



598 PLINGUET STREET

**GREATER WINNIPEG WATER DISTRICT
RAILWAY STATION**

City of Winnipeg
Historical Buildings Committee

May 1995

598 PLINGUET STREET

GREATER WINNIPEG WATER DISTRICT RAILWAY STATION

The abundance and purity of the water supply has determined the growth and permanence of the civic communities and has always been a determining factor in selecting from the group of cities struggling for commercial and industrial supremacy the favoured few that should be finally awarded leadership.¹

Prior to 1880, Winnipeg's water supply was obtained from a scattering of wells throughout the city and distributed in barrels and tanks hauled by cart or sled. In 1882, the Winnipeg Water Works Company was incorporated with an exclusive 20-year franchise to supply water to citizens. It built a plant on the Assiniboine River (now the site of the Cornish Library) to pump, treat and deliver water under pressure. Quality was poor and resulted in the establishment of the first lime-soda ash softening plant in North America.²

As the city grew, however, better water quality was demanded. In 1899, the Winnipeg Water Works Company became municipally owned and, between 1900 and 1908, the river was replaced as a source of supply by seven large wells. While the water obtained was better, it was still less than ideal as both quality and quantity varied throughout the year.³

Again the search for a more permanent, cleaner source of water began. As early as 1883 the Lake of the Woods was suggested as a possible source. A 1907 study compared the relative merits of four alternatives: Shoal Lake; artesian wells; the Winnipeg River; and the Red River. It was recommended that the Winnipeg River be used, but action was not taken. Another study five years

¹ Professor Charles S. Slichter, 1912 report to the Public Utilities Commissioner on Winnipeg's water supply, quoted in James F. MacLaren Associates, Report on Waterworks Development in Metropolitan Winnipeg to 1981 (Toronto: James F. MacLaren Associates, 1961), p. 67. Below as Waterworks.

² Ibid., p. 68.

³ Ibid., p. 68.

later concluded the best option was the construction of a concrete aqueduct to move water by gravity from Indian Bay on Shoal Lake to city reservoirs. Total cost of the project was estimated at \$13,045,600.

On the basis of the latter report, the Greater Winnipeg Water District (GWWD) was formed in 1913. The city, together with St. Boniface, Transcona, St. Vital, and parts of Kildonan, Assiniboia and Fort Garry, formed the district to facilitate the procurement of safe water.⁴ After engineering studies and some debate, the Shoal Lake aqueduct scheme was adopted by officials of the Greater Winnipeg Water District on September 6, 1913 and by Winnipeg City Council on September 8, 1913, followed by voter approval in a city-wide plebiscite on October 1, 1913.⁵

The GWWD Complex, as it stands today, is a collection of brick, stone, frame and metal buildings with a wide range of ages and uses. When the site was originally set aside in the early 1900s by St. Boniface for its water pumping facilities, it was located in town's extreme northeast corner - well away from growing residential districts along the Red and Seine rivers. It is now part of a large industrial development spreading over many acres of land. In 1927, with both passenger and freight traffic on the line increasing, the GWWD Railway replaced its original frame structure (Plate 1) with a more imposing stone building.

STYLE

The GWWD Railway Station, with its highly public role, is the most ornamentally treated building within the Complex (Plate 2). The most noticeable stylistic element is the construction material itself - red flint stone.⁶ The irregularly shaped pieces were laid randomly, giving the depot its textured look. Gabled parapets highlight the roof. This building, like hundreds of other depots across western Canada, was designed to be efficient and flexible rather than ornamentally complex

⁴ The Dominion, Vol. 4, No. 9 (June 1913), p. 26.

⁵ Waterworks, p. 71.

⁶ City of Winnipeg Assessment Record, Roll No. 516600, St. Boniface, PC 80.

or stylistically significant.

CONSTRUCTION

The one-storey station is located on the southwest corner of Plinguet Street and Dawson Road, on land legally described as Roman Catholic Mission Parish, Plan 5383, Lots 15 to 18 and 21, and Plan 15221, Parcel A.⁷ The depot measures 22.11 x 7.02 x 6.10 m. (72.5 x 23 x 22'). A partial basement was also built, located under the centre portion of the station. The stone used for the station was quarried along the railway's right-of-way. Construction data for all buildings within the GWWD Complex are found in Appendix I.

