

CRH Canada Group Inc. 2300 Steeles Ave W, 4<sup>th</sup> floor Concord, Ontario L4K 5X6 Canada **T.** 905-761-7100 **F.** 905-761-7200

www.crhcanada.com

April 29, 2022

Chris Hyde District Manager

Ministry of Environment, Conservation and Parks

Barrie District Office 54 Cedar Pointe Dr, Unit 1201 Barrie, ON L4N 5R7 Gregory Meek Supervisor

Ministry of Environment, Conservation and

**Parks** 

Permit to Take Water Unit 125 St Clair Avenue West Toronto, ON M4V 1P5

#### **Dufferin Aggregates Teedon Pit – 2021 Annual Monitoring Report**

Please find enclosed the Annual Monitoring Report for the Dufferin Aggregates Teedon Pit for the 2021 calendar year. This report fulfills the requirements for PTTW No. 5003-APFH26 (rescinded) and Amended PTTW No. 6258-BRDJ2M. Dufferin Aggregates is a division of CRH Canada Group Inc.

Hard copies of the report can be provided upon request.

Please do not hesitate to contact me if you have any questions or comments.

Yours sincerely,

Jennah Pettenuzzo Environmental Specialist

Dufferin Aggregates, a CRH Company

M: 416-602-3422

E: Jennah.pettenuzzo@ca.crh.com

cc: Greg Athron, Senior Environmental Officer – MECP Barrie District Office

Rigoberto Ceballos, DFA North Region Site Manager



# 2021 Annual Monitoring Report

**Teedon Pit** 

Dufferin Aggregates, a division of CRH Canada Group Inc.

29 April 2022

→ The Power of Commitment



# **Contents**

1.	Intro	1	
	1.1	Additional Monitoring	2
2.	2021	Field Activities	2
3.	Data	Assessment	3
	3.1	Hydraulic Monitoring	3
	3.2	Water Taking	4
	3.3	Surface Water Quality Sampling	4
	3.4	Private Water Well Sampling	5
	3.5	Complaints	6
4.	Conc	clusions and Recommendations	6

# Figure Index

Figure 1.1	Monitoring Locations
Figure 3.1	Groundwater Elevation Contours – Upper Aquifer - February 17, 2021
Figure 3.2	Groundwater Elevation Contours – Upper Aquifer - October 22, 2021
Figure 3.3	Hydrograph – Historical Groundwater Elevations
Figure 3.4	Hydrograph – 2021 Groundwater Elevations

# Table Index

Table 1.1	Monitoring Well Completion Details
Table 2.1	Summary of 2021 Groundwater Elevations
Table 2.2	2021 Water Quality Results – SW1 and SW2

# **Appendices**

Appendix A	Permit to Take Water
Appendix A-1	Permit to Take Water No. 6258-BRDJ2M
Appendix A-2	Permit to Take Water No. 5003-APFH26
Appendix B	PTTW Water Taking Summary and Site Observations
Appendix B-1	Water Taking Summary – PW1-09
Appendix B-2	Water Taking Summary – Source Pond
Appendix B-3	Source Pond Water Levels
Appendix C	Hydrographs – Individual Wells

### 1. Introduction

This 2021 Annual Monitoring Report presents the results of the 2021 monitoring activities conducted by Dufferin Aggregates, a division of CRH Canada Group Inc. (Dufferin) and GHD Limited (GHD) at the Dufferin Aggregates Teedon Pit (Site) located in the Township of Tiny, County of Simcoe, Ontario. This report presents data collected between January 1, 2021 until December 31, 2021, unless otherwise noted.

Details of the 2021 Monitoring Program are provided in the following sections:

Section 1 Introduction

Section 2 2021 Field Activities

Section 3 Data Assessment

Section 4 Conclusions and Recommendations

This monitoring report satisfies the requirements of the monitoring program under the Ontario Ministry of the Environment, Conservation and Parks (MECP) Section 34.1 of the Ontario Water Resources Act (OWRA) Permit to Take Water (PTTW) No. 6258-BRDJ2M which was issued on January 14, 2021 and amended January 19, 2021 as presented in Appendix A-1.

Between January 1, 2021 and January 14, 2021 the Site operated under PTTW No. 5003-APFH26, presented in Appendix A-2; however, no taking occurred during that period. This report will therefore focus on the requirements of PTTW No. 6258-BRDJ2M with reference to PTTW No. 5003-APFH26, where relevant. PTTW No. 6258-BRDJ2M was approved on January 14, 2021 and is set to expire on January 13, 2031. PTTW No. 6258-BRDJ2M includes the following authorized water takings, as specified in Table A, therein:

Source Name	Source Type	Taking Specific Purpose	Taking Major Category	Max Taken (L/min)	Max Hours Per Day	Max Taken (L/day)	Max Days Per Year
PW1-09 (WWR#7124734)	Well Drilled	Aggregate Washing	Industrial	950	24	1,368,000	210
Source Pond	Pond Dugout	Aggregate Washing	Industrial	7,274	12	5,237,280	210
					Total	6,605,280	

The PTTW No. 6258-BRDJ2M environmental monitoring requirements are presented in Condition 4.2 and summarized below:

#### **Condition 4.2**

- i. Install and maintain dataloggers at the on-Site and off-Site monitoring wells listed in Schedule B and monitor groundwater levels at a minimum frequency of every four hours. This monitoring shall occur, at a minimum, between February 15 and December 15 of each year for which the Permit is valid.
- ii. Should any other on-Site monitoring well be installed, then groundwater levels shall be monitored as per item (i) above and the data included in the Annual Monitoring Report.
- iii. Measure water levels in private water wells WWR 7150632 and WWR 5717709, if permission is granted by the well owners. Should the permission of either of these domestic water well owners be withdrawn, then the permit holder shall replace the well for which permission has been denied with a well in the same aquifer either on or off site.
- iv. Measure the water level elevation in the Source Pond [also referred to as Sump Pond or SW1] between February 15 and December 15 when the pond is not frozen at a minimum frequency of twice per day, once in the early morning and once in the late afternoon or evening.

These requirements incorporate and build on the requirements of PTTW No. 5003-APFH26; therefore, adherence to PTTW No. 6258-BRDJ2M would also constitute adherence to PTTW No. 5003-APFH26.

The monitoring well completion details for wells listed in PTTW No. 6258-BRDJ2M - Schedule B are provided in Table 1.1 along with other monitoring locations near the Site. The monitoring locations are presented on Figure 1.1.

This 2021 Annual Monitoring Report includes a summary of data collected during the 2021 calendar year and an assessment of that data based on the 2021 and historical (2010 to 2020) monitoring programs.

The Teedon Pit was acquired by Dufferin in 2017 and was previously owned by Cedarhurst Quarries & Crushing Limited since 1987. The accuracy of the hydraulic monitoring data collected prior to ownership by Dufferin, could not be confirmed as these data were collected by the previous owner; however, the data has been reviewed and deemed appropriate to include herein for context.

## 1.1 Additional Monitoring

Further to the monitoring program within PTTW No. 6258-BRDJ2M, the following additional groundwater and surface water monitoring activities were completed in 2021 and presented herein (PTTW Condition 4.3.ii.):

- Sump Pond Water Quality Monitoring
- Private Well Sampling

The additional monitoring activities have been incorporated into the discussion of Site results below, where appropriate.

## 2. 2021 Field Activities

The following 2021 activities were completed by GHD at the Site on the dates presented below:

Date (2021)	Site-wide Hydraulic	Pond Sampling (baseline or no washing)	Pond Sampling (during washing)	Private Well Sampling
February 17	Completed			
April 8	Completed			
May 25		Completed		
May 28			Completed	
June 25			Completed	
July 30	Completed		Completed	
August 26			Completed	
September 21			Completed	
September 29				Completed
October 22	Completed		Completed	Completed
November 18			Completed	Completed
December 16		Completed	Completed	Completed

Hydraulic water level monitoring events occurred in 2021 at one pumping well (PW1-09), eight on-Site groundwater monitoring wells (MW1, MW1-09, MW4-10, MW5-18, MW6-18, MW6R-18, MW7-18, and MW8-18), three off-Site groundwater monitoring wells located on adjacent Dufferin property as per PTTW Condition 4.3 ii. (MW9-18, MW10S-18, and MW10D-18), two private wells (#50632 and #17709), one surface water location for elevation (SW1),

and two surface water locations for quality (SW1 and SW2). For the purposes of this Report, SW1 is the monitoring location designation for the Sump Pond and SW2 is the monitoring location designation for the Unnamed Pond, north and downstream of the Sump Pond.

Groundwater depths were measured using a water level meter to the nearest 0.005 metre (m). Dataloggers were downloaded and verified at the pumping well, on-Site groundwater monitoring wells, private wells, and SW1 during each of the 2021 hydraulic monitoring events.

The monitoring well completion details are provided in Table 1.1 and the groundwater and surface water monitoring locations are presented on Figure 1.1. A summary of the 2021 groundwater elevations is provided in Table 2.1.

SW1 and SW2 sampling was completed as presented above and results are summarized in Table 2.2.

In addition to the field activities completed by GHD, Dufferin completed the daily flow meter readings (PTTW Condition 4.1) and twice daily SW1 water level observation (PTTW Condition 4.2.iv.). Dufferin monitoring activity results are summarized in Appendix B. Twice daily SW1 water level observations were supplemented with a datalogger installed within the Sump Pond throughout 2021.

# 3. Data Assessment

## 3.1 Hydraulic Monitoring

Groundwater elevation contours for the February 17, 2021 and October 22, 2021 monitoring events are provided on Figure 3.1 and Figure 3.2, respectively. Conditions on February 17, 2021 represent the Site with no water taking from PW1-09 or the Sump Pond. Conditions on October 22, 2021 represent the Site with water taking at both PW1-09 and the Sump Pond. The groundwater elevation contours show that groundwater in the Upper Aquifer generally flows to the west, from about 238 to 234 metres above mean sea level (AMSL) with only localized drawdown in the immediate vicinity of PW1-09 (i.e., compared to MW5-18) present during routine water takings.

A hydrograph presenting the historical monitoring well groundwater elevation data (2010 to current) is presented on Figure 3.3. A hydrograph presenting the monitoring well groundwater elevation data for 2021 is presented on Figure 3.4. In addition, individual hydrographs for on-Site monitoring wells, monitored private wells, and SW1 are presented in Appendix C. The Appendix C hydrographs present both manually recorded water levels along with datalogger data. The hydrographs include precipitation data obtained from Environment Canada for Collingwood, Ontario, for reference. This data has not been verified by GHD; however, conditions at the Collingwood station have been observed to be generally typical of the conditions at the Site. Due to the localized nature of thunderstorm activity in the summer months, some variation in precipitation totals may occur between the Collingwood station and the Site.

All groundwater elevations measured in 2021 are within historical ranges for each of the locations (within historical lows and highs). Groundwater levels in the Upper Aquifer typically vary by approximately 30 cm due to seasonal climatic conditions. Somewhat larger variations of up to 70 cm were observed at monitoring well MW5-18 which are attributed to pumping influences from PW1-09, as anticipated. Monitoring well MW5-18 is located approximately 110 m from pumping well PW1-09. In the shallow groundwater zone, annual variation of approximately 50 to 150 cm can be observed with noticeable response to periods of increased precipitation. As presented on Figure 3.3 and 3.4, the shallow groundwater zone and the upper aquifer potentiometric surface are typically separated by greater than 15 m due to the presence of the local aquitard.

The surface water hydrograph for SW1 in 2021 is presented on Figure 3.4. Appendix C also presents the historical data at SW1; however, data prior to August 2017 (the start of Dufferin washing operations) was not made available by the previous landowner. In the Spring of 2021, Dufferin implemented measures to reduce the sustained water elevation within the Sump Pond and raised the outlet elevation as a further factor of safety to prevent overflow of the Sump Pond. The float control (which ceases the supply of water from PW1-09) was also adjusted such that a

minimum of 0.30 m of freeboard was maintained below the historical outlet elevation throughout the washing season. Operation of the float control began in 2018.

Early in the winter of 2021, the data indicates that some overflow of the Sump Pond to the Unnamed Pond occurred as a result of naturally occurring climatic conditions. These conditions occurred during a non-operating period as a result of climatic conditions, not as a result of water taking or washing operations. Subsequently, Dufferin implemented measures as described above to prevent overflows from occurring. Following the start-up of washing operations on April 5, 2021, no overflow from the Sump Pond to the unnamed pond occurred for the remainder of 2021. Also of note, due to Site operations intentionally maintaining a lower sustained water level within the Sump Pond to limit the potential of overflow, the staff gauge at SW1 went dry during operations in 2021. Twice daily observations were recorded and noted that the pond water level was below 263.43 m AMSL. A datalogger was installed in the Sump Pond throughout this period recording every 4 hours as presented on Figure 3.4 and in Appendix C. A supplemental staff gauge was installed at SW1 on October 5, 2021 deeper into the Sump Pond.

Groundwater elevations at Private Wells #17709 and #50632 showed routine variability and response to domestic supply demands as presented in Appendix C. Please note that a correction to the historical data for Private Well #50632 was completed in 2021 to correct a calculation error that resulted in a 10% magnitude reduction in the drawdown data. Private Well #50632 is located on additional lands owned by Dufferin as presented on Figure 1.1.

# 3.2 Water Taking

PTTW No. 6258-BRDJ2M allows for the water taking from PW1-09 with takings up to 24 hours per day and up to 210 days per year. Routine water takings are permitted up to 950 litres per minute (L/min) (maximum of 1,368,000 litres per day [L/day]). This new PTTW taking limit represents a reduction to the rate allowed under PTTW No. 5003-APFH26 (i.e., 1,136 L/min to a maximum of 1,635,840 L/day). PTTW No. 6258-BRDJ2M also allows for water taking from the Sump Pond with takings up to 12 hours per day and up to 210 days per year. Water taking is permitted up to 7,274 L/min (maximum of 5,237,280 L/day); consistent with PTTW No. 5003-APFH26. It is noted that the Sump Pond also received clarified water recirculated from the on-Site aggregate washing system and the water taking from the Sump Pond includes water supplied from PW1-09, recirculated wash water, direct precipitation, and adjacent runoff.

The water taking data for 2021 are presented in Appendix B.

Water takings at the Teedon Pit occurred between April 5 and December 17, 2021 and washing operations occurred between April 6 and December 3, 2021. There were no exceedances of the permitted water taking quantities or rates during 2021 from either PW1-09 or the Sump Pond.

# 3.3 Surface Water Quality Sampling

Surface water quality sampling was initiated at the Site on May 25, 2021. The initial (baseline) sample was collected prior to commencement of operations on May 25, 2021, following a 3-day washing operations shutdown for the Victoria Day long weekend. A post washing sample was collected on December 16, 2021 following the end of the washing season on December 3, 2021. Both these samples represent baseline (non-washing) conditions. Dufferin completed monthly sampling of the Sump Pond throughout the 2021 washing season. The regular monthly samples were taken at the end of a midweek day with normal aggregate washing activity, while allowing for sufficient time for sample collection and delivery to the laboratory. One noted exception was on Friday June 25, 2021, during mobilization to the Site, GHD was notified that the wash plant was down due to a mechanical issue with the wash plant. At that point the wash plant had been operating for 4 constitutive days and it was determined that sampling should be completed regardless of the non-operating condition to ensure that a representative sample was collected in June, in the event of a prolonged shutdown though the end of the Month. The results of the June 25th sample were generally consistent with the other sampling events as presented in Table 2.2.

Surface water quality samples were collected and submitted to ALS Laboratories in Waterloo, Ontario under Chain of Custody procedures. All surface water samples were analyzed for: total metals, anions, turbidity and TSS. Dufferin

added dissolved metals to the sampling program starting in October 2021 and speciated alkalinity in November 2021. These additional analyses can provide further clarification of water quality conditions.

Sump Pond (SW1) and Unnamed Pond (SW2) water quality samples were each collected near the overflow structure to the unnamed pond. For each location, samples were collected using an extendable swing arm sampler from the shoreline; approximately 3 m into the respective pond. The results are presented in Table 2.2 and are screened against Ontario Provincial Water Quality Objectives (PWQOs) to provide context.

The final laboratory analytical results and supporting quality assurance/quality control data were assessed by GHD. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, duplicate data, recovery data from laboratory control samples, matrix spikes, and field quality control samples. The quality assurance/quality control criteria by which these data have been assessed are outlined in the applicable analytical methods and applicable guidance<sup>1</sup>. Where applicable appropriate data qualifications were applied as presented in Table 2.2.

In general water quality at both SW1 and SW2 are within the PWQO with the following exceptions:

- Total Aluminum at SW1 was detected above the PWQO in all samples except December 16, 2021. The PWQO for aluminum is based on clay-free samples. Elevated aluminum is to be expected given the presence of the clay within the aggregate wash water. The dissolved aluminum results from October to December are below the PWQO and demonstrate that the total aluminum is likely the result of suspended clays within the wash water at SW1.
- Total Aluminum at SW2 was detected above the PWQO in one of twelve samples collected. Elevated aluminum is to be expected given the presence of the clay within the natural overburden and pond sediment deposits which are disturbed by natural conditions such as wildlife (beavers are active in this pond) and wind. It is noted that subsequent dissolved aluminum results were all non-detect at a concentration of 0.005 milligram per litre (mg/L).
- Total Iron at SW1 was detected above the PWQO in one of fifteen samples collected and is likely the results of suspend solids within the water sample. Subsequent dissolved iron results were all non-detect at a concentration of 0.01 mg/L.
- Total Iron at SW2 was detected above the PWQO in seven of twelve samples collected. It is noted the iron floc is
  routinely observed around the perimeter of the unnamed pond and concentrations of iron are likely the result of
  venting of shallow perched groundwater from iron rich soils near SW2.
- Total Silver at SW1 was detected at an estimated concentration above the PWQO in one of fifteen samples
  collected; a corresponding duplicate sample was non-detect at 0.000050 mg/L. Similarly, all SW2 samples were
  non-detect for total silver.

Field parameters were also collected at the time of sampling for general characterization and are summarized in Table 2.2. Field equipment is calibrated on a daily basis; however, where available, laboratory analyses should be relied upon for detailed analysis due to the limitations of field monitoring equipment. Field parameters are also compared to PWQOs. All field parameters were within the PWQO's except for Dissolved Oxygen (DO) at SW2 which periodically was detected below the PWQO of greater than 4 mg/L; note that the PWQO of DO is dependent on water temperature and concentrations are also dependent on natural biological activity so this result is not unexpected for SW2.

# 3.4 Private Water Well Sampling

Monthly private well sampling commenced in September 2021 with samples collected at four private wells; two additional private wells (on a single property) were added to the monthly sampling program in October 2021. All six wells were sampled in November and December 2021. Both untreated water samples and treated water samples (where applicable) were collected and submitted to ALS Laboratories in Waterloo, Ontario under Chain of Custody procedures. All samples were analyzed for: metals (total and dissolved), anions, turbidity, and TSS. Bacteria samples

USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", USEPA 540/R-94-013, September 2016.

(E.coli and Total Coliforms) were also collected monthly. Starting in October 2021, Dufferin added speciated alkalinity to the Private well sampling program.

Due to the confidential nature of the private well sample results, those results are not presented here. However, all results were promptly provided to the respective landowners along with an explanation of those results following receipt of the results from the laboratory.

### 3.5 Complaints

Condition 5.1 of the PTTW stipulates that the Permit Holder shall immediately notify the local District Office of any complaint arising from the water taking.

No complaints relating to the water taking were received by Dufferin Aggregates for the Teedon Pit in 2021 and no complaints were reported to Dufferin by the MECP in 2021.

Furthermore, on February 1, 2021 (within 30 days of the issuance of the Permit), Dufferin distributed its Dufferin Aggregates Teedon Pit – Well Complaint Response procedure described in item 4 of Schedule A of PTTW No. 6258-BRDJ2M to the Teedon Pit Community Liaison Committee (CLC), the Corporation of the Township of Tiny and the Corporation of the Township of Tay (PTTW Condition 4.5).

## 4. Conclusions and Recommendations

Based on the results of the 2021 monitoring program, the following conclusions can be provided:

- 1) On each day water was taken, the volume and rate of taking was recorded and takings were submitted to WTRS prior to March 31, 2022 (Condition 4.1).
- 2) Dataloggers were in place at all on- and off-Site monitoring locations throughout 2021 (Condition 4.2 i.)
- 3) No new monitoring locations were installed in 2021 (Condition 4.2 ii.)
- Water levels were recorded at WWR 7150632 and WWR 5717709 throughout 2021 (Condition 4.2 iii.)
- 5) Water level observations were recorded twice per day in the Sump Pond and elevation data was supplemented with a datalogger during 2021 (Condition 4.2 iv.).
- 6) There are no indications of water quantity or water quality impacts to water resources arising from the water taking activities.
- There were no water supply complaints relating to the water taking received for the Teedon Pit in 2021

Based on the results of the 2021 monitoring program, the following recommendations are provided:

- 1) The monitoring program required by PTTW No. 6258-BRDJ2M should be continued in 2022.
- 2) The private water supply well monitoring should continue, and results should be promptly reported to the respective landowners.
- 3) As required by PTTW Condition 4.7, this report should be posted to the Dufferin Aggregates website prior to May 31, 2022.
- 4) Data presented herein should be provided electronically to MECP (Condition 4.3 iii.) under separate cover.

#### All of Which is Respectfully Submitted,

#### **GHD**



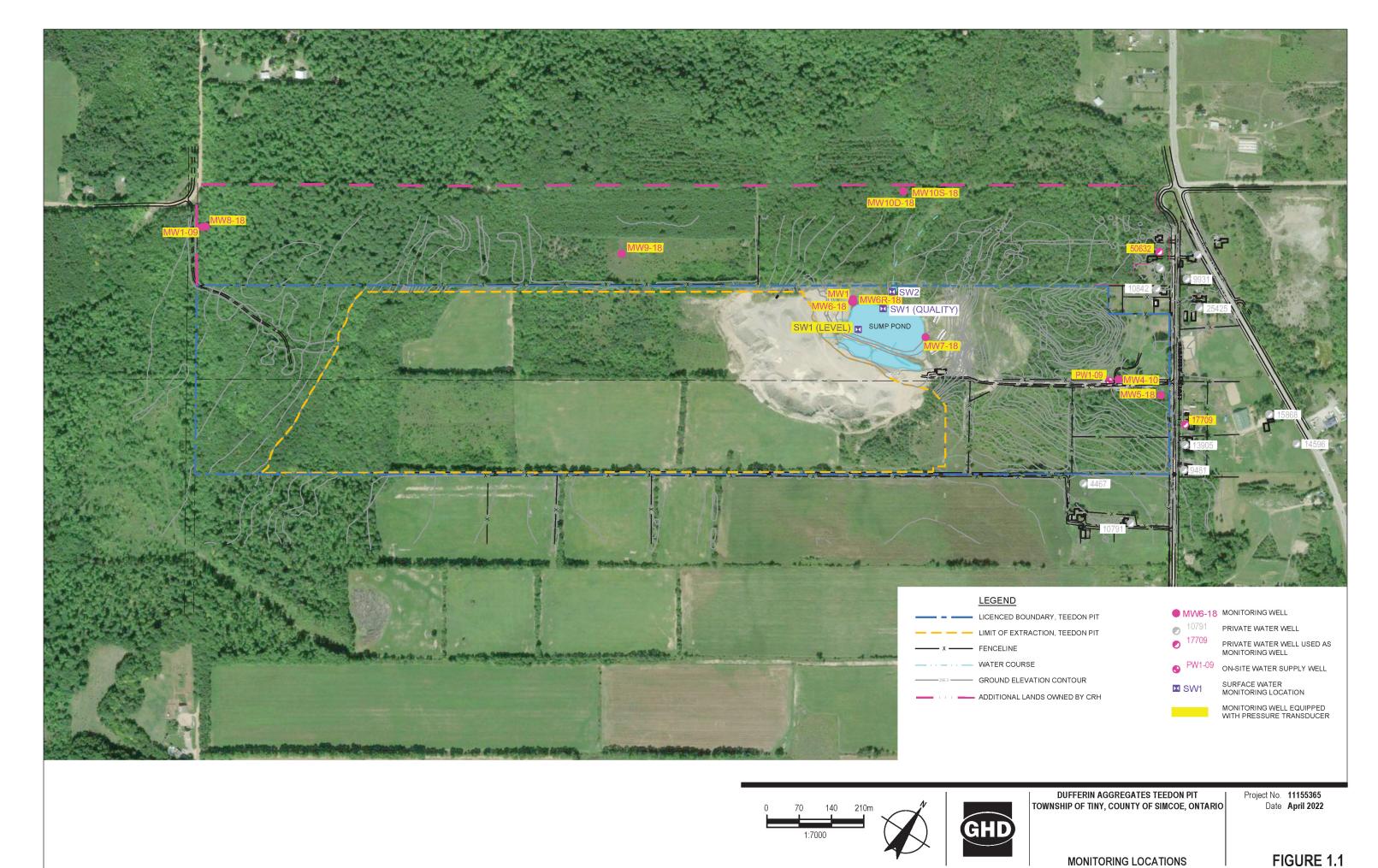
Richard Chatfield, P. Eng.

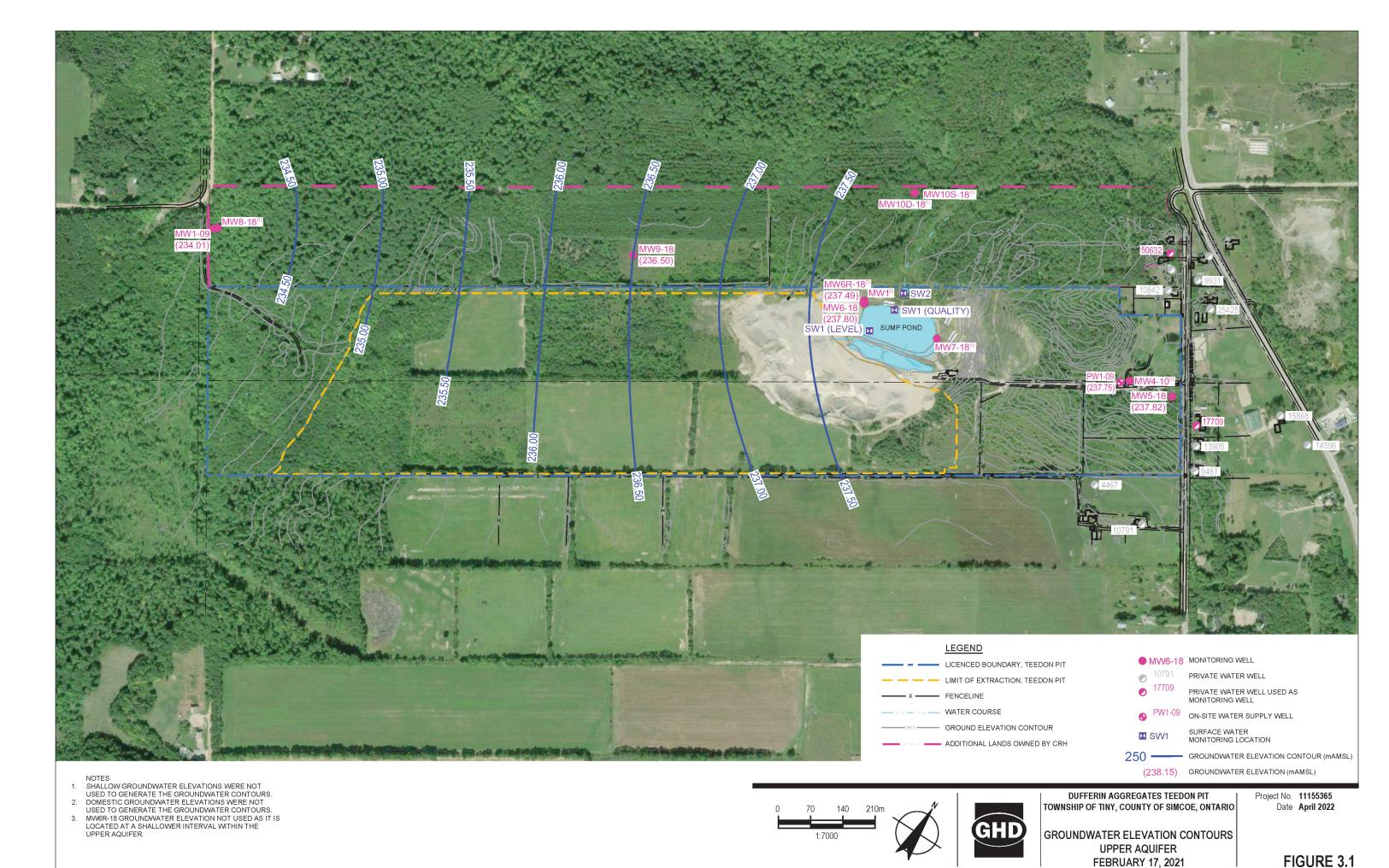
Reviewed by:

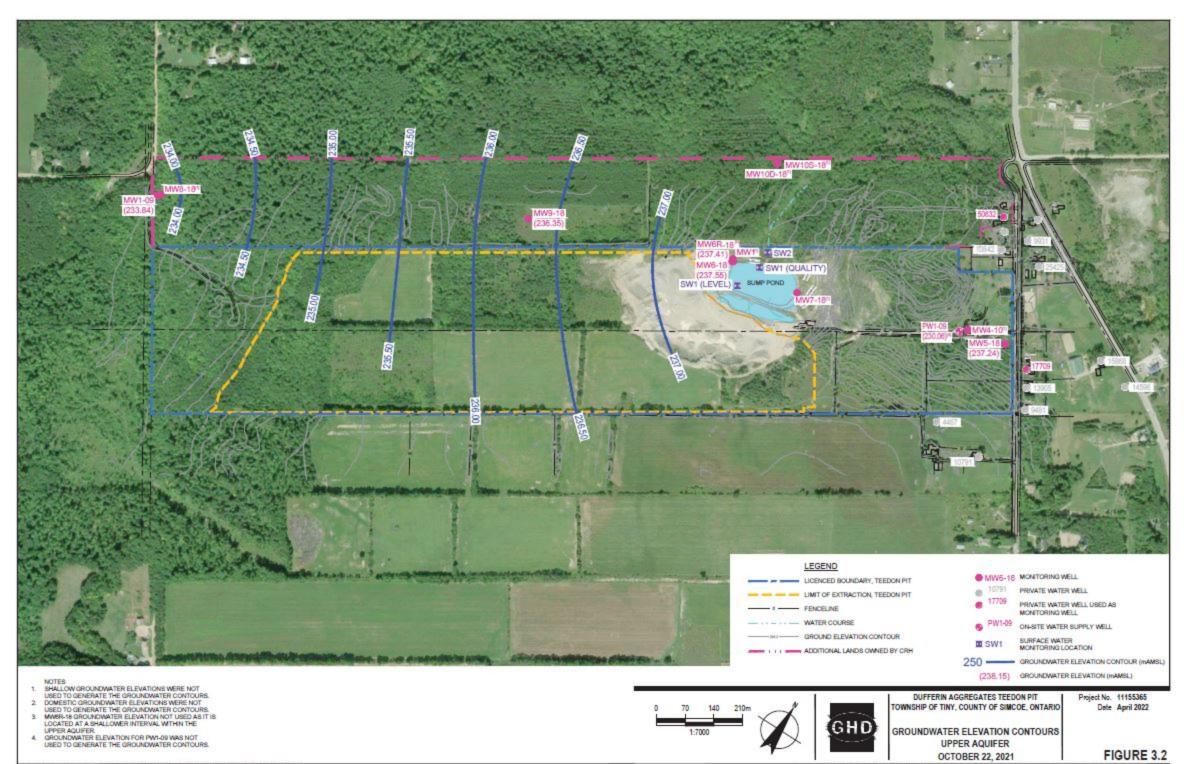
J. Richard Murphy, M.A.Sc., P. Eng.

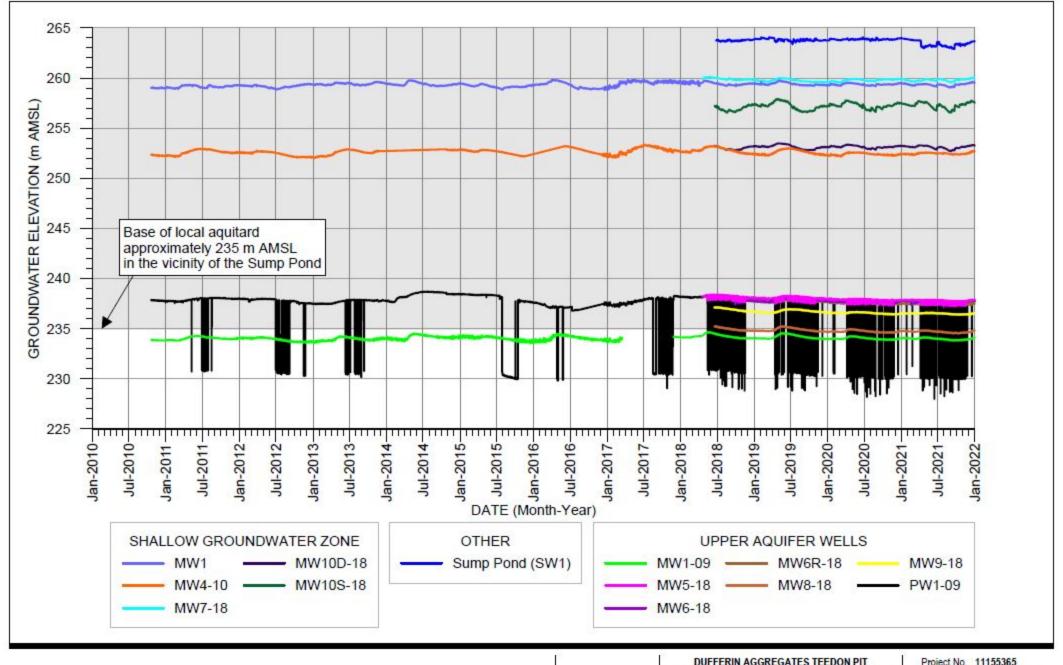
Dan Puddephatt, P. Geo (Limited)

# **Figures**









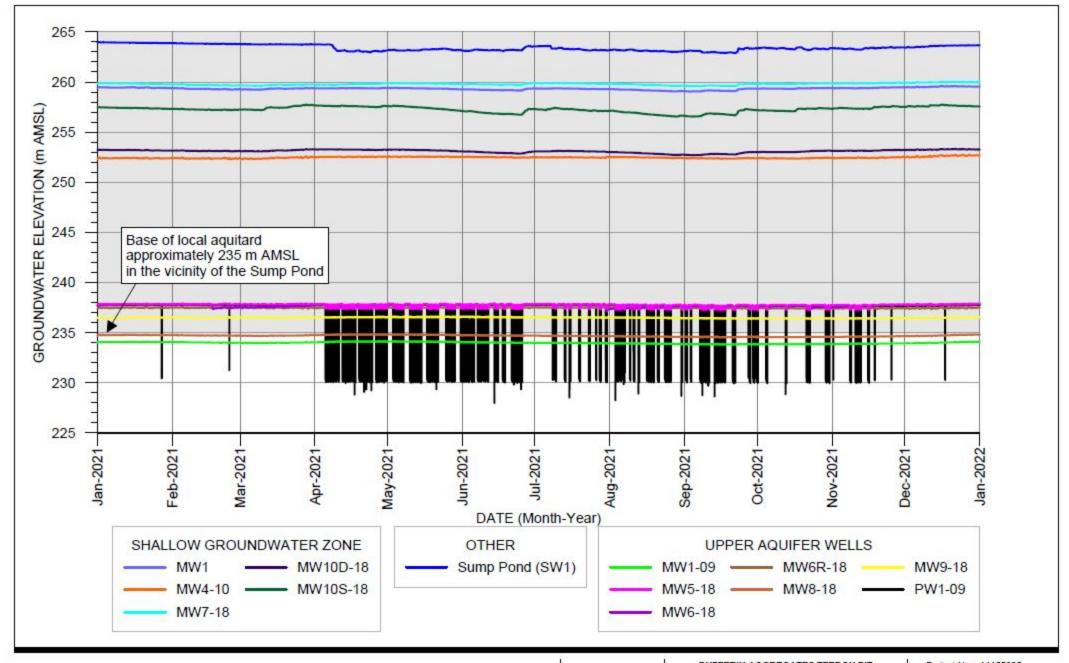


DUFFERIN AGGREGATES TEEDON PIT TOWNSHIP OF TINY, COUNTY OF SIMCOE, ONTARIO 2021 ANNUAL MONITORING REPORT

> HYDROGRAPH - HISTORICAL GROUNDWATER ELEVATIONS

Project No. 11155365 Date April 26, 2022

FIGURE 3.3





DUFFERIN AGGREGATES TEEDON PIT TOWNSHIP OF TINY, COUNTY OF SIMCOE, ONTARIO 2021 ANNUAL MONITORING REPORT

HYDROGRAPH 2021 GROUNDWATER ELEVATIONS Project No. 11155365 Date April 12, 2022

FIGURE 3.4

# **Tables**

Table 1.1

#### **Monitoring Well Completion Details 2021 Annual Monitoring Report Dufferin Aggregates Teedon Pit Township of Tiny, County of Simcoe, Ontario**

Monitoring Well	MECP Well ID	Completion Date	Easting	Northing	Ground Elevation (m AMSL)	Reference Elevation (m AMSL)	Well Bottom Elevation (m AMSL)	Well Depth (m bgs)
PW1-09 <sup>(2)</sup>	7124734	4/29/2009	592343.75	4945072.04	260.72	261.32	191.4	69.3
MW1 <sup>(2)</sup>	7054134	11/8/2007	591776.70	4944920.92	267.45	267.64	245.0	18.3
MW1-09 <sup>(5)</sup>	7124729	6/2/2009	590519.95	4944300.96	245.45	246.04	180.4	65.1
MW4-10 <sup>(2)</sup>	7150631	8/5/2010	592346.97	4945073.66	260.60	261.31	242.3	17.7
MW5-18 <sup>(3)</sup>	A241648	4/5/2018	592450.79	4945106.20	256.39	257.19	186.6	69.2
MW6-18 <sup>(3)</sup>	A241641	3/29/2018	591778.54	4944916.15	267.60	268.43	197.5	70.1
MW6R-18 <sup>(6)</sup>	A241645	10/2/2018	591780.60	4944916.96	267.57	268.20	218.8	48.8
MW7-18 <sup>(3)</sup>	A215946	4/9/2018	591953.92	4944937.13	266.83	267.56	242.8	24.1
MW8-18 <sup>(5)</sup>	A242552	6/11/2018	590518.91	4944303.17	245.35	245.88	224.6	20.7
MW9-18 <sup>(4)</sup>	A242553	6/6/2018	591302.29	4944734.10	291.58	292.50	230.9	60.7
MW10S-18 <sup>(4)</sup>	A242554	6/6/2018	591743.06	4945177.24	259.44	260.42	248.8	10.7
MW10D-18 <sup>(4)</sup>	A242555	6/6/2018	591741.82	4945176.99	259.55	260.52	233.6	25.9
#50632 <sup>(5)</sup>	7150632	8/4/2010	592280.17	4945366.28	260.48	261.12	181.3	79.2
#17709 <sup>(5)</sup>	5717709	9/23/1981	592521.69	4945085.40	256.73	257.27	198.0	57.9
#16440 <sup>(1)</sup>	5716440	11/8/1979	591461.00	4944573.00	293.00	293.00	252.3	42.7

#### Notes:

(1) Installed as a test well and was decommissioned shortly after construction; survey details from Site Plans.

(2)Northing, eastings, ground elevation and reference elevation measured on March 15, 2018.

(3) Northing, eastings, ground elevation and reference elevation measured on April 18, 2018.

(4) Northing, eastings, ground elevation and reference elevation measured on June 13, 2018. (5)

Northing, eastings, ground elevation and reference elevation measured on July 19, 2018.

Northing, eastings, ground elevation and reference elevation measured on October 11, 2018. (6)m AMSL Metres above mean sea level.

Metres below ground surface. m bgs Information not available. NA

Table 2.1

#### Summary of 2021 Groundwater Elevations 2021 Annual Monitoring Report Dufferin Aggregates Teedon Pit Township of Tiny, County of Simcoe, Ontario

Well Location PW1-09	Ground Surface Elevation (m AMSL) 260.72	Reference Elevation (m AMSL) 261.32	February 17, 2021 Groundwater Elevation (m AMSL) 237.75	April 8, 2021 Groundwater Elevation (m AMSL) 230.14	July 30, 2021 Groundwater Elevation (m AMSL) 230.20	October 22, 2021 Groundwater Elevation (m AMSL) 230.06
MW1	267.45	267.64	259.27	259.36	259.23	259.32
MW1-09	245.45	246.04	234.01	234.10	233.93	233.84
MW4-10	260.60	261.31	252.36	252.55	252.44	252.32
MW5-18	256.39	257.19	237.82	237.42	237.48	237.24
MW6-18	267.60	268.43	237.80	237.69	237.80	237.55
MW6R-18	267.57	268.20	237.49	237.52	237.44	237.41
MW7-18	266.83	267.56	259.69	259.72	259.81	259.82
MW8-18	245.35	245.88	234.73	234.81	234.68	234.59
MW9-18	291.58	292.50	236.50	236.53	236.47	236.35
MW10S-18	259.44	260.42	257.22	257.54	257.11	257.34
MW10D-18	259.55	260.52	253.14	253.30	253.07	253.14
#50632	260.48	261.12	237.32	235.10	231.12	236.11
#17709	256.73	257.27	237.79	237.40	237.38	237.29
#16440	293.00	293.00	DECOMMISSIONED	DECOMMISSIONED	DECOMMISSIONED	DECOMMISSIONED

Notes:

m AMSL Metres above mean sea level m bref Metres below reference elevation

Sample Location: Sample ID: 5/25/2021 5/28/2021 5/28/2021 6/25/2021 7/30/2021 7/30/2021 8/26/2021 8/26/2021 Sample Date: 5/25/2021 (Duplicate) (Duplicate) (Duplicate) (Duplicate) **Parameters** Units PWQO Metals

Metals		0.075	(1 th )	0.400	I 0.400 I	0.224	0.004	0.040	0.400	I 0.407	0.005	0.225
Aluminum Aluminum (Dissolved)	mg/L mg/L	0.075 0.075	(1,2) <u> </u>	0.109 	0.109	0.224	0.204	0.210	0.102	0.107	0.225 	0.235
Antimony Antimony (Dissolved)	mg/L	0.02 0.02	(1) (1)	ND (0.00010)	ND (0.00010)	ND (0.00010) 	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)
Arsenic	mg/L mg/L	0.005	(1)	0.00020	0.00021	0.00022	0.00024	0.00028	0.00028	0.00033	0.00037	0.00033
Arsenic (Dissolved) Barium	mg/L mg/L	0.005 -		0.0275	0.0272	0.0291	0.0286	0.0256	0.0275	0.0276	0.0333	0.0337
Barium (Dissolved) Beryllium	mg/L mg/L	0.011	(3)	ND (0.00010)	ND (0.00010)	ND (0.00010)	 ND (0.00010)	 ND (0.00010)	 ND (0.00010)	ND (0.00010)	 ND (0.00010)	 ND (0.00010)
Beryllium (Dissolved) Bismuth	mg/L mg/L	0.011 -	(3)	 ND (0.000050)	ND (0.000050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.000050)	ND (0.00050)	ND (0.000050)	 ND (0.000050)
Bismuth (Dissolved) Boron	mg/L mg/L	0.2	(1)	0.020	0.019	0.019	0.019	0.021	0.020	0.020	0.023	0.023
Boron (Dissolved) Cadmium	mg/L mg/L	0.2 0.0002	(1)	ND (0.000050)	ND (0.000050)	ND (0.000050)	ND (0.0000050)	ND (0.000050)	ND (0.000050)	ND (0.0000050)	ND (0.000050)	 ND (0.000050)
Cadmium (Dissolved) Calcium	mg/L mg/L	0.0002 -		43.4	42.6	42.8	42.1	 41.4	36.5	35.9	34.8	 34.7
Calcium (Dissolved) Chromium Total	mg/L mg/L	0.001	(4)	ND (0.00050)	ND (0.00050)	 ND (0.00050)	 ND (0.00050)	ND (0.00050)	ND (0.00050)	 ND (0.00050)	 ND (0.00050)	0.00053
Chromium Total (dissolved) Cobalt	mg/L mg/L	0.001 0.0009	(4)	 ND (0.00010)	 ND (0.00010)	 0.00017	 0.00015	 0.00013	 ND (0.00010)	 ND (0.00010)	 0.00014	 0.00015
Cobalt (Dissolved) Copper	mg/L mg/L	0.0009 0.005		 ND (0.0010)	 ND (0.0010)	 ND (0.0010)	 ND (0.0010)	 ND (0.0010)	 ND (0.0010)	 ND (0.0010)	 ND (0.0010)	 ND (0.0010)
Copper (Dissolved) Iron	mg/L mg/L	0.005 0.3		 0.082	0.082	0.213	 0.205	 0.168	0.080	0.084	 0.186	 0.189
lron (Dissolved) Lead	mg/L mg/L	0.3 0.005	(5)	 ND (0.000050)	ND (0.00050)	 0.000111	0.000112	0.00092	 0.000051	ND (0.00050)	 0.000116	 0.000119
Lead (Dissolved) Lithium	mg/L mg/L	0.005 -	(5)	 0.0011	 ND (0.0010)	 ND (0.0010)	 ND (0.0010)	 ND (0.0010)	 0.0012	 0.0011	 0.0014	 0.0015
Lithium (Dissolved) Magnesium	mg/L mg/L	-11 -10		 9.70	 9.81	8.99	 8.84	 8.65	 8.28	 8.42	 8.71	 8.85
Magnesium (Dissolved) Manganese	mg/L mg/L	= 1		0.0205	0.0200	0.0290	0.0291	0.0143	0.0127	0.0131	 0.0149	 0.0151
Manganese (Dissolved)	mg/L	2-35	970	ana paren di Miliana yan	AND AND THE STATE OF THE STATE	22. 22. E. Tanana	v. vå9Viimena		property of			
Molybdenum Molybdenum (Dissolved)	mg/L mg/L	0.04 0.04	(1) (1)	0.00174 	0.00171 	0.00190 	0.00186 	0.00209 	0.00232 	0.00224 	0.00273 	0.00278
Nickel Nickel (Dissolved)	mg/L mg/L	0.025 0.025		ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	0.00053	ND (0.00050)	ND (0.00050)
Phosphorous Phosphorous (Dissolved)	mg/L mg/L	0.01 0.01	(1,6) (1,6)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050) 
Potassium Potassium (Dissolved)	mg/L	-	(.,-)	2.40	2.43	2.49	2.44	2.44	2.98	3.01	3.29	3.35 
Selenium Selenium (Dissolved)	mg/L mg/L	0.1 0.1		0.000063	0.000055	0.000059	0.000063	0.000054	0.000059	ND (0.00050)	0.000064 	0.000050
Silicon	mg/L mg/L	-		4.29	4.21	4.28	4.23	4.76	4.20	4.24	5.37	 5.36
Silicon (Dissolved) Silver	mg/L mg/L	0.0001		ND (0.000050)	ND (0.000050)	ND (0.000050)	ND (0.000050)	ND (0.000050)	ND (0.000050)	ND (0.000050)	ND (0.000050)	ND (0.000050)
Silver (Dissolved) Sodium	mg/L mg/L	0.0001 -		6.96	7.28	6.50	6.35	6.98	6.67	6.76	6.88	6.99
Sodium (Dissolved) Strontium	mg/L mg/L	 (3)		0.130	0.131	0.134	0.132	0.131	0.103	0.104	0.114	0.114
Strontium (Dissolved) Thallium	mg/L mg/L	0.0003	(1)	ND (0.000010)	ND (0.000010)	ND (0.000010)	ND (0.000010)	ND (0.000010)	 ND (0.000010)	ND (0.000010)	0.000012	0.000011
Thallium (Dissolved) Tin	mg/L mg/L	0.0003	(1)	 ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)	 ND (0.00010)	 ND (0.00010)	ND (0.00010)	 ND (0.00010)	 ND (0.00010)
Tin (Dissolved) Titanium	mg/L mg/L	=# :=#		0.00358	0.00359	0.00988	0.00863	0.00746	 ND (0.0040) DLI	0.00351	0.00835	0.00905
Titanium (Dissolved) Tungsten	mg/L mg/L	0.03	(1)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)	0.00012	0.00012
Tungsten (Dissolved) Uranium	mg/L mg/L	0.03 0.005	(1) (1)	0.000432	0.000436	0.000471	0.000492	0.000500	0.000445	0.000443	0.000558	0.000569
Uranium (Dissolved) Vanadium	mg/L mg/L	0.005 0.006	(1) (1)	0.00056	0.00057	0.00079	0.00073	0.00077	0.00076	0.00076	0.00109	 0.00113
Vanadium (Dissolved) Zinc	mg/L mg/L	0.006 0.03	(1)	 ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)	 ND (0.0030)	 ND (0.0030)
Zinc (Dissolved) Zirconium	mg/L mg/L	0.03 0.004	(1)	ND (0.00030)	 ND (0.00030)	ND (0.00030)	ND (0.00030)	ND (0.00030)	ND (0.00030)	 ND (0.00030)	 ND (0.00030)	 ND (0.00030)
Zirconium (Dissolved)	mg/L	0.004	(1)	<u></u>		22	1 <u>000</u>		<u> </u>		P <u>ara</u> s	<u></u>

Table 2.2

#### 2021 Water Quality Results - SW1 and SW2 2021 Annual Monitoring Report Dufferin Aggregates Teedon Pit Township of Tiny, County of Simcoe, Ontario

