A. General

1. Area Calculations:

1.1.	Licence (total):	**262.0 hectares**
	Main Area	152.3 hectares
	North Area	30.3 hectares
	South Area	79.4 hectares
1.2.	Limit of Extraction (total):	**204.0 hectares**
	Main Area	126.0 hectares
	North Area	16.0 hectares
	South Area	62.0 hectares

2. The maximum annual tonnage is 2,500,000.

3. The following structures shall be permitted within the Building Location Area identified on the plan view of this drawing:

Building	Width	Length	Area
Scale House	3.7 m	12.2 m	45.1 m^2
Quality Control Lab	3.7 m	12.2 m	45.1 m^2
Maintenance Shop	36.6 m	45.7 m	1,672.6 m^2
Office	13.7 m	18.3 m	250.7 m^2

4. The licensee intends to retain ownership or control of additional land containing a house (to the northwest of the Main Area) during the extraction operation which shall be vacated prior to, and remain vacant while, extraction is occurring within 500 metres. Should the house remain occupied or the property sold, the licensee shall notify the MNRF immediately and provide mitigation necessary to ensure Provincial noise, air, dust and ground vibration limits are satisfied.

5. Table 3 on this drawing identifies the number of sensitive receptors within 500 metres of the licence boundary and the distance from the licence boundary to each receptor.

B. Hours of Operation

1. 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 (7:00am to 7:00pm) Monday to Friday except statutory holidays.
2. Activities for site operations, such as extraction, processing and drilling are permitted to occur during the daytime period (7:00am to 7:00pm) Monday to Saturday, except statutory holidays.
3. 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.
4. Blasting is permitted from 8:00am to 6:00pm Monday to Friday, except statutory holidays.

C. Site Access and Fencing

1. The two existing access points on Charleston Sideroad and the southern access point on Mississauga Road for the Main Area (as shown on drawing 1 of 3) shall be removed during site preparation of the Main Area. The northern access point on Mississauga Road may remain for maintenance purposes only.
2. The two existing access points for the North Area (as shown on drawing 1 of 3) may remain, and shall not be gated, while the North Area is utilized for agricultural purposes (see Section N Variations from Control and Operation Standards). The existing access points on Main Street and Charleston Sideroad may remain for maintenance purposes only.
3. The four existing access points for the South Area (as shown on drawing 1 of 3) may remain, and shall not be gated, while the South Area is utilized for agricultural purposes (see Section N Variations from Control and Operation Standards). During site preparation of the South Area, the three existing access points on Charleston Sideroad shall be removed. The site access on Mississauga Road may remain for maintenance purposes only.
4. The main operational entrance/exit is proposed in the location shown on the plan view of this drawing, subject to an agreement with the Region of Peel. See site entrance simulation on this drawing.
5. The North and South Areas shall be accessed by tunnels beneath both Main Street and Charleston Sideroad in the locations shown on the plan view of this drawing, subject to an agreement with the Region of Peel (see Section N Variations from Control and Operation Standards). Temporary access points shall be permitted in the North and South Areas to facilitate tunnel construction.
6. The operational, maintenance and/or temporary access points shall be gated, kept closed during hours of non-operation and maintained throughout the life of the licence.
7. Page wire and/or hi-tensile fencing, a minimum 1.2 metres in height, shall be erected along the licence boundaries in a phased approach (see Section N Variations from Control and Operation Standards). Prior to site preparation commencing in the Main, North or South Areas, fencing shall be installed along the perimeter of that Area.
8. In order to minimize disturbance to existing vegetation, perimeter fencing may be offset up to five metres from the licence boundary (see Section N Variations from Control and Operation Standards). Where perimeter fencing is offset from the licence boundary, the licence boundary shall be demarcated with highly visible T-bars with PVC-every 30 metres, or less, to maintain visibility from one T-bar to the next.
9. All fencing shall be maintained for the life of the licence.
10. A sign of at least 0.5 metres by 0.5 metres in size shall be erected and maintained at the operational entrance/exit that says in legible words "This site is licensed under the Aggregate Resources Act licence #_____".

