

#### 1.1.12 Licence Area The total licence area is 66.2 ha.

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 building 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.

Access to this site is through the existing license 2901. There is also a secondary farm entrance existing west of the residential lot 2467 Unity Road on the north portion of the license 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.

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

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.

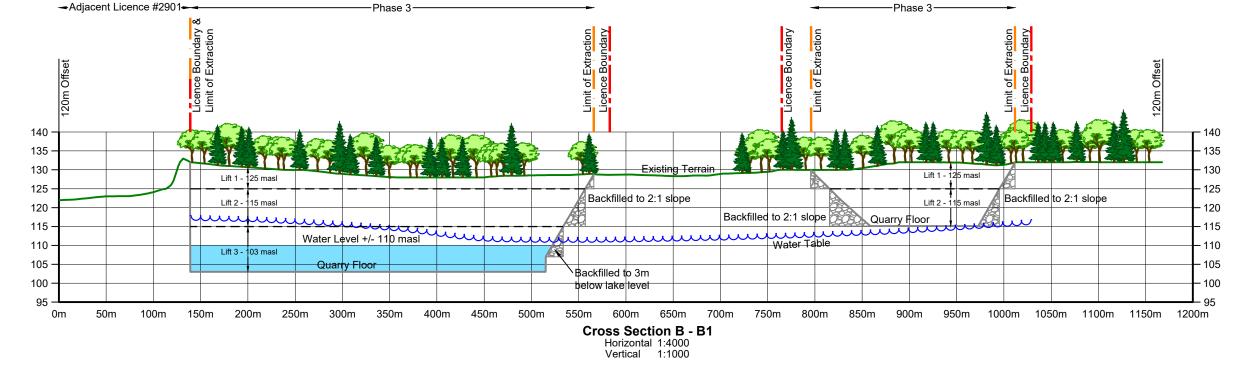
## 1.1.30 Location of Processing Areas

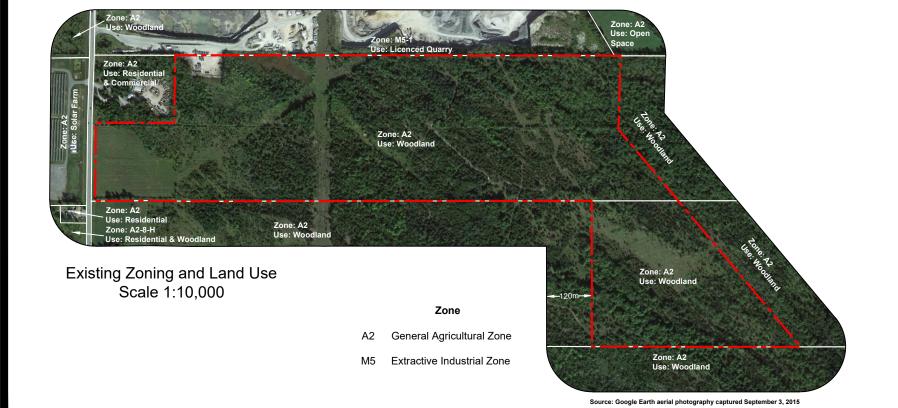
There are temporary crushing and screening equipment, an asphalt plant and concrete batch plant on the adjacent licence site (refer to site plan for existing adjacent quarry licence number 2901). No existing processing 1.1.31 Existing Berms

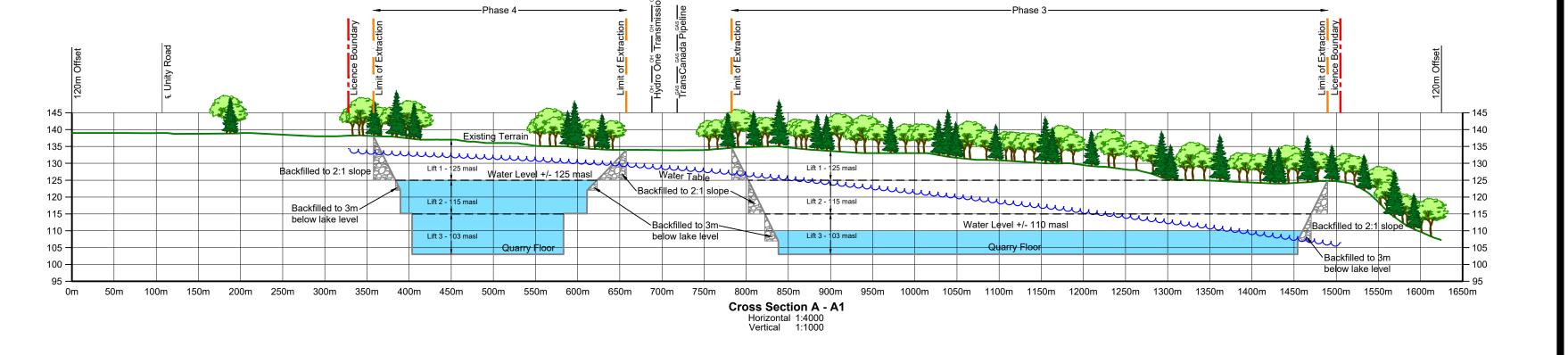
No berms existing

1.1.32 Cross-sections

As shown on this drawing.

