



Stantec Consulting Ltd.
100-300 Hagey Boulevard
Waterloo ON N2L 0A4

June 9, 2022

Project/File: 160961352

Britney Fricke, MCIP, ROO

Senior Planner
Planning and Development Services Department
Regional Municipality of Niagara
1815 Sir Isaac Brock Way, PO Box 1042
Thorold, Ontario L2V 4T7

Dear Britney Fricke, MCIP, ROO,

**Reference: Information Request for Upper Quarry Natural Environment Report Received from
Dougan & Associates March 31, 2022**

The following provides responses to comments received from Steve Hill of Dougan & Associates regarding the Upper Quarry Natural Environment Technical Report prepared by Stantec in support of a proposed aggregate quarry (Stantec 2021).

Comment 1

Information/mapping regarding the zone of influence of dewatering.

Response 1

The zone of influence mapping is illustrated on Figures 24 and 26 of the technical water report prepared by WSP (WSP 2021), see **Attachment 1**. Figure 24 shows baseline conditions “available drawdown” in the bedrock, while Figure 26 shows the predicted available drawdown at full quarry development. The red/yellow area highlighted around the proposed quarry represents the full extent of dewatering conditions prior to quarry rehabilitation.

Comment 2

Information regarding seasonal trends that may be associated with under draining wetlands within the zone of influence (particularly the wetland north of the Fernwood subdivision).

Response 2

The details of the baseline seasonal water levels in the wetland north of Fernwood is provided in the WSP water resource report (WSP2021). These are visually shown on Figures 22A and 22B of the WSP Water Study Report, figures attached (Attachment 1). The figures summarize seasonal water levels for the wet year (2017) and dry year (2018). In summary, it is estimated that under full development conditions, groundwater recharge in the wetland will increase between 5mm/yr and 11mm/yr compared to baseline conditions. This represents between 2% and 4 % of the estimated average annual water surplus of the area of 309.4 mm/ yr and is therefore considered in the water study report as negligible.

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The hydroperiod of the wetland is supported by incident precipitation and other surface water and given the very low permeability of the subsurface matrix, negative impacts to the form and function of the wetland are not predicted .

Comment 3

With regard to the wetland areas W1A and W1C associated with groundwater discharge – were there any plant species of conservation concern or high fidelity (i.e. high CC scores) associated with this area?

Response 3

Native species are assigned a rank of 0 to 10, known as coefficient of Conservatism (cc) based on its degree of fidelity to a range of synecological parameters. Those plants with high degree of fidelity to a narrow range of synecological parameters are assigned cc values of 8 to 9 (Andreas and Lichvar, 1995). There are no plants recorded during the botanical inventories or other incidental observations with a cc of 9 or 10 at any location including the wetland areas W1A and W1C that are riparian features found along the watercourse on site.

Comment 4

Provide the correct legend for Figure 9 Ecological Land Classification.

Response 4

The legend for figure 9 has been corrected and the revised figure is attached (**Attachment 2**).

Comment 5

Provide an updated Appendix D as the species lists and summaries had formatting errors.

Response 5

Appendix D has been revised and formatted correctly. The appendix is attached (**Attachment 3**)

Comment 6

Any background information on fish and fish habitat for areas outside of the primary study area, which would provide context to the study area observations.

Response 6

Based on a review of Ministry of Natural Resources and Forestry (MNR) as well as Fisheries and Oceans Canada (DFO) GIS platform mapping, there is a general lack of background fisheries data available, particularly Aquatic Resource Area Survey Points, in the general regional area beyond the Study Area. One of the closest watercourses with Aquatic Resource Area Water Line Segment data is Beaverdams Creek. Segment data consist of a species list that includes Fantail Darter, Johnny Darter x Tessellated Darter, Longnose Dace, Northern Hog Sucker, Rainbow Darter, River Chub, Spottail Shiner, Stonecat and White Sucker. The capture location of these species is not attributed to any specific Aquatic Resource Area survey point and the source of species list is unknown.

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Shriner's Creek is located to the north of Beaverdams Creek. Sparse fish data for Shriner's Creek includes two ARA survey points (Beechwood Road and Garner Road) that yielded Bluntnose Minnow and Largemouth Bass as species captured by DFO at both stations.

The lacustrine-like lower reaches of Shriner's Creek and Beaverdams Creek are connected to each other via a wide cut extending south to north along the west side of Davis Road (Highway 58) and would provide more substantial and permanent holding water than the many tributaries that feed into both creek systems. The general area features a number of smaller, shallow marshy channels or channel sections that comprise habitat conditions in the upper reaches of these systems or that discharge into either creek at various points along their lengths. The habitat productivity in these shallow marshy habitat systems may be limited by the flashiness of the flow regime that varies on annual basis depending on snow melt and spring precipitation and the onset of intermittent flow conditions. Shallow wetland habitat is available in abundance along the margins of the lower reaches of both Beaverdams and Shriner's Creeks and likely provides a more stable habitat environment on an annual basis given the backwater influence provided by the water levels in the Welland Canal.

Comment 7

Any incidental species records that were not included in the Natural Environment Report (e.g. as mentioned during the meeting, turtles were observed).

Response 7

All surveys completed on-site were used to observe and record signs and sightings of wildlife that may be using various habitats as part of the standard field study inventories, no additional observations of turtles were recorded.

Sincerely,

STANTEC CONSULTING LTD.