D. Drainage and Siltation Control

1. Drainage of undisturbed areas will continue in the directions shown on drawing 1 of 3.
2. Silt fencing shall be installed in a phased approach. Prior to site preparation commencing in the Main, North or South Areas, silt fencing shall be installed on the exterior side toe of perimeter berms and along the dripline of significant woodlands as shown on the plan view of this drawing. See Natural Environment note 9j) under Section O Technical Recommendations for additional information.
3. Silt fencing shall be inspected prior to site preparation activities to ensure it was installed correctly and during extraction operations to ensure that the fencing is being maintained and functioning properly. Any issues that are identified shall be rectified immediately.
4. Silt fencing shall not be removed until re-vegetation and soil stabilization has occurred to limit sedimentation of the setbacks.

E. Site Preparation

1. Existing structures within the licence boundary outside of the Cultural Heritage Potential areas shall be demolished or removed prior to extraction within each Area. Structures within the Cultural Heritage Potential areas shall be subject to the cultural heritage technical recommendations in Section O.4.
2. Timber resources shall be salvaged for use as saw logs, fence posts and fuel wood where appropriate. Cleared stumps and brush may be burned (with applicable permits), used for aquatic habitat enhancement or mulched for use in progressive rehabilitation.
3. Ensure all requirements for natural environment notes 9 a to 9 d under Section O Technical Recommendations are met, if applicable.
4. Topsoil and overburden shall be stripped and stored separately.
5. Topsoil and overburden shall be placed in noise attenuation/visual berms or used immediately for progressive rehabilitation.
6. Excess topsoil and overburden not required for immediate use in berms or progressive rehabilitation may be temporarily stockpiled within the limit of extraction in the location shown on the plan view of this drawing. Topsoil and overburden stockpiles in this location shall not exceed eight metres in height and may be located within 30 metres of the licence boundary (see Section N Variations from Control and Operation Standards).
7. In situations where excess topsoil and overburden has to be temporarily stockpiled outside the area shown on the plan view of this drawing, stockpiles shall be located within the limit of extraction and remain a minimum of 30 metres from the licence boundary and 90 metres from a property with a residential use.
8. Temporary topsoil and overburden stockpiles which remain for more than one year shall have their slopes vegetated to control erosion. Seeding shall not be required if these stockpiles have vegetated naturally in the first year.
9. No topsoil shall be removed from the site (see Section N Variations from Control and Operation Standards).
10. Ensure the cultural heritage and archaeology technical recommendations in Sections O.4 and O.5 have been completed for the phase undergoing site preparation, if applicable.

F. Berms and Screening

1. Berms shall not be located within three metres of the licence boundary.
2. Berms shall be a minimum of five metres in height.
3. Berm side slopes shall not exceed 2:1 (horizontal : vertical).
4. The minimum width of the berm crest shall be two metres.
5. See Typical Acoustic and Visual Berm detail on this drawing for additional information.
6. Berms shall be seeded in accordance with visual note 6 c under Section O Technical Recommendations.
7. Existing vegetation within the setbacks shall be maintained where berms are not required.

G. Site Dewatering

1. Refer to water notes 7.c, 7.g, 7.h, 7.i and 7.j under Section O Technical Recommendations for information regarding site dewatering.

