District 3 Truck Parking Conceptual Design and Feasibility Study

Summary Memorandum

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1 Project Purpose

According to the American Transportation Research Institute (ATRI), truck parking availability is the number 2 ranked concern or issue for truck drivers nationwide.[1] Recent updates to Federal Hours of Service (HOS) regulations and the mandatory use of Electronic Logging Devices (ELDs) have magnified this issue in recent years, often forcing drivers to make a choice between parking further away from their destination and losing productivity or parking in undesignated areas to avoid going over their allowable drive time. This lack of adequate truck parking can be a major safety issue for all roadway users when trucks are unable to find a safe and accessible location to park, which can lead to parking at unauthorized locations like roadway shoulders, ramps, and vacant lots. Additionally,

The Florida Department of Transportation (FDOT), like many other State DOTs has also seen a rise in the overutilization and overcrowding of state-owned rest areas, welcome centers, and weigh stations along major interstate corridors when other secure parking options are not available. In recent years, FDOT has made considerable effort to study the issue, identify areas of most concern, develop projects to increase capacity, and deploy technology solutions like the Truck Parking Availability System (TPAS). Like other areas of the state, FDOT District Three has seen many of their state-owned parking facilities at full or over capacity on most weeknights, which was confirmed in the recently completed *FDOT Truck Parking Implementation Study*, which utilized Closed-Circuit Television (CCTV) cameras to measure truck parking utilization (and overutilization) at parking facilities across the state.

As a result of these efforts, District Three initiated this *Truck Parking Conceptual Design and Feasibility Study (Study)* to evaluate implementable solutions to increase truck parking capacity at state-owned rest areas, welcome centers, weigh stations, existing Right of Way (ROW), and parcels adjacent to existing parking facilities along the I-10 corridor. The following *Summary Memorandum* provides a brief overview of the key tasks and work efforts undertaken during the development of the Study and is organized as follows:

- **Document and Literature Review** – provides a summary of the relevant truck parking literature that was reviewed to identify best practices, strategies, and lessons learned
- **Facility Inventory** – provides an inventory of all state-owned rest areas, welcome centers, weigh stations, and alternative ROW including interchange infield areas in District Three
- **Existing Conditions Assessment** – highlights the evaluation of expansion opportunities, environmental impacts, and other site characteristics reviewed for each location
- **Concept Plans and Cost Estimates** – provides an overview of all concepts and cost estimates developed for state-owned parking facilities and alternative ROW sites

The existing conditions assessment, concept plans, and cost estimates developed for each site were organized into individual feasibility studies which can be viewed as "stand alone" documents with more detailed information for use in future project development and planning activities.

[1] https://truckingresearch.org/2023/10/critical-issues-in-the-trucking-industry-2023/

2 Document and Literature Review

The following section provides a summary of the key Federal, State, and regional truck parking documents reviewed during the development of this study which identified relevant recommendations, policies, needs, and opportunities for to address the truck parking shortage. The resources, tools, and data identified during this review were collectively leveraged during the development of the Florida Department of Transportation (FDOT) District 3 Truck Parking Conceptual Design and Feasibility Study. *Document and Literature Review Summary Memorandum* provides a more detailed overview of each document reviewed.

2.1 National Initiatives and Documents

The Federal Highway Administration (FWHA) recognizes the need for prompt and ongoing action to combat the lack of safe, available truck parking across the country. As an administration, they have passed laws, created working groups, and assembled resources and tools for both state agencies and local municipalities to utilize in addressing truck parking needs at all levels of government. A summary of the documents reviewed at a national level is shown in **Table 1**.

Table 1: Summary of National Initiatives and Documents Reviewed

Document	Survey	Study	Implementation	State-Owned Infrastructure	New Capacity	Policy	Partnership Ideas	Funding	Other	Design Concepts
Jason's Law	✓	✓								
National Coalition on Truck Parking	✓			✓	✓	✓	✓	✓		
Truck Parking Development Handbook			✓	✓	✓	✓	✓			

2.2 Regional and Peer State Initiatives and Documents

Federal literature recognizes that truck parking is a regional need and oftentimes requires a multi-state approach in addition to traditional statewide studies and plans. As a result, regions across the country have formed truck parking coalitions to address the issue on a broader scale. In response to the nationwide issue, states across the country have also conducted their own studies, developed plans, and identified solutions tailored to the specific needs of their state. A summary of the documents reviewed from coalitions and peer states is shown in **Table 2**.

Table 2: Summary of Peer State Initiatives and Documents Reviewed

Document	Survey	Study	Implementation	State-Owned Infrastructure	New Capacity	Policy	Partnership Ideas	Funding	Other	Design Concept
Eastern Transportation Coalition Truck Parking Workshop	✓			✓	✓	✓	✓			
Mid-America Freight Coalition		✓	✓		✓					
Nevada	✓	✓	✓	✓	✓	✓	✓	✓		✓
Washington	✓		✓	✓	✓	✓	✓			
Arizona		✓	✓	✓	✓	✓				✓
Texas	✓	✓		✓	✓	✓	✓			✓

2.3 FDOT Initiatives and Literature

FDOT has identified truck parking as a critical need to accommodate statewide freight growth. Multiple statewide studies analyze the truck parking shortage on the State Highway System and explore opportunities to enhance and increase truck parking across the state by upgrading technology, capacity, and amenities. At a regional level, FDOT Districts have initiated more than 30 studies and projects to expand truck parking capacity. A summary of the FDOT Central Office and District initiatives reviewed is shown in **Table 3**.

Table 3: Summary of FDOT Initiatives and Documents Reviewed

FDOT Initiative/ Document	Survey	Study	Implementation	State-Owned Infrastructure	New Capacity	Policy	Partnership Ideas	Funding	Other	Design Concept
Statewide Truck Parking Study		✓	✓	✓	✓	✓	✓	✓	✓	
Truck Parking Implementation Study	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
District 1		✓	✓	✓	✓	✓	✓			
District 2	✓	✓	✓	✓		✓	✓	✓	✓	
District 6		✓			✓		✓			
District 7	✓								✓	

2.4 Key Takeaways

The review of truck parking literature showcases the industry best practices and lessons learned that can be applied to truck parking implementation initiatives across FDOT District Three. The availability of truck parking remains a top safety concern for transportation officials. By evaluating the current climate and work completed, Florida can identify opportunities for investment that address truck parking needs while working cohesively to move people and goods safely and efficiently on the transportation system.

The following are key findings that reflect the results of the document and literature review:

- Truck parking availability is a prominent national concern for the industry and state DOTs. Mandated statewide truck parking surveys help understand the shortage of parking and navigate the relationship between the supply and demand.
- Working Groups, industry surveys, and multi-state Coalitions are used to solicit feedback to inform officials during the planning and implementation of truck parking projects and to understand the issues, needs, and opportunities for improvement.
- The need to evaluate, plan for, and implement truck parking is a regional and cooperative approach. Many states form partnerships with multiple DOTs and/or the private sector to leverage existing resources and prioritize regional strategies.
- Multiple states, including Florida, analyze truck parking site location and feasibility using GPS, land use data, and local government resources.
- Many states, including Florida, address truck parking shortages by re-purposing right-of-way; re-allocating existing facility public parking at rest areas, weigh stations, and welcome centers; re-striping and accommodating design for back-in parking; and technology deployments such as TPAS.
- Truck parking capacity expansion proves unique challenges and opportunities are dependent on factors such as right-of-way, existing conditions, shortage, land use, and context (urban vs rural)
- Technology advancements such as TPAS deployment and GPS analysis could help improve notification and monitoring, operations and safety, and the overall driving experience by reducing illegal parking and eliminating the time spent searching for parking.
- There are opportunities for truck parking considerations to be incorporated into local municipal land use and zoning regulations, which can help improve access management and safety.

3 Inventory

FDOT-owned parking facilities including rest areas, welcome centers, and weigh stations, along with select interchange infield and interchange adjacent parcels were considered in the evaluation process of potential truck parking expansion sites. The assessment aimed to identify opportunities for potential capacity expansion by first prioritizing existing and available right-of-way and exploring public private partnerships to optimize truck parking infrastructure and address the needs of the industry. The FDOT facilities evaluated included a total of 12 rest areas, four weigh stations, and two welcome centers within District Three. Additionally, five interchange infield sites and two interchange adjacent parcels were evaluated. **Figure 1** provides a summary of the existing FDOT-owned parking facilities while **Figure 2** shows the interchange infield and interchange adjacent parcels assessed.

Figure 1: Inventory of Existing FDOT-Owned Parking Facilities

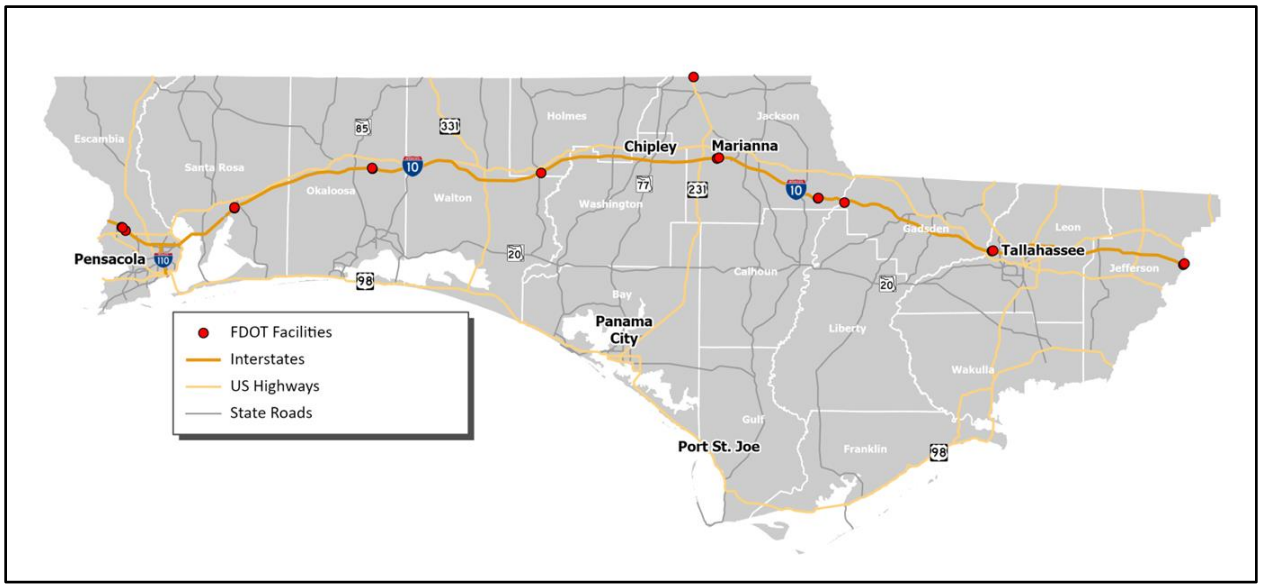


Figure 2: Inventory of Interchange Infield and Interchange Adjacent Sites

3.1 Rest Areas

The rest areas in District Three are distributed throughout seven counties from Escambia to Jefferson County. All facilities are located within the ROW of the I-10 corridor except for the Holmes County Rest Area, which is located off I-10 and the SR 81 interchange. For most of the rest areas, two separate facilities service the eastbound and westbound directions where each directional traffic exits I-10 using an off-ramp. The Gadsden and Holmes County Rest Areas service both the eastbound and westbound directions. There are two common facility layout and configurations for the Rest Areas consisting of the truck parking area closest to I-10, followed by passenger vehicle parking, and the facility building with picnic pavilions furthest back. The second configuration consists of the passenger vehicle parking area closest to I-10,

followed by the facility building and picnic pavilions, and the truck parking area behind the building. A summary of the Rest Area facilities is shown in **Table 4**.

