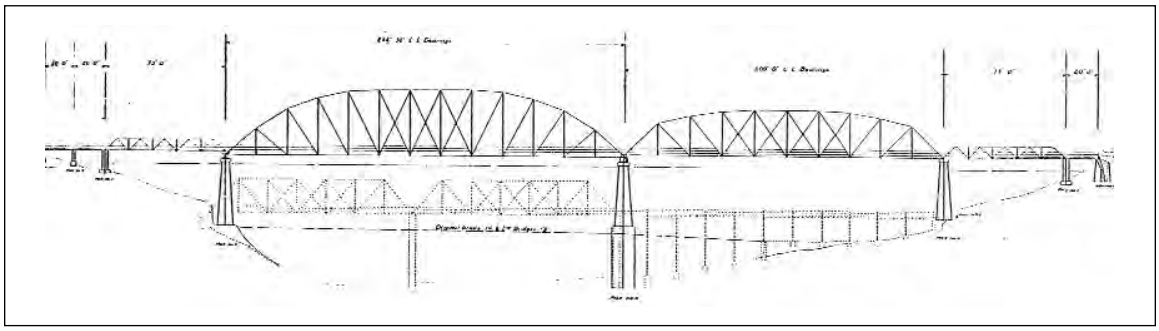
(#112) 89-04261-11.60: Collins River Bridge spanning the Collins River at Rock Island in northwest Warren County (Doyle Quad, 327 SE).



Significant under Criterion A for its associations with the Great Falls Dam and TEPCo and under Criterion C as unusual 1889 Parker and representative trusses by the Nashville Bridge Company.

The largest truss on this bridge was originally erected in 1887-1889 as part of the Hyde's Ferry Bridge located in Davidson County. Eugene Falconnet designed the bridge, and the Mount Vernon Bridge Company erected it. In 1917 Davidson County awarded a contract to the Nashville Bridge Company to relocate two spans from the Hyde's Ferry Bridge in Davidson County (#16, 19-NonHighway-2) and gave this span to the Nashville Bridge Company. The Nashville Bridge Company stored it until 1924 when the company erected it at this site. Arthur Dyer, president of the Nashville Bridge Company, often used this bridge as an example of the superiority of truss bridges over concrete due to their mobility.

This site is located near the 1916 Great Falls Dam, a major power source in the area. The Tennessee Power Company, of which Dyer was a stockholder, owned the dam. In 1922 this company merged with two other firms to become the Tennessee Electric Power Company (TEPCo), one of the most significant power producers in the region. Afterwards, TEPCo began to expand its facilities at the Great Falls Dam. This expansion program included raising the

dam thirty-five feet which resulted in several bridges being modified (see #61, 88-NonHighway-1) or as in the case of this bridge, being replaced (see #16, 19-NonHighway-2; Crouch 1973; Crouch and Claybrook 1976; Hamblen 1976; Nashville Bridge Company #4222-11; Woodruff 1978).

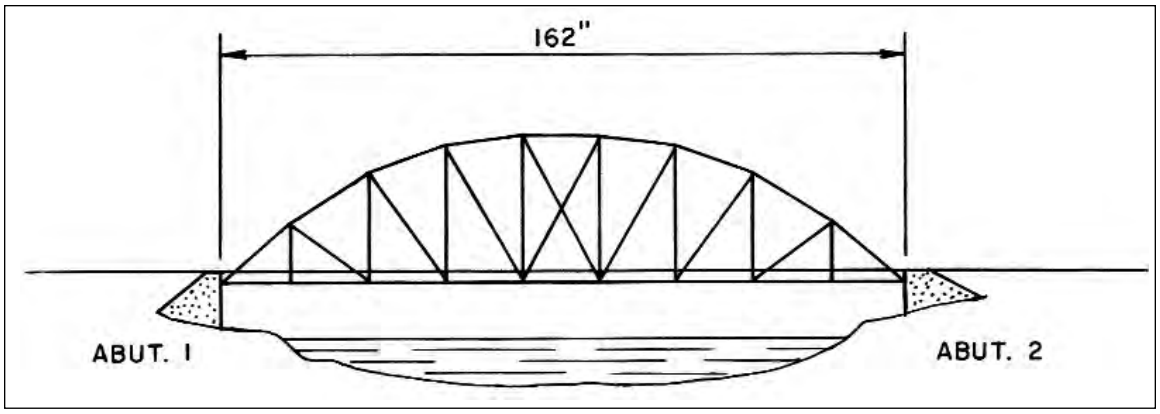
Consequently, the Nashville Bridge Company removed the existing truss bridge from this site in 1924 and erected a new bridge. The stored 1889 247-foot pin-connected elliptical iron Parker through truss became the main span. Its composition is identical to #16, 19-NonHighway-2 except that the original rail is missing. Top chords and end posts are channels with lacing, and diagonals and the bottom chords are paired rectilinear eyebars. Verticals are channels with lacing except hip verticals which are paired rectilinear eyerods. Counters are single rectilinear tie rods. The bottom chords are below the floor beams, a somewhat unusual arrangement. The other spans are a 200-foot pin-connected Parker through truss, two 75-foot riveted Warren pony trusses, and three 20-foot steel I-beam approaches. The bridge has a curb-to-curb width of 15 feet and an out-to-out width of 17 feet. The substructure is concrete. Composition of the members of the 1924 trusses is typical. The Parker's top chords and end posts are channels with lacing. Bottom chords, diagonals and counters are angles with battens. Verticals are paired angles with lacing. The Warrens' top chords are channels, and the end posts are channels with battens. Bottom chords, verticals, and diagonals are angles with battens.