H. Extraction Sequence

1. This plan depicts a schematic operations for the property based on the best information available at the time of preparation.
2. Extraction shall occur in eight phases (Phases 1, 2A, 2B, 3, 4, 5, 6 and 7) as shown on the plan view.
3. Notwithstanding the operational and rehabilitation notes, demand for certain products or blending of materials may require minor deviations in the extraction and rehabilitation sequence. Any major deviations from the operations sequence shown shall require approval from the MNRF.
4. Phase 1
   4.1. Prepare Phase 1 for extraction and ensure all requirements in Sections 'C' through 'G' of this drawing are met.
   4.2. Strip Phase 1 and use the material to construct the perimeter berm for the Main Area.
   4.3. Extract sand and gravel in a northeasterly direction to top of bedrock.
   4.4. Once bedrock is reached, establish facility pad for permanent processing area at an elevation of 397.0 masl.
   4.5. Commence quarrying operations through sinking cut.
   4.6. Continue extracting the pit and quarry in a northeasterly direction before proceeding in a northwesterly direction.
   4.7. Phase 1 may be extracted to a maximum depth between 384.0 and 392.7 masl.
   4.8. Progressive rehabilitation shall consist of backfilling the southeast and northeast phase boundary to establish the final elevations and grades depicted on the plan view for drawing 3 of 3.
   4.9. Prepare Phases 2A and 2B for extraction and ensure all requirements in Sections 'C' through 'G' of this drawing are met.
5. Phases 2A
   5.1. Strip Phase 2A and use the material to construct the perimeter berm for the North Area, for progressive rehabilitation in Phase 1 or temporarily stockpile the material in the topsoil and overburden stockpile area.
   5.2. Extract pit and quarry in a northwesterly direction before proceeding in a southwesterly direction.
   5.3. Phase 2A may be extracted to a maximum depth between 387.2 and 392.7 masl.
   5.4. Establish tunnel beneath Main Street to connect with Phase 2B.
   5.5. Progressive rehabilitation shall consist of backfilling a portion of the phase to pre-extraction grades as well as the side slopes to establish the final elevations and grades depicted on the plan view of drawing 3 of 3.
6. Phase 2B
   6.1. Strip Phase 2B and use the material for progressive rehabilitation in Phases 1 and 2A or temporarily stockpile the material in the topsoil and overburden stockpile area.
   6.2. Create sinking cut to establish tunnel beneath Main Street to connect with Phase 2A.
   6.3. Extract pit and quarry in a northwesterly direction before proceeding in a southwesterly direction.
   6.4. Phase 2B may be extracted to a maximum depth between 393.3 and 395.0 masl.
   6.5. Progressive rehabilitation shall consist of backfilling the side slopes and quarry floor to establish the final elevations and grades depicted on the plan view of drawing 3 of 3.
   6.6. Prepare Phase 3 for extraction and ensure all requirements in Sections 'C' through 'G' of this drawing are met.
7. Phase 3
   7.1. Use the topsoil and overburden stockpiled in Phase 3, as well as the existing material, for progressive rehabilitation in Phases 2A and 2B.
   7.2. Extract pit and quarry in a southwest direction.
   7.3. Phase 3 may be extracted to a maximum depth between 383.9 and 388.6 masl.
   7.4. Progressive rehabilitation shall consist of backfilling a portion of the phase to pre-extraction grades as well as side slopes to establish the final elevations and grades depicted on the plan view of drawing 3 of 3.
   7.5. Prepare Phase 4 for extraction and ensure all requirements in Sections 'C' through 'G' of this drawing are met.
8. Phase 4
   8.1. Use the topsoil and overburden stockpiled in Phase 4, as well as the existing material, for progressive rehabilitation in Phases 2A, 2B, 3, 4 and backfilling the tunnel beneath Main Street.
   8.2. Extract pit and quarry in a southwest direction.
   8.3. Phase 4 may be extracted to a maximum depth between 382.3 and 385.9 masl.
   8.4. Progressive rehabilitation shall consist of backfilling a portion of the phase to pre-extraction grades as well as side slopes to establish the final elevations and grades depicted on the plan view of drawing 3 of 3.
   8.5. Prepare Phase 5 for extraction and ensure all requirements in Sections 'C' through 'G' of this drawing are met.
9. Phase 5
   9.1. Strip Phase 5 and use the material for progressive rehabilitation in Phases 4 and 5 and any other areas requiring backfilling within the Main area. Any remaining topsoil and overburden shall be used for the future progressive rehabilitation in Phases 6 and 7.
   9.2. Extract pit and quarry in a southeasterly direction.
   9.3. Phase 5 may be extracted to a maximum depth between 380.8 and 384.7 masl.
   9.4. Progressive rehabilitation shall consist of backfilling the side slopes to establish the final elevations and grades depicting on the plan view of drawing 3 of 3.
   9.5. Prepare Phase 6 for extraction and ensure all requirements in Sections 'C' through 'G' of this drawing are met.
10. Phase 6
   10.1. Strip Phase 6 and use the material to construct the perimeter berm for the South Area or temporarily stockpile for future use with progressive rehabilitation.
   10.2. Create sinking cut to establish tunnel beneath Charleston Sideroad to connect with Phase 1.
   10.3. Extract pit and quarry in a southeasterly direction.
   10.4. Phase 6 may be extracted to a maximum depth between 385.0 and 391.4 masl.
   10.5. Progressive rehabilitation shall consist of backfilling the quarry floor and side slopes to establish the final elevations and grades depicted on the plan view of drawing 3 of 3.
   10.6. Prepare Phase 7 for extraction and ensure all requirements in Sections 'C' through 'G' of this drawing are met.
11. Phase 7
   11.1. Strip Phase 7 and use the material for progressive rehabilitation in Phases 6 and 7.
   11.2. Extract pit and quarry in a southwesterly direction before proceeding in a southeasterly direction.
   11.3. Phase 7 may be extracted to a maximum depth between 381.0 and 386.6 masl.
   11.4. Extract facility pad in Main Area.
   11.5. Progressive rehabilitation shall consist of backfilling the quarry floor (including tunnel) and side slopes to establish the final elevations and grades depicted on the plan view of drawing 3 of 3.