Daniel Eusebi

Senior Environmental Planner

Phone: 519 585 3452

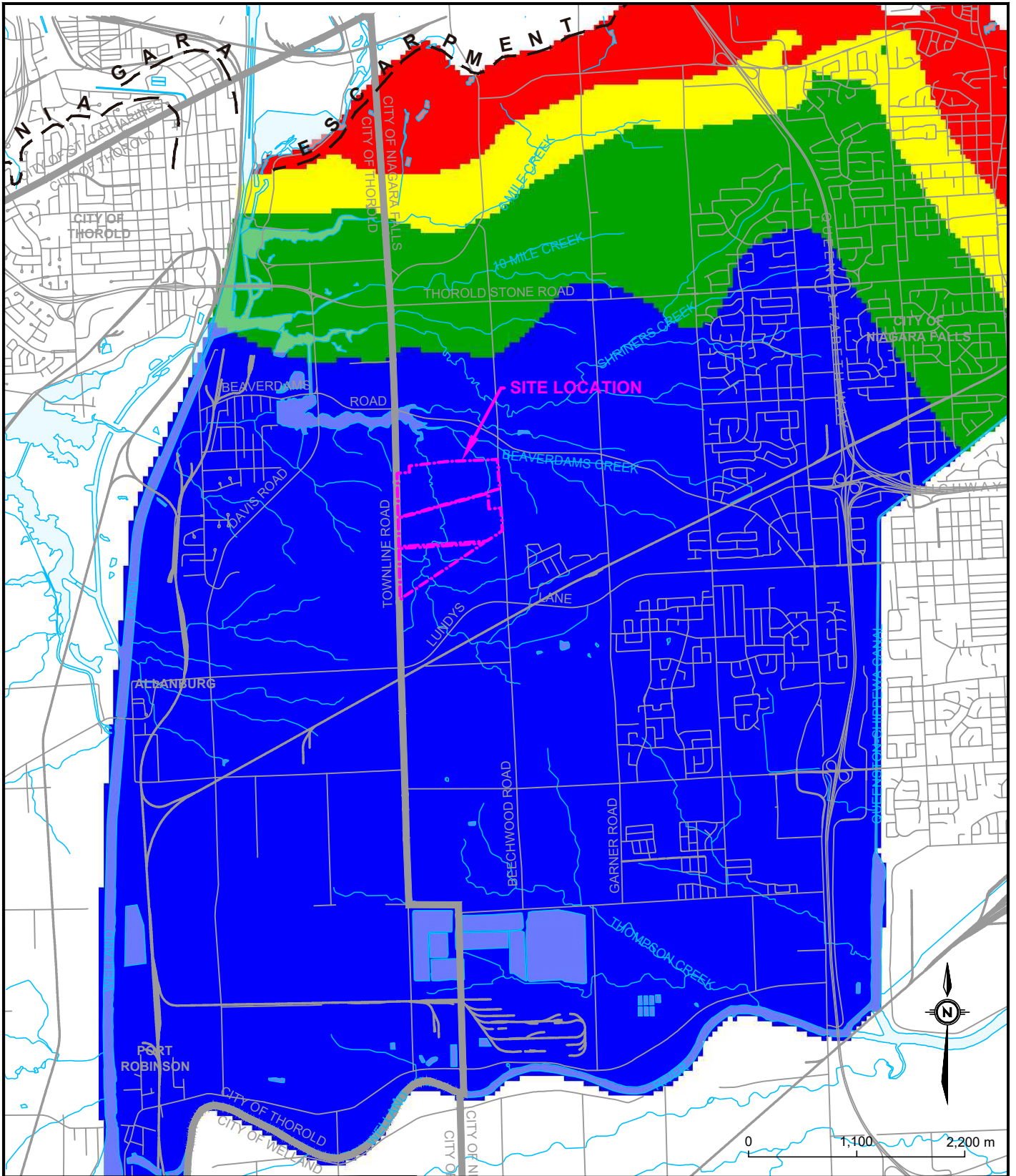
Fax: 519 836 2493

dan.eusebi@stantec.com

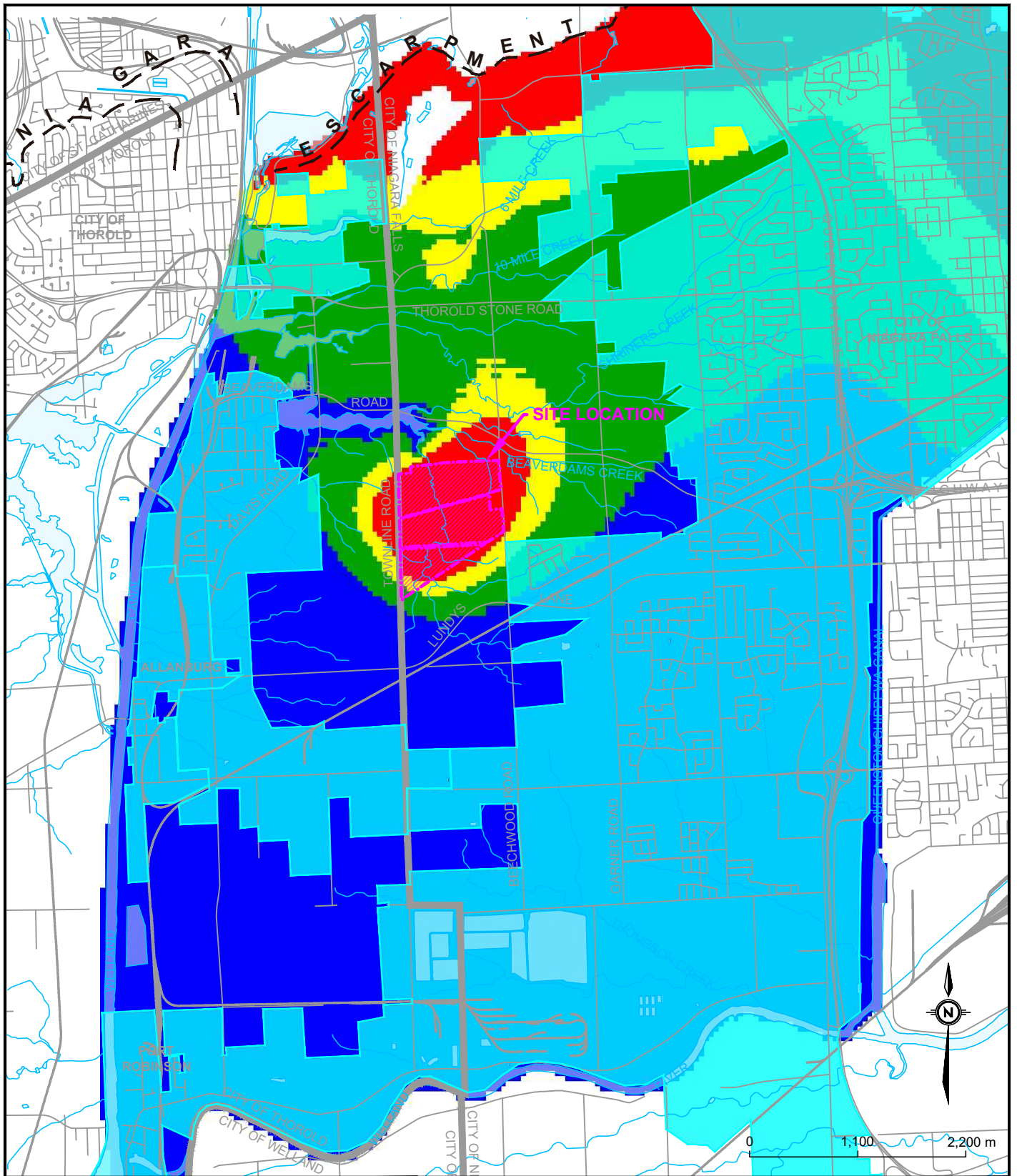
Attachment: 1 – WSP Figures
2 – Stantec Figures
3 – Appendix D

cc. Sean Norman, Niagara Region
Debra Walker, MHBC Kevin
Kehl, Walker Industries Sean
Geddes, Stantec Kevin
Fitzpatrick WSP

Attachment 1 WSP Figures



LEGEND SHALLOW AND DEEP BEDROCK AQUIFER AVAILABLE DRAWDOWN (m) 	SHALLOW AND DEEP BEDROCK AQUIFER AVAILABLE DRAWDOWN - BASELINE CONDITIONS		
	LEVEL 2 WATER REPORT PROPOSED UPPER'S QUARRY THOROLD / NIAGARA FALLS, ON For Walker Aggregates Inc.		
DATE: OCTOBER 2021	PROJECT: 161-11633-00	FIGURE No:	24



LEGEND

APPROXIMATE EXISTING WATER SYSTEM
(MASTER SERVICING PLAN,
NIAGARA REGION, 2016)

**SHALLOW AND DEEP BEDROCK AQUIFER
AVAILABLE DRAWDOWN (m)**

- < 3
- 3 - 10
- 10 - 20
- > 20

**SHALLOW AND DEEP BEDROCK AQUIFER
PREDICTED AVAILABLE DRAWDOWN -
FULL QUARRY DEVELOPMENT**

**LEVEL 2 WATER REPORT
PROPOSED UPPER'S QUARRY
THOROLD / NIAGARA FALLS, ON
For Walker Aggregates Inc.**

DATE: OCTOBER 2021 PROJECT: 161-11633-00



SCALE: 1 : 55,000

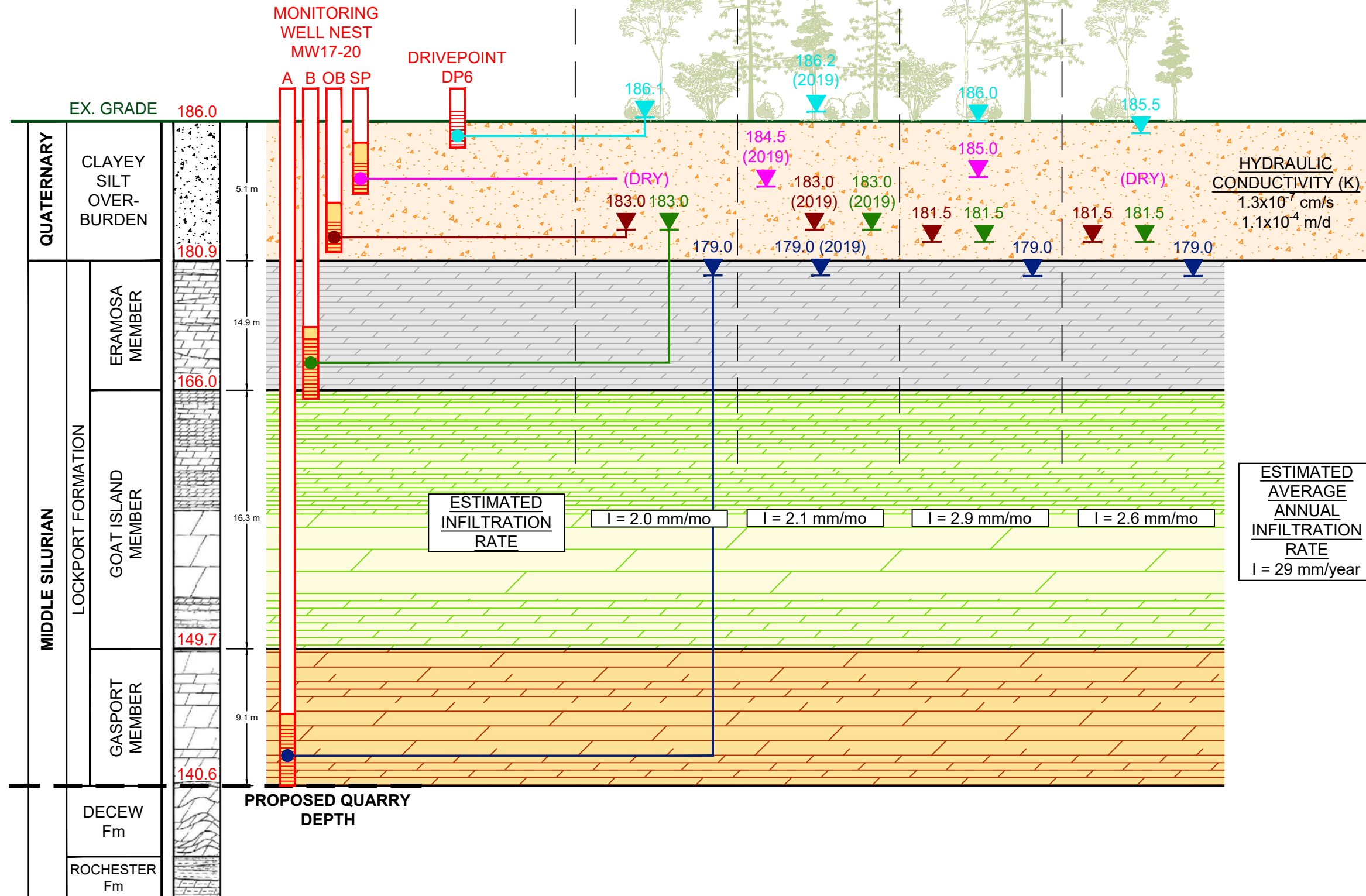
DRAWN BY: JLD

FIGURE No: **26**

5584 BEECHWOOD ROAD WETLAND - BASELINE CONDITIONS

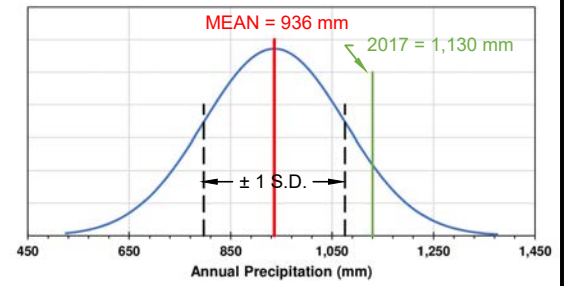
WATER BALANCE - 2017		
	1964-1990 NORMAL	2017
PRECIPITATION -	953 mm	1,130 mm
EVAPOTRANSPIRATION -	644 mm	656 mm
AVAILABLE RECHARGE -	309 mm	474 mm

WINTER | SPRING (2019 DATA SHOWN - WELLS INSTALLED JULY 2017) | SUMMER | FALL



ESTIMATED AVERAGE ANNUAL INFILTRATION RATE
I = 29 mm/year

ANNUAL PRECIPITATION PROBABILITY CURVE
BASED ON WELAND DATA (1931 - 2006)



5584 BEECHWOOD ROAD WETLAND - BASELINE CONDITIONS (2017)

LEVEL 2 WATER REPORT
PROPOSED UPPER'S QUARRY
THOROLD / NIAGARA FALLS, ON
For Walker Aggregates Inc.

