: 2045 Posted Speed: 50 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use LOS C	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	-3	-3	1051
		Med Trucks	1	1	44
		Heavy Trucks	1	1	50
		Buses	1	1	17
		Motorcycles	1	1	6
		Total	1	1	1168
	Off-Peak Direction	Autos	-3	-3	731
		Med Trucks	1	1	30
		Heavy Trucks	1	1	35
		Buses	1	1	12
		Motorcycles	1	1	4
		Total	1	1	812
LOS C	Peak Direction	Autos	-4	-4	1721
		Med Trucks	1	1	71
		Heavy Trucks	1	1	81
		Buses	1	1	28
		Motorcycles	1	1	9
		Total	0	0	1910
	Off-Peak Direction	Autos	-4	-4	1721
		Med Trucks	1	1	71
		Heavy Trucks	1	1	81
		Buses	1	1	28
		Motorcycles	1	1	9
		Total	0	0	1910

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29 Bypass
Project Description:	Alternative #2
Segment Description:	Flagler St to Kissimmee St
Section Number:	4
Mile Post To/From:	N/A

Existing Facility:

Year:	2017
LOS C Peak Hour Directional Volume:	0
Demand Peak Hour Volume:	1
Posted Speed:	0

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	3.74%	% of Design Hour Volume
HT =	4.26%	% of Design Hour Volume
B =	1.44%	% of Design Hour Volume
MC =	0.49%	% of Design Hour Volume

No Build Alternative (Design Year):

Year:	2045
LOS C Peak Hour Directional Volume:	0
Demand Peak Hour Volume:	1
Posted Speed:	0

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	3.74%	% of Design Hour Volume
HT =	4.26%	% of Design Hour Volume
B =	1.44%	% of Design Hour Volume
MC =	0.49%	% of Design Hour Volume

Build Alternative (Design Year):

Year:	2045
LOS C Peak Hour Directional Volume:	1910
Demand Peak Hour Volume:	1381
Posted Speed:	60

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	3.74%	% of Design Hour Volume
HT =	4.26%	% of Design Hour Volume
B =	1.44%	% of Design Hour Volume
MC =	0.49%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: ~~Vinod Vishwanatha~~ Jorge Tolosa — Print Name / Signature — Date: January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: ~~Yleana Baez~~ Christopher Simpson — Print Name / Signature — Date: 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29 Bypass

Project Description: Alternative #2

Segment Description: Flagler St to Kissimmee St

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 0 Number of Travel Lanes: 0	No Build (Design Year) Year: 2045 Posted Speed: 0 Number of Travel Lanes: 0	Build (Design Year) Year: 2045 Posted Speed: 60 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use LOS C	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	-3	-3	1243
		Med Trucks	1	1	52
		Heavy Trucks	1	1	59
		Buses	1	1	20
		Motorcycles	1	1	7
		Total	1	1	1381
	Off-Peak Direction	Autos	-3	-3	863
		Med Trucks	1	1	36
		Heavy Trucks	1	1	41
		Buses	1	1	14
		Motorcycles	1	1	5
		Total	1	1	959
LOS C	Peak Direction	Autos	-4	-4	1721
		Med Trucks	1	1	71
		Heavy Trucks	1	1	81
		Buses	1	1	28
		Motorcycles	1	1	9
		Total	0	0	1910
	Off-Peak Direction	Autos	-4	-4	1721
		Med Trucks	1	1	71
		Heavy Trucks	1	1	81
		Buses	1	1	28
		Motorcycles	1	1	9
		Total	0	0	1910

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29 Bypass
Project Description:	Alternative #2
Segment Description:	Kissimmee St to SR 29
Section Number:	5
Mile Post To/From:	N/A

Existing Facility:

Year:	2017	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	0	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	1	MT =	3.74%	% of Design Hour Volume
Posted Speed:	0	HT =	4.26%	% of Design Hour Volume
		B =	1.44%	% of Design Hour Volume
		MC =	0.49%	% of Design Hour Volume

No Build Alternative (Design Year):

Year:	2045	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	0	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	1	MT =	3.74%	% of Design Hour Volume
Posted Speed:	0	HT =	4.26%	% of Design Hour Volume
		B =	1.44%	% of Design Hour Volume
		MC =	0.49%	% of Design Hour Volume

Build Alternative (Design Year):