Table 4: Summary of Rest Area Facility Inventory

County	Facility #	Description
Gadsden	30070	0.5 mi east of Apalachicola River, MM 162
Holmes	30050	Exit 96 onto SR 81, MM 96
Jackson	30061 EB/ 30062 WB	3 mi west of CR 279 (Exit 136), MM 133
Jefferson	30091 EB/ 30092 WB	9 mi east of US 19 (Exit 225), MM 233
Leon	30081 EB/ 30082 WB	2 mi east of SR 263 (Exit 196), MM 194
Okaloosa	30041 EB/ 30042 WB	3 mi east of SR 85 (Exit 31), MM 61
Santa Rosa	30031 EB/ 30032 WB	1 mi east of Sr 87 (Exit 31), MM 29

3.1.1 Welcome Centers

The two welcome centers located within District Three are found in Escambia and Jackson Counties. The Escambia Welcome Center is located along the I-10 corridor and the Jackson County Welcome Center is located along US 231. A summary of the welcome center facilities is shown in **Table 5**.

Table 5: Summary of Welcome Center Facility Inventory

County	Facility	Description
Escambia	30010 EB	4 mi east of AL State Line, MM 4
Jackson	30020 SB	0.5 mi south of AL State Line

3.1.2 Weigh Stations

The four (4) Weigh Stations located within District Three are found in Escambia and Jackson Counties along the I-10 corridor where a separate facility services the eastbound and westbound directions. The layout and configurations for the Weigh Stations are consistent throughout all facilities consisting of the inspection areas being closest to I-10, followed by the facility buildings, and the truck parking area located behind. A summary of the Weigh Station facilities is shown in **Table 6**.

Table 6: Summary of Weigh Station Facility Inventory

County	Facility #	Description
Escambia	30651 EB	3.4 mi east of AL State Line, MM3
Escambia	30652 WB	2.1 mi west of Alt. US 90 (Exit 5)
Jackson	30641 EB	3.5 mi east of SR 69 (Exit 152), MM 155
Jackson	30642 WB	2.4 mi west of CR 286 (Exit 158), MM 155

3.2 Interchange Infield & Interchange Adjacent Parcel Opportunities

In addition to the existing FDOT facilities, seven additional locations were assessed near select I-10 interchanges for truck parking expansion. These locations include four interchange infields within state-owned right-of-way that meet the necessary criteria for spacing and grading, allowing trucks to maneuver and park safely. Parcels adjacent to existing private truck parking facilities and distribution centers, such as Flying J's, Pilot Travel, and Family Dollar, were also considered. In these cases, partnerships can be developed where FDOT expands truck parking, and the facilities provide the amenities. A summary of the interchange infield and interchange adjacent truck parking locations is shown in **Table 7**.

Table 7: Summary of Interchange Infield and Interchange Adjacent Site Inventory

County	Facility Type	Description
Escambia	Interchange Infield	Exit 10
Jackson	Interchange Infield	Exit 130
Jackson	Interchange Infield	Exit 158
Jefferson	Interchange Infield	Exit 233
Leon	Interchange Infield	Exit 209
Jackson	Interchange Adjacent	Exit 136
Santa Rosa	Interchange Adjacent	Exit 26

3.3 Site Visits

The FDOT facilities and other private truck stops were physically assessed between October 3rd and 4th, 2023. The days were divided between the East and West routes, involving visits to facilities from Jefferson County to Jackson County on the first date (East Route) and facilities from Holmes to Escambia County on the second date (West Route).

3.3.1 Site Visit Key Takeaways

- With the opening of the Amazon Fulfillment Center in Tallahassee, there may be an increase in utilization of the Leon and Jefferson County Rest Areas.
- Rest Areas are used for staging during emergency management operations as observed in the Jefferson County Rest Area.
- No utilization of the picnic tables was observed during the visit.
- The private truck stops such as Flying J/Pilot Travel and Love's Travel experienced a higher utilization of trucks than observed in the FDOT facilities. These stops offer chain restaurants, physicals, and mechanic services.
- The private truck stops have 90 degree back-in parking design layout; however, it was observed that drivers use the spaces as pull-through parking. Driver loop to the back of the space, drive into the lane, and exit forward.
- The Okaloosa, Jackson, and Jefferson County Rest Areas may be candidates for striping reconfigurations converting angled pull-through parking to 40-degree back-in parking and shifting passenger vehicle parking to the facility loops.

4 Existing Conditions Assessment

A districtwide assessment of the current state of network performance, drainage, and utilities for existing rest areas, weigh stations, welcome centers, and alternative state-owned parcels was conducted to develop an initial baseline of truck parking conditions, needs, and feasibility improvements. The inventory and evaluation process utilized GIS analysis, desktop aerial map review, and site visits. For facility and site-specific information on the existing conditions assessment refer to the *Conceptual Design and Feasibility Studies* completed for each site.

4.1 Network Performance

Network performance measures are a critical factor in freight planning for roadway and pavement design of routes and parking facilities that require additional considerations due to the presence of heavy truck traffic. Many of these measures are also useful in traffic operations and safety analysis, and environmental and noise assessments.

A five-mile buffer was used to analyze traffic conditions along I-10 and in the vicinity of the rest areas, welcome centers, weigh stations, and alternative ROW sites. Network performance is based on 2020 and 2021 data that includes Average Annual Daily Truck Traffic (AADTT), truck percentage, level of service (LOS), combination truck hours of delay, combination truck planning time index, and combination truck average speed. A summary of network performance measures analyzed at the District level is shown in **Table 8.**

Table 8: Summary of District Three Network Performance Analysis

Performance Measure	District Three Analysis
Average Annual Daily Truck Traffic (AADTT)	6,000 to 10,000
Truck Percentage (Average)	23.9
Level of Service (LOS)	B
Combination Truck Hours of Delay	1 to 5
Combination Truck Planning Time Index (PTI)	Less than 1.5
Combination Truck Average Speed	60 + mph

4.2 Drainage

Existing drainage conditions were evaluated for stormwater drainage patterns and existing capacities of stormwater facilities. This process allows for the design team to have a better understanding of the direction of runoff and potential future capacity, in the event impervious surfaces are added to accommodate truck parking expansion. Runoff from the existing truck facilities is conveyed through a combination of open and closed systems. Drainage structures found at most facilities are highlighted in **Table 9**.

Table 9: Summary of Drainage Structures

Drainage Structures	
Grate inlets	Open concrete ditches
Curb and gutter	Grassed swales
Cross drains	

4.3 Utilities

Utility information is provided for the purpose of evaluating and considering potential surface and subsurface utility conflicts associated with the proposed truck parking expansion. Understanding the location of utility placement allows the project team to proactively consider avoiding utility impacts during the initial design and right-of-way processes. Coordination with the utility agencies is needed if it is determined that utility relocation will be required. **Table 10**provides a list of the utilities found within the vicinity of most facilities.

Table 10: Summary of Utilities Identified

Utilities	
Telephone	Communication Lines
CATV	Sewer/Water/Wastewater Lines
Electric	Fiber
Natural Gas	Traffic Signals

A design ticket was obtained for each of the FDOT facilities and interchange infield/adjacent locations from the Sunshine One Call of Florida. **Table 11** provides a summary of the findings based on the responses received from utility owners located in the vicinity of the FDOT facilities and interchange infield/adjacent locations.

Table 11: Utility Design Ticket Findings for All Sites

Facility/Location	Findings
Gadsden Rest Area 30070 EB/WB	Active facilities present; potential for coordination
Holmes Rest Area 30050 EB/WB	No major conflicts anticipated
Jackson Rest Areas 30061 EB/ 30062 WB	No major conflicts anticipated
Jefferson Rest Areas 30091 EB/30092 WB	Active facilities present; potential for coordination
Leon Rest Areas 30081 EB/30082 WB	Active facilities present; potential for coordination
Okaloosa Rest Areas 30041EB/30042 WB	Active facilities present; potential for coordination
Santa Rosa Rest Areas 30031 EB/30032 WB	No major conflicts anticipated
Escambia Welcome Center 30010 EB	No major conflicts anticipated
Jackson Welcome Center 30020 SB	No major conflicts anticipated
Escambia Weigh Stations 30651 EB/30652 WB	No major conflicts anticipated
Jackson Weigh Stations 30641 EB/30642 WB	No major conflicts anticipated
Escambia Exit 10 Interchange Infield	No major conflicts anticipated
Jackson Exit 130 Interchange Infield	No major conflicts anticipated
Jackson Exit 158 Interchange Infield	No major conflicts anticipated

Leon Exit 209 Interchange Infield	No major conflicts anticipated
Jefferson Exit 233 Interchange Infield	No major conflicts anticipated
Jackson Exit 136 P3 Adjacent ROW	No major conflicts anticipated
Santa Rosa Exit 26 P3 Adjacent ROW	No major conflicts anticipated

4.4 Environmental Screening

FDOT, acting under FHWA authority granted by the National Environmental Policy Act (NEPA) of 1969, oversees environmental reviews for federalized highway projects on the State Highway System (23 USC 327). In line with NEPA and FDOT's Project Development and Environment (PD&E) Manual, an initial environmental screening assessed social, cultural, natural, and physical resources within and near the facilities and alternative right-of-way parcels. This aims to reduce or prevent impacts on the environment. The process involved reviewing various databases from partner agencies such as:

- U.S. Fish and Wildlife Service (USFWS) for the National Wetland Inventory
- Federal Emergency Management Agency (FEMA) for Flood Zones
- Northwest Florida Water Management District (NWFWMD), Suwanee River Water Management District (SRWMD), and the University of Florida (UF) GeoPlan Center for Land Use
- U.S. Department of Agriculture (USDA) National Resources Conservation Services (NRCS) for Soil Survey
- Florida Natural Areas Inventory (FNAI) for Conservation Lands and Protected Species
- Bureau of Archaeological Research (BAR) Florida Master Site File for Historic, Archaeological, and Cultural Resources

5 Concept Plan Development

Development of the truck parking expansion concept plans utilized existing conditions data and information outlined in the previous sections to ensure a conceptual design that is sustainable, cost-effective, and safe for users of the parking facility. Environmental conditions, topography, and right-of-way limitations were considered to minimize wetland impacts, address sloping and grading challenges, and identify cost-effective designs that maximize the use of available space. The concept plans were developed following the design guidance in the FDOT Design Manual, FDOT Building Facilities Design Manual, FDOT Truck Parking Implementation Study, and the FHWA Truck Parking Development Handbook.

Once initial concepts were developed, MicroStation AutoTurn software was used to assess and confirm that an AASHTO WB-67 combination truck, the largest heavy truck design vehicle used by FDOT, could safely operate, and navigate the proposed parking configurations, which includes converting traditional angled pull-through spaces to angled back-in. Lighting and signage considerations were also incorporated in the conceptual design to ensure proposed layouts would provide a safe and functional parking facility for truck drivers.