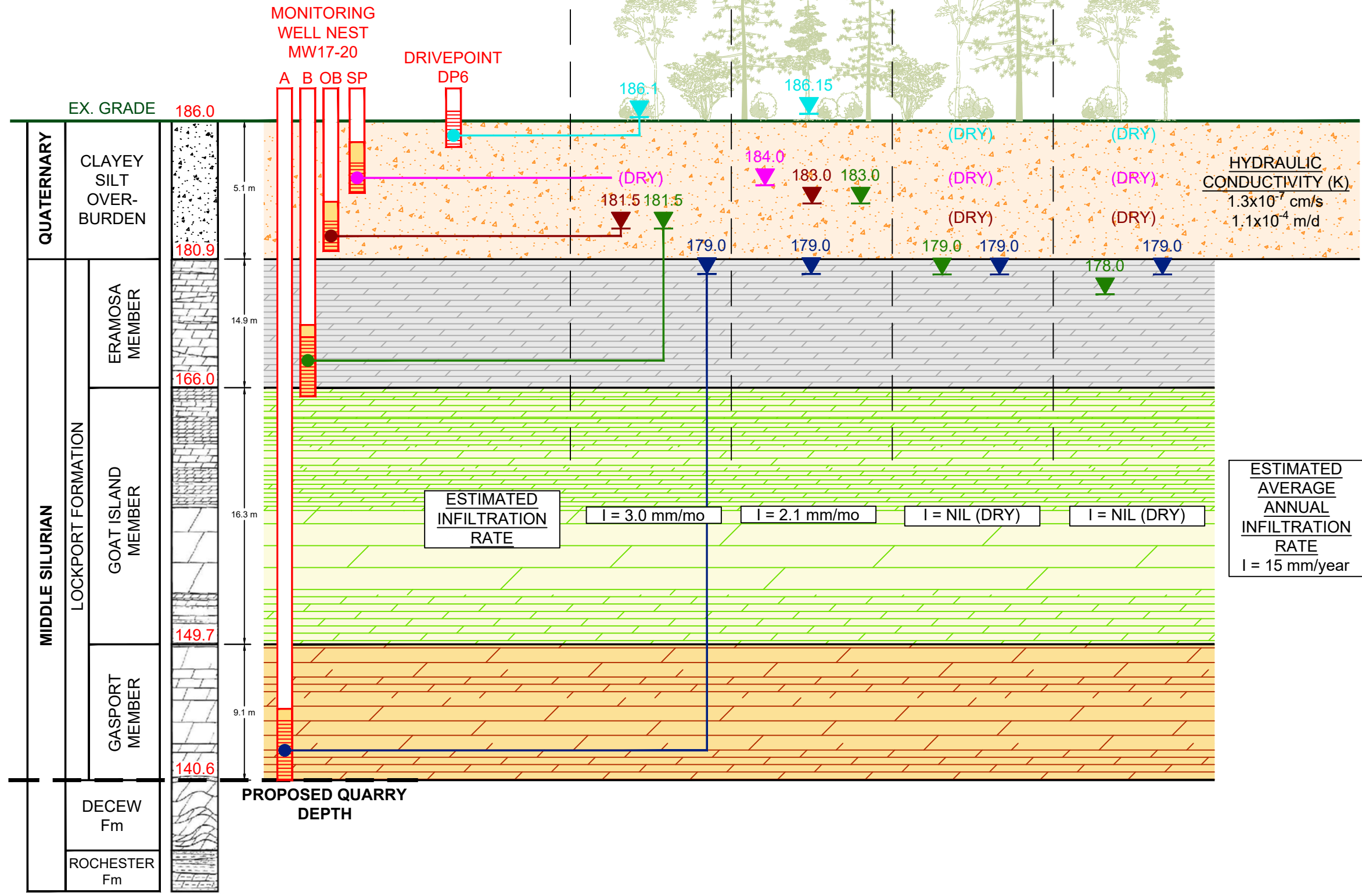
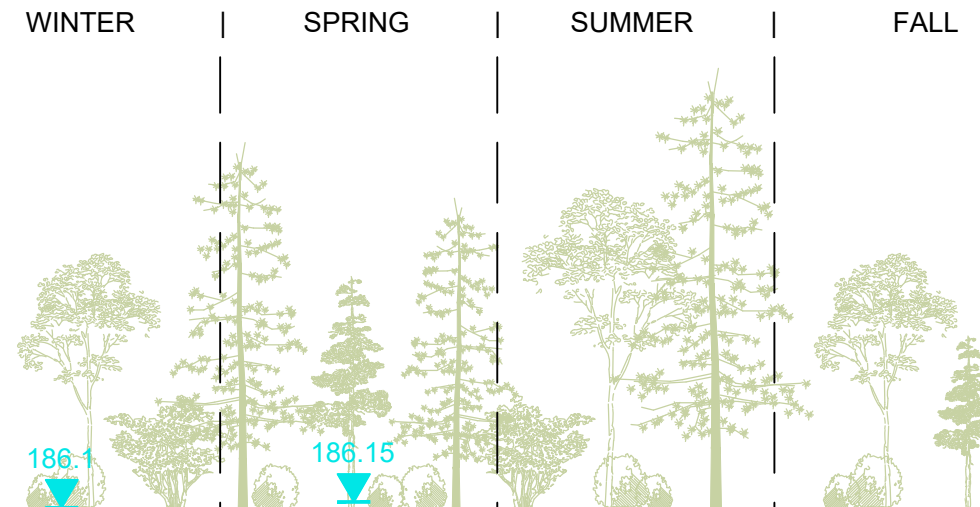
DATE: OCTOBER 2021
PROJECT: 161-11633-00
SCALE: AS SHOWN
DRAWN BY: JLD



FIGURE No: **22A**

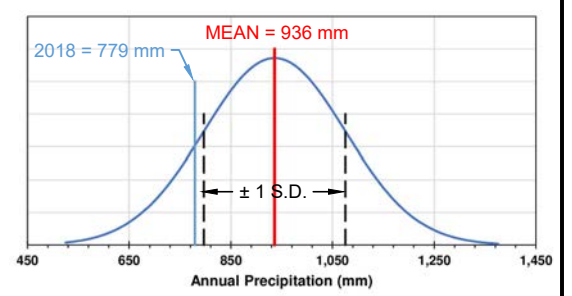
5584 BEECHWOOD ROAD WETLAND - BASELINE CONDITIONS

WATER BALANCE - 2018		
	1964-1990 NORMAL	2018
PRECIPITATION -	953 mm	779 mm
EVAPOTRANSPIRATION -	644 mm	665 mm
AVAILABLE RECHARGE -	309 mm	118 mm



ESTIMATED AVERAGE ANNUAL INFILTRATION RATE
I = 15 mm/year

ANNUAL PRECIPITATION PROBABILITY CURVE
BASED ON WELAND DATA (1931 - 2006)



5584 BEECHWOOD ROAD WETLAND - BASELINE CONDITIONS (2018)

LEVEL 2 WATER REPORT
PROPOSED UPPER'S QUARRY
THOROLD / NIAGARA FALLS, ON
For Walker Aggregates Inc.

DATE:	OCTOBER 2021
PROJECT:	161-11633-00
SCALE:	AS SHOWN
DRAWN BY:	JLD

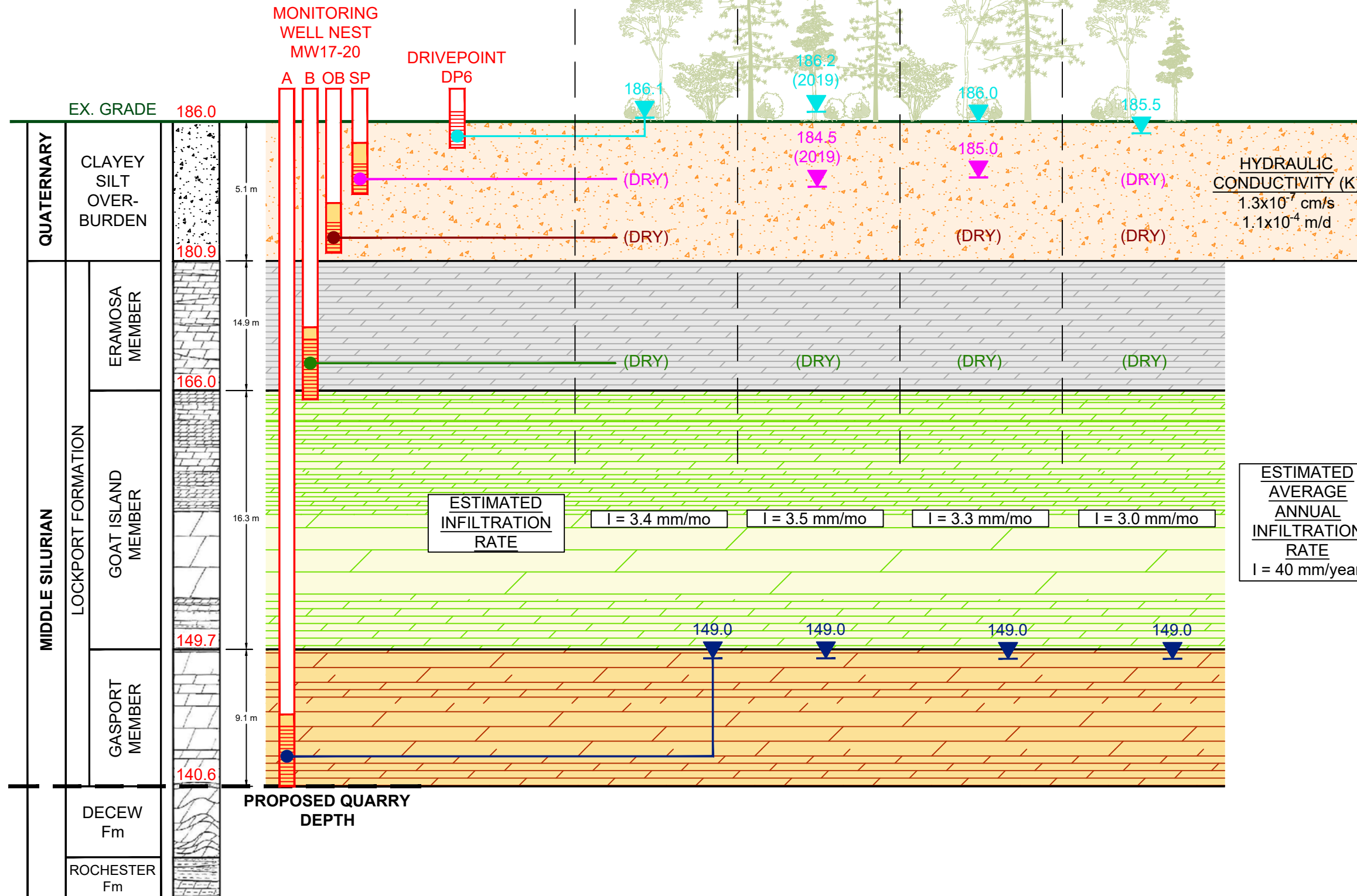
55 KING STREET, SUITE 700
ST. CATHARINES, ON L2R 3H5
T 905-687-1771 | F 905-687-1773 | www.wsp.com