Year:	2045	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	1910	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	1221	MT =	3.74%	% of Design Hour Volume
Posted Speed:	50	HT =	4.26%	% of Design Hour Volume
		B =	1.44%	% of Design Hour Volume
		MC =	0.49%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) Date: January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) Date: 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29 Bypass

Project Description: Alternative #2

Segment Description: Kissimmee St to SR 29

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 0 Number of Travel Lanes: 0	No Build (Design Year) Year: 2045 Posted Speed: 0 Number of Travel Lanes: 0	Build (Design Year) Year: 2045 Posted Speed: 50 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use LOS C	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	-3	-3	1099
		Med Trucks	1	1	46
		Heavy Trucks	1	1	52
		Buses	1	1	18
		Motorcycles	1	1	6
		Total	1	1	1221
	Off-Peak Direction	Autos	-3	-3	765
		Med Trucks	1	1	32
		Heavy Trucks	1	1	36
		Buses	1	1	12
		Motorcycles	1	1	4
		Total	1	1	849
LOS C	Peak Direction	Autos	-4	-4	1721
		Med Trucks	1	1	71
		Heavy Trucks	1	1	81
		Buses	1	1	28
		Motorcycles	1	1	9
		Total	0	0	1910
	Off-Peak Direction	Autos	-4	-4	1721
		Med Trucks	1	1	71
		Heavy Trucks	1	1	81
		Buses	1	1	28
		Motorcycles	1	1	9
		Total	0	0	1910

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29
Project Description:	Alternative #2
Segment Description:	New Market Rd/Westclox to SR 29 Bypass
Section Number:	6
Mile Post To/From:	From MP 39.761 to 40.861 (Approx.)

Existing Facility:		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2017	Tpeak =	8.00%	% of Design Hour Volume
		MT =	4.08%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	850	HT =	3.92%	% of Design Hour Volume
Demand Peak Hour Volume:	956	B =	1.06%	% of Design Hour Volume
Posted Speed:	45	MC =	0.65%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2045	Tpeak =	8.00%	% of Design Hour Volume
		MT =	4.08%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	850	HT =	3.92%	% of Design Hour Volume
Demand Peak Hour Volume:	2230	B =	1.06%	% of Design Hour Volume
Posted Speed:	45	MC =	0.65%	% of Design Hour Volume

Build Alternative (Design Year):		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2045	Tpeak =	8.00%	% of Design Hour Volume
		MT =	4.08%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	2005	HT =	3.92%	% of Design Hour Volume
Demand Peak Hour Volume:	1009	B =	1.06%	% of Design Hour Volume
Posted Speed:	50	MC =	0.65%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) Date: January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) Date: 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29

Project Description: Alternative #2

Segment Description: New Market Rd/Westclox to SR 29 Bypass

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 45 Number of Travel Lanes: 1	No Build (Design Year) Year: 2045 Posted Speed: 45 Number of Travel Lanes: 1	Build (Design Year) Year: 2045 Posted Speed: 50 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use LOS C	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	864	2014	910
		Med Trucks	39	91	41
		Heavy Trucks	37	87	40
		Buses	10	24	11
		Motorcycles	6	14	7
		Total	956	2230	1009
	Off-Peak Direction	Autos	600	1400	633
		Med Trucks	27	63	29
		Heavy Trucks	26	61	27
		Buses	7	16	7
		Motorcycles	4	10	5
		Total	664	1550	701
LOS C	Peak Direction	Autos	767	767	1810
		Med Trucks	35	35	82
		Heavy Trucks	33	33	79
		Buses	9	9	21
		Motorcycles	6	6	13
		Total	850	850	2005
	Off-Peak Direction	Autos	767	767	1810
		Med Trucks	35	35	82
		Heavy Trucks	33	33	79
		Buses	9	9	21
		Motorcycles	6	6	13
		Total	850	850	2005

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	New Market Rd
Project Description:	Alternative #2
Segment Description:	SR 29 Bypass to SR 82
Section Number:	7
Mile Post To/From:	From MP 40.861 (Approx.) to MP 42.798

Existing Facility:

Year:	2017	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	850	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	956	MT =	4.08%	% of Design Hour Volume
Posted Speed:	55	HT =	3.92%	% of Design Hour Volume
		B =	1.06%	% of Design Hour Volume
		MC =	0.65%	% of Design Hour Volume

No Build Alternative (Design Year):

