



**Site Plan Amendments**

No.	Date	Description	By

- Notes**
- A. General**
- This site plan is prepared under the Aggregate Resources Act (ARA) for a Class A licence for a quarry below the ground water table. Also, this site plan follows the Aggregate Resources of Ontario, Site Plan Standards August 2020.
  - Area Calculations:  
Licence Area: 72.3 hectares (178.7 acres)  
Limit of Extraction: 51.2 hectares (126.5 acres)
  - All measurements shown are in metres unless specified otherwise.
- B. References**
- Topographic information provided by GeoOptic. Base data was digitized using ARCGIS 10.2 and the newly acquired ortho imagery. The drone flight took place on November 15, 2016 and was undertaken with an Aerohawk HawkEye platform at 800ft agl, cleared with both Transport Canada and NavCan. Ground control was placed in a network of 20 points across the site and surveyed in with a Spectra Epoch50 DK GPS system with sub-centimetre precision. All coordinates are in NAD83 UTM17 / HTV21NE. The contour interval is 1m.
  - Property boundaries compiled from vMap (First Base Solutions) online mapping service, Teranet parcel fabric layer.
  - Subject site is zoned 'A4' (rural) in the Township of Wainfleet Comprehensive Zoning By-law 034-2014 (September 2014).
  - Land use information and structures identified on or within 120 metres of the site boundary was determined using aerial imagery and 2019/2021 site visits.
- C. Drainage**
- Surface drainage on and within 120 metres of the licence boundary is by overland flow in the directions shown by arrows on the plan view or by infiltration.
- D. Groundwater**
- The groundwater table elevation on site ranges between ±170 masl in the southeast portion of the site to ±180 masl in the west portion of the site. The existing water table elevations are shown on each cross section on page 5 of 5. Groundwater table elevations provided by WSP (March 2022).
- E. Site Access and Fencing**
- There are several existing field accesses to the site. There is one from Highway #3, a couple from Biederman Road and one at the northwest portion of the site.
  - Post and wire fencing (unless noted otherwise) exists in the locations shown on the plan view.
- F. Aggregate Related Site Features**
- There are no existing aggregate operations or features on-site such as processing areas with stationary or portable equipment, stockpiles, recyclable materials, scrap, haul roads, fuel storage, berms or excavation faces.
- G. Cross Sections**
- As shown on this page. Detailed sections are shown on page 5 of 5.
  - Cross section locations are identified on the plan view for each drawing.
- H. Technical Reports - References**
- Hydrogeology: "Law Quarry Extension Level 1 and 2 Water Study Report" and "Law Quarry Extension Maximum Predicted Water Table Report", March 2022 (Source: WSP Canada Inc.)
  - Natural Environment: "Natural Environment Report Level 1 and 2 Assessment, Law Crushed Stone Quarry", June 2022 (Source: Riverstone Environmental Solutions Inc.)
  - Noise: "Noise Impact Study - Project 17132.02" May 26, 2022 (Source: Aerocoustics Engineering Ltd.)
  - Slating: "Slating Impact Analysis, Waterford Sand & Gravel Limited Law Quarry Extension", June 2022 (Source: Explotech Engineering Ltd.)
  - Archaeology: "Stage 1 Archaeological Assessment of the Law Crushed Stone Quarry Extension, Part of Lots 6 and 7, Concession 2, Geographic Township of Wainfleet, Welland County, Township of Wainfleet, Regional Municipality of Niagara" - Revised Report and Supplementary Documentation, August 6, 2021 (Source: ASI)
  - "Stage 1 and 2 Archaeological Assessment of the Law Crushed Stone Extension, Part of Lots 6 and 7 Concession 2, Geographic Township of Wainfleet, Welland County, Township of Wainfleet, Regional Municipality of Niagara" - Original Report and Supplementary Documentation, August 6, 2021 (Source: ASI)
  - "Stage 1-2 Archaeological Assessment of Additional Lands at Waterford's Law Quarry Extension, Part of Lot 6 Concession 2, Geographic Township of Wainfleet, Welland County, Township of Wainfleet, Regional Municipality of Niagara" - Original Report and Supplementary Documentation, August 6, 2021 (Source: ASI)
  - "Stage 3 Archaeological Assessment of AIGI-289 and AIGI-290, Law Crushed Stone Extension, Part of Lot 6, Concession 2, Geographic Township of Wainfleet, Welland County, Township of Wainfleet, Regional Municipality of Niagara, Ontario" - Record of Indigenous Engagement, Original Report and Supplementary Documentation, August 24, 2021 (Source: ASI)
- I. Other Reports - References**
- Air Quality Assessment: "Law Quarry Extension - Port Colborne, Ontario, Air Quality Assessment" February 3, 2022 (Source: RWDI Air Inc.)
  - Agricultural Impact Assessment: "Scoped Agricultural Impact Assessment, Waterford Sand and Gravel Law Quarry Crushed Stone Extension" May 2022 (Source: MHBC Planning)
  - Cultural Heritage: "Cultural Heritage Evaluation Report" May 2022 (Source: MHBC Planning)
  - Traffic: "Traffic Impact Study for Waterford Sand & Gravel Limited" April 26, 2022 (Source: JD Northcoote Engineering Inc.)