Sample Location: Sample ID: Sample Date:			SW1 SW-11155365-052521-RC-01 5/25/2021	SW1 SW-11155365-052521-RC-02 5/25/2021 (Duplicate)	SW1 SW-11155365-052821-RC-01 5/28/2021	SW1 SW-11155365-052821-RC-02 5/28/2021 (Duplicate)	SW1 SW-11155365-062521-RC-01 6/25/2021	SW1 SW-11155365-073021-RC-01 7/30/2021	SW1 SW-11155365-073021-RC-02 7/30/2021 (Duplicate)	SW1 SW-11155365-082621-RC-01 8/26/2021	SW1 SW-11155365-082621-RC-02 8/26/2021 (Duplicate)
Parameters	Units	PWQO		& &		10 00 000			21 2		- 10 miles
General Chemistry											
ydroxide (as CaCO3)	mg/L	? <b>=</b> %		<u> 22</u>	Tarra	-		uu uu	122		
Alkalinity, Bicarbonate	mg/L	=	<del>2-</del>	-	<del></del>	5	20	==	==	( <del></del> )	
Alkalinity, Carbonate	mg/L			<del>==</del>	:==	) <del>==</del> 1			<del></del>	1==1	
Alkalinity, Hydroxide	mg/L	( <del>-</del> ))	<del></del>	; <del></del> :	ş <del>= -</del>	00				e <del></del> :	
Alkalinity, Phenolphthalein	mg/L	15.8	<del></del> -	85	3 <del>5.5</del>	37.53	==.	==	<del></del>	a <del></del> -	<del>==</del> :
Alkalinity, Total (As CaCO3)	mg/L			7.7		2 <del>70</del> %	<del></del>	- <del></del> -	- <del></del>		<del></del>
Chloride	mg/L	-	6.69	6.69	6.64	6.64	6.74	6.93	6.92	7.05	6.99
Chloride (Dissolved)	mg/L	220	LINE CONTROL C	<u> </u>	# <u>***</u>		LANCON CONTROL	Value of the Control	100 mm - 000	80-40 100 -	100000000000000000000000000000000000000
Nitrate (as N)	mg/L	12.00 - 12.00	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)
Nitrite (as N)	mg/L	= 7	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
Orthophosphate (dissolved)	mg/L	(=0)	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)
pH (lab)	s.u.	6.5-8.5				2==2				( <del></del> )	
Sulphate	mg/L	15.8	9.46	9.48	9.67	9.66	9.95	8.75	8.75	9.72	9.66
Sulphate (Dissolved)	mg/L	5E()	<del></del>	manas (Trail and	100 m	5 <del>-1</del> 0	<del></del>	mana a Table and	250.00		J <del>7</del> 7
Total Suspended Solids (TSS)	mg/L	-	4.2	ND (3.0)	5.5	6.1	3.8	ND (3.0)	3.6	5.8	3.8
Turbidity	NTU	22//	1.90	1.41	6.21	6.55	3.95	2.54	2.62	6.66	6.00
Field Parameters											
Conductivity Field	uS/cm	1 <u>0</u> 70	339	339	317	317	300	286	286	287	286
Dissolved Oxygen, Field	mg/L	>4	4.89	4.89	7.17	7.17	5.05	6.01	6.01	6.74	6.01
ORP, Field	millivolts		205	205	228	228	278	228	228	351	228
pH Field	s.u.	6.5-8.5	7.1	7.1	7.61	7.61	8.22	7.47	7.47	8.34	7.47
Temperature, Field	Deg C	( <del></del>	19.94	19.94	17.35	17.35	21.44	22.04	22.04	26.19	22.04
Turbidity, field	NTU	350	3.5	3.5	33.7	33.7	11.4	9	9	62.7	3.7

#### Notes:

ND (#)	Not present at or above the associated value
J	Estimated concentration based on GHD Data Verification
<b>PWQO</b>	Provincial Water Quality Objectives, February 1999
(1)	Interim PWQO
(2)	At pH >6.5 to 9.0, based on clay-free samples
(3)	Assume hardness as CaCO3 <75 mg/L
(4)	PWQO for trivalent chromium (Cr III) is 8.9 µg/L
(5)	Alkalinity as CaCO3 >80 mg/L
(6)	Prevent excessive plant growth in rivers and streams
	Detected above PWQO; below for Dissolved Oxygen

GHD 11155365 (8)

Sample Location: SW1 SW1 SW1 SW1 SW2 SW2 SW2 SW-11155365-092321-RC-01 SW-11155365-102221-RC-02 SW-11155365-102221-RC-02 SW-11155365-102221-RC-02 SW-11155365-121621-RC-02 SW-11155365-052521-RC-03 SW-11155365-052821-RC-03 SW-11155365-062521-RC-02 Sample ID: 10/22/2021 12/16/2021 12/16/2021 5/25/2021 5/28/2021 6/25/2021 Sample Date: 9/23/2021 10/22/2021 11/18/2021 (Duplicate) (Duplicate) **Parameters** Units **PWQO** Metals 0.450 0.107 0.075 (1,2)0.236 0.252 0.181 0.0750 0.0741 0.0647 0.0463 Aluminum mg/L 0.075 0.0201 Aluminum (Dissolved) (1,2)0.0184 0.0132 0.0079 0.0074 mg/L ND (0.00010) 0.02 ND (0.00010) Antimony mg/L (1) Antimony (Dissolved) mg/L 0.02 ND (0.00010) ND (0.00010) ND (0.00010) ND (0.00010) ND (0.00010) mg/L 0.005 0.00030 0.00030 0.00030 0.00024 0.00018 0.00019 0.00022 0.00025 0.00032 Arsenic Arsenic (Dissolved) 0.005 0.00023 0.00022 0.00013 0.00015 mg/L 0.00023 mg/L 0.0303 0.0281 0.0284 0.0309 0.0233 0.0230 0.0200 0.0219 0.0205 Barium Barium (Dissolved) 0.0231 0.0242 0.0284 0.0203 0.0211 mg/L 0.011 (3) ND (0.00010) Bervllium mg/L ND (0.00010) 0.011 ND (0.00010) ND (0.00010) ND (0.00010) ND (0.00010) Bervllium (Dissolved) mg/L (3) Bismuth mg/L ND (0.000050) Bismuth (Dissolved) mg/L ND (0.000050) ND (0.000050) ND (0.000050) ND (0.000050) ND (0.000050) 0.2 (1) 0.019 0.014 0.013 0.017 mg/L 0.021 0.021 0.019 0.016 0.017 Boron 0.2 0.019 0.019 0.020 0.016 0.015 Boron (Dissolved) mg/L (1) 0.0002 ND (0.0000050) Cadmium mg/L 0.0002 ND (0.000010) ND (0.000010) ND (0.000010) ND (0.000010) ND (0.000010) Cadmium (Dissolved) ma/L 33.2 64.9 64.3 72.7 37.5 Calcium mg/L 37.3 37.2 34.0 33.9 Calcium (Dissolved) mg/L 36.3 36.6 37.9 32.5 32.3 0.001 (4) Chromium Total mg/L 0.00063 0.00061 ND (0.00050) Chromium Total (dissolved) mg/L 0.001 ND (0.00050) ND (0.00050) ND (0.00050) ND (0.00050) ND (0.00050) Cobalt mg/L 0.0009 0.00026 0.00021 0.00021 0.00021 ND (0.00010) ND (0.00010) ND (0.00010) 0.00011 ND (0.00010) Cobalt (Dissolved) 0.0009 ND (0.00010) ND (0.00010) ND (0.00010) ND (0.00010) ND (0.00010) mg/L ND (0.0010) ND (0.0010) 0.005 0.0012 0.0010 ND (0.0010) ND (0.0010) ND (0.0010) 0.0011 0.0011 Copper ma/L Copper (Dissolved) 0.005 0.00052 0.00054 0.00040 mg/L 0.00024 0.00026 0.389 0.239 0.384 mg/L 0.3 0.242 0.248 0.272 0.069 0.068 0.319 Iron (Dissolved) mg/L 0.3 ND (0.010) ND (0.010) ND (0.010) ND (0.010) ND (0.010) 0.000085 ND (0.000050) mg/L 0.005 (5)0.000261 0.000159 0.000162 0.000159 0.000057 0.000054 0.000051 mg/L 0.005 (5) ND (0.000050) ND (0.000050) ND (0.000050) ND (0.000050) ND (0.000050) Lead (Dissolved) 0.0010 ND (0.0010) ND (0.0010) ND (0.0010) mg/L 0.0012 0.0011 0.0012 ND (0.0010) ND (0.0010) Lithium Lithium (Dissolved) ND (0.0010) ND (0.0010) ND (0.0010) ND (0.0010) ND (0.0010) mg/L 7.17 10.8 9.99 10.8 Magnesium mg/L 8.08 8.08 8.89 7.31 7.27 819 Magnesium (Dissolved) 8 15 8 59 7.76 7.52 mg/L 0.0244 0.0165 0.0167 0.472 0.717 Manganese mg/L 0.0294 0.0287 0.0264 0.498 Manganese (Dissolved) 0.0113 0.0115 0.00238 0.00165 J 0.00104 Jmg/L Molybdenum mg/L 0.04 (1) 0.00234 0.00281 0.00288 0.00259 0.00228 0.00230 0.000404 0.000378 0.000368 Molybdenum (Dissolved) mg/L 0.04 0.00282 0.00282 0.00277 0.00201 0.00203 0.025 ND (0.00050) ND (0.00050) ND (0.00050) ND (0.00050) 0.00056 ND (0.00050) ND (0.00050) 0.00054 ND (0.00050) Nickel mq/L Nickel (Dissolved) 0.025 ND (0.00050) ND (0.00050) ND (0.00050) ND (0.00050) ND (0.00050) mg/L ND (0.050) ND (0.050) ND (0.050) ND (0.050) 0.01 ND (0.050) ND (0.050) Phosphorous mg/L (1,6)ND (0.050) ND (0.050) ND (0.050) Phosphorous (Dissolved) mg/L 0.01 (1,6)ND (0.050) ND (0.050) ND (0.050) ND (0.050) ND (0.050) 2.87 2.37 2.26 2.39 Potassium mg/L 3.08 3.10 2.70 2.40 2.37 Potassium (Dissolved) 2.79 2.83 2.86 2.15 2.18 mg/L 0.1 ND (0.000050) Selenium mg/L 0.1 ND (0.000050) Selenium (Dissolved) mg/L ND (0.000050) ND (0.000050) 0.000051 ND (0.000050) 4.71 2.47 2.35 2.27 Silicon ma/L 4.59 4.57 4.16 3.25 3.25 Silicon (Dissolved) 3 99 4 08 3.91 2.97 296 mg/L 0.0001 ND (0.000050) ND (0.000050) ND (0.000050) ND (0.000050) 0.000121 J ND (0.000050) ND (0.000050) mg/L ND (0.000050) J ND (0.000050) Silver (Dissolved) mg/L 0.0001 ND (0.000050) ND (0.000050) ND (0.000050) ND (0.000050) ND (0.000050) Sodium mg/L 5.48 6.23 6.26 6.30 5.76 5.76 6.01 5.61 5.98 Sodium (Dissolved) mg/L 6.10 6.21 6.27 5.52 5.45 0.109 0.0997 0.101 0.0887 0.0891 0.145 0.149 0.173 Strontium ma/L 0 102 Strontium (Dissolved) 0.0992 0.0996 0.104 0.0794 0.0813 mg/L 0.0003 (1) ND (0.000010) Thallium mg/L 0.0003 ND (0.000010) Thallium (Dissolved) mg/L (1) ND (0.000010) ND (0.000010) ND (0.000010) ND (0.000010) ND (0.00010) mg/L ND (0.00010) ND (0.00010 ND (0.00010) ND (0.00010) ND (0.00010) ND (0.00010) ND (0.00010) ND (0.00010) Tin (Dissolved) mg/L ND (0.00010) ND (0.00010) ND (0.00010) ND (0.00010) ND (0.00010) 0.00457 Titanium mg/L 0.0206 0.0102 0.0109 0.00795 0.00299 0.00315 0.00303 0.00220 ND (0.00030) ND (0.00030) ND (0.00030) ND (0.00030) ND (0.00030) Titanium (Dissolved) mg/L 0.03 ND (0.00010) ND (0.00010) ND (0.00010) ND (0.00010) Tunasten mg/L (1) ND (0.00010) ND (0.00010) ND (0.00010) ND (0.00010) ND (0.00010) Tungsten (Dissolved) 0.03 ND (0.00010) ND (0.00010) ND (0.00010) ND (0.00010) ND (0.00010) (1) mg/L 0.005 0.000511 0.000150 0.000149 (1) 0.000497 0.000491 0.000415 0.000422 0.000418 0.000122 Hranium mg/L 0.000363 0.005 0.000470 0.000469 0.000432 0.000375 Uranium (Dissolved) mg/L (1) Vanadium mg/L 0.006 (1) 0.00131 0.00094 0.00100 0.00075 ND (0.00050) ND (0.00050) ND (0.00050) ND (0.00050) ND (0.00050) Vanadium (Dissolved) mg/L 0.006 0.00051 0.00052 ND (0.00050) ND (0.00050) ND (0.00050) mg/L 0.03 ND (0.0030) Zinc (Dissolved) 0.03 ND (0.0010) ND (0.0010) ND (0.0010) ND (0.0010) ND (0.0010) ma/L 0.004 (1) 0.00032 ND (0.00030) Zirconium ma/L ND (0.00030) Zirconium (Dissolved) mg/L 0.004 (1)ND (0.00030) ND (0.00030) ND (0.00030) ND (0.00030)

Sample Location: Sample ID: Sample Date: Parameters	Units	PWQO	SW1 SW-11155365-092321-RC-01 9/23/2021	SW1 SW-11155365-102221-RC-01 10/22/2021	SW1 SW-11155365-102221-RC-02 10/22/2021 (Duplicate)	SW1 SW-11155365-111821-RC-01 11/18/2021	SW1 SW-11155365-121621-RC-01 12/16/2021	SW1 SW-11155365-121621-RC-02 12/16/2021 (Duplicate)	SW2 SW-11155365-052521-RC-03 5/25/2021	SW2 SW-11155365-052821-RC-03 5/28/2021	SW2 SW-11155365-062521-RC-02 6/25/2021
General Chemistry											
lydroxide (as CaCO3) Alkalinity, Bicarbonate Alkalinity, Carbonate Alkalinity, Hydroxide Alkalinity, Phenolphthalein Alkalinity, Total (As CaCO3) Chloride Chloride (Dissolved) Nitrate (as N) Nitrite (as N) Orthophosphate (dissolved) pH (lab) Sulphate Sulphate (Dissolved) Total Suspended Solids (TSS)	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	- - - - - - - 6.5-8.5	    6.17  ND (0.020) ND (0.010) ND (0.0030)  9.02  8.2	   6.72  0.039 ND (0.010) ND (0.0030)  8.56  6.0	   6.91  ND (0.020) ND (0.010) ND (0.0030)  8.76  5.8	 139 ND (1.0) ND (1.0)  139 7.48  0.026 ND (0.010) ND (0.0030) 8.40 9.63  8.2	 118 ND (1.0) ND (1.0)  118 7.73  0.023 ND (0.010) ND (0.0030) 7.84 8.21  ND (3.0)	 120 ND (1.0) ND (1.0)  120 7.79  0.021 ND (0.010) ND (0.0030) 7.90 8.24  ND (3.0)	   7.20  ND (0.020) ND (0.010) ND (0.0030)  1.61  ND (3.0)	   6.98  ND (0.020) ND (0.010) ND (0.0030)  1.42  6.1	    6.63  ND (0.020) ND (0.010) ND (0.0030)  0.76  ND (3.0)
Turbidity  Field Parameters	NTU	<u> 124</u> 0	15.4	7.05	7.39	12.0	2.02	1.82	2.36	4.64	2.45
Conductivity Field Dissolved Oxygen, Field ORP, Field pH Field Temperature, Field Turbidity, field	uS/cm mg/L millivolts s.u. Deg C NTU	- >4 - 6.5-8.5 -	276 8.51 168 8.39 17.03 95.2	290 9.12 86 8.41 12.64 53	290 9.12 86 8.41 12.64 53	293.00 4.42 201 8.22 6.35 44.3	243.00 14.36 188 8.25 8.08 0	243.00 14.36 188 8.25 8.08 0	414 18.38 211 7.04 19.38 2.5	307 0 246 7.02 16.59 5.1	420 5.4 311 7.74 21.73 0

#### Notes:

ND (#)	Not present at or above the associated value
J	Estimated concentration based on GHD Data Verification
<b>PWQO</b>	Provincial Water Quality Objectives, February 1999
(1)	Interim PWQO
(2)	At pH >6.5 to 9.0, based on clay-free samples
(3)	Assume hardness as CaCO3 <75 mg/L
(4)	PWQO for trivalent chromium (Cr III) is 8.9 µg/L
(5)	Alkalinity as CaCO3 >80 mg/L
(6)	Prevent excessive plant growth in rivers and streams
	Detected above PWQO; below for Dissolved Oxygen

Sample Location: Sample ID: Sample Date:				SW2 SW-11155365-062521-RC-03 6/25/2021 (Duplicate)	SW2 SW-11155365-073021-RC-03 7/30/2021	SW2 SW-11155365-082621-RC-03 8/26/2021	SW2 SW-11155365-092321-RC-02 9/23/2021	SW2 SW-11155365-092321-RC-03 9/23/2021 (Duplicate)	SW2 SW-11155365-102221-RC-03 10/22/2021	SW2 SW-11155365-111821-RC-02 11/18/2021	SW2 SW-11155365-111821-RC-03 11/18/2021 (Duplicate)	SW2 SW-11155365-121621-RC-03 12/16/2021
Parameters	Units	PWQO										
Metals Aluminum Aluminum (Dissolved)	mg/L mg/L	0.075 0.075	(1,2) (1,2)	0.0472 	0.0259	0.0389	0.0397	0.0395	0.0181 ND (0.0050)	0.0071 ND (0.0050)	0.0095 ND (0.0050)	0.0056 ND (0.0050)
Antimony Antimony (Dissolved)	mg/L mg/L	0.02 0.02	(1) (1)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010) ND (0.00010)	ND (0.00010) ND (0.00010)	ND (0.00010) ND (0.00010)	ND (0.00010) ND (0.00010)
Arsenic	mg/L	0.005	(.,)	0.00032	0.00027	0.00029	0.00021	0.00022	0.00022	0.00013	0.00012	0.00014
Arsenic (Dissolved) Barium	mg/L mg/L	0.005 -		0.0200	0.0217	 0.0179	 0.0181	0.0180	0.00016 0.0190	0.00015 0.0158	0.00014 0.0158	0.00012 0.0154
Barium (Dissolved) Beryllium	mg/L mg/L	- 0.011	(3)	 ND (0.00010)	 ND (0.00010)	 ND (0.00010)	 ND (0.00010)	 ND (0.00010)	0.0172 ND (0.00010)	0.0160 ND (0.00010)	0.0159 ND (0.00010)	0.0135 ND (0.00010)
Beryllium (Dissolved) Bismuth	mg/L mg/L	0.011 -	(3)	ND (0.000050)	ND (0.00050)	ND (0.000050)	ND (0.00050)	ND (0.00050)	ND (0.00010) ND (0.00050)	ND (0.00010) ND (0.00050)	ND (0.00010) ND (0.00050)	ND (0.00010) ND (0.000050)
Bismuth (Dissolved)	mg/L	250	240	±20 00000000000000000000000000000000000	<u>122</u>	==	22-20 20-20-20-20-20-20-20-20-20-20-20-20-20-2	222	ND (0.00050)	ND (0.000050)	ND (0.00050)	ND (0.00050)
Boron Boron (Dissolved)	mg/L mg/L	0.2 0.2	(1) (1)	0.016 	0.015 	0.017 	0.014 	0.015 	0.017 0.015	0.016 0.016	0.016 0.016	0.015 0.013
Cadmium Cadmium (Dissolved)	mg/L mg/L	0.0002 0.0002		ND (0.000050)	ND (0.000050)	ND (0.000050)	ND (0.0000050)	ND (0.000050)	ND (0.000050) ND (0.00010)	ND (0.000050) ND (0.000010)	ND (0.000050) ND (0.000010)	ND (0.000050) ND (0.000010)
Calcium	mg/L	(3.3)		67.3 	64.1	66.7	59.5	59.2	68.1 63.1	62.5 66.2	63.5 65.4	63.9 58.6
Calcium (Dissolved) Chromium Total	mg/L mg/L	0.001	(4)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)
Chromium Total (dissolved) Cobalt	mg/L mg/L	0.001 0.0009	(4)	 ND (0.00010)	 ND (0.00010)	 ND (0.00010)	 ND (0.00010)	 ND (0.00010)	ND (0.00050) 0.00012	ND (0.00050) ND (0.00010)	ND (0.00050) ND (0.00010)	ND (0.00050) 0.00010
Cobalt (Dissolved) Copper	mg/L mg/L	0.0009 0.005		 ND (0.0010)	 ND (0.0010)	 ND (0.0010)	 ND (0.0010)	 ND (0.0010)	ND (0.00010) ND (0.0010)	ND (0.00010) ND (0.0010)	ND (0.00010) ND (0.0010)	ND (0.00010) ND (0.0010)
Copper (Dissolved)	mg/L	0.005 0.3		0.316	0.315	0.238	0.548	0.540	ND (0.00020) 0.773	ND (0.00020) 0.294	ND (0.00020) 0.297	ND (0.00020) 0.285
Iron Iron (Dissolved)	mg/L mg/L	0.3	51225	or our Manager	esse ou Werensone	• · · · · · · · · · · · · · · · · · · ·	marin and April 1970 marin and are	course with Wesselveries	0.023	0.045	0.040	ND (0.010)
Lead Lead (Dissolved)	mg/L mg/L	0.005 0.005	(5) (5)	0.000051 	ND (0.000050) 	ND (0.000050) 	ND (0.000050) 	ND (0.000050) 	ND (0.000050) ND (0.000050)	ND (0.00050) ND (0.00050)	ND (0.000050) ND (0.000050)	ND (0.000050) ND (0.000050)
Lithium Lithium (Dissolved)	mg/L mg/L	120 120		ND (0.0010)	ND (0.0010)	ND (0.0010)	ND (0.0010) 	ND (0.0010)	ND (0.0010) ND (0.0010)	ND (0.0010) ND (0.0010)	ND (0.0010) ND (0.0010)	ND (0.0010) ND (0.0010)
Magnesium	mg/L			10.7	10.7	10.9	9.01	9.01	10.5 10.8	10.6 10.3	10.4 10.2	9.79 9.65
Magnesium (Dissolved) Manganese	mg/L mg/L			 0.492	0.697	0.412	0.358	0.355	0.652	0.256	0.252	0.965
Manganese (Dissolved) Molybdenum	mg/L mg/L	0.04	(1)	0.000371	0.000221	0.000207	0.000156	0.000161	0.630 0.000189	0.228 0.000175	0.225 0.000192	0.774 0.000203
Molybdenum (Dissolved) Nickel	mg/L mg/L	0.04 0.025	(1)	 ND (0.00050)	 ND (0.00050)	 ND (0.00050)	 ND (0.00050)	 ND (0.00050)	0.000160 ND (0.00050)	0.000187 ND (0.00050)	0.000186 ND (0.00050)	0.000179 ND (0.00050)
Nickel (Dissolved) Phosphorous	mg/L	0.025 0.01	(1,6)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.00050) ND (0.050)	ND (0.00050) ND (0.050)	ND (0.00050) ND (0.050)	ND (0.00050) ND (0.050)
Phosphorous (Dissolved)	mg/L mg/L	0.01	(1,6)	THE	and the second s		(##C	######################################	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)
Potassium Potassium (Dissolved)	mg/L mg/L	1 <del>5</del> .00		2.40 	2.10 	1.97 	1.87 	1.86 	1.97 1.83	1.60 1.82	1.64 1.81	1.58 1.39
Selenium Selenium (Dissolved)	mg/L mg/L	0.1 0.1		ND (0.000050)	0.000051 	ND (0.000050)	ND (0.000050)	ND (0.000050)	ND (0.000050) ND (0.000050)	ND (0.00050) ND (0.00050)	ND (0.000050) ND (0.000050)	ND (0.000050) ND (0.000050)
Silicon Silicon (Dissolved)	mg/L mg/L	2 <u>29</u>		2.18	3.81	4.63	4.65	4.62	5.04 4.85	4.70 4.88	4.68 4.85	4.55 4.14
Silver	mg/L	0.0001		ND (0.000050)	ND (0.000050)	ND (0.00050)	ND (0.000050)	ND (0.000050)	ND (0.00050)	ND (0.00050)	ND (0.000050)	ND (0.000050)
Silver (Dissolved) Sodium	mg/L mg/L	0.0001 -		 5.95	 5.85	6.39	5.31	5.29	ND (0.000050) 6.54	ND (0.000050) 6.38	ND (0.000050) 6.46	ND (0.000050) 6.16
Sodium (Dissolved) Strontium	mg/L mg/L			 0.159	 0.154	0.160	 0.147	 0.146	6.39 0.158	6.54 0.143	6.45 0.146	5.78 0.152
Strontium (Dissolved) Thallium	mg/L mg/L	0.0003	(1)	 ND (0.000010)	 ND (0.000010)	 ND (0.000010)	ND (0.000010)	 ND (0.000010)	0.150 ND (0.000010)	0.155 ND (0.00010)	0.153 ND (0.000010)	0.141 ND (0.000010)
Thallium (Dissolved)	mg/L	0.0003	(1)	44			(##)	24	ND (0.000010)	ND (0.000010)	ND (0.000010)	ND (0.000010)
Tin Tin (Dissolved)	mg/L mg/L	3K0		ND (0.00010) 	ND (0.00010) 	ND (0.00010) 	ND (0.00010)	ND (0.00010) 	ND (0.00010) ND (0.00010)	ND (0.00010) ND (0.00010)	ND (0.00010) ND (0.00010)	ND (0.00010) ND (0.00010)
Titanium Titanium (Dissolved)	mg/L mg/L	=		0.00219 	ND (0.0020) DLI 	ND (0.0020) DLI 	ND (0.0020) DLI 	0.00180 	0.00075 ND (0.00030)	ND (0.00030) ND (0.00030)	ND (0.00030) ND (0.00030)	ND (0.00030) ND (0.00030)
Tungsten Tungsten (Dissolved)	mg/L mg/L	0.03 0.03	(1) (1)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010) ND (0.00010)	ND (0.00010) ND (0.00010)	ND (0.00010) ND (0.00010)	ND (0.00010) ND (0.00010)
Uranium	mg/L	0.005	(1)	0.000111	0.000061	0.000070	0.000063	0.000063	0.000073	0.000087	0.000085	0.000097
Uranium (Dissolved) Vanadium	mg/L mg/L	0.005 0.006	(1) (1)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	 ND (0.00050)	0.000073 ND (0.00050)	0.000089 ND (0.00050)	0.000090 ND (0.00050)	0.000077 ND (0.00050)
Vanadium (Dissolved) Zinc	mg/L mg/L	0.006 0.03	(1)	 ND (0.0030)	 ND (0.0030)	 ND (0.0030)	 ND (0.0030)	 ND (0.0030)	ND (0.00050) ND (0.0030)	ND (0.00050) ND (0.0030)	ND (0.00050) ND (0.0030)	ND (0.00050) ND (0.0030)
Zinc (Dissolved) Zirconium	mg/L mg/L	0.03 0.004	(1)	ND (0.00030)	ND (0.00030)	 ND (0.00030)	ND (0.00030)	ND (0.00030)	ND (0.0010) ND (0.00030)	ND (0.0010) ND (0.00030)	ND (0.0010) ND (0.00030)	ND (0.0010) ND (0.00030)
Zirconium (Dissolved)	mg/L	0.004	(1)						ND (0.00030)	ND (0.00030)	ND (0.00030)	ND (0.00030)

