Lawrence ousiness district lay south of the river. Permission was finally granted to run interurban tracks over the Douglas County bridge. At the south end of this crossing the line purchased right of way into the Lawrence depot at 638 Massachusetts Street and served the Bowersock Flour Mill, the Lawrence Paper Co., and oil and coal yards located on it's property. In building it's 34.7 mile line from Kansas City to Lawrence, the Kaw Valley-Railroad paid taxes to three counties. From Kansas City, Kansas, to a few miles beyond Bonner Springs, the Kansas City, Kaw Valley, and Western ran in Wyandotte County, then crossed over into the southern edge of Leavenworth County for about fifteen miles, finally laying four miles of track in Douglas County.

Following the completion of the 34.7 mile line from Kansas City to Lawrence, plus a few miles of leased track in Kansas City, Missouri, the Kaw Valley continued to look west for expansion. During late 1916 and early 1917, a route was surveyed from Lawrence to Popeka, some right of way was purchased and materials were brought to Lawrence for the continued expansion of the line. However, World war intervened and the expansion plans, though contemplated as late as 1923, were to remained only on the drawing board and in the dreams of it's proponents. Even in being denied Popeka the Kaw Valley and it's owners were successful in that they were the only ones of four electric lines to dream of entering Lawrence to actually do so.

The route of the Kaw Valley in it's 34.7 miles reeled along the bluff most of the fourteen mile trip into Bonner. Leaving the Kaw River at Bonner Springs, the Kaw Valley line cut across in a ten mile diagonal to the town of Linwood, then resumed it's meandering course along the Kaw the remaining ten miles into Lawrence. Of the towns and cities along the route surviving to now are only Kansas City, Kansas, Kansas City, Missouri, Muncie, Edwardsville, Forest Lake, Bonner Springs, Linwood, and Lawrence. Most of the above named places had especially constructed stations with ticket sellers, waiting rooms, and in some cases, baggage rooms. The remainder of the stops boasted only shelter houses