Year:	2045	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	850	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	2230	MT =	4.08%	% of Design Hour Volume
Posted Speed:	55	HT =	3.92%	% of Design Hour Volume
		B =	1.06%	% of Design Hour Volume
		MC =	0.65%	% of Design Hour Volume

Build Alternative (Design Year):

Year:	2045	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2450	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	2177	MT =	4.08%	% of Design Hour Volume
Posted Speed:	60	HT =	3.92%	% of Design Hour Volume
		B =	1.06%	% of Design Hour Volume
		MC =	0.65%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) Date: January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) Date: 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: New Market Rd

Project Description: Alternative #2

Segment Description: SR 29 Bypass to SR 82

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 55 Number of Travel Lanes: 1	No Build (Design Year) Year: 2045 Posted Speed: 55 Number of Travel Lanes: 1	Build (Design Year) Year: 2045 Posted Speed: 60 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use LOS C	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	864	2014	1966
		Med Trucks	39	91	89
		Heavy Trucks	37	87	85
		Buses	10	24	23
		Motorcycles	6	14	14
		Total	956	2230	2177
	Off-Peak Direction	Autos	600	1400	1366
		Med Trucks	27	63	62
		Heavy Trucks	26	61	59
		Buses	7	16	16
		Motorcycles	4	10	10
		Total	664	1550	1513
LOS C	Peak Direction	Autos	767	767	2212
		Med Trucks	35	35	100
		Heavy Trucks	33	33	96
		Buses	9	9	26
		Motorcycles	6	6	16
		Total	850	850	2450
	Off-Peak Direction	Autos	767	767	2212
		Med Trucks	35	35	100
		Heavy Trucks	33	33	96
		Buses	9	9	26
		Motorcycles	6	6	16
		Total	850	850	2450

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29
Project Description:	Alternative #2R
Segment Description:	Oil Well Road to Farm Worker Way
Section Number:	1
Mile Post To/From:	From MP 27.208 to MP 33.416

Existing Facility:

Year:	2017
LOS C Peak Hour Directional Volume:	850
Demand Peak Hour Volume:	291
Posted Speed:	60

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	5.08%	% of Design Hour Volume
HT =	2.92%	% of Design Hour Volume
B =	3.45%	% of Design Hour Volume
MC =	1.11%	% of Design Hour Volume

No Build Alternative (Design Year):

Year:	2045
LOS C Peak Hour Directional Volume:	850
Demand Peak Hour Volume:	785
Posted Speed:	60

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	5.08%	% of Design Hour Volume
HT =	2.92%	% of Design Hour Volume
B =	3.45%	% of Design Hour Volume
MC =	1.11%	% of Design Hour Volume

Build Alternative (Design Year):

Year:	2045
LOS C Peak Hour Directional Volume:	2120
Demand Peak Hour Volume:	841
Posted Speed:	60

D =	59.00%	%
T24 =	16.00%	% of 24 Hour Volume
Tpeak =	8.00%	% of Design Hour Volume
MT =	5.08%	% of Design Hour Volume
HT =	2.92%	% of Design Hour Volume
B =	3.45%	% of Design Hour Volume
MC =	1.11%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) Date: January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) Date: 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29

Project Description: Alternative #2R

Segment Description: Oil Well Road to Farm Worker Way

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 60 Number of Travel Lanes: 1	No Build (Design Year) Year: 2045 Posted Speed: 60 Number of Travel Lanes: 1	Build (Design Year) Year: 2045 Posted Speed: 60 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use Demand Volumes	Use Demand Volumes	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	255	686	735
		Med Trucks	15	40	43
		Heavy Trucks	8	23	25
		Buses	10	27	29
		Motorcycles	3	9	9
		Total	291	785	841
	Off-Peak Direction	Autos	178	476	511
		Med Trucks	10	28	30
		Heavy Trucks	6	16	17
		Buses	7	19	20
		Motorcycles	2	6	6
		Total	203	545	584
LOS C	Peak Direction	Autos	744	744	1853
		Med Trucks	43	43	108
		Heavy Trucks	25	25	62
		Buses	29	29	73
		Motorcycles	9	9	24
		Total	850	850	2120
	Off-Peak Direction	Autos	744	744	1853
		Med Trucks	43	43	108
		Heavy Trucks	25	25	62
		Buses	29	29	73
		Motorcycles	9	9	24
		Total	850	850	2120