Truck Parking Availability System (TPAS) design and cost estimates were not included in the concepts and cost estimates for this effort as statewide updates to the Developmental Specifications and Pay Item structure are currently being drafted and approved by Central Office. TPAS is transitioning from in-ground sensors installed in each parking space to video camera detection systems that leverage low-cost cameras

and an in-house detection software solution. This technology and camera layouts should be assessed as part of future final design efforts.

5.1 Cost Estimate Development

The cost estimates were developed using a process consistent with FDOT's Long Range Estimates (LRE) application. The Engineer's Estimate includes pay items highlighted in **Table 12**. Contingencies were also included for temporary traffic control (5%), mobilization (15%), project unknowns (15%), and initial contingencies (5% or $50,000).

Table 12: Engineer's Estimate Pay Items

Pay Items	
Clearing & Grubbing	Embankment
Stabilization	Optional Base Group
Concrete Curbs, Sidewalks, & Driveways	Performance Turf, Sod
Signing & Pavement Markings	Post Signs
Light Pole (New & Relocation)	

5.2 Feasibility Studies

The *District 3 Truck Parking Conceptual Design and Feasibility Study* provided a comprehensive review of all state-owned rest areas, welcome centers, and weigh stations, as well as a review of select interchange infields and interchange adjacent sites near existing truck parking facilities. The existing conditions assessment, concept plans, and cost estimates developed for each site were organized into individual feasibility studies which can be viewed as "stand alone" documents with more detailed information for use in future project development and planning activities.

In total, the Study developed 29 alternative concepts covering ten rest areas/welcome centers, four weigh stations, four interchange infields, and two interchange adjacent parcels. 19 cost estimates were developed for 14 rest areas, welcome centers, and weigh stations. Feasibility studies were developed for all facilities and sites reviewed for the study. Feasibility studies were also developed for three other rest areas that were not reviewed for this effort including:

- **Gadsden Rest Area** – concepts and cost estimates were previously developed for the FDOT Statewide Truck Parking Implementation Study and subsequent Carbon Reduction Funding program exercises
  - Funding was not secured for these concepts, but could be explored for future funding and expansion opportunities
- **Jefferson Rest Areas** – concepts and cost estimates were previously developed for the FDOT Statewide Truck Parking Implementation Study and subsequent Carbon Reduction Funding program exercises
  - Funding was secured for Design and Construction (Westbound only)
- **Okaloosa Rest Areas** – concepts and cost estimates were previously developed for the FDOT Statewide Truck Parking Implementation Study and subsequent Carbon Reduction Funding program exercises
  - Funding was secured for Design and Construction (Eastbound only)

Table 13 provides a summary of all concepts, cost estimates, and feasibility studies developed for this effort.

Table 13: Summary of Facility Concepts, Cost Estimates, and Feasibility Studies

Facility/Location	Concept	Cost Estimate	Feasibility Study
Holmes Rest Area 30050 EB/WB	1	1	Yes
Jackson Rest Areas 30061 EB/ 30062 WB	2	2	Yes
Leon Rest Areas 30081 EB/30082 WB	6	6	Yes
Santa Rosa Rest Areas 30031 EB/30032 WB	4	4	Yes
Escambia Welcome Center 30010 EB	1	1	Yes
Jackson Welcome Center 30020 SB	1	1	Yes
Escambia Weigh Stations 30651 EB/30652 WB	2	2	Yes
Jackson Weigh Stations 30641 EB/30642 WB	2	2	Yes
Escambia Exit 10 Interchange Infield	1	*N/A*	Yes
Jackson Exit 130 Interchange Infield	2	*N/A*	Yes
Jackson Exit 158 Interchange Infield	4	*N/A*	Yes
Jefferson Exit 233 Interchange Infield	1	*N/A*	Yes
Leon Exit 209 Interchange Infield	*N/A*	*N/A*	Yes
Jackson Exit 136 Interchange Adjacent	1	*N/A*	Yes
Santa Rosa Exit 26 Interchange Adjacent	1	*N/A*	Yes
*Gadsden Rest Area 30070 EB/WB**	*N/A*	*N/A*	Yes
*Jefferson Rest Areas 30091 EB/30092 WB***	*N/A*	*N/A*	Yes
*Okaloosa Rest Areas 30041EB/30042 WB***	*N/A*	*N/A*	Yes
Total:	**29**	**19**	**18**

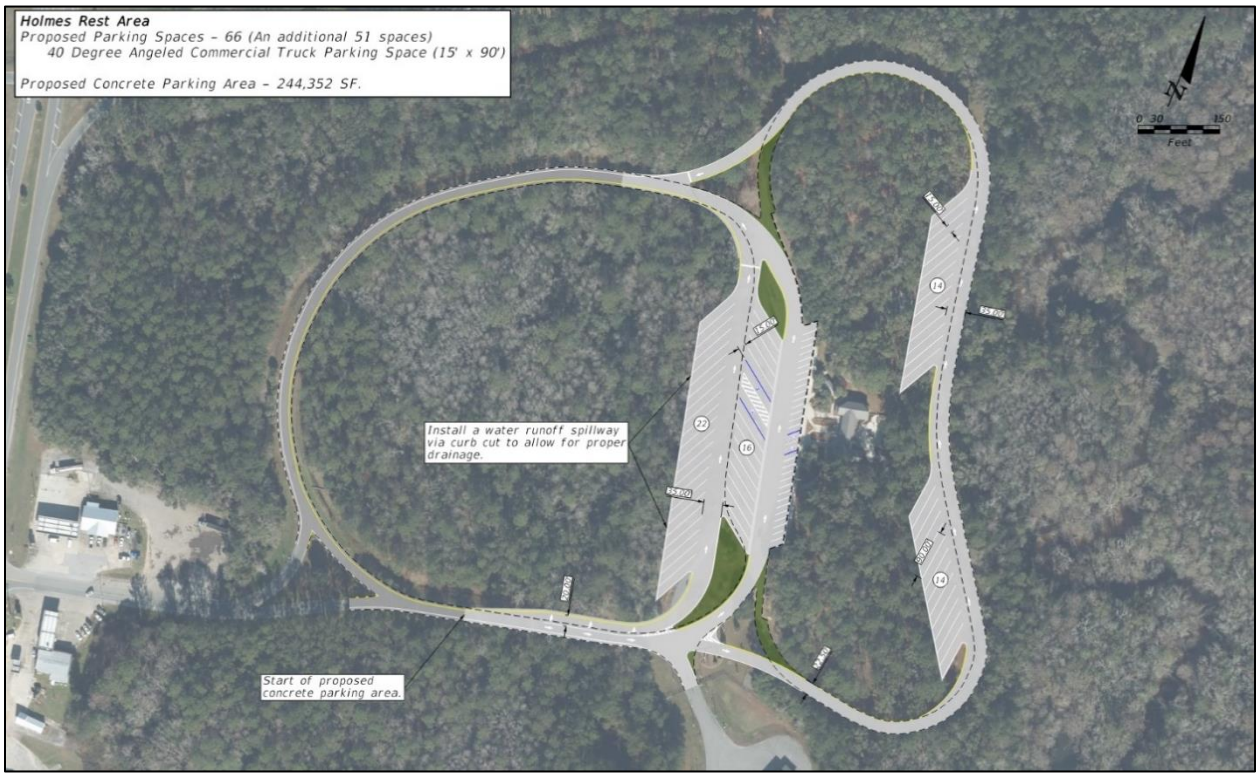
5.2.1 Holmes County Rest Area

The Holmes County Rest Area currently has an asphalt parking area with 14 truck parking spaces. The concept plan proposes converting the existing parking area to concrete and includes additional paved surfaces inside the Sunrise Circle loop on the west end of the facility as well as inside the eastern loop behind the facility building. The new design proposes 40 degree back-in parking with each space measuring 15 ft in width by 90 ft in length that can accommodate a **total of 66 parking spaces** as shown in **Figure 3**.

The new design would provide an **additional 52 spaces** and approximately 100,000 square feet of paved surface. A water runoff spillway via curb and gutter is proposed to allow proper drainage of the additional impervious surface in the facility. However, the existing drainage will be utilized for the passenger vehicle parking area. Minor grading within the parking area may be required to allow for runoff to flow

appropriately. Fill and grading are proposed on the northern portion of the eastern loop into Sunrise Circle. The Holmes County Rest Area truck parking expansion conceptual design has a preliminary cost of **$8,038,022**.

Figure 3: Holmes County Rest Area Concept Design



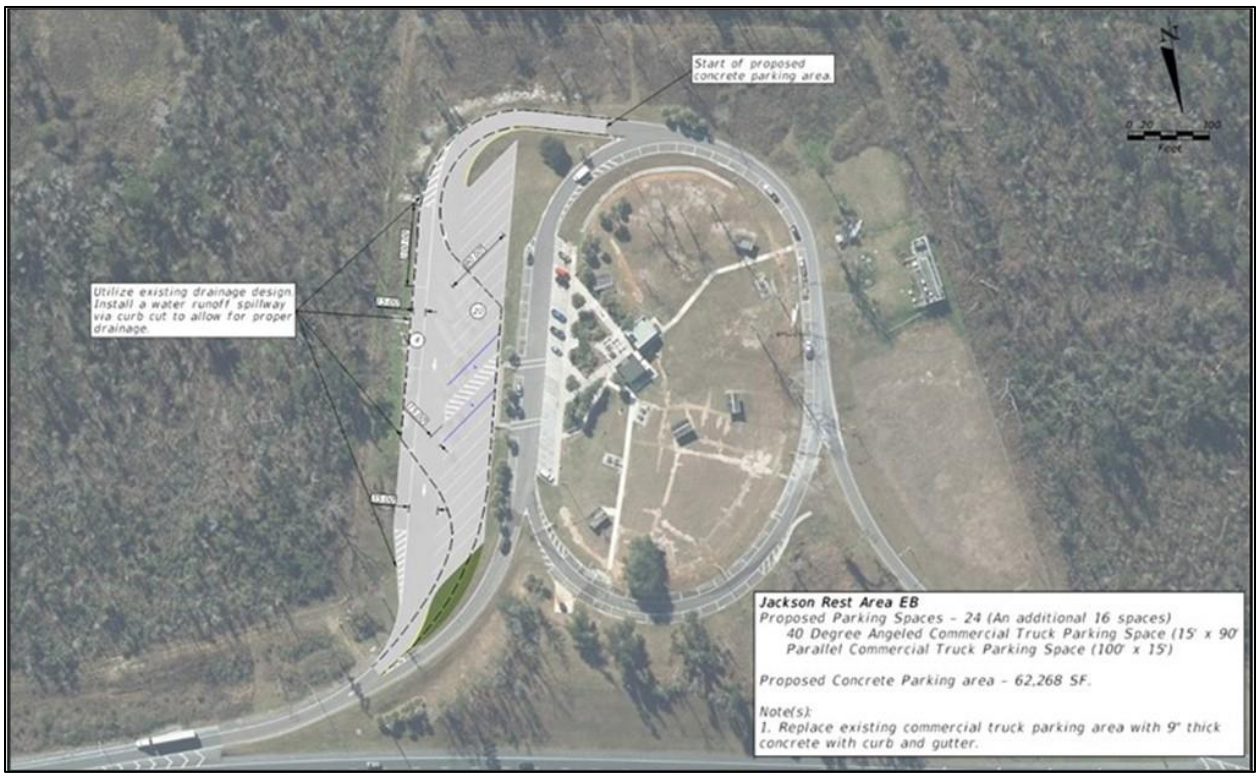
5.2.2 Jackson County Rest Areas

The Jackson County Rest Areas currently have an asphalt parking area. The eastbound facility has 8 existing truck parking spaces while the westbound facility has 22 spaces. The new design proposes 40 degree back-in parking with each space measuring 15 ft in width by 90 ft in length and parallel parking with each space measuring 15 ft in width by 100 ft in length.