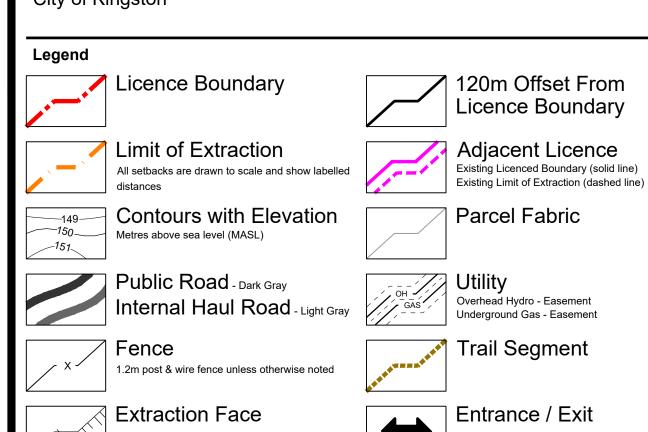






Legal Description

Part Lots 12 & 13, Concession 5 City of Kingston



Woodlands Significant Woodlands

Building/Structure Location and use for buildings on site & within 120m are shown Point Features

Direction of Surface

Drainage

Archaeological Site

10m Buffer - Dashed Line

30m Buffer - Dashed Line

Water Features

Natural Watercourse (solid line) Discharge Channel (dashed line)

> Well Monitoring Well Cross Sections **A1**

Site Plan Amendments Date Description

Site Plan Revisions (Pre-Licencing) October 2022 Update site plan per settlement consultation March 2022 Update site plan per feedback from City of Kingston Add Rideau Trail to plan view. Update legend and note 1.1.28. October 2020 Date Description



**MNRF Approval Stamp** 



**Applicant** 

Plan Scale: 1:4000 (Arch D)

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

March 2020

Elginburg Quarry 2

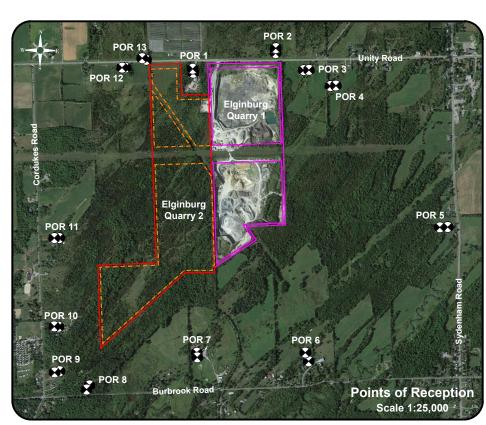
2506 Bur Brook Road, City of Kingston MNRF Licence Reference No. Applicant's Signature:

0818K

**Existing Features & Cross Sections** 

Drawing No. 1 of 3

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



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

2.1 Sequence and Direction of Operation

The expansion area will be developed from the adjacent Elginburg Quarry 1 in an east to west direction in three Phases. Phase 3 is located south of the pipeline while Phases 4 and 5 are north of the pipeline and separated by the hydro corridor. The order of the phasing will be dictated by rock quality and market demand

### 1.2.2 Stripping and Stockpiling

Topsoil and overburden will be stripped seasonally, as required, to expose an area required for the season's production. Stripped material will be constructed into berms, used for progressive rehabilitation or stored in piles on site for future use.

The quarry will operate in up to 3 lifts, benched at approximate elevation 125 m ASL and 115 m ASL. Depending on rock quality, market demand, and to facilitate rehabilitation, the lower bench may be mined to a shear face provided the elevation does not exceed 25 meters in height and the upper bench can support a 2:1 slope to final water level.

Internal haul routes will vary with the areas being developed. Only upon approval of the National Energy Board, one pipeline crossing is to be maintained between the north and south quarry in the

expansion area. The location of the pipeline crossing may move as quarry operations advance.

Main entrance and exit from quarry will be through existing entrance on licence # 2901. There will be an entrance from existing licence # 2901 on both the north side of pipeline as well as south side. An access way for use by Hydro One to access tower #1 will be in the northwest corner of the site.

#### .2.6 Groundwater table and depth of Extraction The groundwater table is sloped across the site in a mainly north to south direction. The water table elevation has been established at approximately 134 m ASL in the north to 106 m ASL at the south end

of the site. The maximum depth of extraction will be 103 m A.S.L.

.7 Surface Water Diversion and Discharge Water from the north expansion area will be pumped or will flow via gravity to the north sump on the east side of the existing quarry. From here it will flow via gravity or will be pumped through the culvert beneath the pipeline into the south quarry. This water and all other drainage from the south quarry (existing and expansion areas) will discharge via pumping from a sump to the existing drainage channel within the southeast corner of the site to the discharge point (see map this page). Once the drainage channel is extracted the water will be pumped directly to the discharge point. The exact location of the drainage channel and discharge point will be in accordance with MECP Environmental

Drainage from 2467 Unity Road must be allowed to discharge at the southern end of this property by 1.2.8 Fencing

The property is currently fenced with the exception of the south perimeter. The south boundary will be clearly demarcated (refer to variation chart for details on other boundaries). Fencing along the south boundary will be installed within 6 months of licence being issued.

