

This site plan has been prepared to comply with the Provincial Standards for Bill 52 under the Aggregate Resources Act for a Category 2 Class "A" license. This license is for a quarry operation that intends to extract aggregate material from below the established water table.

Contours were derived from the digital elevation model for the Ministry of Natural Resources and Forestry's 2014 Digital Raster Acquisition Project for Eastern Ontario and are in 1 metre intervals.

Topographic information was obtained from a combination of April 22, 2017 aerial photography from Google Earth Pro and Land Information Ontario (LIO) data.

The quarry property is surrounded by mixed brush to the west, a solar farm on Lot 6 Conc. 6, a residential receptor at 2528 Unity Road, and a residential receptor at 2467 Unity Road (4 ha) to the north, mixed brush, and property owned by Cruickshank to the east, and property owned by Cruickshank to the South.

- Note numbers below refer to ARA Category 2 Provincial Standards Version 1.0 -

1.1.10 Reports Contributing to the Operation Plan

Hydrogeological Impact Assessment for the Expansion of the Cruickshank Elginburg Quarry, Morrison Hershfield, February 22, 2016

Natural Environment Technical Report: Level I and II Elginburg Quarry, Ecological Services, January 9, 2018

Stage 1 Archaeological Assessment, Parts of Lots 12 & 13, Concession 5, Kingston Township, Frontenac County, City of Kingston, Ground Truth Archaeology & Abacus Archaeological Services, October 14, 2010

Stage 2 Archaeological Assessment of the Elginburg Quarry Expansion, Frontenac County, Ontario, Ground Truth Archaeology, February 7, 2014; As amended April 30, 2014

Stage 3 Archaeological Assessment of the Albertson Lime Kiln, BbGd-59, Ground Truth Archaeology, November 17, 2014; As amended February 19, 2015

Stage 3 Archaeological Assessment of the Albertson Foundation (BbGd-60), Ground Truth Archaeology, November 17, 2014; As amended April 1, 2015

Stage 3 Archaeological Assessment of the Donovan Lime Kiln (BbGd-62), Ground Truth Archaeology, November 17, 2014; As amended March 22, 2015

Acoustic Assessment Report, Elginburg Quarry Expansion, Freefield Ltd., March 23, 2020

Blast Impact Analysis, Proposed Elginburg Quarry, City of Kingston, Province of Ontario, DST Consulting Engineers, January 2018 Elginburg Quarry (Unity Road) Traffic Review, IBI Group, July 2013; As amended January 2014

Truck Route Evaluation, IBI Group, July 2015; As amended February 9, 2018

Aggregate Resources Assessment, Elginburg Quarry, Kingston, Ontario, Morrison Hershfield, August 15, 2014

Site Plans for the adjacent licensed Existing Elginburg Quarry licence number 2901 were prepared by Gorrell Resource Investigations, dated August 2002, and all supporting documentation

Best Management Practices Plan for the Control of Fugitive Dust Emissions, Coco Properties Corporation (A Division of the Coco Group), October 6, 2020

1.1.20 Existing Surface Water Drainage within 120 m of Site

There is a surface ditch running from north to south outside the south-east portion of the adjacent licence quarry boundary. See map this page. The ditch receives water pumped from the north part of the existing quarry through a culvert which traverses beneath the pipeline. This ditch receives water joined from the south part of the existing quarry. The drainage ditch traverses the K&P Trail at a culvert and joins Collins Creek on the north side of Bur Brook Road. Drainage from the southern part of the expansion area currently flows overland to this same drainage feature.

Drainage from the north part of the expansion area flows overland in the south-westerly direction to a tributary of Collins Creek.

1.1.21 Fencing

There is existing page wire fencing running along the entire north and west boundaries of the site.

1.1.22 Tree Cover within 120 m of Site

Much of the site and surrounding areas is covered by mixed brush consisting of red cedar, sugar maple, and white ash. See map this page.

