

4. Cultural Heritage e.b.a. Prior to site preparation in Phase 5, the licensee shall erect fencing 50 m from the farmhouse to identify a a. Areas of cultural heritage potential were identified for portions of the properties located at 18722 Main Street, 1055 Charleston Agriculture Sideroad, 1420 Charleston Sideroad, 18501 Mississauga Road, and 18667 Mississauga Road. Accordingly, property specific "no-go-zone" to reduce the risk of accidental damage from vehicles, heavy equipment operation, or other activities a. Lands that are currently in agricultural production, and not required for immediate extraction and site preparation, shall be kept in Heritage Impact Assessment (HIAs) have been prepared for these properties. The recommendations from each HIA are of the mineral aggregate operation. agricultural production for as long as possibl e.b.b. Implement the recommendations of the blast impact assessment to ensure the structural integrity of the b. The licensee shall document any complaints involving the local agricultural community, and as part of the annual Compliance b. HIA Recommendations for 1420 Charleston Sideroad: farmhouse is maintained. Assessment Report, shall provide information to MNRF on the nature of the complaint and actions taken by the licensee to The HIA for 1420 Charleston Sideroad determined that the Study Area will be subject to both direct and indirect impacts. To e.c. A Heritage Documentation Plan shall be prepared for the barns and mature vegetation on the property. address the issue. avoid or reduce these effects, WSP recommends the licensee shall: e.d. A Structural Engineer should shall be consulted to confirm whether the farmhouse is structurally sound enough to • During operations, the farmhouse shall be adaptively re-used as an office/laboratory site for the quarry operations. Prior to withstand relocation. If the structural engineer determines that the farmhouse cannot be relocated the following shall be a. All quarry blasts shall be monitored at the closest residences in front of and behind the blast for ground and air vibration effects the surrender of the licence, the building shall be converted back to its original use. implemented: i) the extraction area shall be revised to include a 50 m buffer from the farmhouse ii) fencing shall be to ensure compliance with the current MECP guideline limits. installed at the 50 m buffer to identify the "no-go-zone" iii) the recommendations of the blast impact assessment shall To achieve this conservation strategy, the following mitigation measures shall be implemented: be implemented to ensure the structural integrity of the farmhouse is maintained by a qualified specialist shall develop b. All quarry blasts shall be monitored within 300 metres of the nearest pipeline on the ground above that pipeline to ensure a mothball plan for the farmhouse with a maintenance and inspection schedule to conserve the house until the license b.a. If the property is vacated prior to converting the farmhouse to an office/laboratory a qualified specialist shall develop a compliance with Enbridge's ground vibrations limits. licence is surrendered and v) following surrender of the license licence, the farmhouse shall be inhabited for residential mothball plan for the farmhouse, with a maintenance and inspection schedule, to conserve the structure until further c. All quarry blasts shall be monitored within 300 metres of the farmhouse and barn located at 18722 Main Street, the farmhouse action is implemented located at 18501 Mississauga Road, the farmhouse located at 18667 Mississauga Road and the house (to be converted to e.e. A Heritage Conservation Plan shall be prepared for the farmhouse to guide the relocation and outline how the heritage h. Monitoring of trees survival shall be conducted within the first year following planting and equivalent replacement planting shall office/laboratory during operation) located at 1420 Charleston Sideroad to ensure compliance with the ground vibration limit of 50 b.b. The limit of extraction shall include a 50 m buffer from the farmhouse to protect the heritage attributes of the property. attributes of the structure will be conserved, protected, and enhanced during the relocation and into the future. mm/s. Once the farmhouse(s) located at 18501 Mississauga Road and 18667 Mississauga Road is relocated outside of the licence area, all quarry blasts shall be monitored to ensure compliance with the current MECP guideline limits. See cultural b.b.a. Prior to site preparation, the licensee shall erect fencing at the 50 m buffer to identify a 'no-go zone' to reduce the e.f. Relocate the farmhouse on the portion of 18501 Mississauga Road that is located outside of the licence boundary to heritage technical recommendations Section O.4 for additional information. risk of accidental damage from vehicles, heavy equipment operation, or other activities of the mineral aggregate retain the general geographic and visual setting of the structure and supports understanding of its cultural heritage value or interest as a rural farmhouse. d. The vibration monitoring shall be carried out by an independent third-party engineering firm with expertise in blasting and b.c. Implement the recommendations of the blast impact assessment to ensure the structural integrity of the farmhouse is e.g. The relocated farmhouse shall be inhabited for residential use. e. Notification shall be provided to Enbridge when blasting approaches within 300 metres of the pipeline. f. HIA Recommendations for 18667 Mississauga Road: b.d. A Heritage Documentation Plan shall be prepared for the property with a focus on the barn foundation ruins on the The HIA for 18667 Mississauga Road determined that the property will be subject to both direct and indirect negative impacts. To f. No extraction within 30 metres of the pipeline without authorization from Enbridge. avoid or reduce these effects, WSP recommends the licensee shall: g. Blasting shall be carried out by persons experienced, trained and qualified to conduct blasting operations. b.e. A Heritage Conservation Plan shall be prepared for the farmhouse prior to use of the farmhouse as an office or laboratory space to guide the adaptive re-use efforts and outline how the heritage attributes of the structure will be • Prior to extraction in Phase 4, the licensee shall relocate the farmhouse and summer kitchen within the existing property h. The licensee shall establish a blasting notification program for residents within 500 metres. The licensee shall also provide conserved, protected, and enhanced during the rehabilitation program phase and into the future. parcel located outside of the licence boundary and complete documentation and salvage for the remaining landscape and notification to the Town of Caledon Clerk and the Brampton Flying Club prior to a blast taking place on-site. outbuilding components. b.f. Prior to the surrender of the licence, remove any temporary protective measures implemented during the time the i. Blasting shall not occur on Saturday, Sunday and all Statutory holidays. farmhouse is used as an office/laboratory site and rehabilitate the farmhouse back to its original use. To achieve this conservation strategy, the following mitigation measures shall be implemented: If there are exceedances of the vibration limits, the Licensee shall