

I-75 REST AREAS PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY

SARASOTA AND CHARLOTTE COUNTIES

DRAFT PRELIMINARY ENGINEERING REPORT

FINANCIAL PROJECT NO.: 436602-1-22-01

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1 Executive Summary

To be completed after the Public Hearing.

1.1 Commitments

To be completed after the Public Hearing.

1.2 Recommendations

To be completed after the Public Hearing.

2 Introduction

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) study to identify sites for the placement of one northbound (NB) and one southbound (SB) rest area facility along I-75.

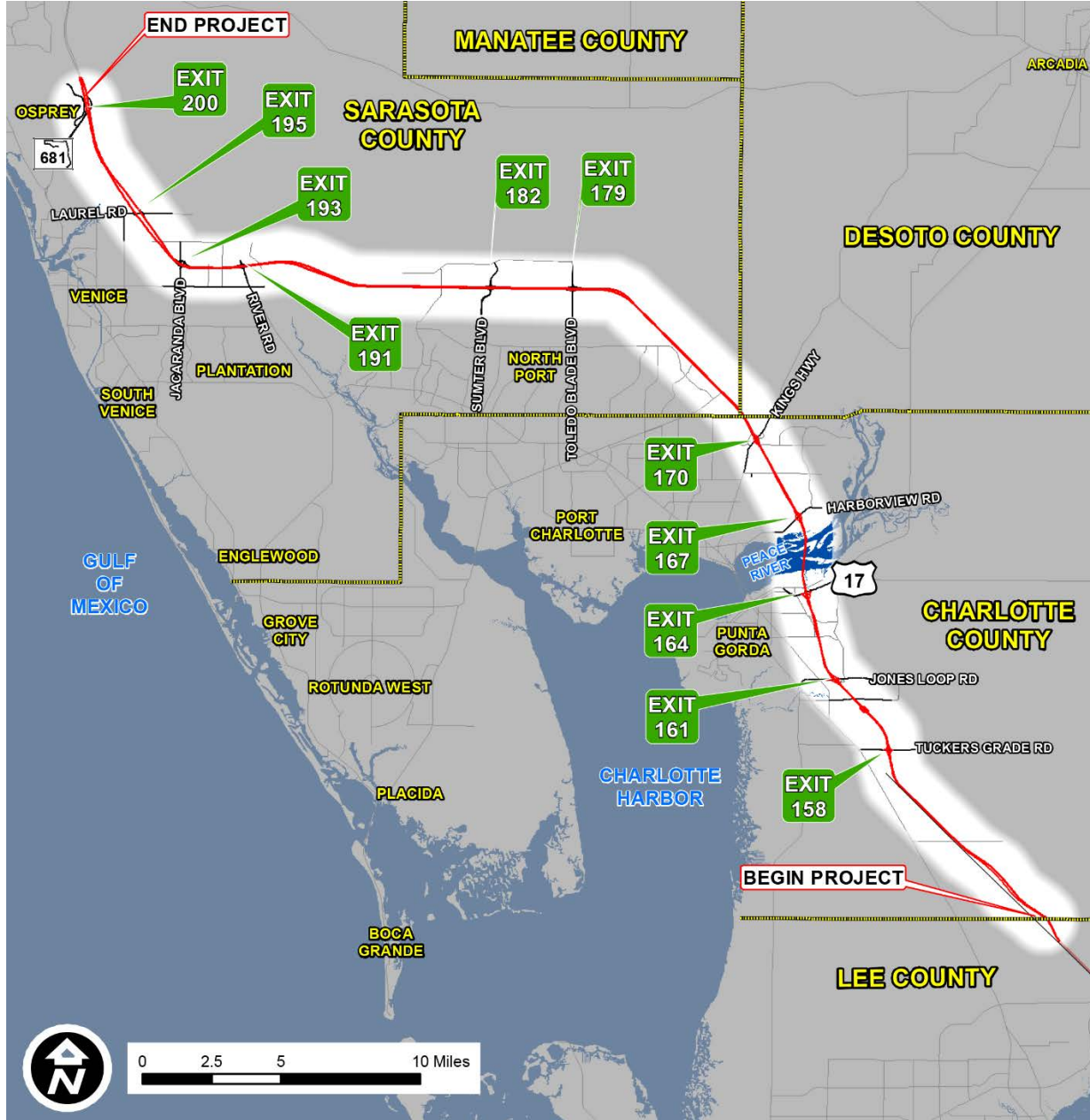
2.1 Purpose and Need

The purpose of this study is to identify the locations for the replacement of a recently closed rest area with two new rest areas (northbound and southbound). In April of 2015, the FDOT closed the Jones Loop Rest Area at exit 161 in Charlotte County. This facility was an “off-system” rest area that serviced vehicles in both directions of I-75. The closure of this facility increased the distance between existing rest area facilities.

2.2 Project Description

The study limits extend from the Charlotte/Lee County line north to the interchange of SR 681 and I-75, see **Figure 2-1**. The total study corridor length is approximately 51 miles (22 miles in Charlotte County and 29 miles in Sarasota County). Note that there is a very small portion (approximately 0.214 miles) of I-75 located in DeSoto County between Charlotte County and Sarasota County. For this study, this portion is included in the Sarasota County portion of the project. The project will identify two sites for new rest areas along I-75, one each in the northbound and southbound direction.

Figure 2-1: Project Location Map



3 Need for Improvement

3.1 User Benefits

I-75 (SR 93) is one of two major north-south limited access interstates that connect south Florida with the state of Georgia. As noted previously, in April of 2015, the FDOT closed the Jones Loop Rest Area at exit 161 in Charlotte County. This facility was an “off-system” rest area that serviced vehicles in both directions of I-75. The closure of this facility increased the distance between existing rest area facilities. The next closest rest area is the Lee County Rest Area, located at exit 131 on Daniel’s Parkway.

However, this site is planned for closure as it is also an “off-system” site. With the planned closure of the Lee County Rest Area, the nearest adjacent rest areas on I-75 are the Hillsborough County Rest Area, located at mile marker 238, and the Collier County Rest Area, located at mile marker 63. The distance between these two rest area facilities is approximately 175 miles. The American Association of State Highway and Transportation Officials (AASHTO) guidelines recommend rest areas should be spaced approximately a one-hour drive between appropriate stopping opportunities. At interstate speeds, this equates to approximately 70 miles between stopping opportunities. It is important to note that one set of rest areas will not meet the recommended spacing of 70 miles between the stopping opportunities. One of the considerations for the placement of the new rest area facilities will be that they are as equidistant to the existing rest area sites as possible.

3.2 Safety

The purpose of FDOT rest areas on the interstate is to provide safe rest stops for the motoring public. The rest areas provide comfort and convenience with restrooms, parking, and vending machines adjacent to the interstate. The rest areas enhance safety by providing a safe place for motorists to stop, reducing driver fatigue. Also, the rest areas can provide a site for FDOT and Florida Highway Patrol (FHP) emergency operations during disasters, such as hurricanes.

3.3 Hurricane Evacuation

I-75 provides a vital evacuation route for Florida residents living along the west coast. Providing rest stops along I-75 allow residents a safe place to stop briefly during an evacuation. Also, as noted before, the rest stop can be used as an emergency operation facility after hurricanes.

3.4 Consistency with Transportation Plans

The replacement of the rest area facilities is not listed in the Charlotte County-Punta Gorda Metropolitan Planning Organization (MPO).

4 Corridor Analysis

The proposed project involves siting and preliminary design for new rest areas on I-75 between the Charlotte/Lee County line and SR 681 in Sarasota County. Based upon the need to locate the rest areas on I-75, the only viable alternatives would be sites on this corridor within the project limits.

A three phase evaluation process was used to determine the best location for a new rest area for I-75 and was documented in the Site Selection Report dated March 2016. During the first phase, data was collected from a variety of sources to develop a preliminary base map of the I-75 corridor's existing conditions within the study's limits between the Charlotte/Lee County line and SR 681 in Sarasota County. During the second phase, an initial corridor screening was used to locate segments within the corridor with potential for a new rest area site. Next, a viable segment screening of the initial segments was conducted to determine which segments presented the best potential for a new rest area site. The following sections provide the details of each phase of the rest area location evaluation process.

4.1 Site Selection Criteria

Site selection criteria used in the evaluation process were developed to reflect the purpose and need of the study, while minimizing impacts to the corridor's existing physical and natural environment. The ideal location for a new rest area would be away from existing interchanges where travelers could access similar services. The traffic characteristics of rest areas, such as large traffic volumes and truck acceleration/deceleration, generate additional noise that can be objectionable to nearby residences. Therefore, adequate distance from residential areas was important. Finally, avoidance and minimization of impacts to potential 4(f) resources, wetlands, listed species, and the 100-year floodplain were additional important considerations. The list below summarizes the site selection criteria used to select the most viable sites:

1. Be located greater than a mile from an existing interchange
2. Avoid or minimize Section 4(f) impacts
3. Avoid or minimize proximity to existing and planned residential areas
4. Avoid or minimize impacts to wetlands
5. Avoid or minimize impacts to the 100-year floodplain
6. Avoid or minimize impacts to listed species habitat

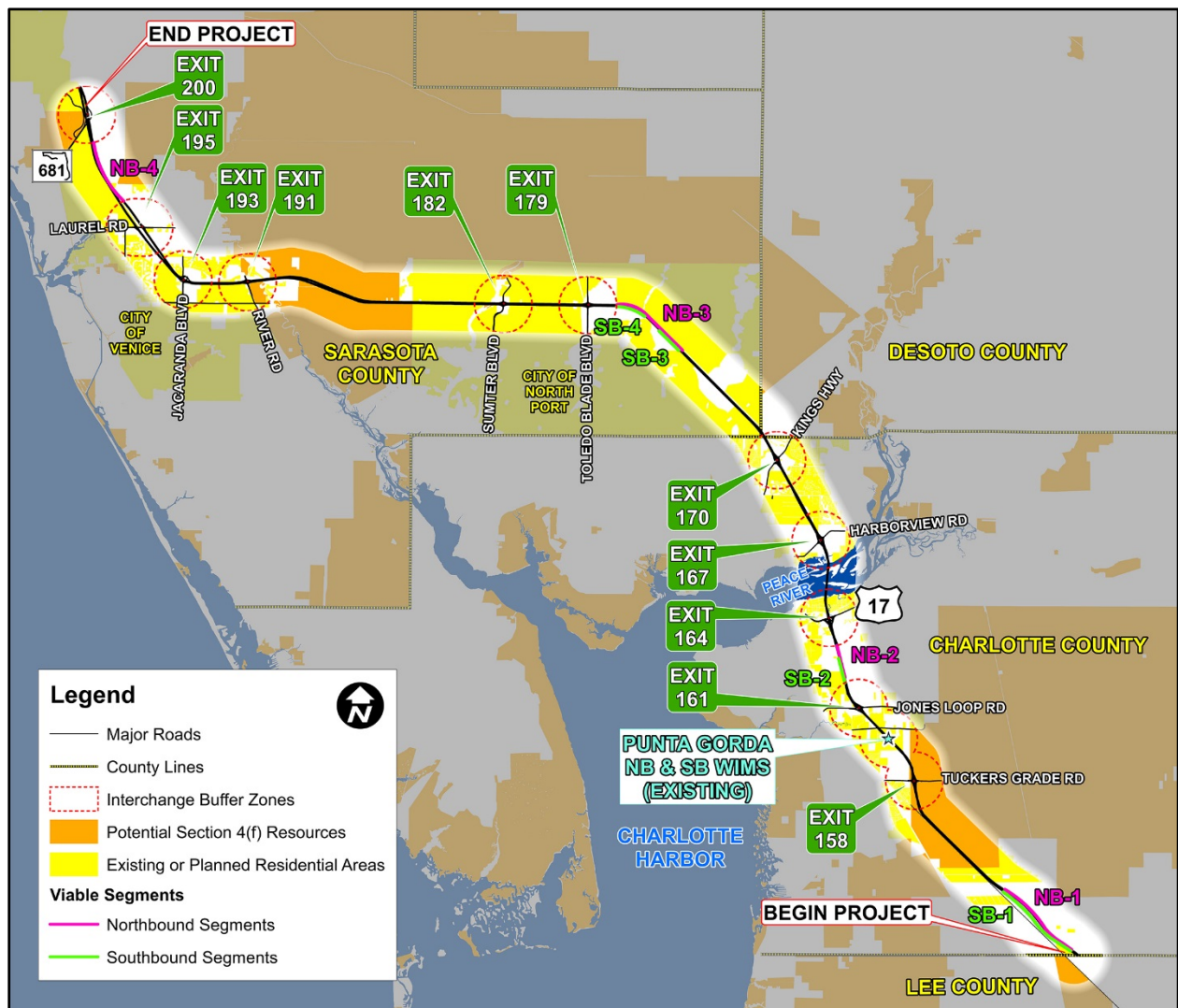
4.2 Initial Corridor Screening

The initial corridor screening was based on the first three site selection criteria: interchange locations, the location of potential Section 4(f) resources, and the location of existing and planned residential areas. This preliminary constraints map shows the constraints used in the initial corridor screening to identify ten (10) viable rest area segments. The preliminary constraints map and viable segments are listed in **Table 4-1** and shown in **Figure 4-1**. These ten viable segments were advanced into the more detailed, viable segments screening phase.

Table 4-1: Viable Rest Area Segments

NAME	LOCATION DESCRIPTION
NB-1	Charlotte County, Just north of Charlotte/Lee County Line
Punta Gorda NB WIM	Charlotte County, between Exit 158 and Exit 161
NB-2	Charlotte County, near Charlotte Co. Airport between Exit 161 and Exit 164
NB-3	Sarasota County, just east of the City of North Port between Exit 170 and Exit 179
NB-4	Sarasota County, south of SR 681 between Exit 195 and Exit 200
SB-1	Charlotte County, Just north of Charlotte/Lee County Line
Punta Gorda SB WIM	Charlotte County, between Exit 158 and Exit 161
SB-2	Charlotte County, near Charlotte Co. Airport between Exit 161 and Exit 164
SB-3	Sarasota County, just east of the City of North Port between Exit 170 and Exit 179
SB-4	Sarasota County, just east of the City of North Port between Exit 170 and Exit 179

Figure 4-1: Preliminary Constraints Map with Viable Segments



4.3 Viable Segment Corridor Screening

The ten viable segments were analyzed and evaluated for potential impacts to the 100-year floodplain, wetlands, and listed species habitat in accordance with the site selection criteria for avoidance and minimization of impacts to these environmental features. Following the Initial Corridor Screening and Viable Segments Screening, an evaluation matrix was developed to compare the natural environmental characteristics of the ten viable segments. The segments recommended for further study were selected based on the information shown in the evaluation matrix.

Table 4-2: Corridor Screening Evaluation Matrix

ENVIRONMENTAL CRITERIA	NB-1	NB WIM	NB-2	NB-3	NB-4	SB-1	SB WIM	SB-2	SB-3	SB-4
Wetlands	39%	15%	<1%	34%	25%	42%	10%	<1%	35%	31%
Floodplains	100%*	41%	78%	81%	6%	100%*	7%*	72%	43%	31%
Available Natural Habitat (FLUCFCS 300-700)	50%	23%	<1%	58%	31%	98%	<1%	<1%	98%	99%
Protected Species Observed/Known	Yes	Yes	No	Yes	No	No	No	No	Yes	No
Recommended for Further Study	No	Yes	Yes	No	Yes	No	Yes	Yes	No	No

*Percent shown represents Flood Zone D - unmapped areas

4.4 Corridor Screening Results

The four segments recommended for further study were NB WIM, NB-2, SB WIM, and SB-2. Segments NB-1, NB-3, SB-1, SB-3, and SB-4 were eliminated from further consideration due to their comparatively higher impacts to the natural environment, including wetlands and available natural habitat. Segment NB-4 was eliminated from further consideration because it does not have a viable southbound counterpart.

5 Existing Conditions

Existing conditions were assessed for the four segments recommended for further study, which include NB WIM, NB-2, SB WIM, and SB-2. Segment NB-2 had two potential rest area site locations: NB-2 and NB-2B, representing a total of five potential rest area site alternatives: two southbound (SB WIM and SB-2) and three northbound (NB WIM, NB-2, and NB-2B). The precise location and conceptual layout of the five sites is included in **Section 8.1**. All five sites are located within Charlotte County between Tuckers Grade and US 17, and the following sections describe existing conditions along this portion of I-75.

5.1 Functional Classification

I-75 is a Principal Arterial Interstate with limited access and serves as a major north-south roadway along the western portion of Florida. It connects South Florida with Georgia.

5.2 Typical Sections

I-75 is currently a four-lane divided interstate from the Charlotte/Lee County line to the N. River Road interchange in Sarasota County. However, from the Tuckers Grade interchange to the Jones Loop Road interchange, I-75 operates as a 6-lane divided interstate with two general purpose lanes and one auxiliary lane in each direction. The 4-lane portion of I-75 is currently either under construction or in design to be widened to a 6-lane section. The additional lane of traffic will be widened into the median. Typical sections for the existing 4-lane section is shown in **Figure 5-1**.

Figure 5-1: Existing 4 Lane Typical Section - I-75, Charlotte/Lee County Line to Tuckers Grade

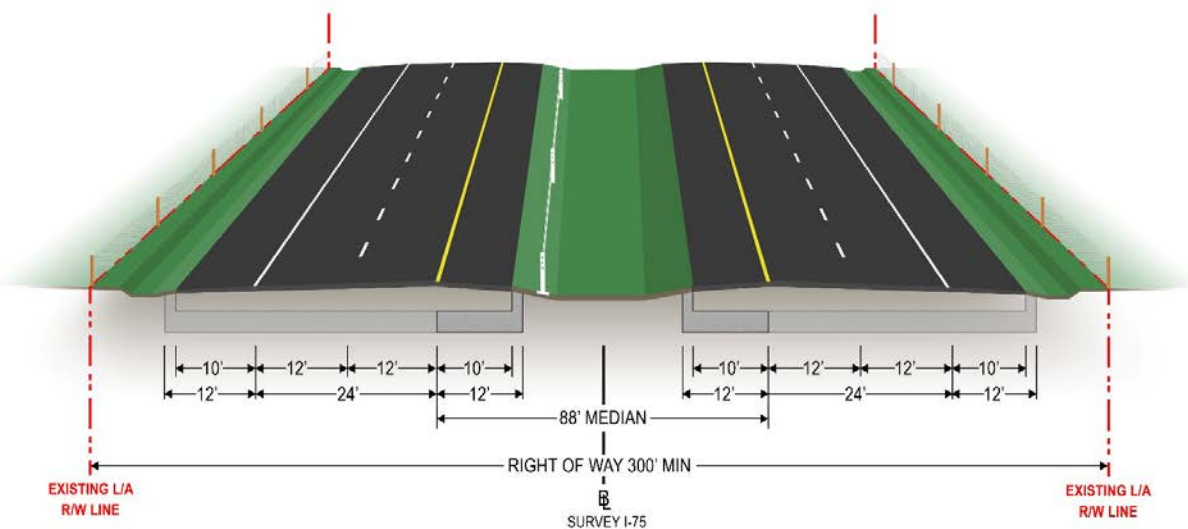
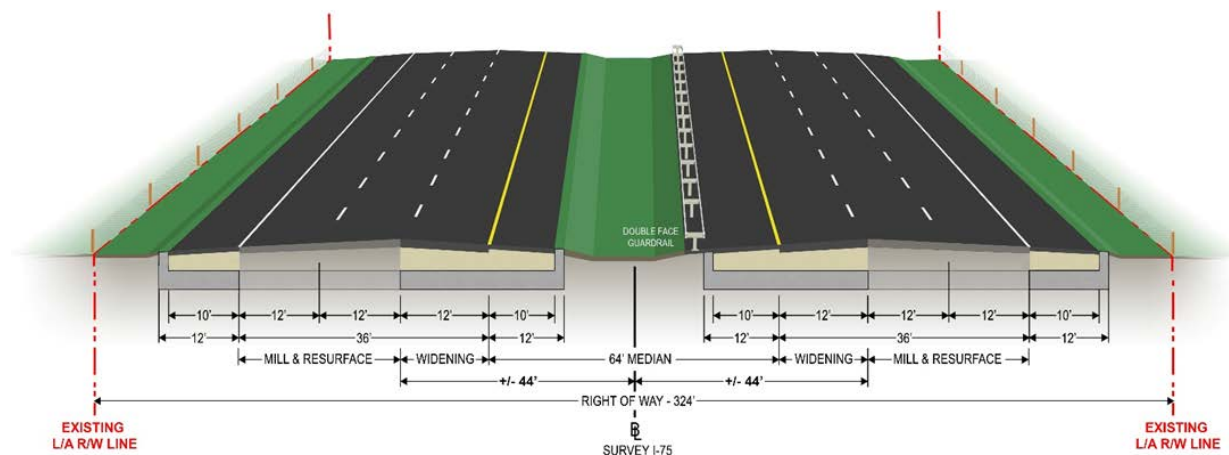


Figure 5-2: Existing 6 Lane Typical Section - I-75 between Tuckers Grade and Jones Loop Road



5.3 Pedestrian and Bicycle Facilities

Because I-75 is an interstate highway, bicycles and pedestrians are prohibited from using the facility.

5.4 Right-of-Way

The existing right-of-way within the project limits along I-75 varies, but the minimum width is approximately 250 feet.

5.5 Horizontal Alignment

I-75 has numerous horizontal curves and tangent sections through the project limits. For safety, rest areas facilities should ideally be located on tangent sections or very large radius horizontal curves. This maximizes the sight distance for vehicles as they enter and exit the rest area.

5.6 Vertical Alignment

I-75 is relatively flat through the corridor. Most vertical curves are located at overpasses at either interchanges or side roads. For safety, the rest area facilities should be located on sections with minimal or no vertical curves. This maximizes the sight distance for vehicles as they enter and exit the rest area.

5.7 Drainage

Alternative SB-2 is located approximately 1500 feet south of Airport Road. The existing land use is pasture and the future land use has been defined as commercial on the north end of the site and residential on the south end of the site. This site does not have wetlands. The majority of this site is located within FEMA Flood Zone AE (Elev. 12.0-feet) with the southern end of the site located within FEMA Flood Zone X, which is defined as an area of minimal flooding and no established base flood elevation. Alternative SB-2 is located in the Broad Creek Basin and WBID No. 2062, which is not impaired for either total phosphorus or total nitrogen.

Alternative SB-WIM is located approximately 2500 feet south of South Jones Loop Road directly west of the existing SB weigh in motion station. The existing land use is pasture and the future land use has been defined as residential. There are no wetlands located at this site. Alternative SB-WIM is located

within FEMA Flood Zone X which is defined as an area of minimal flooding and has no established base flood elevation. SB-WIM is located in the Alligator Creek Basin and WBID No. 2074 which is currently impaired for dissolved solids, but not total phosphorus or total nitrogen.

Alternative NB-WIM is located approximately 2500 feet south of South Jones Loop Road directly east of the existing NB weigh in motion station. The existing land use is pasture and the future land use has been defined as residential. There are no wetlands located at this site. The majority of the NB-WIM site is located within FEMA Flood Zone A. There is no established base flood elevation, but for the purposes of this report it has been estimated at elevation 20.7-feet. The on and off ramps to the rest area are located within FEMA Flood Zone X which is defined as an area of minimal flooding. Alternative NB-WIM is located in the Alligator Creek Basin and WBID No. 2074 which is currently impaired for dissolved solids.

Alternative NB-2 is located approximately 2000 feet north of Airport Road. The existing land use is industrial and the future land use has also been defined as industrial. There are no wetlands located at NB-2. There is a permitted floodplain compensation facility (SWFWMD Permit No. 43000164.038) located on this site and Alternative NB-2 is located within FEMA Flood Zone AE (Elev. 10.5-feet) As such impacts for fill material placed below the base flood elevation will need to be accounted for. Alternative NB-2 is located in the Broad Creek Basin and WBID No. 2062 which is not impaired for total phosphorus or total nitrogen.

Alternative NB-2B is located approximately 700 feet south of Airport Road. The existing land use is industrial and the future land use has also been defined as industrial. There are no wetlands located at this site. The majority of this rest area is located within FEMA Flood Zone AE (Elev. 12.0-feet) with the southern end of the site located within FEMA Flood Zone X which is defined as an area of minimal flooding and no established base flood elevation. Alternative NB-2B is located in the Broad Creek Basin and WBID No. 2062 which is not impaired for total phosphorus or total nitrogen.