5.2.2.1 Eastbound Rest Area

The Jackson County Eastbound Rest Area concept plan can accommodate a **total of 24 spaces** as shown in **Figure 4.** The design would provide an **additional 12 spaces** and approximately 19,431 square feet of paved surface. The concept plan proposes converting the parking area to nine-inch concrete with curb and gutter and include additional paved surface on the northern portion of the parking area. The existing drainage design will be utilized for the parking area with the installation of a water runoff spillway via curb cut to allow for proper drainage. The proposed parking area is relatively flat and may require minor grading for accurate water flow. Fill and grading are proposed on the southern portion of the facility closest to the truck parking area exit lane. The Jackson County Eastbound Rest Area truck parking expansion conceptual design has a preliminary cost of **$3,062,878**.

Figure 4: Jackson County Eastbound Rest Area Concept Design



5.2.2.2 Westbound Rest Area

The Jackson County Westbound Rest Area concept plans can accommodate a **total of 34 spaces** as shown in **Figure 5**. The design would provide an **additional 34 spaces** and approximately 7,016 square feet of paved surface. The concept plan proposes shifting the passenger vehicle parking into the existing picnic area. The existing drainage design will be utilized where possible on the eastern portion of the facility closest to the truck entrance lanes. Excavation will also be required on the northeastern portion of the facility to avoid a retaining wall. The excavation can be utilized for the fill required on the northwestern portion of the facility to achieve proper grade in the passenger vehicle parking area. The Jackson County Westbound Rest Area truck parking expansion conceptual design has a preliminary cost of **$4,938,605**.

Figure 5: Jackson County Westbound Rest Area Concept Design

5.2.3 Leon County Rest Areas

The Leon County Rest Areas consist of concrete parking areas with asphalt pavement entrance and exit ramps. The eastbound and westbound facilities have 25 existing truck parking spaces each. The concept plans propose maintaining a concrete pavement parking area with additional paved surface and asphalt pavement loops. Three design reconfigurations are proposed consisting of 40-degree back-in, 90-degree back-in, and 30-degee pull-through parking. The 40-degree back-in parking consist of truck parking spaces measuring 15 ft in width by 90 ft in length and the 90-degree back-in parking consists of spaces measuring 15 ft in width by 77 ft in length. The pull-through parking consists of 30-degree angled spaces measuring 15 ft in width by 90 ft in length. The eastbound facility concept design consists of 40-degree back-in parking while the westbound facility concept design consists of five different options including four rows of 40-degree back-in; two, three, and four rows of 90-degree back-in; and four rows of 30-degree pull-through parking. The proposed parking area for both facilities is relatively flat and may require grading for accurate water flow.

5.2.3.1 Eastbound Rest Area

The Leon County Eastbound Rest Area concept plans consist of 40-degree back in parking that can accommodate a **total of 45 spaces** as shown in **Figure 6**. The design would provide an **additional 20 spaces** and 47,483 square feet of paved surface. The Leon County Eastbound Rest Area truck parking expansion conceptual design has a preliminary cost of **$3,544,842**.

Figure 6: Leon County Eastbound Rest Area Concept Design

5.2.3.2 Westbound Rest Area

Leon County Westbound Rest Area concept plans consist of multiple parking design strategies include 90-degree back-in, 40-degree angled back-in, and 30-degree angled pull-through parking configurations.

Three options were developed for the design of 90-degree back-in parking at the Leon County Westbound Rest Area consisting of additional rows of parking spaces as shown in **Figure 7**, **Figure 8**, and **Figure 9**. The addition of parking spaces is proposed within the loop behind the facility building. Specifics for each design are summarized in **Table 14**.

Table 14: Leon County Westbound Rest Area 90-Degree Back-In Design Alternatives

Concept Option #	Total Spaces	Additional Spaces	Number of Rows	Additional Paved Surface (Square feet)
1	82	57	2	105,474
2	103	78	3	155,470
3	128	103	4	183,380

The Leon County Westbound Rest Area truck parking expansion 90-degree back-in parking conceptual designs have a preliminary cost of:

- Option 1 (90-Degree Back-In): **$4,624,418**
- Option 2 (90-Degree Back-In): **$6,589,969**
- Option 3 (90-Degree Back-In): **$7,706,215**

Figure 7: Leon County Westbound Rest Area Option 1 Concept Design

Figure 8: Leon County Westbound Rest Area Option 2 Concept Design

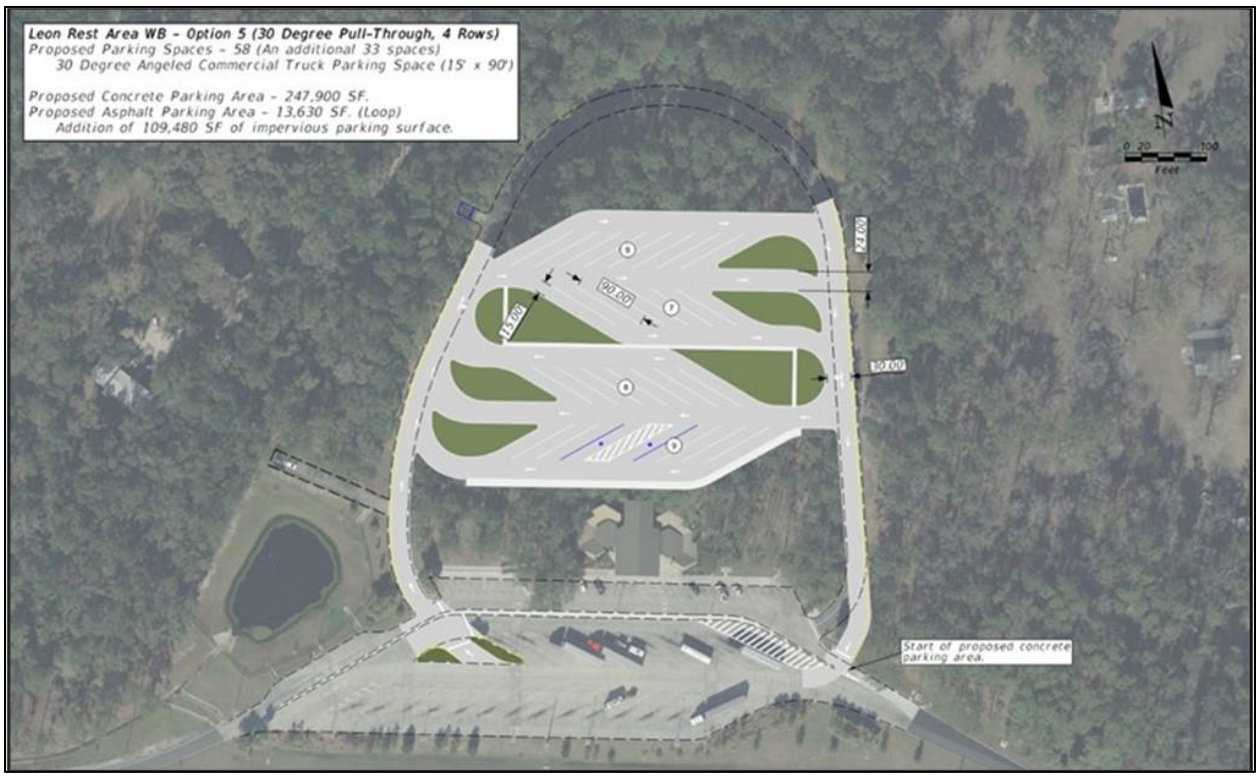
Figure 9: Leon County Westbound Rest Area Option 3 Concept Design

Option 4 for the Leon County Westbound Rest Area is 40-degree back in parking that can accommodate a **total of 74 spaces** as shown in **Figure 10.** The design would provide an **additional 49 spaces** and 119,000 square feet of paved surface. The Leon County Westbound Rest Area truck parking expansion 40-degree angled back-in parking conceptual design has a preliminary cost of **$5,505,207**.

Figure 10: Leon County Westbound Rest Area Option 4 Concept Design

Option 5 for the Leon County Westbound Rest Area is 30-degree pull-through parking that can accommodate a **total of 58 spaces** as shown in **Figure 11**. The design would provide an **additional 33 spaces** and 109,480 square feet of paved surface. The Leon County Westbound Rest Area truck parking expansion 30-degree angled pull-through parking conceptual design has a preliminary cost of **$5,589,304**.

Figure 11: Leon County Westbound Rest Area Option 5 Concept Design



5.2.4 Santa Rosa County Rest Areas

The Santa Rosa County Rest Areas consist of a concrete parking area with asphalt pavement entrance and exit ramps. The eastbound facility has 73 existing truck parking spaces while the westbound facility has 75 spaces. The concept plans propose maintaining a concrete pavement parking area with a reconfiguration that will reduce the impervious surface area. Two design reconfigurations are proposed for each directional facility consisting of 40-degree and 90-degree back-in parking. The 40-degree back-in parking consists of truck parking spaces measuring 15 ft in width by 90 ft in length and the 90-degree back-in parking consists of spaces measuring 15 ft in width by 77 ft in length.

5.2.4.1 Eastbound Rest Area

Option 1 for the Santa Rosa Eastbound Rest Area is 40-degree back-in parking that can accommodate a **total of 85 spaces** as shown in **Figure 12**. The design would provide an **additional 12 spaces** and reduce the impervious parking surface by 32,486 square feet. Minor grading within the parking area may be required. The Santa Rosa County Eastbound Rest Area truck parking expansion 40-degree angled back-in parking conceptual design has a preliminary cost of **$3,600,691**.