Current page wire fencing will be maintained along the north boundary. Current page wire fencing along the west boundary will be dismantled and reinstalled east of the realigned Rideau Trail (refer to map for location and Detail B: Rideau Trail Placement for additional information), within 6 months of the licence being issued (see note 1.2.25).

.2.9 Buildings and Structures

No new buildings are currently planned for the site. A portable crushing plant and screening plant may be located on the site and may be relocated from time to time also.

Topsoil and overburden will be stockpiled in perimeter berms. If the crushing plant is to be operated on the site, stockpiles may be located strategically to minimize operational noise.

2.11 Aggregate Stockpiles and Recycled Materials Stockpiles may be constructed on the floor of the excavation adjacent to portable processing equipment to a maximum height of 15 metres. Imported recycle materials will include asphalt grindings,

concrete with re-enforcement bar removed, glass and porcelain and sand materials to blend and feed portable crushing and screening plants. Storage of recycled asphalt and concrete shall be 2 m above the water table and 30 m away from any of natural water bodies or the man-made pond.

Scrap will be kept in a designated area on site to be relocated as the quarry progresses and will be removed on an ongoing basis. Scrap will not be stored within a setback.

Fueling is restricted to mobile fuel bowsers and portable above ground fuel tanks in accordance with the Technical Standards and the Safety Act and regulations. Underground tanks are prohibited. If portable fuel tanks are required, they would be located a minimum of 30 m away from man-made ponds and natural open water bodies on original grade. Fuel tanks will be made up of double-walled as per the specification of TSSA - Technical Standard and Safety Act/Authority and carry approval

## 1.2.14 Area to be Extracted

The total area of extraction is 53.6 hectares, broken down as follows:

- expansion area north of the pipeline: 13.4 hectares - expansion area south of the pipeline: 40.2 hectares

1.2.15 Location of all Excavation Setbacks

See plan for location of setbacks. Setback from pipeline corridor may be reduced from to 20 m from 40 m to match existing quarry, only upon approval from the National Energy Board.

1.2.16 Final Elevation

See plan for final elevation. 1.2.17 Processing Areas

1.2.18 Berms

All processing equipment on site will be portable and be relocated as the quarry progresses. Processing equipment on-site may include but not be limited to: crushing plant, screening plant, rock drill, and associated hauling equipment. No wash plant shall be permitted within this licence.

Berms will be constructed of overburden and topsoil in the locations shown on the plan view and range from 3-5m in height with a minimum side slope of 2:1 (see Detail A: Typical Berm for additional detail). Berm 2 along the northern limit of the extension will serve as a noise attenuation berm. The remaining berms along the west and south boundary will provide a visual buffer.

1.2.19 Berm Vegetation and Maintenance Berms will be seeded with a suitable field grass mix upon development. Vegetation will be maintained

as necessary to prevent erosion. 1.2.20 Equipment and Equipment Storage

Equipment on-site may include but not be limited to: crushing plant, screening plant, rock drill, and associated hauling equipment 1.2.21 Proposed Tree Screens

Existing trees will be maintained where possible. Tree screens will be used to help control dust and 1.2.22 Hours of Operation

Operating hours are 7 a.m. to 7p.m. Monday to Saturday. On Sundays and statutory holidays no operation is permitted. Site preparation and rehabilitation activities shall only take place during these hours Monday to Friday 1.2.23 Tree and Stump Removal

Timber will be harvested and used where possible. Debris from the trees and stumps will either be control-burned with approval from Kingston Fire and Rescue, or ground into chips.

.2.24 Location of Cross-sections See plan view and drawing 1 of 3.



1.2.25 Variations form Operational Standards

cing shall not be required along the common boundary with adjacent licence # 290 and shall be delineated with marker posts every 30 m. e south boundary shall be delineated with marker posts every 20 m until a new fence 0.13 (3) (a) is installed within 6 months of the licence being issued. Fencing shall be placed east of the western boundary where the Rideau Trail croaches within the setback (see Detail B on this drawing) within 6 months of the licence being issued. here there are no distinguishable layers and sufficient thickness to allow separate handling, topsoil and overburden will not be stored separately. regate, recycled aggregate/asphalt/concrete, topsoil and overburden as well as ssing equipment may be located within 30 m of the common licence boundar with licence # 2901. The adjacent licence is owned by the same licensee.

Variations from Operational Standards

115.0

Proposed 6m W x 10m H

tunnel to be constructed n elevation of 115 ma Bench at 115 masl

s shall not be required where haul roads cross the common licence boundary wit (1) 1 and 0.1 nce # 2901. This will eliminate constraints to the movement of equipment between licences owned by the same licensee. ) m setback shall be provided where the licence boundary abuts adjacent licence  $\sharp$ 2901. This will enable material to be extracted along the common boundary and for

rehabilitation to transition between licences. Topsoil, overburden and/or aggregate may be transferred between this licence and adjacent licence # 2901. This will allow stripped material from site preparation to be ed for berm construction and/or progressive rehabilitation in other parts of this licence and the adjacent licence.

