

## **Appendix F    Current (May 2024) Groundwater Levels and Estimated Dewatering Flow Requirements at Shafts**

*(Note: Groundwater levels change seasonally.)*

**Table 1**  
**Summary of Groundwater Elevation Data**  
**Ferry Road Piezometer Network**  
**City of Winnipeg**

Adjacent Shaft ID	Location	Piezometer No.	Ground Surface Elevation <sup>a</sup>	Top of Well Casing Elevation <sup>a</sup>	Screen Section Depth		Material Adjacent to Screen Section	Groundwater Elevation (m Above Sea Level)				
			m Above Sea Level	m Above Sea Level	m below grade	m Above Sea Level		Monday, September 23, 2019	Wednesday, November 13, 2019	Saturday, January 18, 2020	Monday, May 25, 2020	Sunday, May 5, 2024
2	South side of Silver	TH19-173	235.159	235.109	15.2 - 15.5	219.7 - 220.0	Bedrock (Dolomite)	226.63	228.619	NA	227.41	Plugged with soil
3	Ness	TH19-240 b	235.111	235.061	9.1 - 9.4	225.7 - 226.0	Silt (Till)	226.56	227.211	NA	228.56	228.743
4	Bruce	TH19-239	234.083	234.033	10.7 - 11.0	223.1 - 223.4	Silt (Till)	226.32	228.483	NA	227.04	228.268
5	Portage N Lane	TH19-155	233.629	233.554	12.0 - 12.3	221.3 - 221.6	Silt (Till)	226.21	228.379	NA	226.89	Could Not Locate
NA	South end - Bournvale Park	TH19-148	230.566	230.516	6.1 - 6.4	224.2 - 224.5	Clay (Alluvial) underlain by Sand (alluvial)	226.34	226.946	NA	226.93	Could Not Locate
8	Dyke	TH19-147	228.619	229.529	6.1 - 6.4	222.2 - 222.5	Silt (Till)	226.51	227.739	NA	227.19	226.943

Note: <sup>a</sup> Elevations for geotechnical test holes (TH) based on Dyregrov Robinson Inc. well logs. Elevations for monitoring wells (MW) and Test Well recorded by Tetra Tech.  
<sup>b</sup> TH19-240 : Top of Casing elevation is only approximate for 2024 reading due to frost heave. Top of casing was cut down by approximately 100 mm to restore top of casing to near original location under flush mount well cover.  
 NA = Not Available

**Table 2**  
**Summary of Hydraulic Conductivity Test Results**  
**Ferry Road Piezometer Hydraulic Conductivity Testing**  
**City of Winnipeg**

Shaft ID	Location	Representative Piezometer No.	Primary Conductivity			Secondary Conductivity		
			Hydraulic Conductivity (m/s)	Flow (L/s)	Flow (m <sup>3</sup> /day)	Hydraulic Conductivity (m/s)	Flow (L/s)	Flow (m <sup>3</sup> /day)
1	St. Matthews	TH19-240	8.0E-07	0.16	13.8	2.5E-06	0.4	34.6
2	Silver	TH19-240	8.0E-07	0.14	12.1	2.5E-06	0.35	30.2
3	Ness	TH19-240	8.0E-07	0.15	13.0	2.5E-06	0.37	32.0
4	Bruce	TH19-239	8.9E-06	1.26	108.9	2.2E-05	2.89	249.7
5	Portage N Lane	TH19-155	4.5E-06	0.73	63.1	1.3E-05	1.88	162.4
8	Dyke - Near River	TH19-147	3.6E-06	0.59	51.0	3.6E-05	4.58	395.7

Note: