NUMBERING SCHEME USED FOR REHABILITATION NOTES REFERS TO AGGREGATE RESOURCES ACT PROVINCIAL STANDARDS FOR A CLASS "A" CATEGORY 1 LICENCE APPLICATION.

Sequence and Direction
1.3.1 Rehabilitation will be progressive following the general direction of extraction and proceed as limits of extraction (area and depth) are reached [see "Progressive Rehabilitation Sequence", this page]. Generally, rehabilitation will follow the Sequence of Operations diagram located on Page 2 of 2. Minor deviations/variations in operational/rehabilitation sequence will be permitted in order to adjust for any variable resource and market conditions. Sufficient working and travel areas will remain active.

Topsoil and Overburden
1.3.2 Topsoil will be used in the progressive rehabilitation of the pit side slope areas and where appropriate the pit floor areas (ie. shallow littoral area). Topsoil and subsoil will be stripped, stored, and re-applied separately. Areas of compacted soils will be ripped to alleviate compaction without mixing soil layers. Soils (topsoil and subsoil) will be replaced at variable depths (minimum 150mm-300mm)side slope areas. Overburden material will be used to establish side slopes to desired finished grades (i.e.3:1 slope).

Proposed Vegetation
1.3.3 & 1.4.3 The proposed rehabilitation includes an opportunity to enhance the biological diversity of the local landscape. Shallow shoreline planting zones will include, but are not limited to non-invasive species such as red-osier dogwood, slender willow and herbaceous plants such as water plantain, lake sedge, swamp milkweed, soft stem bulrush and common cattail; and other native aquatic plants that are suited to the site conditions and present in the local area. The shallow shoreline areas will include nodal shrub plantings near the shore, woody debris and boulders, etc., to provide waterfowl and reptile basking, bird perching, and waterfowl nesting locations; and will incorporate a combination of fine sand and coarse stone pond bottom (see Shallow Shoreline Detail, this page). All ground covers on side slopes will be maintained and replaced should it fail to establish itself to control erosion. Trees and shrubs will be maintained in a healthy vigorous growing condition. Nodal planting is also proposed within the north setback areas. Planting cells will include a variety of deciduous and coniferous species, including but not limited to white pine, basswood, trembling aspen and white birch with secondary focus on species such as choke cherry, alternate-leaved dogwood, highbush cranberry, nannyberry and serviceberry. (see planting detail, this page).

Slope Creation & Rehabilitated Landform
1.3.4 & 1.4.2 Final pit landform will generally be in accordance with the drawing as shown on this page. Rough grading to create a stable side slope shall be carried out progressively as extraction proceeds across the site to minimize the final grading work to be undertaken following the completion of resource extraction. Above the water table side slopes will be graded 3:1 and seeded with a grass/legume mixture consisting of non-invasive species to ensure stability. Side slopes will be established using a combination of backfill and/or cut and fill methods using on-site overburden, aggregate material, etc. Above the water table side slopes will be irregular with an average top to bottom grade not steeper than 3:1. Below water extraction and shoreline formation by dragline around perimeter edge of pond directly abutting 3:1 rehabilitated side slopes will be excavated in a manner that will result in the retention of a 5m wide bench along the shoreline above water. This bench allows for equipment manoeuvring and helps ensure the above-water slope remains stable. Below water slopes will occur to the natural angle of repose except where site specific grading to establish shallow shoreline areas occurs. A shallow littoral area will be created in Phase 3 (see typical shoreline section). Where possible the shoreline area will be undulating (see undulating shoreline detail, this page).

Progressive Rehabilitation
1.3.5 Progressive rehabilitation shall follow the Sequence of Operations diagram/ notes on page 2 of 3 and Progressive Rehabilitation Sequence, this page.

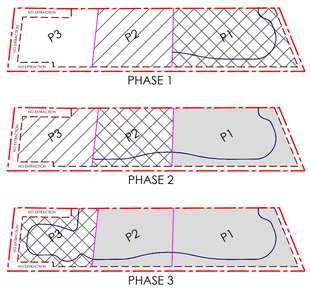
Buildings & Structures
1.4.4 No buildings or structures associated with aggregate operations will remain on site.

Groundwater Table
1.4.5 The post extraction water level of the proposed Lake (~238 mAMSL) and the post extraction ground water table are shown on the rehabilitation drawing, this page, as per hydrogeological assessment.

Internal Haul Roads
1.4.6 An access road to the shoreline edge may remain on the site.

Surface Water Drainage & Discharge
1.4.7 Final surface drainage will follow the rehabilitated contours as shown and generally be directed towards the post-extraction pond.

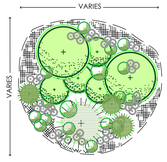
PROGRESSIVE REHABILITATION SEQUENCE (See Note 1.2.1 Page 2 of 3) N.T.S.