1.13 (1) 25 - Scrap Scrap may be stored within 30 m of the common licence boundary with licence # 290

1.2.26 Frequency and Timing of Blasts Blasting will not occur on Saturdays, Sundays, statutory holidays or between 6 pm on any day and 8 am on the following day. All blasts will be monitored for vibration and over pressure levels.

The addregate from this site will be shipped to market from the Existing Elginburg Quarry License Number 2901. No more than 1 million tonnes of material shall be removed from this site in combination with the Existing Elginburg Quarry License Number 2901 in any calendar year.

1.2.28 Monitoring Requirements The recommendations and/or monitoring programs referenced in section 1.1.10 will be adhered to throughout the sites development. Graphical components of these key recommendations are shown on

#### Air Quality Dust will be mitigated on site

The Licensee shall implement the Best Management Practice Plan for the Control of Fugitive Dust Emissions dated October 20, 2020, as may be amended from time to time to reflect current best management practices

3. Water or another provincially approved dust suppressant will be applied to internal haul roads and processing areas as often as required to mitigate dust. Processing equipment will be equipped with dust suppressing or collection devices, where the equipment

creates dust and is being operated within 300 metres of a sensitive receptor. Should dust interference complaints be received, the licensee shall take appropriate measures as outlined in the Best Management Practice Plan for the Control of Fugitive Dust Emissions to address the complaint. In the event that the action taken is not satisfactory to the individual who filed the complaint, the licensee shall notify the Ministry of Environment, Conservation and Parks of the unresolved issue and take appropriate measures as deemed necessary by the Ministry of Environment, Conservation and Parks to rectify the problem.

#### **Hydrogeological Impact Assessment** The following is a summary of recommendations made:

Monthly groundwater level monitoring is recommended in DDH 10-01. BH 11-02, BH 11-03, BH11-04, BH 12-01, BH 12-02, BH 12-03, BH 13-01, the domestic well at 2528 Unity Road, and in the following three additional monitoring wells:

a. Future Monitoring Well 1 (FMW-1) on the Lot 12-Lot 13 boundary, approximately 60 m south of BH 13-01, to be drilled prior to extraction within the western half of Lot 13,

b. FMW-2 on the Lot 11-Lot 12 boundary at the northwest corner of the part of the expansion lands in Lot 12, to be drilled prior to extraction within Lot 12.

c. FMW-3 on the Lot 11-Lot 12 boundary at the southwest corner of the part of the expansion lands in Lot 12, to be drilled prior to extraction within Lot 12. Annual winter photographic seepage face monitoring is recommended shall occur on all available

extraction faces within 250 m of Unity Road in the western half of Lot 13 and also in Lot 12. This would consist of taking one or more photographs of the rock face from static viewpoints, where possible based on quarry operations. The information will provide a record of seepage into the quarry in the winter when ice will form at key seepage locations.

No extraction of the third lift (i.e. below 115 mASL) should occur within 250 m of the property at 2528 Unity road, and west of the Lot 12/Lot 13 lot line. A grouting pilot study may be considered during extraction of Lift 3 in Lit 13, if suitable conditions exist.

The terms of reference for the study are included in Appendix J. 5. In consultation with the property owner, drainage from 2467 Unity Road must be allowed to discharge at the southern end of this property by way of a culvert(s) or break(s) in the berm.

The existing PTTW will be sufficient for dewatering of the existing quarry and the expansion area until its expiry in 2022. Upon renewal, the PTTW shall be updated to operate the sites under one PTTW and it is <del>ended to</del> combine the monitoring programs proposed in this report for the quarry expansion with the monitoring program for the existing quarry.

## Natural Environment Technical Report: Level I and II

No quarry activities within the identified significant woodland FOD 5-8 or its 30 metre buffer are propose nitted. A berm wall will be built between the quarry and the woodland (and its 30m buffer) on the southern edge of the property limits to help maintain woodland function. The edge of the woodland will be clearly demarcated to prevent intrusion during berm wall construction

Any tree clearing will take place between September and March, outside of the bird breeding season (April 15 to July 31) in order to prevent the possible loss of active nests. It is possible to work within the breeding season, as long as the land is cleared prior to April 15.

There will be no quarry activities (e.g., excavation, soil stripping, land clearing, etc.) in Lot 12 until at least 2024, or when extraction progresses to the point where stripping is required in Lot 12 to allow for extraction, whichever comes later.

4. To enhance succession of the shrub/early successional bird breeding habitat, large tree removal (i.e. trees greater than 2 m tall) will occur throughout the woodland in Lot 12. Removal will take place outside of the bird breeding season (April 15 to July 31) within the first two years after licensing. Lot 12 will be rehabilitated for wildlife use by laying down 20 cm of stockpiled berm soils and planting commercial pasture seed mix and planted with scattered low-lying native shrubs, approved by the Ministry of Natural Resources and Forestry. The site will be allowed to succeed naturally to shrubland, and then to woodland and that human access to the site be restricted by fencing.