Sample Location: Sample ID: Sample Date:			SW2 SW-11155365-062521-RC-03 6/25/2021 (Duplicate)	SW2 SW-11155365-073021-RC-03 7/30/2021	SW2 SW-11155365-082621-RC-03 8/26/2021	SW2 SW-11155365-092321-RC-02 9/23/2021	SW2 SW-11155365-092321-RC-03 9/23/2021 (Duplicate)	SW2 SW-11155365-102221-RC-03 10/22/2021	SW2 SW-11155365-111821-RC-02 11/18/2021	SW2 SW-11155365-111821-RC-03 11/18/2021 (Duplicate)	SW2 SW-11155365-121621-RC-03 12/16/2021
Parameters	Units	PWQO	( <b>-</b>				(= ap,			(p,	
General Chemistry											
hydroxide (as CaCO3)	mg/L	12%		<u> </u>	<b>144</b>			<del>일입</del>			<del>일</del> 점
Alkalinity, Bicarbonate	mg/L	( <b>=</b> 5)	<del>2-</del>		<del></del>	7-45	20	==	228	228	220
Alkalinity, Carbonate	mg/L	-				) <del></del> 1			ND (1.0)	ND (1.0)	ND (1.0)
Alkalinity, Hydroxide	mg/L	-				s <del></del> 2			ND (1.0)	ND (1.0)	ND (1.0)
Alkalinity, Phenolphthalein	mg/L	1574			, <del>a.a</del>		==:	<del>55</del>	l <del>es</del>	.==	
Alkalinity, Total (As CaCO3)	mg/L	. <del></del>	- <u> </u>		- <del>-</del> -			<del></del>	228	228	220
Chloride	mg/L	-	6.58	5.64	5.73	5.89	6.04	6.23	6.56	6.54	6.32
Chloride (Dissolved)	mg/L	727	AND CONTRACTOR OF THE PARTY OF	<u>indi</u> Section of the section	122 127 (127 (127 (127 (127 (127 (127 (127 (	M <u>aan</u> s		<u> </u>		NAME OF THE PROPERTY OF THE PR	
Nitrate (as N)	mg/L	12.7	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)
Nitrite (as N)	mg/L	( <del>=</del> ))	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
Orthophosphate (dissolved)	mg/L	(#)	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)
pH (lab)	s.u.	6.5-8.5				( <del>144</del> )	==		8.25	8.29	7.93
Sulphate	mg/L	1000	0.74	0.58	0.52	0.51	0.53	0.38	0.73	0.72	1.13
Sulphate (Dissolved)	mg/L	7. T.	470	N		.72	- T	<u></u>			ND 70 8
Total Suspended Solids (TSS)	mg/L	(A)	3.4	ND (3.0)	ND (3.0)	4.6	4.2	5.2	ND (3.0)	ND (3.0)	ND (3.0)
Turbidity	NTU	79//	2.42	2.15	2.32	3.87	4.25	3.94	1.79	1.89	1.26
Field Parameters											
Conductivity Field	uS/cm	129	420	401	417	416	416	434	420.00	420.00	410.00
Dissolved Oxygen, Field	mg/L	>4	5.4	0	4.08	8.18	8.18	0	5.32	5.32	0.00
ORP, Field	millivolts	. <del>-</del> 0	311	207	385	191	191	117	169	169	132
pH Field	s.u.	6.5-8.5	7.74	7.29	7.76	7.74	7.74	7.64	7.47	7.47	7.32
Temperature, Field	Deg C	(7.8)	21.73	21.4	26.87	17.45	17.45	12.77	6.28	6.28	8.17
Turbidity, field	NTU	150	0	8.5	5.1	21.1	21.1	10.7	2.4	2.4	0

#### Notes:

ND (#)	Not present at or above the associated value
J	Estimated concentration based on GHD Data Verification
<b>PWQO</b>	Provincial Water Quality Objectives, February 1999
(1)	Interim PWQO
(2)	At pH >6.5 to 9.0, based on clay-free samples
(3)	Assume hardness as CaCO3 <75 mg/L
(4)	PWQO for trivalent chromium (Cr III) is 8.9 µg/L
(5)	Alkalinity as CaCO3 >80 mg/L
(6)	Prevent excessive plant growth in rivers and streams
	Detected above PWQO; below for Dissolved Oxygen

# Appendices

# Appendix A Permit to Take Water

# Appendix A-1

Permit to Take Water No. 6258-BRDJ2M

# Ministry of the Environment, Conservation and Parks

Environmental Assessment and Permissions Division Brownfields and Permit to Take Water Permit To Take Water Unit Floor 1, 135 St Clair Ave W Toronto, ON M4V 1P5 Tel: (416) 326-3766

January 19, 2021

CRH Canada Group Inc. Floor 4 - 2300 Steeles Ave W Concord, Ontario, L4K 5X6 Canada Ministère de l'Environnement, de la Protection de la nature et des Parcs

Direction des évaluations et des permissions environnementales 1er étage, 135 av St. Clair O Toronto, ON M4V 1P5 Tél:(416) 326-3766



Attn: Kevin Mitchell

**RE:** Amendment to Permit To Take Water Number 6258-BRDJ2M 90 Darby Rd Lots 79 and 80 Concession 1 Original Township of Tiny Tiny, County of Simcoe Reference Number 0363-AV9PXK

In an email dated January 15, 2021 to Ms. Erinn Lee (MECP) from Kevin Mitchell of CRH Canada Group Inc., an error was identified in Permit To Take Water number 6258-BRDJ2M, issued on January 14, 2021. Specifically, the submission deadline for an annual report was identified as April 31, rather than April 30 of each year following the issuance of the Permit To Take Water.

As Director under section 34.1 of the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended ("OWRA"), and pursuant to my authority under subsection 34.1(2) of the OWRA, I am exercising my discretion to amend Permit to Take Water 6258-BRDJ2M by amending Condition 4.3 as follows:

- 4.3 The Permit Holder shall submit an Annual Monitoring Report to the District Office and the Director by April 30<sup>th</sup> of each year following the issuance of the Permit to Take Water. The report shall include:
  - i. All of the monitoring data collected for the preceding calendar year for the locations listed under 4.1 and 4.2.
  - ii. All other relevant groundwater or surface water monitoring data collected by the Permit Holder for the preceding calendar year from any on site and off-site monitoring wells/ locations, including on the adjacent property where the proposed Teedon Pit extension is located and identified by the land registry

#### system's PIN 583870135.

#### iii. An electronic version of all of the monitoring data reported.

Please note that all other terms and conditions of Permit to Take Water 5684-BRCSS4 shall remain in force, including the maximum water taking rates and volumes listed in Table A.

This notice, as of January 19, 2021, forms part of the Permit and is to remain attached to the Permit at all times.

Any change in circumstances related to this permit should be reported promptly to a Director.

Yours truly,

Gregory Meek

Supervisor (Acting), Permit To Take Water

Director, Section 34.1, Ontario Water Resources Act, R.S.O. 1990

Environmental Assessment and Permissions Branch

File Storage Number: SI-SI-TI-C1-220



#### PERMIT TO TAKE WATER

Surface and Ground Water NUMBER 6258-BRDJ2M

Pursuant to Section 34.1 of the <u>Ontario Water Resources Act</u>, R.S.O. 1990 this Permit To Take Water is hereby issued to:

CRH Canada Group Inc. Floor 4 - 2300 Steeles Ave W Concord, Ontario, L4K 5X6 Canada

For the water PW1-09 (WWR # 7124734), Source Pond

taking from:

Located at: 90 Darby Rd Lots 79 and 80 Concession 1 Original Township of Tiny

Tiny, County of Simcoe

For the purposes of this Permit, and the terms and conditions specified below, the following definitions apply:

#### **DEFINITIONS**

- (a) "Director" means any person appointed in writing as a Director pursuant to section 5 of the OWRA for the purposes of section 34.1, OWRA.
- (b) "Provincial Officer" means any person designated in writing by the Minister as a Provincial Officer pursuant to section 5 of the OWRA.
- (c) "Ministry" means Ontario Ministry of the Environment, Conservation and Parks.
- (d) "District Office" means the Barrie District Office.
- (e) "Permit" means this Permit to Take Water No. 6258-BRDJ2M including its Schedules, if any, issued in accordance with Section 34.1 of the OWRA.
- (f) "Permit Holder" means CRH Canada Group Inc..
- (g) "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O. 40, as amended.

You are hereby notified that this Permit is issued subject to the terms and conditions outlined below:

#### **TERMS AND CONDITIONS**

#### 1. Compliance with Permit

- 1.1 Except where modified by this Permit, the water taking shall be in accordance with the application for this Permit To Take Water, dated January 17, 2018 and signed by Nicolle Bellissimo, and all Schedules included in this Permit.
- 1.2 The Permit Holder shall ensure that any person authorized by the Permit Holder to take water under this Permit is provided with a copy of this Permit and shall take all reasonable measures to ensure that any such person complies with the conditions of this Permit.
- 1.3 Any person authorized by the Permit Holder to take water under this Permit shall comply with the conditions of this Permit.
- 1.4 This Permit is not transferable to another person.
- 1.5 This Permit provides the Permit Holder with permission to take water in accordance with the conditions of this Permit, up to the date of the expiry of this Permit. This Permit does not constitute a legal right, vested or otherwise, to a water allocation, and the issuance of this Permit does not guarantee that, upon its expiry, it will be renewed.
- 1.6 The Permit Holder shall keep this Permit available at all times at or near the site of the taking, and shall produce this Permit immediately for inspection by a Provincial Officer upon his or her request.
- 1.7 The Permit Holder shall report any changes of address to the Director within thirty days of any such change. The Permit Holder shall report any change of ownership of the property for which this Permit is issued within thirty days of any such change. A change in ownership in the property shall cause this Permit to be cancelled.

#### 2. General Conditions and Interpretation

#### 2.1 Inspections

The Permit Holder must forthwith, upon presentation of credentials, permit a Provincial Officer to carry out any and all inspections authorized by the OWRA, the *Environmental Protection Act*, R.S.O. 1990, the *Pesticides Act*, R.S.O. 1990, or the *Safe Drinking Water Act*, S.O. 2002.

#### 2.2 Other Approvals

The issuance of, and compliance with this Permit, does not:

(a) relieve the Permit Holder or any other person from any obligation to comply with any other applicable legal requirements, including the provisions of the *Ontario Water Resources Act*, and

the Environmental Protection Act, and any regulations made thereunder; or

(b) limit in any way any authority of the Ministry, a Director, or a Provincial Officer, including the authority to require certain steps be taken or to require the Permit Holder to furnish any further information related to this Permit.

#### 2.3 Information

The receipt of any information by the Ministry, the failure of the Ministry to take any action or require any person to take any action in relation to the information, or the failure of a Provincial Officer to prosecute any person in relation to the information, shall not be construed as:

- (a) an approval, waiver or justification by the Ministry of any act or omission of any person that contravenes this Permit or other legal requirement; or
- (b) acceptance by the Ministry of the information's completeness or accuracy.

#### 2.4 Rights of Action

The issuance of, and compliance with this Permit shall not be construed as precluding or limiting any legal claims or rights of action that any person, including the Crown in right of Ontario or any agency thereof, has or may have against the Permit Holder, its officers, employees, agents, and contractors.

#### 2.5 Severability

The requirements of this Permit are severable. If any requirements of this Permit, or the application of any requirements of this Permit to any circumstance, is held invalid or unenforceable, the application of such requirements to other circumstances and the remainder of this Permit shall not be affected thereby.

#### 2.6 Conflicts

Where there is a conflict between a provision of any submitted document referred to in this Permit, including its Schedules, and the conditions of this Permit, the conditions in this Permit shall take precedence.

#### 3. Water Takings Authorized by This Permit

#### 3.1 Expiry

This Permit expires on **January 13, 2031**. No water shall be taken under authority of this Permit after the expiry date.

#### 3.2 Amounts of Taking Permitted

The Permit Holder shall only take water from the source, during the periods and at the rates and amounts of taking specified in Table A. Water takings are authorized only for the purposes specified in Table A.

#### Table A

	Source Name / Description:	Source: Type:	Taking Specific Purpose:	Taking Major Category:	Max. Taken per Minute (litres):	Max. Num. of Hrs Taken per Day:	Max. Taken per Day (litres):	Max. Num. of Days Taken per Year:	Zone/ Easting/ Northing:
1	PW1-09 (WWR # 7124734)	Well Drilled	Aggregate Washing	Industrial	950	24	1,368,000	210	17 592343 4945072
2	Source Pond	Pond Dugout	Aggregate Washing	Industrial	7,274	12	5,237,280	210	17 591900 4944960
						Total Taking:	6,605,280		

3.3 In addition to aggregate washing, the water taken under this Permit may also be used for other onsite uses including dust suppression.

#### 4. Monitoring

4.1 Under section 9 of O. Reg. 387/04 as amended from time to time, the Permit Holder shall, on each day water is taken under the authorization of this Permit, record the date, the volume of water taken on that date and the rate at which it was taken. The daily volume of water taken shall be measured by a flow meter or calculated in accordance with the method described in the application for this Permit, or as otherwise accepted by the Director.

The Permit Holder shall keep all records required by this condition current and available at or near the site of the taking and shall produce the records immediately for inspection by a Provincial Officer upon his or her request. The Permit Holder, unless otherwise required by the Director, shall submit, on or before March 31<sup>st</sup> in every year, the records required by this condition to the ministry's Water Taking Reporting System.

- 4.2 The Permit Holder shall implement the following groundwater and pond water level monitoring program:
  - i. Install and maintain dataloggers at the on-site and off-site monitoring wells listed in Schedule B and monitor groundwater levels at a minimum frequency of once every four hours. This monitoring shall occur, at a minimum, between February 15 and December 15 of every year for which the Permit is valid.
  - ii. Should any other on-site monitoring well be installed, then groundwater levels shall be monitored as per item (i) above and the data included in the Annual Monitoring Report.
  - iii. Measure water levels in private water wells WWR 7150632 and WWR 5717709, if permission is granted by the well owners. Should the permission of either of these the domestic water well owners be withdrawn, then the Permit Holder shall replace the well for which permission has been denied with a well in the same aquifer either on or

off site.

- iv. measure the water level elevation in the Source Pond between February 15 and December 15 when the pond is not frozen at a minimum frequency of twice per day, once in the early morning and once in the late afternoon or evening.
- 4.3 The Permit Holder shall submit an Annual Monitoring Report to the District Office and the Director by April 31<sup>st</sup> of each year following the issuance of the Permit to Take Water. The report shall include:
  - i. All of the monitoring data collected for the preceding calendar year for the locations listed under 4.1 and 4.2.
  - ii. All other relevant groundwater or surface water monitoring data collected by the Permit Holder for the preceding calendar year from any on site and off-site monitoring wells/ locations, including on the adjacent property where the proposed Teedon Pit extension is located and identified by the land registry system's PIN 583870135.
  - iii. An electronic version of all of the monitoring data reported.
- 4.4 The Permit Holder may replace damaged or inoperable monitoring wells without amendment of the PTTW. The changes shall maintain or expand the intended scope of the monitoring program, be approved at the time of the change by a responsible qualified professional, and be documented in the Annual Monitoring Report along with the justification for the changes.
- 4.5 Within 30 days of the issuance of the Permit, the Permit Holder shall distribute its Dufferin Aggregates Teedon Pit – Well Complaint Response described in Item 4 of Schedule A of this Permit to the Teedon Pit Community Liaison Committee (CLC), the Corporation of the Township of Tiny and the Corporation of the Township of Tay.
- 4.6 Any request for an amendment or renewal of this Permit shall be accompanied by a report prepared by a Qualified Person (P.Geo. or equivalent) assessing all data collected under the Conditions 4.1 to 4.4 of this Permit. The report shall also document all reported well interference complaints and how they were addressed. The report shall include an electronic version of the monitoring data collected. This Condition does not apply to administrative amendments.
- 4.7 The Permit Holder shall make the Annual Monitoring Report required by Condition 4.3 available publicly by posting it on the Company's website by May 31<sup>st</sup> of each year following the issuance of the Permit to Take Water.

#### 5. Impacts of the Water Taking

5.1 Notification

The Permit Holder shall immediately notify the local District Office of any complaint arising

from the taking of water authorized under this Permit and shall report any action which has been taken or is proposed with regard to such complaint. The Permit Holder shall immediately notify the local District Office if the taking of water is observed to have any significant impact on the surrounding waters. After hours, calls shall be directed to the Ministry's Spills Action Centre at 1-800-268-6060.

#### 5.2 For Surface-Water Takings

The taking of water (including the taking of water into storage and the subsequent or simultaneous withdrawal from storage) shall be carried out in such a manner that streamflow is not stopped and is not reduced to a rate that will cause interference with downstream uses of water or with the natural functions of the stream.

#### For Groundwater Takings

If the taking of water is observed to cause any negative impact to other water supplies obtained from any adequate sources that were in use prior to initial issuance of a Permit for this water taking, the Permit Holder shall take such action necessary to make available to those affected, a supply of water equivalent in quantity and quality to their normal takings, or shall compensate such persons for their reasonable costs of so doing, or shall reduce the rate and amount of taking to prevent or alleviate the observed negative impact. Pending permanent restoration of the affected supplies, the Permit Holder shall provide, to those affected, temporary water supplies adequate to meet their normal requirements, or shall compensate such persons for their reasonable costs of doing so.

If permanent interference is caused by the water taking, the Permit Holder shall restore the water supplies of those permanently affected.

#### 6. Director May Amend Permit

The Director may amend this Permit by letter requiring the Permit Holder to suspend or reduce the taking to an amount or threshold specified by the Director in the letter. The suspension or reduction in taking shall be effective immediately and may be revoked at any time upon notification by the Director. This condition does not affect your right to appeal the suspension or reduction in taking to the Environmental Review Tribunal under the *Ontario Water Resources Act*, Section 100 (4).

*The reasons for the imposition of these terms and conditions are as follows:* 

- 1. Condition 1 is included to ensure that the conditions in this Permit are complied with and can be enforced.
- 2. Condition 2 is included to clarify the legal interpretation of aspects of this Permit.
- 3. Conditions 3 through 6 are included to protect the quality of the natural environment so as to

safeguard the ecosystem and human health and foster efficient use and conservation of waters. These conditions allow for the beneficial use of waters while ensuring the fair sharing, conservation and sustainable use of the waters of Ontario. The conditions also specify the water takings that are authorized by this Permit and the scope of this Permit.

In accordance with Section 100 of the <u>Ontario Water Resources Act</u>, R.S.O. 1990, you may by written notice served upon me, the Environmental Review Tribunal and the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 101 of the <u>Ontario Water Resources Act</u>, as amended provides that the Notice requiring a hearing shall state:

- 1. The portions of the Permit or each term or condition in the Permit in respect of which the hearing is required, and;
- 2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

In addition to these legal requirements, the Notice should also include:

AND

- a. The name of the appellant;
- b. The address of the appellant;
- c. The Permit to Take Water number;
- d. The date of the Permit to Take Water;
- e. The name of the Director:
- f. The municipality within which the works are located;

#### This notice must be served upon:

The Secretary
Environmental Review Tribunal
655 Bay Street, 15th Floor
Toronto ON
M5G 1E5
Fax: (416) 326-5370
Email:
ERTTribunalsecretary@ontario.ca

The Minister of the Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, Ontario M7J 2J3 The Director, Section 34.1, Ministry of the Environment, Conservation and Parks Client Services and Permissions Branch 1st Floor 135 St Clair Ave W Toronto ON M4V 1P5 Fax: (416) 314-8452

AND

Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal:

by Telephone at by Fax at by e-mail at (416) 212-6349 (416) 326-5370 www.ert.gov.on.ca Toll Free 1(866) 448-2248 Toll Free 1(844) 213-3474

This instrument is subject to Section 38 of the **Environmental Bill of Rights** that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek to appeal for 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry, you can determine when the leave to appeal period ends.

This Permit cancels and replaces Permit Number 5003-APFH26, issued on 2017/08/14.

Dated at Toronto this 14th day of January, 2021.

Adam Leus

Director, Section 34.1

Ontario Water Resources Act , R.S.O. 1990

#### Schedule A

This Schedule "A" forms part of Permit To Take Water 6258-BRDJ2M, dated January 14, 2021.

- 1. GHD. 2018. Category 1 Permit-To-Take-Water Renewal Application Supporting Hydrologic and Hydrogeologic Study Dufferin Teedon Pit, Township of Tiny, County of Simcoe, Ontario; Project: 11155365, Report No 1, Signed and stamped by Gary Lagos, P.Geo. and signed by J. Richard Murphy, P. Eng. January 18, 2018.
- 2. GHD. 2018. Items Completed At The Request of MOECC Associated with the PTTW Renewal, Dufferin Teedon Pit, Township of Tiny, County of Simcoe, Ontario letter to Mr. Vincent Bulman, MOECC, Central Region, Water Unit signed and stamped by Gary I. Lagos of GHD; April 20, 2018 Reference No. 11155365.
- 3. GHD. April 26, 2018. Re: 2018 Domestic Well Survey Dufferin Teedon Pit, Township of Tiny, County of Simcoe letter addressed to V. Bulman, Ministry of the Environment and Climate Change Ontario; April 26, 2018; signed and stamped by Gary I. Lagos, P. Geo. of GHD. Reference No. 11155365.
- 4. Dufferin. 2018. Dufferin Aggregates Teedon Pit Well Interference Protocol, addressed to the Ministry of the Environment, Conservation and Parks, signed by Maria Tapalovic of Dufferin Aggregates, a division of CRH Canada Group Inc. dated August 2, 2018.