FIGURE No: **22B**

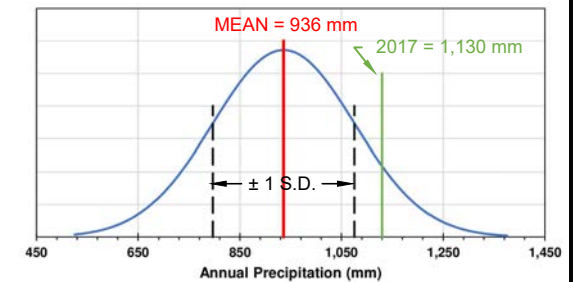
5584 BEECHWOOD ROAD WETLAND - FULL DEVELOPMENT INFILTRATION

WATER BALANCE - 2017		
	1964-1990 NORMAL	2017
PRECIPITATION -	953 mm	1,130 mm
EVAPOTRANSPIRATION -	644 mm	656 mm
AVAILABLE RECHARGE -	309 mm	474 mm

WINTER | SPRING (2019 DATA SHOWN - WELLS INSTALLED JULY 2017) | SUMMER | FALL



ANNUAL PRECIPITATION PROBABILITY CURVE
BASED ON WELAND DATA (1931 - 2006)



5584 BEECHWOOD ROAD WETLAND - FULL QUARRY DEVELOPMENT (WET YEAR)

LEVEL 2 WATER REPORT
PROPOSED UPPER'S QUARRY
THOROLD / NIAGARA FALLS, ON
For Walker Aggregates Inc.

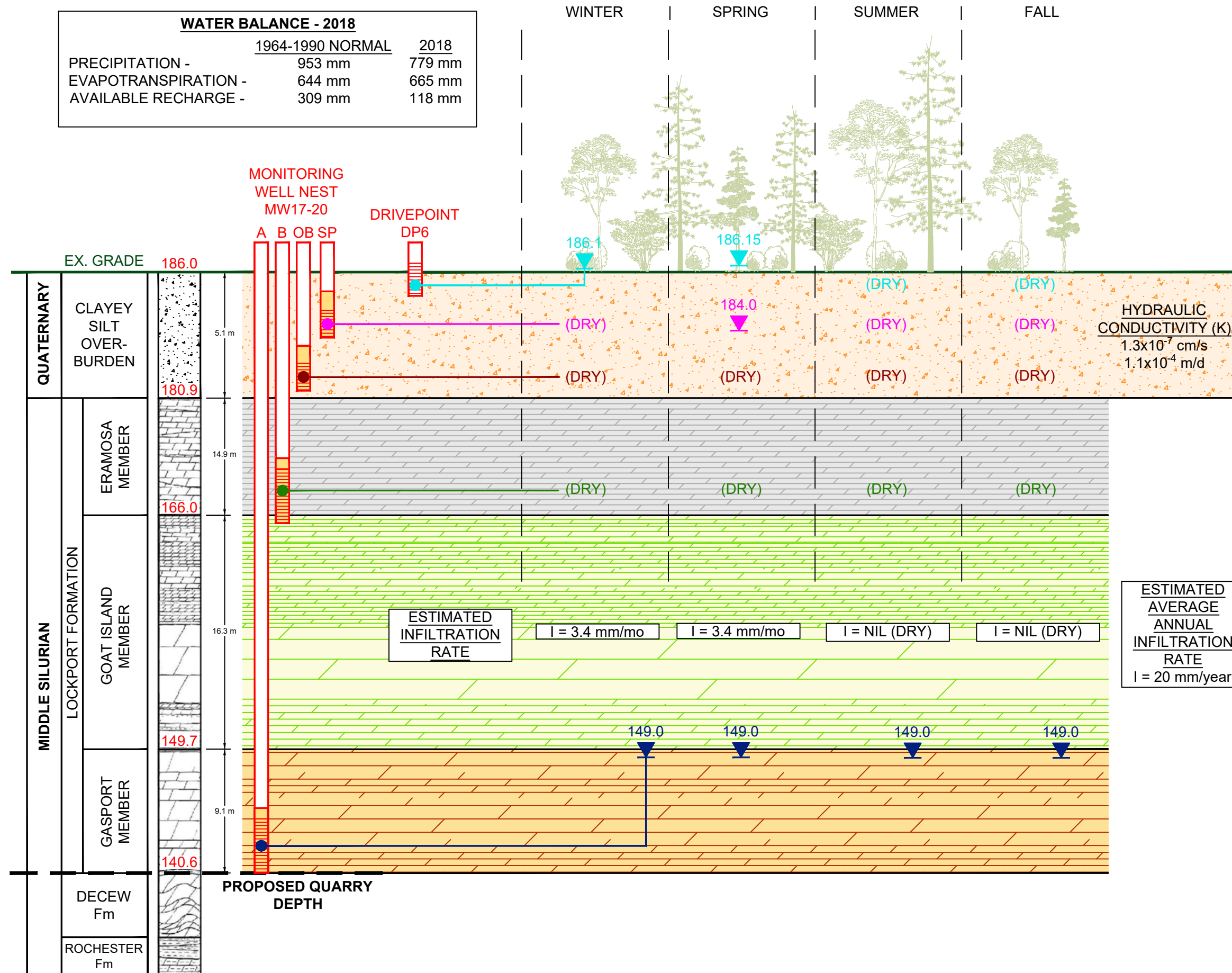
DATE: OCTOBER 2021
PROJECT: 161-11633-00
SCALE: AS SHOWN
DRAWN BY: JLD



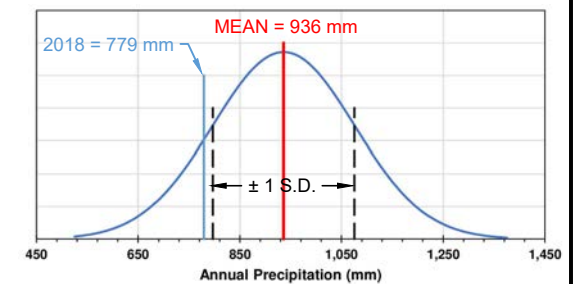
FIGURE No: **27A**

5584 BEECHWOOD ROAD WETLAND - FULL DEVELOPMENT INFILTRATION

WATER BALANCE - 2018		
	1964-1990 NORMAL	2018
PRECIPITATION -	953 mm	779 mm
EVAPOTRANSPIRATION -	644 mm	665 mm
AVAILABLE RECHARGE -	309 mm	118 mm



ANNUAL PRECIPITATION PROBABILITY CURVE
 BASED ON WELAND DATA (1931 - 2006)



5584 BEECHWOOD ROAD WETLAND - FULL QUARRY DEVELOPMENT (DRY YEAR)

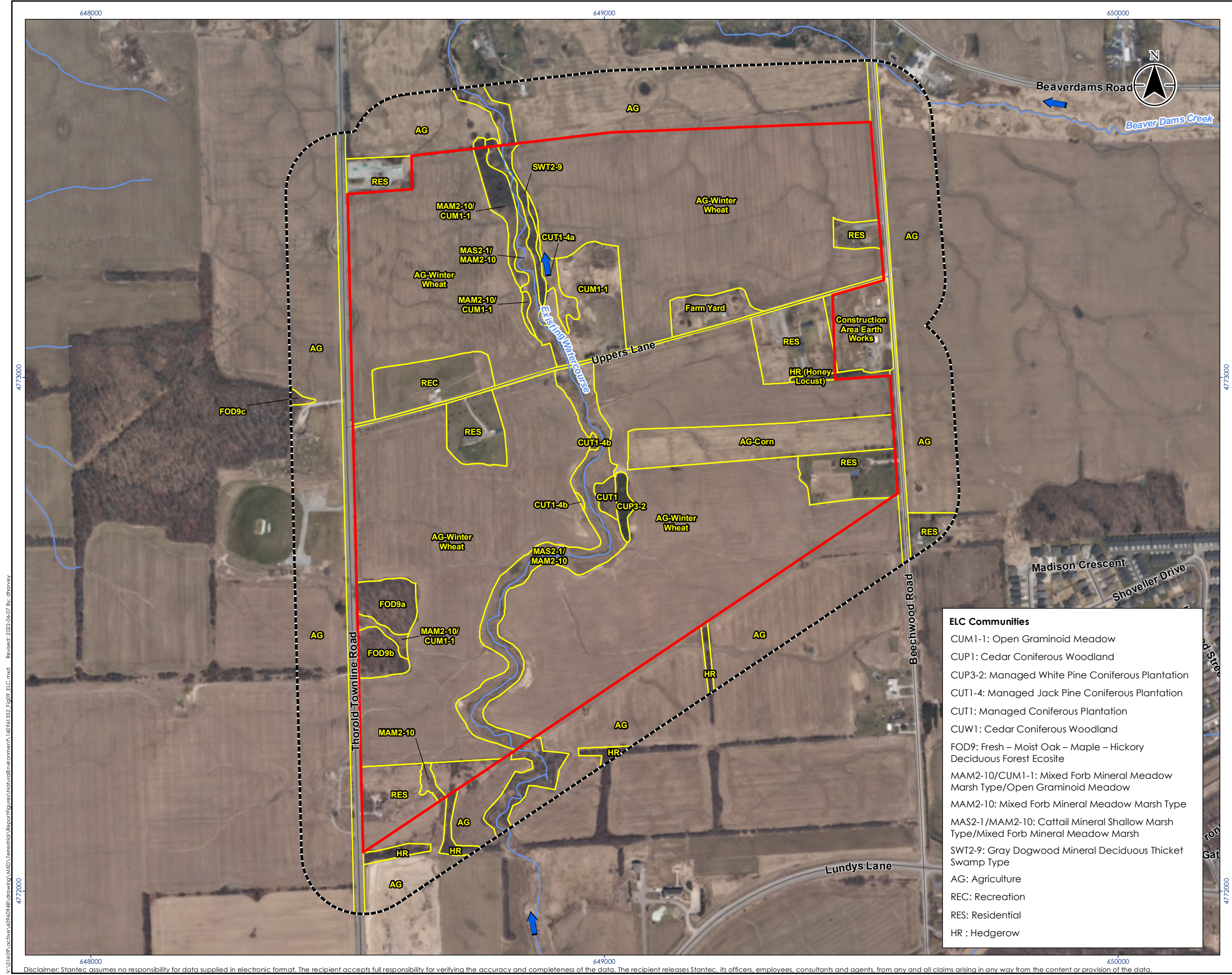
LEVEL 2 WATER REPORT
 PROPOSED UPPER'S QUARRY
 THOROLD / NIAGARA FALLS, ON
 For Walker Aggregates Inc.

