D227 Freight Facilities

227.1 General

*This chapter is currently under development. Section **227.7** is provided prior to the remaining sections to address critical needs regarding truck parking.*

227.2 Freight Facilities

Section under development.

227.3 Design and Control Vehicles

Section under development.

227.4 Designated Freight Routes

Section under development.

227.5 Freight Considerations for Limited Access Facilities

Section under development.

227.6 Freight Considerations for Arterials and Collectors

Section under development.

227.7 Truck Parking

Truck parking is provided on the SHS at Rest Areas, Welcome Centers, Weigh Stations, and Truck-Only Parking facilities. For all Rest Areas and Welcome Centers, coordinate truck parking accommodations with the Commercial Vehicle Operations Division Programs Manager within the State Traffic Engineering and Operations Office. When developing parking concepts, consider safety for access to facility amenities in determination of the parking area dimensions and accommodations.

227.7.1 Design and Control Vehicles

See ***FDM 201*** for more information.

227.7.2 Design Speed

Use a Design Speed of 10 mph for lanes immediately adjacent to the parking spaces.

227.7.3 Parking Configurations

See the FHWA ***Truck Parking Development Handbook*** and use the following guidance for determining the appropriate solutions for the project.

Coordinate with local agencies for truck parking adjacent to the curbs for delivery zones. Accommodate bicycle lanes and other facilities and features for vulnerable users.

227.7.3.1 Pull-Through Truck Parking

FDOT Rest Areas and Welcome Center facilities have traditionally been designed for pull-through truck parking. This design necessitates both an entrance and exit lane, each 20'-30' wide, to fully accommodate a WB-62FL Design Vehicle. Tighter angled parking allows for narrower travel lanes due to a reduced swept path of the truck. Pull-through design layouts may be either an outside-in or inside-out approach, both requiring three lanes of travel per bay. See the following ***Figures 227.7.1*** and ***227.7.2*** for examples of single bay and multiple bay pull-through truck parking facilities. The truck parking stall and aisle dimensions shown in ***Figure 227.7.3*** details the minimum dimensions for angled pull-through parking. The 30-degree angle allows for reduced drive aisle width for facilities that are constrained with space.