notify MECP and the blast design parameters shall be altered c. HIA Recommendations for 1055 Charleston Sideroad: f.a. If the farmhouse and summer kitchen is vacated prior to the relocation, a qualified specialist shall develop a mothball to bring results back into compliance prior to the next blast occurring on-site. plan for the farmhouse and summer kitchen, with a maintenance and inspection schedule, to conserve the structure The HIA for 1055 Charleston Sideroad determined that the property will be subject to both direct and indirect impacts. To avoid until further action is implemented. k. When blasting within approximately 440 metres of adjacent residences, the quarry shall regularly review their blast procedures in or reduce these effects, WSP recommends the licensee shall: conjunction with the blast monitoring results to assess if it is necessary to modify blast design parameters of the blasts. f.b. The following short-term conservation actions, shall be implemented prior to relocation of the farmhouse and summer • Prior to site preparation in Phase 7 salvage, document, and commemorate the heritage attributes of 1055 Charleston Blasting procedures, such as drilling and loading, shall be reviewed annually and modified as required to ensure compliance with f.b.a. Prior to site preparation in Phase 4, erect fencing 50 m from the farmhouse and summer kitchen to identify a To achieve this conservation strategy, the following mitigations shall be implemented: "no-go-zone" to reduce the risk of accidental damage from vehicles, heavy equipment operation, or other activities m. The licensee shall maintain a record of all blasting details including a seismic record of the ground and air vibration monitoring of the mineral aggregate operation. results. The blast details and monitoring results shall be made available to the MNRF and the MECP, upon written request. The c.a. A Heritage Documentation Plan shall be prepared for 1055 Charleston Sideroad to create a record of the property. The blasting reports shall include the following information: f.b.b. Implement the recommendations of the blast impact assessment to ensure the structural integrity of the documentation of the property shall include the foundation ruins of the barn and outbuilding (Structural Foundation No. 1 and Structural Foundation No. 2) and remnant landscape components of the farm complex (driveway and tree lines). farmhouse and summer kitchen are maintained. m.a. Location, date and time of the blast; The Heritage Documentation Plan shall be completed by a qualified cultural heritage specialist prior to the m.b. Dimensioned sketch including photographs, if necessary, of the location of the blasting operation, and nearest point of commencement of quarrying activities within Phase 7. f.c. A Heritage Documentation Plan shall be prepared for the barn complex, Outbuilding No. 1, fieldstone wall, and mature vegetation on the property. c.b. Prior to the surrender of the licence, a commemorative plaque shall be installed at 1055 Charleston Sideroad to m.c. Physical and topographical description of the ground between the source and the receptor location. m.d. Type of material being blasted document the heritage attributes at the property. The commemoration strategy should shall be implemented during the f.d. A Structural Engineer should shall be consulted to confirm whether the farmhouse is structurally sound enough to m.e. Sub-soil conditions, if known; rehabilitation phase of the project, following the completion of quarrying activities. withstand relocation. If the structural engineer determines that the farmhouse cannot be relocated the following shall be m.f. Prevailing meteorological conditions including wind speed in m/s, wind direction, air temperature in OC, relative implemented: i) the extraction area shall be revised to include a 50 m buffer from the farmhouse ii) fencing shall be humidity, degree of cloud cover and ground moisture content; d. HIA Recommendations for 18722 Main Street: installed at the 50 m buffer to identify the "no-go-zone", iii) the recommendations of the blast impact assessment shall m.g. Number of drill holes; be implemented to ensure the structural integrity of the farmhouse is maintained iv) a qualified specialist shall develop m.h. Pattern and pitch of drill holes; The HIA for 18722 Main Street determined that the property will be subject to both direct and indirect impacts. To avoid or a mothball plan for the farmhouse with a maintenance and inspection schedule to conserve the house until the license m.i. Size of holes: reduce these effects, WSP recommends the licensee shall: licence is surrendered and v) following surrender of the licence the farmhouse shall be inhabited for residential m.j. Depth of drilling; m.k. Depth of collar (or stemming); • Retain the farmhouse, barn, and mature vegetation on site in their original use. m.l. Depth of toe-load; f.e. A Heritage Conservation Plan shall be prepared for the farmhouse and summer kitchen to guide the relocation and To achieve this conservation strategy, the following mitigation measures shall be implemented: m.m. Weight of charge per delay outline how the heritage attributes of the structures will be conserved, protected, and enhanced during the relocation m.n. Number and times of delays; and into the future. d.a. The limit of extraction shall include a 50 m buffer from the barn to protect the heritage attributes of the property. m.o. The result and calculated value of Peak Pressure Level in dBL and Peak Vibration Velocity in mm/s; m.p. Applicable limits; and f.f. Relocate the farmhouse and summer kitchen on the portion of 18667 Mississauga Road that is located outside of the m.q. The excess, if any, over the prescribed limit. d.a.a. Prior to site preparation, the licensee shall erect fencing at the 50 m buffer to identify a 'no-go zone' to reduce the licence boundary to retain the general geographic and visual setting of the structure and conserve the contextual value risk of accidental damage from vehicles, heavy equipment operation, or other activities of the mineral aggregate of the farmhouse and summer kitchen. n. The first five regular production blasts in the Main Area of the Licence shall be monitored at a minimum of five locations at varying distances from each blast to better define the ground and air vibration attenuation characteristics at the nearest receptors f.g. The relocated farmhouse and summer kitchen shall be in habited for residential use d.b. Implement the recommendations of the blast impact assessment to ensure the structural integrity of the farmhouse and to assist with future blast designs. This shall entail establishing monitoring stations between the blast site and neighbouring Archaeology o. Prior to the commencement of blasting within 500 metres of a structure and subject to landowner authorization, the licensee shall d.c. A berm or vegetative screen, shall be placed between 18722 Main Street the limit of extraction. a. A Stage 4.3 Archaeological Assessment Archaeological Mitigation shall be required for the following sites: Location 1 (AkHa-23) Location 2 (AkHa-24), Location 4 (AkHa-25), Location 7 (AkHa-26), Location 9 (AkHa-27), Location 10 (AkHa-28), Location 12 conduct a pre-blast inspection, periodic inspections while extraction is within 500 metres and a post-blast inspection