DATE: OCTOBER 2021
 PROJECT: 161-11633-00
 SCALE: AS SHOWN
 DRAWN BY: JLD

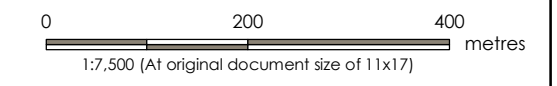


FIGURE No: **27B**

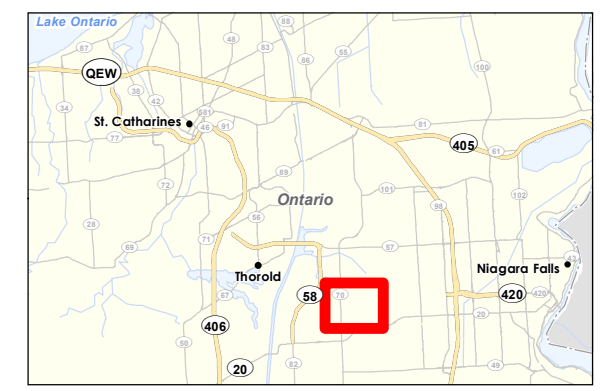
Attachment 2 Stantec Figures



- Legend**
- Subject Property
 - Study Area (120 m Zone of Investigation)
 - ↑ Flow Direction
 - Watercourse
 - Ecological Land Classification



- Notes**
1. Coordinate System: NAD 1983 UTM Zone 17N
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
 3. Orthoimagery © First Base Solutions, 2018. Imagery Date 2018.



- ELC Communities**
- CUM1-1: Open Graminoid Meadow
 - CUP1: Cedar Coniferous Woodland
 - CUP3-2: Managed White Pine Coniferous Plantation
 - CUT1-4: Managed Jack Pine Coniferous Plantation
 - CUT1: Managed Coniferous Plantation
 - CUW1: Cedar Coniferous Woodland
 - FOD9: Fresh – Moist Oak – Maple – Hickory Deciduous Forest Ecosite
 - MAM2-10/CUM1-1: Mixed Forb Mineral Meadow Marsh Type/Open Graminoid Meadow
 - MAM2-10: Mixed Forb Mineral Meadow Marsh Type
 - MAS2-1/MAM2-10: Cattail Mineral Shallow Marsh Type/Mixed Forb Mineral Meadow Marsh
 - SWT2-9: Gray Dogwood Mineral Deciduous Thicket Swamp Type
 - AG: Agriculture
 - REC: Recreation
 - RES: Residential
 - HR : Hedgerow

Project Location: Regional Municipality of Niagara
 Prepared by CMC on 2022-06-07
 Technical Review by BC on 2019-01-31
 160961352 REVA

Client/Project: WALKER AGGREGATES INC.
 UPPERS QUARRY LEVEL 1 AND LEVEL 2 NATURAL ENVIRONMENT TECHNICAL REPORT AND ENVIRONMENTAL IMPACT STUDY

Figure No. **9**
 Title: **Ecological Land Classification**

Attachment 3

Appendix D

Appendix D – Plant List

LATIN NAME		COMMON NAME	COEFFICIENT OF CONSERVATISM	WETNESS INDEX	WEEDINESS INDEX	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	GLOBAL STATUS	LOCAL STATUS NIAG
PTERIDOPHYTES		FERNS & ALLIES								
Equisetaceae		Horsetail Family								
<i>Equisetum</i>	<i>arvense</i>	Field Horsetail	0	0		S5			G5	X
GYMNOSPERMS		CONIFERS								
<i>Thuja</i>	<i>occidentalis</i>	Eastern White Cedar	4	-3		S5			G5	X
Pinaceae		Pine Family								
<i>Picea</i>	<i>abies</i>	Norway Spruce		5	-1	SE3			G?	I
<i>Picea</i>	<i>pungens</i>	Colorado Spruce				SE1			G5	
<i>Pinus</i>	<i>nigra</i>	Austrian Pine		-5	-1	SE2			G?	
<i>Pinus</i>	<i>strobus</i>	Eastern White Pine	4	3		S5			G5	X
DICOTYLEDONS		DICOTS								
Amaranthaceae		Amaranth Family								
<i>Amaranthus</i>	<i>retroflexus</i>	Green Amaranth		2	-1	SE5			G?	I
<i>Chenopodium</i>	<i>album</i> var. <i>album</i>	Lamb's Quarters		1	-1	SE5			G5T5	I
<i>Chenopodium</i>	<i>glaucum</i> ssp. <i>glaucum</i>	Oak-leaved Goosefoot		-3	-1	SE5			G5T?	I
Anacardiaceae		Sumac or Cashew Family								
<i>Rhus</i>	<i>typhina</i>	Staghorn Sumac	1	5		S5			G5	X
<i>Toxicodendron</i>	<i>radicans</i> var. <i>radicans</i>	Eastern Poison-ivy	5	-1		S5			G5T	X
<i>Toxicodendron</i>	<i>radicans</i> var. <i>rydbergii</i>	Western Poison-ivy	0	0		S5			G5T	X
Apiaceae		Carrot or Parsley Family								
<i>Cicuta</i>	<i>maculata</i>	Spotted Water-hemlock	6	-5		S5			G5	X
<i>Daucus</i>	<i>carota</i>	Wild Carrot		5	-2	SE5			G?	I
Apocynaceae		Dogbane Family								
<i>Apocynum</i>	<i>cannabinum</i> var. <i>cannabinum</i>	Indian Hemp		1		S5			G5T	X
<i>Asclepias</i>	<i>incarnata</i> ssp. <i>incarnata</i>	Swamp Milkweed	6	-5		S5			G5T5	X
<i>Asclepias</i>	<i>syriaca</i>	Common Milkweed	0	5		S5			G5	X

Appendix D – Plant List

LATIN NAME		COMMON NAME	COEFFICIENT OF CONSERVATISM	WETNESS INDEX	WEEDINESS INDEX	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	GLOBAL STATUS	LOCAL STATUS NIAG
Asteraceae		Composite or Aster Family								
<i>Achillea</i>	<i>millefolium</i>	Common Yarrow		3	-1	SE?			G5T?	I
<i>Ambrosia</i>	<i>artemisiifolia</i>	Common Ragweed	0	3		S5			G5	X
<i>Ambrosia</i>	<i>trifida</i>	Giant Ragweed	0	-1		S5			G5	X
<i>Bidens</i>	<i>vulgata</i>	Tall Beggar-ticks	5	-3		S5			G5	X
<i>Carduus</i>	<i>nutans</i> ssp. <i>nutans</i>	Musk Thistle		5	-1	SE?			G?T?	I
<i>Centaurea</i>	<i>sp.</i>	Knapweed		5	-1	SE5			G?	I
<i>Cichorium</i>	<i>intybus</i>	Chicory		5	-1	SE5			G?	I
<i>Cirsium</i>	<i>arvense</i>	Canada Thistle		3	-1	SE5			G?	I
<i>Erigeron</i>	<i>canadensis</i>	Horseweed	0	1		S5			G5	X
<i>Erigeron</i>	<i>annuus</i>	Annual Fleabane	0	1		S5			G5	
<i>Erigeron</i>	<i>strigosus</i>	Daisy Fleabane	0	1		S5			G5	R
<i>Eupatorium</i>	<i>perfoliatum</i>	Perfoliate Thoroughwort	2	-4		S5			G5	X
<i>Euthamia</i>	<i>graminifolia</i>	Flat-topped Bushy Goldenrod	2	-2		S5			G5	X
<i>Inula</i>	<i>helenium</i>	Elecampane		5	-2	SE5			G?	I
<i>Lactuca</i>	<i>serriola</i>	Prickly Lettuce		0	-1	SE5			G?	I
<i>Leucanthemum</i>	<i>vulgare</i>	Ox-eye Daisy		5	-1	SE5			G?	I
<i>Solidago</i>	<i>altissima</i> ssp. <i>altissima</i>	Tall Goldenrod	1	3		S5				X
<i>Solidago</i>	<i>juncea</i>	Early Goldenrod	3	5		S5			G5	X
<i>Sonchus</i>	<i>arvensis</i> ssp. <i>arvensis</i>	Field Sow-thistle				SE5			G?T?	I
<i>Sonchus</i>	<i>asper</i> ssp. <i>asper</i>	Spiny-leaved Sow-thistle		0	-1	SE5			G?T?	I
<i>Symphotrichum</i>	<i>lanceolatum</i> ssp. <i>lanceolatum</i>	White Panicked Aster	3	-3		S5			G5T5	
<i>Symphotrichum</i>	<i>lateriflorum</i> var. <i>lateriflorum</i>	Calico Aster	3	-2		S5			G5T5	X
<i>Symphotrichum</i>	<i>novae-angliae</i>	New England Aster	2	-3		S5			G5	X
<i>Symphotrichum</i>	<i>pilosum</i> var. <i>pilosum</i>	Hairy Aster	4	2		S5			G5T5	X
<i>Taraxacum</i>	<i>officinale</i>	Common Dandelion		3	-2	SE5			G5	I