There are several existing cross drains located within the limits of the rest area alternatives and the ramps needed to access the rest areas. Locations of these cross drains were taken from existing plans for FPID No. 413042-3-52-01 and FPID No. 413042-4-52-01. **Table 5-1** identifies each cross drain location and size as they were presented in the two previously mentioned plan sets.

Table 5-1: Existing Cross Drain Locations

REST AREA ALTERNATIVE	SIZE OF CROSS DRAIN	LOCATION OF CROSS DRAIN
NB-2	30"	1,000' north of Airport Road
NB-2	10' x 6'	1,800' north of Airport Road
NB-2	24"	600' south of Henry Street
NB-2B, SB-2	30"	4,900' north of Jones Loop Road
NB-2B, SB-2	30"	5,500' north of Jones Loop Road
NB-WIM	18"	4,600' north of Tuckers Grade
NB-WIM, SB-WIM	18"	5,600' north of Tuckers Grade
NB-WIM, SB-WIM	48"	5,600' south of S. Tuckers Grade
NB-WIM, SB-WIM	30"	3,900' south of S. Jones Loop Road
NB-WIM, SB-WIM	10' x 5'	900' south of S. Jones Loop Road
SB-WIM	30"	1,600' north of N. Jones Loop Road

5.8 Geotechnical Data

The purpose of this section is to provide preliminary geotechnical (i.e. soils) input and considerations based on a review of published data for use in selecting/evaluating the proposed alternatives. Two sources were reviewed to determine geotechnical considerations:

1. Soil information from the "Soil Survey of Charlotte County, Florida" published by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS).
2. Topographic information obtained from the "Punta Gorda, Florida", "Cleveland, Florida", and "Gilchrist, Florida" Quadrangle Maps published by the United States Geological Survey (USGS).

Based on a review of the "Soil Survey of Charlotte County, Florida" published by the USDA, there are six (6) primary soil-mapping units noted in the vicinity of the proposed rest area site alternatives. The general soil descriptions are presented in the sub-sections below, as described in the Soil Survey along with a summary table that follows. A reproduction of the USDA Vicinity Maps and USGS Quadrangle Maps is included in **Appendix A** and the soil mapping units are summarized below.

Boca fine sand makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 24 to 40 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, June, July, August, September, and October. Organic matter content in the surface horizon is about 2 percent. Non-irrigated land capability classification is 3w. This soil does not meet hydric criteria. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Immokalee sand makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, and September. Organic matter content in the surface horizon is about 3 percent. Non-irrigated land capability classification is 4w. This soil does not meet hydric criteria. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Oldsmar sand makes up 87 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, and September. Organic matter content in the surface horizon is about 4 percent. Non-irrigated land capability classification is 4w. This soil does not meet hydric criteria. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Malabar fine sand makes up 88 percent of the map unit. Slopes are 0 to 1 percent. This component is on drainage ways on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during June, July, August, September, October, and November. Organic matter content in the surface horizon is about 4 percent. Non-irrigated land capability classification is 4w. This soil meets hydric criteria. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Wabasso sand, limestone substratum makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 40 to 80 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, and September. Organic matter content in the surface horizon is about 2 percent. Non-irrigated land capability classification is 3w. This soil does not meet hydric criteria. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Smyrna fine sand makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of

water saturation is at 12 inches during June, July, August, and September. Organic matter content in the surface horizon is about 2 percent. Non-irrigated land capability classification is 4w. This soil does not meet hydric criteria. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Based on a review of the USGS Quadrangle Maps of “Punta Gorda, Florida”, “Cleveland, Florida”, and “Gilchrist, Florida” it appears that the natural ground surface elevations in the vicinity of the proposed rest area and weigh-in-motion sites range from approximately +10 to +25 feet National Geodetic Vertical Datum of 1929 (NGVD 29). The sites are generally flat to gently sloping. Flowing wells are also identified in the area of the weigh-in-motion station alternatives. The USGS Quadrangle Maps for the proposed alternatives are provided in **Appendix A**.

Table 5-2: Soil Survey Summary

SUMMARY OF USDA SOIL SURVEY CHARLOTTE COUNTY, FLORIDA							
USDA Map Symbol and Soil Name	Soil Classification				pH	Seasonal High Water Table	
	Depth (in)	USCS	AASHTO	Permeability (in/hr)		Depth (feet)	Months
(13) Boca	0-2	SP, SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-8.4	0.5-1.5	Jan&Feb, June-Oct
	2-25	SP, SP-SM	A-2-4, A-3	6.0 - 20.0			
	25-30	SC	A-2-4, A-2-6, A-6	0.6 - 2.0	5.1-8.4		
	30-34	Weathered Limestone		2.0 - 20.0			
(28) Immokalee	0-9	SP, SP-SM	A-3	6.0 - 20.0	3.5-6.0	0.5-1.5	June-Sept
	9-36	SP, SP-SM	A-3	6.0 - 20.0	3.5-6.0		
	36-55	SM, SP-SM	A-2-4, A-3	0.6 - 2.0	3.5-6.0		
	55-80	SP, SP-SM	A-3	6.0 - 20.0	3.5-6.0		
(33) Oldsmar	0-3	SP, SP-SM	A-3	6.0 - 20.0	3.5-7.3	0.5-1.5	June-Sept
	3-42	SP, SP-SM	A-3	6.0 - 20.0	3.5-7.3		
	42-47	SM, SP-SM	A-2-4, A-3	0.2 - 6.0	3.5-7.3		
	47-59	SC, SC-SM	A-2-4, A-2-6	0.1 - 0.2	6.1-8.4		
	59-80	SM, SP-SM	A-2-4, A-3	0.2 - 6.0	6.1-8.4		
(34) Malabar	0-5	SP, SP-SM	A-3	6.0 - 20.0	5.1-8.4	0.0-1.0	June-Nov
	5-17	SP, SP-SM	A-3	6.0 - 20.0	5.1-8.4		
	17-42	SP, SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-8.4		
	42-59	SC, SC-SM	A-2, A-4, A-6	0.1 - 0.2	5.1-8.4		
	59-80	SM, SP-SM	A-2-4, A-3	6.0 - 20.0	5.1-8.4		
(42) Wabasso, limestone substratum	0-3	SM, SP-SM	A-2-4, A-3	6.0 - 20.0	3.5-6.5	0.5-1.5	June-Sept
	3-19	SM, SP-SM	A-2-4	6.0 - 20.0	3.5-6.5		
	19-37	SM	A-2-4	0.6 - 2.0	4.5-7.3		
	37-51	SC, SC-SM, SM	A-2-4, A-2-6, A-4, A-6	0.1 - 0.2	7.4-8.4		
	51-53	Weathered Limestone		2.0 - 20.0			
(43) Smyrna	0-4	SP, SP-SM	A-2-4, A-3	6.0 - 20.0	3.5-7.3	0.5-1.5	June-Sept
	4-13	SP, SP-SM	A-2-4, A-3	6.0 - 20.0	3.5-7.3		
	13-18	SM, SP-SM	A-2-4, A-3	0.6 - 6.0	3.5-7.3		
	18-80	SP, SP-SM	A-3	6.0 - 20.0	4.5-5.5		

Near Surface clayey soils

Estimated Seasonal High Groundwater Table 0 to 1.5 feet below natural grade

Shallow weathered limestone (caprock)

5.9 Crash Data

Crash data for the project subarea was collected using *Signal Four Analytics* software. The extents of the subarea were selected geographically and the results for years 2010-2014 are displayed below in **Table 5-3** and **Table 5-4**. I-75 is classified as a *Rural Principal Arterial – Interstate* south Airport Road and as an *Urban Principal Arterial – Interstate* north of Airport Road. The crash data was divided into two segments: 1) north of Jones Loop and 2) south of Jones Loop. **Figure 5-3** displays the crash data graphically for the study area.

5.9.1 I-75 North of Jones Loop

The crash rate along mainline I-75 within the study area was 0.577 per million vehicle miles traveled, less than the statewide average of 0.791 per million vehicle miles among *Interstate Urban* facilities but greater than the statewide average of 0.389 per million vehicle miles among *Interstate Rural* facilities.

5.9.2 I-75 South of Jones Loop

The crash rate along mainline I-75 within the study area was 0.468 per million vehicle miles traveled, greater than the statewide average of 0.389 per million vehicle miles among *Interstate Rural* facilities.

5.9.3 Fatal Crashes

As displayed in **Table 5-4**, a total of six fatal crash incidents occurred in the study area between 2010 and 2014. These crashes varied widely in cause and geographic location within the project area. Of the fatal crashes, two were rear end collisions, two sideswipe, one rollover and one pedestrian related. The location of the fatal crashes can be found in **Figure 5-3**.

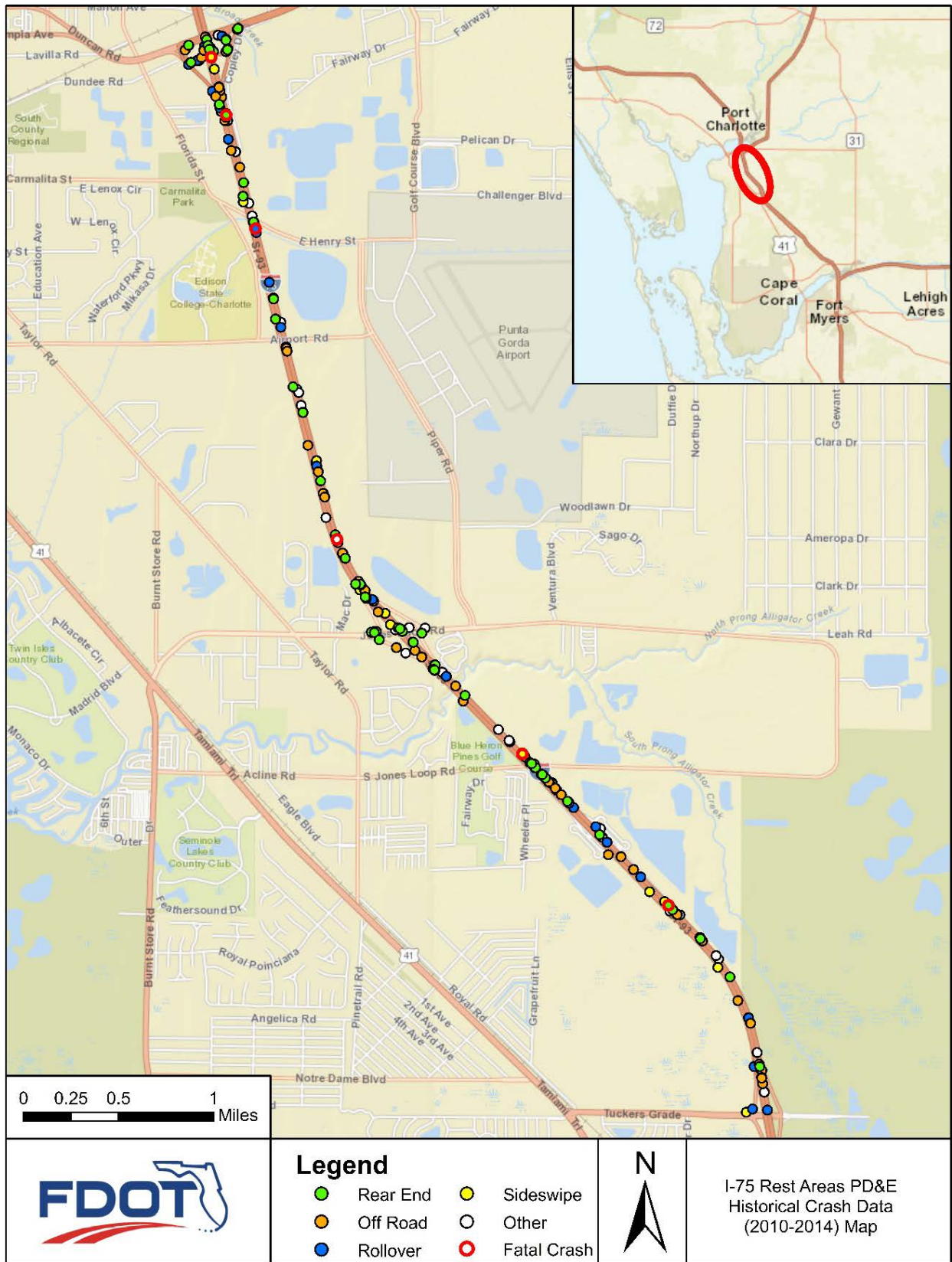
Table 5-3: Crashes by Type

Between US 17 and Jones Loop Rd		
Crash Type	Number of Occurrences	Percentage
Rear End	48	26.5%
Off Road	42	23.2%
Rollover	26	14.4%
Sideswipe	20	11.0%
Pedestrian	2	1.1%
Left Turn	1	0.6%
Angle	1	0.6%
Animal	1	0.6%
Other	33	18.2%
Unknown	7	3.9%
Total	181	100.0%
Between Jones Loop Rd and Tuckers Grade		
Crash Type	Number of Occurrences	Percentage
Rear End	28	22.4%
Off Road	34	27.2%
Rollover	17	13.6%
Sideswipe	10	8.0%
Animal	2	1.6%
Pedestrian	1	0.8%
Other	32	25.6%
Unknown	1	0.8%
Total	125	100.0%

Table 5-4: Crashes by Year

Between US 17 and Jones Loop Rd			
Year	Total Crashes	Fatal Crashes	Injury Crashes
2010	22	1	18
2011	32	2	19
2012	40	1	27
2013	36	0	12
2014	51	0	17
Between Jones Loop Rd and Tuckers Grade			
Year	Total Crashes	Fatal Crashes	Injury Crashes
2010	19	1	14
2011	25	0	27
2012	40	1	28
2013	25	0	7
2014	16	0	9

Figure 5-3: Crash Data Map



5.10 Intersections and Signalization

Access to and from I-75 is provided through interchanges with the interstate to adjacent roadways. Therefore, there are no signalized intersections on I-75. No signalized intersections are associated with on-system rest areas.

5.11 ITS

Within the project limits, there are ITS facilities located along the east side of I-75. There are several ITS variable message signs throughout the corridor.

5.12 Lighting

Within the project limits, I-75 has no lighting along the mainline. However, at all of the interchanges and at the WIM stations, high mast lighting is provided.

5.13 Utilities

Utility Agencies/Owners known to operate within the project corridor include:

- **CenturyLink**

CenturyLink owns an 84 count buried fiber optic cable and a 300 pair copper phone line along the southern Right-of-Way (ROW) of Airport Road crossing I-75. Additionally, they own a network of fiber optic and copper phone cable within the Charlotte County Airport Authority property. Coming from South Jones Loop Road CenturyLink owns a 25 and a 50 pair copper phone line that crosses I-75. Both phone cable run south within eastern Limited Access Right-of-Way (LAROW) to the existing northbound Weigh-in-Motion (WIM) truck weigh station to provide phone service. The 25 pair copper phone line continues past the northbound WIM station and crosses I-75 to provide phone service to the southbound WIM station.

- **City of Punta Gorda**

The City of Punta Gorda owns a 6" asbestos concrete water main along the southern ROW of Airport Road. The City also owns a 10" PVC water main running parallel to I-75 within the Charlotte County Airport Authority property. Approximately 1000' south of East Henry Street the City owns an 18" DIP force main that crosses I-75.

- **Comcast**

Comcast owns overhead cable television attached to FP&L's utility pole line approaching I-75 within the northern ROW of Airport Road that risers down and goes underground crossing I-75 and risers back up to continue overhead east out of the LAROW. Additionally, they own overhead cable television attached to FP&L's utility poles approaching I-75 within the northern ROW of South Jones Loop Road that risers down and underground crossing I-75 and riser's back up to continue overhead east out of the LAROW.

- **Florida Power & Light (FPL)**

Florida Power & Light owns overhead 23kV power approaching I-75 within the northern ROW of Airport Road that risers down and underground crossing I-75 and risers back up to continue overhead east out of the LAROW. FPL also owns overhead 23kV power running parallel to I-75 within the Charlotte County Airport Authority property. FPL also owns a 23kV power parallel to I-75 within private property adjacent to I-75 west of I-75 to East Henry Street, where it turns northwest away from I-75. FPL also owns 23kV power approaching I-75 within the southern ROW of South Jones Loop Road that risers down and underground running parallel to I-75 within private property adjacent to I-75 east of I-75 to the existing northbound Weigh-in-Motion (WIM) truck weigh station to provide electrical service. The 23kV buried electric continues past the northbound WIM station and crosses I-75 to provide electric service to the southbound WIM station.

- **FPL FiberNet**

FPL FiberNet owns overhead fiber optic cable attached to FP&L utility poles approaching I-75 within the northern ROW of Airport Road that risers down and underground crossing I-75 and risers back up to continue overhead east out of the LAROW. FPL FiberNet also owns overhead fiber optic cable attached to FP&L poles running parallel to I-75 within the Charlotte County Airport Authority property.

- **TECO Peoples Gas**

TECO Peoples Gas owns a 4" steel gas main within the northern ROW of Airport Road crossing I-75.

5.14 Pavement Conditions

The existing four-lane section of I-75 is currently under construction or in design to be widened to six-lanes. Therefore, when the construction is complete, I-75 will have excellent pavement conditions.

5.15 Bridges

A number of structures exist along I-75 in the project corridor. Structures that will be impacted by the recommended alternatives will be addressed separately in later sections of this report.

6 Traffic

FDOT classifies I-75 as a Rural Principal Arterial – Interstate from south of Tuckers Grade to Airport Road and as an Urban Principal Arterial – Interstate from Airport Road to north of US 17 within the project study subarea. South of the Tuckers Grade interchange, I-75 operates as a 4-lane divided interstate. From the Tuckers Grade interchange to the Jones Loop Road interchange, I-75 operates as a 6-lane divided interstate with two general purpose lanes and one auxiliary lane in each direction. From the Jones Loop Road interchange to the US 17 interchange, I-75 again operates as a 4-lane divided interstate system. From the US 17 interchange north over the Peace River Bridge I-75 operates as a 6-lane divided interstate with two general purpose lanes and one auxiliary lane in each direction. Throughout the subarea, I-75 operates at a posted speed of 70 MPH. Major interchanges within the study area include Tuckers Grade, Jones Loop Road, and US 17.

6.1 Existing Traffic Conditions

Count data was collected along ramps at each of the interstate interchanges and along the I-75 mainline from the FDOT 'Florida Transportation Information CD (2014)' (2014 FTI). The data collected included:

- Historical AADT Count Data (including K, D, and T factors)
- Peak Season Factor Category Reports
- Count Station Synopsis Reports

Based upon the traffic data described previously, existing daily and peak hour volumes were developed. The latest available (2012) hourly count data for the I-75 ramps at Jones Loop Road displayed some inconsistencies which resulted in the use of volumes extrapolated from 2009 volumes, which were the next most recent available hourly count volumes for these ramps. **Figure 6-1** shows the existing year (2014) Annual Average Daily Traffic (AADT) volumes. **Figure 6-2** shows the AM and PM peak hour volumes along the corridor which were developed based on a review of all available count data.

Figure 6-1: 2014 Annual Average Daily Traffic

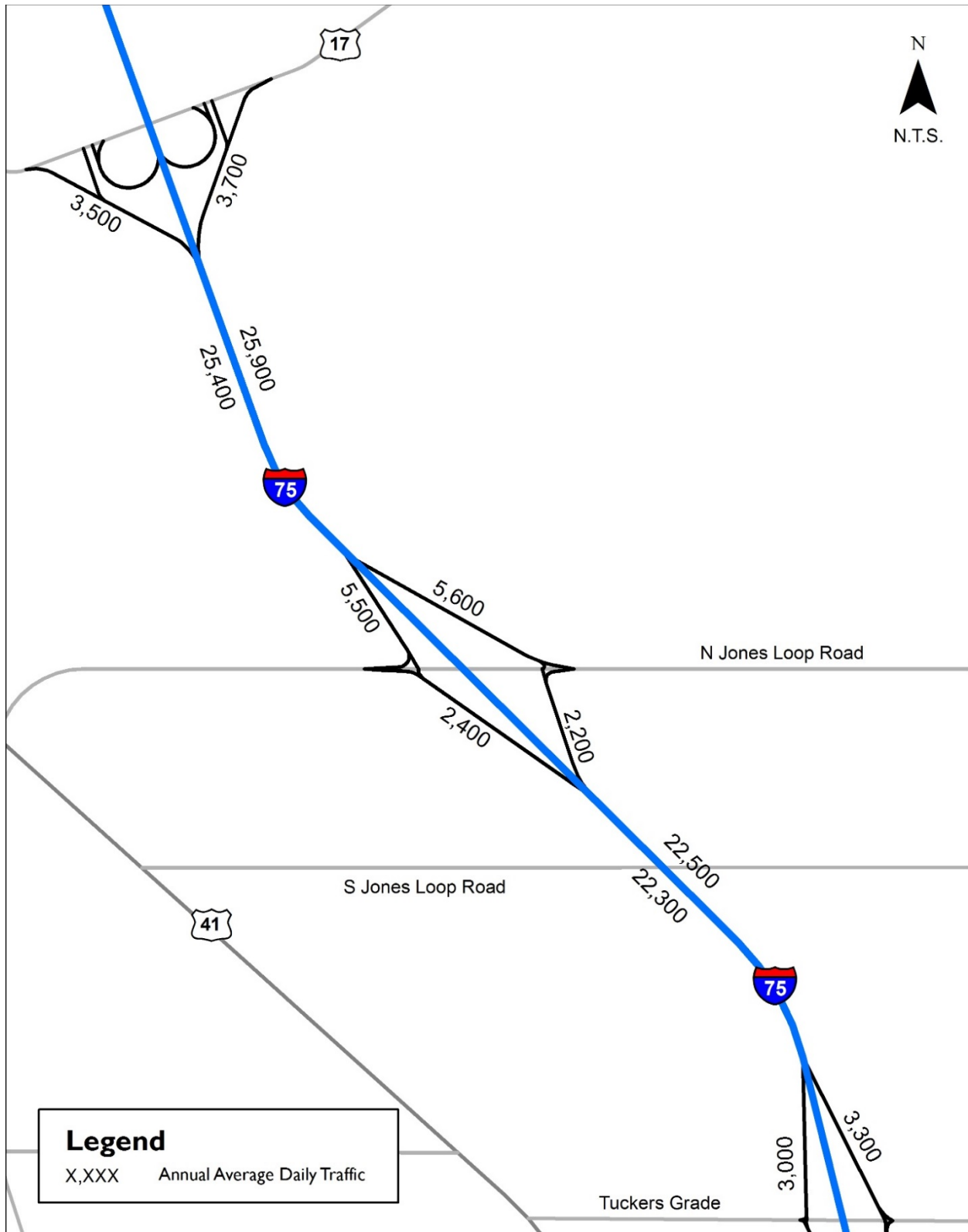
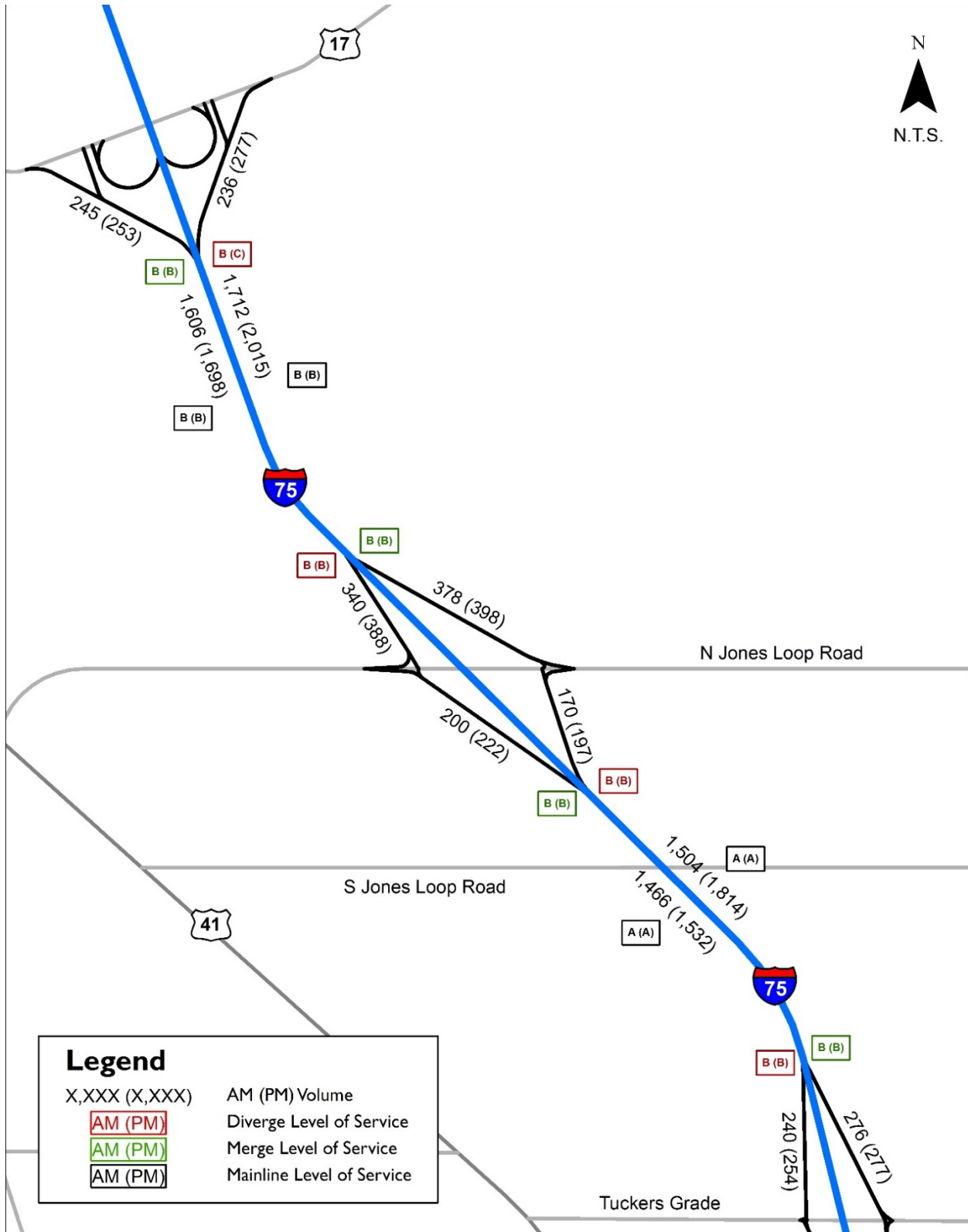


Figure 6-2: 2014 Peak Hour Volumes and LOS



6.2 Multimodal Traffic System Considerations

No multimodal traffic was considered for the rest area alternatives.