when d.d. The property at 18722 Main Street shall remain inhabited. In the event the property is vacated a qualified specialist extraction is no longer within 500 metres of the structure. The result of the inspection shall be provided to the landowner and (AkHa-29), Location 15 (AlHa-52), Location 16 (AkHa-30), Location 18 (AkHa-31), Location 22 (AkHa-32), Location 26 form the basis for assessing any potential impact to the structure from blasting operations within 500 metres. shall develop a mothball plan for the farmhouse, with a maintenance and inspection schedule, to conserve the (AkHa-33), Location 27 (AkHa-34), and the Cameron Site (AlHa-9). structure until the property is inhabited again. p. The Licensee shall take all reasonable measures to prevent fly rock from leaving the site during blasting if a sensitive receptor is b. The limits of each of these archaeological sites have been determined by Stage 3 Archaeological Assessment and include a 10 d.e. A Management and Maintenance Plan shall be prepared to protect and maintain the heritage attributes during the metre protective buffer zone., plus a 70 metre buffer, These sites are identified on the plan view of this drawing and referred to located within 500 metres of the boundary of the site. activities of the mineral aggregate operation. as an "Archaeological Protection Area". q. The use of electronic detonators shall be implemented to improve timing accuracy and maintain hole timing as designed. e. HIA Recommendations for 18501 Mississauga Road: c. Alterations and/or ground disturbing activities are prohibited within the limits of the "Archaeological Protection Area" until such time that a professionally licenced archaeologist has completed archaeological field work on the site and the Ministry of The HIA for 18501 Mississauga Road determined that the property will be subject to both direct and indirect negative impacts. To Citizenship and Multiculturalism (MCM) has entered a report(s) in the Ontario Public Register of Archaeological Reports where a. The Site shall operate in accordance with the Fugitive Dust Best Management Practices Plan (BMPP) dated December 2022, avoid or reduce these effects, WSP recommends the licensee shall: the report(s) recommends that the archaeological site is of no further cultural heritage value or interest. (revised July 2023 May 2025). The BMPP shall be reviewed annually and updated if required based on current Site operations • Prior to extraction in Phase 5 relocate the farmhouse within the existing property parcel located outside of the licence d. Any archaeological site that is of further cultural heritage value or interest that remains within the licenced area at the time of and new best management practices. surrender of the licence shall be protected through a restrictive covenant on title. boundary and complete documentation and salvage for the remaining landscape and outbuilding components. b. Unpaved haul roads shall be watered using a water truck and/or dust suppressant. The application of water shall be dependent To achieve this conservation strategy, the following mitigation measures shall be implemented: on weather conditions but should be designed to achieve a watering rate of at least 2 L/m²/hour. Site personnel shall conduct e. The protected sites shall be fenced (post and wire) prior to commencing extraction. daily visible inspections of visible dust from the onsite haul roads, which shall be used to inform additional watering activities if e.a. If the farmhouse is vacated prior to the relocation, a qualified specialist shall develop a mothball plan for the f. Should deeply buried archaeology remains be found during the course of site preparation and/or extraction related activities, the high opacity dust is reported. When temperatures fall below 4° C, a Ministry of Environment, Conservation and Parks chemica dust suppressant shall be used in place of water. farmhouse, with a maintenance and inspection schedule, to conserve the structure until further action is implemented. g. In the event that human remains are encountered during construction or extraction activities, the licensee shall immediately c. Unpaved haul roads shall be re-graded annually (or as needed based on observations) using coarser material. contact both the MCM and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Government d. A speed limit of 25 km/hour on all site roads shall be implemented. and Consumer Services (MGCS). e. Stockpiles shall be placed below grade where possible with drop heights of less than 1 metre maintained for fine material. 6. <u>Visual</u> f. The processing plant shall be equipped with a water spray system with the watering rate set to suppress visible dust. a. Berms shall be designed to mitigate visual effects and shall be constructed in the locations identified on the plan view of this ing for the along the perimeter of each area (Main Area, North Area and South Area) as shown on the plan view of this drawing. The berms shall be five to seven metres in height and constructed with material from each extraction area on-site g. The processing plant shall be located below grade as soon as feasible. topsoil and overburden, prior to extraction commencing in the Main Area, North Area and South Area. h. Drills shall be equipped with dust suppression systems. b. Berms shall remain in place throughout the operational phases in each of the Main Area, North Area and South Area until If sustained winds exceed 40 km/hour, on-site processing activities, including drilling and blasting, will shall cease and not extraction has been completed. Once operations are completed in each Area, the berms shall be removed and the material from the berms shall be used for rehabilitation. resume until two consecutive hours of winds below 40 km/hour are recorded. c. The berms shall be seeded with a grass/legume seed mix in order to stabilize the soils on the berms and groundwater infiltration . A record of all visual inspections, dust mitigation activities and complaints shall be kept in the onsite filing system, as identified in trench. The grass/legume seed mix shall be applied at a rate of 125 kg /ha. The mix should shall consist of 50-70% grasses (a minimum of three species) and 30-50% legumes, and may include the following species, as available at the time of application: Annual rye (Lolium multiflorum) Perennial rye (Lolium perenne) Tall fescue (Lolium arundinaceum Buckwheat (Fagopyrum esculentum Alfalfa (Medicago sativa) Crown vetch (Securigera varia) • White clover (Trifolium repens) Creeping bentgrass (Agrostis stolonifera) Red fescue (Festuca rubra) d. When constructing the berms, as much of the existing perimeter tree lines as possible shall be left in place for additional visual Phase 2A (Phase 3 414.1 - Existing 409.9 - Water Table 389.5 - Max Depth Phase 1 CBM Caledon Pit / Quarry Office and Quality Control Lab 406.6 - Water Tab 385.8 - Max Depth Minimum 170 metre internal access road to truck queuing. See note O.10.c on drawing 3 of 4 **Site Entrance Simulation** See Cell Tower Detail on drawing 2 of 4 for additional information South Area **Groundwater Infiltration Trench Cross Section** LICENCE LIMIT -PICAL MONITORING — WELL NEST WATER LEVEL SAND AND GRAVEL tent with Figure 9 in WSP's re UPPER GASPORT (CONTACT AQUIFER/WEATHERED BEDROCK ZONE) OPTION TO GROUT