Figure 12: Santa Rosa County Eastbound Rest Area Option 1 Concept Design

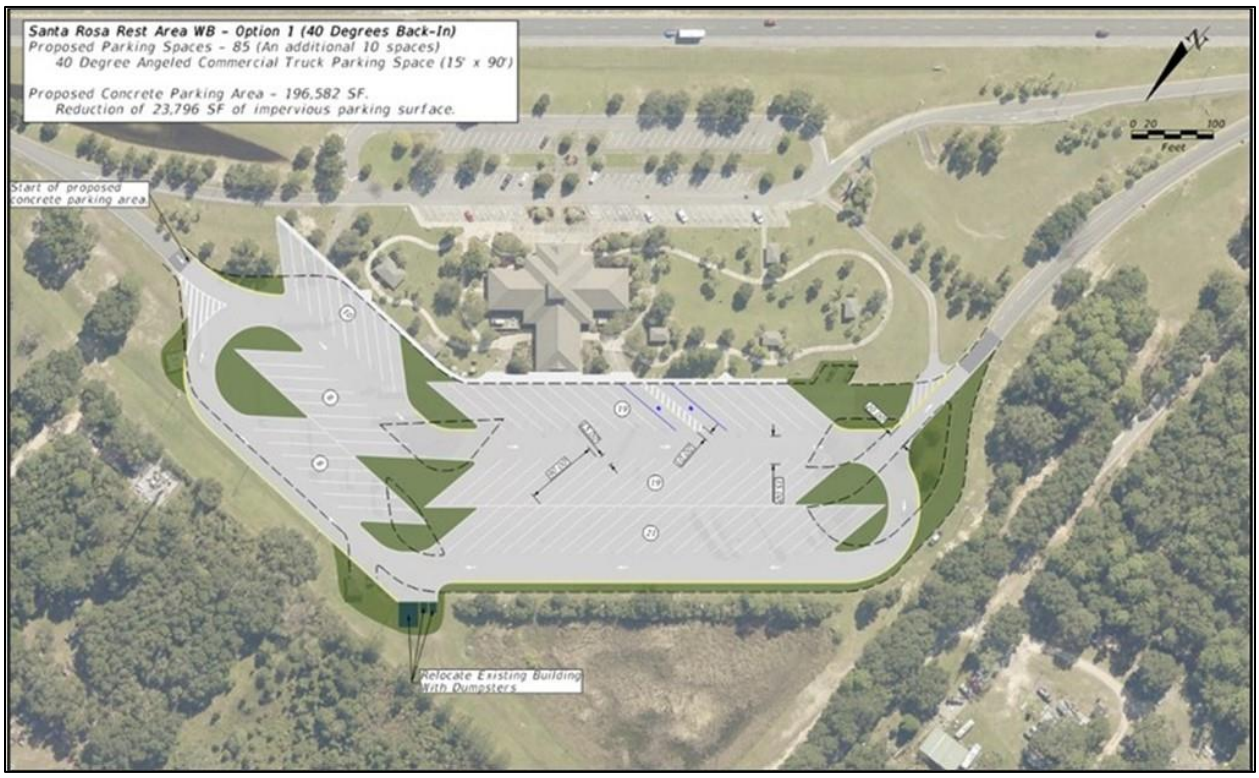
Option 2 for the Santa Rosa Eastbound Rest Area is 90-degree back in parking that can accommodate a **total of 110 spaces** as shown in **Figure 13**. The design would provide an **additional 37 spaces** and reduce the impervious parking surface by 3,958 square feet. Fill and grading are proposed on the western portion of the facility closest to the truck parking area entrance lane. Additional grading may be required in the proposed parking area. The design also proposes relocating the existing building on the southern portion of the facility and placing dumpsters in the area. The Santa Rosa County Eastbound Rest Area truck parking expansion 90-degree back-in parking conceptual design has a preliminary cost of **$2,382,572**.

Figure 13: Santa Rosa County Eastbound Rest Area Option 2 Concept Design

5.2.4.2 Westbound Rest Area

Option 1 for the Santa Rosa Westbound Rest Area is 40-degree back in parking that can accommodate a **total of 85 spaces** as shown in **Figure 14**. The design would provide an **additional 10 spaces** and reduce the impervious parking surface by 23,796 square feet. The concepts also propose relocating the existing building on the southern portion of the facility and placing dumpsters in the area. The Santa Rosa County Westbound Rest Area truck parking expansion 40-degree angled back-in parking conceptual design has a preliminary cost of **$3,451,114**.

Figure 14: Santa Rosa County Westbound Rest Area Option 1 Concept Design



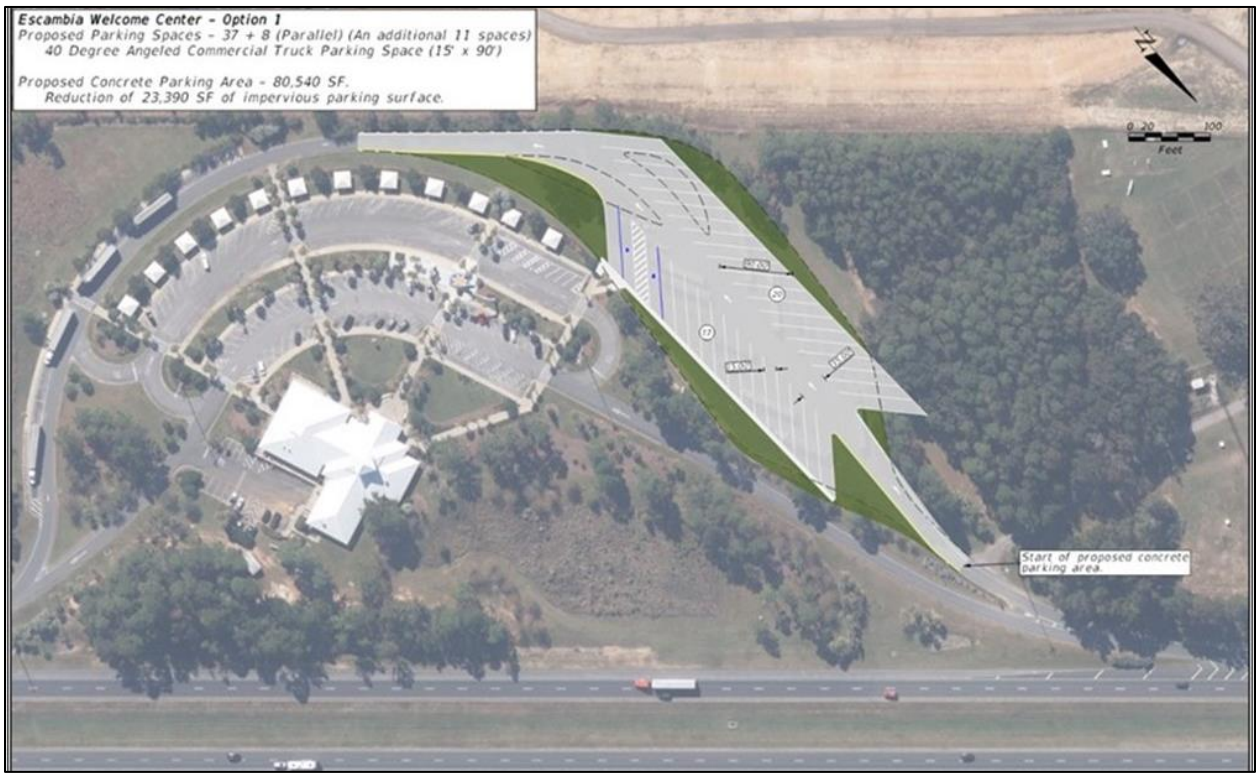
Option 2 for the Santa Rosa Westbound Rest Area is 90-degree back in parking that can accommodate a **total of 110 spaces** as shown in **Figure 15**. The design would provide an **additional 35 spaces** and reduce the impervious parking surface by 9,630 square feet. The concepts also propose relocating the existing building on the southern portion of the facility and placing dumpsters in the area. The Santa Rosa County Westbound Rest Area truck parking expansion 90-degree back-in parking conceptual design has a preliminary cost of **$2,473,782**.

Figure 15: Santa Rosa County Westbound Rest Area Option 2 Concept Design

5.2.5 Escambia County Welcome Center

The Escambia County Welcome Center currently has an asphalt parking area with 34 truck parking spaces. The concept plan proposes converting the existing parking area to concrete and reducing the impervious parking area by 23,390 square feet. The proposed parking area is relatively flat and may require minor grading for accurate water flow. The new design proposes 40 degree back-in parking measuring 15 ft in width by 90 ft in length that can accommodate a **total of 45 parking spaces**, providing an **additional 11 spaces**, as shown in **Figure 16.** The Escambia County Welcome Center truck parking expansion 40-degree angled back-in parking conceptual design has a preliminary cost of **$3,228,426**.

Figure 16: Escambia County Welcome Center Concept Design



5.2.6 Jackson County Welcome Center

The Jackson County Welcome Center currently has an asphalt parking area with 35 truck parking spaces. The concept plan proposes converting the existing parking area to concrete and includes additional paved surface on the north end, behind the facility building adding 59,150 square feet. The proposed parking area is relatively flat and may require minor grading for accurate water flow. The new design proposes 90 degree back-in parking with each space measuring 15 ft in width by 77 ft in length that can accommodate a **total of 79 parking spaces**, providing an **additional 44 spaces**, as shown in **Figure 17**. The Jackson County Welcome Center truck parking expansion 90-degree back-in parking conceptual design has a preliminary cost of **$5,431,240**.

Figure 17: Jackson County Welcome Center Concept Design

5.2.7 Escambia County Weigh Stations

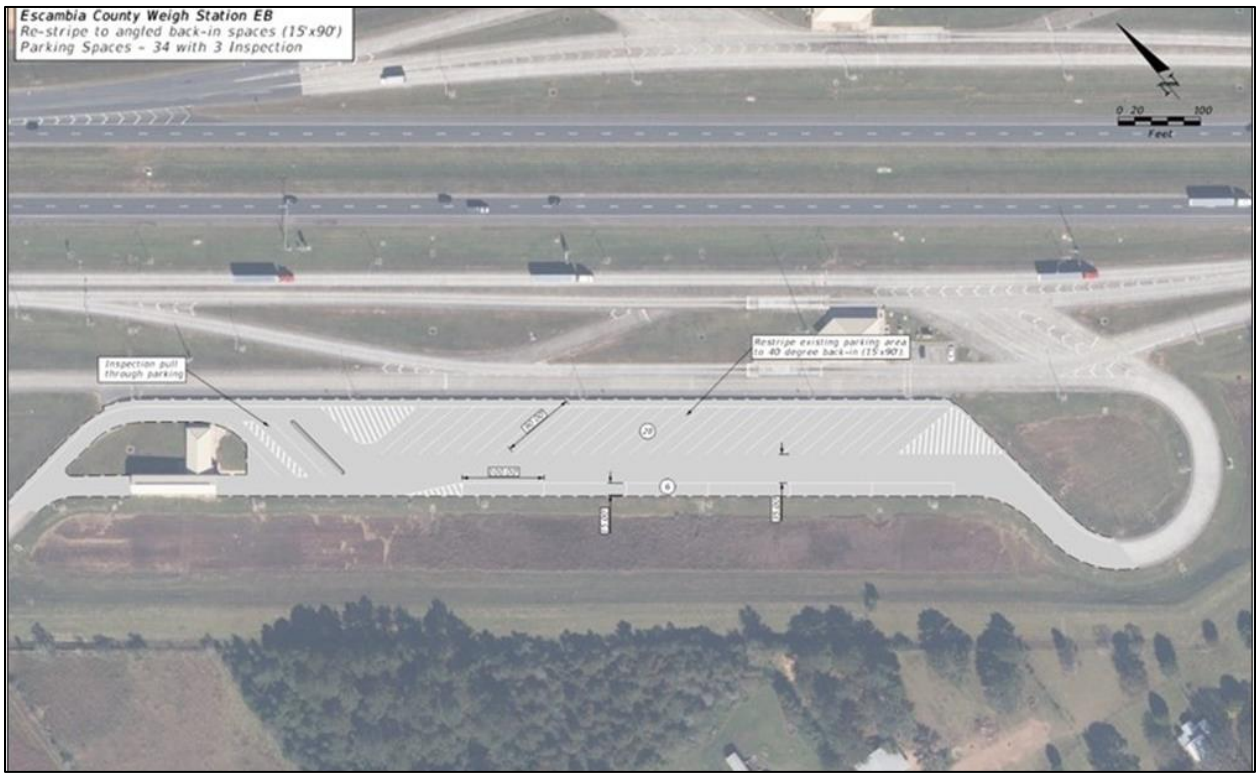
The Escambia County Weigh Stations consist of concrete parking areas with the eastbound facility having 33 existing truck parking spaces and three (3) inspection spaces and the westbound facility having 32 truck spaces and three (3) inspection spaces. The concepts propose restriping the existing parking area to 40-degree back-in and parallel parking. The 40-degree back-in parking consists of truck parking spaces measuring 15 ft in width by 90 ft in length and the parallel parking consists of spaces measuring 15 ft in width by 100 ft in length.