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29
Project Description:	Alternative #2R
Segment Description:	Farm Worker Way to CR 846/Airport Rd
Section Number:	2
Mile Post To/From:	From MP 35.416 to MP 36.770

Existing Facility:		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2017	Tpeak =	8.00%	% of Design Hour Volume
		MT =	5.08%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	915	HT =	2.92%	% of Design Hour Volume
Demand Peak Hour Volume:	462	B =	3.45%	% of Design Hour Volume
Posted Speed:	45	MC =	1.11%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2045	Tpeak =	8.00%	% of Design Hour Volume
		MT =	5.08%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	915	HT =	2.92%	% of Design Hour Volume
Demand Peak Hour Volume:	1168	B =	3.45%	% of Design Hour Volume
Posted Speed:	45	MC =	1.11%	% of Design Hour Volume

Build Alternative (Design Year):		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2045	Tpeak =	8.00%	% of Design Hour Volume
		MT =	5.08%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	1910	HT =	2.92%	% of Design Hour Volume
Demand Peak Hour Volume:	1221	B =	3.45%	% of Design Hour Volume
Posted Speed:	50	MC =	1.11%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) **Date:** January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) **Date:** 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29

Project Description: Alternative #2R

Segment Description: Farm Worker Way to CR 846/Airport Rd

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 45 Number of Travel Lanes: 1	No Build (Design Year) Year: 2045 Posted Speed: 45 Number of Travel Lanes: 1	Build (Design Year) Year: 2045 Posted Speed: 50 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use Demand Volumes	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	405	1022	1067
		Med Trucks	23	59	62
		Heavy Trucks	13	34	36
		Buses	16	40	42
		Motorcycles	5	13	14
		Total	462	1168	1221
	Off-Peak Direction	Autos	281	710	743
		Med Trucks	16	41	43
		Heavy Trucks	9	24	25
		Buses	11	28	29
		Motorcycles	4	9	9
		Total	321	812	849
LOS C	Peak Direction	Autos	800	800	1670
		Med Trucks	46	46	97
		Heavy Trucks	27	27	56
		Buses	32	32	66
		Motorcycles	10	10	21
		Total	915	915	1910
	Off-Peak Direction	Autos	800	800	1670
		Med Trucks	46	46	97
		Heavy Trucks	27	27	56
		Buses	32	32	66
		Motorcycles	10	10	21
		Total	915	915	1910

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29 Bypass
Project Description:	Alternative #2R
Segment Description:	SR 29 to Alachua
Section Number:	3
Mile Post To/From:	N/A

Existing Facility:

Year:	2017	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	0	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	1	MT =	3.74%	% of Design Hour Volume
Posted Speed:	0	HT =	4.26%	% of Design Hour Volume
		B =	1.44%	% of Design Hour Volume
		MC =	0.49%	% of Design Hour Volume

No Build Alternative (Design Year):

Year:	2045	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	0	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	1	MT =	3.74%	% of Design Hour Volume
Posted Speed:	0	HT =	4.26%	% of Design Hour Volume
		B =	1.44%	% of Design Hour Volume
		MC =	0.49%	% of Design Hour Volume

Build Alternative (Design Year):

Year:	2045	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	1910	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	903	MT =	3.74%	% of Design Hour Volume
Posted Speed:	50	HT =	4.26%	% of Design Hour Volume
		B =	1.44%	% of Design Hour Volume
		MC =	0.49%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) Date: January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) Date: 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29 Bypass

Project Description: Alternative #2R

Segment Description: SR 29 to Alachua

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 0 Number of Travel Lanes: 0	No Build (Design Year) Year: 2045 Posted Speed: 0 Number of Travel Lanes: 0	Build (Design Year) Year: 2045 Posted Speed: 50 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use LOS C	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	-3	-3	814
		Med Trucks	1	1	34
		Heavy Trucks	1	1	38
		Buses	1	1	13
		Motorcycles	1	1	4
		Total	1	1	903
	Off-Peak Direction	Autos	-3	-3	565
		Med Trucks	1	1	23
		Heavy Trucks	1	1	27
		Buses	1	1	9
		Motorcycles	1	1	3
		Total	1	1	627
LOS C	Peak Direction	Autos	-4	-4	1721
		Med Trucks	1	1	71
		Heavy Trucks	1	1	81
		Buses	1	1	28
		Motorcycles	1	1	9
		Total	0	0	1910
	Off-Peak Direction	Autos	-4	-4	1721
		Med Trucks	1	1	71
		Heavy Trucks	1	1	81
		Buses	1	1	28
		Motorcycles	1	1	9
		Total	0	0	1910