D. Technical Recommendations

e.b. The following short-term conservation actions, shall be implemented prior to relocation of the farmhouse: e. Deciduous trees shall be planted with approximately 10 m spacing on either side of the water infiltration trench, within 1 year of issuance of the licence. The trees shall include the following species and percentage mixture: Sugar Maple (Acer saccharum) - 50% Red Oak (Quercus rubra) - 50%

f. Trees and shrubs shall be planted as seedlings in the visual planting areas (see plan view on this drawing for locations) with approximately five metre spacing. The tree seedlings shall be approximately 50 centimetres in height. The tree and shrub mix shall include the following species and percentage mixture:

December 2021, are as follows:

Trembling aspen (Populus tremuloides) - 10 %

Rehabilitation shall be implemented as illustrated on drawing 4 of 4.

Main Area - Ranges from 420.7 to 393.5 masl (north to southwest)

South Area - Ranges from 405.3 to 391.0 masl (northeast to south)

Pumping, collection, storage and discharge of pit and guarry water;

and shall include the scope and frequency specified in Table 1.

results of the assessment shall be provided to the resident

minimum, include all groundwater and surface water monitoring requirements as outlined below:

and shall include the scope and frequency specified in Table 2, subject to landowner approval.

influence (1,000 metres), the licensee shall implement the following Well Complaint Response Protocol:

ementation of which would be at their expense

source within 24 hours if the issue cannot be easily determined and rectified (see steps below)

participation in this private well survey is voluntary.

to operate the pit and quarry. These activities include:

Operation of a groundwater infiltration trench; and

Construction and operation of an aggregate wash plant.

North Area - Ranges from 407.0 to 397.3 masl (northwest to southeast)

be carried out if more than 20% of the trees did not survive. If replacement trees are required, another year of monitoring is

a. The maximum predicted groundwater table, based on groundwater levels monitored over a 12 month period from January to

b. Prior to below water extraction, the licensee shall complete a follow-up door-to-door survey of private wells for properties within

1,000 metres of the licence area, to supplement and verify the MECP Water Well Information System (WWIS) information, to

confirm neighbouring water users and confirm baseline conditions prior to below water extraction commencing. Landowner

c. Prior to below water extraction, the licensee shall obtain and operate in accordance with a Permit To Take Water and

d. The approved monitoring programs defined in the Permit to Take Water and/or Environmental Compliance Approval shall, at a

• On-site monitoring shall include the wells, surface water stations and mini-piezometers listed in Table 1 on drawing 1 of 4,

• Off-site monitoring shall include the wells, surface water stations and mini-piezometers listed in Table 2 on drawing 1 of 4,

e.a. A representative of the licensee shall meet with the resident within 24 hours and discuss the complaint. If warranted,

e.b. If the issue raised by the resident is related to a loss of water supply, the licensee shall have a consultant / well

e.c. The consultant / well contractor will be able to readily determine if pump failure or extended use of the well is the

e.d. If, however, well interference is determined to potentially have been caused by aggregate extraction and dewatering

e.e. In the event that the well is incapable of providing an adequate supply of water (i.e., the water level is too low in

e.f. If the issue raised by the land owner is related to water quality, the licensee shall have a consultant/contractor

f. The licensee shall submit an annual water resources monitoring report to MNRF, MECP, Town of Caledon and Credit Valley

Conservation (CVC). The annual report shall also include a summary of any water related complaint and the actions taken by the

quarry floor. The position of the sump at a given point in time will be dictated by direction of extraction and elevation of the base

• Main Area - the sump shall be located in the most southwestern area of the current pit and quarry floor, at the point of lowest

• North Area - the sump shall be located in the most southwestern southeastern area of the current pit and quarry floor, at the

• South Area - the sump shall be located in the most southeastern area of the current pit and quarry floor, at the point of lowest