### **Schedule B**

This Schedule B forms part of Permit to Take Water 6258-BRDJ2M, dated January 13, 2021

# <u>Teedon Pit Production and Monitoring Wells</u> <u>Dufferin Teedon Pit, Township of Tiny, County of Simcoe, Ontario</u>

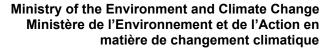
Location	MOECC Well ID	Well Tag Number	Completion Date	Easting	Northing
<b>PW1-09</b> (1)(5)	7124734	A082190	4/29/2009	592343.75	4945072.04
<b>MW1-09</b> (3)(5)	7124729	A082184	6/2/2009	590513.00	4944298.00
<b>MW1</b> (1)(5)	7054134	A062215	11/8/2007	591776.70	4944920.92
<b>MW4-10</b> (1)(5)	7150631	A105968	8/5/2010	592346.97	4945073.66
<b>MW5-18</b> (4)(5)	7310101	A241648	4/5/2018	592450.79	4945106.20
<b>MW6-18</b> (4)(5)	7310100	A241641	3/29/2018	591778.54	4944916.15
<b>MW7-18</b> (4)(5)	7310099	A215946	4/9/2018	591953.92	4944937.13
MW8-18	7314361	A242552	6/11/2018	590518.91	4944303.17
<b>#50632</b> (5)	7150632		8/4/2010	592282.00	4945366.00
<b>#17709</b> (5)	5717709		9/23/1981	592539.00	4945093.00
# <b>16440</b> (3)	5716440	_	11/8/1979	591461.00	4944573.00

#### Notes:

- (1) Northing, eastings, measured on March 15, 2018.
- (2) Northing, eastings, measured on April 18, 2018.
- (3) Northing, eastings, from the approved Site Plans.
- (4) These monitoring wells include Tag Numbers.
- (5) Pressure transducers are installed at these locations.

# Appendix A-2

Permit to Take Water No. 5003-APFH26





#### AMENDED PERMIT TO TAKE WATER

Surface and Ground Water NUMBER 5003-APFH26

Pursuant to Section 34.1 of the Ontario Water Resources Act, R.S.O. 1990 this Permit To Take *Water is hereby issued to:* 

> CRH Canada Group Inc. 2300 Steeles Avenue West, Floor 4 Concord, Ontario, L4K 5X6 Canada

For the water PW1-09, Wash Pond

taking from:

Located at:

90 Darby Rd Lots 79 and 80 Concession 1 Original Township of Tiny

Tiny, County of Simcoe

For the purposes of this Permit, and the terms and conditions specified below, the following definitions apply:

#### **DEFINITIONS**

- (a) "Director" means any person appointed in writing as a Director pursuant to section 5 of the OWRA for the purposes of section 34.1, OWRA.
- (b) "Provincial Officer" means any person designated in writing by the Minister as a Provincial Officer pursuant to section 5 of the OWRA.
- (c) "Ministry" means Ontario Ministry of the Environment and Climate Change.
- (d) "District Office" means the Barrie District Office.
- (e) "Permit" means this Permit to Take Water No. 5003-APFH26 including its Schedules, if any, issued in accordance with Section 34.1 of the OWRA.
- (f) "Permit Holder" means CRH Canada Group Inc..
- "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O. 40, as amended. (g)

You are hereby notified that this Permit is issued subject to the terms and conditions outlined below:

#### **TERMS AND CONDITIONS**

### 1. Compliance with Permit

- 1.1 Except where modified by this Permit, the water taking shall be in accordance with the application for this Permit To Take Water, dated April 29, 2010 and signed by Robert E. Graham, and all Schedules included in this Permit.
- 1.2 The Permit Holder shall ensure that any person authorized by the Permit Holder to take water under this Permit is provided with a copy of this Permit and shall take all reasonable measures to ensure that any such person complies with the conditions of this Permit.
- 1.3 Any person authorized by the Permit Holder to take water under this Permit shall comply with the conditions of this Permit.
- 1.4 This Permit is not transferable to another person.
- 1.5 This Permit provides the Permit Holder with permission to take water in accordance with the conditions of this Permit, up to the date of the expiry of this Permit. This Permit does not constitute a legal right, vested or otherwise, to a water allocation, and the issuance of this Permit does not guarantee that, upon its expiry, it will be renewed.
- 1.6 The Permit Holder shall keep this Permit available at all times at or near the site of the taking, and shall produce this Permit immediately for inspection by a Provincial Officer upon his or her request.
- 1.7 The Permit Holder shall report any changes of address to the Director within thirty days of any such change. The Permit Holder shall report any change of ownership of the property for which this Permit is issued within thirty days of any such change. A change in ownership in the property shall cause this Permit to be cancelled.

### 2. General Conditions and Interpretation

### 2.1 Inspections

The Permit Holder must forthwith, upon presentation of credentials, permit a Provincial Officer to carry out any and all inspections authorized by the OWRA, the *Environmental Protection Act*, R.S.O. 1990, the *Pesticides Act*, R.S.O. 1990, or the *Safe Drinking Water Act*, S. O. 2002.

#### 2.2 Other Approvals

The issuance of, and compliance with this Permit, does not:

(a) relieve the Permit Holder or any other person from any obligation to comply with any other applicable legal requirements, including the provisions of the  $Ontario\ Water\ Resources\ Act$ , and

the Environmental Protection Act, and any regulations made thereunder; or

(b) limit in any way any authority of the Ministry, a Director, or a Provincial Officer, including the authority to require certain steps be taken or to require the Permit Holder to furnish any further information related to this Permit.

#### 2.3 Information

The receipt of any information by the Ministry, the failure of the Ministry to take any action or require any person to take any action in relation to the information, or the failure of a Provincial Officer to prosecute any person in relation to the information, shall not be construed as:

- (a) an approval, waiver or justification by the Ministry of any act or omission of any person that contravenes this Permit or other legal requirement; or
- (b) acceptance by the Ministry of the information's completeness or accuracy.

#### 2.4 Rights of Action

The issuance of, and compliance with this Permit shall not be construed as precluding or limiting any legal claims or rights of action that any person, including the Crown in right of Ontario or any agency thereof, has or may have against the Permit Holder, its officers, employees, agents, and contractors.

### 2.5 Severability

The requirements of this Permit are severable. If any requirements of this Permit, or the application of any requirements of this Permit to any circumstance, is held invalid or unenforceable, the application of such requirements to other circumstances and the remainder of this Permit shall not be affected thereby.

#### 2.6 Conflicts

Where there is a conflict between a provision of any submitted document referred to in this Permit, including its Schedules, and the conditions of this Permit, the conditions in this Permit shall take precedence.

### 3. Water Takings Authorized by This Permit

### 3.1 Expiry

This Permit expires on **April 30**, **2018**. No water shall be taken under authority of this Permit after the expiry date.

### 3.2 Amounts of Taking Permitted

The Permit Holder shall only take water from the source, during the periods and at the rates and amounts of taking specified in Table A. Water takings are authorized only for the purposes specified in Table A.

#### Table A

	Source Name / Description:	Source: Type:	Taking Specific Purpose:	Taking Major Category:	Max. Taken per Minute (litres):	Max. Num. of Hrs Taken per Day:	Max. Taken per Day (litres):	Max. Num. of Days Taken per Year:	Zone/ Easting/ Northing:
1	PW1-09	Well Drilled	Aggregate Washing	Industrial	1,136	24	1,635,840	210	17 592343 4945072
2	Wash Pond	Pond Dugout	Aggregate Washing	Industrial	7,274	12	5,237,280	210	17 591900 4944960
						Total Taking:	6,873,120		

## 4. Monitoring

- 4.1 The Permit Holder shall install and maintain flow meters on each source listed in Table A. Meter readings for each source shall be recorded daily and available for inspection by a Provincial Officer upon his or her request.
- 4.2 The Permit Holder shall install and maintain a continuous water level recorder within production well, PW1-09 prior to the start of any taking of water from that source. Additional water level recorders shall be installed and maintained in at least one onsite well of comparable depth to PW1-09 and one onsite well terminating within the shallower aquifer unit underlying this site. Data collected shall be available to Ministry staff at any time upon request.
- 4.3 Any request for an amendment or renewal of this Permit shall be accompanied by a report by a Qualified Person (P.Geo. or equivalent) assessing all data collected under the Conditions of this Permit. The report shall include an electronic version of the monitoring data collected.

### 5. Impacts of the Water Taking

#### 5.1 Notification

The Permit Holder shall immediately notify the local District Office of any complaint arising from the taking of water authorized under this Permit and shall report any action which has been taken or is proposed with regard to such complaint. The Permit Holder shall immediately notify the local District Office if the taking of water is observed to have any significant impact on the surrounding waters. After hours, calls shall be directed to the Ministry's Spills Action Centre at 1-800-268-6060.

#### 5.2 For Surface-Water Takings

The taking of water (including the taking of water into storage and the subsequent or simultaneous withdrawal from storage) shall be carried out in such a manner that streamflow is not stopped and is not reduced to a rate that will cause interference with downstream uses of water or with the natural functions of the stream.

### For Groundwater Takings

If the taking of water is observed to cause any negative impact to other water supplies obtained from any adequate sources that were in use prior to initial issuance of a Permit for this water taking, the Permit Holder shall take such action necessary to make available to those affected, a supply of water equivalent in quantity and quality to their normal takings, or shall compensate such persons for their reasonable costs of so doing, or shall reduce the rate and amount of taking to prevent or alleviate the observed negative impact. Pending permanent restoration of the affected supplies, the Permit Holder shall provide, to those affected, temporary water supplies adequate to meet their normal requirements, or shall compensate such persons for their reasonable costs of doing so.

If permanent interference is caused by the water taking, the Permit Holder shall restore the water supplies of those permanently affected.

#### 6. Director May Amend Permit

The Director may amend this Permit by letter requiring the Permit Holder to suspend or reduce the taking to an amount or threshold specified by the Director in the letter. The suspension or reduction in taking shall be effective immediately and may be revoked at any time upon notification by the Director. This condition does not affect your right to appeal the suspension or reduction in taking to the Environmental Review Tribunal under the *Ontario Water Resources Act*, Section 100 (4).

The reasons for the imposition of these terms and conditions are as follows:

- 1. Condition 1 is included to ensure that the conditions in this Permit are complied with and can be enforced.
- 2. Condition 2 is included to clarify the legal interpretation of aspects of this Permit.
- 3. Conditions 3 through 6 are included to protect the quality of the natural environment so as to safeguard the ecosystem and human health and foster efficient use and conservation of waters. These conditions allow for the beneficial use of waters while ensuring the fair sharing, conservation and sustainable use of the waters of Ontario. The conditions also specify the water takings that are authorized by this Permit and the scope of this Permit.

In accordance with Section 100 of the <u>Ontario Water Resources Act</u>, R.S.O. 1990, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 101 of the <u>Ontario Water Resources Act</u>, R.S.O. 1990, as amended, provides that the Notice requiring the hearing shall state:

- 1. The portions of the Permit or each term or condition in the Permit in respect of which the hearing is required, and;
- 2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

*In addition to these legal requirements, the Notice should also include:* 

- a. The name of the appellant;
- b. The address of the appellant;
- c. The Permit to Take Water number;
- d. The date of the Permit to Take Water;
- e. The name of the Director;
- f. The municipality within which the works are located;

This notice must be served upon:

The Secretary
Environmental Review Tribunal
655 Bay Street, 15th Floor
Toronto ON
M5G 1E5

Fax: (416) 326-5370

 ${\it Email: ERTT ribunal secretary @ontario.ca}$ 

The Director, Section 34.1, Ministry of the AND Environment and Climate Change

8th Floor 5775 Yonge St Toronto ON M2M 4J1

Fax: (416) 325-6347

Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal:

by Telephone at by Fax at by e-mail at

(416) 212-6349 (416) 326-5370 www.ert.gov.on.ca

Toll Free 1(866) 448-2248 Toll Free 1(844) 213-3474

This Permit cancels and replaces Permit Number 4317-87CNZN, issued on 2010/07/23.

Dated at Toronto this 14th day of August, 2017.

Karoly Tajnay

Director, Section 34.1

Ontario Water Resources Act, R.S.O. 1990

#### Schedule A

This Schedule "A" forms part of Permit To Take Water 5003-APFH26, dated August 14, 2017.

- 1. Permit amendment application signed by Robert E. Graham on April 29, 2010.
- 2. Alpha Environmental Services Inc. report entitled "Aggregate Wash Water Supply Pumping Test Results, Teedon Pit, Waverly Ontario" dated April 2010.
- 3. E Mail clarification on proposed site monitors locations from Ross Campbell to MOE / MNR dated July 19, 2010.
- 4. Submission for company ownership change from Cedarhurst Quarries & Crushing Limited to CRH Canada Group Inc. dated June 23, 2017.

# Appendix B

PTTW Water Taking Summary and site Observations

# Appendix B-1

**Water Taking Summary PW1-09** 

Hrs Taken Per Minute Per Day Days Ta Per Day (litres) (litres) Per Ye 24 950 1,368,000 210
--

	24	950	1,368,000	210
Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments
Friday January 1, 2021				
Saturday January 2, 2021				
Sunday January 3, 2021				
Monday January 4, 2021				
Tuesday January 5, 2021				
Wednesday January 6, 2021				
Thursday January 7, 2021				
Friday January 8, 2021				
Saturday January 9, 2021				<b></b>
Sunday January 10, 2021				
Monday January 11, 2021				
Tuesday January 12, 2021				<b></b>
Wednesday January 13, 2021 Thursday January 14, 2021				<b></b>
Friday January 15, 2021				<b></b>
Saturday January 16, 2021				<b></b>
Sunday January 17, 2021	 			
Monday January 18, 2021	<del></del>		<del></del>	<del></del>
Tuesday January 19, 2021				
Wednesday January 20, 2021				
Thursday January 21, 2021				
Friday January 22, 2021				
Saturday January 23, 2021				<del>-</del>
Sunday January 24, 2021				
Monday January 25, 2021				
Tuesday January 26, 2021				
Wednesday January 27, 2021				
Thursday January 28, 2021				
Friday January 29, 2021				
Saturday January 30, 2021				
Sunday January 31, 2021				
Monday February 1, 2021				
Tuesday February 2, 2021				
Wednesday February 3, 2021				
Thursday February 4, 2021				
Friday February 5, 2021				
Saturday February 6, 2021				
Sunday February 7, 2021				

The permitted rates for PW1-09 are as follows:			
Max. Num. of Hrs Taken	Per Minute	Max. Taken Per Day	Max. Num. of Days Taken
Per Day	(litres)	(litres)	Per Year
24	950	1,368,000	210

Date & Time         Hours of Taking (hours)         Rate of Taking (Lpm)         Amount of Taking (Lpm)         Comments           Monday February 8, 2021               Tuesday February 9, 2021               Wednesday February 10, 2021               Thursday February 11, 2021
Tuesday February 9, 2021              Wednesday February 10, 2021              Thursday February 11, 2021
Wednesday February 10, 2021
Thursday February 11, 2021
Friday February 12, 2021
Saturday February 13, 2021
Sunday February 14, 2021
Monday February 15, 2021
Tuesday February 16, 2021
Wednesday February 17, 2021
Thursday February 18, 2021
Friday February 19, 2021
Saturday February 20, 2021
Sunday February 21, 2021
Monday February 22, 2021
Tuesday February 23, 2021
Wednesday February 24, 2021
Thursday February 25, 2021
Friday February 26, 2021
Saturday February 27, 2021
Sunday February 28, 2021
Monday March 1, 2021
Tuesday March 2, 2021
Wednesday March 3, 2021
Thursday March 4, 2021
Friday March 5, 2021
Saturday March 6, 2021
Sunday March 7, 2021
Monday March 8, 2021
Tuesday March 9, 2021
Wednesday March 10, 2021
Thursday March 11, 2021
Friday March 12, 2021
Saturday March 13, 2021
Sunday March 14, 2021
Monday March 15, 2021
Tuesday March 16, 2021
Wednesday March 17, 2021

The permitted rates for PW1-09 are as	follows:			
	Max. Num. of Hrs Taken Per Dav	Max. Taken Per Minute (litres)	Max. Taken Per Day (litres)	Max. Num. of Days Taken Per Year
	24	950	1,368,000	210

	24	950	1,368,000	210
Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments
Thursday March 18, 2021				
Friday March 19, 2021				
Saturday March 20, 2021				<del></del>
Sunday March 21, 2021				<b></b>
Monday March 22, 2021				
Tuesday March 23, 2021				
Wednesday March 24, 2021				
Thursday March 25, 2021				
Friday March 26, 2021				
Saturday March 27, 2021				
Sunday March 28, 2021				
Monday March 29, 2021				
Tuesday March 30, 2021				
Wednesday March 31, 2021				
Thursday April 1, 2021				
Friday April 2, 2021				
Saturday April 3, 2021				
Sunday April 4, 2021				
Monday April 5, 2021	9.3	554	307,197	
Tuesday April 6, 2021	10.5	561	353,222	
Wednesday April 7, 2021	10.8	558	360,078	
Thursday April 8, 2021	10.5	555	349,885	
Friday April 9, 2021	10.5	581	366,324	
Saturday April 10, 2021	11.0	554	365,765	
Sunday April 11, 2021				<del></del>
Monday April 12, 2021	10.5	579	364,969	
Tuesday April 13, 2021	11.0	554	365,737	
Wednesday April 14, 2021	11.0	555	366,183	
Thursday April 15, 2021	11.0	555	366,242	
Friday April 16, 2021	11.0	555	366,460	
Saturday April 17, 2021	11.0	555	366,524	
Sunday April 18, 2021				
Monday April 19, 2021	11.0	555	365,992	
Tuesday April 20, 2021	11.0	554	365,833	
Wednesday April 21, 2021	11.0	556	367,238	
Thursday April 22, 2021	11.0	555	366,433	
Friday April 23, 2021	11.0	554	365,687	
Saturday April 24, 2021	11.0	555	366,310	

The permitted rates for PW1-09 a	are as follows:			
	Max. Num. of Hrs Taken Per Day 24	Max. Taken Per Minute (litres) 950	Max. Taken Per Day (litres) 1,368,000	Max. Num. of Days Taken Per Year 210
Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments
Sunday April 25, 2021				
Monday April 26, 2021	11.0	555	366,288	
Tuesday April 27, 2021	11.0	533	351,817	
Wednesday April 28, 2021	11.0	555	366,251	
Thursday April 29, 2021	14.3	443	378,567	
Friday April 30, 2021	11.0	296	195,282	
Saturday May 1, 2021				
Sunday May 2, 2021				
Monday May 3, 2021	11.0	555	366,579	
Tuesday May 4, 2021	11.0	556	367,224	
Wednesday May 5, 2021	11.0	555	366,492	
Thursday May 6, 2021	15.0	542	488,168	
Friday May 7, 2021	11.0	557	367,342	
Saturday May 8, 2021				
Sunday May 9, 2021				
Monday May 10, 2021	15.0	561	504,943	
Tuesday May 11, 2021	11.0	554	365,778	
Wednesday May 12, 2021	11.0	554	365,528	
Thursday May 13, 2021	11.0	555	366,233	
Friday May 14, 2021	14.8	507	451,304	
Saturday May 15, 2021				
Sunday May 16, 2021				
Monday May 17, 2021	11.00	557	367,456	
Tuesday May 18, 2021	11.00	557	367,588	
Wednesday May 19, 2021	11.00	553	365,101	
Thursday May 20, 2021	10.92	555	363,655	
Friday May 21, 2021	18.00	553	597,220	
Saturday May 22, 2021				
Sunday May 23, 2021				
Monday May 24, 2021				VICTORIA DAY
Tuesday May 25, 2021	11.0	553	364,892	
Wednesday May 26, 2021	11.0	555	366,328	
Thursday May 27, 2021	11.0	554	365,787	
Friday May 28, 2021	13.0	556	433,802	
Saturday May 29, 2021				
Sunday May 30, 2021				
Monday May 31, 2021	11.0	555	366,497	
T	44.0	rrr	000 004	

11.0

555

366,224

Tuesday June 1, 2021

Pl	Township of Tiny, Co		•	
The permitted rates for PW1-09 a	are as follows: Max. Num. of Hrs Taken Per Day 24	Max. Taken Per Minute (litres) 950	Max. Taken Per Day (litres) 1,368,000	Max. Num. of Days Taken Per Year 210
Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments
Wednesday June 2, 2021	11.0	553	364,933	
Γhursday June 3, 2021	11.0	554	365,592	
Friday June 4, 2021	11.0	548	362,001	
Saturday June 5, 2021	15.5	548	509,858	
Sunday June 6, 2021				
Monday June 7, 2021	11.0	547	361,269	
Tuesday June 8, 2021	11.0	547	360,891	
Vednesday June 9, 2021	11.0	544	359,232	
Thursday June 10, 2021	11.0	546	360,369	
riday June 11, 2021	11.0	549	362,187	
Saturday June 12, 2021				-
unday June 13, 2021	<u></u>			
Monday June 14, 2021	11.0	550	363,178	
uesday June 15, 2021	11.0	551	363,946	
Vednesday June 16, 2021				Did not Pump
Thursday June 17, 2021	11.0	555	365,974	
riday June 18, 2021	11.0	556	366,897	
Saturday June 19, 2021				
Sunday June 20, 2021				
Monday June 21, 2021	11.0	554	365,692	
uesday June 22, 2021	11.0	554	365,751	
Vednesday June 23, 2021	11.0	555	366,065	
hursday June 24, 2021	11.0	553	365,219	
riday June 25, 2021	11.0	550	363,064	
Saturday June 26, 2021				
Sunday June 27, 2021				
Monday June 28, 2021				Did not Pump
uesday June 29, 2021				Did not Pump
Vednesday June 30, 2021				Did not Pump
hursday July 1, 2021		 		CANADA DAY
riday July 2, 2021				Did not Pump
Saturday July 3, 2021				Did not Fullip
Sunday July 4, 2021		-	<del></del>	-
	<del>-</del>	<u></u>	<del></del>	Did not Dumn
Monday July 5, 2021	<b></b>			Did not Pump
uesday July 6, 2021	<b></b>			Did not Pump
Vednesday July 7, 2021	 	 0	 160 000	Did not Pump
Fhursday July 8, 2021	5.0	542	162,682	

12.0

566

407,198

Friday July 9, 2021

	Max. Num. of Hrs Taken Per Day 24	Max. Taken Per Minute (litres) 950	Max. Taken Per Day (litres) 1,368,000	Max. Num. of Days Taken Per Year 210
Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments
aturday July 10, 2021				
unday July 11, 2021				
onday July 12, 2021				Did not Pump
uesday July 13, 2021	11.0	483	319,049	
/ednesday July 14, 2021				Did not Pump
hursday July 15, 2021	11.0	552	364,246	
riday July 16, 2021				Did not Pump
aturday July 17, 2021				-
unday July 18, 2021			-	-
onday July 19, 2021	11.0	550	362,778	
uesday July 20, 2021				Did not Pump
ednesday July 21, 2021				Did not Pump
hursday July 22, 2021				Did not Pump
riday July 23, 2021	11.0	552	364,178	
aturday July 24, 2021				-
unday July 25, 2021				
onday July 26, 2021	4.3	543	141,170	
uesday July 27, 2021	11.0	551	363,560	
/ednesday July 28, 2021				Did not Pump
hursday July 29, 2021				Did not Pump
riday July 30, 2021	11.0	549	362,046	
aturday July 31, 2021				-
unday August 1, 2021				
onday August 2, 2021				CIVIC HOLIDAY
uesday August 3, 2021	11.0	550	362,751	
/ednesday August 4, 2021	11.0	549	362,664	
hursday August 5, 2021	11.0	547	360,760	
riday August 6, 2021	11.0	550	363,301	
aturday August 7, 2021				
unday August 8, 2021				
onday August 9, 2021	4.8	540	153,962	
uesday August 10, 2021	11.0	551	363,851	
ednesday August 11, 2021				Did not Pump
hursday August 12, 2021	11.0	554	365,447	
riday August 13, 2021				Did not Pump
aturday August 14, 2021				-
unday August 15, 2021			-	-
onday August 16, 2021	16.5	563	556,982	

The permitted rates for PW1-09 are as follows:						
	Max. Num. of Hrs Taken Per Day 24	Max. Taken Per Minute (litres) 950	Max. Taken Per Day (litres) 1,368,000	Max. Num. of Days Taken Per Year 210		
Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments		
Tuesday August 17, 2021	11.0	554	365,565			
Wednesday August 18, 2021	11.0	554	365,874			
Thursday August 19, 2021				Did not Pump		
Friday August 20, 2021	11.0	554	365,333			
Saturday August 21, 2021						
Sunday August 22, 2021				<del></del>		
Monday August 23, 2021	11.0	554	365,524			
Tuesday August 24, 2021	11.0	553	364,942			
Wednesday August 25, 2021	11.0	552	364,542			
Thursday August 26, 2021				Did not Pump		
Friday August 27, 2021				Did not Pump		
Saturday August 28, 2021						
Sunday August 29, 2021						
Monday August 30, 2021	11.0	553	364,724			
Tuesday August 31, 2021				Did not Pump		
Wednesday September 1, 2021	11.0	555	366,224	<del></del>		
Thursday September 2, 2021				Did not Pump		
Friday September 3, 2021	8.0	527	252,863			
Saturday September 4, 2021						
Sunday September 5, 2021						
Monday September 6, 2021				LABOUR DAY		
Tuesday September 7, 2021	11.0	525	346,385			
Wednesday September 8, 2021	11.0	555	366,110			
Thursday September 9, 2021	11.0	554	365,633			
Friday September 10, 2021	11.0	552	364,101			
Saturday September 11, 2021						
Sunday September 12, 2021						
Monday September 13, 2021	11.0	555	366,247			
Tuesday September 14, 2021	11.0	553	364,956			
Wednesday September 15, 2021	11.0	552	364,169			
Thursday September 16, 2021	11.0	550	362,942			
Friday September 17, 2021	11.0	551	363,714			
Saturday September 18, 2021						
Sunday September 19, 2021						
Monday September 20, 2021	11.0	553	365,119			
Tuesday September 21, 2021	11.0	573	378,403			
Wednesday September 22, 2021				Did not Pump		
Thursday September 23, 2021				Did not Pump		