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LATIN NAME		COMMON NAME	COEFFICIENT OF CONSERVATISM	WETNESS INDEX	WEEDINESS INDEX	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	GLOBAL STATUS	LOCAL STATUS NIAG
<i>Tragopogon</i>	<i>dubius</i>	Doubtful Goat's-beard		5	-1	SE5			G?	I
<i>Xanthium</i>	<i>strumarium</i>	Tumor-curing Cocklebur	2	0		S5			G?	X
Balsaminaceae		Touch-me-not Family								
<i>Impatiens</i>	<i>capensis</i>	Spotted Touch-me-not	4	-3		S5			G5	X
Betulaceae		Birch Family								
<i>Carpinus</i>	<i>caroliniana</i> ssp. <i>virginiana</i>	Blue Beech	6	0		S5			G5T	X
<i>Ostrya</i>	<i>virginiana</i>	Hop Hornbeam	4	4		S5			G5	X
Boraginaceae		Borage Family								
<i>Myosotis</i>	<i>laxa</i>	Smaller Forget-me-not	6	-5		S5			G5	X
Brassicaceae		Mustard Family								
<i>Alliaria</i>	<i>petiolata</i>	Garlic Mustard		0	-3	SE5			G5	I
Caprifoliaceae		Honeysuckle Family								
<i>Lonicera</i>	<i>dioica</i>	Glaucous Honeysuckle	5	3		S5			G5	X
Celastraceae		Staff-tree Family								
<i>Euonymus</i>	<i>obovata</i>	Running Strawberry-bush	6	5		S5			G5	X
Convolvulaceae		Morning-glory Family								
<i>Calystegia</i>	<i>sepium</i> ssp. <i>angulatum</i>	Hedge Bindweed				SU			G4G5T?	
Cornaceae		Dogwood Family								
<i>Cornus</i>	<i>racemosa</i>	Gray Dogwood	2	-2		S5			G5?	X
<i>Cornus</i>	<i>stolonifera</i>	Red-osier Dogwood	2	-3		S5			G5	X
Dipsacaceae		Teasel Family								
<i>Dipsacus</i>	<i>fullonum</i> ssp. <i>sylvestris</i>	Wild Teasel		5	-1	SE5			G?T?	I
Euphorbiaceae		Spurge Family								
<i>Acalypha</i>	<i>virginica</i> var. <i>rhomboidea</i>	Three-seeded Mercury	0	3		S5			G5T5	X
Fabaceae		Pea Family								
<i>Gleditsia</i>	<i>triacanthos</i>	Honey Locust	3	0		S2			G5	R
<i>Lotus</i>	<i>corniculatus</i>	Bird's-foot Trefoil		1	-2	SE5			G?	I
<i>Medicago</i>	<i>lupulina</i>	Black Medick		1	-1	SE5			G?	I
<i>Melilotus</i>	<i>alba</i>	White Sweet-clover		3	-3	SE5			G?	I

Appendix D – Plant List

LATIN NAME		COMMON NAME	COEFFICIENT OF CONSERVATISM	WETNESS INDEX	WEEDINESS INDEX	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	GLOBAL STATUS	LOCAL STATUS NIAG
<i>Melilotus</i>	<i>officinalis</i>	Yellow Sweet-clover		3	-1	SE5			G?	I
<i>Robinia</i>	<i>pseudo-acacia</i>	Black Locust		4	-3	SE5			G5	I
<i>Trifolium</i>	<i>hybridum</i> ssp. <i>elegans</i>	Alsike Clover		1	-1	SE5				I
<i>Trifolium</i>	<i>repens</i>	White Clover		2	-1	SE5			G?	I
<i>Vicia</i>	<i>cracca</i>	Tufted Vetch		5	-1	SE5			G?	I
Fagaceae		Beech Family								
<i>Fagus</i>	<i>grandifolia</i>	American Beech	6	3		S5			G5	X
<i>Quercus</i>	<i>palustris</i>	Pin Oak	9	-3		S4			G5	X
<i>Quercus</i>	<i>rubra</i>	Red Oak	6	3		S5			G5	X
Geraniaceae		Geranium Family								
<i>Geranium</i>	<i>robertianum</i>	Herb-robert		5	-2	SE5			G5	I
Guttiferae		St. John's-wort Family								
<i>Hypericum</i>	<i>perforatum</i>	Common St. John's-wort		5	-3	SE5			G?	I
Juglandaceae		Walnut Family								
<i>Carya</i>	<i>ovata</i> var. <i>ovata</i>	Shagbark Hickory	6	3		S5			G5	X
Lamiaceae		Mint Family								
<i>Glechoma</i>	<i>hederacea</i>	Creeping Charlie		5	-2	SE5			G?	I
<i>Hedeoma</i>	<i>pulegioides</i>	American Pennyroyal	6	5		S4			G5	X
<i>Lycopus</i>	<i>americanus</i>	Cut-leaved Water-horehound	4	-5		S5			G5	X
<i>Lycopus</i>	<i>americanus</i>	Cut-leaved Water-horehound	4	-5		S5			G5	X
<i>Mentha</i>	<i>arvensis</i> ssp. <i>borealis</i>	American Wild Mint	3	-3		S5				X
<i>Nepeta</i>	<i>cataria</i>	Catnip		1	-2	SE5			G?	I
<i>Prunella</i>	<i>vulgaris</i> ssp. <i>lanceolata</i>	Heal-all	5	5		S5			G5T?	X
Lythraceae		Loosestrife Family								
<i>Lythrum</i>	<i>salicaria</i>	Purple Loosestrife		-5	-3	SE5			G5	X
Malvaceae		Mallow Family								
<i>Abutilon</i>	<i>theophrasti</i>	Velvet-leaf		4	-1	SE5			G?	I
Oleaceae		Olive Family								

Appendix D – Plant List

LATIN NAME		COMMON NAME	COEFFICIENT OF CONSERVATISM	WETNESS INDEX	WEEDINESS INDEX	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	GLOBAL STATUS	LOCAL STATUS NIAG
<i>Fraxinus</i>	<i>americana</i>	White Ash	4	3		S5			G5	X
<i>Fraxinus</i>	<i>pennsylvanica</i>	Red Ash	3	-3		S5			G5	X
<i>Ligustrum</i>	<i>vulgare</i>	Common Privet		1	-2	SE5			G?	I
<i>Syringa</i>	<i>vulgaris</i>	Common Lilac		5	-2	SE5			G?	I
Onagraceae		Evening-primrose Family								
<i>Circaea</i>	<i>lutetiana</i> ssp. <i>canadensis</i>	Yellowish Enchanter's Nightshade	3	3		S5			G5T5	X
<i>Epilobium</i>	<i>coloratum</i>	Purple-veined Willow-herb	3	-5		S5			G5	X
<i>Oenothera</i>	<i>biennis</i>	Common Evening-primrose	0	3		S5			G5	X
Oxalidaceae		Wood Sorrel Family								
<i>Oxalis</i>	<i>stricta</i>	Upright Yellow Wood-sorrel	0	3		S5			G5	
Plantaginaceae		Plantain Family								
<i>Plantago</i>	<i>lanceolata</i>	Ribgrass		0	-1	SE5			G5	I
<i>Plantago</i>	<i>major</i>	Common Plantain		-1	-1	SE5			G5	I
Polygonaceae		Smartweed Family								
<i>Persicaria</i>	<i>pennsylvanica</i>	Pennsylvania Smartweed	3	-4		S5			G5	X
<i>Persicaria</i>	<i>virginiana</i>	Virginia Knotweed	6	0		S4			G5	X
<i>Polygonum</i>	<i>aviculare</i> ssp. <i>aviculare</i>	Prostrate Knotweed		1	-1	SE5			GNR	X
<i>Rumex</i>	<i>crispus</i>	Curly-leaf Dock		-1	-2	SE5			G?	I
Ranunculaceae		Buttercup Family								
<i>Ranunculus</i>	<i>sceleratus</i> var. <i>sceleratus</i>	Cursed Buttercup	2	-5		S5			G5T5	X
Rhamnaceae		Buckthorn Family								
<i>Rhamnus</i>	<i>cathartica</i>	Common Buckthorn		3	-3	SE5			G?	I
<i>Rhamnus</i>	<i>frangula</i>	Glossy Buckthorn		-1	-3	SE5			G?	I
Rosaceae		Rose Family								
<i>Agrimonia</i>	<i>gryposepala</i>	Tall Hairy Agrimony	2	2		S5			G5	X
<i>Crataegus</i>	<i>species</i>	Hawthorn species								
<i>Crataegus</i>	<i>macrosperma</i>	Variable Thorn	4	5		S5			G5	X

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LATIN NAME		COMMON NAME	COEFFICIENT OF CONSERVATISM	WETNESS INDEX	WEEDINESS INDEX	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	GLOBAL STATUS	LOCAL STATUS NIAG
<i>Fragaria</i>	<i>virginiana</i> ssp. <i>virginiana</i>	Scarlet Strawberry	2	1		SU			G5T?	X
<i>Geum</i>	<i>canadense</i>	White Avens	3	0		S5			G5	X
<i>Geum</i>	<i>laciniatum</i>	Rough Avens		-3		S4			G5	X
<i>Malus</i>	<i>pumila</i>	Common Crabapple		5	-1	SE5			G5	I
<i>Potentilla</i>	<i>norvegica</i>	Rough Cinquefoil	0	0		SU			G5T?	
<i>Potentilla</i>	<i>recta</i>	Rough-fruited Cinquefoil		5	-2	SE5			G?	I
<i>Potentilla</i>	<i>simplex</i>	Old-field Cinquefoil	3	4		S5			G5	X
<i>Prunus</i>	<i>avium</i>	Sweet Cherry		5	-2	SE4			G?	I
<i>Prunus</i>	<i>serotina</i>	Black Cherry	3	3		S5			G5	X
<i>Pyrus</i>	<i>communis</i>	Common Pear		5	-1	SE4			G5	I
<i>Rosa</i>	<i>multiflora</i>	Multiflora Rose		3	-3	SE4			G?	I
<i>Rosa</i>	<i>palustris</i>	Marsh Rose	7	-5		S5			G5	X
<i>Rubus</i>	<i>allegheniensis</i>	Alleghany Blackberry	2	2		S5			G5	X
<i>Rubus</i>	<i>idaeus</i> ssp. <i>idaeus</i>	Red Raspberry				SE1			G5T5	X
<i>Galium</i>	<i>aparine</i>	Cleavers	4	3		S5			G5	X
Salicaceae		Willow Family								
<i>Populus</i>	<i>deltoides</i> ssp. <i>deltoides</i>	Eastern Cottonwood	4	-1		SU			G5T5	X
<i>Salix</i>	<i>bebbiana</i>	Long-beaked Willow	4	-4		S5			G5	X
<i>Salix</i>	<i>nigra</i>	Black Willow	6	-5		S4?			G5	X
Sapindaceae		Maple Family								
<i>Acer</i>	<i>negundo</i>	Manitoba Maple	0	-2		S5			G5	X
<i>Acer</i>	<i>platanooides</i>	Norway Maple		5	-3	SE5			G?	I
<i>Acer</i>	<i>saccharum</i>	Sugar Maple	4	3		S5			G5T?	X
<i>Acer X</i>	<i>freemanii</i>	Freeman's Maple								X
<i>Penthorum</i>	<i>sedoides</i>	Ditch Stonecrop	4	-5		S5			G5	X
Scrophulariaceae		Figwort Family								
<i>Linaria</i>	<i>vulgaris</i>	Butter-and-eggs		5	-1	SE5			G?	I
<i>Penstemon</i>	<i>digitalis</i>	Foxglove Beard-tongue	6	1		S4S5			G5	U
<i>Penstemon</i>	<i>hirsutus</i>	Hairy Beard-tongue	7	5		S4			G4	X