## **Acoustic Assessment Report**

Prior to the commencement of the asphalt plant during the evening and nighttime period on Licence The operation of the Portable Crushing and Screening Plant (Crusher) may take place only during the

daytime period (07:00-19:00), and shall comply with the following: a. The crusher is to be located on the quarry floor at a maximum elevation of 125 mASL and shall comply with the following:

When operating one lift down at a maximum elevation of 125 mASI, the crusher on this Licence or adjacent Licence #2901, or the wash plant or asphalt plant located on Licence #2901 are not to

ii. When operating two or more lifts down, at an elevation of 115 mASL, the crusher on this Licence or adjacent Licence #2901, and the wash plant and asphalt plant on Licence #2901 may operate

b. When operating in Phase 3 i. The crusher is to be located at a maximum distance of 50 m to the east of the lift face shielding receptors POR 9, 10 and 11. The height of the lift face is to be a minimum of 10 m. c. When operating in Phase 4:

The crusher is to be located at a maximum distance of 40 m from the lift face shielding receptor

i. The crusher is to be located at a maximum distance of 30 m from the lift face shielding receptor

3. The operation of a Standard Hydraulic Rock Drill (Drill), may take place only during the daytime period (07:00-19:00), and shall comply with the following: a. The drill is not to operate concurrently with the crusher on this Licence or adjacent Licence #2901,

or the wash plant or asphalt plant located on Licence #2901. b. When operating on the surface in Phase 3: The drill may operate anywhere in the extraction area

above or below grade. No shielding with portable barriers is required. c. When operating on the surface in Phase 4: Berm 2 is to be provided.

d. When operating on the surface in Phase 5:

d. When operating in Phase 5:

i. Berm 2 is to be provided ii. A 4m high portable barrier (Barrier RD2) located at a maximum of 10 m from the drill is to be provided shielding noise impacts to POR 12.

The operation of a Low Noise Rock Drill (low noise drill), such as the Atlas Copco SmartRig ROC D9C or similar, may take place only during the daytime period (07:00-19:00), and shall comply with the following: a. The drill may operate anywhere in the extraction area above or below grade. No shielding with portable barriers is required.

b. When operating on the surface in Phase 3: The low noise rock drill may operate concurrently with the crusher on this Licence or adjacent Licence #2901, or the wash plant or asphalt plant located on

When operating on the surface in Phase 4 or Phase 5: The low noise rock drill is not to operate concurrently with the crusher on this Licence or adjacent Licence #2901, or the wash plant or asphalt plant located on Licence #2901. The loading and shipping of product associated with the Extraction and Aggregate Processing Operation

using Highway Trucks, may take from 07:00-19:00 and shall comply with the following: a. When operating on-site, Highway Trucks shall not exceed 20 kph and shall not use compression

b. A maximum of ten (10) trucks may enter and exit the site per hour 7. The operation of loaders or excavators associated with the Extraction and Aggregate processing

operation may take place from 07:00 -19:00 anywhere in the extraction area, and shall comply with the a. A maximum of three (3) loaders or excavators may be in operation carrying out extraction, stockpiling and loading operations.

8. Prior to commencing extraction operations in the Expansion Area Phase 4 or Phase 5, a 5 m high berm (Berm 2) is to be provided at the sites northern setback shielding Line of Sight (LOS) from the extraction and aggregate processing operations to POR1. Berm 2 is to be extended to shield LOS from the extraction and aggregate processing operations to POR 12 and 13 when operating west of Line AA. 9. Noise barriers shielding portable equipment may be progressively established to provide shielding from

location of operation to the identified noise sensitive point of reception (POR). 10. Noise barriers or berms are to be solid, having no gaps, and are to have a surface density of no less than 20 kg/m2. Examples of suitable barriers or berms are as follow:

 a. Lift face or existing terrain; b. Earth, gravel or aggregate berms or stockpiles;

c. Concrete of or brick walls;

d. Commercial noise barriers;

e. Shipping containers; f. A portable barrier such as a truck trailer equipped with movable flaps to block the space between the ground and the bottom of the trailer.

Berm 2 shall be in the form of an earth berm that is vegetated due to its proximity to sensitive receptors 11. Portable construction equipment used for site preparation (e.g. land clearing and construction of berms) and rehabilitation shall comply with MECP Publication NPC 115, Construction Equipment, August 19/8. (This publication gives noise standards to be met by construction equipment in Ontario.) Site preparation and rehabilitation activities shall take place only during daytime hours (07:00-19:00) Monday to Friday.

consultant prior to commissioning. Noise mitigation measures shall be reviewed, and altered if necessary, to ensure that MECP sound level limits are met at all points of reception 13. An independent noise audit will be completed at the commencement of each phase of the extension to ensure the required mitigation is in place to ensure provincial guidelines will be met.

14. Should noise interference complaints be received, the licensee shall take appropriate measures as deemed necessary by the Ministry of Environment Conservation and Parks to rectify the problem.