In the 1930s, when TVA acquired TEPCo, it also assumed maintenance responsibility for this and several other bridges. TVA maintained this bridge until 1982 when the road became a state route. After the state built a new structure adjacent to this bridge in 1986, the Tennessee Department of Transportation made necessary repairs to the bridge for pedestrian use and transferred ownership of the bridge to the Department of Conservation, which incorporated it into a trail system in the Rock Island State Park.

Tweetsie Railroad abandoned a large segment of the line in Carter County in 1950. In 1967 the county opened a short segment, which included this bridge, for vehicular traffic (Bradshaw 1942:37-39; ET&WNCRR April May 1993:8-11,16; Ferrell 1976; Sulzer 1975:85- 122).

The bridge contains one span, a pinned Pratt through truss 111 feet long and 24.9 feet tall. Top chords and end posts are channels with lacing on the top and bottom. Bottom chords, which lie below the floor beam, are paired rectilinear eyebars. Verticals are channels with lacing, except the hip verticals, which are paired rectilinear eyebars as are the diagonals. The counters are paired rectilinear tie rods. The truss rests on masonry abutments, probably erected in 1882, which have concrete caps, possibly added in 1909.

(#16) 19-NonHighway-2: Old Bordeaux Bridge at Linton spanning South Harpeth River in southwest Davidson County (Kingston Springs Quad, 305 SE).



Significant under Criterion C as unusual Parker truss bridge by the Mount Vernon Bridge Company.

This span was one of four trusses on the Old Hyde's Ferry or Bordeaux Bridge that Davidson County built in 1889 over the Cumberland River northwest of Nashville. Designed by Nashville engineer E. F. Falconnet, the county awarded the contract for the iron superstructure to the Mount Vernon Bridge Company. The bridge was apparently under-built as the need for a larger bridge soon arose. By 1910 engineer Howard Jones, whom the county had hired to examine the bridge, recommended a new bridge, but it was not until 1915 that the county began in earnest to replace the bridge. In 1917 the county hired the Nashville Bridge Company to relocate two of the trusses from the Hyde's Ferry Bridge to different sites at Linton for $8,000 and for ownership of the two remaining spans (Davidson County Quarterly Court Minutes Volume A:220-222, 299-301, 323-330, 337-338, 343, 352, 354, 371-372, 444-447, 499, 537-540; Volume B:11-12, 70, 71, 78-92, 432, 468, 491;Volume H:211-213, 283-291;Volume K:358-359, 402-404, 461, 596-597;Volume L:355-357; Graves 1975:105-112; Nashville Bridge Company #3825). Of the two spans erected at Linton, only this one remains. One of the other spans is now part of #112, 89-04261-11.60; it is unknown what happened to the fourth span.

When Nashville Bridge relocated the span to Linton, it removed one panel and reduced the original length of 180 feet to 162 feet. It also reduced the original width of 20 feet to 16 feet. The top chords and end posts are channels with lacing as are the verticals. The diagonals and the bottom chords are paired rectilinear eyebars. The hip verticals are paired rectilinear eyerods. The counters are single rectilinear tie rods. The substructure is concrete. The bottom chords are below the floor beams, which is somewhat unusual. The elaborate two tier lattice railing remains. The lattice portal bracing and arched knee bracing contains a boss diamond decorative detail. This gracefully curved variation of the Parker is sometimes called an "elliptical truss" or "curved chord truss."

This bridge is located on a bypassed segment of a bypassed road, and although closed to traffic, it remains intact.