SITE PREPARATION
EXTRACTION
NOT EXTRACTED
FINAL/ PROGRESSIVE REHABILITATED

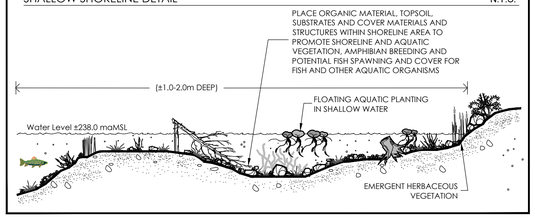
REHABILITATION TO OCCUR IN PHASE 3 IMMEDIATELY AFTER EXTRACTION IS COMPLETED

NODAL PLANTING DETAIL N.T.S.

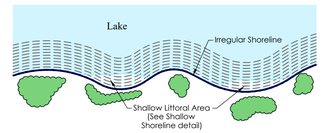


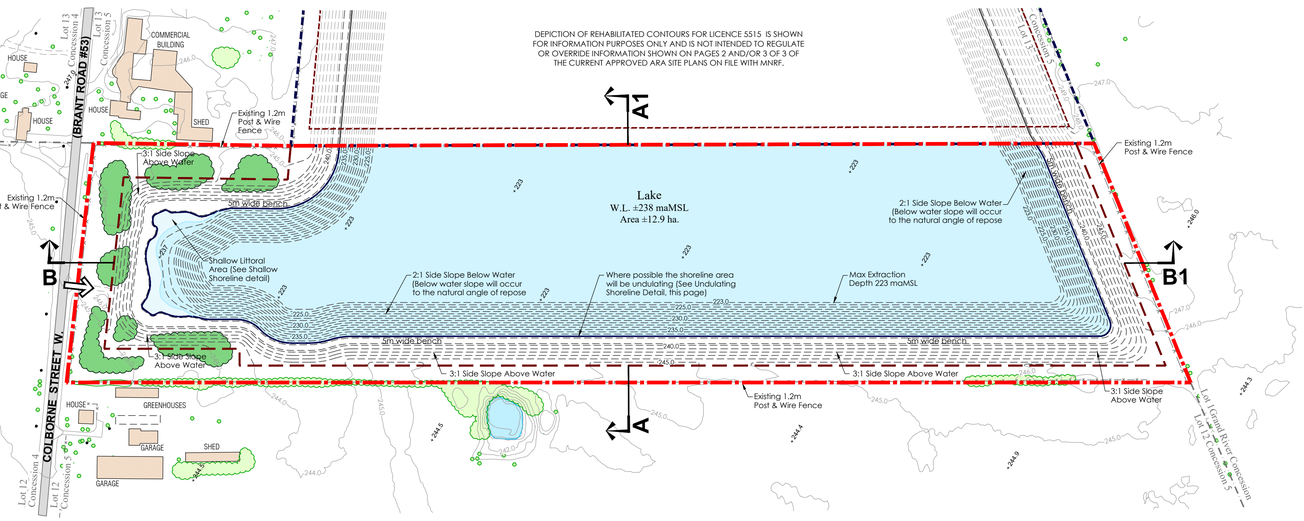
- PLANTING AREAS WILL CONSIST OF A NUMBER OF NODAL PLANTING CELLS CONTAINING A MIXTURE OF CONIFEROUS AND DECIDUOUS SPECIES PLANTED AS SEEDLINGS AT APPROXIMATE 3.0m CENTRES.
- SPECIES SHALL INCLUDE BUT ARE NOT LIMITED TO: WHITE PINE, SILVER MAPLE, BASSWOOD, TREMBLING ASPEN, EASTERN WHITE CEDAR, BALSAM POPLAR AND WHITE BIRCH WITH A SECONDARY FOCUS ON ALTERNATE LEAVED DOGWOOD, CHOKECHERRY, HIGH BUSH CRANBERRY AND NANNYBERRY.

SHALLOW SHORELINE DETAIL N.T.S.

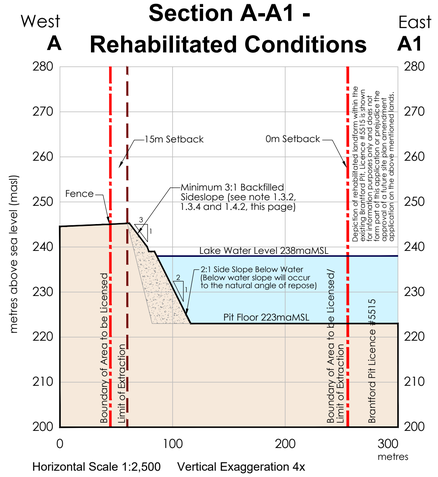


UNDULATING SHORELINE DETAIL N.T.S.