Figure 227.7.1 Single Bay Pull-Through

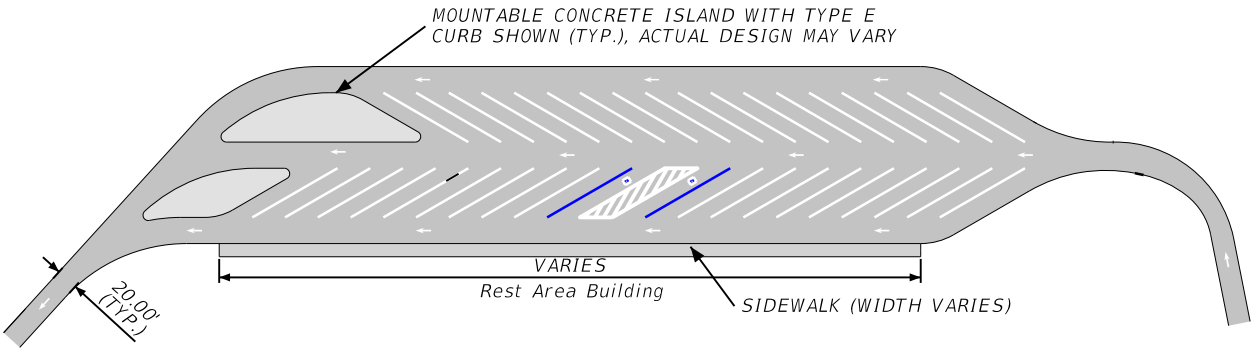


Figure 227.7.2 Multiple Bay Pull-Through

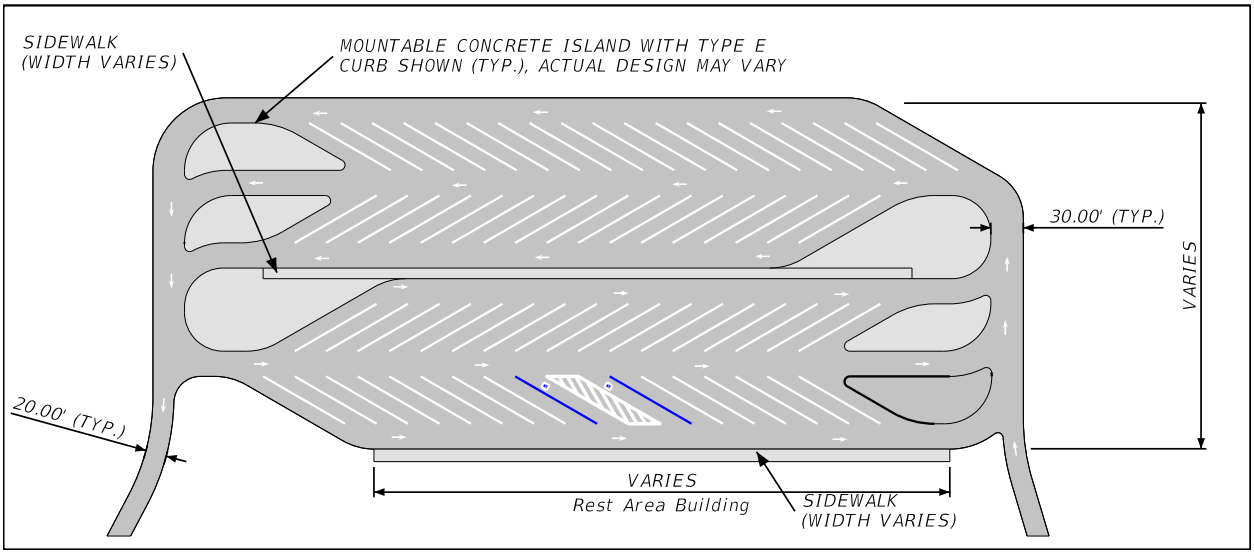
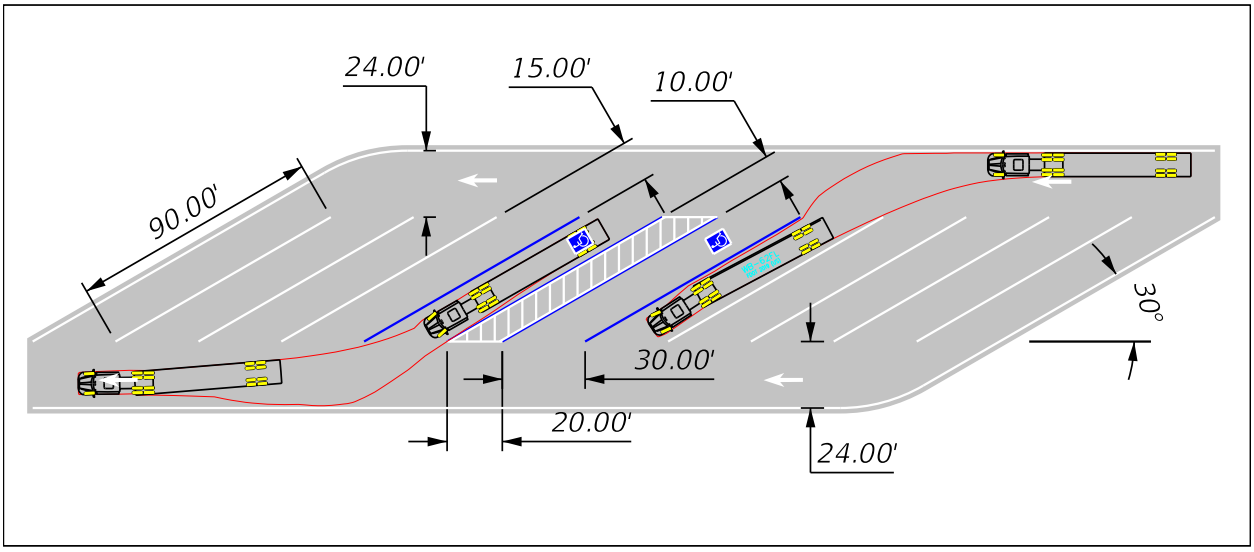