## **Blast Impact Analysis**

1. Sequential blasting techniques will be used to ensure minimum explosives per delay period is initiated. a. Non-electric blast initiation systems such as the EZ-Det / Handi-Det / Snap-Det systems or, b. Electronic initiation system with remote detonation

2. Maximum drill-hole diameter for initial guarry blasting will be 102 mm (4"). Vibration and overpressure data acquired during initial blasting may allow for an increase in drill-hole

4. Minimum collar will be 1.5 m (5 ft.)

Bench height shall not exceed 13 m.

Clear crushed stone will be used for stemming. a minimum.

103.0

103.0

103.0

Phase 3

BH12-01 -

Bench at 125 masl

8. Blasting should be avoided during overcast and temperature inversions. 9. Blast-hole detonation shall be limited to a single hole per delay period, and when boreholes are decked, a

single explosive deck per period. The amount of explosives per delay period for initial quarry blasting shall not exceed 76 kg. Location of monitoring device. All blasts shall be monitored for both vibration and overpressure (noise) at the two closest receptors with digital seismographs. The licensee shall retain the blast monitoring reports

Detailed blast records shall be maintained by the operator. Blast records shall include, at a minimum, the

• Location, date and time of the blast.

• Dimensional sketch including photographs, if necessary, of the location of the blasting operation and the nearest point of reception

 Physical and topographical description of the ground between the source and the receptor location. Type of material being blasted. Subsoil conditions, if known Prevailing meteorological conditions including windspeed in metres per second, wind direction, air

temperature in degrees Celsius, relative humidity, degree of cloud cover and ground moisture • Number of drill holes.

 Pattern and pitch of drill holes Size of holes

 Depth of drilling. Depth of collar.

within 500 m:

a. adjust pump pressure;

 Depth of toe-load. Weight of charge per delay period. Number and time of delays.

 The result and calculated value of Peak Sound Pressure Level in dB(L) and Peak Particle Velocity Applicable limits.

The excess, if any, over the prescribed limit.

13. Blast designs shall be continually reviewed with respect to fragmentation, ground vibration and overpressure. Blast designs shall be modified as required to ensure compliance with applicable guidelines and regulations. Blasting procedures shall be reviewed on a yearly basis and modified as equired to ensure compliance with industry standards.

steps to mitigate noise level

### Complaint Action Plan - Domestic/Agricultural Well Mitigation 1. If a water well complaint is received by the licensee the following actions will be taken for properties

a. The licensee will notify MNRF and MECP of the complaint. b. The licensee will contact a well contractor in the event of a well malfunction, which includes a loss of 2. A stake out report shall be completed by a TransCanada Representative for all blasting requests within water supply, and residents will be provided a temporary water supply within 24 hours, if the issue

cannot be easily determined and rectified. The well contractor will contact the resident with the supply issue and rectify the problem as expediently as possible, provided landowner authorization of the work. If the issue raised by the landowner is related to loss of water supply, the licensee will have a consultant/contractor determine the likely causes of the loss of water supply, which can result from a number of factors, including pump failure (owner's expense), extended overuse of the well (owner's expense) or lowering of the water level in the well from potential quarry interference (licensee expense). This assessment process would be carried out at the expense of

the licensee and the results provided to the homeowner. 12. If a new process is introduced to the site, then this process shall be assessed by a qualified acoustical If it has been determined that the quarry caused the water supply interference, the quarry shall continue to supply water at the licensee's expense until the problem is rectified. The following mitigation measures shall be considered and the appropriate measure(s) implemented at the expense of the licensee:

> b. lowering of the pump to take advantage of existing water storage within the well; c. deepening of the well to increase the available water column; d. widening of the well to increase the available storage of water;

e. relocation of the well to another area on the property: f. drilling multiple wells; and g. only at the request of a landowner would a cistern be installed 4. If the issue raised by the land owner is related to water quality, the licensee will have a consultant/contractor determine the likely causes of the change in water quality, and review monitoring results at the guarry and background monitoring results from the baseline well survey to determine i there is any potential correlation with the quarry. If it has been determined that the quarry caused a water quality issue, the quarry shall continue to supply water at the licensee's expense until the problem is rectified. The licensee shall be responsible for restoring the water supply by replacing the well or providing a water treatment system. Only at the request of a landowner would a cistern be supplied. The

**Detail A: Typical Berm** 

**Detail B: Rideau Trail Placement** 

(minimum 1.2m high)

licensee is responsible for the expense to restore the water quality. Primary and secondary dust collectors will be employed on the rock drills to keep the level of rock dust to 5. If a water well complaint is received by the licensee, the following actions will be taken for properties

beyond 500 m: a. the licensee will contact the landowner to discuss the issue;

b. the licensee will review the groundwater monitoring results to determine if there is any lowering of groundwater in the vicinity of the well complaint; c. if it is determined that the existing monitoring program shows there has been no impact to

groundwater levels in this area the licensee will advise the landowner that their well is located outside of the area of influence of the quarry; and d. if it is determined that the well is located within the groundwater drawdown area of influence of the

quarry the actions required for a well within 500 m will be completed. 6. If any well complaint is not resolved to the satisfaction of the landowner, the issue will be resolved to the satisfaction MECP.