6.3 Design Traffic Factors

After a review of multiple data sources including the D1RPM, Historical Trend Data, and BEBR population forecasts, a range of growth rates have been calculated using different data sets. Four different forecasting options (two options are based on the D1RPM) were identified for this analysis:

1. Average Historic Trend Line Growth Rate
2. Three County Average BEBR Medium Forecast Growth Rate
3. Average Travel Demand Model Growth Rate
4. 2014 FTI Count to 2040 Travel Demand Model Volume Growth Rate

As the only continuous count location in the subarea, the count station between Jones Loop Road and US 17 (FTI Count Station 010350) has been used to illustrate these four methods, along with an average of the four (Option 5). The results of this comparison can be found in **Table 6-1**.

Table 6-1: Subarea Growth Rate Comparisons (Location: FTI Count Station 010350)

Option	Growth Rate Applications 2014 AADT: 50,624	AADT Calculations	
		AGR	2045
1	Average Historic Trend Line Growth Rate	1.24%	70,100
2	Three County Average BEBR Medium Forecast Growth Rate	1.35%	71,800
3	Average Travel Demand Model Growth Rate	2.44%	88,900
4	2014 FTI Count to 2040 Travel Demand Model Volume Growth Rate	1.34%	71,600
5	Average of Options 1-4	1.59%	75,600

The annual growth rates obtained from the various sources presented above range from 1.24% to 2.44% (with an average of 1.59%) as shown in **Table 6-1**. As a conservative approach, with special consideration given to the D1RPM model forecast, a project growth rate of 2.0% is recommended for traffic forecasting conducted as part of this PD&E Study. A growth rate of 2.0% produces a design year AADT volume of approximately 83,000 vehicles per day on I-75 between Jones Loop Road and US 17.

The recommended growth rate will be applied to existing traffic volumes to develop future design year 2045 demand volumes for use in the evaluation of potential rest area sites along I-75.

6.4 Future Traffic Volumes Projections

As part of this study, future year analysis was conducted at the proposed rest area ramps as well as along mainline I-75 and nearby interchange ramps to assess their effectiveness in meeting the future travel demand on the study corridor.

6.4.1 Design Year (2045) Mainline Operational Analysis

The I-75 mainline segment analysis was performed using HCS 2010 for the Build condition which includes three general use lanes in each direction from Tuckers Grade to US 17. The results for the design year are shown below in **Table 6-2**.

Table 6-2: 2045 I-75 Mainline Segment Analysis

Interstate Segment	AM		PM	
	Density (pc/ln/mi)	LOS	Density (pc/ln/mi)	LOS
NB I-75 north of Jones Loop	21.1	C	17.1	B
SB I-75 north of Jones Loop	17.1	B	21.1	C
NB I-75 south of Jones Loop	18.3	C	14.9	B
SB I-75 south of Jones Loop	14.9	B	18.3	C

6.4.2 Design Year (2045) Ramp Operational Analysis

Design Year merge and diverge analyses were conducted for the I-75 on- and off-ramps and are summarized in **Table 6-3**.

Table 6-3: 2045 I-75 Ramp Operational Analysis

Ramp	AM				PM			
	Volume	v/c Ratio	Density (pc/ln/m)	LOS	Volume	v/c Ratio	Density (pc/ln/mi)	LOS
NB I-75 On-Ramp from Tuckers Grade	505	0.24	21.8	C	413	0.20	18.3	B
NB Off-Ramp to Jones Loop	371	0.19	24.1	C	304	0.15	20.5	C
NB On-Ramp from Jones Loop	891	0.42	25.2	D	729	0.35	20.7	C
NB Off-Ramp to US17	579	0.29	28.1	D	474	0.24	24.1	C
SB I-75 On-Ramp from US17	474	0.23	20.0	C	579	0.28	24.1	C
SB I-75 Off-Ramp to Jones Loop	729	0.36	21.5	C	891	0.45	25.6	C
SB I-75 On-Ramp from Jones Loop	304	0.14	15.6	B	371	0.18	19.1	B
SB I-75 Off-Ramp to Tuckers Grade	413	0.21	16.4	B	505	0.25	25.1	C

6.4.3 Design Year (2045) I-75 Rest Area Ramp Operational Analysis

According to Chapter 13 ‘Ramp Merge and Diverge Segments’ of the HCM 2010, analyzing the diverge and merge areas of the rest areas themselves cannot be conducted using HCS because the merge and diverge segments are more than 1,500 feet downstream and upstream, respectively, from the approximate tip of the gore. The methodology utilized in place of HCS consists of comparing ramp volume to ramp capacity. The operational analysis for the rest area ramps in the design year is summarized in **Table 6-4**. Potential traffic weaving for I-75 segments between the proposed rest area ramps and adjacent interchange ramps was evaluated, but due to the sufficient distance between proposed adjacent ramp gore points (at least 3,300 feet), a detailed HCM weave analysis was not conducted.

Table 6-4: 2045 I-75 Rest Area Ramp Operational Analysis

Ramp	Capacity	AM			PM		
		Volume	Ramp v/c	Capacity Exceeded (v/c>1)?	Volume	Ramp v/c	Capacity Exceeded (v/c>1)?
NB On-Ramp	2100	438	0.21	NO	358	0.17	NO
SB On-Ramp	2100	358	0.17	NO	438	0.21	NO
NB Off-Ramp	2000	438	0.22	NO	358	0.18	NO
SB Off-Ramp	2000	358	0.18	NO	438	0.22	NO

6.5 Traffic Operations Analysis

Highway Capacity Software 2010 (HCS) was utilized to analyze ramp merge/diverge locations and mainline level of service (LOS) along the I-75 subarea corridor. FDOT LOS standards for State Highway Systems during peak travel hours are “D” in urbanized areas and “C” in rural/transitioning areas. The results of this analysis can be found in **Table 6-5** and detailed HCS Reports summarizing this analysis can be found in the *Design Traffic Technical Memorandum*.

Table 6-5: Existing (2014) Operational Analysis

I-75 Mainline and Ramp Existing (2014) Operational Analysis				
Description	Northbound		Southbound	
	AM	PM	AM	PM
I-75 Mainline – Mainline Capacity Analysis				
I-75 Mainline (From N Jones Loop Rd to US-17)	B	B	B	B
I-75 Mainline (From Tuckers Grade to N Jones Loop Rd)	A	A	A	A
Description	Directional			
Ramps – Merge/Diverge Analysis				
	AM		PM	
NB, ON-RAMP FROM CR762/TUCKERS GRADE X158	B		B	
NB, OFF-RAMP TO CR768/N JONES LOOP X161	B		B	
NB, ON-RAMP FROM CR768/N JONES LOOP X161	B		B	
NB, OFF-RAMP TO SR35/US17 X164	B		C	
SB, ON-RAMP FROM SR35/US17 X164	B		B	
SB, OFF-RAMP TO CR768/N JONES LOOP X161	B		B	
SB, ON-RAMP FROM CR 768/N JONES LOOP X161	B		B	
SB, OFF-RAMP TO CR762/TUCKERS GRADE X158	B		B	

Existing (2014) operational analyses show that both interstate mainline segments and all merge/diverge locations operate at or above the FDOT standard.

7 Design Control and Standards

Table 7-1 shows the I-75 Design Criteria used in the I-75 Rest Area PD&E Study.

Table 7-1: Roadway Design Criteria

Design Element	Design Standard	Source
Type of Facility		
Interstate 75	Rural principal arterial - interstate	FDOT Highway Data
Design Speed		
I-75 – auxiliary lanes	70 mph	FDOT PPM Table 1.9.2
Rest Area – ramps	25 mph	
Rest Area – parking area	20 mph	
Lane Width		
I-75 – auxiliary lanes	12 feet	FDOT PPM Table 2.1.1
Rest Area – ramps	15 feet (minimum)	FDOT PPM Table 2.1.3
Outside Shoulder Width		
I-75 – auxiliary lanes	10 feet (paved)	FDOT PPM, Table 2.3.1
Rest Area - ramps	4 feet (paved)	FDOT PPM, Table 2.3.1
Inside Shoulder Width		
I-75 – auxiliary lanes	N/A	
Rest Area - ramps	2 feet (paved)	FDOT PPM, Table 2.3.1
Maximum Degree of Curve		
I-75 – auxiliary lanes	3° 30' e(max) = 10%	FDOT PPM Table 2.8.3
Rest Area - ramps	24° 45' e(max) = 10%	FDOT PPM Table 2.8.3
Length of Horizontal Curve		
I-75 – auxiliary lanes	2,100 feet	FDOT PPM Table 2.8.2a
Rest Area - ramps	750 feet, 375 feet min.	FDOT PPM Table 2.8.2a
Maximum Deflection w/o Curve		
I-75 – auxiliary lanes	0° 45' 00"	FDOT PPM Table 2.8.1a
Rest Area - ramps	2° 00' 00"	FDOT PPM Table 2.8.1a
Stopping Sight Distance		
I-75 – auxiliary lanes	820 feet	FDOT PPM Table 2.7.1
Rest Area - ramps	155 feet	FDOT PPM Table 2.7.1
Superelevation Transition		
I-75 – auxiliary lanes	1:250	FDOT PPM Table 2.9.3
Rest Area - ramps	1:100	FDOT PPM Table 2.9.4
Maximum Superelevation		
I-75 – auxiliary lanes	0.10 ft/ft	FDOT PPM Table 2.9.1
Rest Area - ramps	0.12 ft/ft	AASHTO Table 3-11b
Maximum Profile Grade		
I-75 – auxiliary lanes	3%	FDOT PPM Table 2.6.1
Rest Area - ramps	7%	FDOT PPM Table 2.6.1
Minimum Length of Vertical Curve		
I-75 – auxiliary lanes	1,000 feet open highways	FDOT PPM Table 2.8.5
Rest Area – ramps		

Design Element	Design Standard	Source
Crest Vertical Curve (K-Value)		
I-75 – auxiliary lanes	506	FDOT PPM Table 2.8.5
Rest Area - ramps	19	FDOT PPM Table 2.8.5
Sag Vertical Curve (K- Value)		
I-75 – auxiliary lanes	206	FDOT PPM Table 2.8.6
Rest Area - ramps	26	FDOT PPM Table 2.8.6
Clear Zone		
I-75 – auxiliary lanes	24 feet	FDOT PPM Table 4.2.1
Rest Area - ramps	10 feet	FDOT PPM Table 4.2.1
Pavement Design		
Rest Area parking and ramps	Plain jointed concrete	FDOT Pavement Type Selection Manual

8 Site Alternatives Analysis

8.1 Alternatives Considered

At the completion of the *Site Selection Report*, four segments were recommended for further study, NB-WIM, NB-2, SB-WIM, and SB-2. The segment names were used for the alternatives that were sited in each segment. During the analysis of the four segments to identify potential sites for the rest area, segment NB-2 was identified as having two separate sites to locate a rest area. One site was called NB-2 and the second site was called NB-2B. In addition to these build alternatives, the No Build alternative was also considered.

8.1.1 No Build Alternative

The No Build alternative would not provide rest areas along I-75 in either direction within the project limits. This would create an approximate 107 miles gap on I-75 between the Lee County Rest Area, located at exit 131 on Daniel's Parkway and the Hillsborough County Rest Area, located at mile marker 238. The American Association of State Highway and Transportation Officials (AASHTO) guidelines recommend rest areas should be spaced approximately a one-hour drive between appropriate stopping opportunities. At interstate speeds, this equates to approximately 70 miles between stopping opportunities. During the course of the PD&E study, the No Build option will remain a viable alternative until the final selection is made.

8.1.2 Transportation System Management

Transportation System Management (TSM) is a program that optimizes the performance of existing infrastructure through implementation of systems, services, and projects to preserve capacity and improve the safety and reliability of the transportation system. These improvements can include minor ramp intersection improvements, increasing ramp lengths, and improve signage and pavement striping. These changes can make minor improvements to the performance of the roadways. However, these types of improvements are not applicable to this study.

8.1.3 Build Alternatives

Five build alternatives were developed from the four recommended segments evaluated in the Site Selection Report. The five build alternatives include two southbound sites (SB-2 and SB-WIM) and three northbound build alternatives (NB-2, NB-2B, and NB-WIM) advanced. Additional detail on the five build alternatives are presented in the following sections, and Conceptual Design Plans for each of the build alternatives is included in **Appendix A**.

SOUTHBOUND DIRECTION

Alternative SB-WIM

Alternative SB-WIM is located behind the existing Charlotte County southbound WIM on the west side of I-75 just south of the South Jones Loop Road overpass. The site consists of disturbed uplands and wetland areas. This alternative, seen in **Figure 8-1**, extends the auxiliary lane from the North Jones Loop Road on-ramp. This lane becomes a single exit only lane ramp to the rest area separate from the exit ramp for the existing WIM station. The single lane ramp passes underneath the bridge overpass for South Jones Loop Road. The existing pavement slope would be removed and replaced with a Schnabel wall. The lane would pass between the wall and the piers of the bridge. The single lane ramp then separates into a parking area for cars and one for RVs. For this alternative, trailer trucks would be restricted from entering the rest area. The trailer trucks would use the WIM station for a rest area. In this rest area site plan, parking for cars is located behind the rest area building. The parking for the RVs is located between the rest area building and the WIM parking. The WIM station and the rest area would be separated by a fence to prevent pedestrians from entering the WIM facility. The parking lot for the cars has 99 spaces and 5 handicapped spaces. The parking lot for the RVs has 13 spaces and 2 handicapped spaces. Two ramps leading from the separate parking areas converge into a single lane ramp. This single lane ramp then merges with the existing two lane entrance ramp for the WIM station. The existing on-ramp from the WIM station would need to be extended to provide the necessary acceleration length.

In addition to the parking for vehicles, the rest area alternative includes the main building with restrooms, vending, and security, as well as picnic shelters, a dog park and a maintenance building.

The total right-of-way impact for this alternative is approximately 13.0 acres. This includes the acreage for the site and ponds. No residential or businesses relocations are anticipated with this alternative.

Alternative SB-2

Alternative SB-2 is located on the west side of I-75 just south of Airport Road in Charlotte County. The site consists primarily of open improved pasture. This alternative, seen in **Figure 8-2**, develops an auxiliary lane north of Airport road. This lane becomes a single exit only lane ramp to the rest area. This single lane ramp then separates into two single lane ramps. One ramp is for cars and the other ramp is for trailer trucks and RVs. Based on current FDOT standards for rest area site plan, parking for cars is located between I-75 and the rest area building. The parking for the trailer trucks

and RVs is located behind the rest area building. The parking lot for the cars has 107 spaces and 5 handicapped spaces. The parking lot for the trailer trucks and RVs has 32 spaces and 2 handicapped spaces. Two ramps leading from the separate parking areas converge into a single lane ramp. This single lane ramp then merges with I-75 as a parallel entrance ramp.

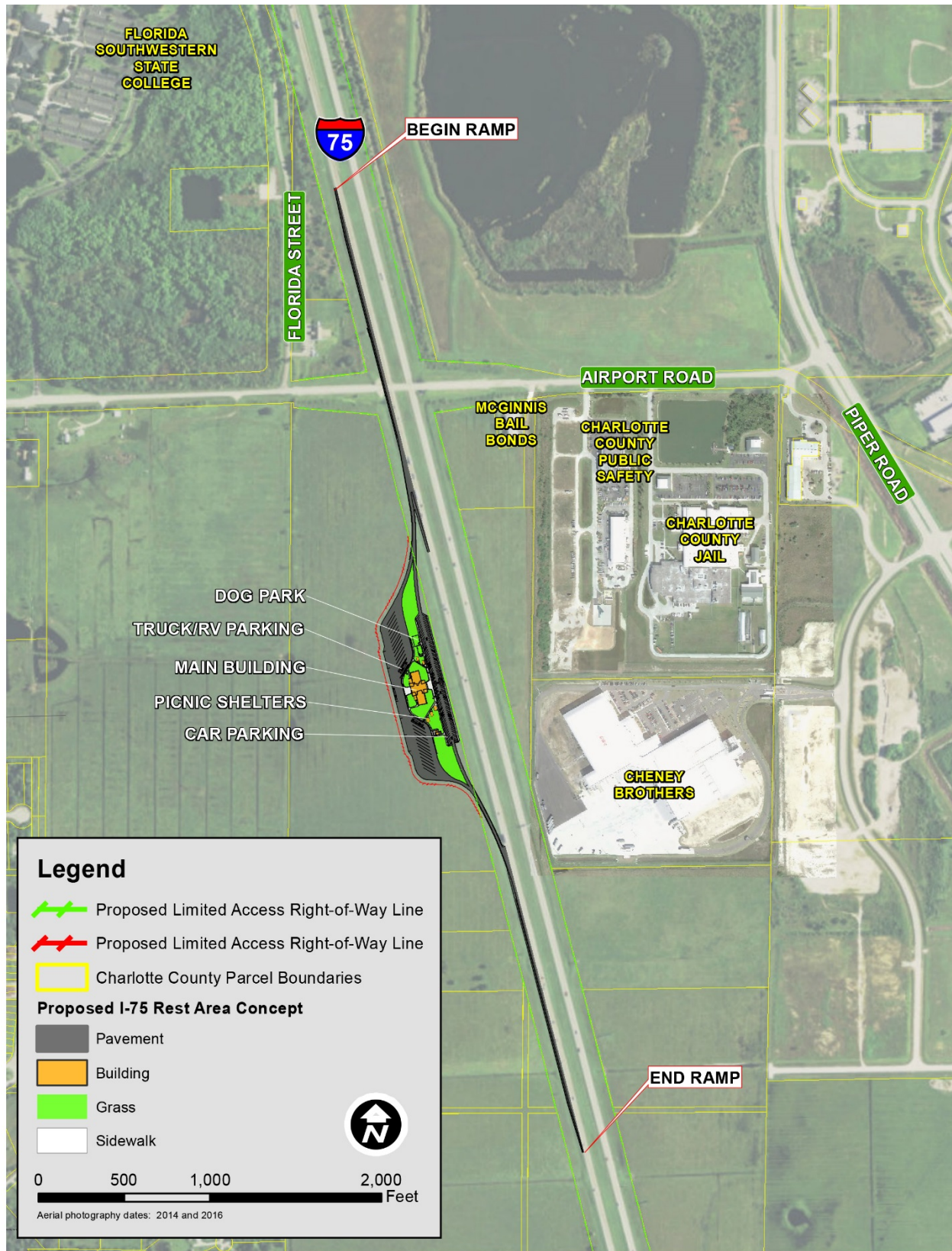
In addition to the parking for vehicles, the rest area alternative includes the main building with restrooms, vending, and security, as well as picnic shelters, a dog park and a maintenance building.

The total right-of-way impact for this alternative is approximately 17.5 acres. This includes the acreage for the site, ponds, and floodplain compensation sites. No residential or businesses relocations are anticipated with this alternative.

Figure 8-1: Alternative SB-WIM



Figure 8-2: Alternative SB-2



Alternative NB-2

Alternative NB-2 is located on the east side of I-75 just south of the Henry Street overpass in Charlotte County. The site consists almost entirely of open improved pasture. This alternative, seen in **Figure 8-3**, develops an auxiliary lane just south of Airport Road. This lane becomes a single exit only lane ramp to the rest area. This single lane ramp then separates into two single lane ramps. One ramp is for cars and the other ramp is for trailer trucks and RVs. Based on current FDOT standards for rest area site plan, parking for cars is located between I-75 and the rest area building. The parking for the trailer trucks and RVs is located behind the rest area building. The parking lot for the cars has 107 spaces and 5 handicapped spaces. The parking lot for the trailer trucks and RVs has 34 spaces and 2 handicapped spaces. Two ramps leading from the separate parking areas converge into a single lane ramp. This single lane ramp then merges with I-75 as a parallel entrance ramp.

In addition to the parking for vehicles, the rest area alternative includes the main building with restrooms, vending, and security, as well as picnic shelters, a dog park and a maintenance building.

The total right-of-way impact for this alternative is approximately 14.4 acres. This includes the acreage for the site, ponds, and floodplain compensation sites. No residential or businesses relocations are anticipated with this alternative.

Alternative NB-2B

Alternative NB-2B is located on the east side of I-75 just south of the Airport Road overpass in Charlotte County. The site consists of open improved pasture. This alternative, seen in **Figure 8-4**, develops an auxiliary lane north of North Jones Loop Road. This lane becomes a single exit only lane ramp to the rest area. This single lane ramp then separates into two single lane ramps. One ramp is for cars and the other ramp is for trailer trucks and RVs. Based on current FDOT standards for rest area site plan, parking for cars is located between I-75 and the rest area building. The parking for the trailer trucks and RVs is located behind the rest area building. The parking lot for the cars has 107 spaces and 5 handicapped spaces. The parking lot for the trailer trucks and RVs has 32 spaces and 2 handicapped spaces. Two ramps leading from the separate parking areas converge into a single lane ramp. This single lane ramp then merges with I-75 as a parallel entrance ramp.

In addition to the parking for vehicles, the rest area alternative includes the main building with restrooms, vending, and security, as well as picnic shelters, a dog park and a maintenance building.

The total right-of-way impact for this alternative is approximately 14.4 acres. This includes the acreage for the site, ponds, and floodplain compensation sites. No residential or businesses relocations are anticipated with this alternative.

Alternative NB-WIM

Alternative NB-WIM is located behind the existing Charlotte County northbound WIM on the east side of I-75 just south of the South Jones Loop Road overpass. The site consists of disturbed uplands and man-made ponds. This alternative, seen in **Figure 8-5**, develops an exit ramp in advance of the

existing exit ramp for the northbound WIM station. The single lane ramp then separates into a parking area for cars and one for RVs. For this alternative, trailer trucks would be restricted from entering the rest area. The trailer trucks would use the WIM station for a rest area. In this rest area site plan, parking for cars is located behind the rest area building. The parking for the RVs is located between the rest area building and the WIM parking. The WIM station and the rest area would be separated by a fence to prevent pedestrians from entering the WIM facility. The parking lot for the cars has 100 spaces and 5 handicapped spaces. The parking lot for the RVs has 14 spaces and 2 handicapped spaces. Two ramps leading from the separate parking areas converge into a single lane ramp. This single lane ramp then merges with the existing two lane entrance ramp for the WIM station. The existing on-ramp from the WIM station would need to be extended to provide the necessary acceleration length.

