Utilitarian in design and solid brick in construction, this two-storey pumping station appeared in 1904 as part of a new waterworks system for the growing Town of St. Boniface.

As the region's second-largest urban municipality, St. Boniface underwent rapid residential development from the turn of the century onward. However, town councillors wanted the community to be more than a dormitory suburb for people who worked in the adjacent City of Winnipeg. They thus aggressively recruited industrial and commercial firms, using the lure of lower land values and tax rates.

They succeeded prior to World War I in attracting brick yards, lumber mills, and several other building products manufacturers, linseed oil and flour mills, grain elevators, a dye works, a large railway sorting yard, and the Union Stock Yards, followed later by several meat-packing enterprises.
Rounding out the local economy were various shops and hotels, plus a well-developed institutional sector set up primarily by Roman Catholic religious orders active in St. Boniface since 1818 when a mission was established at the urging of Lord Selkirk, patron of the Red River Settlement. Prominent among these organizations were the St. Boniface General, Tache and St. Roch hospitals, St. Boniface College, a provincial normal school, and several other educational and training institutes.

The town's early water sources were the Seine River, public wells and purchases from private suppliers. In 1904, councillors approved funding for a new system designed by engineer Cecil Goddard and consisting of a series of artesian wells, small pump-houses, a central pumping station, a large storage tank, and water mains extending some 20 kilometres throughout the community.

The south side of Plinguet Street between Rue Archibald and Dawson Road originally provided an isolated location for the central station and storage facility. Water was fed to this site from the wells, pumped up 43 metres to a 39,096-decalitre tank, then allowed to flow by gravity through the mains.

Design of the buff-coloured brick station emphasized structural strength, durability and efficient use of space rather than ornamentation. External highlights included corbelled brickwork, large arched windows to supply natural lighting and ventilation, and a tall smoke-stack. One-storey additions were attached to the plant's rear southeast and southwest corners, the former consisting of brick, and the latter of metal and concrete.

The St. Boniface waterworks were expanded in 1905 and 1908, followed in early 1912 by the official opening of a 454,600-decalitre underground reservoir located south of the central station.

The next major development occurred in 1913-19 when the municipality joined the Greater Winnipeg Water District (GWWD) and participated in construction of a 156-kilometre aqueduct to bring in water from Shoal Lake on the Manitoba-Ontario border. The Plinguet site subsequently was converted into a large GWWD complex, complete with a railway station,
shops, storage facilities, and some staff housing.

The St. Boniface Pumping Station was connected to the aqueduct by a 60.96-centimetre pipe. Three large pumps with a capacity of about 1.59 million decalitres a day distributed water throughout the community. The original storage tank was retained to boost pressure when needed, while the artesian wells formed a back-up system. A new steel tower and tank were installed in 1936 and expanded in 1945.

The underground reservoir and artesian wells eventually were decommissioned, while the pumping station itself was closed in the 1970s and now stands vacant.