1.1.23 Existing Stockpiles of Topsoil and Overburden

No topsoil or overburden on-site.

1.1.24 Existing Aggregate Stockpiles

None.

1.1.25 Existing Scrap Locations

There are no existing scrap location.

1.1.26 Existing Fuel Storage

There is no existing fuel storage on site.

1.1.27 Significant Natural Features on and within 120 m of Site

There is a Significant Woodland outside the south boundary of the site. The site boundary does not cross a 30 metre imposed buffer.

1.1.28 Significant Man-made Features on and Within 120 m of Site

The site is transected from east to west by three gas pipelines. Two Trans-Canada Pipelines to the north and Enbridge to the south. An extraction setback of 40 m will be maintained north and south of the right-of-ways of the corridor.

The Rideau Trail primarily abuts and, in some locations, deviates up to 50m into the site along the western boundary as shown on the map.

As shown on this page, there are significant archaeological sites located outside the south boundary of the site. They are identified as Albertson Lime Kiln (BbGd-59), Albertson Foundation (BbGd-60), and Donovan Lime Kiln (BbGd-62). These sites are protected under Section 48(1) of the Ontario Heritage Act, R.S.O. c. O.18. Each archaeological site will be protected by a 10 metre buffer, thus no alteration, soil disturbance or erection of any structures shall take place within these areas. No release of these restrictions will be given until such time as a licensed consultant archaeologist has recommended in a report that the archaeological site has no further cultural heritage value or interest and the Ministry of Tourism, Culture and Sport has stated its satisfaction with that report and entered it into the Ontario Public Register of Archaeological Reports according to Section 48(3) of the Ontario Heritage Act.

1.1.29 Existing Excavation Faces and Rehabilitated Areas

With the exception of the parking area associated with the Existing Elginburg Quarry License Number 2901, the site is presently undisturbed.

1.1.30 Location of Processing Areas

There are temporary crushing and screening equipment, an asphalt plant and concrete batch plant on the adjacent licence site (refer to site plan for existing adjacent quarry licence number 2901). No existing processing plants on this site.

1.1.31 Existing Berms

No berms existing

1.1.32 Cross-sections

As shown on this drawing.

1.1.12 Licence Area

The total licence area is 66.2 ha.

1.1.16 Location and Use of Buildings/Structures

A scale house, aggregate testing lab, Ready-mix plant, asphalt plant, garage and several sheds exist on the existing quarry site. Residences within 120 m of the quarry are 2467 Unity Road, which is a 4 ha parcel adjacent and on the west side of the existing quarry, and 2528 Unity Road which is on the north side of Unity Road, west of the expansion area. There are no buildings or structures within the proposed expansion area of the site. There is a parking area on-site related to the Existing Elginburg Quarry License Number 2901.