DESIGN

Interesting features of the station other than the stone itself are the gabled parapets used to finish both ends of the building. This element is repeated on the cross gable of the trackside façade. Three semi-circular windows grace each of the gabled parapets. The cross gable roof covers a small rectangular bay which originally furnished railway personnel with an improved view of the track, train and platform. Windows throughout the station are plain and finished with stone lug sills. The small, high windows of the south end of the station indicate the original baggage room and cold storage area of the depot. The building is well-designed and aesthetically pleasing (Plates 3 and 4).

INTERIOR

The interior of the railway station, like so many across the country, was laid out to provide comfort for passengers and an efficient workplace for employees. The need to combine retail, waiting room and storage facilities under one roof was essential.

As originally designed, the north end of the building held the waiting room. The area would have

⁷ Ibid.

included comfortable seating and restroom facilities. The waiting area was separated from the noise and dust of the baggage and storage room (south end) by the station master's office in the centre of the depot. His office, as mentioned previously, also included the bay window. After the railway ceased operating its passenger service, the station was converted into a general office. A false ceiling and new lighting have been installed and the interior space has been divided into a number of smaller offices.

INTEGRITY

The station stands on its original site and appears to be in good structural condition. There do not seem to be any major alterations to its exterior. In the Complex, the most significant alteration is in the number of buildings. The total number has risen over time, reflecting the overall growth of activity on the site and of the railway itself.

STREETSCAPE

The GWWD Complex forms its own unique and varied streetscape - from the imposing brick walls of the former St. Boniface Pumping Station, to the massive water tower emblazoned with the words "City of St. Boniface," to two small houses nestled amongst the larger structures, to the refined elegance of the station. Also included on the site was a large, 4.5 million litre (million-gallon) under-ground reservoir opened by the City of St. Boniface on February 8, 1912, but now filled in. The approximate location of each building within the Complex is found at Plate 5. The area surrounding the site has been similarly developed with a range of industrial structures.

ARCHITECT/CONTRACTOR

The architect for the station is unknown, although it was probably the work of a GWWD employee. Contractors who built the structure included: J.J. Daoust (St. Boniface), electrical; Beairsto Limited (Winnipeg), heating and plumbing; McDonald Brothers (Winnipeg), roofing; J. Boux (St. Boniface), plastering; Dickson and Henry (Winnipeg), painting; and Dowse Sash and Door Company

(Winnipeg), mill work.⁸

INSTITUTION

The project [an aqueduct] that the City of Winnipeg now puts forward commits it indefinitely to a particular source of supply...The City of Winnipeg is no longer merely the supply point of the north-west prairie or merely the capital of a Province. It has entered the class of world cities and it has begun to direct the commerce and industries of a vast territory. Within the small group of cities of this class, pride as well as self-interest may be well appealed to. The City cannot afford to be committed to a temporizing or inadequate policy or to permit further postponement of the settlement of the matter on a large, inadequate basis.⁹

The above argument was one of many that carried the day in 1912 and 1913, creating the GWWD and its 156 km. aqueduct. The design chosen for the pipeline was a horseshoe-shaped, 'arch and invert' conduit built of reinforced concrete (Plate 6). Placed in a shallow trench, 0.92 to 1.22 m. (3 to 4 ft.) deep, the bottom inverts were laid in 4.58 m. (15 ft.) lengths (Plate 7), then covered by arches, laid in lengths of 13.73 m. (45 ft.) and by earth to a minimum depth of 1.22 m. (4 ft.). Between Mile 17 and Mile 5 (St. Boniface), circular pipe of varying diameters was installed.¹⁰

The aqueduct was built between 1915 and 1919. At its mouth on Shoal Lake, canals, dykes, a concrete intake and screening devices were constructed. Chief engineers were W.C. Chase and Associates and the three main contractors were J.H. Tremblay and McDiarmid Company, Thomas

⁸ City of Winnipeg, Greater Winnipeg Water District Administrative Board, "Minute Book #4," Items 6349 (August 15, 1929), 6362 (September 19, 1929), 6396 (December 19, 1929), and "Minute Book #5," Item 9 (January 17, 1930).