Given the constrained availability of right-of-way, additional acquisition should be considered to increase the truck parking capacity at these facilities. This strategy should be coordinated prior to the initiation of any programmed reconstruction project.

5.2.7.1 Eastbound Weigh Station

The Escambia County Eastbound Weigh Station concept plan can accommodate a **total of 34 parking spaces** and three (3) inspection spaces as shown in **Figure 18**. The design proposes restriping the parking area from pull-through parking to 40-degree back-in parking due to the limited right-of-way. The Escambia County Eastbound Weigh Station truck parking expansion 40-degree angled back-in parking conceptual design has a preliminary cost of **$50,862**.

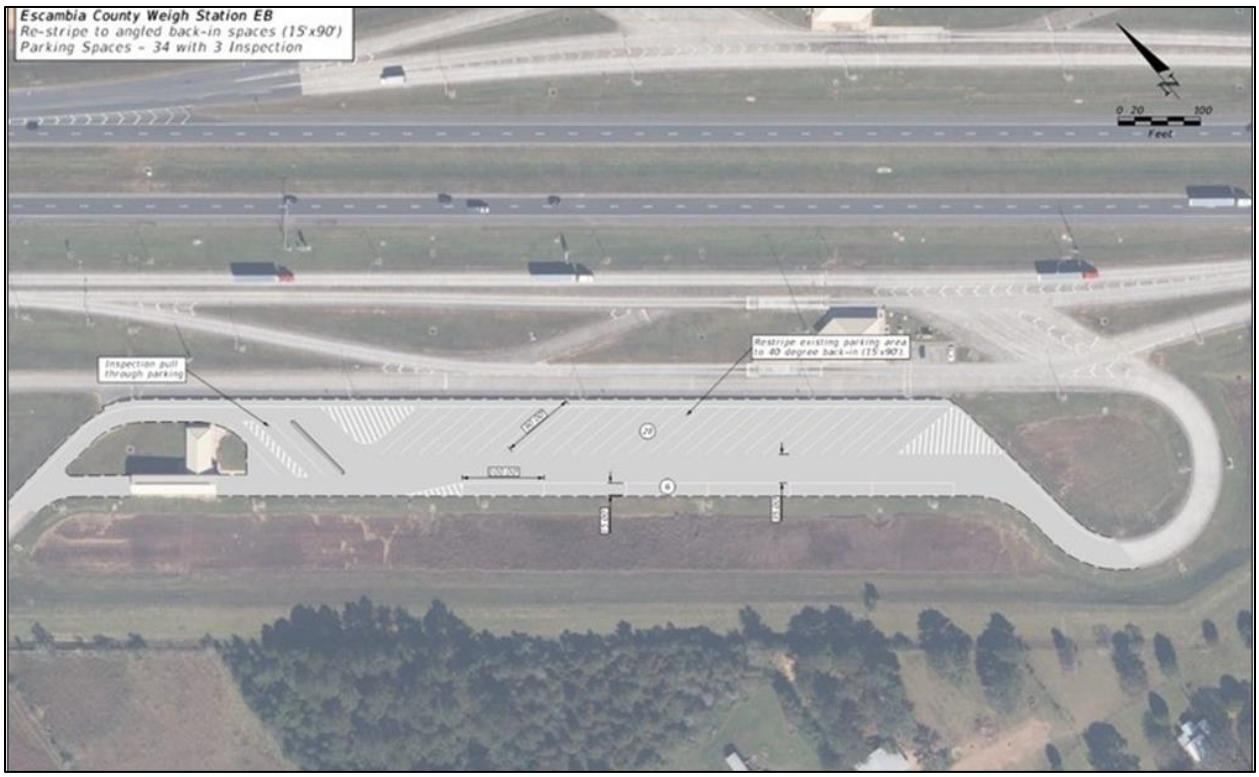
Figure 18: Escambia County Eastbound Weigh Station Concept Design



5.2.7.2 Westbound Weigh Station

The Escambia County Westbound Weigh Station concept plan can accommodate a **total of 35 parking spaces** and two (2) inspection spaces as shown in **Figure 19**. The design proposes restriping the parking area from pull-through parking to 40-degree back-in parking due to the limited right-of-way. The Escambia County Westbound Weigh Station truck parking expansion 40-degree angled back-in parking conceptual design has a preliminary cost of **$56,524**.

Figure 19: Escambia County Westbound Weigh Station Concept Design



5.2.8 Jackson County Weigh Stations

The Jackson County Weigh Stations consist of asphalt parking areas with the eastbound facility having 34 existing truck parking spaces and the westbound facility having 33 parking spaces. The concepts propose converting the existing parking area to concrete and reconfiguring the spaces to be 40-degree back-in parking with each space measuring 15 ft in width by 90 ft in length.

5.2.8.1 Eastbound Weigh Station

The Jackson County Eastbound Weigh Station concept plan can accommodate a **total of 71 parking spaces** as shown in **Figure 20**. The design would provide an **additional 37 spaces** and approximately 51,673 square feet of paved surface. The concept plan proposes filling the existing stormwater retention ponds and shifting a new pond area to the southeastern end of the facility. The Jackson County Eastbound Weigh Station truck parking expansion 40-degree angled back-in parking conceptual design has a preliminary cost of **$6,769,635**.

Figure 20: Jackson County Eastbound Weigh Station Concept Design

5.2.8.2 Westbound Weigh Station

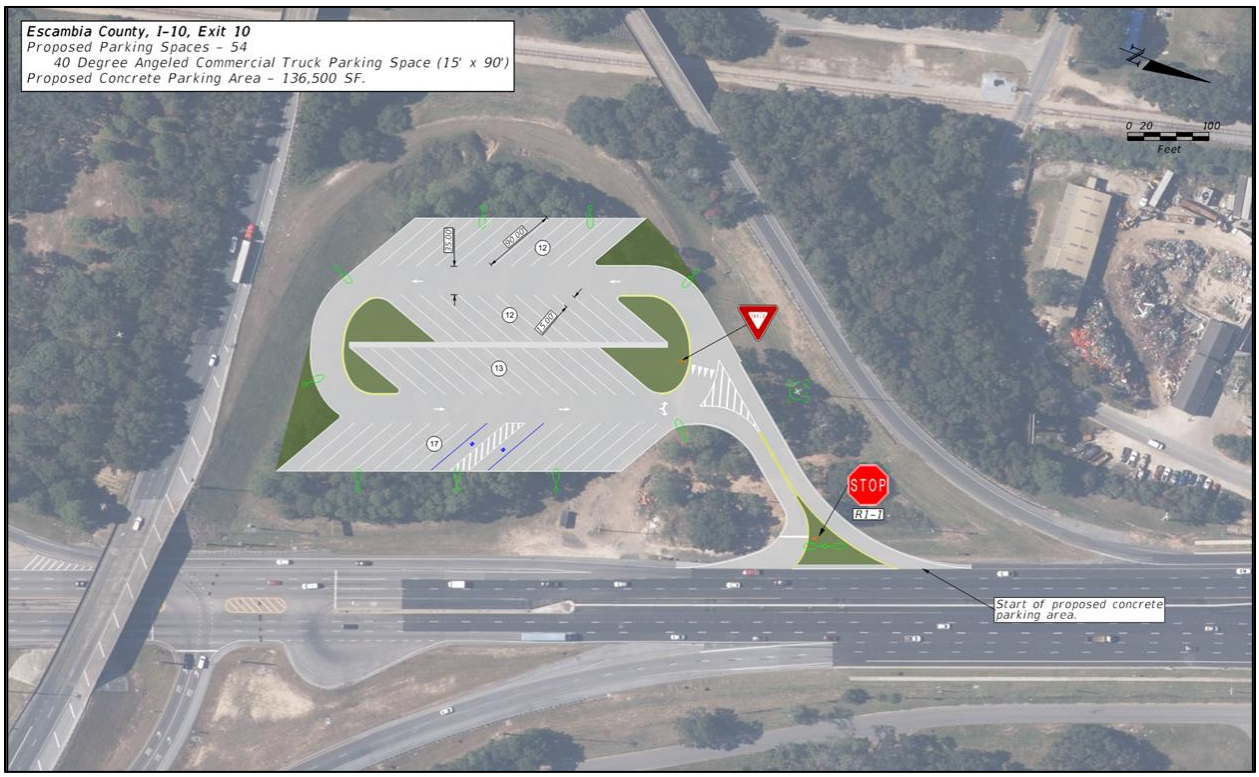
The Jackson County Westbound Weigh Station concept plan can accommodate a total of 72 parking spaces as shown in **Figure 21**. The design would provide an additional 39 spaces and approximately 51,214 square feet of paved surface. The concept plan proposes filling the existing stormwater retention ponds and modify the existing pond on the southeastern end of the facility to increase total volume capacity. The Jackson County Westbound Weigh Station truck parking expansion 40-degree angled back-in parking conceptual design has a preliminary cost of **$6,888,834**.

Figure 21: Jackson County Westbound Weigh Station Concept Design

5.2.9 Escambia County Exit 10 Interchange Infield

The Exit 10 interchange infield in Escambia County is currently undeveloped with upland forest and pine flatwoods vegetation. The concept plan proposes converting the parcel to a concrete parking area of approximately 136,500 square feet consisting of a 40-degree angled back-in parking configuration. The design proposes **54 parking spaces** with each space measuring 15 ft in width by 90 ft in length as shown in **Figure 22**. The site will require excavation and possible retaining walls, with minimal fill near the travel lane loops.