There shall be no extraction within the Hydro easement, with the exception of the tunnel referred in Note 2. Adjacent to the easement during operation the licensee will grade the overburden to a 2:1 side slope to

top of bedrock to ensure no erosion within the easement. 3. Phase 5 (the lands west of the Hydro Corridor, north of Pipeline) will be accessed by a sinking cut. 4. The aggregate extracted west of the Hydro easement will be transferred by a road crossing that is

perpendicular to the hydro corridor and maintains a minimum 15 metre setback from the transmission

transported by a tunnel that is 6 metres wide and 10 metres high (see Operational Plan). Once the tunnel is no longer required it will be backfilled. 6. Prior to the construction of a tunnel, the Licensee shall submit construction drawings to Hydro One prepared by a qualified engineer for their approval. The design shall ensure the structural integrity of the

5. Once the sinking cut west of the Hydro Corridor reaches an elevation of 115 masl the aggregate may be

easement for the hydro lines, towers, hydro equipment and aggregate vehicles crossing at-grade. The design shall also include the requirements for backfilling the tunnel to ensure long-term structural integrity 7. Upon approval by Hydro One the Licensee shall provide MNRF a copy of the engineering drawings with

Hydro One approval. 8. Extraction adjacent to the Hydro Easement shall occur in lifts. The area directly adjacent to the easement will be extracted to a maximum depth of 125 masl.

9. The area east of the easement will be backfilled with a 2:1 slope and will be vegetated to avoid erosion. 14. Prior to making any changes to the site, MNRF should be informed ahead of introduction of any new 10. The area west of the easement will backfilled to existing grade following extraction. 11. In the event the Licensee does not require the tunnel or Hydro One does not approve a tunnel, the at

# grade crossing will be utilized to complete extraction and rehabilitation.

TransCanada and Enbridge Pipelines 1. TransCanada and Enbridge shall be notified if an application has been submitted to the National Energy Board for a reduction of the blasting setback.

100 metres/300 feet of the pipeline and submitted to the Engineering department along with the Blasting Plan for approval prior to the commencement of blasting. The stake out report should include a drawing of the proposed blasting, the distances to all TransCanada facilities in the area, and the chainage of the

The blasting contractor shall not transport explosives along TransCanada's right-of-way unless granted

A TransCanada Representative is required to be onsite when blasting closer than 100 metres /300 feet from TransCanada facilities.

exception by the Engineering Department. The storage of explosives and other equipment on the TransCanada right-of-way is strictly prohibited. TransCanada requests that explosives are not stored within 300 metres/1000 feet of the right-of-way. 6. Approval shall be obtained from TransCanada prior to undertaking the following activities:

b. conducting a ground disturbance (excavation or digging) on TransCanada's pipeline right-of-way or within 30 meters of the centreline of TransCanada's pipe (the "Prescribed Area"). c driving a vehicle mobile equipment or machinery including the transport of explosives across a

a. constructing or installing a facility across, on, along or under a TransCanada pipeline right-of-way.

TransCanada pipeline right-of-way outside the travelled portion of a highway or public road. d. using any explosives within 300 meters of TransCanada's pipeline right-of-way.

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

Woodlands

Legend

Licence Boundary 120m Offset From Licence Boundary Limit of Extraction Adjacent Licence Existing Licenced Boundary (solid line) All setbacks are drawn to scale and show labelled Existing Limit of Extraction (dashed line) \_<sub>149</sub>\_\_ Contours with Elevation Bench Metres above sea level (MASL) First bench - 125 masl Second bench - 115 masl Public Road - Dark Gray

Underground Gas - Easement

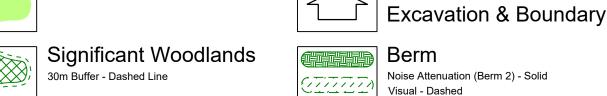
General Direction of

Location and use for buildings

Metres above sea level (MASL)

Trail Segment 1.2m post & wire fence unless otherwise noted Extraction Face Silt Fence

│ Water Features Entrance / Exit & Gate Natural Watercourse (solid line Discharge Channel (dashed line)



Building/Structure on site & within 120m are shown Archaeological Site



**Site Plan Amendments** Description Date

**Site Plan Revisions (Pre-Licencing)** March 2022 Update site plan per feedback from City of Kingston Add Rideau Trail location to plan view and Detail B. Update legend and notes 1.2.8 & 1.2.25. October 2020