⁹ Waterworks, p. 70.

¹⁰ Diane Payment, "The Winnipeg Aqueduct, 1919," report for The Canadian Engineering Heritage Record (n.d.), pp. 6-7.

Kelly and Sons Limited, and the Winnipeg Aqueduct Company (all local firms).¹¹

The 91.5 m. (300 ft.) drop in elevation between Shoal Lake and St. Boniface, coupled with a reservoir and a pumping station, enabled the original system to deliver water at a maximum capacity of 382.5 million litres per day (M.L.D.) [85 million gallons per day (M.G.D.)]. It was not until after 1950 that the maximum capacity was increased to 450 M.L.D. (100 M.G.D.) by the addition of booster pumping stations, reservoirs and a 19.3-km. (12-mile) extension of the aqueduct built in 1959-60.¹²

The initial construction phase of the aqueduct between 1913 and 1914 actually involved the completion of the GWWD Railway, western Canada's longest industrial line (Plate 8). The line was surveyed to run parallel to the water conduit and was built to facilitate the movement of materials and workers along its length. For many years it was the only source of communication between the intake and the terminus of the aqueduct in St. Boniface.

After the aqueduct was completed, the railway took on a number of roles in an attempt to defray operating costs. Before the 1950s, firewood, pulpwood, poles, railway ties, ice, mail and milk all were carried westward (Plate 9). Gravel and sand destined for a St. Boniface concrete plant became the major westbound freight after World War II.¹³

Freight was not the only item to utilize the line. During the summer months, cottagers travelled east to the small communities that had developed along the line. While a lack of good agricultural land prevented these homesteads from developing into larger communities, there was considerable passenger traffic on the line. For many years tri-weekly trains offered both freight and passenger transport to its customers.¹⁴ The regular passenger service was reduced and finally curtailed in

¹¹ D. Payment, op. cit., pp. 3-5.

¹² Ibid., pp. 1, 9-10.

¹³ Peter Lacey, *The Muskeg Limited* (Winnipeg: Author, 1993), pp. 29-30, 42 and 43.

¹⁴ Lorna Annell (ed.), *Pioneer History (McMunn, East Braintree and Glenn, Manitoba, 1913-1989)* (East Braintree, Manitoba: Pioneer History Book Committee, 1989), p. 62.

September of 1977, and summer excursions were stopped in 1982.¹⁵ The line sees very limited use at present.

It is a credit to the people of Winnipeg and surrounding communities, project planners and civic leaders that such an enormous project was undertaken. Although the scheme was not the least expensive, it was deemed essential to the future growth of the region. The farsightedness of the decision is amply illustrated by the fact that the aqueduct system has been only minimally altered during its 75 years of service. It has been called one of "the world's greatest engineering works."¹⁶

CONTEXT

The GWWD aqueduct was an intimate part of the growth of Winnipeg after World War I. It was planned during the final stages of the city's fantastic growth phase that lasted from 1900 until the war. Most people felt the city would simply continue to move forward in population, commerce and industry. It is not surprising, then, that a scheme of such enormity would be discussed, agreed to and completed in a relatively short period of time. Although the pace of the city's growth slowed, the aqueduct ensured its citizens and business community had a clean, reliable source of water.

It also provided an impetus for the settlement of part of south-eastern Manitoba. The GWWD Railway allowed for the settling of isolated land along its right-of-way. Empty territory was turned into farms, timber stands provided raw material for construction and lumber and paper industries, and communities developed.

The Complex itself has mirrored the slow growth of the area which it serves. As service requirements increased, new buildings were added to the site to address particular needs. It is also true that as some of the facilities aged, their usefulness diminished and they were abandoned.

¹⁵ Ibid., pp. 58 and 62. One of the old GWWD passenger coaches was restored and is now used as part of the Prairie Dog Central's excursion train.

¹⁶ Manitoba Free Press, date illegible, 1919; and Toronto Globe and Mail, December 24, 1974.

