



**Photo 5-82. Brorein Street Bridge, Hillsborough County (No. 105501)**

### **Brorein Street Bridge**

Hillsborough County

FDOT #105501, 8HI11540

Construction of the Brorein Street Bridge was initiated in early 1958 and completed on July 7, 1959. This double-leaf bascule bridge carries Brorein Street over the Hillsborough River in Tampa. W.I. Nolen, the city bridge engineer, oversaw the bridge design implementation by the Paul Smith Construction Company. Composed of four spans, for a total length of 318.3 feet, this bridge rests on concrete abutments on both embankments. The width of the bridge at 54.5 feet incorporates a four-lane roadway, two 5-foot-wide

sidewalks, and aluminum guard railing. Approach spans are constructed of prestressed concrete girders with concrete-cast-in-place decking. The bascule mechanisms hidden within the pier systems, by historical account, are powered by two 15-horsepower motors. The boat fenders within the river on the north side of the bridge are composed of rounded wood pilings and wood and steel beams. The boat fenders on the south side have been modified to protect the foundation of the adjacent Crosstown Expressway, and now consist of squared concrete pilings and wood plank board. Twelve lampposts, six each on the north and south sides, once flanked the roadway over the bridge, as indicated in historic photographs. Currently, only their mounting brackets or lamppost bases remain; the lampposts were removed at an unknown date.

The tender house located on the south side of the bridge is a small, one-room building with a flat roof, stucco walls, and twelve-over-eight and nine-over-six single-hung-sash windows in ribbon arrangements, giving the operator a clear view of his surroundings. Metal awnings protect the east-facing window and the entry door on the west elevation. Both the tender house and the adjacent striped traffic gates are cantilevered over the sides of the bridge on wedge-shaped platforms.

The Brorein Street Bridge was first proposed in early 1958 as a means of relieving the traffic congestion in downtown Tampa. At that time, only two bridges provided access from the residential area west of the Hillsborough River and downtown Tampa to the east. The Lafayette (later Kennedy) Bridge carried traffic through mid-town and the Platt Street Bridge channeled traffic at downtown's southernmost apex. The Brorein Street Bridge was the first completed project from the \$20 million Public Improvement Program for the City of Tampa.<sup>138</sup>

The Brorein Street Bridge has suffered a loss of integrity with respect to its original design elements. Despite these alterations, in 2009, the SHPO determined it eligible for listing in the NRHP under Criterion A in the areas of Community Planning and Development and Transportation as a mid-century example of a movable bascule bridge over a navigable waterway constructed through a unique source of funding. The bridge is also eligible under Criterion C in the area of Engineering.

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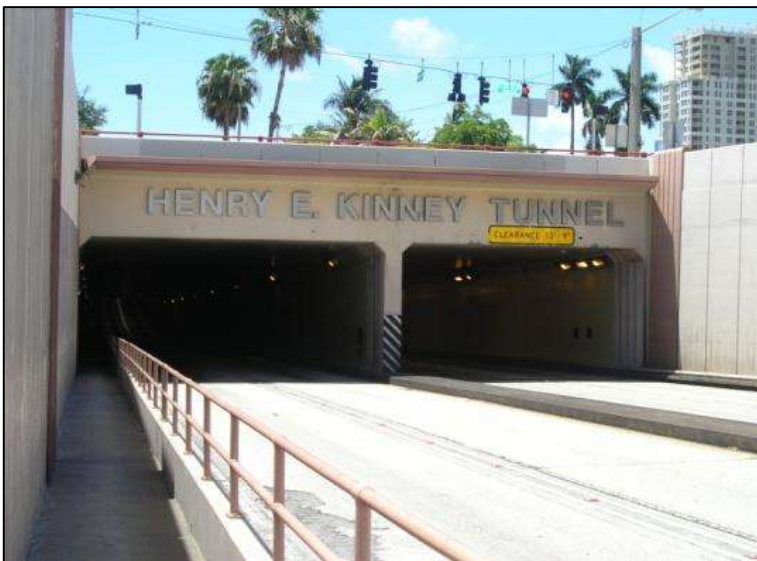
<sup>138</sup> "788,000 River Bridge Opened in Downtown Tampa," *Tampa Tribune* Wednesday July 8, 1959.

## UNIQUE TRANSPORTATION RESOURCES

In addition to the bridges included in this 2010 Historic Highway Bridge Survey update, two unique transportation resources were identified: the Henry E. Kinney Tunnel, in Broward County, and the Fort Gates Ferry Slip in Putnam County. A description and evaluation of each resource follows.

**Henry E. Kinney Tunnel**  
US-1/SR-5 under New River  
Broward County  
FDOT #860003, 8BD4504

The 1960 Henry E. Kinney Tunnel carries US-1/SR-5 under the New River in downtown Ft. Lauderdale. It is the only tunnel in the state of Florida. Constructed by the Rhode Island firm, Thorington Construction Company, Inc. and Alfred Spear, the 864-foot long tunnel replaced a double-leaf bascule bridge that operated from 1926 to 1958. Construction began in October 1958 and was completed in 1960. The tunnel opened on December 9, 1960.



**Photo 5-83. Henry Kinney Tunnel, Broward County (No. 764039)**

US-1/SR-5 is a critical transportation artery for Ft. Lauderdale. The former bascule bridge proved problematic due to the low vertical clearance which required frequent and disruptive openings to both boat and vehicular traffic. This junction was known as the worst bottleneck on US-1 from Main to Florida.<sup>139</sup> Although debate ensued over whether this bridge replacement should be with another bridge or a tunnel, public majority vote favored a tunnel and the State Road Department began plans for it in 1957. The tunnel was designed by New York engineering firm Singstad and Baillie, who also designed the Baltimore Harbor Tunnel. Originally known as the New River Tunnel, it was renamed in 1986 after Henry E. Kinney, editor of the Broward County edition of the *Miami Herald* whose determination and coverage of the tunnel weighed heavily in its final selection. Kinney had further local significance as a founding trustee of Nova University and his role in the resolution of other local issues; he passed away in 1985.

The 864-foot long tunnel is anchored to the riverbed bedrock by 3000 reinforcing rods. The distance from walled approach to walled approach is over 2000 feet.<sup>140</sup> At its midpoint, the tunnel roadway is 35 feet beneath the surface of the river. The tube side walls are constructed of 33-inch thick reinforced class “A” concrete surrounded by 4-inch thick poured-in-place reinforced class “B” tunnel concrete. The east (northbound) tube contains a pedestrian sidewalk. To prevent flooding, the tunnel is equipped with electric sump pumps.

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<sup>139</sup> Panamerican Consultants, Inc., *Recordation of the Henry E. Kinney Tunnel in Fort Lauderdale, Broward County, Florida*, (Tampa, FL: Panamerican Consultants, Inc., 2008), 5.

<sup>140</sup> Williams, Verne, “They Said Nobody Could Do IT . . .” *The Miami News*, December 1, 1960.