& LANDSCAPE MNRF Approval Stamp

**Applicant** 

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

Elginburg Quarry 2

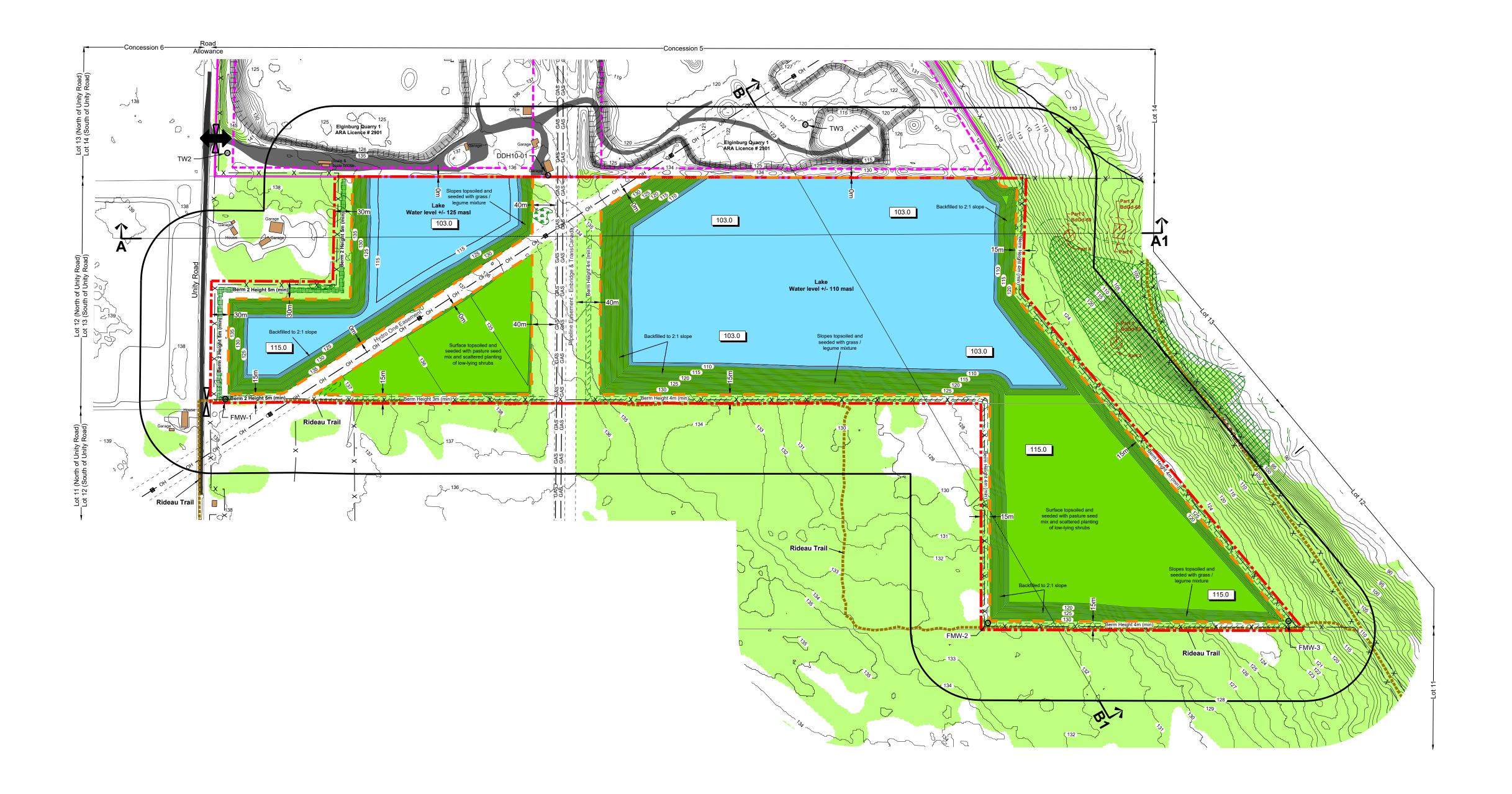
2506 Bur Brook Road, City of Kingston MNRF Licence Reference No. Applicant's Signature: Plan Scale: 1:4000 (Arch D) March 2020 Drawn By C.P.

File Name **Operational Plan** 

Drawing No.

0818K

File Path N:\Brian\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

- 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 Natural Environment Report recommendations. The planting plan shall be approved by 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 120m Offset From Licence Boundary Licence Boundary Adjacent Licence Limit of Extraction Existing Licenced Boundary (solid line) All setbacks are drawn to scale and show labelled Existing Limit of Extraction (dashed line) Parcel Fabric Contours with Elevation —150 \_\_\_\_ Metres above sea level (MASL) Public Road - Dark Gray Underground Gas - Easement Trail Segment 1.2m post & wire fence unless otherwise noted Watercourse Entrance / Exit Woodlands $\bigvee$ Building/Structure Significant Woodlands 30m Buffer - Dashed Line Location and use for buildings on site & within 120m are shown Point Features Wetland Monitoring Well Archaeological Site Proposed Quarry Floor Metres above sea level (MASL) 10m Buffer - Dashed Line Cross Sections **A**1

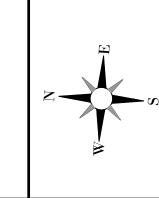
Site Plan Amendments			
No.	Date	Description	Ву

#### Site Plan Revisions (Pre-Licencing) Update site plan per settlement consultation October 2022 Update site plan per feedback from City of Kingston March 2022 Add Rideau Trail location to plan view and update legend. October 2020 Description Date



MNRF Approval Stamp





0818K

**Applicant** 

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

Elginburg Quarry 2 2506 Bur Brook Road, City of Kingston MNRF Licence Reference No. Applicant's Signature: 626239 Plan Scale: 1:4000 (Arch D) March 2020

Rehabilitation Plan

Drawing No.

File Name

3 of 3

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