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29 Bypass
Project Description:	Alternative #2R
Segment Description:	Alachua St to SR 29
Section Number:	4
Mile Post To/From:	N/A

Existing Facility:		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2017	Tpeak =	8.00%	% of Design Hour Volume
		MT =	3.74%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	0	HT =	4.26%	% of Design Hour Volume
Demand Peak Hour Volume:	1	B =	1.44%	% of Design Hour Volume
Posted Speed:	0	MC =	0.49%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2045	Tpeak =	8.00%	% of Design Hour Volume
		MT =	3.74%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	0	HT =	4.26%	% of Design Hour Volume
Demand Peak Hour Volume:	1	B =	1.44%	% of Design Hour Volume
Posted Speed:	0	MC =	0.49%	% of Design Hour Volume

Build Alternative (Design Year):		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2045	Tpeak =	8.00%	% of Design Hour Volume
		MT =	3.74%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	1910	HT =	4.26%	% of Design Hour Volume
Demand Peak Hour Volume:	743	B =	1.44%	% of Design Hour Volume
Posted Speed:	50	MC =	0.49%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) Date: January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) Date: 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29 Bypass

Project Description: Alternative #2R

Segment Description: Alachua St to SR 29

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 0 Number of Travel Lanes: 0	No Build (Design Year) Year: 2045 Posted Speed: 0 Number of Travel Lanes: 0	Build (Design Year) Year: 2045 Posted Speed: 50 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use LOS C	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	-3	-3	668
		Med Trucks	1	1	28
		Heavy Trucks	1	1	32
		Buses	1	1	11
		Motorcycles	1	1	4
		Total	1	1	743
	Off-Peak Direction	Autos	-3	-3	466
		Med Trucks	1	1	19
		Heavy Trucks	1	1	22
		Buses	1	1	7
		Motorcycles	1	1	3
		Total	1	1	517
LOS C	Peak Direction	Autos	-4	-4	1721
		Med Trucks	1	1	71
		Heavy Trucks	1	1	81
		Buses	1	1	28
		Motorcycles	1	1	9
		Total	0	0	1910
	Off-Peak Direction	Autos	-4	-4	1721
		Med Trucks	1	1	71
		Heavy Trucks	1	1	81
		Buses	1	1	28
		Motorcycles	1	1	9
		Total	0	0	1910

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29
Project Description:	Alternative #2R
Segment Description:	New Market/Westclox to SR 29 Bypass
Section Number:	5
Mile Post To/From:	From MP 39.761 to MP 40.861 (Approx.)

Existing Facility:		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2017	Tpeak =	8.00%	% of Design Hour Volume
		MT =	4.08%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	850	HT =	3.92%	% of Design Hour Volume
Demand Peak Hour Volume:	956	B =	1.06%	% of Design Hour Volume
Posted Speed:	45	MC =	0.65%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2045	Tpeak =	8.00%	% of Design Hour Volume
		MT =	4.08%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	850	HT =	3.92%	% of Design Hour Volume
Demand Peak Hour Volume:	2230	B =	1.06%	% of Design Hour Volume
Posted Speed:	45	MC =	0.65%	% of Design Hour Volume

Build Alternative (Design Year):		D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
Year:	2045	Tpeak =	8.00%	% of Design Hour Volume
		MT =	4.08%	% of Design Hour Volume
LOS C Peak Hour Directional Volume:	2005	HT =	3.92%	% of Design Hour Volume
Demand Peak Hour Volume:	1487	B =	1.06%	% of Design Hour Volume
Posted Speed:	50	MC =	0.65%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa _____ Date: January 12, 2018
Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson _____ Date: 1/16/2018
Print Name Signature

