C-01: Portage & Main Concourse

The Portage & Main Concourse is located at 365 Main Street and was built in 1976. The surficial geology at the site consist of 40 feet of clay underlain by approximately 20 feet of till. The carbonate bedrock sequence typically starts between 40 feet to 52 feet in the area and is over 400 feet in thickness. The street elevation at the site is at 231.9 meters geodetic and the recessed slab elevation is at 224.73 meters geodetic.

The nearest provincial monitoring station with available data at the site is G05OJ028, located approximately 3,570 feet (1.09 km) southeast of the facility. The most recent hydrograph station record showing the groundwater levels in the carbonate aquifer is shown as Figure 26.

Through the review of Figure 26, the following key points can be made:

- The groundwater level trends in the carbonate aquifer based on the recorded hydrograph data shows a continually rising trend since the 1960's with a seemingly stabilizing level from 2010 to late 2019.

- Based on available groundwater level data in the carbonate aquifer, it appears that the groundwater levels in the carbonate aquifer have exceeded the geodetic elevations of the recessed slab at the Portage and Main Concourse site on numerous occasions since 1985. There is an upward gradient from the carbonate aquifer into the overlying sediments at the site.

- The lowest groundwater level recorded on the hydrograph is 213.116 meters geodetic and was recorded in September 1967 while the highest recorded groundwater level on the hydrograph is 226.83 meters geodetic and was recorded in October 2014.

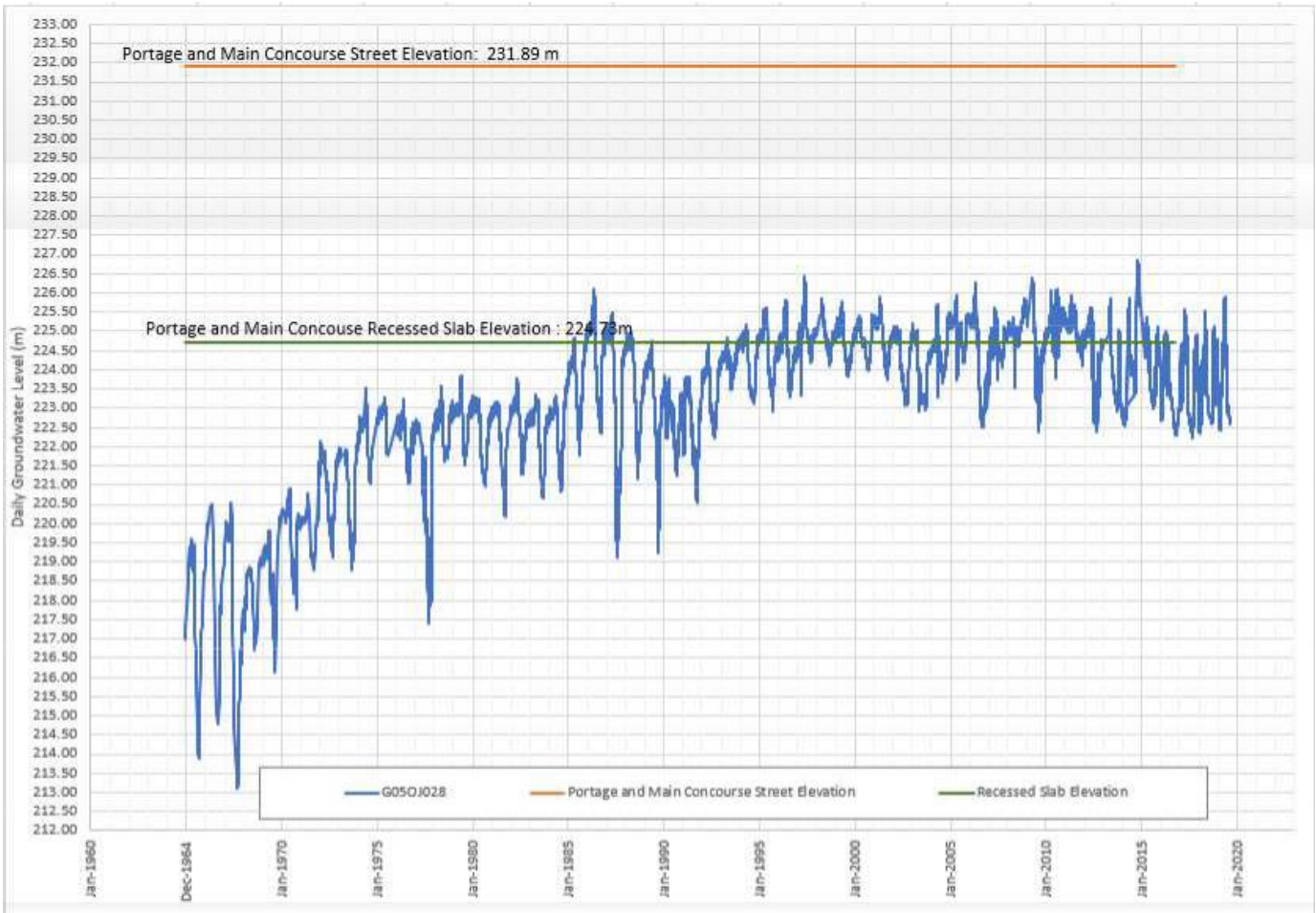

Figure 26: C-01 Elevations on GO5OJ028 Hydrograph (data sources: City of Winnipeg, 2019 and MCC, 2020)