In addition to the parking for vehicles, the rest area alternative includes the main building with restrooms, vending, and security, as well as picnic shelters, a dog park and a maintenance building.

The total right-of-way impact for this alternative is approximately 17.3 acres. This includes the acreage for the site, ponds, and floodplain compensation sites. No residential or businesses relocations are anticipated with this alternative.

Figure 8-3: Alternative NB-2

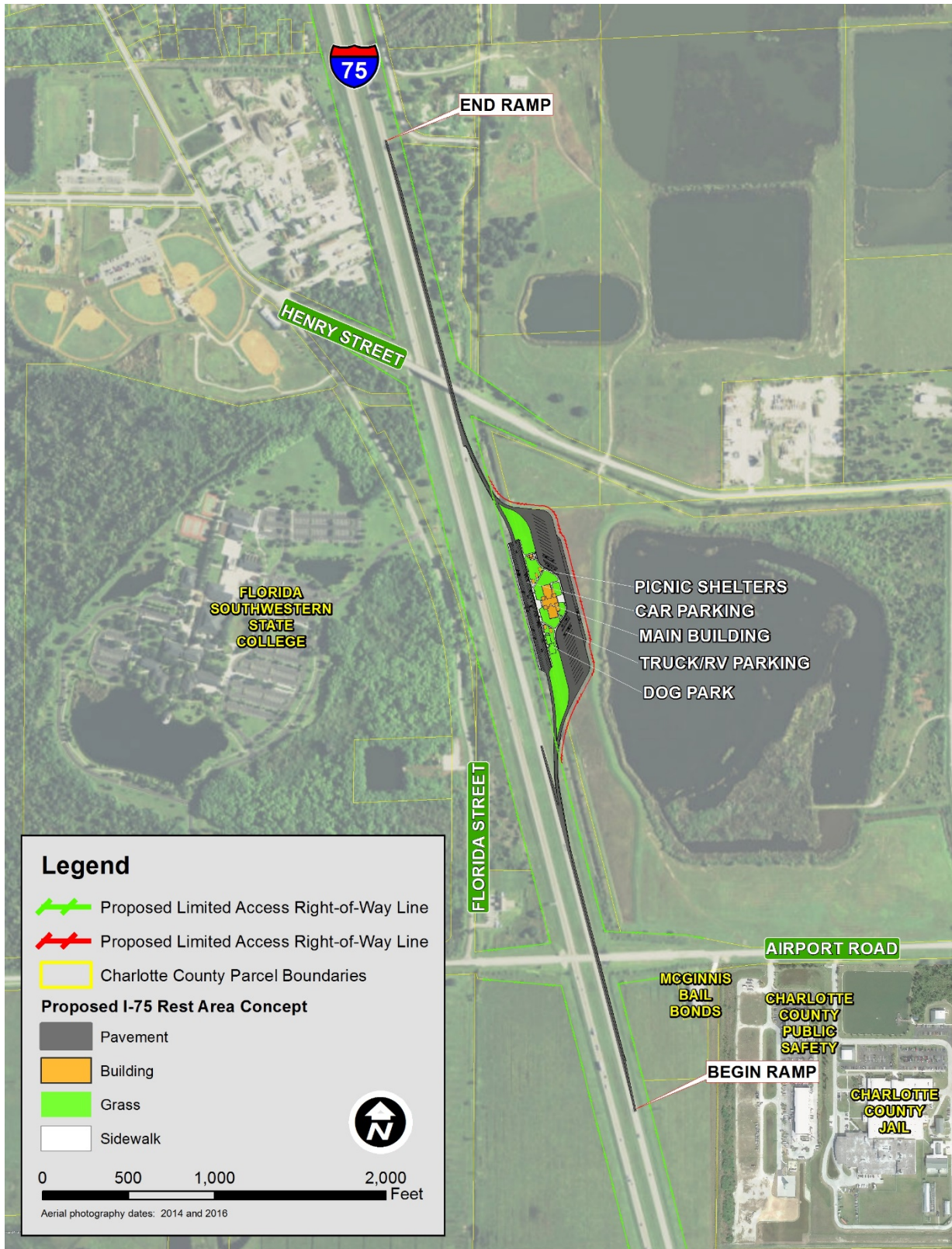


Figure 8-4: Alternative NB-2B

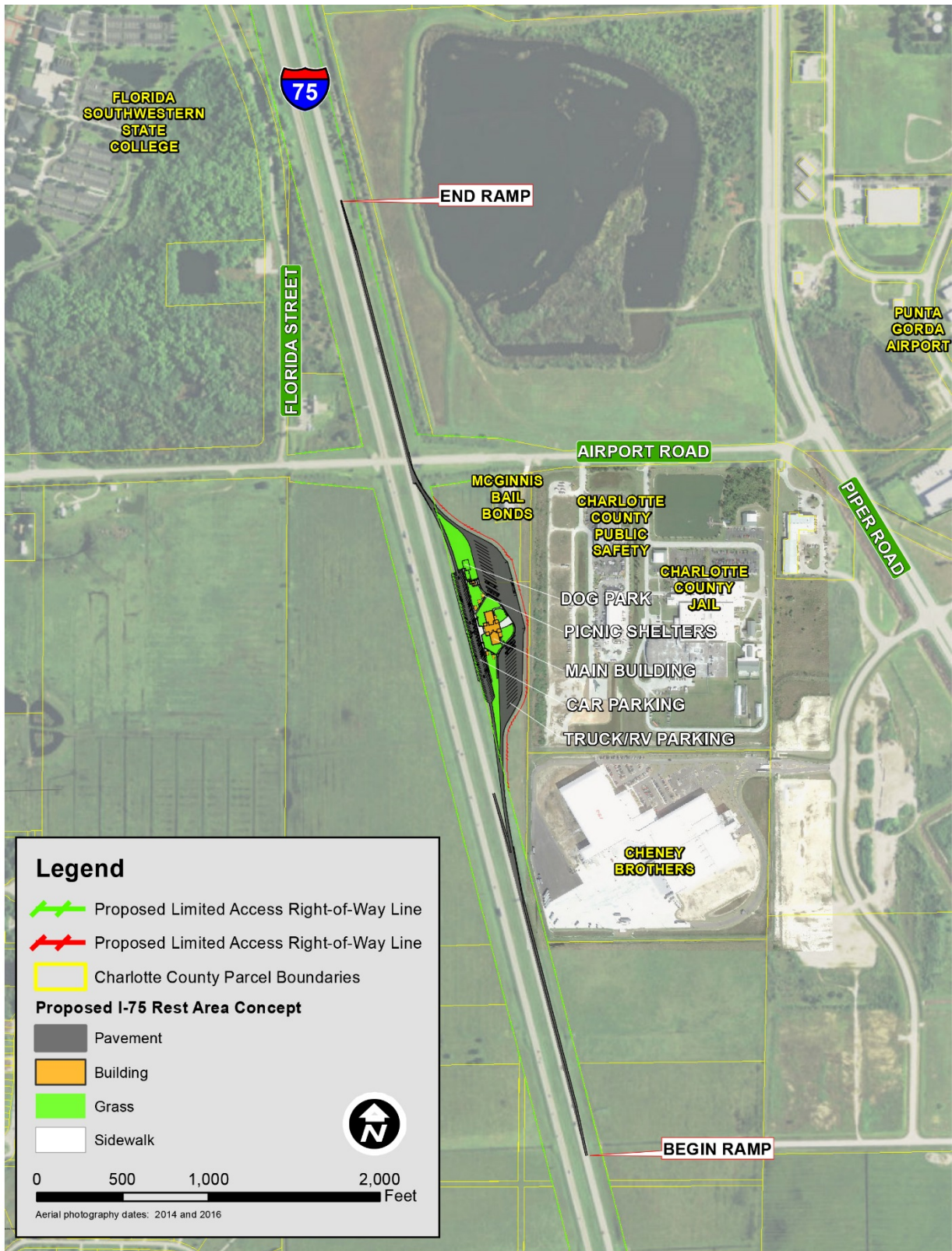
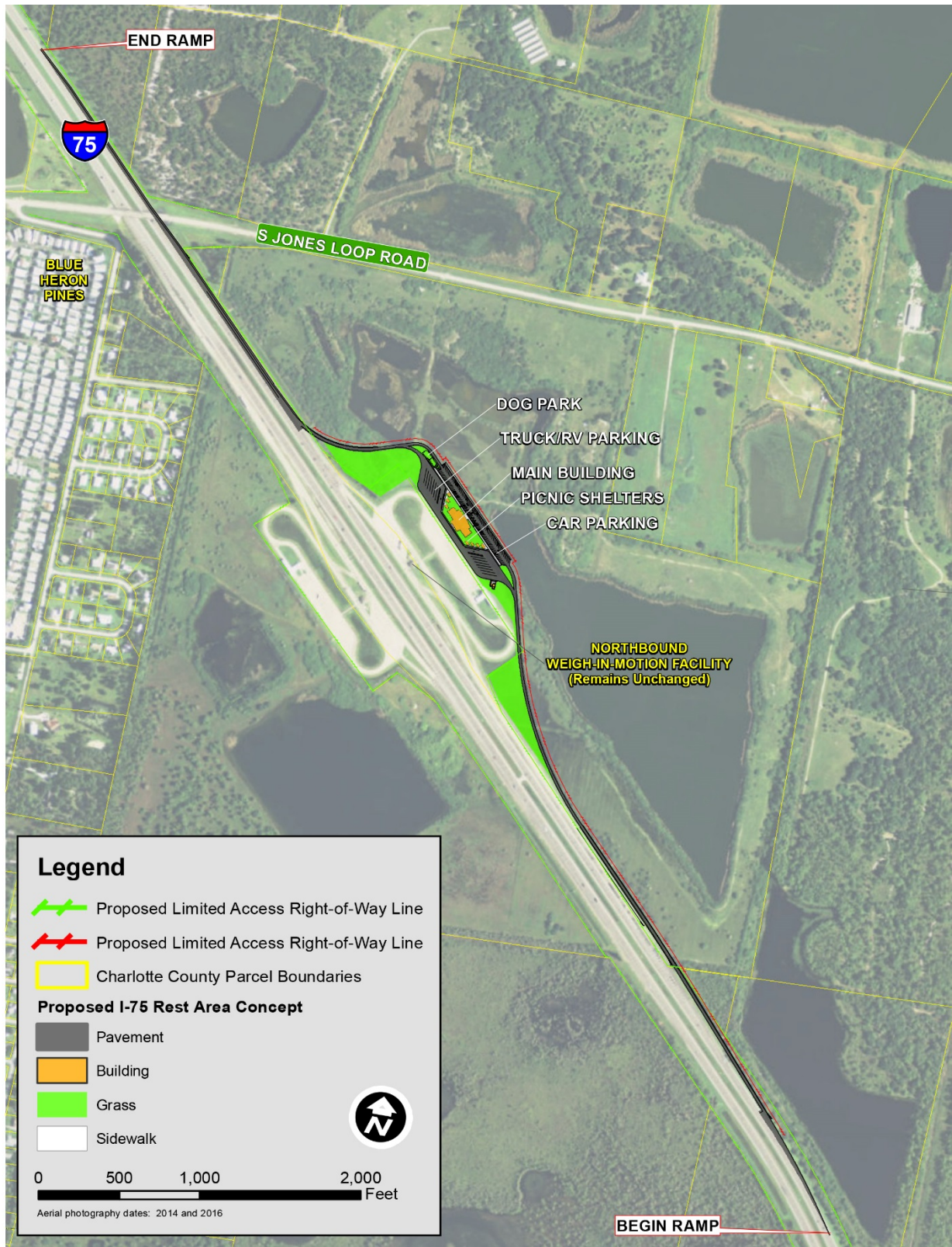


Figure 8-5: Alternative NB-WIM



8.2 Alternatives Evaluation

Each of the five build alternatives were evaluated with respect to the No Build alternative, to compare the costs, benefits, and impacts associated with each. The following sections compare the alternatives' business and residential impacts, right-of-way requirements, environmental impacts, operational impacts, impacts to existing structures, drainage requirements, and cost. The results of these comparisons are summarized in an evaluation matrix shown in **Table 8-2**.

8.2.1 Business/Residential Impacts

There are no business relocations required with the five alternatives. Alternative NB-2 does have one sign relocation and NB-2B has two sign relocations. There are no residential impacts or relocations associated with any of the five sites.

8.2.2 Right-of-Way Impacts

The acreage of ROW impacts, including the rest area site, ponds, and floodplain compensation sites ranged from 13 acres to 17.5 acres. The two alternatives with the lowest ROW acreage impacts are SB-WIM (13.0 acres) and NB-2B (14.4 acres).

8.2.3 Environmental Impacts

The five alternatives generally have a low environmental impact to archaeological, historical, potential 4(f) sites, wetlands, threatened and endangered species, and contaminated sites. Alternative SB-2 has one potential noise impact (Punta Gorda Alliance Church). Alternative SB-WIM has 23 potential noise impacts (Blue Heron Pines golf course and 22 single family residences). The rest areas sites have multiple acres of floodplain impacts, except for Alternative SB-WIM which has zero acres of impacts. The range of acreage impacts to floodplain is from 8.02 to 14.75 acres.

8.2.4 Operational Impacts

The placement of the rest area adjacent to the existing WIM stations in Alternatives SB-WIM and NB-WIM creates two operational concerns for the WIM station. The first is that the new rest area would create a by-pass of the WIM station. In order to address this issue, trucks would need to be restricted from the rest areas for these two alternatives. This would create a second operation issue, enforcing this restriction.

In terms of readily available utilities to provide electric, water, and sewer to the proposed rest areas, Alternatives SB-2, NB-2, and NB-2B are located near readily available municipal utilities allowing these sites to be served by municipal utilities. Alternatives SB-WIM and NB-WIM would be able to connect to the electrical service provided for the existing WIM stations, but would be required to install wells and septic tanks on-site.

8.2.5 Structures

There are three existing bridge sites that will be affected by the proposed five rest area alternatives. All of the affected existing bridges carry local roads over I-75 and are summarized below:

- Bridge No. 010065 – Airport Road over I-75 NB & SB
- Bridge No. 010066 – S. Jones Loop Road over I-75 NB & SB
- Bridge No. 010075 – Henry Street (Carmalite Street) Over I-75 NB & SB

Based on the latest Florida Bridge Information Report (4th Quarter 2016), the existing bridges are classified as functional and are in good condition. The sufficiency rating and health index for the existing bridges are listed in **Table 8-1**.

Table 8-1: Existing Bridge Data

BRIDGE	BRIDGE NO.	LAST INSPECTION	SUFFICIENCY RATING	HEALTH INDEX
Airport Road over I-75 (SR-93)	010065	4/23/2015	95.1	79.99
S. Jones Loop Road over I-75 (SR-93)	010066	4/29/2015	96.7	82.69
Henry St. (Carmalite St.) over I-75 (SR-93)	010075	4/23/2015	98.8	78.61

For all of the rest area alternatives considered (NB-2, NB-2B, NB-WIM, SB-WIM, & SB-2), either the I-75 roadway or the existing spill through embankment in front of the bridge end bent will be modified to accommodate the entry/exit ramps to the proposed rest areas. Since there are no impacts to the existing bridge superstructures or substructures, load rating of the existing bridges will not be required. The following is a description of the three existing bridges and the potential changes associated with the five rest area alternatives.

8.2.5.1 Airport Road Bridge over I-75 (Bridge No. 010065)

The existing Airport Road Bridge over I-75 NB and SB was constructed in 1981. The existing bridge consists of two spans at 130'-8" each for a total overall bridge length of 261'-4", measured along the centerline of Airport Road. The existing bridge has a clear roadway width of 39'-6" and an overall bridge width of 42'-3". The superstructure consists of 5 continuous steel plate girders spaced at 9'-3" with a 7.5" composite concrete bridge deck. The substructure for the existing bridge consists of two cast-in-place concrete end bents and a center multi-column pier founded on footings with 18-inch squared prestressed concrete driven piles. Based on the existing bridge plans, the vertical clearance over the I-75 NB and SB roadway is 16'-4 1/2". A photograph of the existing bridge is shown in **Figure 8-6**.

Figure 8-6: Elevation view of Airport Road Bridge over I-75 (Looking North)



Widening of the existing I-75 NB and SB roadway will be required under the Airport Road Bridge to accommodate proposed Alternatives NB-2, NB-2B, and SB-2 rest areas. For Alternative SB-2, the rest area is located on the I-75 southbound side and south of Airport Road. An additional auxiliary lane will be constructed adjacent to the existing I-75 southbound lanes under the Airport Road Bridge. For alternative NB-2, the rest area is located adjacent to I-75 NB between Henry Street and Airport Road. An additional auxiliary lane will be added to the existing I-75 NB lanes under the Airport Road Bridge to provide an exit ramp from I-75 NB to the rest area. For alternative NB-2B, the rest area is placed on the I-75 NB side and south of Airport Road. Similar to Alternative NB-2, the proposed auxiliary lane for Alternative NB-2B will accommodate the entrance ramp to merge traffic from the rest area onto the I-75 NB. For all three proposed alternatives, the existing vertical clearance over the I-75 roadway will be maintained at 16'-4 ½". Per PPM Section 2.10, minimum vertical clearance of 16'-0" is acceptable for any construction affecting existing roadway bridge clearances. Appropriate roadway barrier or guardrail will be placed in front of the existing toe of slopes in front of the end bents to satisfy FDOT minimum lateral offset requirements. **Figure 8-7** and **Figure 8-8** depict the proposed auxiliary lane added to existing I-75 NB and SB roadways for the proposed SB-2 and NB-2/NB-2B alternatives, respectively.

Figure 8-7: Proposed Roadway Work Under Airport Road Bridge - Alternative SB-2

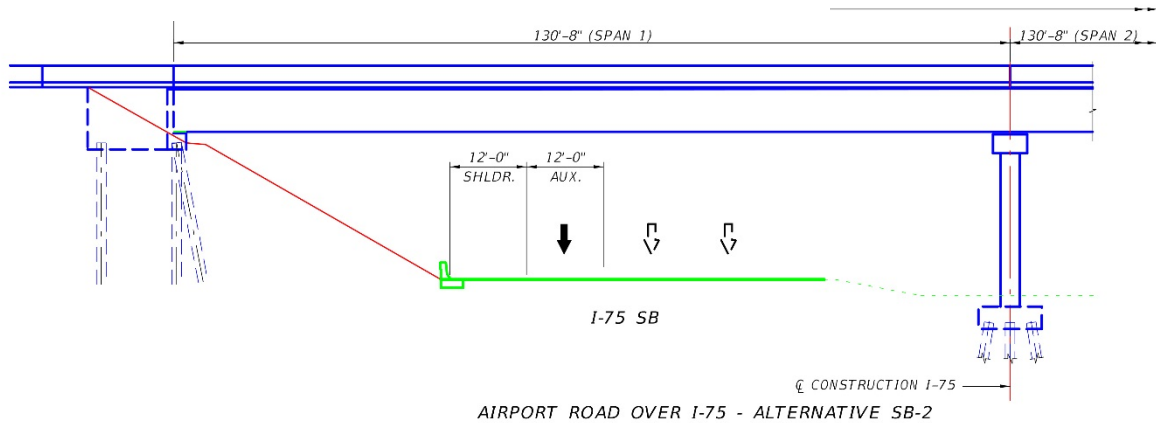
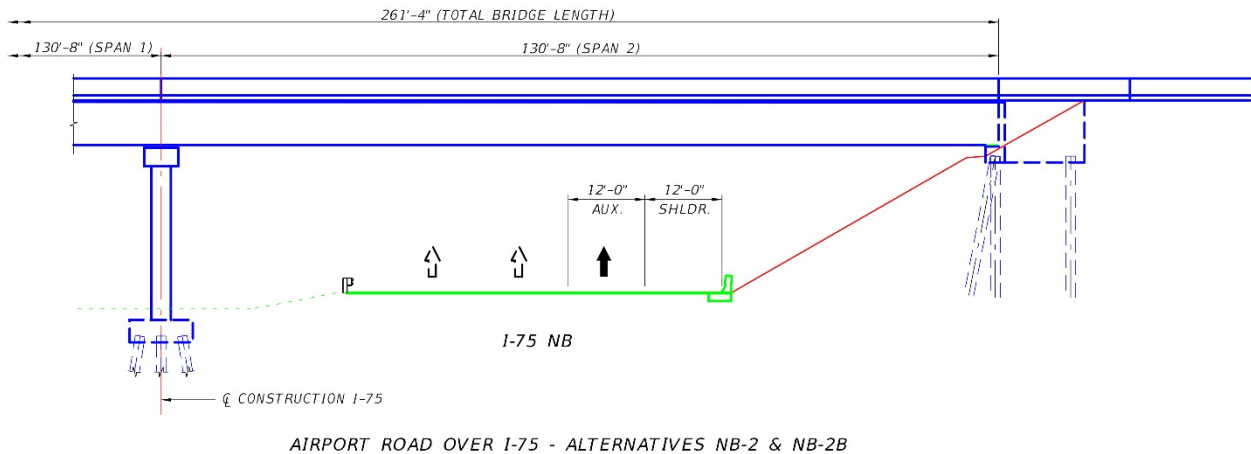


Figure 8-8: Proposed Roadway Work Under Airport Road Bridge - Alternatives NB-2/NB-2B



8.2.5.2 S. Jones Loop Road (S. SR 768) Bridge over I-75 (Bridge No. 010066)

The existing S. Jones Loop Road Bridge over I-75 NB and SB was constructed in 1981 as a 341'-10" long, four span structure. Spans 1 & 4 are single simply supported spans with a length of 40'-3", spans 2 & 3 are continuous spans with a length of 130'-8" for each span, measured along centerline of S. Jones Loop Road. The existing bridge has a clear roadway width of 39'-6" and an overall bridge width of 42'-3". The superstructure consists of 5 steel plate girders spaced at 9'-3" with a 7.5" composite concrete bridge deck. The substructure for the existing bridge consists of two cast-in-place concrete end bents and three multi-column piers on pile footings. All substructures are founded on 18" square prestressed concrete driven piles. Based on the existing bridge plans, the vertical clearance over the I-75 NB and SB roadway is 16'-5 3/8". A photograph of the existing bridge is shown in **Figure 8-9**.

Figure 8-9: Elevation View of S. Jones Loop Road Bridge over I-75 (Looking North)



Reconstruction of the existing spill through slope embankment under Span 1 will be required to accommodate the proposed rest area in Alternative SB-WIM. For Alternative NB-WIM, no reconstruction or modification will be required under the existing S. Jones Loop Road Bridge.

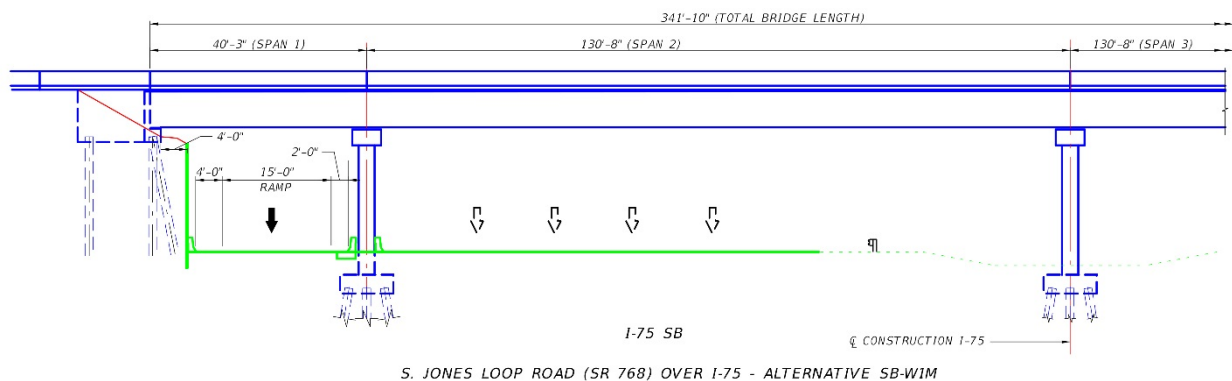
The proposed rest area site for Alternative SB-WIM will be just south of S. Jones Loop Road and located behind the existing Punta Gorda Southbound WIM. An independent single lane ramp will be constructed parallel and on the west side of existing I-75 SB traffic. This proposed ramp will carry traffic from I-75 SB to enter the rest area and extend under Span 1 of the existing bridge. A tied back bridge abutment wall is proposed in front of the existing end bent to provide room for the proposed single lane ramp. The tied back bridge abutment wall is typically comprised of soldier piles with timber lagging, soil anchors and reinforced concrete facing. Barrier walls are proposed to be constructed in front of the tied back abutment bridge wall and the existing pier 2. Since the existing pier is located within the setback distance, it is recommended that the existing pier column be evaluated for vehicular collision force per SDG Section 2.6 during final design. Pier protection per index 411 may be required for this site. The proposed minimum vertical clearance over the ramp is 16'-6". A photograph of the typical tied back bridge abutment wall is shown in **Figure 8-10**.