. Subject to an agreement with the Osprey Valley Golf Course, the licensee shall construct a discharge pipe from the licence area

to the irrigation system infrastructure at the golf course to convey the water from the settling pond to the golf course for irrigation,

g. During operations, the sump in each pit and quarry area shall be located near the lowest point of elevation on the current pit and

Any replacement well shall be constructed in accordance with O.Reg. 903, as amended Standards

supplied. The licensee shall be responsible for the expense to restore the water quality.

of the current pit and quarry floor within each quarry area, and shall generally be as follows:

with the excess water stored or discharged through the existing pond system to the Credit River.

problem and, if so, it is not the licensee's responsibility to remedy. is the problem and, should the resident choose to

well capacity in relation to the demand being placed on the well by the resident (i.e., extended overuse) is determined

to be the issue by the consultant / well contractor, recommendations shall be provided to the resident for their

activities relating to this licence, then water well supply mitigation shall be reviewed with the resident and the best

course of action to restore an equivalent water supply to the resident shall be implemented at CBM's the licensee's

expense. For instance, if the water level in the well is lowered to a point where it has interfered with pumping, then

potential solutions shall be evaluated including adjusting the pump pressure and / or lowering the pump level in the

comparison to the depth of the well), or the repair to the pumping system will be more than a day, the consultant / well

contractor shall continue to supply a potable water source to the resident (until restoration of the well is complete)

These actions would be carried out at the expense of the licensee. In rare cases where the water level in the well has

been lowered significantly, the well may have to be deepened, widened or relocated (also at the licensee's expense).

determine the likely causes of the change in water quality, and review monitoring results at the quarry and background

monitoring results from the baseline well survey to determine if 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

have the pump repaired or replaced at their expense, the well contractor would correct the situation for the resident. If

the licensee shall contact a local well contractor, and the resident shall be immediately supplied a temporary water

contractor determine the likely causes of the loss of water supply, which can result from a number of factors, including

pump failure, extended overuse of the well or lowering of the water level in the well from potential aggregate operations

interference. This assessment process would be carried out at the expense of the aggregate operator licensee and the

e. In the event a well complaint is received by the licensee for a private (domestic / farm) well located within the estimated zone of

Environmental Compliance Approval under the Ontario Water Resources Act to permit the water management activities needed

 Gray dogwood (Cornus racemosa) - 10 % Alternate-leaved dogwood (Cornus alternifolia) - 10 % • Eastern red cedar (Juniperus virginiana) - 10 % White pine (Pinus strobus) - 30 % White spruce (Picea glauca) - 30 % g. Planting of the visual planting areas for the Main Area shall occur within 1 year of issuance of the licence, and for the North and South Areas within 5 years of issuance of licence.

Subject to an agreement with the Region of Peel, the licensee shall construct piping under Main Street and Charleston Sideroad for the transfer of water from the Main and South Areas to the North Area. The licensee shall construct a slurry wall / grout zone prior to the start of Phase 3 and infiltration trenches prior to the start of Phase 4 as a groundwater mitigation system in the west setback of the Main Area, and similarly, a slurry wall / grout zone and infiltration trenches in the west and south setback of the South Area prior to the start of Phase 6. The location of the infiltration trenches are shown on the plan view of drawings 2 and 3 of 4 (refer to the Groundwater Infiltration Trench Cross Section detail on this drawing for additional information). Water to supply the infiltration trenches shall be collected from the pit and quarry sumps during operations and stored in the Settling Pond an up to 1 to 2 ha sized pond located in the Main Area or North Area. The system shall be operated in accordance with the Permit To Take Water and Environmental Compliance Approval under the

licensee to address the issue.

point of lowest elevation.

An aggregate washing operation may be established in the Main and South Area, utilizing up to a 1 to 2 hectare sized pond for the storage of wash water in a closed-loop system. Wash water will be sourced from the pit and quarry sump, and top-up water will be added to the wash pond as needed during operations, in order to maintain sufficient water for the operation. Aggregate washing operations shall be completed in accordance with the Permit To Take Water and Environmental Compliance Approval under the Ontario Water Resources Act. All fuel storage and handling on-site shall be completed in accordance with applicable Technical Standards and Safety Authority

(TSSA) standards. The on-site storage and servicing of machinery shall be carried out in accordance with established best practices and is protective of the environment. The use and storage of hazardous substances shall follow applicable workplace hazardous materials regulations, including Ontario Regulation 860/93, as amended. m. Once operations in the North Area, South Area and Main Area have been completed and the rehabilitated landform has been created, pumping will cease and allowed to flood and to form the Main, North and South ponds. The Main, North and South pond

water levels post-rehabilitation are predicted to reach a level of approximately ~400, ~399 and ~393.5 masl, respectively. The South pond would be self contained and not require an overflow outlet; • The Main pond overflow shall be directed via a culvert under Main Street to the North pond with its outlet invert at ~400 masl;

• The North pond overflow shall be directed via main outlet to the Osprey Valley Golf Course irrigation pond system with its outlet invert at ~399 masl.

n. All rehabilitated pond levels and outlets will be passive and not require pumping.