LANDMARK

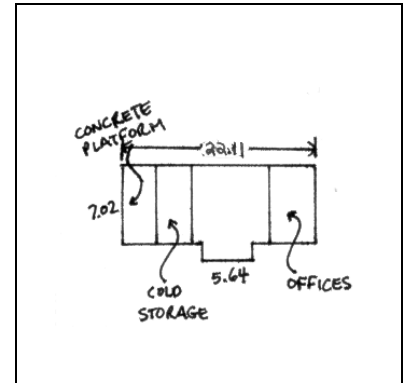
The GWWD Complex on the south side of Plinguet Street is in a remote part of St. Boniface, removed and hidden from the busier thoroughfares. It is very likely that few people realize the aqueduct and its railway continue to have facilities at this site.

APPENDIX I

The following information was gleaned from City of Winnipeg Assessment Record data. The approximate location of each building can be found at Plate 5.

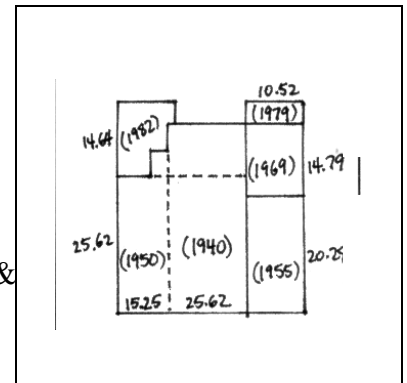
Building 1:

NAME - GWWD Railway Station
 AGE - 1927
 CONSTRUCTION - red flint stone on concrete foundation (partial basement)
 PRESENT USE - offices, storage
 DIMENSIONS - 22.11 x 7.02 x 6.10 m.
 COMMENTS - 45.72 X 45.72 cm. concrete columns & beams throughout



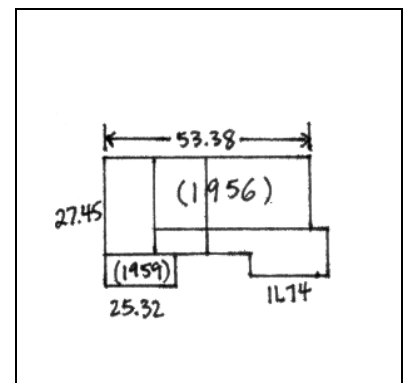
Building 2:

NAME - Shop
 AGE - 1940+
 CONSTRUCTION - brick walls (20.32 cm. thick) & concrete
 PRESENT USE - shop, storage, offices
 DIMENSIONS - 25.62 x 34.77 x 6.68 + 15.25 x 25.62 x 6.86 m.
 COMMENTS - additions in 1950, 1955-57, 1969 (\$22,000), 1979 & 1982



Building 3:

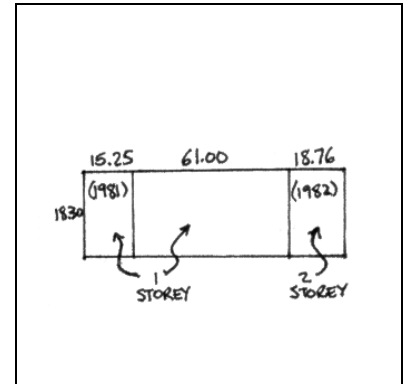
NAME - Shop
 AGE - 1956-59
 CONSTRUCTION - concrete block (20.32 cm. thick)
 PRESENT USE - garage, shop
 DIMENSIONS - 5,642.54 cu. m.
 COMMENTS - 1 storey, 12.70 cm. reinforced concrete slab floors



APPENDIX I

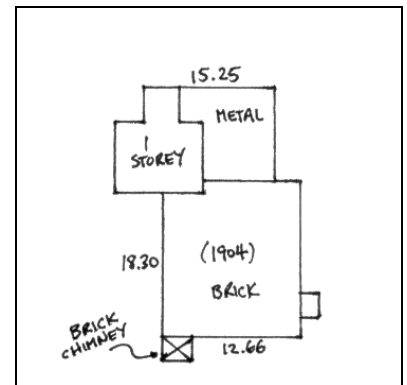
Building 4:

NAME - Storage building
AGE - 1963+
CONSTRUCTION - concrete block (25.40 cm. thick) on rigid steel butler frame
PRESENT USE - storage
DIMENSIONS - 18.30 x 61.00 m.
COMMENTS - Original cost \$66,900. Addition in 1981 (15.25 x 18.45 m.) cost \$43,000.