Figure 8-10: Photograph of Typical Tied Back Bridge Abutment Wall



For this alternative, design variations for substandard shoulder widths will be required since the proposed horizontal opening under Span 1 is approximately 21 ft (measured from gutter to gutter). The 21 ft horizontal opening can accommodate a 15 ft. single lane ramp, 4 ft outside shoulder, and 2 ft. inside shoulder. The proposed construction for this alternative is shown in **Figure 8-11** below.

Figure 8-11: Proposed Tie Back Bridge Abutment Wall - Alternative SB-WIM



The estimated construction cost for the proposed tied back bridge abutment wall is **\$298,810**. The estimated construction cost were determined from Chapter 9 of the FDOT Structure Design Guidelines and FDOT historical prices. The estimated construction costs are shown in **Table 8-2** below.

Table 8-2: Estimated Cost for Tied Back Bridge Abutment Wall

Pay Item	PAY ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
400- 4 -11	CONCRETE CLASS IV, RETAINING WALLS	CY	62	\$ 900.00	\$ 55,800.00
415- 1 -3	REINFORCING STEEL - RETAINING WALLS	LB	9300	\$ 1.00	\$ 9,300.00
451- 70	PRESTRESSED SOIL ANCHORS	EA	11	\$ 7,700.00	\$ 84,700.00
451- 70 -1	PRESTRESSED SOIL ANCHORS, PERFORMANCE TEST	EA	3	\$ 510.00	\$ 1,530.00
451- 70 -2	PRESTRESSED SOIL ANCHOR, CREEP TEST	EA	3	\$ 1,700.00	\$ 5,100.00
455- 133 -3	SHEET PILING STEEL, F&I PERMANENT	SF	4746	\$ 30.00	\$ 142,380.00

TOTAL = \$ **298,810.00**

8.2.5.3 Henry Street (Carmalite St) Bridge over I-75 (Bridge No. 010075)

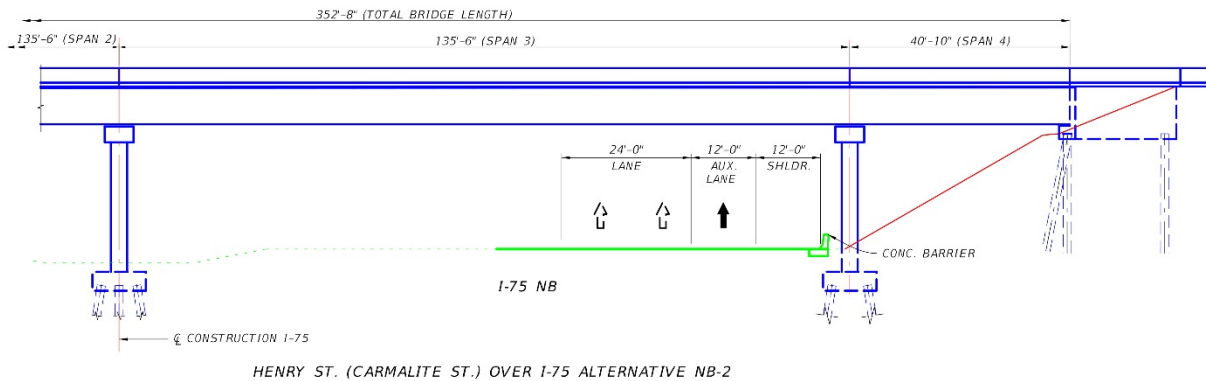
The existing Henry Street (Carmalite Street) Bridge over I-75 NB and SB was constructed in 1981 as a 352'-8" long, four span structure. Spans 1 & 4 are single simply supported spans with a length of 40'-10", spans 2 & 3 are continuous spans with a length of 135'-6" for each span, measured along centerline of Henry Street. The existing bridge has a clear roadway width of 39'-6" and an overall bridge width of 42'-3". The superstructure consists of 5 steel plate girders spaced at 9'-3" with a 7.5" composite concrete bridge deck. The substructure for the existing bridge consists of two cast-in-place concrete end bents and three multi-column piers on pile footings. All substructures are founded on 18" square prestressed concrete driven piles. Based on the existing bridge plans, the vertical clearance over the I-75 NB roadway is 16'-4 ¾", and over I-75 SB is 16'-4 ½". A photograph of the existing bridge is shown in **Figure 8-12**.

Figure 8-12: Elevation View of S. Jones Loop Road Bridge over I-75 (Looking North)



For Alternative NB-2, the proposed rest area is located on the northbound side of I-75 between Henry Street and Airport Road. An additional auxiliary lane will be added to the existing I-75 NB lanes under the existing Henry Street Bridge to provide an on-ramp to merge traffic from the rest area onto I-75 NB. The existing minimum vertical clearance over the I-75 NB will be maintained at 16'-4 1/2". Per PPM Section 2.10, minimum vertical clearance of 16'-0" is acceptable for any construction affecting existing roadway bridge clearances. The appropriate roadway barrier is proposed to be constructed in front of the existing pier 4. Since the existing pier is located within the setback distance, it is recommended that the existing pier column be evaluated for vehicular collision force per SDG Section 2.6 during final design. Pier protection per index 411 may be required for this site. **Figure 8-13** depicts the proposed auxiliary lane added to existing I-75 NB.

Figure 8-13: Proposed Roadway Work under Henry Street Bridge - Alternative NB-2



8.2.6 Geotechnical Considerations

Based on a general review of the published data, the following are some general geotechnical considerations for use in selecting the preferred sites.

Seasonal High Groundwater Estimates

Pre-development seasonal high groundwater (SHGWT) levels in the areas of all site alternatives range from approximately 6 inches to 1½ feet below the natural site grades. Sites with high groundwater levels may require appreciable amounts of fill to provide adequate separation between pavements or other structures and the SHGWT. Drainage design will also need to be cognizant of the high groundwater conditions.

Clayey Soils

Shallow clayey soils were also noted at the proposed site alternatives. Over-excavation and replacement of shallow clayey soils and the use of underdrains in accordance with Index 500 may be required in areas once grades are established. The presence of shallow clayey soils may also result in “perched” water conditions. The drainage design will need to consider the impact of shallow and/or perched groundwater levels along with the presence of clayey soils on stormwater management facilities.

Weathered Limestone/Caprock

Weathered limestone/caprock is also anticipated in some areas within the proposed site alternatives at relatively shallow depths. Excavations into and/or through this material will be difficult and will require non-conventional construction techniques and specialized equipment. In addition, limestone/caprock is porous and will be difficult to dewater. The delineation of shallow limestone/caprock within stormwater ponds will also be important to avoid construction claims.

8.2.7 Costs

Overall estimated total costs for each rest area range from \$17.8M to \$20.0M, with Site Alternative SB-WIM and NB-WIM as the most expensive southbound and northbound site, respectively. Site Alternatives SB-2 and NB-2B are the least expensive southbound and northbound sites, respectively. Right-of-way costs range from \$12.6M for Alternative NB-2B to \$14.7M for Alternative SB-WIM. Construction costs range from \$1.3M for Alternative NB-2B and \$1.5M for Alternative SB-WIM. NB-2 and NB-WIM are the only two sites with additional cost associated with wetland mitigation.

Table 8-2: Alternatives Evaluation Matrix

EVALUATION FACTORS	NO BUILD ALTERNATIVE	SOUTHBOUND ALTERNATIVES		NORTHBOUND ALTERNATIVES		
		SB-2	SB-WIM	NB-2	NB-2B	NB-WIM
POTENTIAL BUSINESS AND RESIDENTIAL IMPACTS						
NUMBER OF BUSINESS IMPACTS (PARCELS)	0	0	0	0	0	0
NUMBER OF BUSINESS RELOCATIONS	0	0	0	0	0	0
NUMBER OF RESIDENTIAL IMPACTS (PARCELS)	0	0	0	0	0	0
NUMBER OF RESIDENTIAL RELOCATIONS	0	0	0	0	0	0
NUMBER OF SIGN RELOCATIONS	0	0	0	1	2	0
POTENTIAL RIGHT OF WAY IMPACTS						
ANTICIPATED RIGHT OF WAY ACQUISITION: SITES AND PONDS (Acres)	0.0	10.8	13.0	8.8	11.3	15.0
ANTICIPATED RIGHT OF WAY ACQUISITION: FLOODPLAIN COMPENSATION SITES (Acres)	0.0	6.7	0.0	8.5	3.1	2.3
ANTICIPATED RIGHT OF WAY ACQUISITION: TOTAL (Acres)	0.0	17.5	13.0	17.3	14.4	17.3
NATURAL/CULTURAL/PHYSICAL ENVIRONMENTAL EFFECTS						
ARCHAEOLOGICAL SITES (HIGH, MEDIUM, OR LOW BASED ON LIKELIHOOD OF IMPACTS)	N/A	Low	Low	Low	Low	Low
HISTORICAL SITES (HIGH, MEDIUM, OR LOW BASED ON LIKELIHOOD OF IMPACTS)	N/A	Low	Low	Low	Low	Low
POTENTIAL SECTION 4(F) SITES (NUMBER)	0	0	0	0	0	0
POTENTIAL NOISE IMPACTS (NUMBER OF RECEPTOR SITES POTENTIALLY EXCEEDING THE NAC)	0	1	23*	0	0	0
WETLANDS/OTHER SURFACE WATERS (ACRES)	0.00	0.00	0.01	0.50	0.00	1.41
FLOODPLAINS (ACRES)	0.00	8.02	0.00	12.38	8.27	14.75
THREATENED & ENDANGERED SPECIES (HIGH, MEDIUM, OR LOW BASED ON LIKELIHOOD OF OCCURRENCE)	N/A	Low	Low	Low	Low	Low
POTENTIAL CONTAMINATED SITES, MEDIUM OR HIGH (NUMBER)	N/A	0	0	0	0	0
OPERATIONAL CONSTRAINTS						
CREATES BYPASS OF WEIGH-IN-MOTION SITE	N/A	No	Yes	No	No	Yes
TRUCKS EXCLUDED FROM REST AREA	N/A	No	Yes	No	No	Yes
UTILITIES READILY AVAILABLE FROM MUNICIPALITY	N/A	Yes	No	Yes	Yes	No
COST ESTIMATES PRESENT DAY COSTS (\$ MILLIONS)						
CONSTRUCTION	\$0.00	\$13.26	\$14.69	\$12.99	\$12.63	\$13.46
FINAL DESIGN (10% OF CONSTRUCTION)	\$0.00	\$1.33	\$1.47	\$1.30	\$1.26	\$1.35
CONSTRUCTION ENGINEERING INSPECTION (10% OF CONSTRUCTION)	\$0.00	\$1.33	\$1.47	\$1.30	\$1.26	\$1.35
RIGHT-OF-WAY	\$0.00	\$2.91	\$2.37	\$2.88	\$2.68	\$2.87
WETLAND MITIGATION**	\$0.00	\$0.00	\$0.00	\$0.06	\$0.00	\$0.16
TOTAL COSTS (\$ MILLIONS) BY SEGMENT	\$0.00	\$18.82	\$20.00	\$18.53	\$17.84	\$19.18

* 22 residences and 1 golf course

** Wetland mitigation costs for estimation purposes only based on Section 373.4137, F.S. - costs are an estimate for programming purposes.

8.3 Selection of a Preferred Alternative

After reviewing the engineering and environmental factors, as well as public comments, the following sites were selected as the Preferred Alternatives:

- Southbound site – SB-2
- Northbound site – NB-2B

These two sites have low environmental impacts. Alternative NB-2B has the smallest ROW acreage impact for the northbound sites and Alternative SB-2 has the higher amount of ROW acquisition for the southbound sites. However, both sites are owned by the same property owner which will simplify the right-of-way acquisition process during design. These two alternatives have minimal impact to the Airport Road Bridge over I-75. The total project cost for each site is the lowest of the alternatives in each direction.

9 Preliminary Design Analysis

9.1 Preferred Alternative

Site NB-2B is located on the east side of I-75 just south of the Airport Road overpass in Charlotte County. The site consists of open improved pasture. This alternative develops an auxiliary lane north of North Jones Loop Road. This lane becomes a single exit only lane ramp to the rest area. This single lane ramp then separates into two single lane ramps. One ramp is for cars and the other ramp is for trailer trucks and RVs. Two ramps leading from the separate parking areas converge into a single lane ramp. This single lane ramp then merges with I-75 as a parallel entrance ramp.

In addition to the parking for vehicles, the rest area site includes the main building with restrooms, vending, and security, as well as picnic shelters, a dog park and a maintenance building.

The total right-of-way impact for this site is approximately 14.4 acres. This includes the acreage for the site, ponds, and floodplain compensation sites. No residential or businesses relocations are anticipated with this alternative.

Site Alternative SB-2 is located on the west side of I-75 just south of Airport Road in Charlotte County. The site consists primarily of open improved pasture. This alternative develops an auxiliary lane north of Airport road. This lane becomes a single exit only lane ramp to the rest area. This single lane ramp then separates into two single lane ramps. One ramp is for cars and the other ramp is for trailer trucks and RVs. Two ramps leading from the separate parking areas converge into a single lane ramp. This single lane ramp then merges with I-75 as a parallel entrance ramp.

In addition to the parking for vehicles, the rest area site includes the main building with restrooms, vending, and security, as well as picnic shelters, a dog park and a maintenance building.

The total right-of-way impact for this site is approximately 17.5 acres. This includes the acreage for the site, ponds, and floodplain compensation sites. No residential or businesses relocations are anticipated with this alternative.

9.2 Parking

For Site NB-2B, parking for cars is located between I-75 and the rest area building. The parking for the trailer trucks and RVs is located behind the rest area building. The parking lot for the cars has 107 spaces and 5 handicapped spaces. The parking lot for the trailer trucks and RVs has 32 spaces and 2 handicapped spaces.

For Site SB-2, parking for cars is located between I-75 and the rest area building. The parking for the trailer trucks and RVs is located behind the rest area building. The parking lot for the cars has 107 spaces and 5 handicapped spaces. The parking lot for the trailer trucks and RVs has 32 spaces and 2 handicapped spaces.

9.3 Typical Section

As rest areas are facilities located off of the interstate mainline, no typical sections are required.

9.4 Horizontal & Vertical Alignment

The two preferred sites are located along tangent section of I-75 in Charlotte County. The rest area sites will not affect the existing horizontal or vertical alignment of I-75. The vertical alignment of the auxiliary lanes for the rest area will follow the same alignment of I-75.

9.5 Design Exceptions and Variations

No design exceptions or variations are required for the rest areas.

9.6 Design Traffic Volumes

The rest area design hour ramp volumes for NB-2B and SB-2 were developed using the FDOT Rest Area Facilities Computation Form, which can be found in the *Traffic Technical Memorandum*.

The aforementioned K and D design factors were utilized and applied to both the 2025 opening year and the 2045 design year AADT volumes to develop peak hour volumes. The calculated and balanced AM and PM peak hour volumes are presented in **Figure 9-1** and **Figure 9-2**, respectively.

Figure 9-1: 2025 Peak Hour Traffic

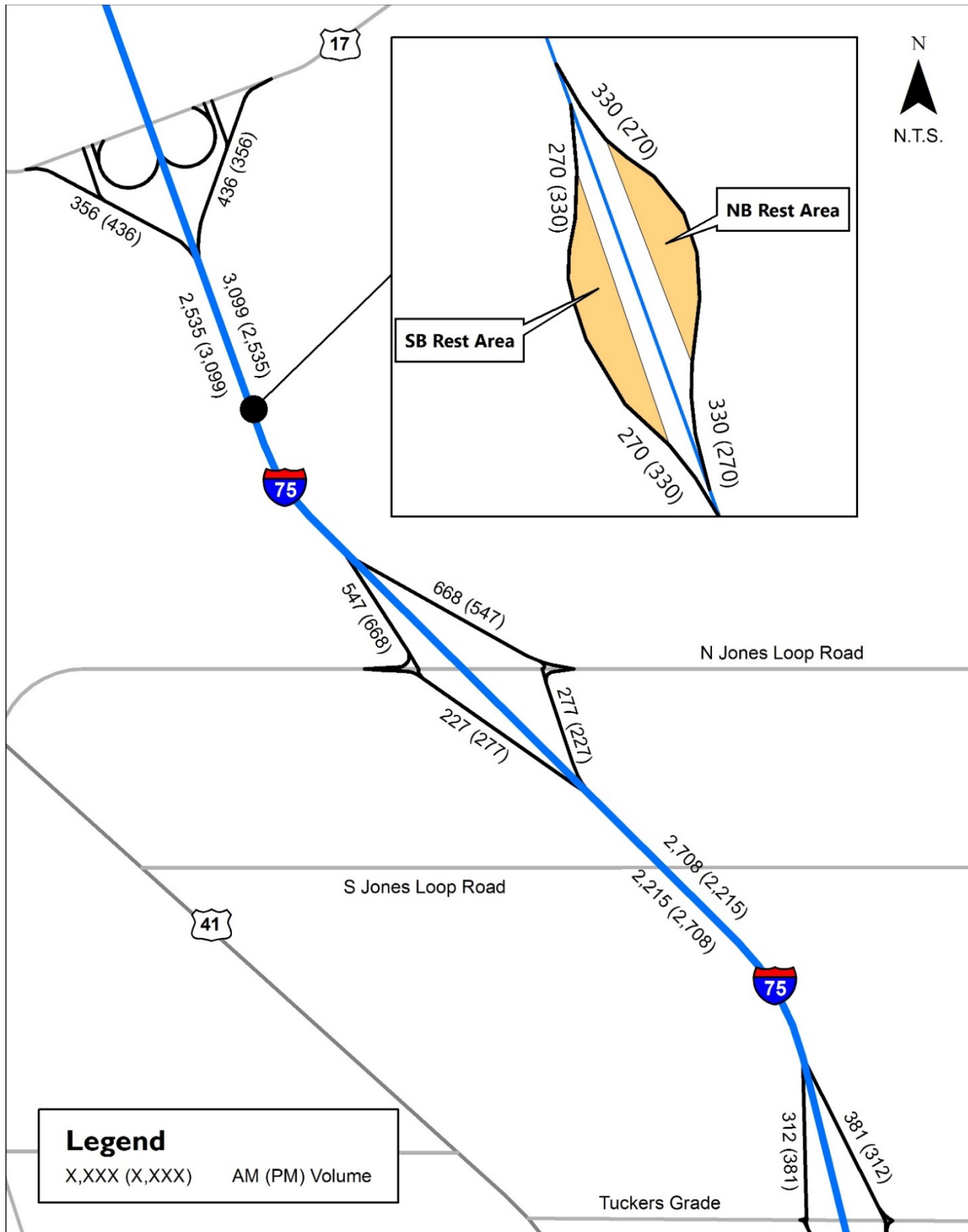
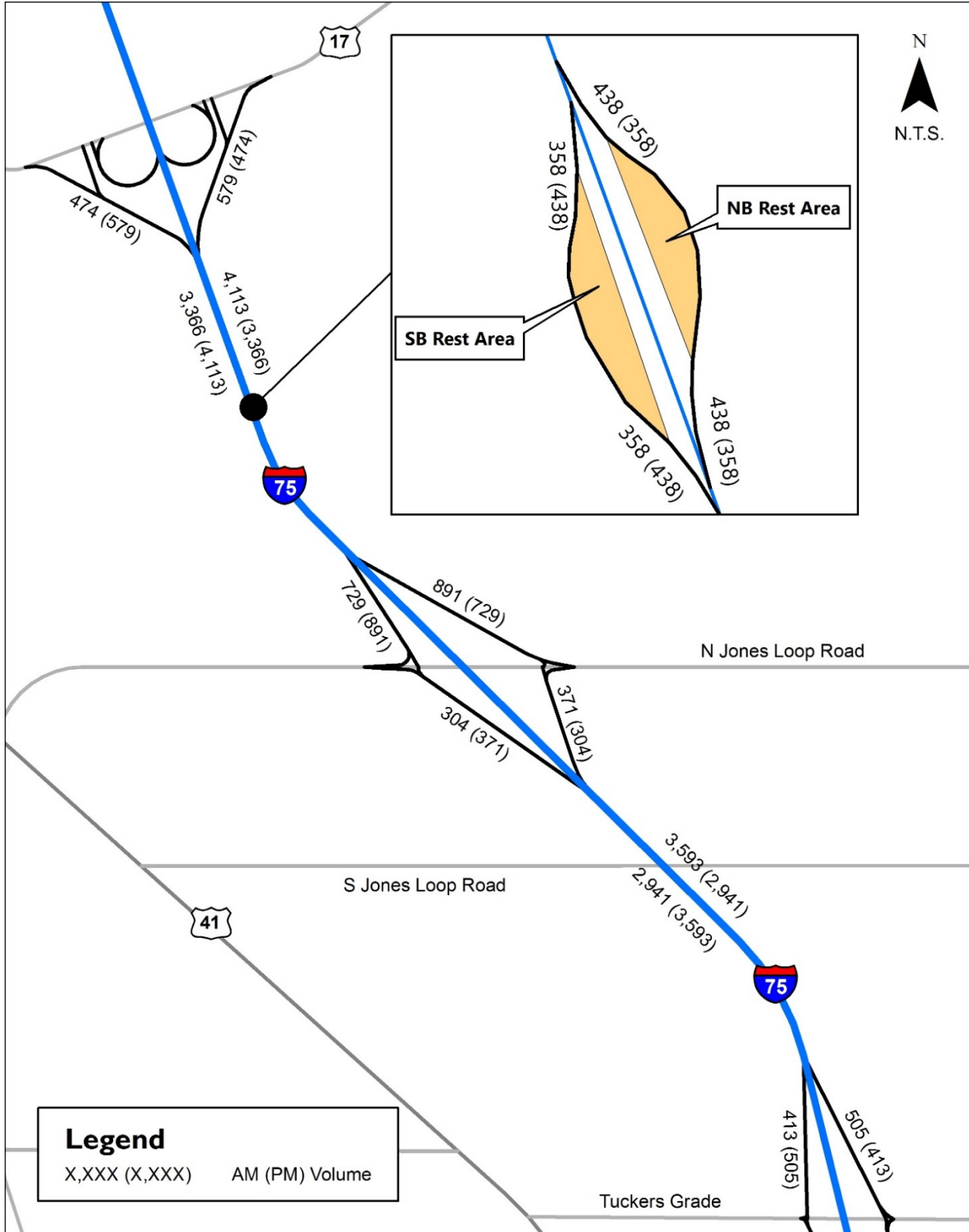


Figure 9-2: 2045 Peak Hour Traffic



9.7 Pedestrian and Bicycle Facilities

The rest area site design includes sidewalks that provide a connection to the buildings from the surrounding parking areas. No other pedestrian or bicycle facilities would be included as part of the rest areas.

9.8 Safety

The rest areas on the interstate will provide safe rest stops for the motoring public. These rest areas provide comfort and convenience with restrooms, parking, and vending machines adjacent to the interstate. The rest areas enhance safety by providing a safe place for motorists to stop, reducing driver fatigue. Also, the rest areas can provide a site for FDOT and Florida Highway Patrol (FHP) emergency operations during disasters, such as hurricanes.

9.9 Economic Development

The rest areas will allow vehicles to exit the interstate so drivers may rest and use the facilities and then re-enter the interstate. This project will not add capacity to the interstate. Also, since limited access right-of-way will be acquired and there will be no openings in the fence surrounding the rest area, no access will be provided to the adjacent property. Therefore, the economic impact of these rest areas is expected to be negligible.