	Per Day 24	Per Minute (litres) 950	Per Day (litres) 1,368,000	Days Taken Per Year 210
Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments
riday September 24, 2021				Did not Pump
Saturday September 25, 2021				
Sunday September 26, 2021				
londay September 27, 2021	11.0	555	366,338	
uesday September 28, 2021				Did not Pump
Vednesday September 29, 2021	11.0	550	363,142	
hursday September 30, 2021	11.0	554	365,574	
riday October 1, 2021				Did not Pump
Saturday October 2, 2021				-
Sunday October 3, 2021				
londay October 4, 2021	11.00	553	364,815	
uesday October 5, 2021				Did not Pump
Vednesday October 6, 2021				Did not Pump
hursday October 7, 2021				Did not Pump
riday October 8, 2021				Did not Pump
Saturday October 9, 2021				
Sunday October 10, 2021				
londay October 11, 2021				THANKSGIVING
uesday October 12, 2021	11.0	551	363,887	
Vednesday October 13, 2021				Did not Pump
hursday October 14, 2021				Did not Pump
riday October 15, 2021				Did not Pump
Saturday October 16, 2021				
Sunday October 17, 2021				
Nonday October 18, 2021				Did not Pump
uesday October 19, 2021				Did not Pump
Vednesday October 20, 2021				Did not Pump
hursday October 21, 2021	11.0	554	365,360	
riday October 22, 2021	11.0	553	364,846	
Saturday October 23, 2021				
unday October 24, 2021				
londay October 25, 2021				Did not Pump
uesday October 26, 2021				Did not Pump
Vednesday October 27, 2021				Did not Pump
hursday October 28, 2021				Did not Pump
riday October 29, 2021	11.0	553	364,874	
Saturday October 30, 2021	11.0	552	364,301	
Sunday October 31, 2021				-

The permitted rates for PW1-09 are	Max. Num. of Hrs Taken Per Day 24	Max. Taken Per Minute (litres) 950	Max. Taken Per Day (litres) 1,368,000	Max. Num. of Days Taken Per Year 210
Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments
Monday November 1, 2021	0.4	530	13,252	
Tuesday November 2, 2021				Did not Pump
Wednesday November 3, 2021				Did not Pump
Thursday November 4, 2021				Did not Pump
Friday November 5, 2021				Did not Pump
Saturday November 6, 2021				
Sunday November 7, 2021				
Monday November 8, 2021	11.0	555	366,215	
Tuesday November 9, 2021				Did not Pump
Wednesday November 10, 2021	11.0	554	365,810	
Thursday November 11, 2021	11.0	552	364,574	
Friday November 12, 2021	11.0	554	365,501	
Saturday November 13, 2021				
Sunday November 14, 2021				<del></del>
Monday November 15, 2021	11.0	554	365,797	
Tuesday November 16, 2021			, 	Did not Pump
Wednesday November 17, 2021				Did not Pump
Thursday November 18, 2021	1.3	551	44,111	Washroom Fill
Friday November 19, 2021			, 	Did not Pump
Saturday November 20, 2021				
Sunday November 21, 2021				<del></del>
Monday November 22, 2021				Did not Pump
Tuesday November 23, 2021				Did not Pump
Wednesday November 24, 2021				Did not Pump
Thursday November 25, 2021	0.8	545	27,249	Washroom Fill
Friday November 26, 2021				Did not Pump
Saturday November 27, 2021				
Sunday November 28, 2021				
Monday November 29, 2021				Did not Pump
Tuesday November 30, 2021				Did not Pump
Wednesday December 1, 2021				Did not Pump
Thursday December 2, 2021				Did not Pump
Friday December 3, 2021				Did not Pump
Saturday December 4, 2021				<b></b>
Sunday December 5, 2021				
Monday December 6, 2021				Did not Pump
Tuesday December 7, 2021				Did not Pump
Wednesday December 8, 2021				Did not Pump

Appendix B-1 Page 10 of 10

Did not Pump

Did not Pump

# Water Taking Summary - PW1-09 2021 Annual Monitoring Report Dufferin Aggregates Teedon Pit Township of Tiny, County of Simcoe, Ontario

The permitted rates for PW1-09 are	as follows:			
	Max. Num. of Hrs Taken Per Day 24	Max. Taken Per Minute (litres) 950	Max. Taken Per Day (litres) 1,368,000	Max. Num. of Days Taken Per Year 210
Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments
Thursday December 9, 2021				Did not Pump
Friday December 10, 2021				Did not Pump
Saturday December 11, 2021				<del>-</del>
Sunday December 12, 2021				
Monday December 13, 2021				Did not Pump
Tuesday December 14, 2021				Did not Pump
Wednesday December 15, 2021				Did not Pump
Thursday December 16, 2021				Did not Pump
Friday December 17, 2021	1.0	561	33,687	Washroom Fill
Saturday December 18, 2021				
Sunday December 19, 2021				
Monday December 20, 2021				Did not Pump
Tuesday December 21, 2021				Did not Pump
Wednesday December 22, 2021				Did not Pump
Thursday December 23, 2021				Did not Pump
Friday December 24, 2021				Did not Pump
Saturday December 25, 2021				
Sunday December 26, 2021				
Monday December 27, 2021				Did not Pump
Tuesday December 28, 2021				Did not Pump
Wednesday December 29, 2021				Did not Pump

Thursday December 30, 2021

Friday December 31, 2021

# Appendix B-2

Water Taking Summary - Source Pond

The permitted rates for the Pond area as follows:			
Max. Num. o	f Max. Taken	Max. Taken	Max. Num. of
Hrs Taken	Per Minute	Per Day	Days Taken
Per Day	(litres)	(litres)	Per Year
12	7,274	5,237,280	210

Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments
			<del></del>
			<del></del>
		<del></del>	
		<del></del>	<del></del>
			<del></del>
		<del></del>	<del></del>
			<del></del>
			<del></del>
<b></b>	<b></b>	<b></b>	
<b></b>		<b></b>	
		_	
		<del></del>	
	Taking (hours)	Taking (hours) (Lpm)	Taking (Lpm) (Lpd)

The permitted rates for the Pond area as follows:			
Max. Nu	ım. of Max. Taker	n Max. Taken	Max. Num. of
Hrs Ta	aken Per Minute	e Per Day	Days Taken
Per D	Day (litres)	(litres)	Per Year
12	7,274	5,237,280	210

Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments
			<del></del>
			<del></del>
			<del></del>
<del></del>	<del></del>	<del></del>	<del></del>
<b></b>		<b></b>	<del></del>
<b></b>		<b></b>	<del></del>
		<b></b>	 
			<del></del>
	<u></u>		
			<del></del>
	Taking (hours)	Taking (hours) (Lpm)	Taking (hours) (Lpm) (Lpd)

The permitted rates for the Pond area a	as follows:			
	Max. Num. of	Max. Taken	Max. Taken	Max. Num. of
	Hrs Taken	Per Minute	Per Day	Days Taken
	Per Day	(litres)	(litres)	Per Year
	12	7,274	5,237,280	210

Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments
Friday March 12, 2021				<del></del>
Saturday March 13, 2021				
Sunday March 14, 2021				
Monday March 15, 2021				
Tuesday March 16, 2021				
Wednesday March 17, 2021				
Thursday March 18, 2021				
Friday March 19, 2021				<del></del>
Saturday March 20, 2021				
Sunday March 21, 2021				<del></del>
Monday March 22, 2021				<del></del>
Tuesday March 23, 2021				<del></del>
Wednesday March 24, 2021				<del></del>
Thursday March 25, 2021				<del></del>
Friday March 26, 2021				<del></del>
Saturday March 27, 2021				
Sunday March 28, 2021				
Monday March 29, 2021				
Tuesday March 30, 2021				
Wednesday March 31, 2021				
Thursday April 1, 2021				
Friday April 2, 2021				
Saturday April 3, 2021				
Sunday April 4, 2021				
Monday April 5, 2021				
Tuesday April 6, 2021	5.3	2,220	710,332	Washplant Operations
Wednesday April 7, 2021	4.5	4,715	1,273,033	Washplant Operations
Thursday April 8, 2021	6.0	4,980	1,792,770	Washplant Operations
Friday April 9, 2021	8.0	4,960	2,380,834	Washplant Operations
Saturday April 10, 2021				<del></del>
Sunday April 11, 2021				<del></del>
Monday April 12, 2021				
Tuesday April 13, 2021	11.3	5,437	3,670,144	Washplant Operations
Wednesday April 14, 2021	11.4	5,586	3,826,671	Washplant Operations
Thursday April 15, 2021	6.3	4,804	1,825,703	Washplant Operations

The permitted rates for the Pond area as follows:					
	Max. Num. of Hrs Taken Per Day 12	Max. Taken Per Minute (litres) 7,274	Max. Taken Per Day (litres) 5,237,280	Max. Num. of Days Taken Per Year 210	
Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments	
Friday April 16, 2021	11.4	4,919	3,369,583	Washplant Operations	
Saturday April 17, 2021			-,,		
Sunday April 18, 2021				<del></del>	
Monday April 19, 2021	11.3	5,314	3,613,742	Washplant Operations	
Tuesday April 20, 2021	11.3	5,654	3,844,462	Washplant Operations	
Wednesday April 21, 2021	6.9	4,978	2,066,077	Washplant Operations	
Thursday April 22, 2021	11.3	5,319	3,616,959	Washplant Operations	
Friday April 23, 2021	11.3	5,502	3,741,121	Washplant Operations	
Saturday April 24, 2021				<u></u>	
Sunday April 25, 2021					
Monday April 26, 2021	11.2	5,359	3,590,272	Washplant Operations	
Tuesday April 27, 2021	11.2	5,411	3,625,287	Washplant Operations	
Wednesday April 28, 2021	7.0	4,737	1,989,611	Washplant Operations	
Thursday April 29, 2021	10.3	6,108	3,786,924	Washplant Operations	
Friday April 30, 2021					
Saturday May 1, 2021				-	
Sunday May 2, 2021				<del>-</del>	
Monday May 3, 2021				<del></del>	
Tuesday May 4, 2021	11.1	5,332	3,545,983	Washplant Operations	
Wednesday May 5, 2021	8.3	5,934	2,937,100	Washplant Operations	
Thursday May 6, 2021	11.1	6,240	4,149,756	Washplant Operations	
Friday May 7, 2021	11.2	5,789	3,878,342	Washplant Operations	
Saturday May 8, 2021				<del>-</del>	
Sunday May 9, 2021		 070			
Monday May 10, 2021	11.1	5,878	3,909,193	Washplant Operations	
Tuesday May 11, 2021	10.8	5,283	3,407,248	Washplant Operations	
Wednesday May 12, 2021	11.2	5,226 5,073	3,501,694	Washplant Operations	
Thursday May 13, 2021	10.7	5,972 5,300	3,822,318	Washplant Operations	
Friday May 14, 2021	3.5	5,300	1,113,100	Washplant Operations	
Saturday May 15, 2021 Sunday May 16, 2021	-		_		
Monday May 17, 2021	 11.17	 5,384.60	 3,607,685	 Washplant Operations	
	10.83			•	
Tuesday May 18, 2021		3,556.25 3,415.63	2,311,561	Washplant Operations	
Wednesday May 19, 2021	11.17	3,415.63 5,041.36	2,288,470	Washplant Operations	
Thursday May 20, 2021	10.92	5,941.36	3,891,591	Washplant Operations	

The permitted rates for the Pond a	rea as follows: Max. Num. of Hrs Taken Per Day 12	Max. Taken Per Minute (litres) 7,274	Max. Taken Per Day (litres) 5,237,280	Max. Num. of Days Taken Per Year 210
Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments
Friday May 21, 2021	10.00	6,042.15	3,625,287	Washplant Operations
Saturday May 22, 2021				
Sunday May 23, 2021				
Monday May 24, 2021				VICTORIA DAY
uesday May 25, 2021	9.9	5,621	3,344,788	Washplant Operations
Vednesday May 26, 2021	8.3	5,951	2,945,617	Washplant Operations
hursday May 27, 2021	10.3	5,858	3,602,575	Washplant Operations
riday May 28, 2021	10.0	5,677	3,405,923	Washplant Operations
Saturday May 29, 2021				<del>-</del>
Sunday May 30, 2021				-
londay May 31, 2021	8.8	5,951	3,153,814	Washplant Operations
uesday June 1, 2021	11.1	5,948	3,955,186	Washplant Operations
Vednesday June 2, 2021	10.6	5,764	3,660,302	Washplant Operations
hursday June 3, 2021	11.1	5,679	3,776,325	Washplant Operations
riday June 4, 2021	5.6	5,259	1,761,730	Washplant Operations
Saturday June 5, 2021				-
Sunday June 6, 2021				-
londay June 7, 2021	9.5	5,761	3,283,843	Washplant Operations
uesday June 8, 2021	11.1	5,788	3,849,194	Washplant Operations
Vednesday June 9, 2021	11.1	5,777	3,841,813	Washplant Operations
hursday June 10, 2021	11.2	5,202	3,485,227	Washplant Operations
riday June 11, 2021	11.1	5,809	3,862,822	Washplant Operations
Saturday June 12, 2021				
unday June 13, 2021				
londay June 14, 2021	11.2	3,242	2,172,068	Washplant Operations
uesday June 15, 2021	11.2	3,329	2,230,553	Washplant Operations
Vednesday June 16, 2021	11.2	5,076	3,400,623	Washplant Operations
hursday June 17, 2021	11.3	4,836	3,263,970	Washplant Operations
riday June 18, 2021				
Saturday June 19, 2021			<del></del>	-
Sunday June 20, 2021				
Monday June 21, 2021	5.3	1,172	369,267	Washplant Operations
Tuesday June 22, 2021	10.9	5,591	3,662,195	Washplant Operations
Wednesday June 23, 2021	11.2	5,610	3,758,912	Washplant Operations
Thursday June 24, 2021	11.2	5,610	3,758,534	Washplant Operations

The permitted rates for the Pond area as	Max. Num. of Hrs Taken	Max. Taken Per Minute	Max. Taken Per Day	Max. Num. of Days Taken
	Per Day 12	(litres) 7,274	(litres) 5,237,280	Per Year 210
Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments
Friday June 25, 2021	4.3	5,262	1,341,739	Washplant Operations
Saturday June 26, 2021				-
Sunday June 27, 2021				
Monday June 28, 2021	11.1	5,847	3,888,373	Washplant Operations
Tuesday June 29, 2021	11.1	5,823	3,872,096	Washplant Operations
Wednesday June 30, 2021				Pond Cleaning
Thursday July 1, 2021				CANADA DAY
Friday July 2, 2021				Pond Cleaning
Saturday July 3, 2021				
Sunday July 4, 2021				
Monday July 5, 2021				Pond Cleaning
Tuesday July 6, 2021				Pond Cleaning
Wednesday July 7, 2021	10.3	5,752	3,566,235	Washplant Operations
Thursday July 8, 2021	11.1	5,842	3,884,966	Washplant Operations
Friday July 9, 2021	11.1	5,484	3,646,864	Washplant Operations
Saturday July 10, 2021				
Sunday July 11, 2021				
Monday July 12, 2021	11.1	5,615	3,733,928	Washplant Operations
Tuesday July 13, 2021	11.1	4,947	3,289,900	Washplant Operations
Wednesday July 14, 2021	9.7	5,587	3,240,500	Washplant Operations
Thursday July 15, 2021	11.0	5,872	3,875,313	Washplant Operations
Friday July 16, 2021	8.6	5,751	2,961,894	Washplant Operations
Saturday July 17, 2021				-
Sunday July 18, 2021				
Monday July 19, 2021	11.1	5,810	3,863,579	Washplant Operations
Tuesday July 20, 2021	11.1	5,886	3,913,925	Washplant Operations
Wednesday July 21, 2021	10.8	5,723	3,691,343	Washplant Operations
Thursday July 22, 2021	10.8	2,718	1,766,462	Washplant Operations
Friday July 23, 2021	11.3	5,659	3,848,437	Washplant Operations
Saturday July 24, 2021				
Sunday July 25, 2021				
Monday July 26, 2021	11.3	5,727	3,866,039	Washplant Operations
Tuesday July 27, 2021	3.3	2,980	596,013	Washplant Operations
. according to the contract of	0.0	_, -,	,	. raciipiani Oporationo
Wednesday July 28, 2021	10.7	5,230	3,347,060	Washplant Operations

he permitted rates for the Pond area	a as follows:  Max. Num. of  Hrs Taken  Per Day  12	Max. Taken Per Minute (litres) 7,274	Max. Taken Per Day (litres) 5,237,280	Max. Num. of Days Taken Per Year 210
ate & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments
riday July 30, 2021	11.3	5,455	3,682,447	Washplant Operations
aturday July 31, 2021				
unday August 1, 2021				<del></del>
londay August 2, 2021				CIVIC HOLIDAY
uesday August 3, 2021	10.8	5,592	3,606,739	Washplant Operations
Vednesday August 4, 2021	5.8	5,244	1,835,545	Washplant Operations
hursday August 5, 2021	10.9	5,169	3,385,671	Washplant Operations
riday August 6, 2021	9.9	5,135	3,055,204	Washplant Operations
aturday August 7, 2021				
unday August 8, 2021				
londay August 9, 2021	2.6	5,197	805,535	Washplant Operations
uesday August 10, 2021	11.1	5,674	3,773,297	Washplant Operations
Vednesday August 11, 2021	11.2	5,816	3,896,890	Washplant Operations
hursday August 12, 2021	9.8	5,103	2,984,985	Washplant Operations
riday August 13, 2021	8.9	6,054	3,238,797	Washplant Operations
aturday August 14, 2021				
funday August 15, 2021				
Monday August 16, 2021	10.3	5,534	3,403,462	Washplant Operations
uesday August 17, 2021	11.0	5,809	3,833,863	Washplant Operations
Vednesday August 18, 2021	11.1	5,078	3,376,586	Washplant Operations
hursday August 19, 2021	11.2	5,456 5,767	3,655,570	Washplant Operations
riday August 20, 2021 aturday August 21, 2021	11.2	5,767	3,864,147	Washplant Operations
			-	
unday August 22, 2021 Ionday August 23, 2021	8.0	 5,618	 2,696,537	Washplant Operations
uesday August 24, 2021	8.9	5,623	3,008,265	Washplant Operations  Washplant Operations
Vednesday August 25, 2021	11.0	5,623 5,601	3,696,642	Washplant Operations
hursday August 26, 2021	4.3	5,739	1,492,019	Washplant Operations
riday August 27, 2021	4.5	J,7 JJ	1,752,013	
eaturday August 27, 2021	 			
unday August 29, 2021				
riday August 29, 2021				
uesday August 31, 2021				Pond Cleaning
Vednesday September 1, 2021	<del></del>		<del></del>	Pond Cleaning
				Pond Cleaning

The permitted rates for the Pond area as follows:						
•	Max. Num. of Hrs Taken Per Day 12	Max. Taken Per Minute (litres) 7,274	Max. Taken Per Day (litres) 5,237,280	Max. Num. of Days Taken Per Year 210		
Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments		
Friday September 3, 2021				Pond Cleaning		
Saturday September 4, 2021						
Sunday September 5, 2021						
Monday September 6, 2021				LABOUR DAY		
Tuesday September 7, 2021	11.2	6,061	4,060,988	Washplant Operations		
Wednesday September 8, 2021	11.0	5,025	3,316,776	Washplant Operations		
Thursday September 9, 2021	11.0	5,522	3,644,782	Washplant Operations		
Friday September 10, 2021	10.6	5,542	3,519,106	Washplant Operations		
Saturday September 11, 2021				· ·		
Sunday September 12, 2021						
Monday September 13, 2021	10.9	4,899	3,208,703	Washplant Operations		
Tuesday September 14, 2021	11.0	5,626	3,713,109	Washplant Operations		
Wednesday September 15, 2021	10.4	4,578	2,861,202	Washplant Operations		
Thursday September 16, 2021	11.1	5,628	3,742,635	Washplant Operations		
Friday September 17, 2021	10.0	5,582	3,348,952	Washplant Operations		
Saturday September 18, 2021						
Sunday September 19, 2021						
Monday September 20, 2021	10.4	5,673	3,545,604	Washplant Operations		
Tuesday September 21, 2021	11.3	5,562	3,754,370	Washplant Operations		
Wednesday September 22, 2021	11.3	5,447	3,676,390	Washplant Operations		
Thursday September 23, 2021	9.2	5,381	2,959,812	Washplant Operations		
Friday September 24, 2021	10.6	5,523	3,507,182	Washplant Operations		
Saturday September 25, 2021						
Sunday September 26, 2021						
Monday September 27, 2021	11.2	5,610	3,758,912	Washplant Operations		
Tuesday September 28, 2021	11.1	5,493	3,652,542	Washplant Operations		
Wednesday September 29, 2021	8.3	5,467	2,733,445	Washplant Operations		
Thursday September 30, 2021	10.2	5,752	3,508,697	Washplant Operations		
Friday October 1, 2021	7.7	5,685	2,614,961	Washplant Operations		
Saturday October 2, 2021				<del></del>		
Sunday October 3, 2021		 005 00	2000240 470			
Monday October 4, 2021	10.92	5,905.82	3868310.479	Washplant Operations		
Tuesday October 5, 2021	11.1	5,682	3,778,218	Washplant Operations		
Wednesday October 6, 2021	9.1	5,923	3,227,819	Washplant Operations		
Thursday October 7, 2021	11.0	5,692	3,757,019	Washplant Operations		

The permitted rates for the Pond are	a as follows: Max. Num. of Hrs Taken Per Day 12	Max. Taken Per Minute (litres) 7,274	Max. Taken Per Day (litres) 5,237,280	Max. Num. of Days Taken Per Year 210
Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments
Friday October 8, 2021	8.7	5,749	2,989,717	Washplant Operations
Saturday October 9, 2021				
Sunday October 10, 2021				
Monday October 11, 2021				THANKSGIVING
Tuesday October 12, 2021	11.0	5,572	3,677,526	Washplant Operations
Wednesday October 13, 2021	11.3	5,591	3,773,675	Washplant Operations
Thursday October 14, 2021	11.2	5,632	3,773,675	Washplant Operations
Friday October 15, 2021	11.0	5,544	3,659,167	Washplant Operations
Saturday October 16, 2021				
Sunday October 17, 2021				
Monday October 18, 2021				Silt Pond Cleaning
Tuesday October 19, 2021	11.0	5,526	3,647,432	Washplant Operations
Vednesday October 20, 2021	11.3	5,371	3,625,287	Washplant Operations
Γhursday October 21, 2021	10.8	5,380	3,496,962	Washplant Operations
Friday October 22, 2021	10.9	5,641	3,694,939	Washplant Operations
Saturday October 23, 2021				
Sunday October 24, 2021				
Monday October 25, 2021	11.2	5,546	3,715,758	Washplant Operations
Tuesday October 26, 2021	10.8	5,104	3,317,533	Washplant Operations
Vednesday October 27, 2021				<del></del>
Γhursday October 28, 2021	11.1	4,746	3,156,086	Washplant Operations
Friday October 29, 2021	11.1	5,677	3,775,379	Washplant Operations
Saturday October 30, 2021				<del></del>
Sunday October 31, 2021				
Monday November 1, 2021	10.2	5,123	3,124,856	Washplant Operations
Tuesday November 2, 2021	11.0	5,701	3,762,698	Washplant Operations
Vednesday November 3, 2021	10.8	5,779	3,756,262	Washplant Operations
hursday November 4, 2021	6.8	6,142	2,518,244	Washplant Operations
riday November 5, 2021	10.3	6,159	3,787,492	Washplant Operations
Saturday November 6, 2021				<del></del>
Sunday November 7, 2021				
Monday November 8, 2021	11.3	4,879	3,317,912	Washplant Operations
Tuesday November 9, 2021	11.1	5,389	3,583,837	Washplant Operations
Vednesday November 10, 2021	11.2	5,988	4,012,156	Washplant Operations
Thursday November 11, 2021	11.0	5,986	3,950,832	Washplant Operations

# Water Taking Summary - Source Pond 2021 Annual Monitoring Report Dufferin Aggregates Teedon Pit Township of Tiny, County of Simcoe, Ontario