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<i>Verbascum</i>	<i>thapsus</i>	Common Mullein		5	-2	SE5			G?	I
<i>Veronica</i>	<i>officinalis</i>	Common Speedwell		5	-2	SE5			G5	I
<i>Veronica</i>	<i>serpyllifolia</i> ssp. <i>serpyllifolia</i>	Thyme-leaved Speedwell				SE5			G?T?	I
Solanaceae		Nightshade Family								
<i>Solanum</i>	<i>dulcamara</i>	Bitter Nightshade		0	-2	SE5			G?	I
Tiliaceae		Linden Family								
<i>Tilia</i>	<i>americana</i>	American Basswood	4	3		S5			G5	X
Ulmaceae		Elm Family								
<i>Ulmus</i>	<i>americana</i>	White Elm	3	-2		S5			G5?	X
Verbenaceae		Vervain Family								
<i>Verbena</i>	<i>hastata</i>	Blue Vervain	4	-4		S5			G5	X
Vitaceae		Grape Family								
<i>Parthenocissus</i>	<i>inserta</i>	Inserted Virginia-creeper	3	3		S5			G5	X
<i>Vitis</i>	<i>riparia</i>	Riverbank Grape	0	-2		S5			G5	X
MONOCOTYLEDONS		MONOCOTS								
Alismataceae		Water-plantain Family								
<i>Alisma</i>	<i>plantago-aquatica</i>	Common Water-plantain	3	-5		S5			G5	X
Cyperaceae		Sedge Family								
<i>Carex</i>	<i>species</i>	Sedge species								
<i>Carex</i>	<i>crinita</i>	Fringed Sedge	6	-4		S5			G5	X
<i>Carex</i>	<i>cristatella</i>	Crested Sedge	3	-4		S5			G5	X
<i>Carex</i>	<i>laxiflora</i>	Loose-flowered Sedge	5	0		S5			G5	X
<i>Carex</i>	<i>lupulina</i>	Hop Sedge	6	-5		S5			G5	X
<i>Carex</i>	<i>pensylvanica</i>	Pennsylvania Sedge	5	5		S5			G5	X
<i>Carex</i>	<i>tribuloides</i> var. <i>tribuloides</i>	Blunt Broom Sedge	5	-4		S4S5			G5	X
<i>Carex</i>	<i>vulpinoidea</i>	Fox Sedge	3	-5		S5			G5	X
<i>Cyperus</i>	<i>strigosus</i>	Straw-colored Umbrella Sedge	5	-3		S5			G5	X
<i>Schoenoplectus</i>	<i>pungens</i> var. <i>pungens</i>	Common Three-square	6	-5		S5			G5	R

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<i>Schoenoplectus</i>	<i>tabernaemontani</i>	Soft-stemmed Bulrush	5	-5		S5			G5	X
<i>Scirpus</i>	<i>atrovirens</i>	Dark-green Bulrush	3	-5		S5			G5?	X
Iridaceae		Iris Family								
<i>Iris</i>	<i>versicolor</i>	Multi-coloured Blue-flag	5	-5		S5			G5	X
<i>Sisyrinchium</i>	<i>angustifolium</i>	Pointed Blue-eyed-grass	6	-2		S4			G4?	X
Juncaceae		Rush Family								
<i>Juncus</i>	<i>effusus</i> ssp. <i>solutus</i>	Soft Rush	4	-5		S5			G5T?	X
Lemnaceae		Duckweed Family								
<i>Lemna</i>	<i>minor</i>	Lesser Duckweed	2	-5		S5			G5	X
Liliaceae		Lily Family								
<i>Asparagus</i>	<i>officinalis</i>	Garden Asparagus		3	-1	SE5			G5?	I
<i>Hemerocallis</i>	<i>fulva</i>	Orange Day-lily		5	-3	SE5			G?	I
Poaceae		Grass Family								
<i>Agrostis</i>	<i>gigantea</i>	Red-top		0	-2	SE5			G4G5	I
<i>Agrostis</i>	<i>stolonifera</i>	Redtop		-3		S5			G5	X
<i>Bromus</i>	<i>inermis</i> ssp. <i>inermis</i>	Awnless Brome		5	-3	SE5			G4G5T?	I
<i>Bromus</i>	<i>secalinus</i>	Cheat Chess		5	-1	SE4				I
<i>Dactylis</i>	<i>glomerata</i>	Orchard Grass		3	-1	SE5			G?	I
<i>Elymus</i>	<i>repens</i>	Quack Grass		3	-3	SE5			GNR	I
<i>Elymus</i>	<i>virginicus</i> var. <i>virginicus</i>	Virginia Wild Rye	5	-2		S5			G5T5	X
<i>Glyceria</i>	<i>striata</i>	Fowl Meadow Grass	3	-5		S4S5			G5T5	X
<i>Leersia</i>	<i>oryzoides</i>	Rice Cut Grass	3	-5		S5			G5	X
<i>Panicum</i>	<i>capillare</i> ssp. <i>capillare</i>	Witch Grass	0	0		S5			G5	X
<i>Panicum</i>	<i>dichotomiflorum</i>	Fall Panicum		-2	-1	SE5			G5	X
<i>Phalaris</i>	<i>arundinacea</i>	Reed Canary Grass	0	-4		S5			G5	X
<i>Phleum</i>	<i>pratense</i> ssp. <i>pratense</i>	Timothy		3	-1	SE5			G?	I
<i>Phragmites</i>	<i>australis</i> ssp. <i>australis</i>	European Reed				SNR			GNR	

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<i>Poa</i>	<i>compressa</i>	Canada Blue Grass		2		SE			GNR	I
<i>Poa</i>	<i>palustris</i>	Fowl Meadow Grass	5	-4		S5			G5	X
<i>Poa</i>	<i>pratensis</i> ssp. <i>pratensis</i>	Kentucky Bluegrass	0	1		S5			G5T5	X
<i>Schedonorus</i>	<i>pratensis</i>	Meadow Fescue		4	-1	SE5			G5	I
<i>Setaria</i>	<i>faberi</i>	Giant Foxtail		2	-1	SE4			G?	
<i>Setaria</i>	<i>faberi</i>	Giant Foxtail		2	-1	SE4			G?	
<i>Setaria</i>	<i>pumila</i> ssp. <i>pumila</i>	Yellow Foxtail		0	-1	SE5			G?	I
Typhaceae		Cattail Family								
<i>Typha</i>	<i>angustifolia</i>	Narrow-leaved Cattail	3	-5		S5			G5	X
<i>Typha</i>	<i>latifolia</i>	Broad-leaved Cattail	3	-5		S5			G5	X
<i>Typha X</i>	<i>glauca</i>	Glaucous Cattail	3	-5		S5			HYB	X

Appendix D – Plant List

FLORISTIC SUMMARY & ASSESSMENT			
Species Diversity			
Total Species:		175	
Native Species:		105	60%
Exotic Species		70	40%
Regionally Significant Species		4	
Locally Significant Species			
S1-S3 Species		1	1%
S4 Species		10	10%
S5 Species		90	89%
Co-efficient of Conservatism and Floristic Quality Index			
Co-efficient of Conservatism (CC) (average)		3.8	
CC 0 to 3	<i>lowest sensitivity</i>	53	52%
CC 4 to 6	<i>moderate sensitivity</i>	45	45%
CC 7 to 8	<i>high sensitivity</i>	2	2%
CC 9 to 10	<i>highest sensitivity</i>	1	1%
Floristic Quality Index (FQI)		38	
Presence of Weedy & Invasive Species			
mean weediness		-1.8	
weediness = -1	<i>low potential invasiveness</i>	36	56%
weediness = -2	<i>moderate potential invasiveness</i>	16	25%
weediness = -3	<i>high potential invasiveness</i>	12	19%
Presence of Wetland Species			
average wetness value		1.8	
upland		34	20%
facultative upland		41	24%
facultative		37	22%
facultative wetland		31	18%
obligate wetland		26	15%

Appendix D – Wildlife List

COMMON NAME	SCIENTIFIC NAME	ONTARIO STATUS	GLOBAL STATUS	SARO	SARA	AREA SENSITIVITY (ha)
ODONATA						
Common Spadewing	<i>Lestes disjunctus</i>	S5	G5			
Slender Spreadwing	<i>Lestes rectangularis</i>	S5	G5			
Familiar Bluet	<i>Enallagma civile</i>	S5	G5			
Eastern Forktail	<i>Ischnura verticalis</i>	S5	G5			
Lance-Tipped Darner	<i>Aeshna constricta</i>	S5	G5			
Common Green Darner	<i>Anax junius</i>	S5	G5			
Common Baskettail	<i>Epitheca cynosura</i>	S5	G5			
Eastern Pondhawk	<i>Erythemis simplicicollis</i>	S5	G5			
Dot-tailed Whiteface	<i>Leucorrhinia intacta</i>	S5	G5			
Widow Skimmer	<i>Libellula luctuosa</i>	S5	G5			
Twelve-Spotted Skimmer	<i>Libellula pulchella</i>	S5	G5			
Blue Dasher	<i>Pachydiplax longipennis</i>	S5	G5			
Wandering Glider	<i>Pantala flavescens</i>	S4	G5			
Common Whitetail	<i>Plathemis lydia</i>	S5	G5			
White-faced Meadowhawk	<i>Sympetrum obtrusum</i>	S5	G5			
Black Saddlebags	<i>Tramea lacerata</i>	S4	G5			
BUTTERFLIES						
Silver Spotted Skipper	<i>Epargyreus clarus</i>	S4	G5			
Wild Indigo Duskywing	<i>Erynnis baptisiae</i>	S4	G5			
Least Skipper	<i>Ancyloxypha numitor</i>	S5	G5			
European Skipper	<i>Thymelicus lineola</i>	SNA	G5			
Delaware Skipper	<i>Anatrytone logan</i>	S4	G5			
Dun Skipper	<i>Euphyes vestris</i>	S5	G5			
Black Swallowtail	<i>Papilio polyxenes</i>	S5	G5			
Giant Swallowtail	<i>Papilio cressphontes</i>	S3	G5			
Eastern Tiger Swallowtail	<i>Papilio glaucus</i>	S5	G5			
Cabbage White	<i>Pieris rapae</i>	SNA	G5			
Clouded Sulphur	<i>Colias philodice</i>	S5	G5			