9.10 Right of Way Needs and Relocation

Alternative SB-2 requires a total of 17.5 acres of right-of-way, including 10.8 acres of right-of-way for the rest area sites and associated stormwater ponds and 6.7 acres of floodplain compensation. No business, residential, or sign relocations are required.

Alternative NB-2B requires a total of 14.4 acres of right-of-way, including 11.3 acres of right-of-way for the rest area sites and associated stormwater ponds and 3.1 acres for floodplain compensation. No business or residential relocations are required, but 2 signs require relocation.

9.11 Utility Impacts

There are no impacts to private or municipal facilities for the preferred alternatives since the proposed development is outside of existing ROW and the proposed development is on private vacant property. For the preferred alternatives, there will be proposed ramp construction under Airport Road. All utilities are reported to be deep enough and the loss of cover will be minimal, so impacts are not anticipated.

9.12 Drainage

Alternative SB-2 would be constructed on an existing pasture adjacent to the I-75 right of way. The seasonal high water table elevation was estimated at elevation 7.9-feet. This value is approximately 1.5-foot below existing ground and is comparable to the seasonal high water elevations established for the I-75 widening project currently under design (FPID – 413042-4-52-01). The existing ground elevation at SB-2 is approximately 9.4. Since the base flood elevation is 12 at SB-2, compensation will be required for all fill placed within the floodplain. Two floodplain compensation sites have been identified between I-75 and Piper Road directly north of Airport Road. The site closest to Piper Road was sized to accommodate the needs for SB-2, however, the size of the site closest to I-75 could also be adjusted in

order to meet all of the floodplain compensation requirements for SB-2. Both of these sites would require the purchase of additional right of way. The location of these two floodplain compensation sites are shown on **Figure 9-3**. Floodplain impacts and compensation requirements are summarized in **Table 9-1**.

Alternative NB-2B is located approximately 700 feet south of Airport Road. This site would be constructed on an existing pasture adjacent to the I-75 right of way. The seasonal high water table elevation was estimated at elevation 9.0-feet. This value is approximately 2.0-feet below existing ground and is comparable to the seasonal high water elevations established for the I-75 widening project currently under design (FPID – 413042-4-52-01).

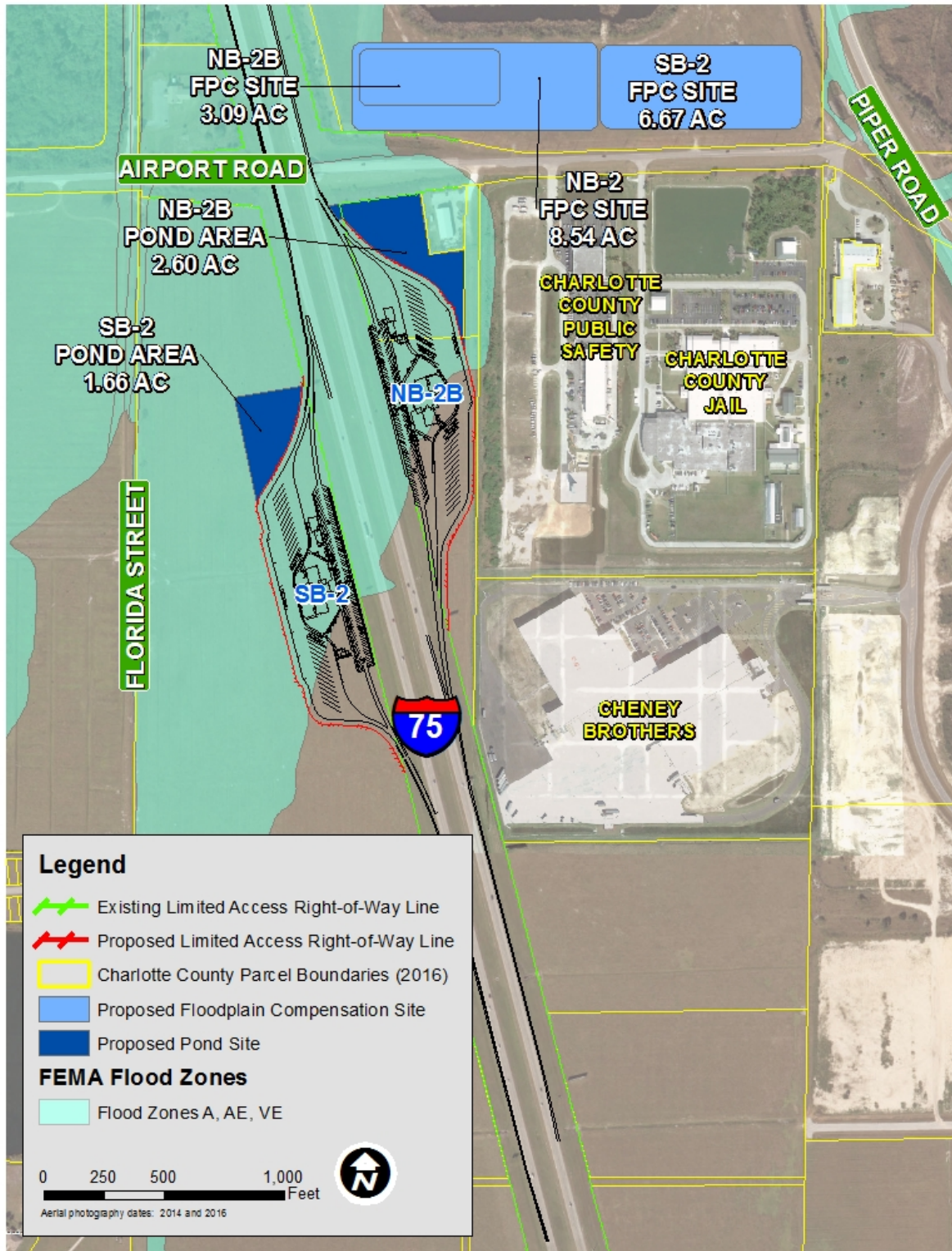
The majority of this rest area is located within FEMA Flood Zone AE with the southern end of the site located within FEMA Flood Zone X which is defined as an area of minimal flooding. Two proposed floodplain compensation sites have been identified between I-75 and Piper Road directly north of Airport Road. The site closest to I-75 was sized to accommodate the needs for NB-2B, however, the floodplain compensation requirements could also be met at the site closest to Piper Road. Both of these sites would require the purchase of additional right of way. The location of these two floodplain compensation sites are shown on **Figure 9-3**. Floodplain impacts and compensation requirements are summarized in **Table 9-1**.

Table 9-1: Floodplain Impacts and Sizing of Compensation Sites

REST AREA ALTERNATIVE	VOLUME IMPACTED (ACRE-FT)	AREA REQUIRED TO ACCOMMODATE IMPACTED VOLUME (ACRES)
SB-2	20.22	6.70
NB-2	28.99	8.54
NB-2B	9.35	3.09
SB-WIM	N/A	N/A
NB-WIM	6.97	2.25

There is potential for transverse impacts resulting from the extension or replacement of culverts. However, based on a preliminary inspection of cross drain locations, no adverse impacts will result at these crossings. FDOT and SWFWMD design criteria do not allow for any significant increase in flood stage upstream of cross drains. A more detailed analysis of these impacts is needed during the design phase of this project to ensure that that this criteria is met.

Figure 9-3: NB-2B & SB-2 Flood Zone Map



9.13 ITS

No significant impacts to ITS facilities are anticipated with the preferred alternatives. The FDOT is currently in design of a project (FPID 438096-1) that will add truck parking availability signs for the Punta Gorda WIM stations. These signs will be posted at least one mile in advance of the WIM station. A similar parking availability sign program could be implemented for the rest areas. This issue will be reviewed during the development of the design scope for the rest areas.

9.14 Lighting

Conventional lighting will be provided along the ramps and in the parking areas of the rest area. LED lights will be used for exterior lighting, including the exterior of the buildings.

9.15 Bridge Analysis

Widening of the existing I-75 NB and SB roadway will be required under the Airport Road Bridge to accommodate preferred Alternatives NB-2B, and SB-2 rest areas. For Alternative SB-2, the rest area is located on the I-75 southbound side and south of Airport Road. An additional auxiliary lane will be constructed adjacent to the existing I-75 southbound lanes under the Airport Road Bridge. For alternative NB-2B, the rest area is placed on the I-75 NB side and south of Airport Road. Similar to Alternative NB-2, the proposed auxiliary lane for Alternative NB-2B will accommodate the entrance ramp to merge traffic from the rest area onto the I-75 NB. For the proposed alternatives, the existing vertical clearance over the I-75 roadway will be maintained at 16'-4 1/2". Per PPM Section 2.10, minimum vertical clearance of 16'-0" is acceptable for any construction affecting existing roadway bridge clearances. Appropriate roadway barrier or guardrail will be placed in front of the existing toe of slopes in front of the end bents to satisfy FDOT minimum lateral offset requirements. **Figure 9-4** and **Figure 9-5** depict the proposed auxiliary lane added to existing I-75 NB and SB roadways for the proposed SB-2 and NB-2B alternatives, respectively.

Figure 9-4: Proposed Roadwork under Airport Road Bridge - Alternative SB-2

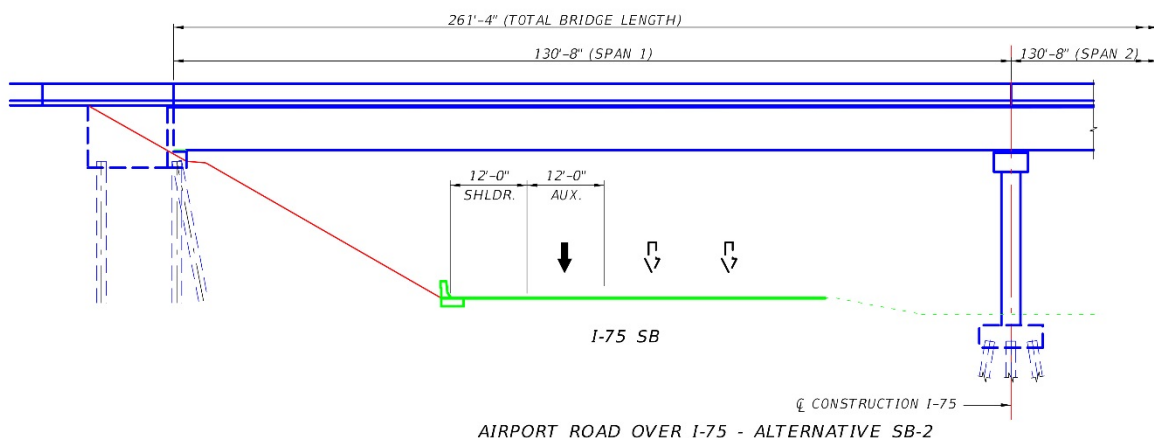
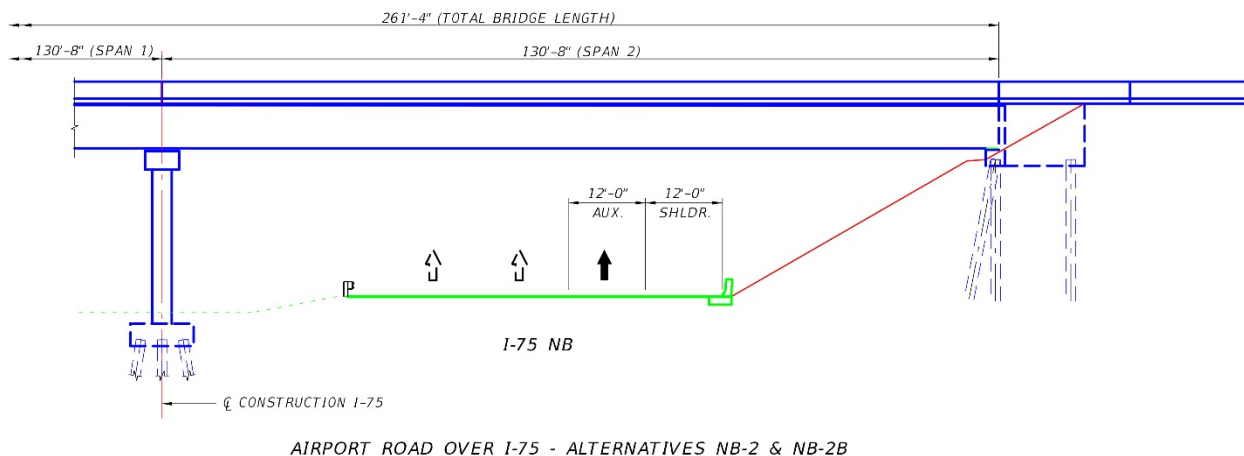


Figure 9-5: Proposed Roadway Work under Airport Road Bridge - Alternative NB-2B



9.16 Special Features (noise barriers, retaining walls, etc.)

No special features are anticipated to be required for the preferred alternatives.

9.17 Access Management

The rest areas will be located within the limited access controlled right-of-way of I-75. Vehicles will exit and enter the rest area via ramps from I-75. No other access will be allowed for the rest area sites.

9.18 Aesthetics and Landscaping

Building and site aesthetics will be consistent with similar rest area facilities to the north and south. Typically, the main building and maintenance building walls are constructed using reinforced concrete masonry units (CMU) that combine split-face and ground-face units to create a pleasing aesthetic. The finished roof is typically an aluminum standing seam metal roof. Picnic shelters would be designed with aesthetics similar to the other buildings on the rest area site. At ground level, black vinyl-coated chain-link fencing panels will enclose the dog park areas. Native and site-specific landscaping would be proposed to enhance the building exteriors. Additional details on the site's aesthetics and landscaping will be developed during the design phase.

9.19 Traffic Control Plan

A detailed traffic control plan will be prepared with the final design planes for the rest areas. The project will include construction exit and entrance ramps to and from I-75. During the construction of these ramps, it may be necessary to temporarily restrict access to the outside lane in each direction of travel on I-75. The internal rest area facilities are located far enough away from the I-75 mainline that this construction should not impair the traffic flow on I-75 mainline. Coordination with the planned widening of the I-75 mainline from four to six lanes is required.

9.20 Costs Estimates

Cost estimates include preliminary engineering costs, right-of-way costs, and construction costs associated with each proposed rest area.

9.20.1 Preliminary Engineering Costs

The estimated design costs for the preferred alternatives, based on the construction costs, are:

- Alternative SB-2 = \$1,330,000
- Alternative NB-2B = \$1,260,000

9.20.2 Right of Way Costs

The estimated right-of-way costs for the preferred alternatives, based on the analysis of the impacted parcels by FDOT staff, are:

- Alternative SB-2 = \$2,910,000
- Alternative NB-2B = \$2,680,000

9.20.3 Construction Costs

The estimated construction costs for the preferred alternatives, based on the FDOT Long Range Estimates (LRE) system, are:

- Alternative SB-2 = \$13,260,000
- Alternative NB-2B = \$12,630,000

9.21 Recycling of Salvageable Materials

Due to the location of the proposed rest areas on undeveloped land, there are not expected to be many salvageable materials on the preferred alternatives. There may be some salvageable material as part of adding the auxiliary lanes for the exit and entrance ramps.

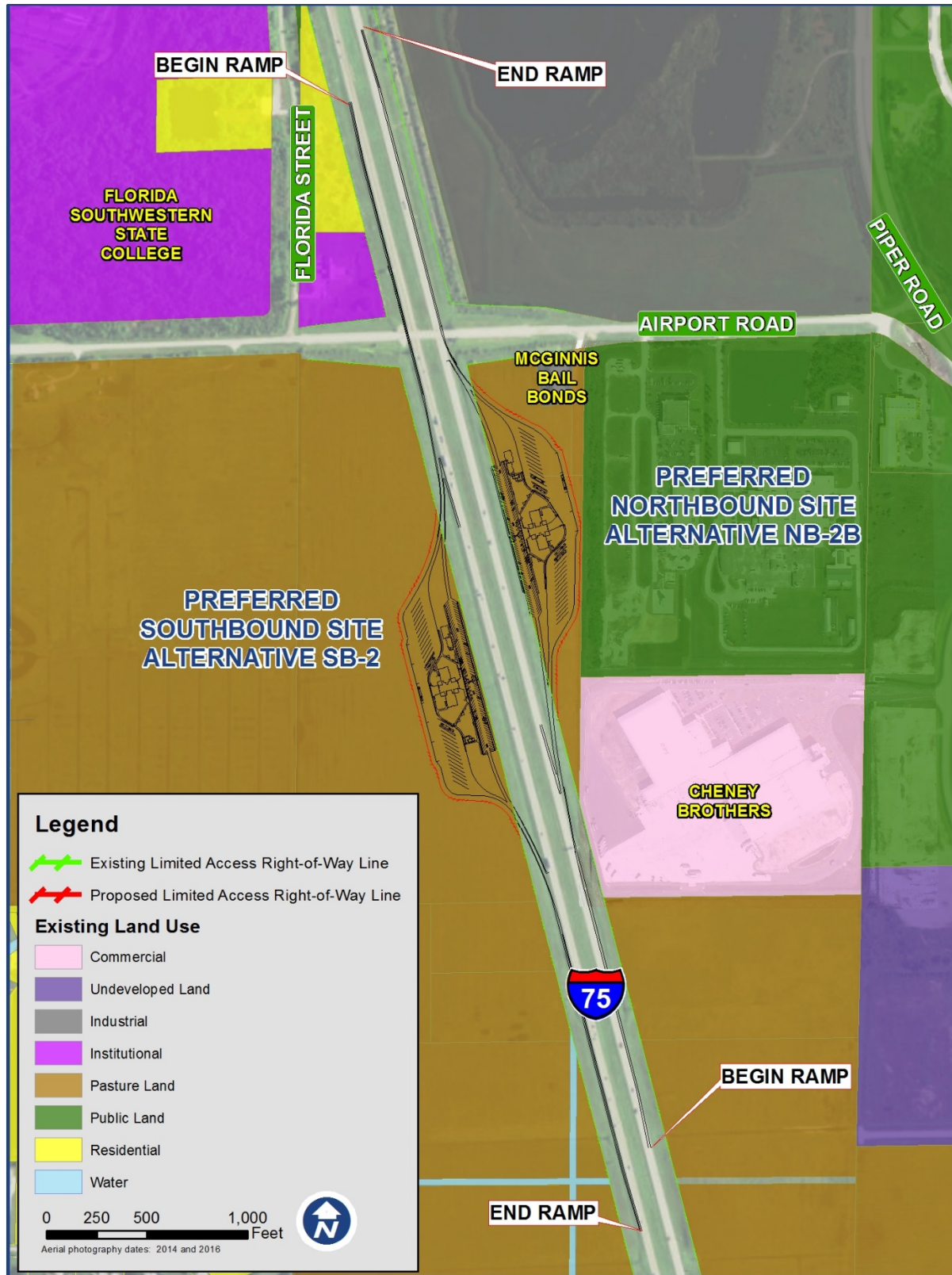
9.22 User Benefits

The purpose of FDOT rest areas on the interstate is to provide safe rest stops for the motoring public. The rest areas provide comfort and convenience with restrooms, parking, and vending machines adjacent to the interstate. The rest areas enhance safety by providing a safe place for motorists to stop, reducing driver fatigue.

9.23 Land Use

As shown in **Figure 9-6**, the preferred alternative sites are positioned on pasture land adjacent to I-75. The southbound alternative SB-2 is completely surrounded by pasture land, and northbound alternative NB-2B is bordered by commercial property to the south, public land to the east, and industrial land to the north.

Figure 9-6: Preferred Alternative Sites Existing Land Use



9.24 Community Cohesion

The nearest communities are far from the Preferred Alternative. No communities will be bisected or isolated by this project. The project is not anticipated to adversely impact elderly persons, handicapped individuals, non-drivers and transit-dependent individuals, or minorities. Therefore, this project is being developed without regard to race, color, national origin, age, sex, religion, disability or family status. It is anticipated that impacts to community cohesiveness resulting from the project improvements will be none.

9.25 Environmental Impacts

9.25.1 Wetlands

The project areas was evaluated for wetlands and surface waters in accordance with Florida Administrative Code (FAC) 62.302.400 and the United States Army Corp of Engineers (USACE) 1987 Wetland Delineation Manual. Project scientists identified no wetlands within the two Preferred Alternatives. Surface waters are present within and adjacent to the Preferred Alternatives footprints as roadside swales and ditches. Roadside swales are present on the east and west sides of I-75, the south side of Airport Road, and the northeast quadrant of Airport Road and I-75. Agricultural, upland-cut ditches are visible throughout both parcels. **Figure 9-7** illustrates the location of wetlands and surface waters within the vicinity of the Preferred Alternatives based on land use data.

No wetlands exist within the Preferred Alternatives; therefore, no impacts to wetlands are anticipated. Surface waters exist within and adjacent to the Preferred Alternatives footprint as roadside swales and agricultural ditching. Approximately 0.34 acres of roadside swales and agricultural ditching will be impacted as part of this project. Agricultural ditching is highly disturbed as it is in an active cow pasture. The roadside swales and ditches impacted were built in uplands, are less than a half an acre, and do not provide significant habitat for threatened and endangered species. Per the *SWFWMD Basis of Review, Section 3.2.2.1*, these surface waters normally would not require mitigation.

9.25.2 Threatened and Endangered Species

The Preferred Alternatives are not expected to adversely affect any federally or state listed species. These locations were selected, in part, because of the low potential for involvement with listed species. The Preferred Alternatives avoid ecologically sensitive areas within the I-75 corridor. They are located in a previously disturbed area, including improved pastures and rangelands. These pastures and rangelands have been extensively cleared and ditched to promote ruderal grasses with minimal shrub and canopy coverage. Impacts to undeveloped habitats will occur as a result of this project. However, these impacts are considered minimal. **Figure 9-8** shows the land cover within the vicinity of the preferred alternative sites.

Indirect, secondary and cumulative impacts associate with the improvements are likely to be negligible due to the fact that the I-75 transportation corridor already exists, no new interchanges are proposed, and the construction of the rest area facility will have minimal effects overall. The Preferred Alternatives are limited access and will not cause additional development within the vicinity of the rest area.