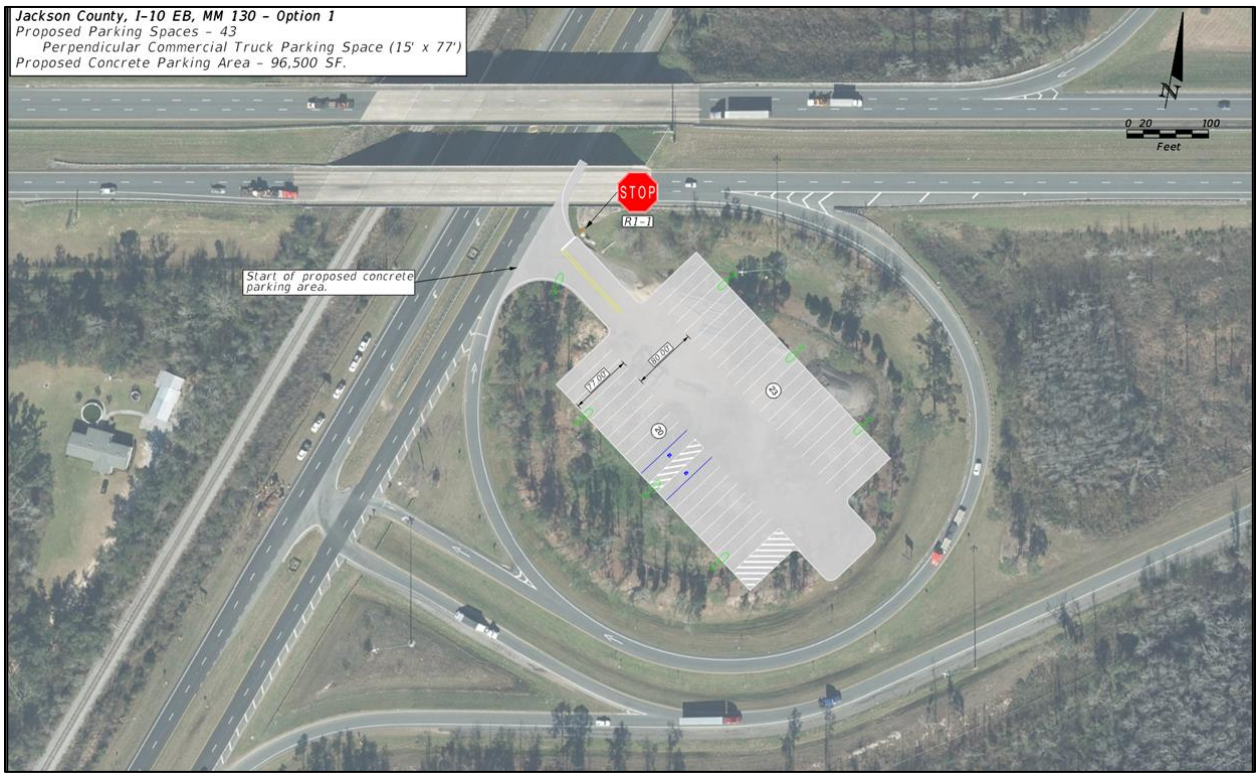
Figure 22: Escambia County Exit 10 Interchange Infield Concept Design



5.2.10 Jackson County Exit 130 Interchange Infield

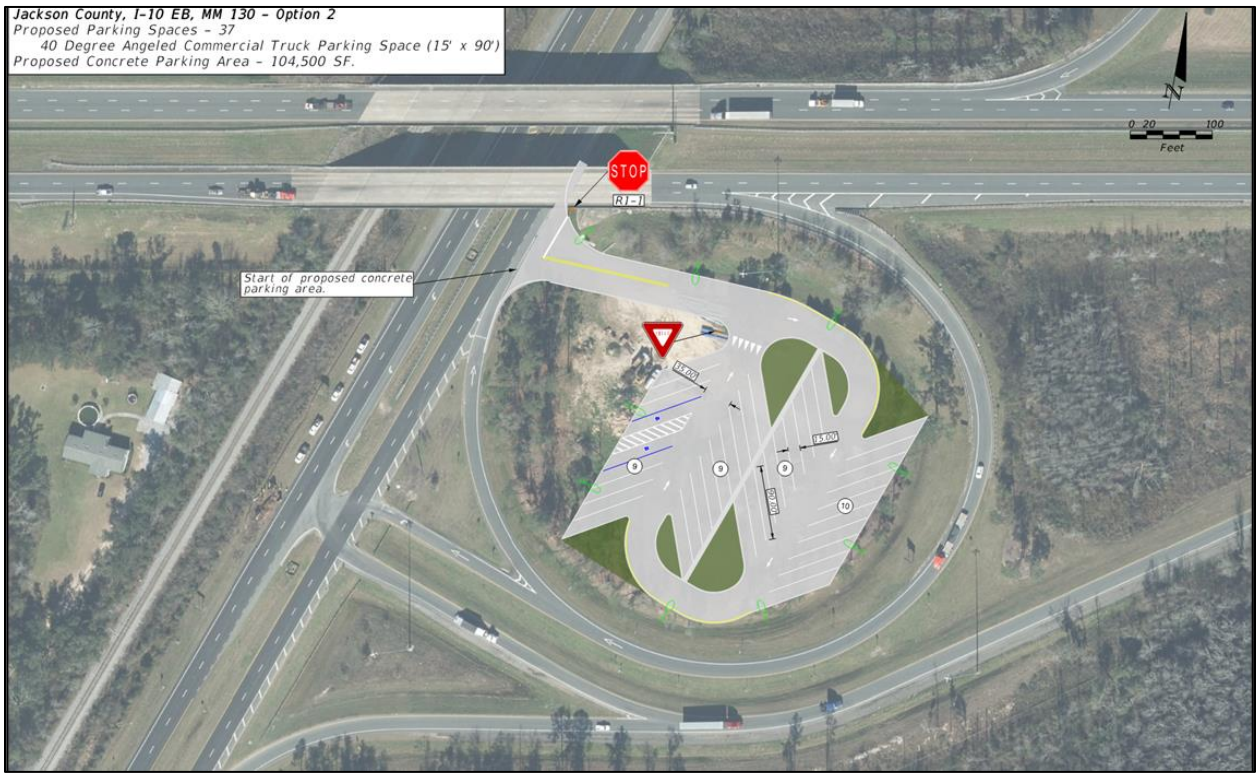
The Exit 130 interchange infield in Jackson County is currently undeveloped with upland forests vegetation and barren land. The concept plan proposes converting the parcel to a concrete parking area consisting of 90-degree and 40-degree angled back in configurations. The concepts developed consist of a design option with 90-degree back-in parking spaces measuring 15 ft in width by 77 ft in length and a second design option with 40-degree back-in parking spaces measuring 15 ft in width by 90 ft in length. The proposed parking area is mostly flat. The first option consists of a concrete parking area of approximately 96,500 square feet with **43 truck parking spaces** as shown in **Figure 23**.

Figure 23: Jackson County Exit 130 Interchange Infield Option 1 Concept Design



The second option consists of a concrete parking area of approximately 104,500 square feet with **37 truck parking spaces** as shown in **Figure 24**.

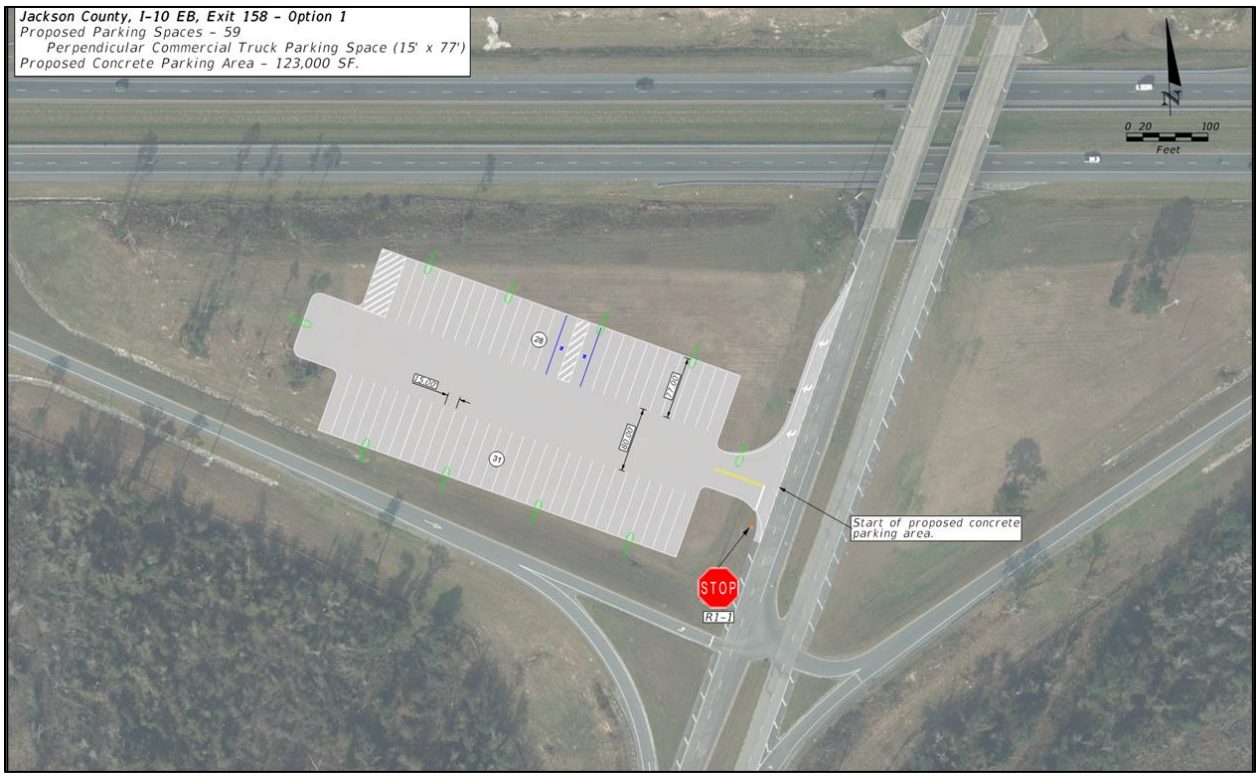
Figure 24: Jackson County Exit 130 Interchange Infield Option 2 Concept Design



5.2.11 Jackson County Exit 158 Interchange Infield

The Exit 158 interchange infield in Jackson County is currently undeveloped upland forest vegetation. The concept plan proposes converting the parcel to a concrete parking area consisting of 90-degree and 40-degree angled back in configurations. The concepts developed consist of a design option with 90-degree back-in parking spaces measuring 15 ft in width by 77 ft in length and a second design option with 40-degree back-in parking spaces measuring 15 ft in width by 90 ft in length for both eastbound and westbound infield areas. The proposed parking areas requires grading to achieve a level surface and establish optimal sheet flow conditions. The first option near the Exit 158 eastbound ramp consists of a concrete parking area of approximately 123,000 square feet with **59 truck parking spaces** as shown in **Figure 25**.

Figure 25: Jackson County Exit 158 Interchange Infield Eastbound Option 1 Concept Design



The second option near the Exit 158 eastbound ramp consists of a concrete parking area of approximately 131,500 square feet with **53 truck parking spaces** as shown in **Figure 26**.