4. 26 unloading events

Source ID	Source Description	Quantity	Overall Sound Power Level [dBA] ¹
Generator	Temporary Processing Plant - Generator	1	113
Screen 1-2	Temporary Processing Plant - Screen	2	115
Jaw Crusher	Temporary Processing Plant - Jaw Crusher	1	111
Cone Crusher	Temporary Processing Plant - Cone Crusher	1	110
Loader PP	Processing Plant Loader	4	107 ²
Loader EX	Extraction Loader	3	110 ²
Drill 1-2	Rock Drill	2	116
Screen 1-7	Permanent Processing Plant - Screen	7	108
Jaw Crusher 1-2	Permanent Processing Plant - Jaw Crusher	2	111
Cone Crusher 1-3	Permanent Processing Plant - Cone Crusher	3	107
Wash Plant Screen 1-2	Permanent Processing Plant - Screen	2	106
Haul Truck	Articulated Haul Truck	26 ³	107
Haul Truck Unloading	Haul Truck Unloading	26 ⁴	114
Shipment Truck	Highway Truck	38 ³	103

1. Values presented in table do not include adjustments that were considered in the modelling (i.e., time weighting) where applicable 2. Average sound power level representing various loader activities Number of round trips in a given hour

Table 3: Receptors Within 500m of Licence Boundarie 7 William Street 18130 Cataract Road

b. Activities to prepare the Site, such as the stripping of topsoil, construction of the berms, or activities related to the rehabilitation of the Site after the extraction is completed are considered to be construction activities and are only permitted to occur during the daytime period (i.e. 7:00am to 7:00pm) Monday to Friday except statutory holidays

c. Activities for site operations, such as extraction, processing and drilling are permitted to occur during the daytime period (i.e. 7:00am to 7:00pm) Monday to Saturday, except statutory holidays.

d. Activities related to shipping are permitted from 6:00am to 7:00pm Monday to Saturday, except statutory holidays. Shipping is permitted from 7:00pm to 6:00am only where required to support public authority contracts that necessitate the delivery of aggregates during these hours. Shipping activities from 7:00pm to 6:00am shall be limited to highway trucks and shipping loaders and no other operations shall be permitted. e. A 5-m high visual/acoustical barrier berm shall be installed around constructed in the locations identified on the plan view of this

drawing for the Main Area, North Area and South Area prior to extraction commencing in the identified areas. A 265 m portion of this the berm along the west part of the Main Area shall be constructed to a 7 m high acoustic/visual barrier berm (see plan view for location). The berm along the west part of the Main Area property boundary shall be constructed prior to the commencement of the use of the temporary processing plant.

f. The temporary processing plant shall be mitigated by noise controls in the form of barriers or acoustically equivalent treatment (e.g., equipment mounted) to reduce the noise emissions. A 7.5 m high, approximately 117 m long barrier located 20 m west and a 6 m high, approximately 80 m long barrier located east of the temporary processing plant shall be installed. g. The permanent processing plant shall be mitigated by noise controls in the form of barriers or acoustically equivalent treatment (e.g., equipment mounted) intended to reduce the noise emissions. A 13 m high, approximately 108 m long barrier located 20 m

north and east and a 13 m high, approximately 56 m long barrier located at 20 m west of the processing plant shall be installed. In addition, a 13 m high, approximately 69 m long barrier located at 20 m east and south of the processing plant equipment located in Phase 6 lands. h. Proposed Barriers can shall be constructed of earth berms, product stockpiles or other suitable acoustic barriers such as trailers

or shipping containers, as long as the height and the density requirements of 20 kg/m² without gaps are maintained. i. Extraction loaders shall be generally operating operate within 30 m of the active working face to maximize noise screening by the working face.

Drills procured for the Site operations shall be mitigated (e.g., manufacturer installed noise controls) resulting in a sound power level of 116 dBA. In addition, when operating within the identified areas on the Noise Mitigation Schematic on this drawing or drawing 2 of 4, the drills shall be equipped with a 4.5 m high "C - shaped" and 22 m long local barriers located at the distance of 5 m from the equipment (or acoustically equivalent). In addition, operational restriction shall be considered for drills operating in specifics areas as indicated on the Noise Mitigation Schematic on this drawing or drawing 2 of 4 Area 1 - operation of a single unmitigated drill; Area 2 - operation of a single mitigated drill;

 Area 3 - operation of two mitigated drills; and, Area 4 - operation of one mitigated and one unmitigated dril k. The number of extraction loaders shall be reduced from three to two units when equipment operates in the areas identified as

Area 5 through Area 6 and shown on the Noise Mitigation Schematic on this drawing or drawing 2 of 4. In addition, the loaders operating in Area 6 shall be similar to the plant loader with sound power levels of 107 dBA. I. Gravel extraction shall be completed using a single loader with a sound power level of 107 dBA.

m. The licensee shall utilize an alternative to narrow band back up alarms that meet Ministry of Labour safety requirements for n. Prior to operations commencing, sound measurements of the equipment used on the Site shall be undertaken by a qualified

professional to confirm maximum emission levels are not exceeded. o. To confirm that sound levels from the Site operations are in compliance with the MECP noise guideline limits, an acoustical audit shall be completed by a qualified professional once extraction and processing activities commence in the Main Area.

p. Proposed mitigation may be substituted through equipment modification, other control measures and/or local barriers if an assessment by a qualified professional is completed in accordance with MECP requirements and demonstrates the modification complies with MECP noise limits at surrounding sensitive receptors. Prior to any modification, notification shall be given to . Natural Environment

a. Barn #1b, Barn #2, Barn #3 and Woodlands F and G (as shown on drawing 1 of 4) shall only be removed outside of the bat active period of March 15th - November 30th

b. Habitat for eastern meadowlark and bobolink (as shown on the Key Natural Heritage Features Schematic on drawing 1 of 4) shall only be removed outside of the nesting period of May 1st - July 31st. C. To comply with the Migratory Birds Convention Act. Barn #1a. Barn #2. Barn #3 and Shed #3 (as shown on the plan view on drawing 1 of 4) shall not be removed during the active season for barn swallow (May 1st - August 31st), unless disturbance is

preceded by a nesting survey conducted by a qualified biologist. If any active nests are found during the nesting survey, the structure shall not be removed until the young have fledged the nest. d. To comply with the Migratory Birds Convention Act, removal of vegetation shall not be permitted during the active season for breeding birds (April 15th - August 15th), unless construction disturbance is preceded by a nesting survey conducted by a

qualified biologist. If any active nests are found during the nesting survey, a buffer will shall be installed around the nest to protect against disturbance. Vegetation within the protection buffer shall not be removed until the young have fledged the nest. e. Implement a minimum setback for extraction of 15 metres from significant woodlands (as shown on this drawing). There shall be no disturbance, including berms, within 10 metres of these significant woodlands.