1.1.17 Site Access

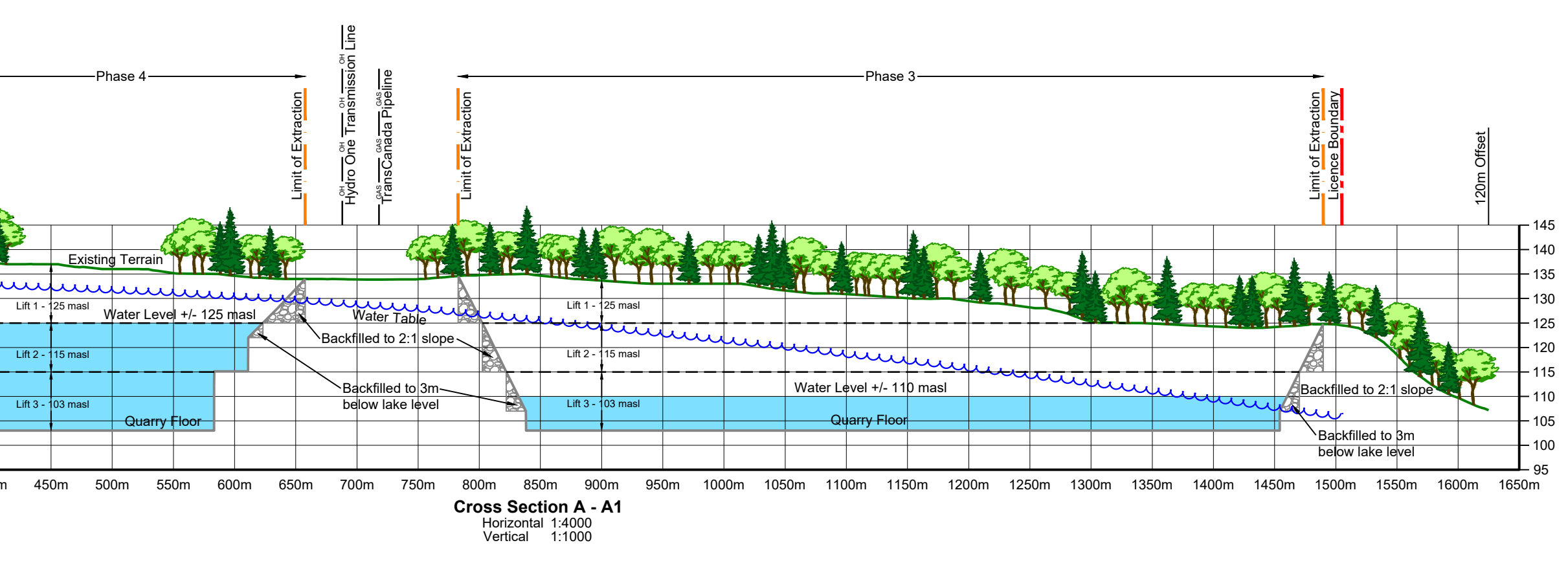
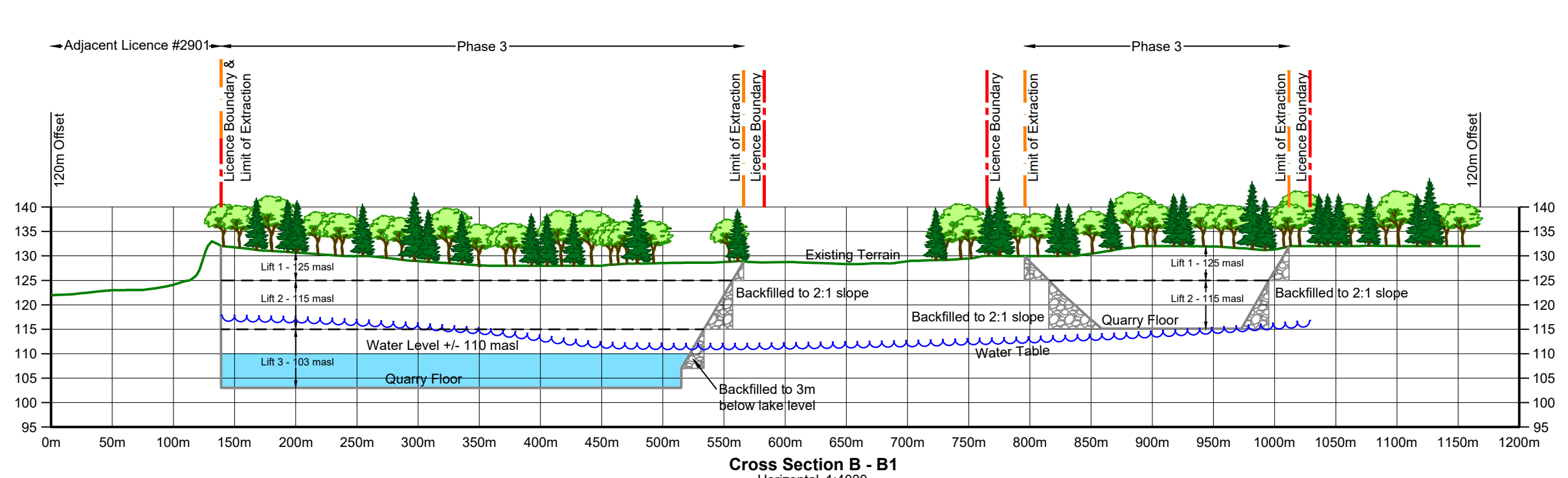
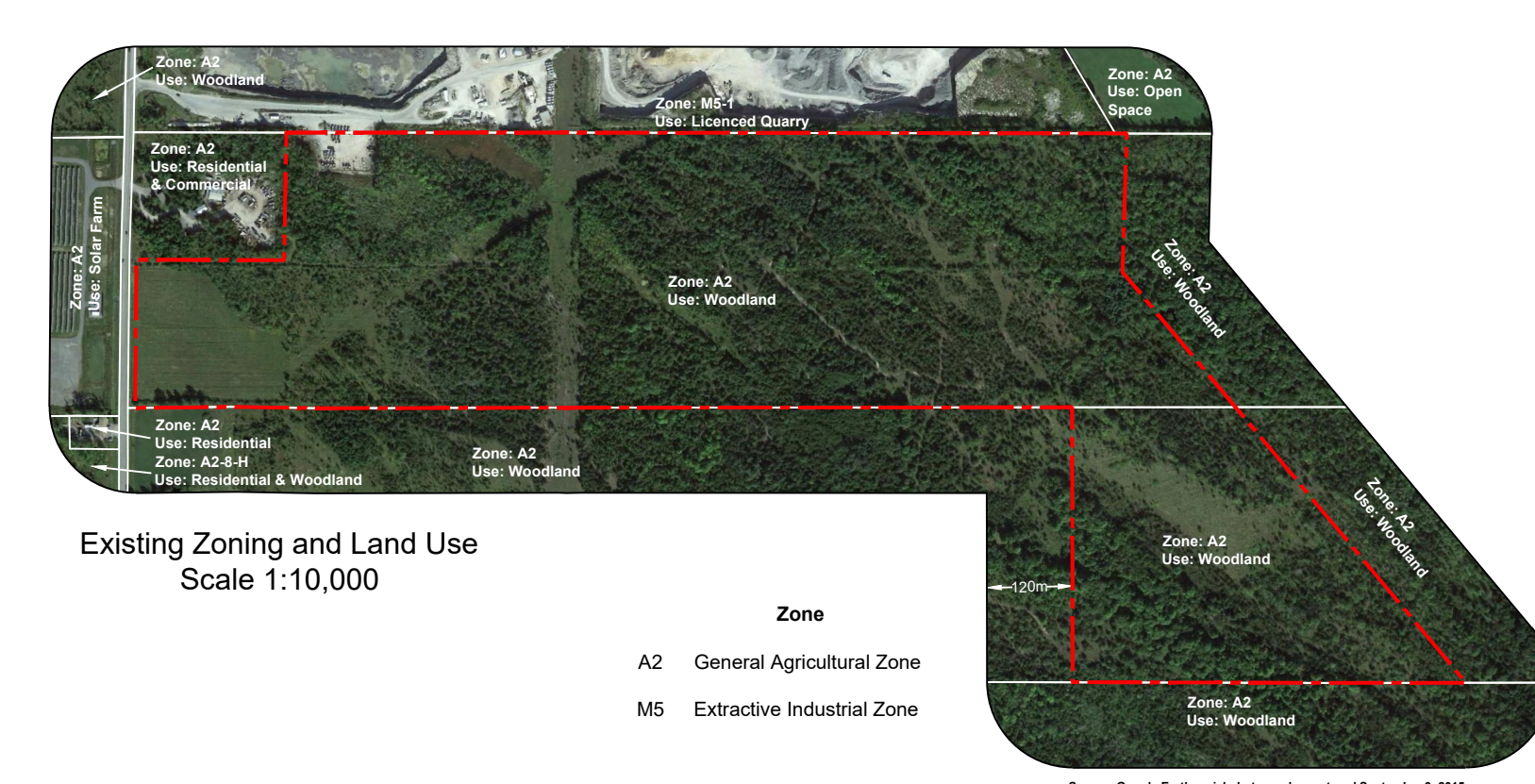
Access to this site is through the existing licence 2901. There is also a secondary farm entrance existing west of the residential lot 2467 Unity Road on the north portion of the licence boundary, (see map).