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29

Project Description: Alternative #2R

Segment Description: New Market Rd to to SR 29 Bypass

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 45 Number of Travel Lanes: 1	No Build (Design Year) Year: 2045 Posted Speed: 45 Number of Travel Lanes: 1	Build (Design Year) Year: 2045 Posted Speed: 50 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use LOS C	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	864	2014	1342
		Med Trucks	39	91	61
		Heavy Trucks	37	87	58
		Buses	10	24	16
		Motorcycles	6	14	10
		Total	956	2230	1487
	Off-Peak Direction	Autos	600	1400	933
		Med Trucks	27	63	42
		Heavy Trucks	26	61	40
		Buses	7	16	11
		Motorcycles	4	10	7
		Total	664	1550	1033
LOS C	Peak Direction	Autos	767	767	1810
		Med Trucks	35	35	82
		Heavy Trucks	33	33	79
		Buses	9	9	21
		Motorcycles	6	6	13
		Total	850	850	2005
	Off-Peak Direction	Autos	767	767	1810
		Med Trucks	35	35	82
		Heavy Trucks	33	33	79
		Buses	9	9	21
		Motorcycles	6	6	13
		Total	850	850	2005

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s):	
FPID Number(s):	417540-1
State/Federal Route No.:	
Road Name:	SR 29
Project Description:	Alternative #2R
Segment Description:	SR 29 Bypass to SR 82
Section Number:	6
Mile Post To/From:	From MP 40.861 (Approx.) to MP 42.798

Existing Facility:

Year:	2017	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	850	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	956	MT =	4.08%	% of Design Hour Volume
Posted Speed:	55	HT =	3.92%	% of Design Hour Volume
		B =	1.06%	% of Design Hour Volume
		MC =	0.65%	% of Design Hour Volume

No Build Alternative (Design Year):

Year:	2045	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	850	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	2230	MT =	4.08%	% of Design Hour Volume
Posted Speed:	55	HT =	3.92%	% of Design Hour Volume
		B =	1.06%	% of Design Hour Volume
		MC =	0.65%	% of Design Hour Volume

Build Alternative (Design Year):

Year:	2045	D =	59.00%	%
		T24 =	16.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	2450	Tpeak =	8.00%	% of Design Hour Volume
Demand Peak Hour Volume:	2177	MT =	4.08%	% of Design Hour Volume
Posted Speed:	60	HT =	3.92%	% of Design Hour Volume
		B =	1.06%	% of Design Hour Volume
		MC =	0.65%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Jorge Tolosa (Print Name) _____ (Signature) **Date:** January 12, 2018

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson (Print Name) _____ (Signature) **Date:** 1/16/2018

FDOT TRAFFIC DATA FOR NOISE STUDIES - DETAILED OUTPUT

FPID Number(s): 417540-1

Road Name: SR 29

Project Description: Alternative #2R

Segment Description: SR 29 Bypass to SR 82

Note: Data sheets are to be completed for each segment having a change in traffic parameters (i.e., volume posted speed, typical section)

Demand Peak Hour/LOS C	Peak or Off-Peak Direction	Vehicle Type	Existing Year: 2017 Posted Speed: 55 Number of Travel Lanes: 1	No Build (Design Year) Year: 2045 Posted Speed: 55 Number of Travel Lanes: 1	Build (Design Year) Year: 2045 Posted Speed: 60 Number of Travel Lanes: 2
			Number of Vehicles	Number of Vehicles	Number of Vehicles
See Columns to Right > for Which Volumes To Use (Demand or LOS C)			Use LOS C	Use LOS C	Use Demand Volumes
Demand Peak Hour	Peak Direction	Autos	864	2014	1966
		Med Trucks	39	91	89
		Heavy Trucks	37	87	85
		Buses	10	24	23
		Motorcycles	6	14	14
		Total	956	2230	2177
	Off-Peak Direction	Autos	600	1400	1366
		Med Trucks	27	63	62
		Heavy Trucks	26	61	59
		Buses	7	16	16
		Motorcycles	4	10	10
		Total	664	1550	1513
LOS C	Peak Direction	Autos	767	767	2212
		Med Trucks	35	35	100
		Heavy Trucks	33	33	96
		Buses	9	9	26
		Motorcycles	6	6	16
		Total	850	850	2450
	Off-Peak Direction	Autos	767	767	2212
		Med Trucks	35	35	100
		Heavy Trucks	33	33	96
		Buses	9	9	26
		Motorcycles	6	6	16
		Total	850	850	2450

APPENDIX C

Typical Noise Levels

Common Outdoor Activities	Noise Level dB(A)	Common Indoor Activities
	110	Rock band
Jet flyover at 1,000 feet		
	100	
Gas lawnmower at 3 feet		
	90	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area daytime		
Gas lawnmower at 100 feet	**70**	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	**60**	
		Large business office
Quiet urban daytime	**50**	Dishwasher in next room
Quiet urban nighttime	**40**	Theater, large conference room (background)
Quiet suburban nighttime		
	30	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcast/recording studio
	10	
	0	