Figure 9-7: Preferred Alternative Sites Wetlands Map

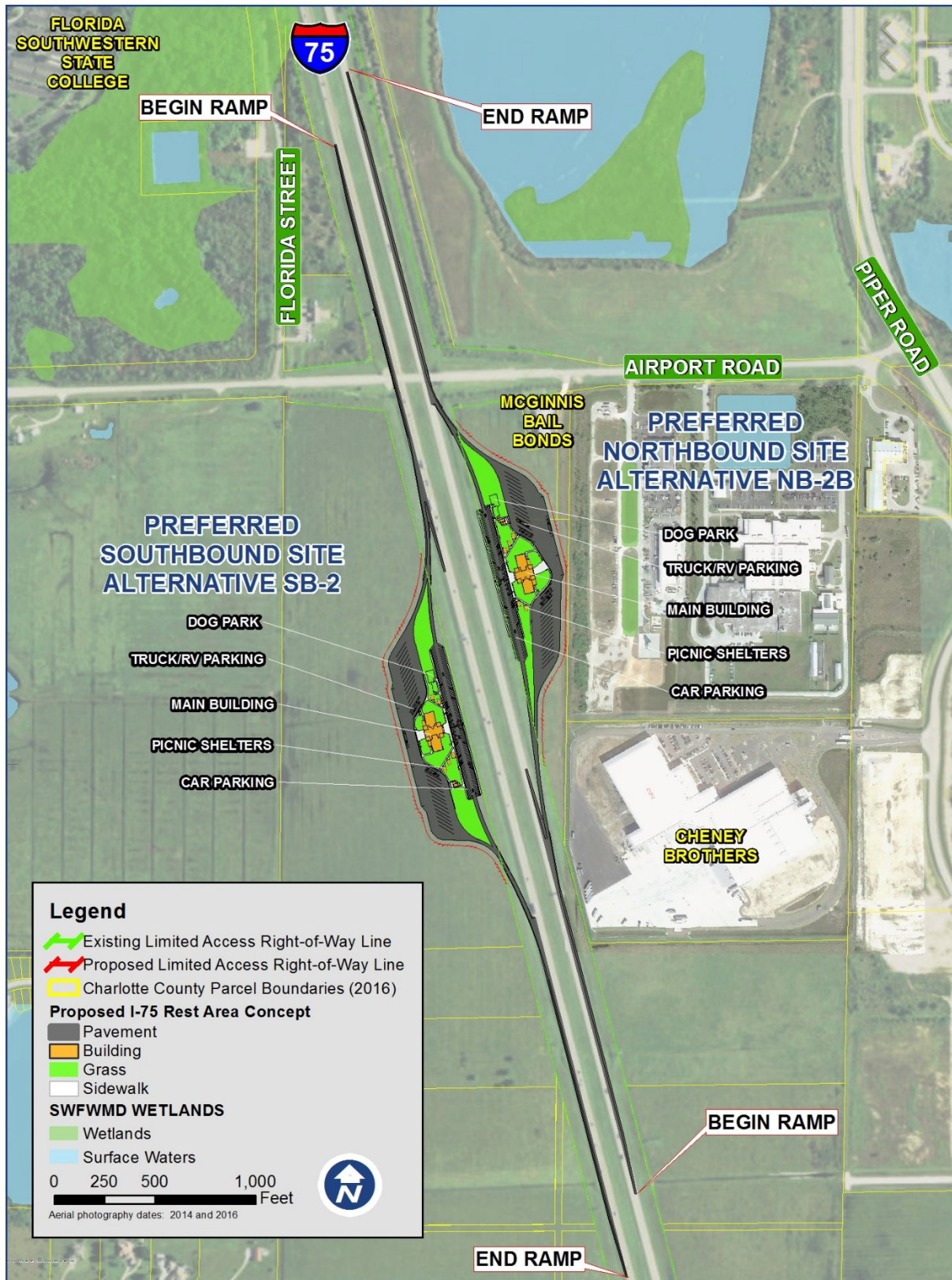


Figure 9-8: Land Cover Classification Map



9.25.3 Floodplains

The Federal Emergency Management Agency (FEMA) Statewide National Flood Hazard Layer (NFHL) from 2015 was used to map flood zones within and within the vicinity of the Preferred Alternatives. The percentage of Zone A designated floodplain was quantified as part of the evaluation matrix. NB-2B contains 8.27 acres and SB-2 contains 8.02 acres of Type AE floodplain. Zone AE is a Special Flood Hazard Area (SFHA) defined as the area that will be inundated by a flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. A Floodplain Compensation site (SWFWMD Permit No. 43000164.038) is associated with the Charlotte County airport to the northeast of the project area on Alternative NB-2. **Figure 9-3** shows floodplains types within and in the vicinity of the two Preferred Alternatives.

Both Preferred Alternatives are expected to impact Type AE Floodplain. Zone AE is a Special Flood Hazard Area (SFHA) defined as the area that will be inundated by a flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. NB-2B contains 8.27 acres and SB-2 contains 8.02 acres of Type AE floodplain. A Floodplain Compensation site is associated with the Charlotte County airport to the northeast of the project area on Alternative NB-2.

9.25.4 Air Quality

The project is located in an area which is designated attainment for criteria air pollutants: ozone/nitrogen dioxide/particulate matter (2.5 microns in size and 10 microns in size)/sulfur dioxide/carbon monoxide/lead.

The project alternatives were subjected to a carbon monoxide (CO) screening model that makes various conservative worst-case assumptions related to site conditions, meteorology and traffic. The Florida Department of Transportation's (FDOT) screening model, CO Florida 2004 (released September 7, 2004) uses the latest United States Environmental Protection Agency (USEPA)-approved software (MOBILE6 and CAL3QHC) to produce estimates of one-hour and eight-hour CO concentrations at default air quality receptor locations. The one-hour and eight-hour estimates can be directly compared to the one- and eight-hour National Ambient Air Quality Standards (NAAQS) for CO that are 35 parts per million (ppm) and 9 parts per million (ppm), respectively.

The roadway intersection analyzed was the intersection of the car ramp and the truck ramp prior to the on-ramp merging back onto I-75. The No-Build analysis was not performed since there is no facility currently located at the sites. The Build scenarios for both the opening year 2025 and the design year 2045 were evaluated.

As population growth and vehicle volumes increase, there is potential to have air quality conformity and non-attainment issues in the future. However, the project is located in an area which is designated attainment for all of the NAAQS under criteria provided in the Clean Air Act. Therefore, the Clean Air Act conformity requirements do not apply to the project.

9.25.5 Water Quality

The proposed storm water facility design will include, at a minimum, the water quantity requirements for water quality impacts as required by the SWFWMD. The FDOT will create a stormwater pollution prevention plan (SWPPP) and erosion and sediment control plan during any future design phase of this project. Proper best management practices (BMPs) will be used during construction. The state agency involved in the permitting process for the I-75 Rest Areas project would be the SWFWMD. Permits would be required for all dredge and fill work within, or areas connected to, Waters of the State (Chapter 17-4.23, FAC. Stormwater systems will be permitted through the SWFWMD in accordance with Chapter 40D-4 FAC, which requires that stormwater management systems meet the SWFWMD design criteria. Specifically, stormwater management systems should provide water quality treatment, peak discharge attenuation, and adequate drainage. The project corridor lies adjacent to wetland areas that must be considered in the design of the stormwater system.

Federal agencies which may require permits for the proposed improvements are the USACE and U.S. Environmental Protection Agency (USEPA). The USACE would be involved in permitting dredge and fill activities in the waters of the United States. In Florida, the National Pollutant Discharge Elimination System (NPDES) permit process is administered by the FDEP for stormwater discharges into Waters of the United States.

9.25.6 Aquatic Preserves

There are no aquatic preserves near either of the preferred rest area alternatives.

9.25.7 Outstanding Florida Waters (OFW)

There are no OFW resources within the vicinity of the preferred rest area alternatives NB-2B or SB-2.

9.26 Section 4(f) Resources

There are no potential Section 4(f) resources located in the vicinity of either of the preferred rest area alternatives.

9.27 Contamination

A Level I Contamination Screening Evaluation Report (CSER) has been prepared using the FDOT *PD&E Manual, Chapter 22* reporting format and standard environmental assessment practices of reviewing records of regulatory agencies, site reconnaissance, literature review and when necessary, personal interviews of individuals and business owners with the limits of the project. The purposes of this report, the project study area includes each rest area alternatives and an approximate 300 foot area extending beyond those boundaries.

The contamination screening evaluation determined the following risk ratings for the preferred alternatives:

- Alternative SB-2 – Based on the historic and current uses (pastureland), the site has a risk rating of “No”
- Alternative NB-2B – Based on the historic and current uses (pastureland), the site has a risk rating of “No”

These sites have been evaluated and determined not to have any potential further environmental risk to the study area.

9.28 Noise

A traffic noise analysis for the proposed project was conducted in accordance with Florida Statute 335.17, and Chapter 17 of the FDOT PD&E Manual, Volume 2. Based on this analysis, a Noise Study Report (NSR) has been prepared. The objectives of the noise study were as follows:

- Identification of Noise Sensitive Receivers;
- Field Measurement of Noise Levels and Noise Model Verification;
- Prediction of Existing and Future Noise Levels;
- Assessment of Traffic Noise Impacts; and
- Consideration of Noise Abatement Measures.

A survey of the project corridor was conducted to identify the noise sensitive receptors that may be impacted by traffic noise associated with the proposed rest areas. Predicted exterior noise levels for the existing conditions ranged from 48.9 dB(A) to 66.1 dB(A), while predicted levels ranged from 53.5 dB(A) to 70.6 dB(A) for the design year Build Alternative. With the Preferred Build Alternative, design year traffic noise levels will approach or exceed the NAC at one location: the Punta Gorda Alliance Church (playground area).

In accordance with FHWA's and FDOT's traffic noise study requirements, noise barriers were considered for all noise sensitive receptor sites where design year traffic noise levels were predicted to equal or exceed the NAC. For the outdoor area of use (playground) at Punta Gorda Alliance Church, a detailed barrier analysis was conducted. TNM was used to determine the effectiveness of a potential noise barrier and to determine the optimal barrier height and length required to provide at least 5-dB(A) of noise reduction for the entire playground area while minimizing costs. Multiple barrier designs were evaluated. Barriers heights of 16 feet and greater are effective in providing at least 5-dB(A) of noise reduction for the entire playground area while satisfying the noise reduction design goal of 7 dB(A). Therefore, noise abatement measures were evaluated for this playground in accordance with the procedures outlined in *A Method to Determine Reasonableness and Feasibility of Noise abatement at Special Use Locations (July 2009)*. The results of this evaluation show that the daily usage of this playground does not meet the requirements set forth in the FDOT's noise policy for special use locations. Therefore, since the expected playground usage is considerably lower than the usage required to meet the FDOT's Special Use Locations criteria, a noise barrier is not considered reasonable at this location.

Based on the noise analysis performed in this study, there appears to be no apparent solution available to mitigate the predicted noise impacts at the Punta Gorda Alliance Church playground. The traffic noise impacts to this noise sensitive site is an unavoidable consequence of the project. Because of the low number of unavoidable impacted sites, the noise impacts associated with this project are not considered significant.

9.29 Summary of Public Involvement Efforts

Several coordination meetings were held during the development of the rest area alternatives. On April 28, 2016, a coordination meeting was held with the Charlotte County Airport Authority. A coordination meeting with FDOT's Motor Carrier Size and Weight was held on April 29, 2016. On May 24, 2016, a property owner coordination meeting was held with the McQueen family, who owns both of the parcels the preferred alternatives SB-2 and NB-2B would occupy.

A project website was developed and included on FDOT's SWFL Roads website on July 6, 2016. The website presented the project's background, basic information, a preliminary schedule of future efforts, and a comment form for public participation. Materials presented at the public information meeting were included on the website after the meeting date.

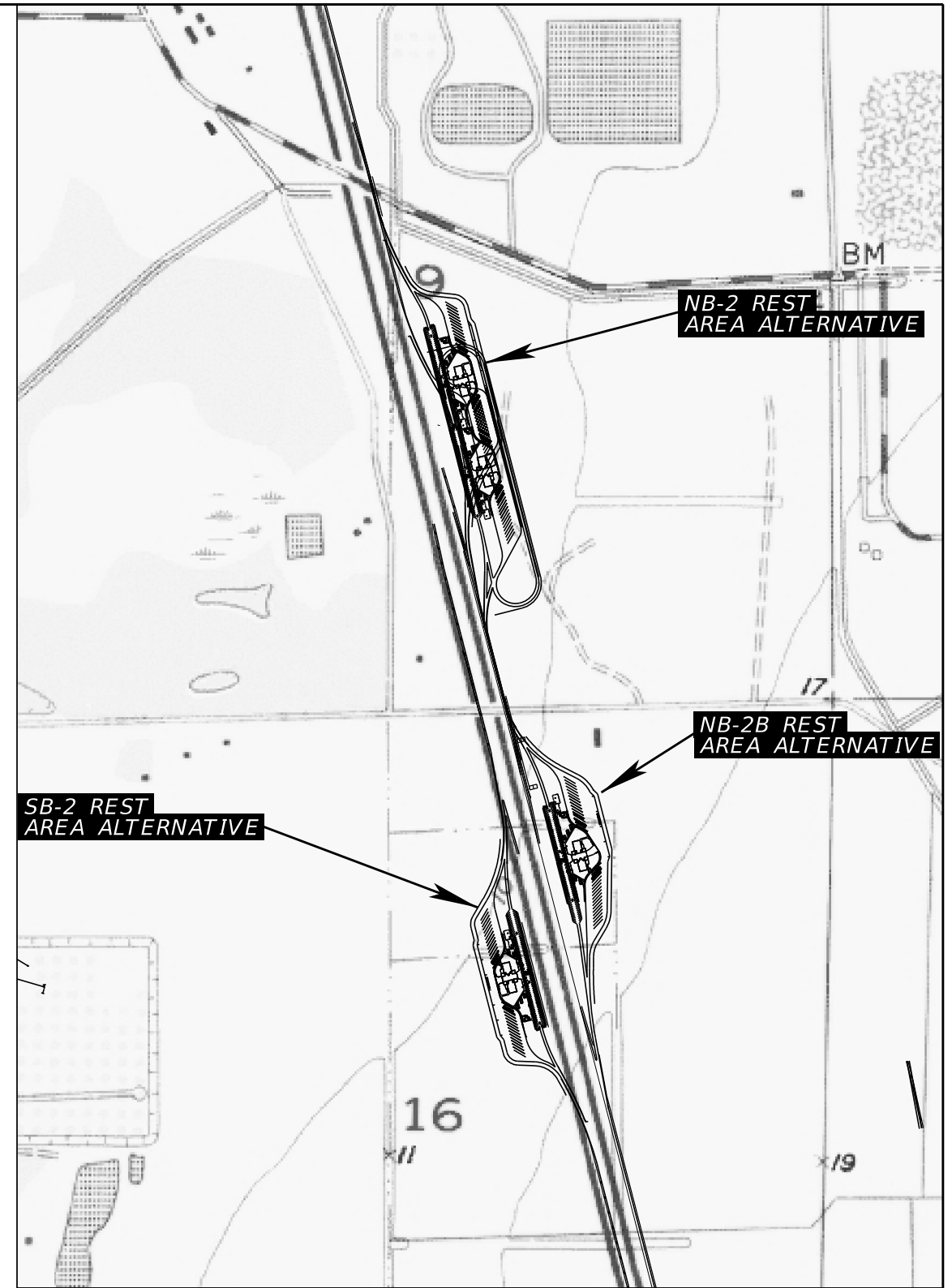
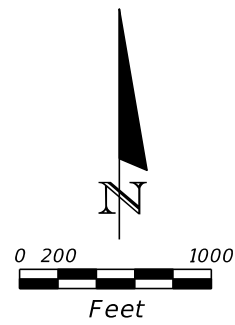
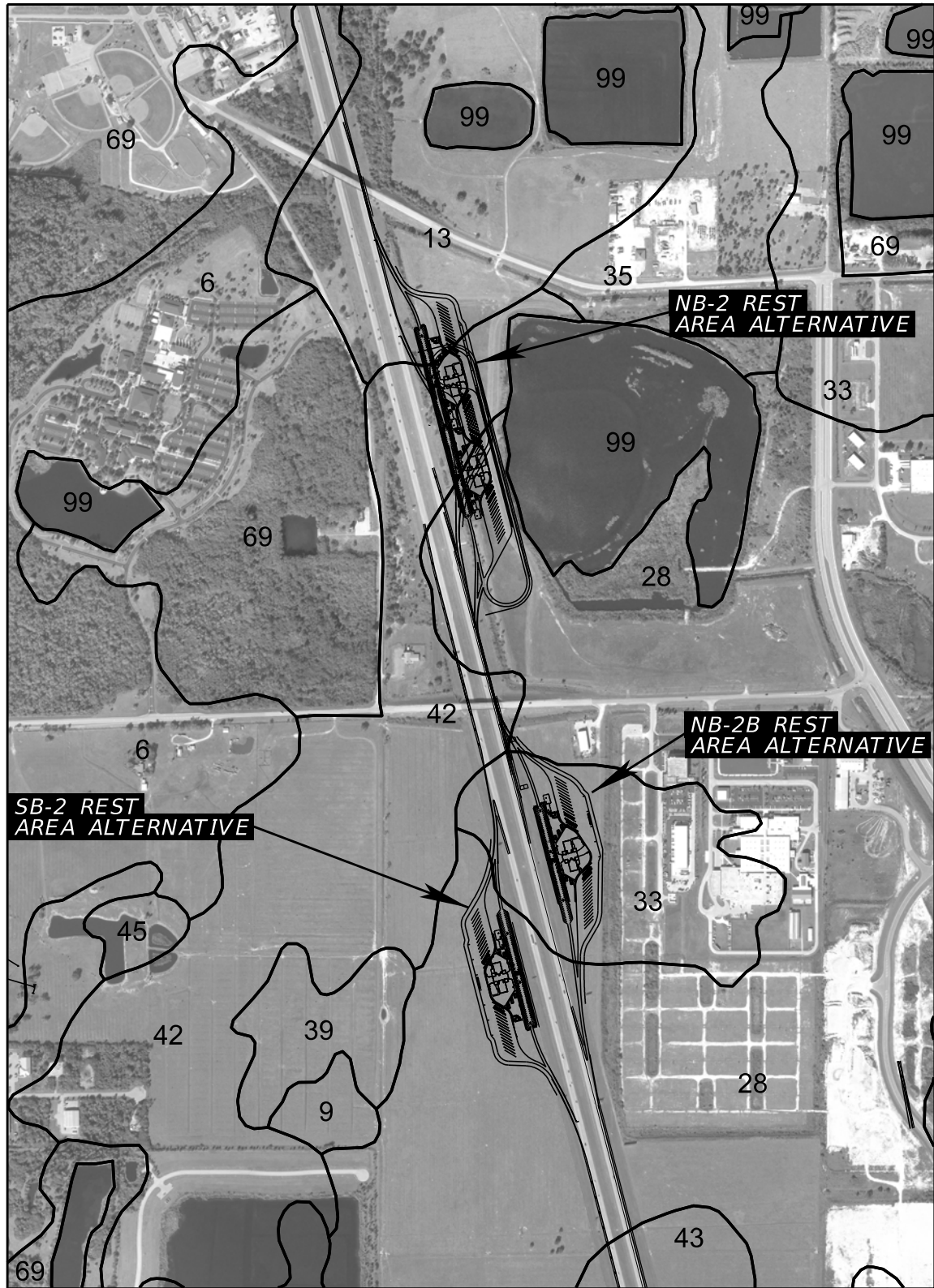
A Public Information Meeting was held on August 2, 2016, at the Charlotte Harbor Event Center, 75 Taylor Street in Punta Gorda, Florida. The meeting was advertised on the project website, in the Florida Administrative Register on July 25, 2016, and in the Charlotte Sun newspaper on July 15 and July 26, 2016. Meeting notification newsletters were sent out to elected and appointed officials and adjacent property owners within 300' of the proposed sites on July 8, 2016. The five build alternatives were presented at the meeting, and the study team was available to answer questions. Thirty two (32) members of the public signed in at the meeting, and thirteen (13) public comments were received by August 16, 2016. Comments collected from the public supported alternatives NB-2B and SB-2, and did not support SB-WIM and NB-WIM.

The study team presented the project and the results of the public involvement efforts to the Charlotte County Board of County Commissioners on October 11, 2016, and to the Charlotte-Punta Gorda Metropolitan Planning Organization Board on October 24, 2016.

10 List of Technical Reports

1. Site Selection Report
2. Natural Resources Evaluation (includes):
 - a. Air Quality Evaluation
 - b. Contamination Screening Evaluation
 - c. Endangered Species Biological Assessment
 - d. Wetland Evaluation
3. Location Hydraulics Report
4. Stormwater Management Facility Report
5. Cultural Resource Assessment Survey
6. Design Traffic Technical Memorandum
7. Design Traffic Technical Memorandum
8. Utility Assessment Package Technical Memorandum
9. Contamination Screening Evaluation Report

APPENDIX A
USDA Soil Survey and USGS Quadrangle Maps



REFERENCE: USDA SOIL SURVEY OF CHARLOTTE COUNTY, FLORIDA

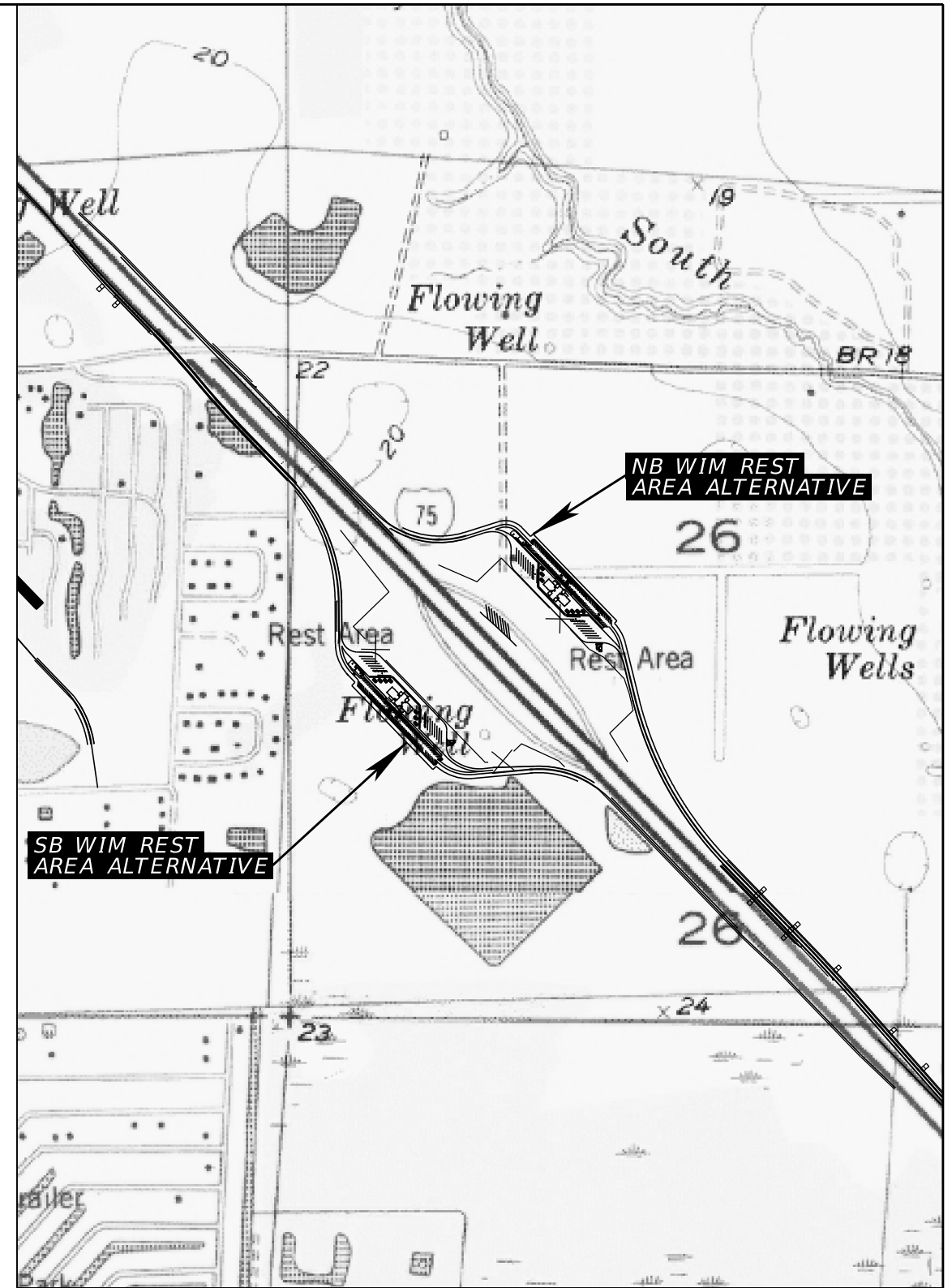
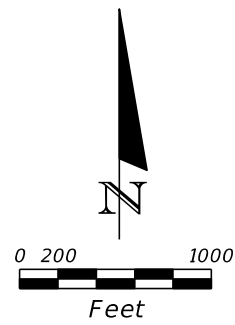
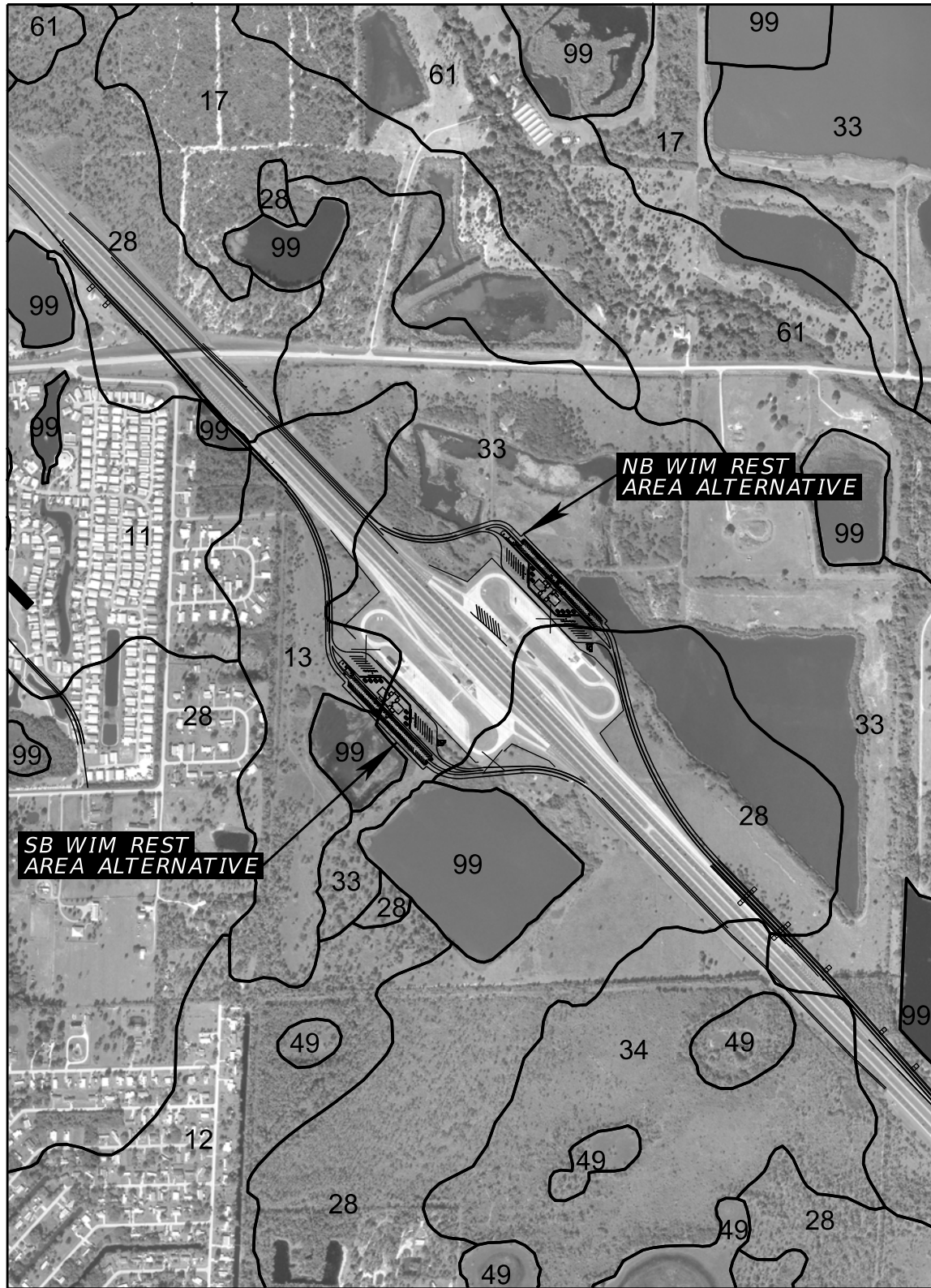
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 RANGE: 23E
 SECTIONS: 9 & 16