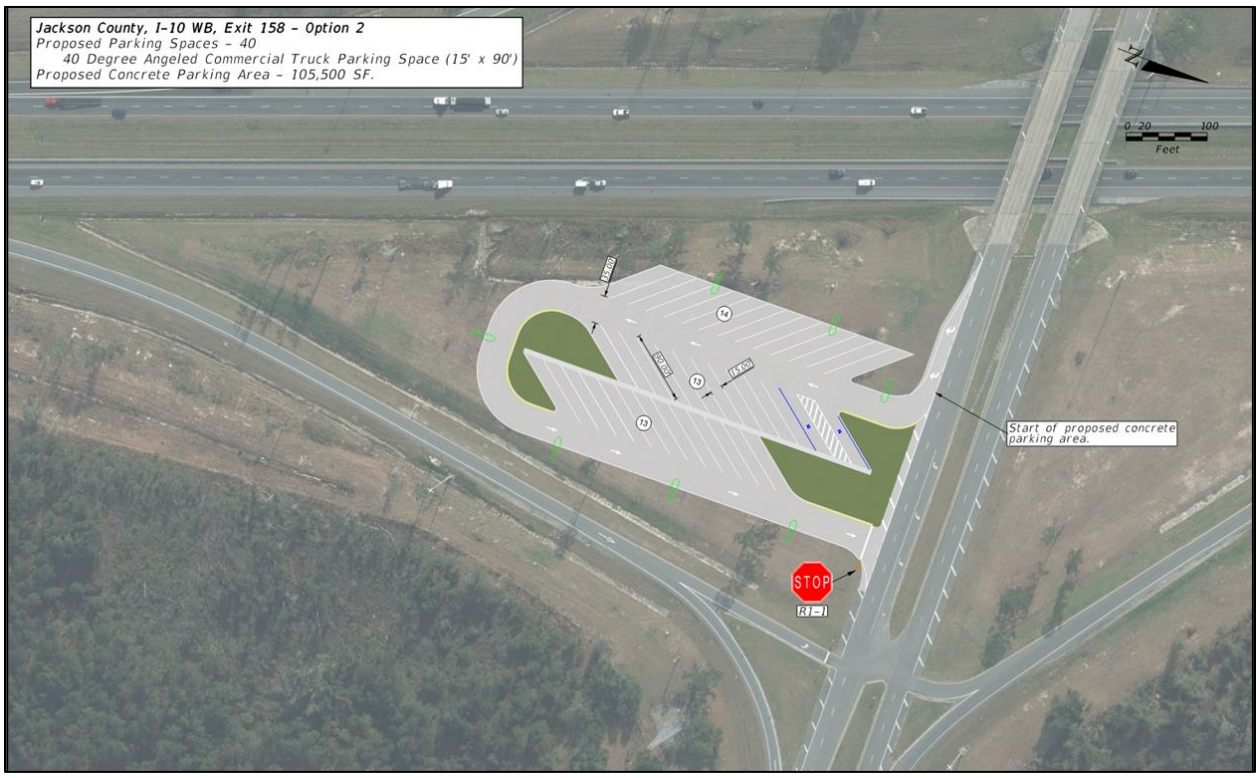
Figure 26: Jackson County Exit 158 Interchange Infield Eastbound Option 2 Concept Design

The first option near the Exit 158 westbound ramp consists of a concrete parking area of approximately 103,000 square feet consisting of **47 parking spaces** as shown in **Figure 27**.

Figure 27: Jackson County Exit 158 Interchange Infield Westbound Option 1 Concept Design

The second option near the Exit 158 westbound ramp consists of a concrete parking area of approximately 105,500 square feet consisting of **40 parking spaces** as shown in **Figure 28**.

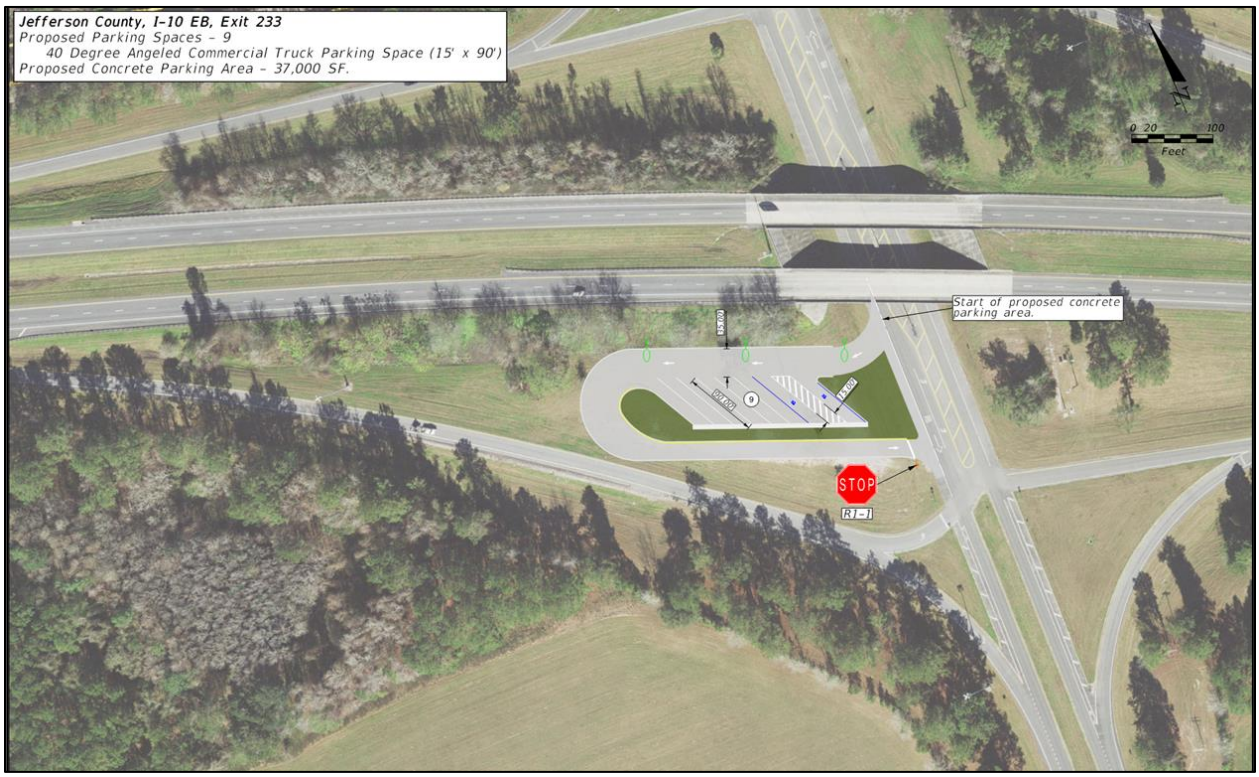
Figure 28: Jackson County Exit 158 Interchange Infield Westbound Option 2 Concept Design



5.2.12 Jefferson County Exit 233 Interchange Infield

The Exit 233 interchange infield in Jefferson County is currently undeveloped with minimal vegetation. The concept plan proposes converting the parcel to a concrete parking area of approximately 37,000 square feet consisting of a 40-degree angled back-in parking configuration. The design proposes **9 parking spaces** with each space measuring 15 ft in width by 90 ft in length as shown in **Figure 29**. The proposed parking area will require minor grading to achieve a level surface and establish optimal sheet flow conditions.

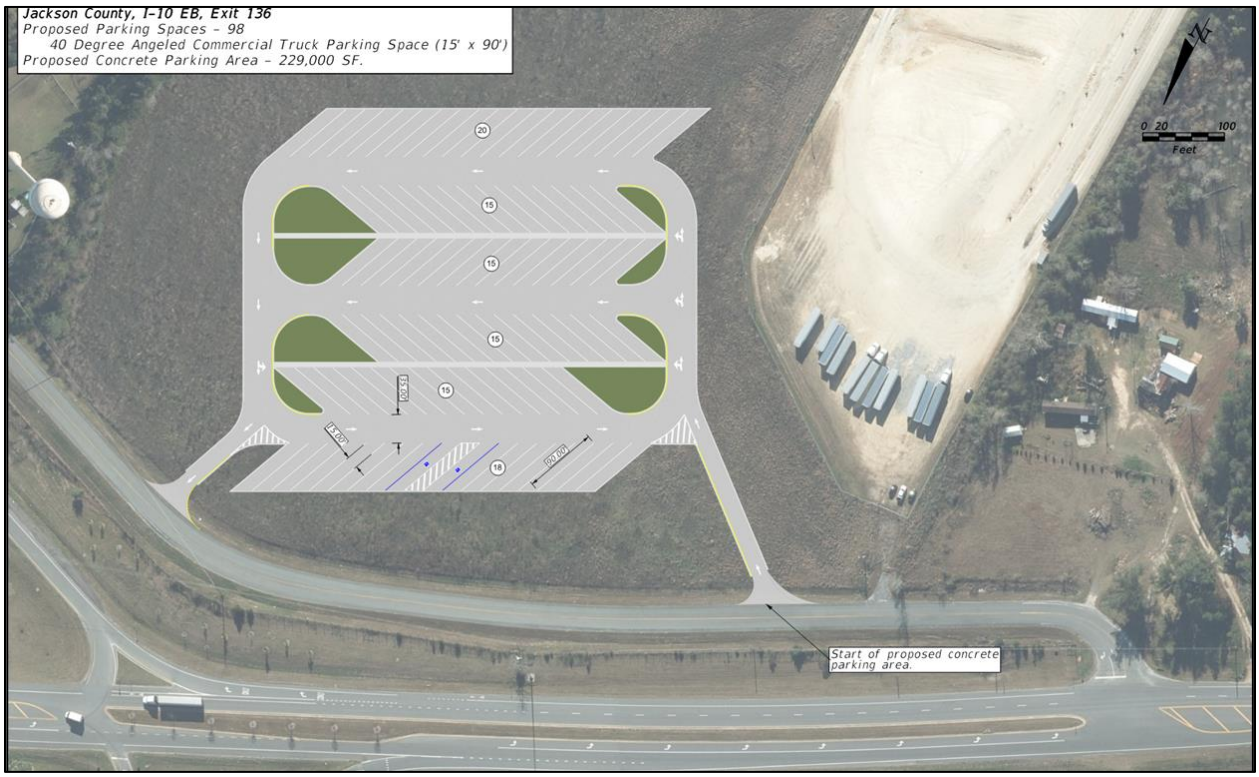
Figure 29: Jefferson County Exit 233 Interchange Infield Concept Design



5.2.13 Jackson County Exit 136 Interchange Adjacent Parcel

The Exit 136 interchange adjacent parcel in Jackson County is currently undeveloped and privately owned with a classification of agriculture and barren land. The concept plan proposes converting the parcel to a concrete parking area of approximately 229,000 square feet with a 40-degree back-in parking configuration. The design proposes **98 parking spaces** with each space measuring 15 ft in width by 90 ft in length as shown in **Figure 30**. The proposed parking area is relatively flat and may require minor grading for accurate water flow.

Figure 30: Jackson County Exit 136 Interchange Adjacent Parcel Concept Design



5.2.14 Santa Rosa County Exit 26 Interchange Adjacent Parcel

The Exit 26 interchange adjacent parcel in Santa Rosa County is currently undeveloped and privately owned with upland forests and wetlands. The concept plan proposes converting the parcel to a concrete parking area of approximately 53,000 square feet with a 90-degree back-in parking configuration. The design proposes **11 parking spaces** with each space measuring 15 ft in width by 77 ft in length as shown in **Figure 31**. The proposed parking area requires the addition of fill material to achieve a level surface and establish optimal sheet flow conditions.

Figure 31: Santa Rosa County Exit 26 Interchange Adjacent Parcel Concept Design