

The Canadian Engineer

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UNIVERSITY BRIDGE, SASKATOON

TEN-SPAN CONCRETE BRIDGE IS 1,407 FEET BETWEEN EXTREME ENDS OF APPROACH WALLS, AND IS BUILT TO GRADE OF 2.88 PER CENT.—
SUMMARY OF COSTS, SPECIFICATIONS AND CONSTRUCTION METHODS.

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City Commissioner, Saskatoon, Sask.

IN the early part of 1913 an agreement was entered into between the city of Saskatoon and the provincial government of Saskatchewan, whereby it was agreed that the latter would construct a reinforced concrete bridge over the Saskatchewan River, running southeasterly from 25th Street and Spadina Crescent to the corner of College Street and Clarence Avenue. This site was chosen principally with the idea of providing more direct communication between the University of Saskatchewan, which is located on the east bank of the river, and the central business portion of the city on the west bank. The only other means of access across the river is by means of a steel truss bridge, which, on account of its width (25 ft. 6 ins.) often becomes congested with traffic.

The agreement between the city and the government provided for a bridge 62 feet wide, with two sidewalks 8 ft. 6 ins. wide, and a carriageway 45 ft. wide, to be designed to carry a double line of street railway tracks, and provided with a conduit to accommodate sewer, water and electric mains. It was originally intended to carry the piers of the bridge upon reinforced concrete piles, but it was found upon trial-holes being made, that immedi-

ately below a strata of gravel and boulders averaging in depth about five feet, and which formed the bed of the river, there was a strata of unknown depth of hard, blue clay which would make an excellent foundation for the load to be carried by each of the piers.

A contract was let to the R. J. Lecky Company in June of 1913 which amounted to \$240,004.86 at the unit prices quoted in the tender, the provincial government undertaking to supply the cement and all steel work, which was estimated to cost \$158,000, so that the total estimated cost was \$398,004.86. The highest tender received, including the cost of material to be supplied by the government, amounted to \$755,594.

Unit Prices.—The

unit prices quoted in the accepted tender were as follows:—

For concrete in piers and abutments below the springing line of arches and in retaining walls, placed, waterproofed and finished as specified, per cubic yard, \$4.77.

For all concrete above the springing line of arches (except concrete in fence and posts or concrete used in pavement or otherwise paid for) furnished waterproof and placed as specified, per cubic yard, \$5.87.

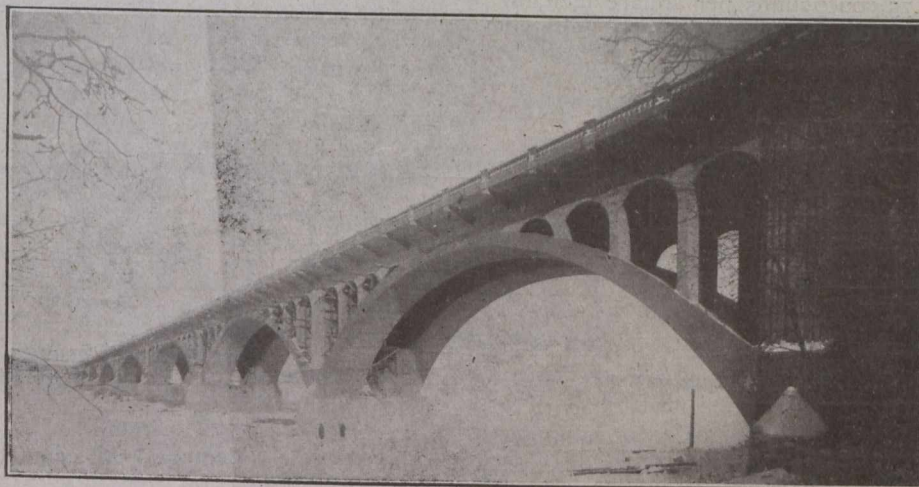
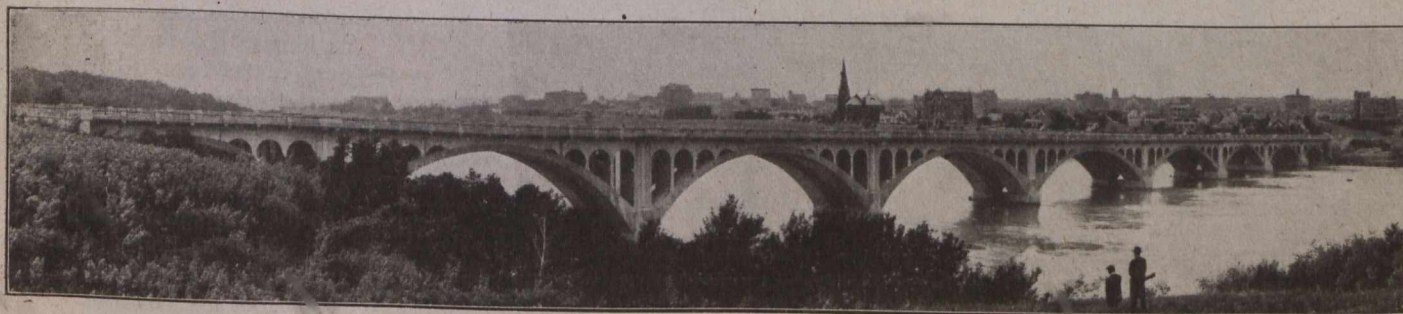


Photo February 1st 1916

View of Bridge from East Bank of River, Showing Cantilever Sidewalk.



View from University Campus, October, 1916.

Photo by Finley, Saskatoon