REFERENCE: USGS QUADRANGLE MAP OF "PUNTA GORDA, FLORIDA"

REST AREA ALTERNATIVES

REVISIONS				KENNETH L. SYMONDS, JR., P.E. P.E. LICENSE NUMBER 59518 TIERRA, INC. 591 SUSAN B. BRITT COURT WINTER GARDEN, FLORIDA 34787 CERTIFICATE OF AUTHORIZATION NO. 6486	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
					I-75	CHARLOTTE	436602-1-22-01	

USDA SOIL SURVEY &
 USGS QUADRANGLE MAPS



REFERENCE: USDA SOIL SURVEY OF CHARLOTTE COUNTY, FLORIDA

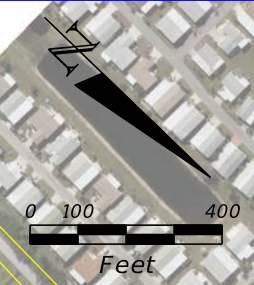
TOWNSHIP: 41S
 RANGE: 23E
 SECTIONS: 26 & 35

REFERENCE: USGS QUADRANGLE MAPS OF "CLEVELAND, FLORIDA"
 & "GILCHRIST, FLORIDA"

WEIGH-IN-MOTION ALTERNATIVES

REVISIONS				KENNETH L. SYMONDS, JR., P.E. P.E. LICENSE NUMBER 59518 TIERRA, INC. 591 SUSAN B. BRITT COURT WINTER GARDEN, FLORIDA 34787 CERTIFICATE OF AUTHORIZATION NO. 6486	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			USDA SOIL SURVEY & USGS QUADRANGLE MAPS	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					I-75	CHARLOTTE	436602-1-22-01		

APPENDIX B
Conceptual Design Plans



SB WIM Facility
(to remain)



NB WIM Facility
(to remain)

End Ramp

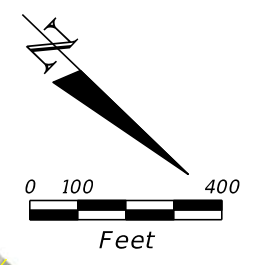
Matchline "A"

S Jones Loop Road

LEGEND

- - - - Existing Limited Access Right-of-Way Line
- - - - Proposed Limited Access Right-of-Way Line
- - - - Charlotte County Parcel Boundaries (2016)
- Proposed Pavement
- Proposed Building
- Proposed Grass

REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-75 REST AREA PD&E STUDY ALTERNATIVE SB-WIM	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
				SR 93	CHARLOTTE	436602-1-22-01		1 of 2



Blue Heron Pines

Blue Heron Pines
Golf Club

Begin Ramp



Rest Area
(closed in April 2015)

Matchline "A"

S Jones Loop Road

N Jones Loop Road

LEGEND

- Existing Limited Access Right-of-Way Line
- Proposed Limited Access Right-of-Way Line
- Charlotte County Parcel Boundaries (2016)
- Proposed Pavement
- Proposed Building
- Proposed Grass
- Proposed Barrier Wall

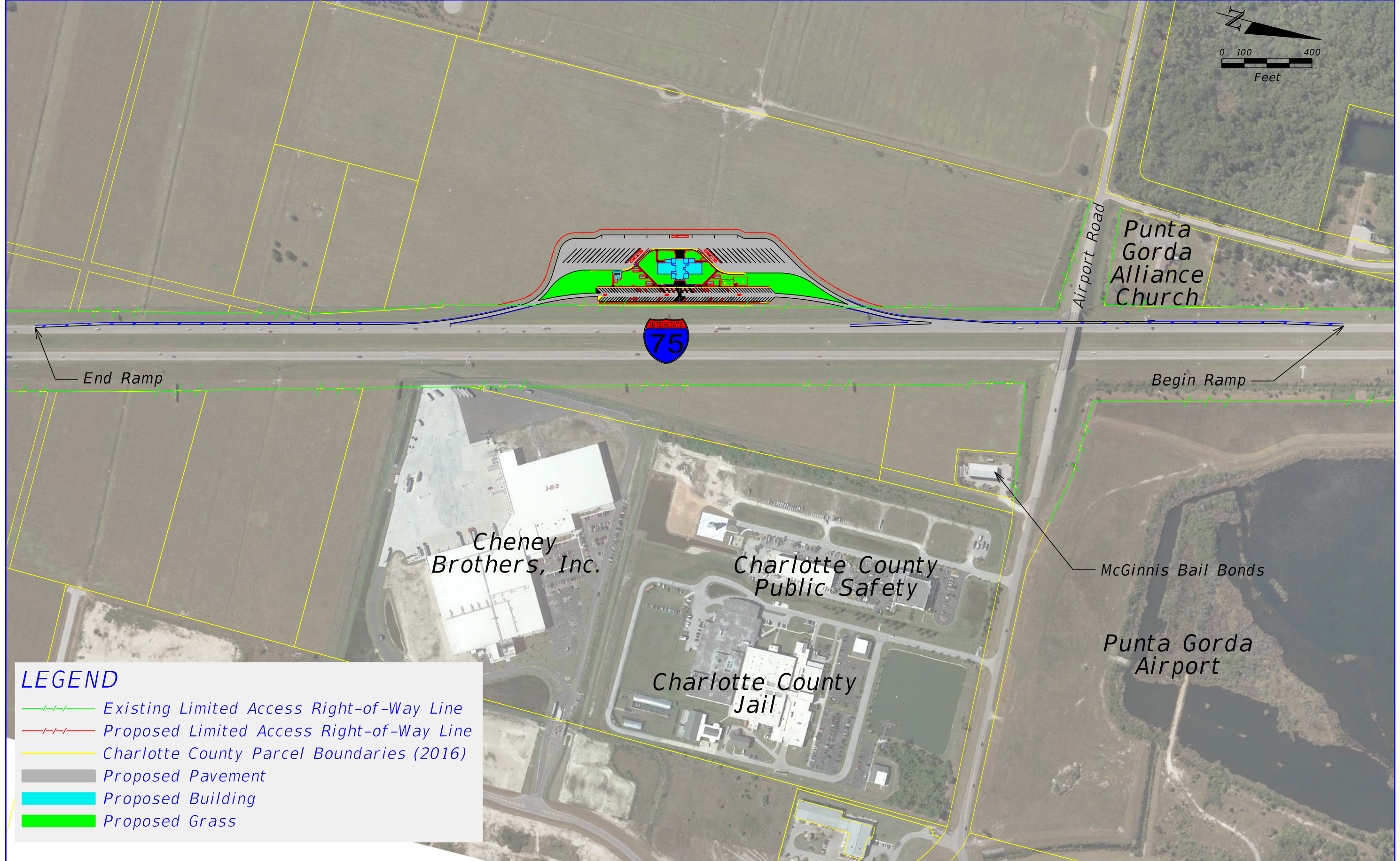
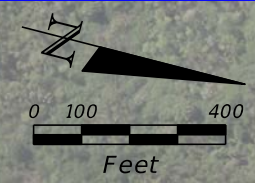
REVISIONS	
DATE	DESCRIPTION

Frederick Carlton Langlass, P.E.
P.E. LICENSE NUMBER 62498
RS&H, INC.
1715 N. Westshore Blvd., #500
Tampa, FL 33607
CERTIFICATE OF AUTHORIZATION 5620

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	CHARLOTTE	436602-1-22-01

I-75 REST AREA PD&E STUDY
ALTERNATIVE SB-WIM

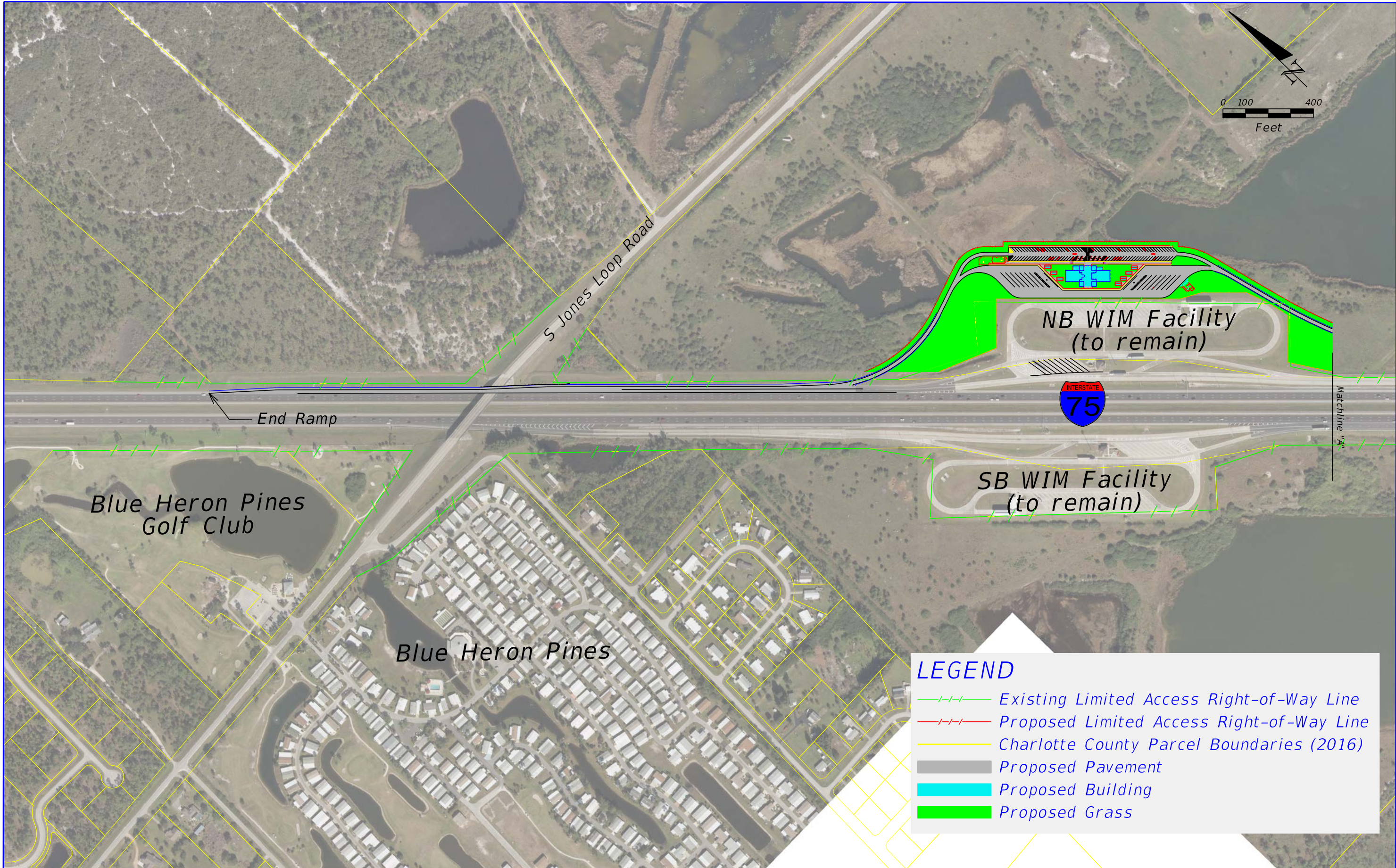
SHEET NO.
2 of 2



LEGEND

- - - - Existing Limited Access Right-of-Way Line
- - - - Proposed Limited Access Right-of-Way Line
- - - - Charlotte County Parcel Boundaries (2016)
- Proposed Pavement
- Proposed Building
- Proposed Grass

DATE		REVISIONS			STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-75 REST AREA PD&E STUDY ALTERNATIVE SB-2	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		1 of 1
					SR 93	CHARLOTTE	436602-1-22-01		



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

Frederick Carlton Langlass, P.E.
P.E. LICENSE NUMBER 62498
RS&H, INC.
1715 N. Westshore Blvd., #500
Tampa, FL 33607
CERTIFICATE OF AUTHORIZATION 5620

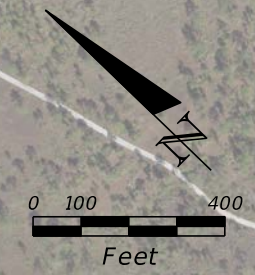
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	CHARLOTTE	436602-1-22-01

I-75 REST AREA PD&E STUDY
ALTERNATIVE NB-WIM

SHEET NO.
1 of 2

LEGEND

- Existing Limited Access Right-of-Way Line
- Proposed Limited Access Right-of-Way Line
- Charlotte County Parcel Boundaries (2016)
- Proposed Pavement
- Proposed Building
- Proposed Grass

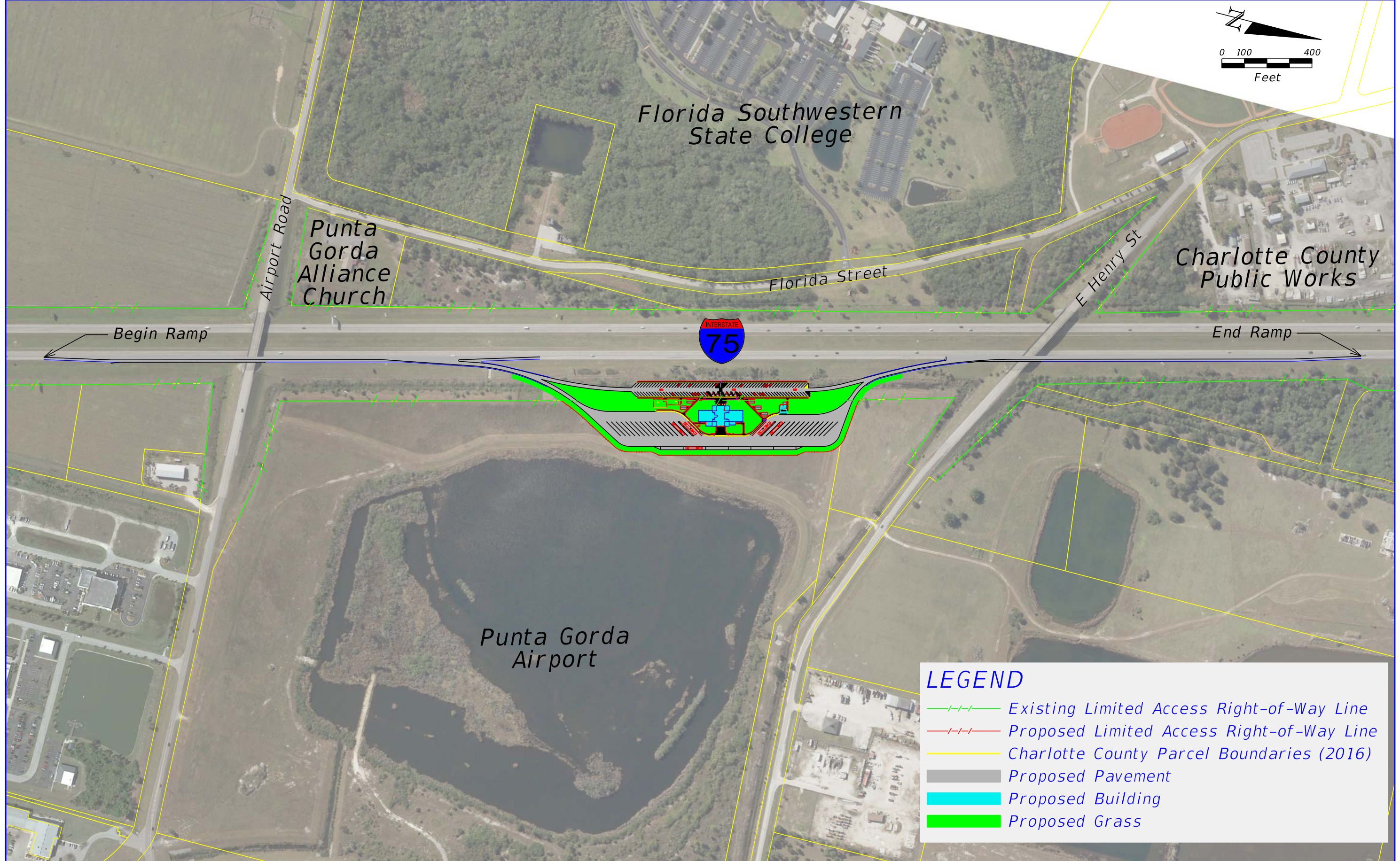
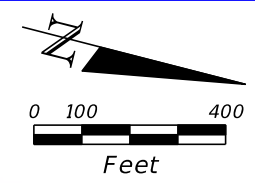


LEGEND

- /—/— Existing Limited Access Right-of-Way Line
- /—/— Proposed Limited Access Right-of-Way Line
- Charlotte County Parcel Boundaries (2016)
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REVISIONS				Frederick Carlton Langlass, P.E. P.E. LICENSE NUMBER 62498 RS&H, INC. 1715 N. Westshore Blvd., #500 Tampa, FL 33607 CERTIFICATE OF AUTHORIZATION 5620	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-75 REST AREA PD&E STUDY ALTERNATIVE NB-WIM	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		2 of 2
					SR 93	CHARLOTTE	436602-1-22-01		

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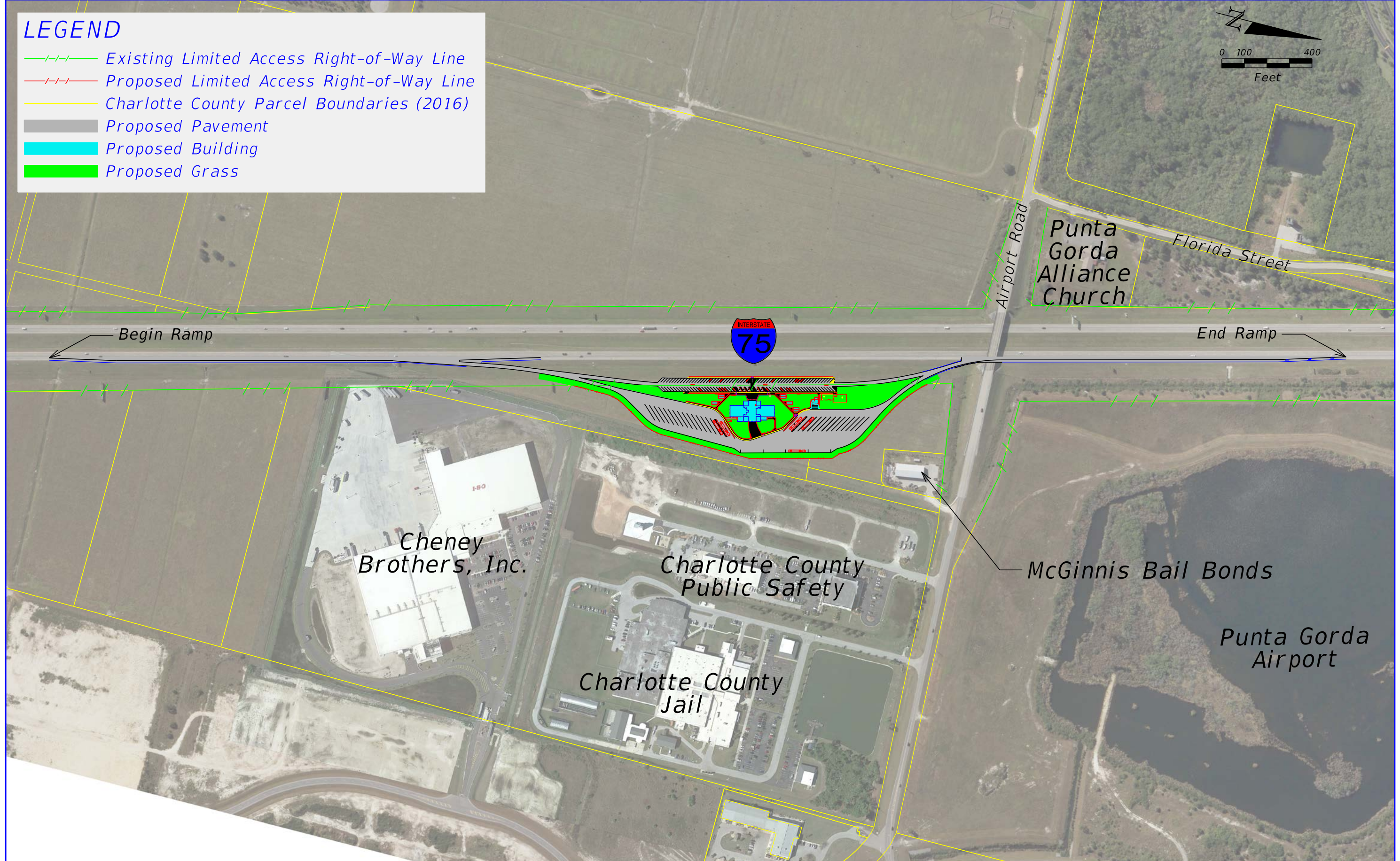
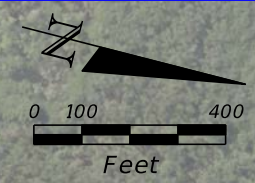
LEGEND

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REVISIONS				Frederick Carlton Langlass, P.E. P.E. LICENSE NUMBER 62498 RS&H, INC. 1715 N. Westshore Blvd., #500 Tampa, FL 33607 CERTIFICATE OF AUTHORIZATION 5620	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			<i>I-75 REST AREA PD&E STUDY</i> <i>ALTERNATIVE NB-2</i>	SHEET NO. 1 of 1
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
				SR 93	CHARLOTTE	436602-1-22-01			

LEGEND

- - - - Existing Limited Access Right-of-Way Line
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REVISIONS				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			<i>I-75 REST AREA PD&E STUDY ALTERNATIVE NB-2B</i>	SHEET NO. 1 of 1
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
				SR 93	CHARLOTTE	436602-1-22-01		

Frederick Carlton Langlass, P.E.
P.E. LICENSE NUMBER 62498
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