Implement a minimum setback for extraction of 30 metres from the Coulterville Wetland Complex (as shown on this drawing). There shall be no disturbance, including berms, within 10 metres of the wetland. g. Implement a minimum setback for extraction of 30 metres from Tributary #1 and the pond (as shown on this drawing). There

shall be no disturbance, including berms, within 10 metres of these features. h. Implement a minimum setback for extraction of 30 metres from unevaluated wetland units 3, 4 and 5 (as shown on this drawing).

There shall be no disturbance, including berms, within 10 metres of these features. i. All conditions of Endangered Species Act approvals/permits shall be followed.

Sediment and erosion control measures shall be installed along the dripline of the significant woodlands in areas where runoff has the potential to enter the woodland, and adjacent to the Coulterville Wetland Complex prior to commencement of activities within 30 metres of the significant woodlands (e.g., Site preparation) and shall be actively monitored and maintained for the duration of the proposed operations. Following rehabilitation of the areas adjacent to the significant woodlands, the control measures shall be removed.

k. Excess water collected in the sump(s) shall be pumped to a settling pond located on the east side of the North Area, from which water will flow by gravity for off-site discharge to the Osprey Valley Golf Course irrigation pond system, with the excess water

stored or discharged through the existing pond system to the Credit River. Water collected from quarry operations and discharged off-Site shall be monitored for total suspended solids and temperature to ensure it meets the discharge objectives for those parameters, as specified in the Environmental Compliance Approval.

m. Implement the water monitoring requirements for Locations 1, 2, 3 and 4: Location 1: Main Quarry - Northwest Area - Tributary #1 (SW14/MP14, SW22/MP22, SW23/MP23, MW20-15A/B/C) • Location 2: Main Quarry - Northwest Area - Coulterville Wetland Complex (SW17/MP17, SW18/MP18, SW19/MP19, SW20/MP20, MW22-02A/B, MW22-03A/B) • Location 3: Main Quarry - Monitoring Wells for the Main Area Mitigation System (MW-IT-01A/B, MW-IT-02A/B)

• Location 4: South Quarry - Monitoring Wells for the South Area Mitigation System (MW-IT-03A/B, MW-IT-04A/B, 10. <u>Traffic</u> a. Prior to shipping, the licensee shall enter into an agreement with the Region of Peel applicable road authority for the construction

> a.a. Entrance / exit a.b. Charleston Sideroad improvements

b. Prior to below water operations commencing in the Main Area and prior to operations commencing in the South Area, the licensee shall enter into an agreement with the Region of Peel applicable road authority for a crossing underneath Main Street and Charleston Sideroad, respectively.

c. A minimum 170 metre long internal access road to accommodate highway truck queuing shall be constructed on-site (the location shown on the plan view of this drawing is schematic only). The scale house shall be located a minimum of 170 metres from the commencement of the internal access road to accommodate highway truck queuing.

a. The licensee shall hold an annual Community Liaison Committee meeting once a year. The Community Liaison Committee shall consist of up to 5 members of the public that live within 500 m of the licence area and representatives of the licensee. The Community Liaison Committee is intended to provide a forum for dialogue and exchange of information between the surrounding community and the licensee relative to ongoing operations, rehabilitation, monitoring, reporting and any complaints received and actions taken by the licensee. The licensee shall also invite the MNRF, Town of Caledon, the Region of Peel and the CVC to

Site Plan Acronyms

attend the Community Liaison Committee meetings.