Building 5:

NAME - St. Boniface Pumping Station
AGE - 1904+
CONSTRUCTION - brick & concrete
PRESENT USE - vacant
DIMENSIONS - 3,252.52 cu. m.
COMMENTS - addition in 1940



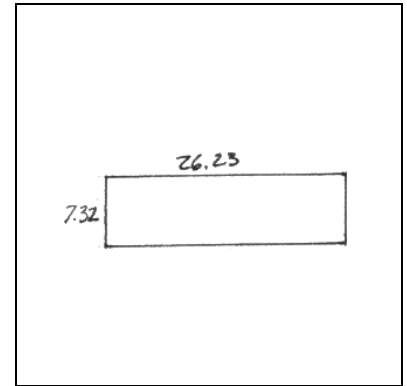
Buildings 6,7 & 8:

NAME - Sheds
AGE - 1940s
CONSTRUCTION - frame on concrete foundation
PRESENT USE - storage
DIMENSIONS -
COMMENTS -

APPENDIX I

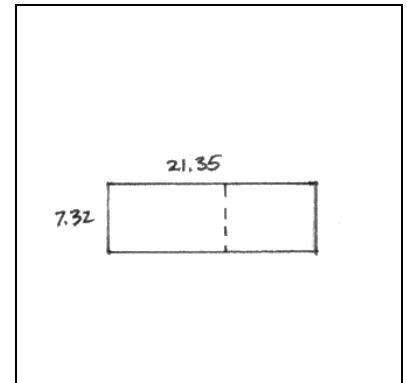
Building 9:

NAME - Storage building
AGE - 1960
CONSTRUCTION - metal clad, concrete floor, no basement
PRESENT USE - storage
DIMENSIONS - 7.32 x 26.23 x 3.81 m.
COMMENTS -



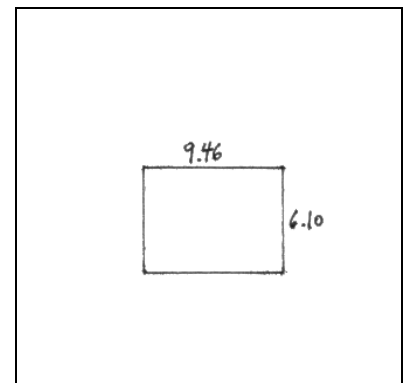
Building 10:

NAME - Shed
AGE - 1951
CONSTRUCTION - metal clad, concrete floor, no basement
PRESENT USE - storage
DIMENSIONS - 7.32 x 21.35 x 3.81
COMMENTS -



Building 11:

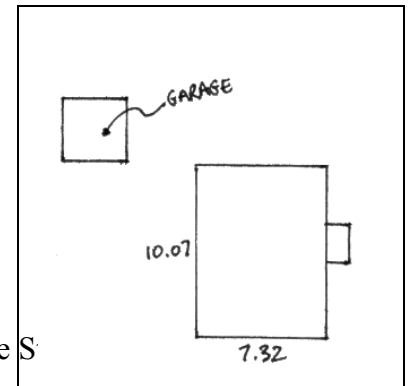
NAME - Shed
AGE - 1955
CONSTRUCTION - metal clad
PRESENT USE - storage
DIMENSIONS - 9.46 x 6.10 x 3.05 m.
COMMENTS -



APPENDIX I

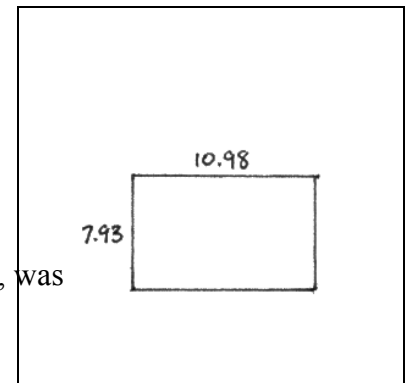
Building 12:

NAME - House (566 Plinguet Street)
AGE - 1910
CONSTRUCTION - composite siding, concrete foundation
PRESENT USE - residential
DIMENSIONS - 7.32 x 10.07 x 6.10 m., 1 storey
COMMENTS - Research could not conclusively determine the original owner/ tenant of this house, although it could have been the managing engineer of the S Boniface Waterworks, Napoleon J. Prince.