Figure 227.7.3 Parking Stall Pull-Through

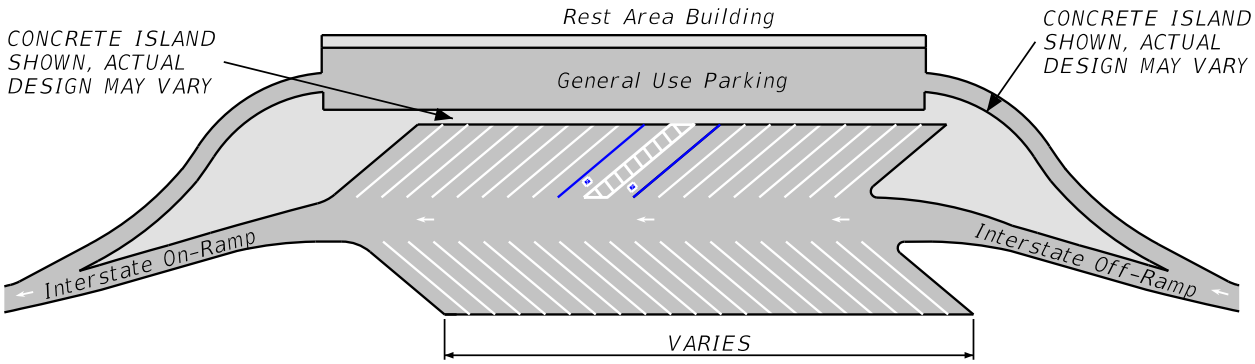


227.7.3.2 Back-In Truck Parking

Back-in truck parking concepts should be used in facilities where the proposed design allows for the separation of auto and truck parking areas and can be designed using an angled herring bone layout. The angled back-in parking spaces should be designed at 30-45 degrees to allow for the minimum width requirement of 36 feet for the driving lane. To fully accommodate the WB-62FL truck with an overall length of 73.5 feet, the standard

dimensions of each angled stall should be a minimum of 15 feet by 90 feet. See the following ***Figure 227.7.4*** for a conceptual layout of angled back-in truck parking and ***Figure 227.7.6*** for detail parking stall dimensions.

Figure 227.7.4 Single Bay Angled Back-In



For facilities that include multiple rows of truck parking spaces, provide lanes of travel for internal circulation within the facility as shown in ***Figure 227.7.5***.

