Girder Bridges

Photo 5-37. Haines City Overpass, Polk County (No. 165700)

Haines City Overpass
Polk County
FDOT #165700, 8PO3013

The Haines City Overpass carries Lilly Avenue over the Atlantic Coast Line (ACL) Railroad corridor in Haines City, Polk County. It was constructed in 1927 as a joint project between Haines City and the ACL Railroad. The 125- feet long, three-span steel girder features a concrete deck and railings with rectangular recessed panels; this decorative element commonly appeared on bridges at that time.

The Haines City Overpass exhibits a graceful arched look that sets it apart from most railroad overpasses. Though conventional in engineering and construction, the overpass appears to be the oldest example of a grade separation remaining in Florida, and retains its historic physical integrity. The Haines City Overpass was determined NRHP-eligible during the 2000 survey under Criterion A in the area of Transportation.

SR-78 over Kissimmee River Bridge
Okeechobee County
FDOT #910009, 8OB0321

Photo 5-38. SR-78 Bridge, Okeechobee County (No. 910009)

This 1964 continuous steel girder bridge carries SR-78 over the Kissimmee River near Okeechobee at the Okeechobee and Glades County Line. It was designed and built by the U.S. Army Corps of Engineers. The 665-foot long bridge includes eight approach spans and one main span, and has concrete post and lintel railings typical of midcentury bridges. The cast-in-place concrete deck features a removable span (**Photo 5-39**) with a metal deck supported by a concrete girder superstructure. The nine girder spans are supported by a substructure of bents featuring two strutted columns topped by a single cap and supported by piles. The abutments consist of mounded fill topped with mixed graded gravel. The SR-78 Bridge also features an

Photo 5-39. SR-78 Bridge (No. 910009) - Removable Span

early form of a strutted pier, an engineering development that provides additional lateral bracing in the event of a flood. This continuous strut also serves as a hydraulic guide wall to funnel water and debris which could collapse a bridge in the event of a flood. Pier struts have since changed from solid walls to slimmer, horizontal braces.

The SR-78 Bridge over the Kissimmee River in Okeechobee County is an excellent example of a continuous steel girder bridge that also includes a removable deck and early-form strutted piers, elements intrinsic to a bridge over a channel designed for both navigable and hydrological purposes. The SR-78 Bridge is newly recommended eligible for listing in the NRHP under Criterion A in the areas of Community Planning and Development and Transportation and under Criterion C in the area of Engineering as a high integrity example of a continuous steel girder bridge that contains a removable span and an early form of strutted piers.

Photo 5-40. US-1/SR-5 Bridge over Miami Road, Looking Southwest, Duval County (No. 720087)

US-1/SR-5 over Miami Road
Duval County
FDOT #720087, 8DU21150

This 1968 continuous steel girder bridge carries US-1/SR-5 over Miami Road in downtown Jacksonville. Engineered by C.P. Coker and constructed by the Wainer Construction Company, it measures 984 feet in length and incorporates 16 concrete spans with a cast-in-place concrete deck.

Although continuous steel girder bridges are a common type, the US-1/SR-5 Bridge is distinguished by its elevated design, incorporated brick-paved plazas, and forced perspective vantage point created by its pier configuration. Each of these elements is significant in its own right; together they create a bridge design with distinct modern architectural influences. The elevated rather than at-grade design, as well as the brick-paved plazas, are uncommon and expensive features. The plazas beneath an elevated bridge encourage the use of this space for more than pedestrian traffic. Also noteworthy are the pier configuration and style, which represent a major divergence from the typical AASHTO girders. The girder design features a clean, rectilinear form indicative of a modernist influence. Similarly, a forced perspective which manipulates visual perception is formed by the voids between the pier columns due to their design and configuration. Knowing "the spaces along an under elevated highways affect the way we experience (a) city," it is obvious the space beneath this bridge was