Building 13:

NAME - House (578 Plinguet Street)
AGE - 1961
CONSTRUCTION - stucco and concrete foundation
PRESENT USE - residential
DIMENSIONS - 7.93 x 10.98 x 5.94
COMMENTS - The original 578 Plinguet Street, built in the 1920s, was demolished in 1960. The original home's first occupant was GWWD employee Alphonse Lambert.



Water Tower:

AGE - 1936
CONSTRUCTION - steel
PRESENT USE - none
DIMENSIONS - 45.75 m. high
COMMENTS - Heightened and made larger in 1945.

598 PLINGUET STREET - GWWD RAILWAY STATION



Plate 1 – Original Greater Winnipeg Water District Railway station, 598 Plinguet Street, ca.1923. (Courtesy of Western Canada Pictorial Index, Negative 513-16364.)



Plate 2 – Greater Winnipeg Water District Railway station, 598 Plinguet Street, west and south sides. (Murray Peterson, 1993.)

598 PLINGUET STREET - GWWD RAILWAY STATION



Plate 3 – Greater Winnipeg Water District Railway station, 598 Plinguet Street, south side. (Murray Peterson, 1993.)

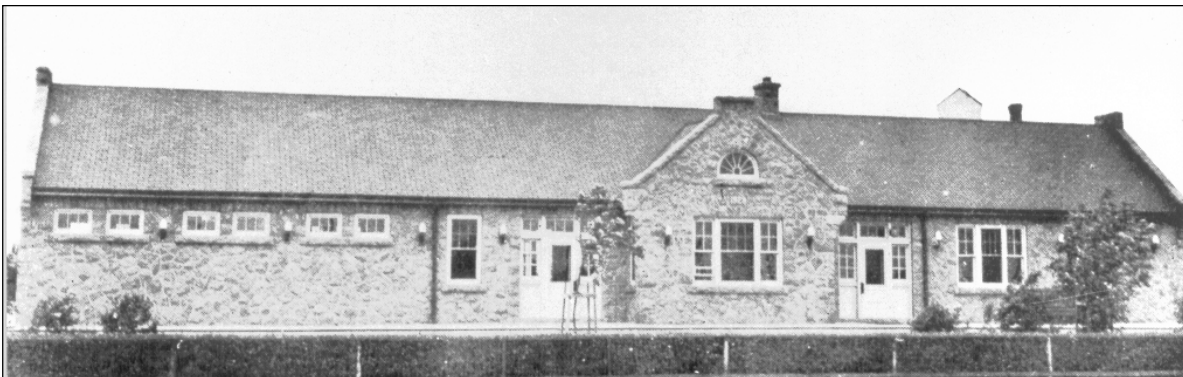


Plate 4 – Greater Winnipeg Water District Railway station, 598 Plinguet Street, 1944. (Courtesy of Provincial Archives of Manitoba, Negative, N14761.)