Figure 227.7.5 Multiple Bay Angled Back-In

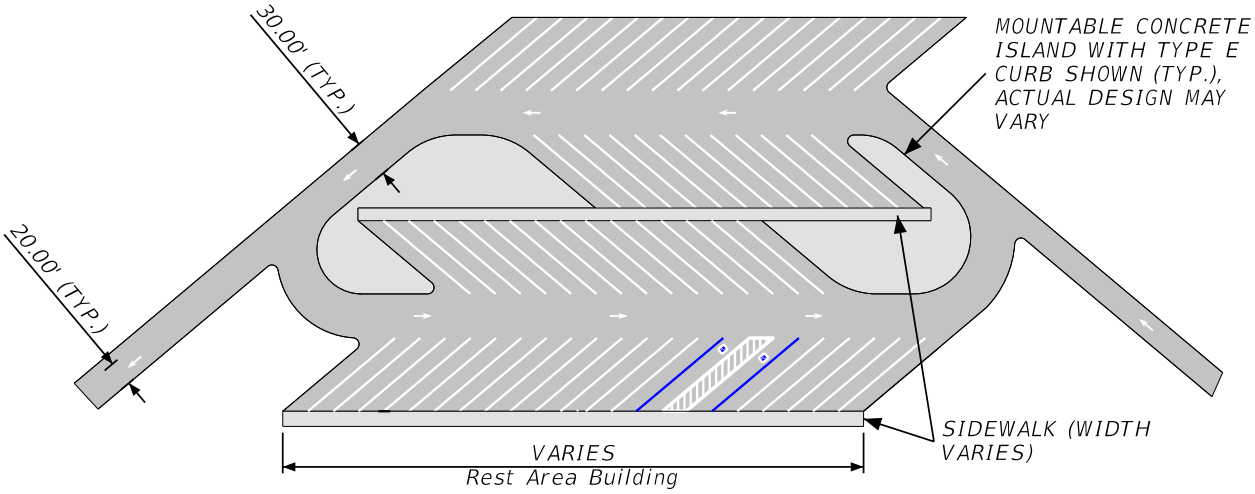
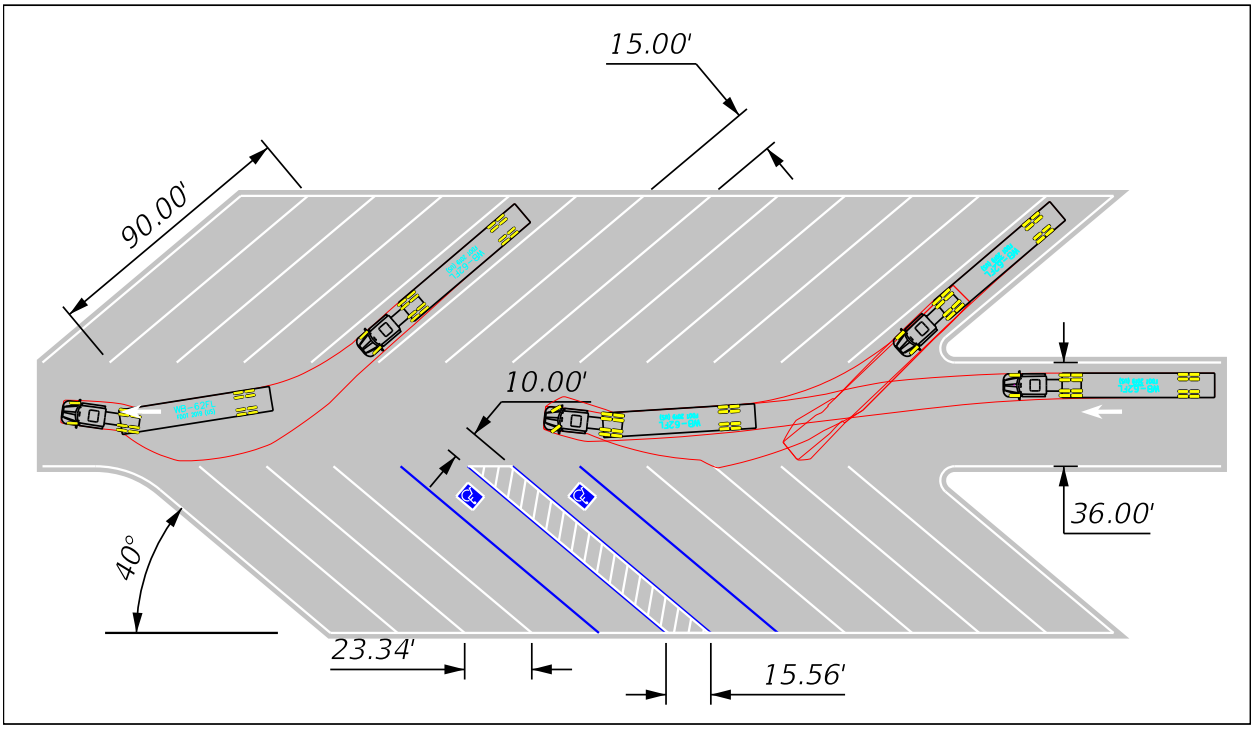