I. Extraction Details

1. All trees within five metres of the excavation face inside the limit of extraction shall be removed.
2. The maximum height of a lift within the pit shall not be greater than 1.5 metres above the highest reaching excavating equipment being utilized on-site.
3. The maximum height of a lift within the quarry shall be 25 metres.
4. The maximum depth of material below top of bedrock in Phase 1 is approximately 27 metres. Areas of Phase 1 that are less than 25 metres in depth shall be extracted in one lift while areas greater than 25 metres in depth shall be extracted in two lifts.
5. The maximum depth of material below top of bedrock in Phase 2A is approximately 28 metres. Areas of Phase 2A that are less than 25 metres in depth shall be extracted in one lift while areas greater than 25 metres in depth shall be extracted in two lifts.
6. The maximum depth of material below top of bedrock in Phase 2B is approximately 14 metres and shall be extracted in one lift.
7. The maximum depth of material below top of bedrock in Phase 3 is approximately 27 metres. Areas of Phase 3 that are less than 25 metres in depth shall be extracted in one lift while areas greater than 25 metres in depth shall be extracted in two lifts.
8. The maximum depth of material below top of bedrock in Phase 4 is approximately 27 metres. Areas of Phase 4 that are less than 25 metres in depth shall be extracted in one lift while areas greater than 25 metres in depth shall be extracted in two lifts.
9. The maximum depth of material below top of bedrock in Phase 5 is approximately 25 metres and shall be extracted in one lift.
10. The maximum depth of material below top of bedrock in Phase 6 is approximately 18 metres and shall be extracted in one lift.
11. The maximum depth of material below top of bedrock in Phase 7 is approximately 16 metres and shall be extracted in one lift.
12. Extraction may occur concurrently in Phases 2A and 2B.
13. Extraction shall be permitted in two phases simultaneously to allow for transition between phases.
14. Blasting shall be permitted daily Monday to Friday (during the hours specified in note B.4 on this drawing). However, it is anticipated that the frequency of blasts will typically be two blasts per week.
15. As excavation reaches the limit of extraction or maximum depth, progressive rehabilitation shall commence.
16. Aggregate stockpiles (including recyclable material) shall be located within the limit of extraction and remain a minimum of 30 metres from the licence boundary and 90 metres from a property with a residential use.
17. Berms that encroach within the limit of extraction shall be removed, and the underlying aggregate may be extracted, as part of final extraction/rehabilitation of the site.
18. Internal haul road locations will vary on the pit and quarry floor as extraction progresses.

J. Equipment and Processing

1. Equipment used on-site may include jaw crushers, excavators, bulldozers, skid steers, screeners, conveyors, hoppers, mobile cone crushers, drill rigs, generators, front end loaders, shipping loaders, shipping trucks, haul trucks, and water trucks.
2. Processing equipment shall remain a minimum of 30 metres from the licence boundary and 90 metres from a property with a residential use.
3. Processing equipment will initially be portable and shall be situated in the location identified on the Noise Mitigation Schematic on this drawing. As operations progress and the top of bedrock is exposed, a permanent processing plant will be constructed within the facility pad area as shown on the plan view of this drawing. Once the permanent processing plant is operational, the temporary processing plant shall be dismantled. A permanent processing plant will be constructed in the South Area once enough aggregate is extracted within Phase 6. Once the permanent processing plant in Phase 6 is operational, the permanent processing plant on the facility pad in Phase 1 shall be dismantled and the material beneath it extracted.

K. Fuel Storage

1. Fuel storage tanks shall be located in close proximity to the maintenance shop. Fuel storage tanks shall be installed and maintained in accordance with the Technical Standards and Safety Act, Liquid Fuel Handling Code and Liquid Fuels Regulation 217/01.
2. All fuel tanks shall be double sided or placed in containment facilities large enough to hold the tanks maximum volume.
3. Fuel trucks shall be used to transfer fuel to on-site equipment in accordance with the Liquid Fuels Handling Code.
4. A Spills Contingency Plan shall be prepared and implemented prior to site preparation. The Spills Contingency Plan shall be available on-site and all employees and contractors shall be informed and required to comply with this plan.