	Max. Num. of Hrs Taken Per Day 12	Max. Taken Per Minute (litres) 7,274	Max. Taken Per Day (litres) 5,237,280	Max. Num. of Days Taken Per Year 210
Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments
Friday November 12, 2021	10.5	6,159	3,880,424	Washplant Operations
Saturday November 13, 2021				<del></del>
Sunday November 14, 2021				
Monday November 15, 2021	6.6	5,413	2,138,189	Washplant Operations
Tuesday November 16, 2021	3.5	2,309	484,911	Plant Down Housekeeping
Vednesday November 17, 2021	10.7	5,926	3,792,602	Washplant Operations
Thursday November 18, 2021	11.1	5,937	3,947,804	Washplant Operations
Friday November 19, 2021	10.1	5,238	3,169,145	Washplant Operations
Saturday November 20, 2021				<u>-</u>
Sunday November 21, 2021				-
londay November 22, 2021	9.2	5,067	2,786,819	Washplant Operations
uesday November 23, 2021				
Vednesday November 24, 2021	10.1	4,981	3,013,565	Washplant Operations
hursday November 25, 2021	11.2	4,928	3,301,445	Washplant Operations
riday November 26, 2021	10.7	4,177	2,673,446	Washplant Operations
Saturday November 27, 2021				
Sunday November 28, 2021				
londay November 29, 2021				
uesday November 30, 2021	3.9	1,169	274,821	Year end cleanup
Vednesday December 1, 2021	4.3	4,044	1,031,146	Year end cleanup
hursday December 2, 2021				<del></del>
riday December 3, 2021	4.8	1,298	376,459	Year end cleanup
Saturday December 4, 2021				
Sunday December 5, 2021				
londay December 6, 2021				
uesday December 7, 2021				<del></del>
Vednesday December 8, 2021				<del></del>
hursday December 9, 2021				<del></del>
riday December 10, 2021				
Saturday December 11, 2021				
Sunday December 12, 2021				
londay December 13, 2021				
uesday December 14, 2021				
Vednesday December 15, 2021				
hursday December 16, 2021				

## Water Taking Summary - Source Pond 2021 Annual Monitoring Report Dufferin Aggregates Teedon Pit Township of Tiny, County of Simcoe, Ontario

The permitted rates for the Pond area as follows:					
·	Max. Num. of Hrs Taken Per Day 12	Max. Taken Per Minute (litres) 7,274	Max. Taken Per Day (litres) 5,237,280	Max. Num. of Days Taken Per Year 210	
Date & Time	Hours of Taking (hours)	Rate of Taking (Lpm)	Amount of Taking (Lpd)	Comments	
Friday December 17, 2021	1.0	561	33,687	Washroom Fill	
Saturday December 18, 2021				-	
Sunday December 19, 2021				<del></del>	
Monday December 20, 2021					
Tuesday December 21, 2021					
Wednesday December 22, 2021					
Thursday December 23, 2021					
Friday December 24, 2021					
Saturday December 25, 2021					
Sunday December 26, 2021					
Monday December 27, 2021					
Tuesday December 28, 2021					
Wednesday December 29, 2021					

Thursday December 30, 2021 Friday December 31, 2021

# Appendix B-3

**Source Pond Water Levels** 

Appendix B-3 Page 1 of 7

Date & Time	Start of Day SW1 Elevation (m AMSL)	End of Day SW1 Elevation (m AMSL)	SW1 Reading Comment
Friday January 1, 2021			<del></del>
Saturday January 2, 2021			<del></del>
Sunday January 3, 2021			
Monday January 4, 2021			<del></del>
Tuesday January 5, 2021			<del></del>
Wednesday January 6, 2021			
Thursday January 7, 2021	==		
Friday January 8, 2021			
Saturday January 9, 2021	 		<del></del>
			<del></del>
Sunday January 10, 2021			<del></del>
Monday January 11, 2021			<del></del>
Tuesday January 12, 2021			<del></del>
Wednesday January 13, 2021			
Thursday January 14, 2021			
Friday January 15, 2021			
Saturday January 16, 2021			<del></del>
Sunday January 17, 2021			
Monday January 18, 2021			
Tuesday January 19, 2021			<del></del>
Wednesday January 20, 2021			<del></del>
Thursday January 21, 2021			
Friday January 22, 2021			
Saturday January 23, 2021	==		
Sunday January 24, 2021	<del></del>	 	<del></del>
			<b></b>
Monday January 25, 2021			<del></del>
Tuesday January 26, 2021			<del></del>
Wednesday January 27, 2021			<del></del>
Thursday January 28, 2021			<del></del>
Friday January 29, 2021			
Saturday January 30, 2021	<del></del>		
Sunday January 31, 2021			<del></del>
Monday February 1, 2021			
Tuesday February 2, 2021			<del></del>
Wednesday February 3, 2021			
Thursday February 4, 2021			
Friday February 5, 2021			<del></del>
Saturday February 6, 2021			<del></del>
Sunday February 7, 2021			<del></del>
Monday February 8, 2021			
Tuesday February 9, 2021			<del></del>
Wednesday February 10, 2021			
Thursday February 11, 2021			
Friday February 12, 2021	<del></del>		<del></del>
·			<del></del>
Saturday February 13, 2021			-
Sunday February 14, 2021	=	<del></del>	
Monday February 15, 2021			*START CHECKING *
Tuesday February 16, 2021			Frozen & Snow Covered
Wednesday February 17, 2021	==		Frozen & Snow Covered
Thursday February 18, 2021			Frozen & Snow Covered
Friday February 19, 2021			Frozen & Snow Covered
Saturday February 20, 2021	-		
Sunday February 21, 2021			
Monday February 22, 2021			Frozen & Snow Covered
Tuesday February 23, 2021			Frozen & Snow Covered
Wednesday February 24, 2021			Frozen & Snow Covered
Thursday February 25, 2021			Frozen & Snow Covered
,,, <del></del> .			

Appendix B-3 Page 2 of 7

Date & Time	Start of Day SW1 Elevation (m AMSL)	End of Day SW1 Elevation (m AMSL)	SW1 Reading Comment
Friday February 26, 2021			Frozen & Snow Covered
Saturday February 27, 2021			<del></del>
Sunday February 28, 2021			
Monday March 1, 2021			Frozen & Snow Covered
Tuesday March 2, 2021			Frozen & Snow Covered
Wednesday March 3, 2021			Frozen & Snow Covered
Thursday March 4, 2021			Frozen & Snow Covered
Friday March 5, 2021			Frozen & Snow Covered
Saturday March 6, 2021			<del></del>
Sunday March 7, 2021			<del></del>
Monday March 8, 2021			Frozen & Snow Covered
Tuesday March 9, 2021			Frozen & Snow Covered
Wednesday March 10, 2021			Frozen & Snow Covered
Thursday March 11, 2021			Frozen & Snow Covered
Friday March 12, 2021			Frozen & Snow Covered
Saturday March 13, 2021			
Sunday March 14, 2021			<del></del>
Monday March 15, 2021			Frozen & Snow Covered
Tuesday March 16, 2021			Frozen & Snow Covered
Wednesday March 17, 2021			Frozen & Snow Covered
Thursday March 18, 2021			Frozen & Snow Covered
Friday March 19, 2021			Frozen & Snow Covered
Saturday March 20, 2021			<del></del>
Sunday March 21, 2021			<del></del>
Monday March 22, 2021			Thaw raised staff gauge not accurate
Tuesday March 23, 2021			Thaw raised staff gauge not accurate
Wednesday March 24, 2021			Thaw raised staff gauge not accurate
Thursday March 25, 2021			Thaw raised staff gauge not accurate
Friday March 26, 2021			Thaw raised staff gauge not accurate
Saturday March 27, 2021			<del></del>
Sunday March 28, 2021			<del></del>
Monday March 29, 2021	263.73	263.73	Staff Gauge Reinstalled
Tuesday March 30, 2021	263.73	263.73	<del></del>
Wednesday March 31, 2021	263.72	263.72	<del></del>
Thursday April 1, 2021	263.72	263.72	<del></del>
Friday April 2, 2021			GOOD FRIDAY
Saturday April 3, 2021			<del></del>
Sunday April 4, 2021			<del></del>
Monday April 5, 2021	263.70	263.73	<del></del>
Tuesday April 6, 2021	263.73	263.69	<del></del>
Wednesday April 7, 2021	263.69	263.57	
Thursday April 8, 2021	263.57	<263.43	
Friday April 9, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday April 10, 2021			-
Sunday April 11, 2021			
Monday April 12, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday April 13, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday April 14, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday April 15, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday April 16, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday April 17, 2021	-	-	
Sunday April 18, 2021		-	
Monday April 19, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday April 20, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday April 21, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday April 22, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.

Appendix B-3 Page 3 of 7

Date & Time	Start of Day SW1 Elevation (m AMSL)	End of Day SW1 Elevation (m AMSL)	SW1 Reading Comment
Friday April 23, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday April 24, 2021			
Sunday April 25, 2021			
Monday April 26, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday April 27, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday April 28, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday April 29, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday April 30, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday May 1, 2021 Sunday May 2, 2021	 		 
Monday May 3, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday May 4, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday May 5, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday May 6, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday May 7, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday May 8, 2021 Sunday May 9, 2021	 	 	
Monday May 10, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday May 11, 2021	<263.43 <263.43	<263.43 <263.43	Staff Gauge Dry. See datalogger data.
Wednesday May 12, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday May 13, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday May 14, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday May 15, 2021			
Sunday May 16, 2021			
Monday May 17, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday May 18, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday May 19, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday May 20, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday May 21, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday May 22, 2021			<del></del>
Sunday May 23, 2021			 \#070B\A BA\
Monday May 24, 2021			VICTORIA DAY
Tuesday May 25, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday May 26, 2021 Thursday May 27, 2021	<263.43 <263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday May 28, 2021	<263.43	<263.43 <263.43	Staff Gauge Dry. See datalogger data. Staff Gauge Dry. See datalogger data.
Saturday May 29, 2021	-200.40	-200.40	
Sunday May 30, 2021			
Monday May 31, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday June 1, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday June 2, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday June 3, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday June 4, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday June 5, 2021 Sunday June 6, 2021			 
Monday June 7, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday June 8, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday June 9, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday June 10, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday June 11, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday June 12, 2021 Sunday June 13, 2021	 		 
Monday June 14, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday June 15, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday June 16, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday June 17, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.

Appendix B-3 Page 4 of 7

Date & Time	Start of Day SW1 Elevation (m AMSL)	End of Day SW1 Elevation (m AMSL)	SW1 Reading Comment
Friday June 18, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday June 19, 2021			
Sunday June 20, 2021			
Monday June 21, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday June 22, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday June 23, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday June 24, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday June 25, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday June 26, 2021 Sunday June 27, 2021			<del></del>
Monday June 28, 2021	263.72	263.61	
Tuesday June 29, 2021	263.67	263.59	<u></u>
Wednesday June 30, 2021	263.64	263.64	<u></u>
Thursday July 1, 2021			CANADA DAY
Friday July 2, 2021	263.65	263.65	
Saturday July 3, 2021			-
Sunday July 4, 2021			<del></del>
Monday July 5, 2021	263.66	263.68	
Tuesday July 6, 2021	263.69	263.69	<del></del>
Wednesday July 7, 2021	263.69	263.69	-
Thursday July 8, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday July 9, 2021	263.45	<263.43	Staff Gauge Dry. See datalogger data.
Saturday July 10, 2021			<del></del>
Sunday July 11, 2021			Ctaff Cours Dry Cos detalarmen deta
Monday July 12, 2021 Tuesday July 13, 2021	263.48 <263.43	<263.43 <263.43	Staff Gauge Dry. See datalogger data. Staff Gauge Dry. See datalogger data.
Wednesday July 14, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday July 15, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday July 16, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday July 17, 2021			
Sunday July 18, 2021			
Monday July 19, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday July 20, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday July 21, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday July 22, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday July 23, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday July 24, 2021			<del></del>
Sunday July 25, 2021			
Monday July 26, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday July 27, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data. Staff Gauge Dry. See datalogger data.
Wednesday July 28, 2021 Thursday July 29, 2021	<263.43 <263.43	<263.43 <263.43	Staff Gauge Dry. See datalogger data.
Friday July 30, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday July 31, 2021			
Sunday August 1, 2021			<del></del>
Monday August 2, 2021			CIVIC HOLIDAY
Tuesday August 3, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday August 4, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday August 5, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday August 6, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday August 7, 2021			<del>-</del>
Sunday August 8, 2021			
Monday August 9, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday August 10, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday August 11, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday August 12, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.

Appendix B-3 Page 5 of 7

Date & Time	Start of Day SW1 Elevation (m AMSL)	End of Day SW1 Elevation (m AMSL)	SW1 Reading Comment
Friday August 13, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday August 14, 2021			
Sunday August 15, 2021			<del></del>
Monday August 16, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday August 17, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday August 18, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday August 19, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday August 20, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday August 21, 2021			
Sunday August 22, 2021			<del></del>
Monday August 23, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday August 24, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday August 25, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday August 26, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday August 27, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday August 28, 2021		-	
Sunday August 29, 2021			
Friday August 27, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday August 31, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday September 1, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday September 2, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday September 3, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday September 4, 2021			
Sunday September 5, 2021			
Monday September 6, 2021			LABOUR DAY
Tuesday September 7, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday September 8, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday September 9, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday September 10, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday September 11, 2021			<del></del>
Sunday September 12, 2021			
Monday September 13, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday September 14, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday September 15, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday September 16, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday September 17, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday September 18, 2021 Sunday September 19, 2021			<del></del>
Monday September 20, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday September 21, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday September 22, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday September 23, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday September 24, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday September 25, 2021		-	
Sunday September 26, 2021			<del></del>
Monday September 27, 2021	263.45	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday September 28, 2021	263.45	<263.43	Staff Gauge Dry. See datalogger data.
Wednesday September 29, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Thursday September 30, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Friday October 1, 2021	<263.43	<263.43	Staff Gauge Dry. See datalogger data.
Saturday October 2, 2021			
Sunday October 3, 2021			
Monday October 4, 2021	263.51	<263.43	Staff Gauge Dry. See datalogger data.
Tuesday October 5, 2021	263.50	263.33	<del></del>
Wednesday October 6, 2021	263.46	263.35	
Thursday October 7, 2021	263.42	263.30	

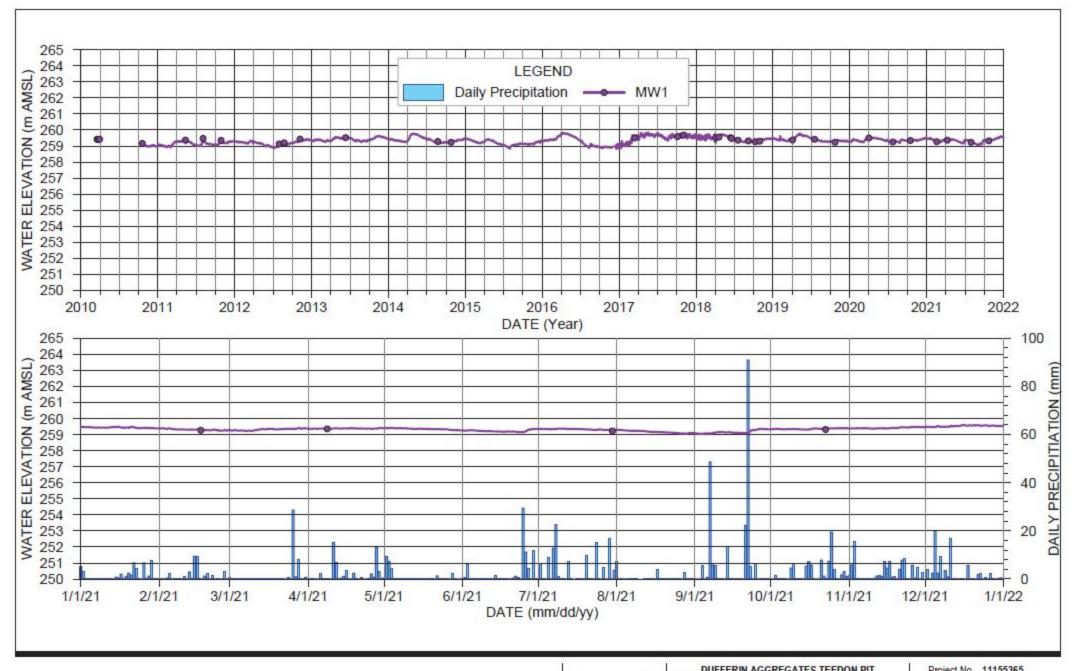
Appendix B-3 Page 6 of 7

Date & Time	Start of Day SW1 Elevation (m AMSL)	End of Day SW1 Elevation (m AMSL)	SW1 Reading Comment
Friday October 8, 2021	263.41	263.30	
Saturday October 9, 2021			
Sunday October 10, 2021			
Monday October 11, 2021			THANKSGIVING
Tuesday October 12, 2021	263.43	263.29	
Wednesday October 13, 2021	263.40	263.29	<del></del>
Thursday October 14, 2021	263.37	263.27	
Friday October 15, 2021	263.34	263.24	
Saturday October 16, 2021			
Sunday October 17, 2021			
Monday October 18, 2021	263.51	263.51	
Tuesday October 19, 2021	263.51	263.26	
Wednesday October 20, 2021	263.35	263.14	
Thursday October 21, 2021	263.25	263.20	
Friday October 22, 2021	263.30	263.23	
Saturday October 23, 2021			
Sunday October 24, 2021			-
Monday October 25, 2021	263.38	263.27	
Tuesday October 26, 2021	263.36	263.23	
Wednesday October 27, 2021	263.36	263.36	
Thursday October 28, 2021	263.37	263.22	
Friday October 29, 2021	263.34	263.25	
Saturday October 30, 2021	263.36		
Sunday October 31, 2021			
Monday November 1, 2021	263.42	263.31	
Tuesday November 2, 2021	263.42	263.30	<del></del>
Wednesday November 3, 2021	263.41	263.30	
Thursday November 4, 2021	263.39	263.28	
Friday November 5, 2021	263.37	263.24	
Saturday November 6, 2021			
Sunday November 7, 2021			<del></del>
Monday November 8, 2021	263.38	263.27	<del></del>
Tuesday November 9, 2021	263.34	263.16	<del></del>
Wednesday November 10, 2021	263.33	263.18	<del></del>
Thursday November 11, 2021	263.32	263.19	<del></del>
Friday November 12, 2021	263.32	263.22	
Saturday November 13, 2021		==	<del></del>
Sunday November 14, 2021			<del></del>
Monday November 15, 2021	263.43	263.29	<del></del>
Tuesday November 16, 2021	263.47	263.46	<del></del>
Wednesday November 17, 2021	263.46	263.28 263.32	<del></del>
Thursday November 18, 2021 Friday November 19, 2021	263.45 263.43	263.30	<del></del>
Saturday November 20, 2021	203.43	205.50	<u>-</u>
Sunday November 21, 2021			
Monday November 22, 2021	263.48	263.42	
Tuesday November 23, 2021	263.48	263.48	<del></del>
Wednesday November 24, 2021	263.48	263.42	<del></del>
Thursday November 25, 2021	263.49	263.43	<del></del>
Friday November 26, 2021	263.49	263.44	<del></del>
Saturday November 27, 2021			
Sunday November 28, 2021			
Monday November 29, 2021	263.50	263.50	<del></del>
Tuesday November 30, 2021	263.51	263.48	<del></del>
Wednesday December 1, 2021	263.49	263.47	<del></del>
Thursday December 2, 2021	263.49	263.49	<del></del>
•			

Appendix B-3 Page 7 of 7

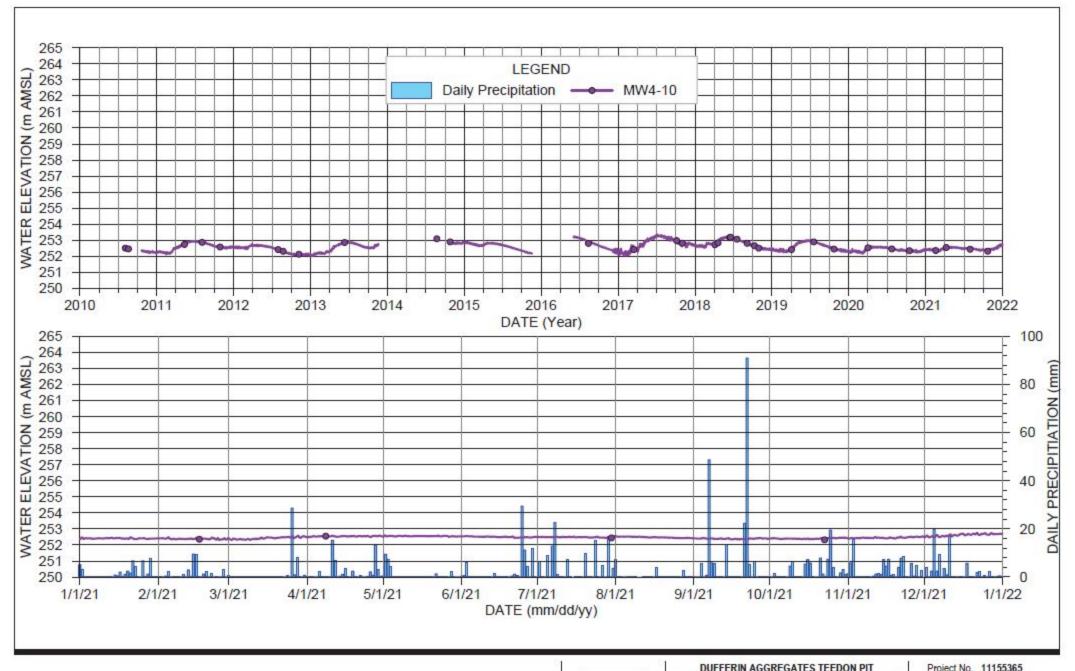
Date & Time	Start of Day SW1 Elevation (m AMSL)	End of Day SW1 Elevation (m AMSL)	SW1 Reading Comment
Friday December 3, 2021	263.50	263.49	
Saturday December 4, 2021			<del></del>
Sunday December 5, 2021			
Monday December 6, 2021	263.55	263.55	
Tuesday December 7, 2021	263.55	263.55	
Wednesday December 8, 2021	263.55	263.55	<del></del>
Thursday December 9, 2021	263.55	263.55	<del></del>
Friday December 10, 2021	263.55	263.55	
Saturday December 11, 2021	-	-	
Sunday December 12, 2021			<del></del>
Monday December 13, 2021	263.55	263.55	
Tuesday December 14, 2021	263.55	263.55	
Wednesday December 15, 2021	263.55	263.55	*STOP CHECKING*
Thursday December 16, 2021			
Friday December 17, 2021			
Saturday December 18, 2021			
Sunday December 19, 2021			
Monday December 20, 2021			
Tuesday December 21, 2021			
Wednesday December 22, 2021			
Thursday December 23, 2021			
Friday December 24, 2021			
Saturday December 25, 2021			
Sunday December 26, 2021			
Monday December 27, 2021			
Tuesday December 28, 2021			
Wednesday December 29, 2021			
Thursday December 30, 2021			
Friday December 31, 2021			