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COMMON NAME	SCIENTIFIC NAME	ONTARIO STATUS	GLOBAL STATUS	SARO	SARA	AREA SENSITIVITY (ha)
Orange Sulphur	<i>Colias eurytheme</i>	S5	G5			
Bronze Copper	<i>Lycaena hyllus</i>	S5	G5			
Eastern Tailed Blue	<i>Everes comyntas</i>	S5	G5			
Spring Azure	<i>Celastrina ladon</i>	S5	G5			
Eastern Comma	<i>Polygonia comma</i>	S5	G5			
Mourning Cloak	<i>Nymphalis antiopa</i>	S5	G5			
American Painted Lady	<i>Vanessa virginiensis</i>	S5	G5			
Red Admiral	<i>Vanessa atalanta</i>	S5	G5			
Red-spotted Purple	<i>Limenitis arthemis astyanax</i>	S5	G5T5			
Viceroy	<i>Limenitis archippus</i>	S5	G5			
Northern Pearly Eye	<i>Enodia anhedon</i>	S5	G5			
Common Ringlet	<i>Coenonympha tullia</i>	S5	G5			
Monarch	<i>Danaus plexippus</i>	S4B, S2N	G5	SC	SC	
AMPHIBIANS						
American Toad	<i>Anaxyrus americanus</i>	S5	G5			
Northern Green Frog	<i>Lithobates clamitans</i>	S5	G5			
Wood Frog	<i>Lithobates sylvatica</i>	S5	G5			
Northern Leopard Frog	<i>Lithobates pipiens</i>	S5	G5	NAR	NAR	
REPTILES						
Eastern Gartersnake	<i>Thamnophis sirtalis</i>	S5	G5			
BIRDS						
Canada Goose	<i>Branta canadensis</i>	S5	G5			
Mourning Dove	<i>Zenaida macroura</i>	S5	G5			
Killdeer	<i>Charadrius vociferus</i>	S5B, S5N	G5			
Upland Sandpiper	<i>Bartramia longicauda</i>	S4B	G5			25
Ring-billed Gull	<i>Larus delawarensis</i>	S5B, S4N	G5			
Herring Gull	<i>Larus argentatus</i>	S5B, S5N	G5			
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	S5B	G5	NAR	NAR	20
Great Blue Heron	<i>Ardea herodias</i>	S5	G5			

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COMMON NAME	SCIENTIFIC NAME	ONTARIO STATUS	GLOBAL STATUS	SARO	SARA	AREA SENSITIVITY (ha)
Turkey Vulture	<i>Cathartes aura</i>	S5B	G5			
Red-tailed Hawk	<i>Buteo jamaicensis</i>	S5	G5	NAR	NAR	
Downy Woodpecker	<i>Dryobates pubescens</i>	S5	G5			
Northern Flicker	<i>Colaptes auratus</i>	S4B	G5			
Eastern Wood-Pewee	<i>Contopus virens</i>	S4B	G5	SC	SC	
Willow Flycatcher	<i>Empidonax traillii</i>	S5B	G5			
Eastern Phoebe	<i>Sayornis phoebe</i>	S5B	G5			
Eastern Kingbird	<i>Tyrannus tyrannus</i>	S4B	G5			
Warbling Vireo	<i>Vireo gilvus</i>	S5B	G5			
Blue Jay	<i>Cyanocitta cristata</i>	S5	G5			
American Crow	<i>Corvus brachyrhynchos</i>	S5B	G5			
Horned Lark	<i>Eremophila alpestris</i>	S5B	G5			
Purple Martin	<i>Progne subis</i>	S4B	G5			
Tree Swallow	<i>Tachycineta bicolor</i>	S4B	G5			
Barn Swallow	<i>Hirundo rustica</i>	S4B	G5	THR	THR	
Black-capped Chickadee	<i>Poecile atricapillus</i>	S5	G5			
American Robin	<i>Turdus migratorius</i>	S5B	G5			
Gray Catbird	<i>Dumetella carolinensis</i>	S4B	G5			
Northern Mockingbird	<i>Mimus polyglottos</i>	S4	G5			
European Starling	<i>Sturnus vulgaris</i>	SNA	G5			
Cedar Waxwing	<i>Bombycilla cedrorum</i>	S5B	G5			
House Sparrow	<i>Passer domesticus</i>	SNA	G5			
House Finch	<i>Haemorhous mexicanus</i>	SNA	G5			
American Goldfinch	<i>Spinus tristis</i>	S5B	G5			
Chipping Sparrow	<i>Spizella passerina</i>	S5B	G5			
Vesper Sparrow	<i>Pooecetes gramineus</i>	S4B	G5			
Savannah Sparrow	<i>Passerculus sandwichensis</i>	S4B	G5			
Song Sparrow	<i>Melospiza melodia</i>	S5B	G5			
Swamp Sparrow	<i>Melospiza georgiana</i>	S5B	G5			

Appendix D – Wildlife List

COMMON NAME	SCIENTIFIC NAME	ONTARIO STATUS	GLOBAL STATUS	SARO	SARA	AREA SENSITIVITY (ha)
Bobolink	<i>Dolichonyx oryzivorus</i>	S4B	G5	THR	THR	10
Eastern Meadowlark	<i>Sturnella magna</i>	S4B	G5	THR	THR	
Baltimore Oriole	<i>Icterus galbula</i>	S4B	G5			
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	S4	G5			
Brown-headed Cowbird	<i>Molothrus ater</i>	S4B	G5			
Common Grackle	<i>Quiscalus quiscula</i>	S5B	G5			
Common Yellowthroat	<i>Geothlypis trichas</i>	S5B	G5			
Yellow Warbler	<i>Setophaga petechia</i>	S5B	G5			
Northern Cardinal	<i>Cardinalis cardinalis</i>	S5	G5			
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	S4B	G5			

SUMMARY

Total Odonata:	16
Total Butterflies:	24
Total Amphibians:	4
Total Reptiles:	1
Total Birds:	47
Total Mammals:	0

SIGNIFICANT SPECIES

Global:	0
National:	5
Provincial:	5

Appendix D – Wildlife List

Explanation of Status and Acronyms

COSSARO: Committee on the Status of Species at Risk in Ontario

COSEWIC: Committee on the Status of Endangered Wildlife in Canada

REGION: Rare in a Site Region

S1: Critically Imperiled—Critically imperiled in the province (often 5 or fewer occurrences)

S2: Imperiled—Imperiled in the province, very few populations (often 20 or fewer),

S3: Vulnerable—Vulnerable in the province, relatively few populations (often 80 or fewer)

S4: Apparently Secure—Uncommon but not rare

S5: Secure—Common, widespread, and abundant in the province

SX: Presumed extirpated

SH: Possibly Extirpated (Historical)

SNR: Unranked

SU: Unrankable—Currently unrankable due to lack of information

SNA: Not applicable—A conservation status rank is not applicable because the species is not a suitable target for conservation activities.

S#S#: Range Rank—A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species

S#B- Breeding status rank

S#N- Non Breeding status rank

?: Indicates uncertainty in the assigned rank

G1: Extremely rare globally; usually fewer than 5 occurrences in the overall range

G1G2: Extremely rare to very rare globally

G2: Very rare globally; usually between 5-10 occurrences in the overall range

G2G3: Very rare to uncommon globally

G3: Rare to uncommon globally; usually between 20-100 occurrences

G3G4: Rare to common globally

G4: Common globally; usually more than 100 occurrences in the overall range

G4G5: Common to very common globally

G5: Very common globally; demonstrably secure

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GU: Status uncertain, often because of low search effort or cryptic nature of the species; more data needed.

GNR: Unranked—Global rank not yet assessed.

T: Denotes that the rank applies to a subspecies or variety

Q: Denotes that the taxonomic status of the species, subspecies, or variety is questionable.

END: Endangered

THR: Threatened

SC: Special Concern

2, 3 or NS after a COSEWIC ranking indicates the species is either on Schedule 2, Schedule 3 or No Schedule of the Species At Risk Act (SARA)

NAR: Not At Risk

IND: Indeterminant, insufficient information to assign status

DD: Data Deficient

6: Rare in Site Region 6

7: Rare in Site Region 7

Area: Minimum patch size for area-sensitive species (ha)

H- highly significant in Hamilton Region (i.e. rare)

m- moderately significant in Hamilton Region (i.e. uncommon)

L1- extremely rare locally (Toronto Region)

L2- very rare locally (Toronto Region)

L3- rare to uncommon locally (Toronto Region)

HR- rare in Halton Region, highly significant

HU- uncommon in Halton Region, moderately significant

* The Pileated Woodpecker will incorporate smaller woodlots into its homerange, therefore it may not be a true area-sensitive species (Naylor et al. 1996)

Appendix D – Wildlife List

LATEST STATUS UPDATE

Odonata: Jan 2018

Butterflies: Jan 2018

Bumble Bees: June 2016

Other Arthropods: May 2018

Terrestrial Molluscs: May 2018

Amphibians: Jan 2018

Reptiles: Jan 2018

Birds: August 2018

Mammals: May 2018

S and G ranks and explanations: December 2011

NOTE

All rankings for birds refer to breeding birds unless the ranking is followed by N

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