L. Scrap and Recycling

1. Scrap may be stored on-site and shall be removed on an on-going basis.
2. Scrap shall only include material generated directly as a result of the aggregate operation such as refuse, debris, scrap metal, lumber, discarded machinery, equipment and motor vehicles.
3. All fluids shall be drained from any discarded equipment, machinery or motor vehicle prior to storage and disposed of in accordance with the Waste Management Act.
4. Scrap shall not be stored within 30 metres of any body of water, or the licence boundary, and shall be kept in close proximity to the main processing plant.
5. Recycling of concrete shall be permitted on-site.
6. Recyclable material shall be kept in close proximity to the main processing plant.
7. Rebar or other structural metal shall be separated from recyclable aggregate material during processing and placed in a designated scrap pile on-site which shall be removed on an on-going basis.
8. Recycled aggregate shall be removed on an on-going basis.
9. Recycling activities shall not interfere with the operational phases of the site or with rehabilitation.
10. Once the site is depleted, no further importation of recyclable material shall be permitted.
11. Once final rehabilitation has been completed and approved in accordance with the site plan, all recycling operations shall cease.
12. The site shall be kept in an orderly condition.

M. Maximum Disturbed Area

1. The maximum disturbed area is 95.0 hectares. Disturbed areas shall include active extraction areas, stockpile areas, internal haul routes, areas being progressively rehabilitated and berms until they are vegetated. Areas that have been side-sloped and vegetated, and the adjacent un-vegetated or flooded vacated quarry floor (eg. stockpiles and equipment removed), shall not constitute disturbed areas.

N. Variations from Control and Operation Standards

Section 0.13 Standard	Variation	Rationale
(1) 1 & 2	1. A gate shall not be required for the tunnel crossings. 2. Gates shall not be required in an Area that is not currently undergoing site preparation.	1. The tunnel crossings are beneath the road allowance. Therefore, access is already restricted. 2. This will enable agricultural operations to continue without being impeded.
(1) 3	A clear view of the road in both directions shall not be provided at the tunnel crossings.	The tunnel crossings are beneath the road allowance. Therefore, visibility in both directions is not possible.
(1) 9 & 10.i.A	Excavation may occur within the setback at the tunnel crossings.	This will facilitate construction associated with the tunnel.
(1) 11	Aggregate / overburden may be removed from the setback at the tunnel crossings.	This will facilitate construction associated with the tunnel.
(1) 13.i.	Topsoil and overburden within the "Topsoil and Overburden Stockpile Area" may be stockpiled within 30 metres of the licence boundary.	The "Topsoil and Overburden Stockpile Area" is adjacent to additional land owned by the licensee.
(1) 17	Topsoil and/or overburden may be transferred between the Main, North and South Areas.	This will allow stripped material from site preparation to be used for berm construction, progressive rehabilitation and/or temporarily stockpiled in any Area.
(1) 19.i.	The minimum side slope within the sand and gravel deposit areas shall be 2:1.	This will enable side slopes to transition seamlessly between the pit and quarry excavation areas.
(3) (a)	1. Fencing shall be installed in a phased approach. 2. Fencing may be offset up to five metres from the licence boundary.	1. This will enable agricultural production to continue with minimal disruption and accounts for the long life expectancy of the operation. 2. This will minimize the removal of existing trees to accommodate the perimeter fencing.