1.1.18 Main Internal Haul Roads

Main internal haul roads will be as shown, although subject to relocation as quarry progresses.

1.1.19 Groundwater Table

The ground water table was determined from the wells and diamond drill holes drilled on the site to vary from 134 M.A.S.L. at the north edge of the site to 106 M.A.S.L. at the south edge of the site. See cross-section this page.



Legal Description
Part Lots 12 & 13, Concession 5
City of Kingston

Legend

- Licence Boundary
- Limit of Extraction
- Contours with Elevation
- Public Road - Dark Gray
- Internal Haul Road - Light Gray
- Fence
- Extraction Face
- Water Features
- Woodlands
- Significant Woodlands
- Wetland
- Archaeological Site
- 120m Offset From Licence Boundary
- Adjacent Licence
- Parcel Fabric
- Utility
- Trail Segment
- Entrance / Exit
- Gate
- Direction of Surface Drainage
- Building/Structure
- Point Features
- Cross Sections

Site Plan Amendments

No.	Date	Description	By

Site Plan Revisions (Pre-Licensing)

No.	Date	Description	By
3.	October 2022	Update site plan per settlement consultation	CAP
2.	March 2022	Update site plan per feedback from City of Kingston	CAP
1.	October 2020	Add Rideau Trail to plan view. Update legend and note 1.1.28.	CAP

MHBC
PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE
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MNRF Approval Stamp

MHBC Stamp

Draft

Applicant

Coco Properties Corporation
949 Wilson Avenue
Toronto, Ontario
M3K 1G2

Project
Elginburg Quarry 2
2506 Bur Brook Road, City of Kingston

MNRF Licence Reference No.
626239

Applicant's Signature:

Plan Scale: 1:4000 (Arch D)