**Legal Description**  
Part of Lots 6 & 7, Concession 2 and Part of Road Allowance Between Lots 5 & 6, Concession 2 (geographic Township of Wainfleet) Township of Wainfleet, Region of Niagara

**Legend**

- Boundary of Area to be Licensed
- Existing Licensed Boundary (LAW QUARRY - LICENCE #4464)
- Contour with Elevation (METRES ABOVE SEA LEVEL)
- Lot and Concession
- Existing Field Access
- Monitoring Well (WSP 2021)
- Existing Vegetation (APPROXIMATE LOCATION)
- Wainfleet Bog Provincially Significant Wetland Complex (RIVERSTONE 2020)
- Onondaga Escarpment Brow (RIVERSTONE 2020)
- Significant Wildlife Habitat (RIVERSTONE 2020)
- Permanent Exclusion Archaeological Sites (SEE NOTE M "ARCHAEOLOGY" ON PAGE 3 OF 5)
- Temporary Avoidance Archaeological Sites (SEE NOTE M "ARCHAEOLOGY" ON PAGE 3 OF 5)
- Cross Sections (SEE PAGE 5 OF 5 FOR EXISTING AND REHABILITATED CROSS SECTIONS)
- Limit of Extraction (ALL SETBACKS ARE DRAWN TO SCALE AND SHOW LABELLED DISTANCES)
- Additional Lands Owned by Applicant
- Existing Limit of Extraction (LAW QUARRY - LICENCE #4464)
- Private Laneway/Roadway
- Public Road (Paved)
- Public Road (Gravel)
- Existing Fence (1.2m POST & WIRE FARM FENCE UNLESS OTHERWISE NOTED)
- Building/Structure (LOCATION AND USE FOR BUILDINGS ON-SITE AND WITHIN 120m OF SITE)
- Direction of Surface Drainage (IF ANY)
- Hydro Poles
- Spoon-leaved Moss (SEE NOTE M "NATURAL ENVIRONMENT" ON PAGE 3 OF 5)
- Whip-poor-will Category 1 Habitat (SEE NOTE M "NATURAL ENVIRONMENT" ON PAGE 3 OF 5)
- 120m Zone

**PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE**  
**MHBC**  
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**NDMNR Approval Stamp**      **MHBC Stamp**

**Applicant**  
**Waterford Sand & Gravel Limited**  
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Brantford, Ontario  
N3T 5M1  
Tel: (519) 752-1300

**Applicant's Signature**  
Ed Lamb  
VP/GM Construction Materials

**Project**  
**Law Quarry Extension**  
Part of Lots 6 & 7, Concession 2  
Part of Road Allowance Between Lots 5 & 6, Concession 2  
(Geographic Township of Wainfleet) Township of Wainfleet, Regional Municipality of Niagara

ARA Licence Reference No.	Pre-approval review:
Plan Scale 1:2,500 (Arch D)	For Submission to NDMNR - June 2022
SCALE 50 0 50 100 METRES	Plot Scale 1:2.5 [1mm = 2.5 units] MODEL
	Drawn By D.G.S. File No. 0956B
	Checked By C.P.

**EXISTING FEATURES PLAN**  
**1 OF 5**