APPENDIX D

Validation and Ambient Levels Documentation

NOISE MEASUREMENT DATA SHEET (Validation)

Measurements Taken By: Wayne Arner and Cristina Schoonard Date: 4/25/18
Time Study Started: 1315 Time Study Ended: 1406
Project Identification:
Financial Project ID: 417540 1 22 01
Project Location: SR 29 – Oil Well Road to SR 82

Site Identification: Farm Worker Way at Farm Worker Village (distance equivalent to first row of houses)
Validation Runs 1 - 3

Weather Conditions:
Sky: Clear X Partly Cloudy Cloudy Other
Temperature 84F Wind Speed 6.0 mph Wind Direction NW Humidity 56%
Equipment:
Sound Level Meter:
Type: Larson Davis LxT Serial Number(s): 1843
Did you check the battery? Yes X No
Calibration Readings: Start 114.0 End 113.9
Response Settings: Fast Slow X
Weighting: A X Other
Calibrator:
Type: Larson Davis CAL 200 Serial Number: 14375
Did you check the battery? Yes X No

TRAFFIC DATA

Roadway Identification	SR 29 Northbound		SR 29 Southbound	
Vehicle Type	Volume (veh/hr)	Speed (mph)	Volume (veh/hr)	Speed (mph)
Autos	168-60-30	43.6-52.0-54.0	222-186-150	45.7-51.2-45.0
Medium Trucks	6-6-0	40.0-62.0-NA	12-30-18	56.0-46.8-38.5
Heavy Trucks	30-24-6	44.0-47.0-43.0	30-24-18	42.3-49.0-38.0
Buses	6-0-6	40.0-NA-30.0	6-6-0	56.0-46.8-NA
Motorcycles	0-0-0	NA-NA-NA	6-0-0	45.7-NA-NA
Duration	10 minute runs × 3		10 minute runs × 3	

RESULTS [dB(A)]

L_{EQ} 61.2-60.3-56.1 Lmax 80.3-74.5-68.5

Background Noise:
Major Sources: SR 29. Traffic entering/leaving Farmer Worker Village on Farm Worker Way.
Unusual Events: Flyover during run 1. Sparse/intermittent traffic during all three runs.

KB Environmental Sciences

NOISE MEASUREMENT DATA SHEET (Ambient)

Measurements Taken By: Wayne Arner and Cristina Schoonard Date: 4/25/18
Time Study Started: 1037 Time Study Ended: 1107
Project Identification:
Financial Project ID: 417540 1 22 01
Project Location: SR 29 – Oil Well Road to SR 82

Site Identification: Ambient Site #1 – Madison Ave btw Indian River St and Hendry St
A.M. measurements

Weather Conditions:
Sky: Clear X Partly Cloudy Cloudy Other
Temperature 84F Wind Speed 5.0 mph Wind Direction NW Humidity 54%
Equipment:
Sound Level Meter:
Type: Larson Davis LxT Serial Number(s): 1843
Did you check the battery? Yes X No
Calibration Readings: Start 114.0 End 114.0
Response Settings: Fast Slow X
Weighting: A X Other
Calibrator:
Type: Larson Davis CAL 200 Serial Number: 14375
Did you check the battery? Yes X No

TRAFFIC DATA

Roadway Identification				
Vehicle Type	Volume (veh/hr)	Speed (mph)	Volume (veh/hr)	Speed (mph)
Autos				
Medium Trucks				
Heavy Trucks				
Buses				
Motorcycles				
Duration				

RESULTS [dB(A)]

L_{EQ} 61.7-58.4-59.2

Background Noise: Leaves rustling in the wind, passbys on Madison Ave, traffic on New Market Road, birds, wind chimes, helicopter, and jet flyover.