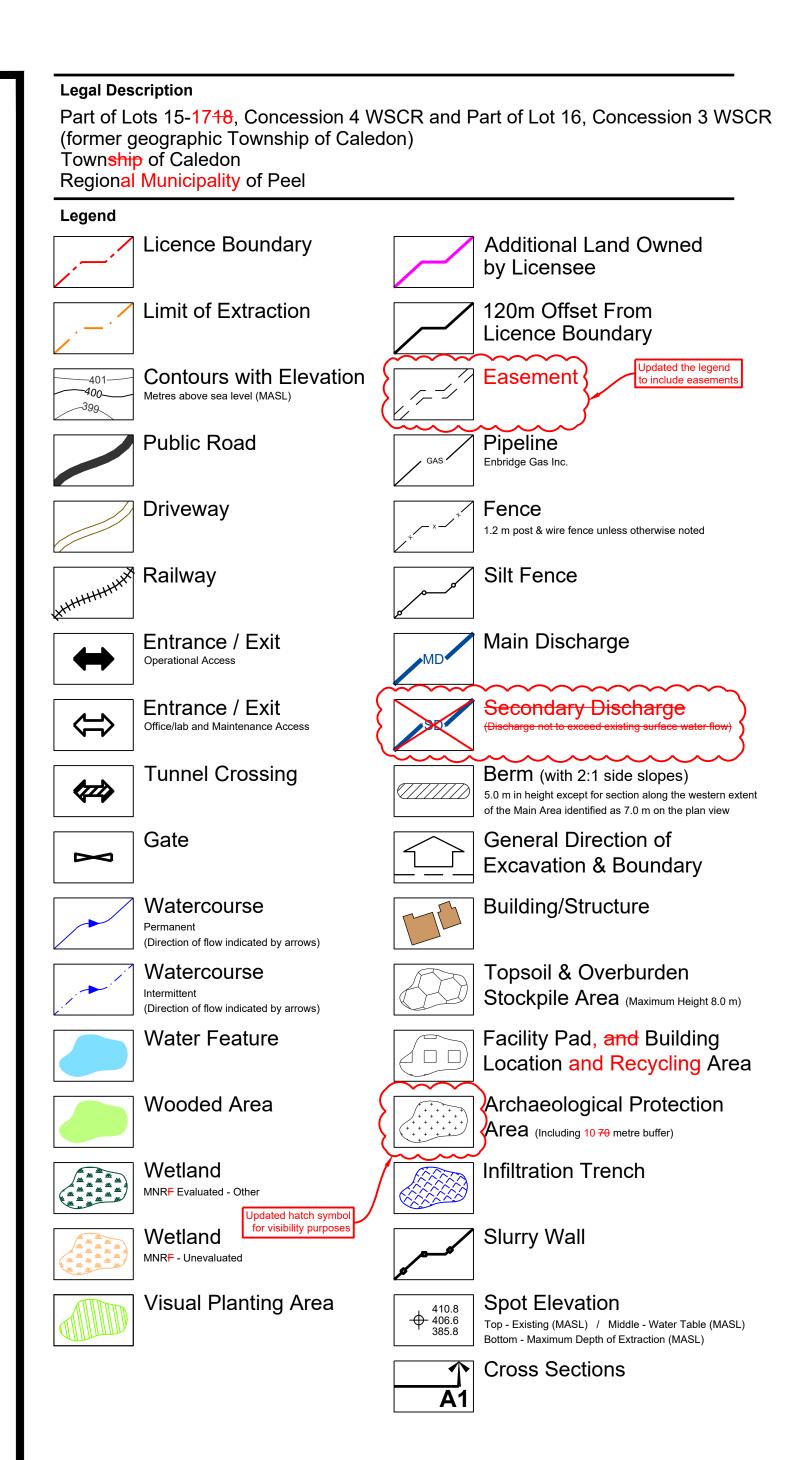
1. ARA - Aggregate Resources Act 2. MECP - Ministry of the Environment, Conservation and Parks 3. MGCS - Ministry of Government and Consumer Services 4. DFO - Department of Fisheries and Oceans Canada MNRF - Ministry of Natural Resources and Forestry 6. MCM - Ministry of Citizenship and Multiculturalism 7. TSSA - Technical Standards and Safety Authority

8. MTCS - Ministry of Tourism, Culture and Sport 9. ECA - Environmental Compliance Approval 10. BMPP - Best Management Practices Plan 11. WWIS - Water Well Information System 12. HIA - Heritage Impact Assessment CVC - Credit Valley Conservation

14. MASL - Metres above sea level 15. PTTW - Permit to Take Water 16. NTS - Not to Scale

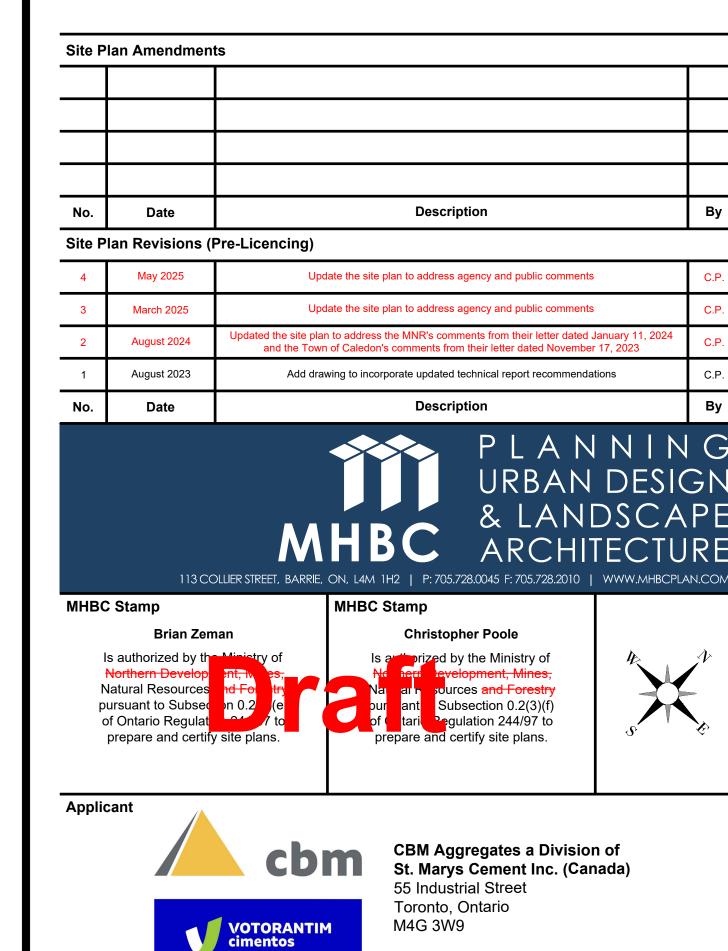
Noise Mitigation Schematic





Site Plan Changes

The redline revisions shown on this drawing represent all of the changes that have been made since the August 2023 Aggregate Resource Act site plan



Caledon Pit & Quarry

18722 Main Street, Caledon, Ontario

MNRF Licence Reference No. **Applicant's Signature** 626600 Plan Scale: 1:5000 (Arch E) August 2023 May 2025

Technical Recommendations

3 of 4

Drawing No.

File Path

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