# Appendix C Hydrographs – Individual Wells



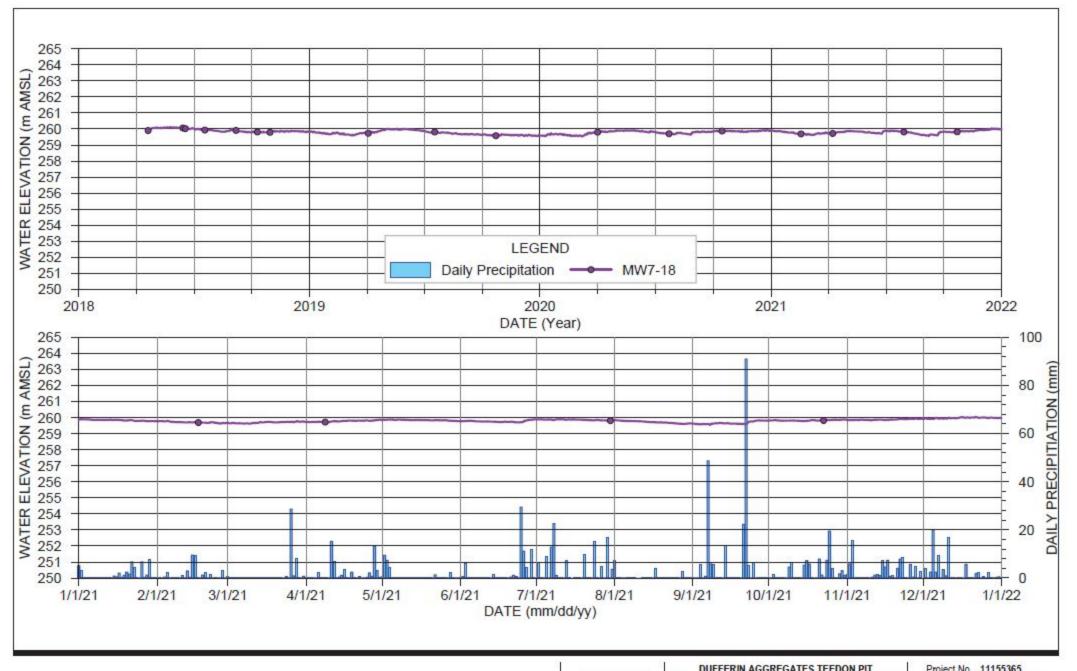


HYDROGRAPH SHALLOW GROUNDWATER ZONE MW1 Project No. 11155365 Date April 12, 2022



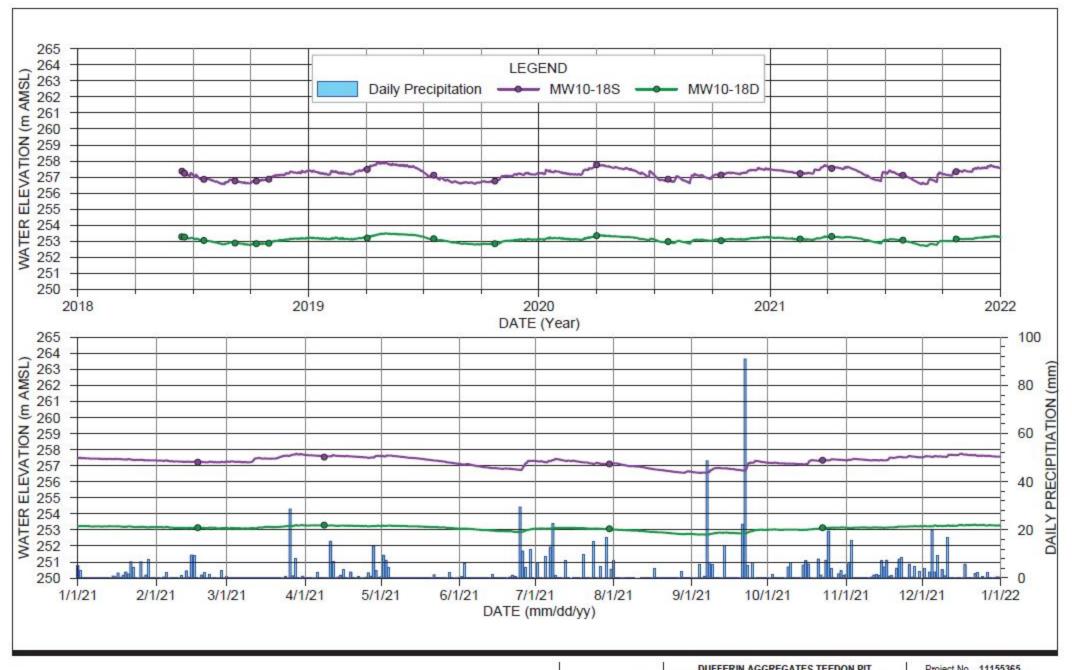


HYDROGRAPH SHALLOW GROUNDWATER ZONE MW4-10 Project No. 11155365 Date April 12, 2022



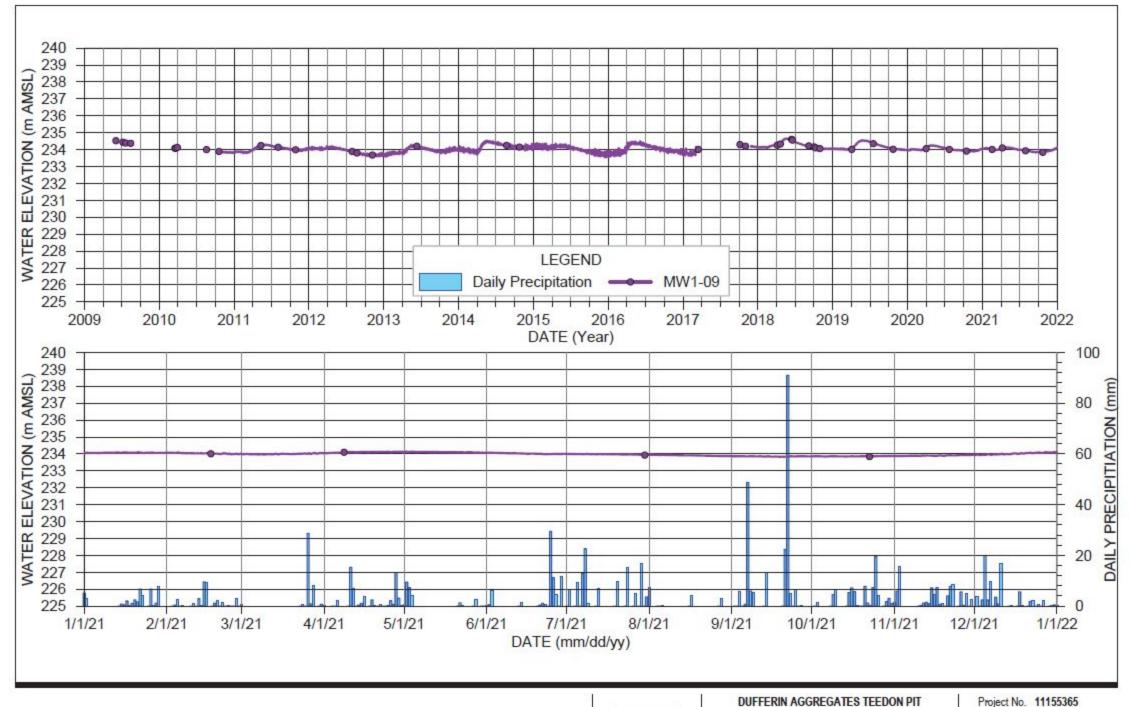


HYDROGRAPH SHALLOW GROUNDWATER ZONE MW7-18 Project No. 11155365 Date April 12, 2022





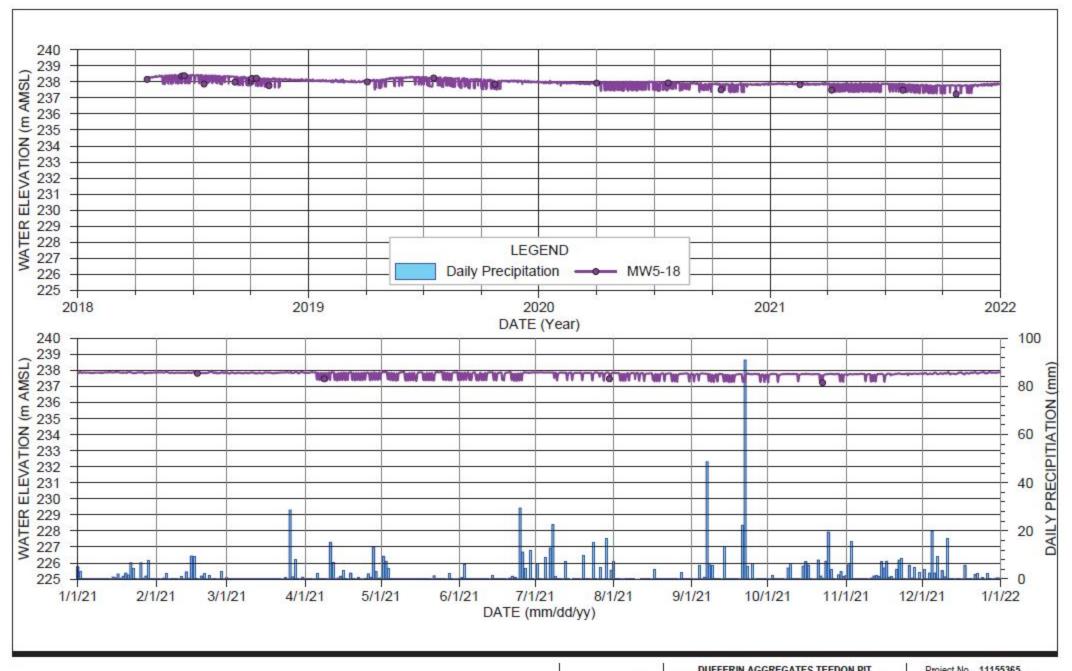
HYDROGRAPH SHALLOW GROUNDWATER ZONE MW10-18 Project No. 11155365 Date April 12, 2022





> HYDROGRAPH UPPER AQUIFER MW1-09

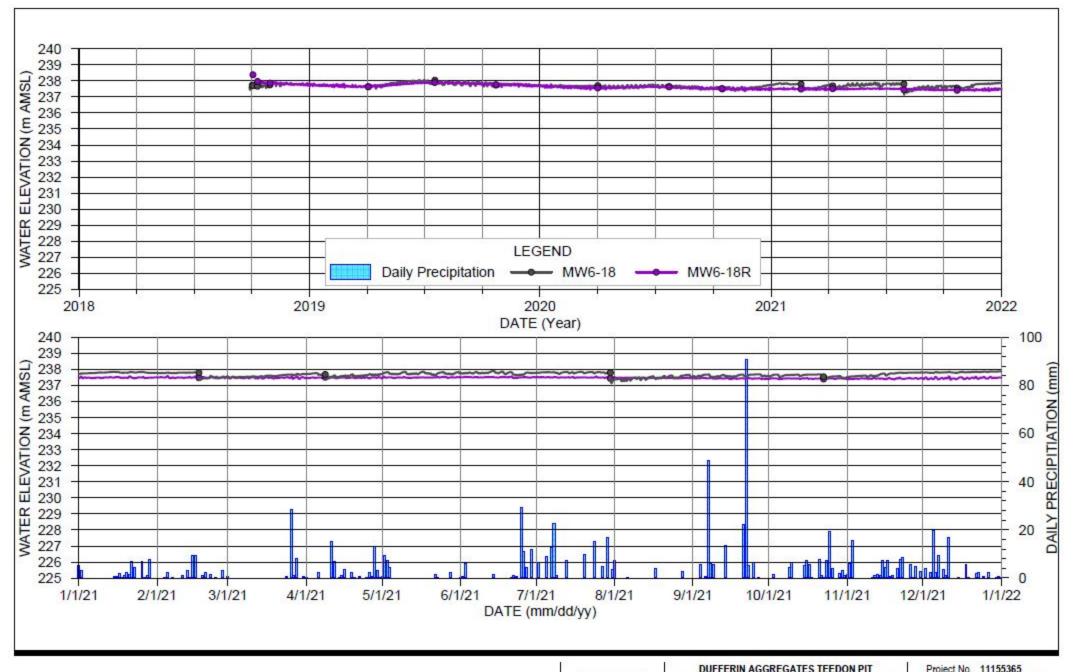
Project No. 11155365 Date April 12, 2022





> HYDROGRAPH UPPER AQUIFER MW5-18

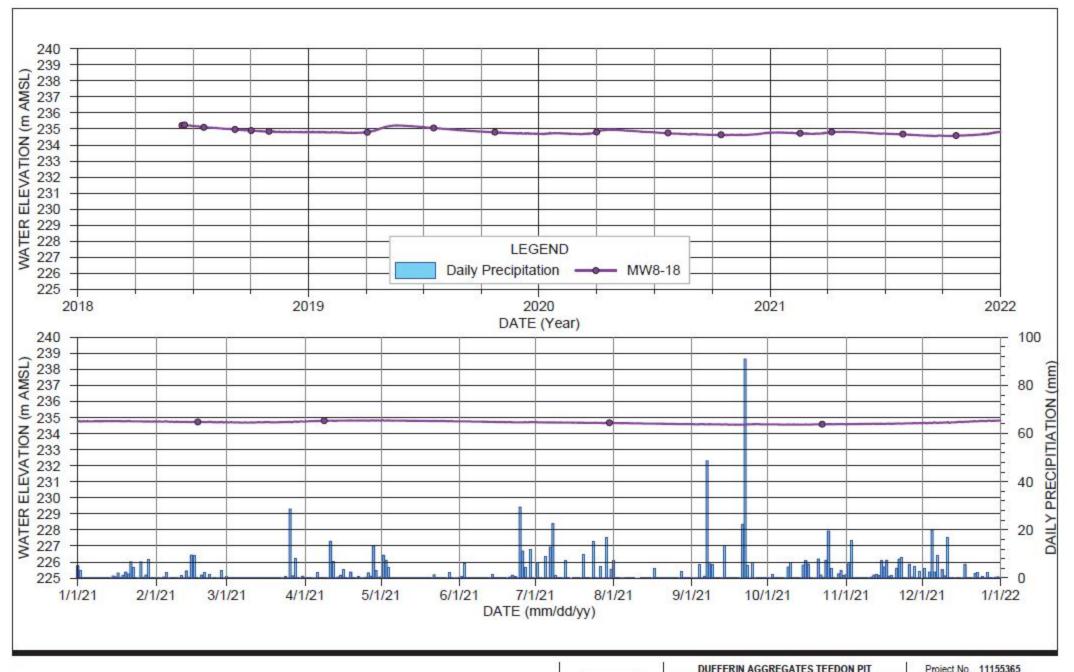
Project No. 11155365 Date April 12, 2022





> HYDROGRAPH UPPER AQUIFER MW6-18

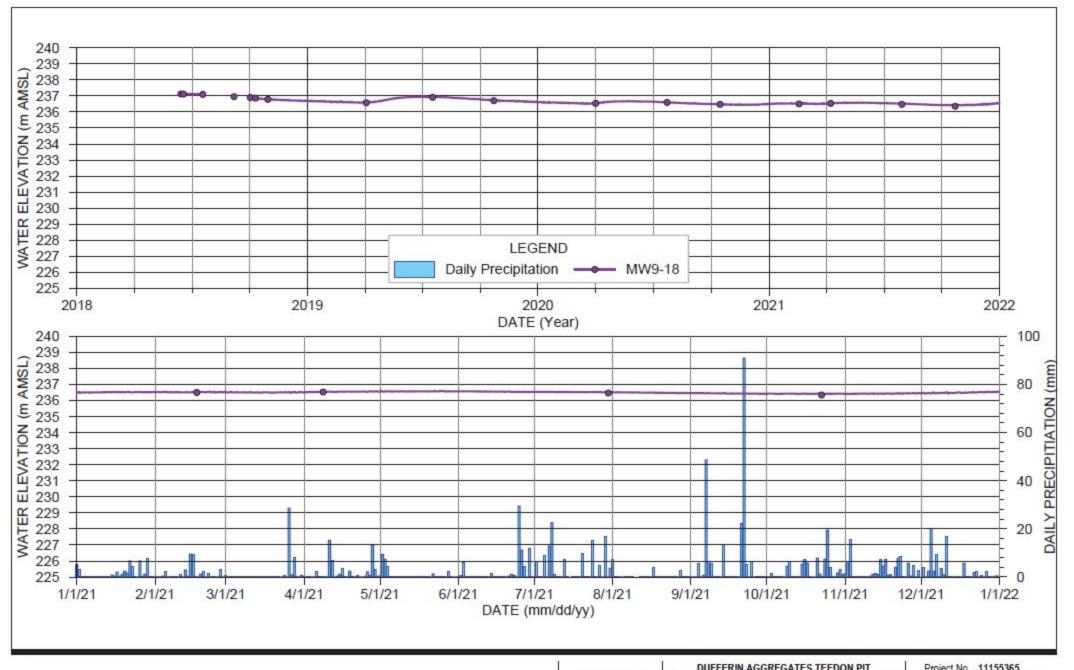
Project No. 11155365 Date April 12, 2022





> HYDROGRAPH UPPER AQUIFER MW8-18

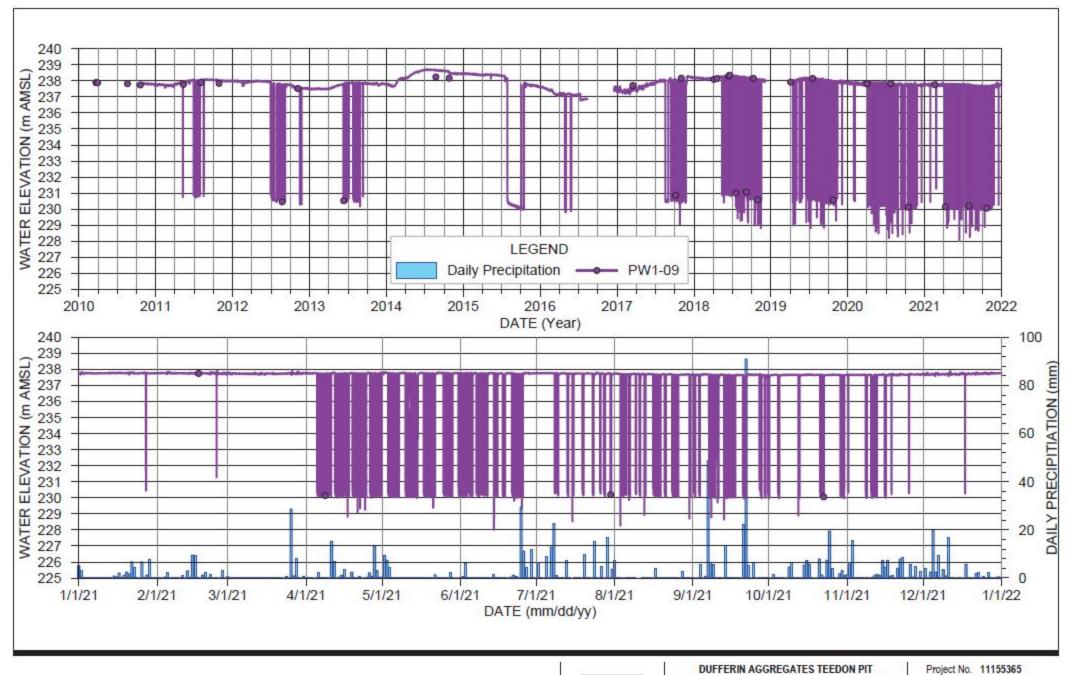
Project No. 11155365 Date April 12, 2022





> HYDROGRAPH UPPER AQUIFER MW9-18

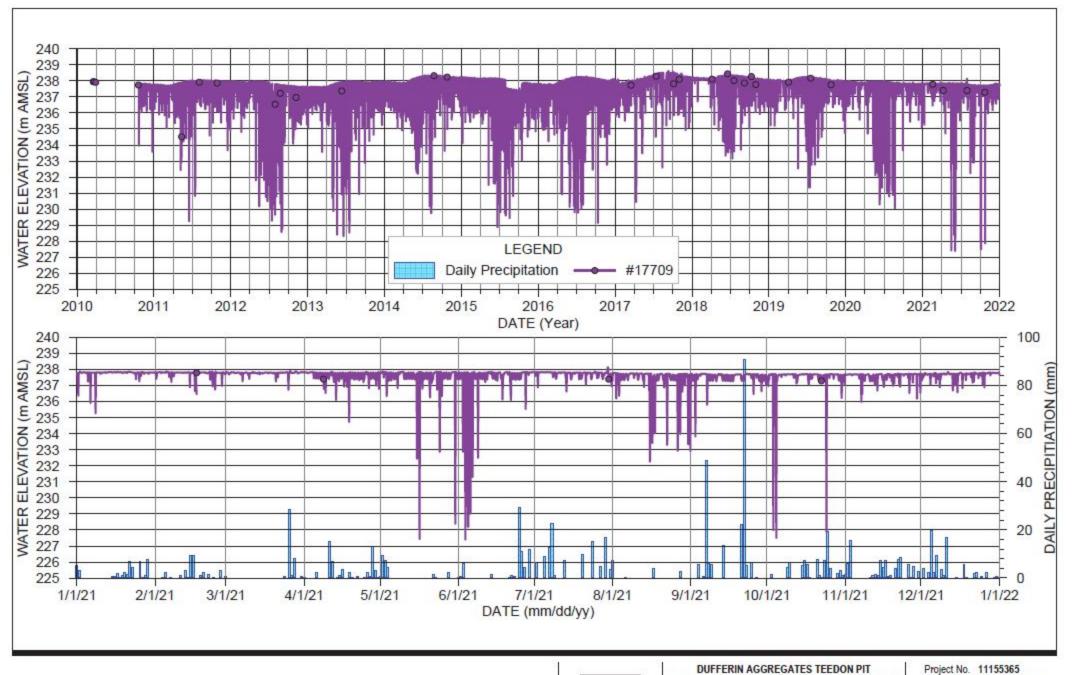
Project No. 11155365 Date April 12, 2022





> HYDROGRAPH UPPER AQUIFER PW1-09

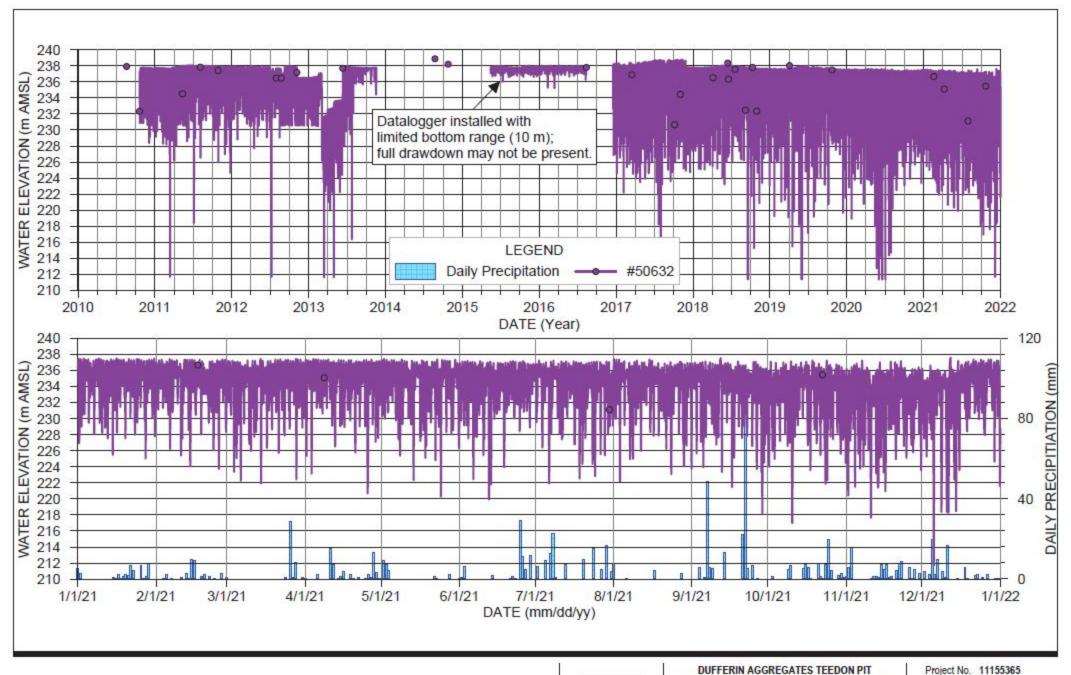
Project No. 11155365 Date April 12, 2022





> HYDROGRAPH PRIVATE WELL #17709

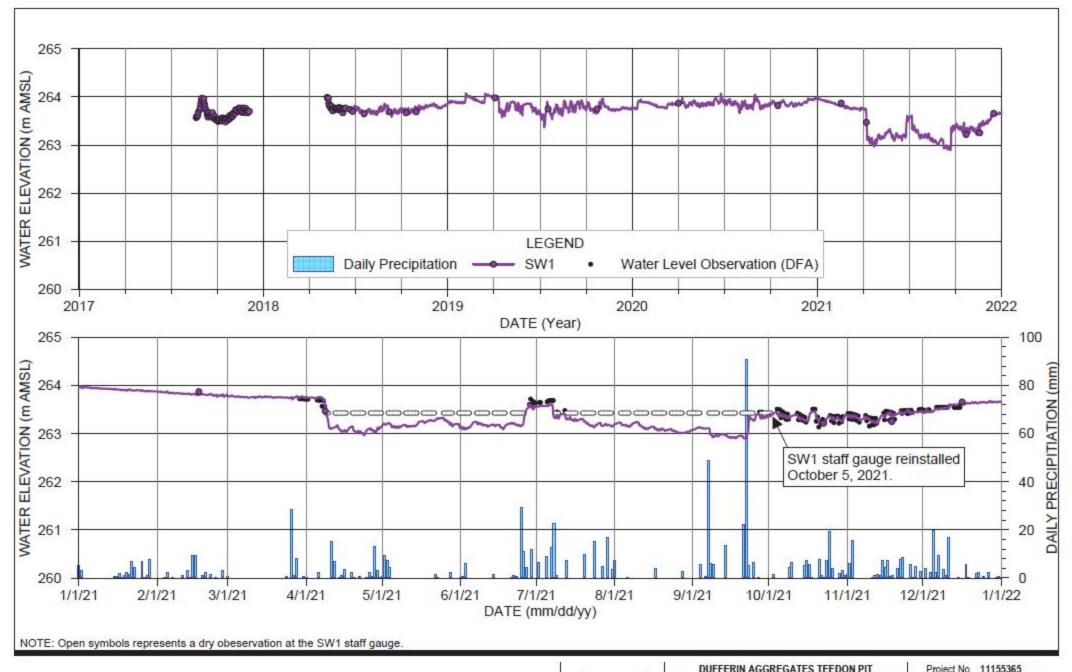
Project No. 11155365 Date April 12, 2022





> HYDROGRAPH PRIVATE WELL #50632

Project No. 11155365 Date April 12, 2022





> HYDROGRAPH SURFACE WATER SUMP POND (SW1)

Project No. 11155365 Date April 25, 2022



ghd.com