598 PLINGUET STREET - GWWD RAILWAY STATION

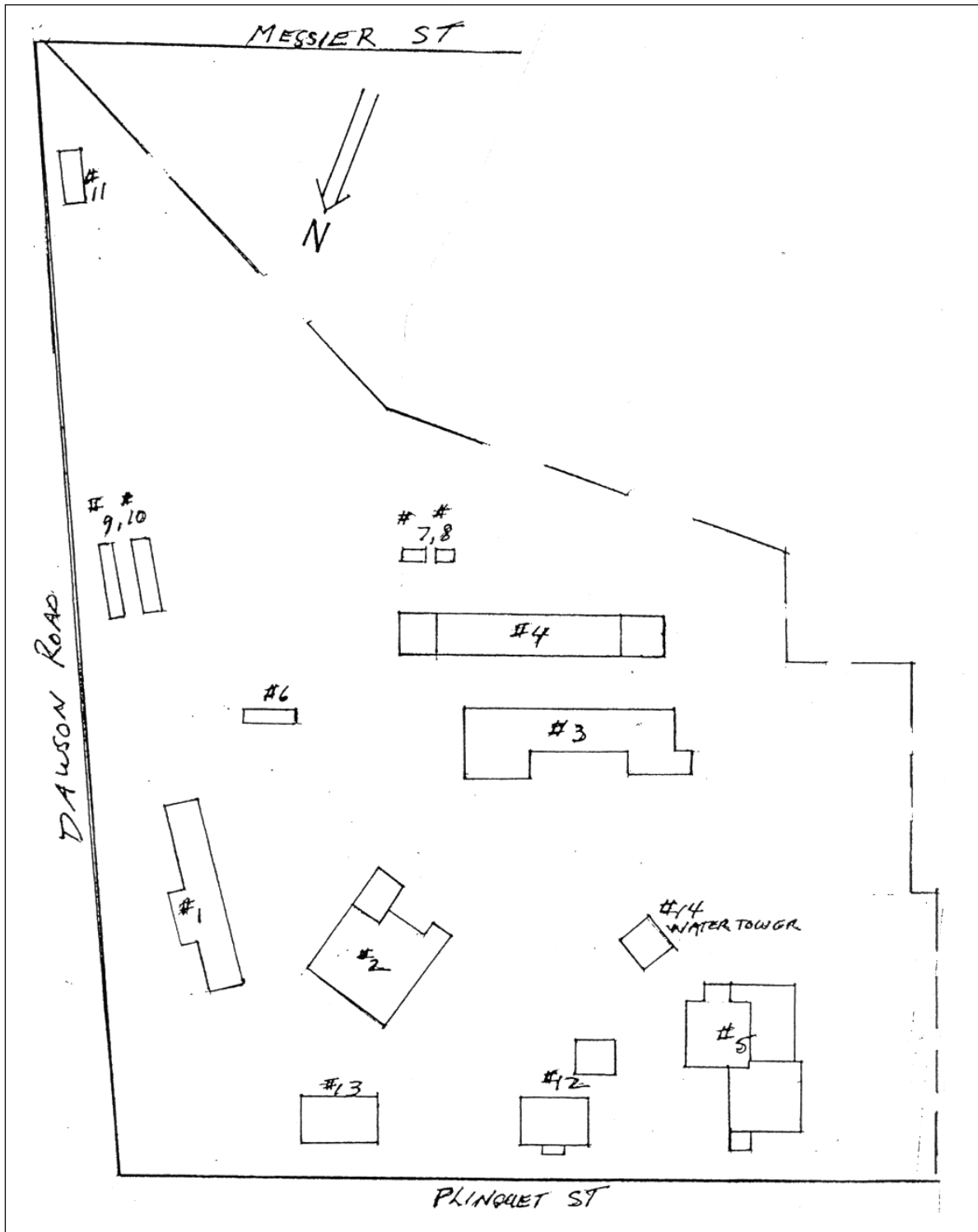


Plate 5 – Map of the Greater Winnipeg Water District Complex, n.d. (Reproduced from City of Winnipeg Assessment Records, Roll No. 516600, St. Boniface, PC 80.)