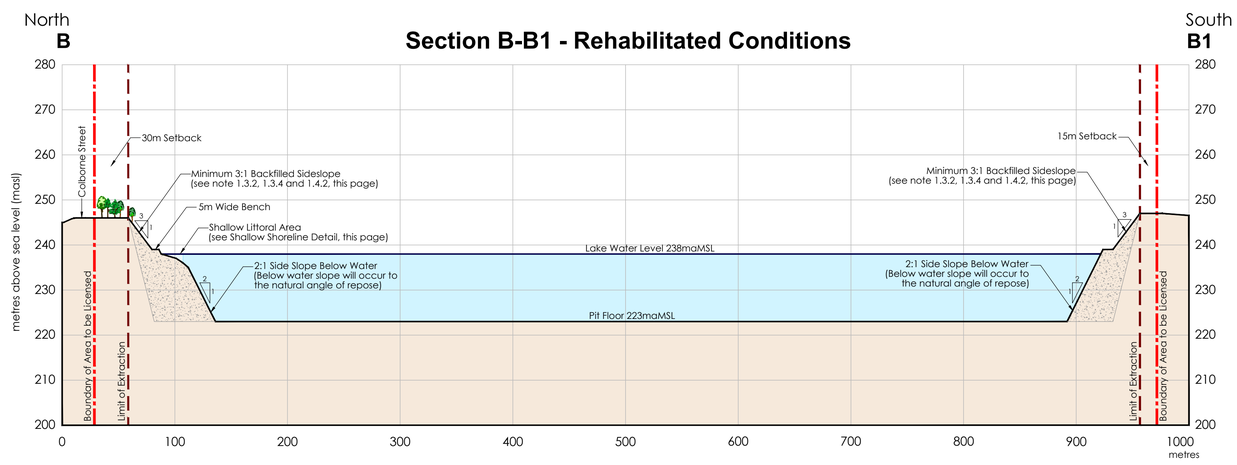




Section A-A1 - Rehabilitated Conditions



Section B-B1 - Rehabilitated Conditions



Legend

- Boundary of Area to be Licensed
- Additional Lands Owned by Applicant — LAFARGE BRANTFORD PIT–LIC.#5515
- Existing Fence — POST & WIRE FENCE UNLESS OTHERWISE NOTED
- Contour and Elevation — METRES ABOVE SEA LEVEL
- Private Driveway/ Laneway
- Farm/Field Access
- Hydro Pole
- Cross Sections — SEE PAGE 1 AND 3 OF 3 FOR EXISTING AND REHABILITATED CROSS SECTIONS
- Public Road
- Limit of Extraction — ALL SETBACKS ARE DRAWN TO SCALE AND SHOW LABELED DISTANCES
- Existing Extraction Limit — LAFARGE BRANTFORD PIT–LIC.#5515
- Spot Height Elevation — METRES ABOVE SEA LEVEL
- Proposed Contour — METRES ABOVE SEA LEVEL
- Building/Structure — LOCATION AND USE FOR BUILDINGS ON–SITE AND WITHIN 120m ARE SHOWN ON THIS PAGE.
- Existing Vegetation
- Proposed Vegetation
- Proposed Lake
- Proposed Shallow Littoral Area

Notes

1. HYDROGEOLOGICAL INFORMATION PREPARED BY MTE CONSULTANTS INC. JULY, 2020 GROUNDWATER TABLE ELEVATION ~238 maMSL
2. AREA TO BE LICENSED ±19.9 ha. (±49 ac.)
   AREA TO BE EXTRACTED ±16.9 ha. (±42 ac.)
3. ALL MEASUREMENTS SHOWN ON THIS PLAN ARE IN METRES.

Site Plan Amendments

No.	Date	Description	By

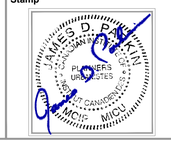
MHBC PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE
200 - 540 BINGEMANS CENTRE DR. KITCHENER, ON. N2B 3X9 | P: 519.576.3650 F: 519.576.0121 | WWW.MHBCPLAN.COM

Legal Description

PART OF LOT 12
CONCESSION 5
(former geographic township of Brantford)
COUNTY OF BRANT

MNRF Approval Stamp

Stamp



north

Applicant's Signature

LAFARGE Building better cities™

Carol Siemiginowski, P.Eng
Land Manager, Southwest Ontario & Atlantic
Lafarge Canada Inc.

Project

Brantford Pit Extension

Lafarge Canada Inc.
6509 Airport Road, Mississauga Ontario, L4V 1S7
Tel: (905) 738-7070 Fax: (905) 738-7092

MNRF Licence Reference No.

Pre-approval review:
For Client Review - November 2019

Plan Scale **1:2,500 (Arch D)**
SCALE 50 0 50 100 METRES

Plot Scale 1:2.5 [1mm = 2.5 units] MODEL
Drawn By D.G.S. / G.C.
Checked By J.P.
File No. **9526FU**

File Name
REHABILITATION PLAN

Drawing No.
3 OF 3

K:\9526FU-Lafarge-Ginseng Farm Property-County of Brant\A\Rehaplan 3of3.dwg