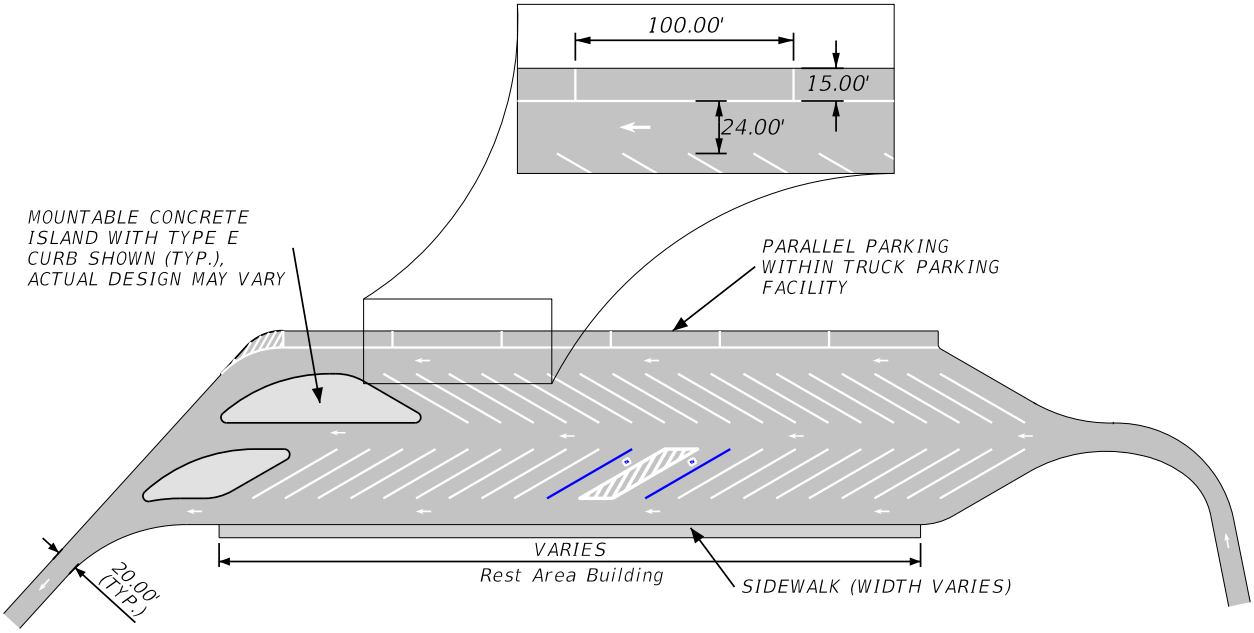
Figure 227.7.6 Parking Stall Angled Back-In



227.7.3.3 Parallel Truck Parking at Rest Areas

To fully accommodate the WB-62FL truck with an overall length of 73.5 feet, the standard dimensions of each parallel parking stall should be a minimum of 15 feet by 100 feet. See the following ***Figure 227.7.8*** for a conceptual layout of parallel parking within a truck parking facility.

Figure 227.7.8 Parallel Parking within Truck Parking Facility



227.7.4 Pavement Type

In accordance with the ***FDOT Pavement Type Selection Manual*** all new and reconstructed weigh stations, rest areas, and welcome centers must use concrete paving for ingress/egress, internal truck traffic flow, and truck parking within the facility.

Commentary: Slow-moving or standing truck traffic has a greater potential to cause rutting, cracking, and potholes in regular flexible pavement design. Concrete's rigidity and high tensile strength allows it to have a heavier loading capacity and reduced long-term maintenance.

Other new and innovative pavements are considered experimental and must be assessed by the State Materials Office.

227.7.5 Drainage

Design drainage features ~~facilities to retain stormwater~~ in accordance with the ***FDOT Drainage Manual***.

227.7.6 Signing and Technology

For all new and reconstructed truck parking facilities, provide a Truck Parking Availability System (TPAS) in accordance with the Concept Plans, ***Truck Parking Availability System Design Guidance***, and tools located on the Department's ***Florida Trucking Publications*** webpage.

Provide signing in accordance with the ***Standard Plans*** Index 700-102. Include ***Developmental Specification*** Dev660TPDS and Dev995TPDS in the project Specifications Package.

227.8 Weigh Stations

Section under development.

227.9 Rail Crossings and Freight Impacts

Section under development.