Date: March 2020

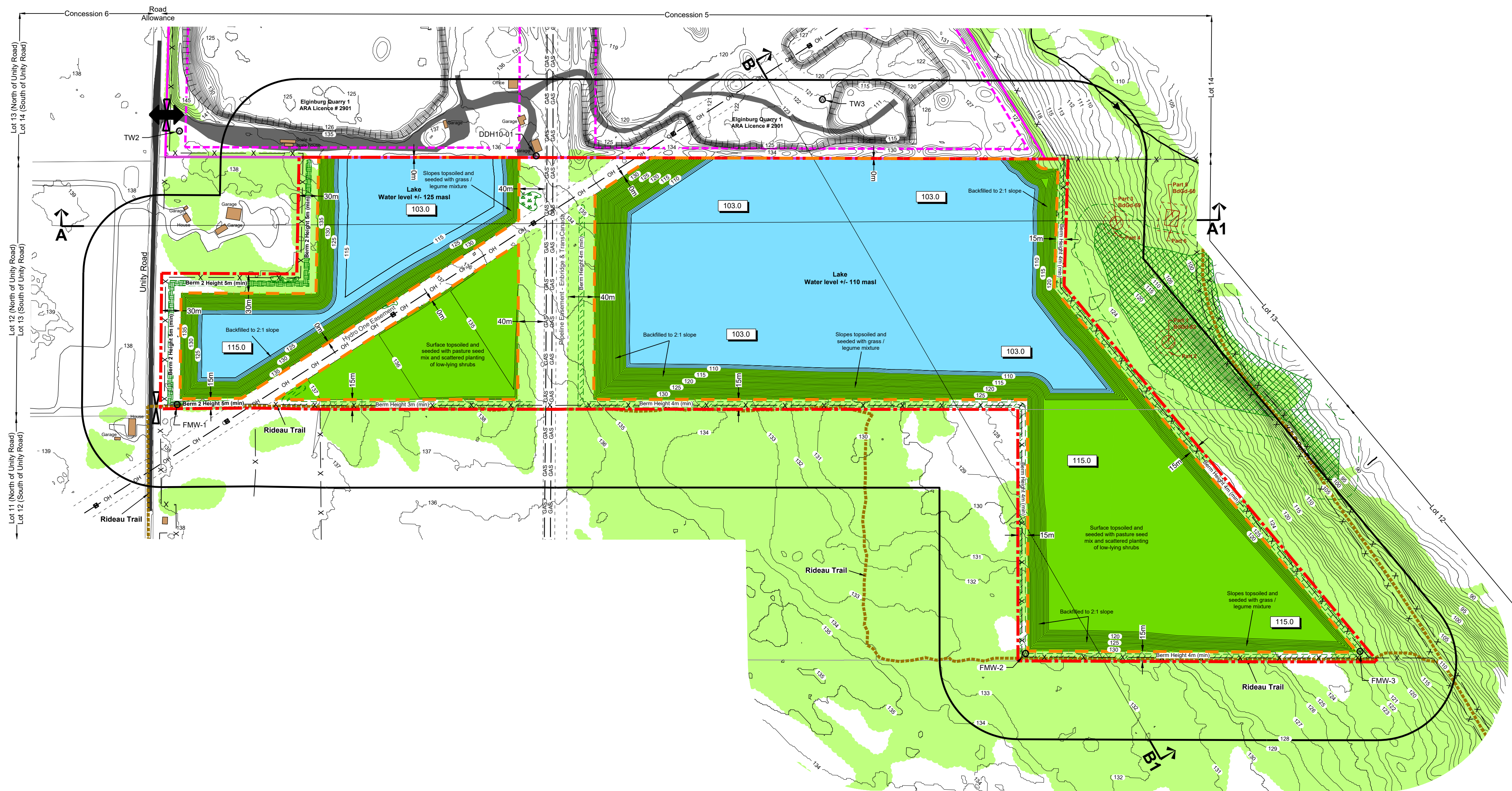
Drawn By: C.P. **File No.:** 0818K

Checked By: B.Z.

File Name: Existing Features & Cross Sections

Drawing No.: 1 of 3

File Path: N:\Briani\0818K Coco - Elginburg Quarry\Drawings\Site Plan\Site Plan - Extension\CAD\0818K - Elginburg Quarry - Site Plan.dwg



Progressive Rehabilitation

The proposed final rehabilitation of the site would be two separate lakes. Upon completion of the quarry operations, the bottom of the quarry will be allowed to fill with water to an expected elevation of 125 m ASL in the lake north of the pipeline corridor and to 110 m ASL in the lake south of the corridor.

- Note numbers below refer to ARA Category 2 Provincial Standards Version 1.0 -

1.3.1 Sequence and Direction of Progressive Rehabilitation

Progressive rehabilitation will begin at the east side of the site as extraction limits are met and material is made available for rehabilitation and progress to the west as conditions permit. The amount of area to be disturbed will be kept to a minimum. As extraction commences on the second lift, progressive backfilling, sloping and topsoil cover will commence from the setback limit to the bench at the bottom of the first lift. The slopes will be adequately vegetated.