598 PLINGUET STREET - GWWD RAILWAY STATION

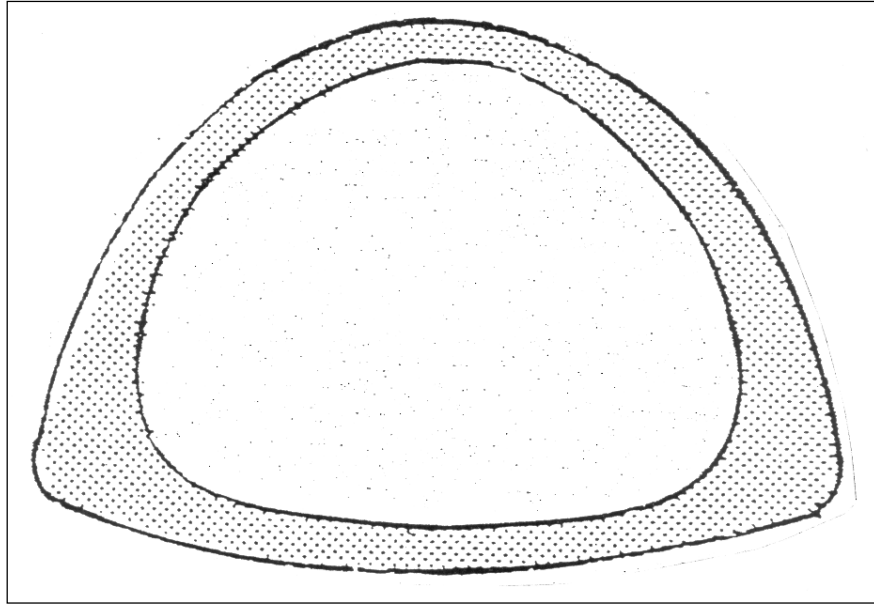


Plate 6 – Cross-section of the Greater Winnipeg Water District aqueduct. (Reproduced from Diane Payment, "The Winnipeg Aqueduct, 1919," report for The Canadian Engineering Heritage Record (n.d), n.p..)

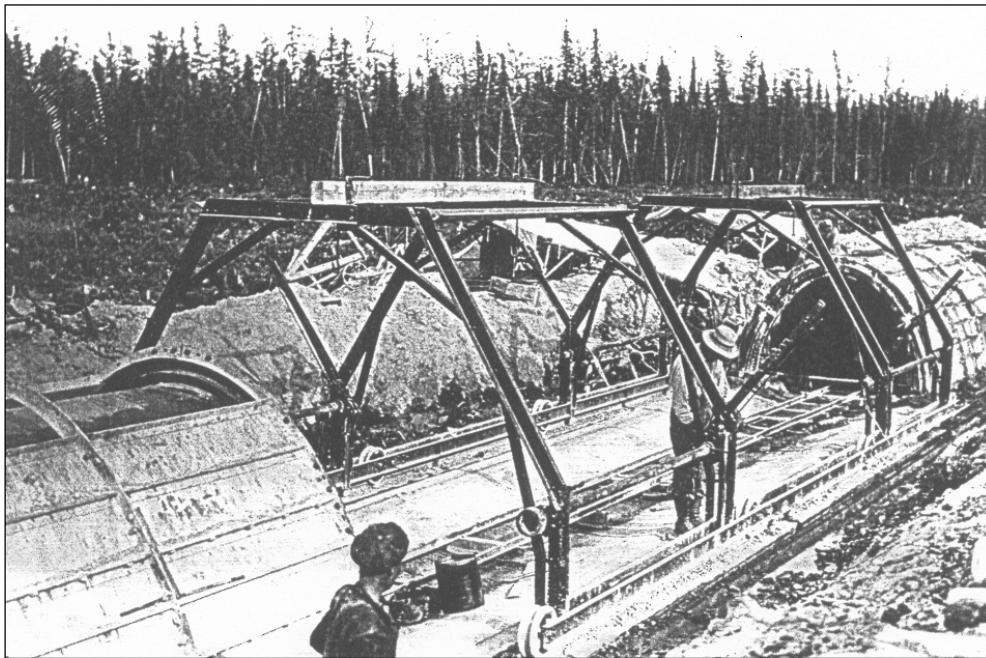


Plate 7 – Greater Winnipeg Water District aqueduct construction, Mile 57, ca.1917. (Courtesy of the Western Canada Pictorial Index, Negative 513-16363.)

598 PLINGUET STREET - GWWD RAILWAY STATION



Plate 8 – “The Greater Winnipeg Water District Railway.” (Reproduced from J.E. Martin, Western Canada's Railways, British Columbia, 1986, p. 86.)



Plate 9 – Depression relief wood at the St. Boniface terminal of the Greater Winnipeg Water District Railway, 1932. (Provincial Archives of Manitoba, Foote Collection, #2466.)