KB Environmental Sciences

NOISE MEASUREMENT DATA SHEET (Ambient)

Measurements Taken By: Wayne Arner and Cristina Schoonard Date: 4/25/18
Time Study Started: 0950 Time Study Ended: 1020
Project Identification:
Financial Project ID: 417540 1 22 01
Project Location: SR 29 – Oil Well Road to SR 82

Site Identification: Ambient Site #2 – Madison Ave at Manatee St
A.M. measurements

Weather Conditions:
Sky: Clear X Partly Cloudy Cloudy Other
Temperature 82F Wind Speed 4.0 mph Wind Direction NW Humidity 62%
Equipment:
Sound Level Meter:
Type: Larson Davis LxT Serial Number(s): 1843
Did you check the battery? Yes X No
Calibration Readings: Start 114.0 End 113.9
Response Settings: Fast Slow X
Weighting: A X Other
Calibrator:
Type: Larson Davis CAL 200 Serial Number: 14375
Did you check the battery? Yes X No

TRAFFIC DATA

Roadway Identification				
Vehicle Type	Volume (veh/hr)	Speed (mph)	Volume (veh/hr)	Speed (mph)
Autos				
Medium Trucks				
Heavy Trucks				
Buses				
Motorcycles				
Duration				

RESULTS [dB(A)]

L_{EQ} 59.2-57.4-60.0

Background Noise: Sirens on SR 29, passbys on Madison Ave, rooster, birds chirping, traffic on New Market Rd, single engine piston aircraft flyovers, sirens on New Market Rd, mail truck, people talking across street, heavy truck noise on SR 29, and car with flat tire drive by.

KB Environmental Sciences

NOISE MEASUREMENT DATA SHEET (Ambient)

Measurements Taken By: Wayne Arner Date: 3/01/18
Time Study Started: 1515 Time Study Ended: 1545
Project Identification:
Financial Project ID: 417540 1 22 01
Project Location: SR 29 – Oil Well Road to SR 82

Site Identification: Ambient Site #1 – Madison Ave btw Indian River St and Hendry St
P.M. measurements

Weather Conditions:
Sky: Clear ____ Partly Cloudy X Cloudy ____ Other _____
Temperature 87F Wind Speed 7.0 mph Wind Direction NW Humidity 62%
Equipment:
Sound Level Meter:
Type: Larson Davis LxT Serial Number(s): 1843
Did you check the battery? Yes X No _____
Calibration Readings: Start 114.0 End 114.0
Response Settings: Fast _____ Slow X
Weighting: A X Other _____
Calibrator:
Type: Larson Davis CAL 200 Serial Number: 14375
Did you check the battery? Yes X No _____

TRAFFIC DATA

Roadway Identification				
Vehicle Type	Volume (veh/hr)	Speed (mph)	Volume (veh/hr)	Speed (mph)
Autos				
Medium Trucks				
Heavy Trucks				
Buses				
Motorcycles				
Duration				

RESULTS [dB(A)]

L_{EQ} 62.1-59.6-58.6

Background Noise: Sirens on New Market Rd, passbys on Madison Ave, rooster, birds chirping, traffic on New Market Rd including HTs, rustling of vegetation, aircraft flyovers, and wind chimes.

KB Environmental Sciences

NOISE MEASUREMENT DATA SHEET (Ambient)

Measurements Taken By: Wayne Arner Date: 3/01/18
Time Study Started: 1645 Time Study Ended: 1715
Project Identification:
Financial Project ID: 417540 1 22 01
Project Location: SR 29 – Oil Well Road to SR 82

Site Identification: Ambient Site #2 – Madison Ave at Manatee St
P.M. measurements

Weather Conditions:
Sky: Clear X Partly Cloudy ____ Cloudy____ Other _____
Temperature 83F Wind Speed 6.0 mph Wind Direction NW Humidity 62%
Equipment:
Sound Level Meter:
Type: Larson Davis LxT Serial Number(s): 1843
Did you check the battery? Yes X No ____
Calibration Readings: Start 114.0 End 114.0
Response Settings: Fast ____ Slow X
Weighting: A X Other____
Calibrator:
Type: Larson Davis CAL 200 Serial Number: 14375
Did you check the battery? Yes X No ____

TRAFFIC DATA

Roadway Identification				
Vehicle Type	Volume (veh/hr)	Speed (mph)	Volume (veh/hr)	Speed (mph)
Autos				
Medium Trucks				
Heavy Trucks				
Buses				
Motorcycles				
Duration				

RESULTS [dB(A)]

L_{EQ} 61.4-61.9-60.2

Background Noise: Sirens on New Market Rd, passbys on Madison Ave, rooster, birds chirping, traffic on New Market Rd including HTs, rustling of vegetation, aircraft flyovers, wind chimes, water truck passby, motorist stopped to ask questions, HT passby on Madison Ave.

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