1.3.2 Use of Overburden and Topsoil in Rehabilitation

Overburden will be used for sloping the side of the quarry at maximum 2:1. Clean inert fill materials free from any contaminants as per the MOECC guideline: Excess Soil Management may include a combination of concrete, stone, rock, clay fill and loamy silty clay from off site. If waste rock is used as a base, available overburden and topsoil will be used on the slopes to provide a surface that will grow vegetation. All available on-site topsoil will be used to top-dress the rehabilitated site.

1.3.3 Vegetation during Progressive Rehabilitation

The surface will be seeded with non-maintenance grasses to prevent erosion.

1.3.4 Sloping of Excavation and Floor

The side will be rehabilitated by sloping the faces to a maximum 2:1 slope down to 3 m below the expected water level with stored overburden, waste rock or other approved inert material.

1.3.5 Progressive Rehabilitation and Site Operations

Progressive rehabilitation will be carried out as soon as quarrying operations permit it.

1.3.6 Proposed Importation of Material to Facilitate Rehabilitation

If there is not enough overburden to rehabilitate the property, material meeting the definition of "inert fill" may be brought onto the site to assist in the rehabilitation.

Final Rehabilitation

Upon final rehabilitation, the excavation will be permitted to fill with surface water.

1.4.1 Use of Overburden and Topsoil in Rehabilitation

Clean and inert fill materials may include a combination of concrete, stone, rock, clay fill and loamy silty clay from off site. If waste rock is used as a base, available on-site overburden and topsoil will be used on the slopes to provide a surface that will grow vegetation. All available on-site topsoil will be used to top-dress the rehabilitated surface. Lot 12 will be rehabilitated by laying down 20 cm of stockpiled berm soils and planting a commercial pasture seed mix and native shrubs, as per Natural Environment Report recommendations.

1.4.2 Final Sloping and Grading

The sides will be rehabilitated by sloping the faces to a maximum 2:1 slope down to 3 m below the expected water level with the material stored in berms and other overburden.

1.4.3 Final Vegetation

The above-water portion of the site in Lot 12 will be rehabilitated by laying down 20 cm of stockpiled berm soils and planting a commercial pasture seed mix and native shrubs, as per the Ministry of Natural Resources and Forestry.

1.4.4 Buildings and Structures

Aside for the electrical transmission towers, there will be no buildings or structures on site following final rehabilitation. Fencing to remain to protect early succession.

1.4.5 Anticipated Evaluation of Water Table

The lake north of the cross-site pipeline corridor is expected to fill to 125 m ASL. The lake south of the corridor is expected to fill to 110 m ASL.

1.4.6 Internal Roads

A single internal road may be maintained to permit site maintenance.

1.4.7 Final Surface Water Drainage

Water from the northern lake will likely flow into the southern lake, near the east side of the site. Surface flow from the southern lake is not anticipated.

Legal Description

Part Lots 12 & 13, Concession 5
City of Kingston

Legend

	Licence Boundary		120m Offset From Licence Boundary
	Limit of Extraction All setbacks are drawn to scale and show labelled distances		Adjacent Licence Existing Licence Boundary (solid line) Existing Limit of Extraction (dashed line)
	Contours with Elevation Metres above sea level (MASL)		Parcel Fabric
	Public Road - Dark Gray		Utility Overhead Hydro - Easement Underground Gas - Easement
	Internal Haul Road - Light Gray		Fence 1.2m post & wire fence unless otherwise noted
	Watercourse		Trail Segment
	Woodlands		Entrance / Exit
	Significant Woodlands 30m Buffer - Dashed Line		Gate
	Wetland		Building/Structure Location and use for buildings on site & within 120m are shown
	Archaeological Site 10m Buffer - Dashed Line		Point Features Monitoring Well
	Proposed Quarry Floor Metres above sea level (MASL)		Cross Sections

Site Plan Amendments

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Applicant's Signature: _____

Plan Scale: 1:4000 (Arch D)

Date: **March 2020**

Drawn By: **C.P.** File No.: **0818K**

Checked By: **B.Z.**

File Name: **Rehabilitation Plan**

Drawing No. **3 of 3**