O. Technical Recommendations

1. Agriculture
   a. Lands that are currently in agricultural production, and not required for immediate extraction and site preparation, shall be kept in agricultural production for as long as possible.
   b. The licensee shall document any complaints involving the local agricultural community, and as part of the annual Compliance Assessment Report, shall provide information to MNRF on the nature of the complaint and actions taken by the licensee to address the issue.
2. Blasting
   a. All quarry blasts shall be monitored at the closest residences in front of and behind the blast for ground and air vibration effects to ensure compliance with the current MECP guideline limits.
   b. All quarry blasts shall be monitored within 300 metres of identified area of cultural heritage potential to ensure compliance with the ground vibration limit of 30 mm/s. These requirements may need to be re-assessed upon completion of the Heritage Impact Assessment. See cultural heritage technical recommendations Section O.4.
   d. The vibration monitoring shall be carried out by an independent third-party engineering firm with expertise in blasting and monitoring.
   e. Notification shall be provided to Enbridge when blasting approaches within 300 metres of the pipeline.
   f. No extraction within 30 metres of the pipeline without authorization from Enbridge.
   g. Blasting shall be carried out by person experienced, trained and qualified to conduct blasting operations.
   h. The licensee shall establish a blasting notification program for residents within 500 metres.
   i. Blasting shall not occur on Saturday, Sunday and all Statutory holidays.
   j. If there are exceedances of the vibration limits, blast design parameters shall be altered to bring results back into compliance.
   k. When blasting within approximately 440 metres of adjacent residences, the quarry shall regularly review their blast procedures in conjunction with the blast monitoring results to assess if it is necessary to modify blast design parameters of the blasts.
   l. Blasting procedures, such as drilling and loading, shall be reviewed annually and modified as required to ensure compliance with industry standards.
   m. The licensee shall maintain a record of all blasting details including a seismic record of the ground and air vibration monitoring results. The blast details and monitoring results shall be made available to the MNRF and the MECP, upon written request. The blasting reports shall include the following information:
      m.a. Location, date and time of the blast;
      m.b. Name of company taken including photographs, if necessary, of the location of the blasting operation, and nearest point of reception;
      m.c. Physical and topographical description of the ground between the source and the receptor location;
      m.d. Type of material being blasted;
      m.e. Sub-soil conditions, if known;
      m.f. Prevailing meteorological conditions including wind speed in mls, wind direction, air temperature in ^{o}C, relative humidity, degree of cloud cover and ground moisture content;
      m.g. Number of drill holes;
      m.h. Pattern and pitch of drill holes;
      m.i. Size of holes;
      m.j. Depth of drilling;
      m.k. Depth of collar (or stemming);
      m.l. Depth of toe-hole;
      m.m. Weight of charge per delay;
      m.n. Type of detonators and of delays;
      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
      m.q. The excess, if any, over the prescribed limit.
   n. The first five regular production blasts in the 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 to assist with future blast designs. This shall entail establishing monitoring stations between the blast site and neighbouring receptors (residences).
3. Air Quality
   a. The Site shall operate in accordance with the Fugitive Dust Best Management Practices Plan (BMPP) dated December 2022. The BMPP shall be reviewed annually and updated if required based on current Site operations and new best management practices.
   b. Unpaved haul roads shall be watered using a water truck and/or dust suppressant. The application of water shall be dependent on weather conditions but should be designed to achieve a watering rate of at least 2 L/m^2/hour. Site personnel shall conduct daily visible inspections of visible dust from the onsite haul roads, which shall be used to inform additional watering activities if high opacity dust is reported. When temperatures fall below 4° C, a Ministry of Environment, Conservation and Parks chemical dust suppressant shall be used in place of water.
   c. Unpaved haul roads shall be re-graded annually (or as needed based on observations) using coarser material.
   d. A speed limit of 25 km/hour on all site roads shall be implemented.
   e. Stockpiles shall be placed below grade where possible with drop heights of less than 1 metre maintained for fine material.
   f. The processing plant shall be equipped with a water spray system with the watering rate set to suppress visible dust.
   g. The processing plant shall be located below grade as soon as feasible.
   h. Drills shall be equipped with dust suppression systems.
   i. If sustained winds exceed 40 km/hour, on-site processing activities, including drilling and blasting, will cease and not resume until two consecutive hours of winds below 40 km/hour are recorded.
   j. A record of all visual inspections, dust mitigation activities and complaints shall be kept in the onsite filing system, as identified in the BMPP.
4. Cultural Heritage
   a. Areas of cultural heritage potential are identified on the plan view of this drawing. This includes portions of the properties located at 18722 Main Street, 1055 Charleston Sideroad, 1420 Charleston Sideroad, 18501 Mississauga Road, and 18667 Mississauga Road.
   b. Prior to any site alteration or extraction within these areas, a Heritage Impact Assessment (HIA) shall be required. The HIA shall include a full evaluation of the property using the criteria prescribed in O. Reg. 9/06, provide a Statement of CHVI with list of heritage attributes, identify all direct and indirect impacts, and recommend site-specific mitigation measures to ensure the CHVI and heritage attributes of the property are conserved in accordance with provincial requirements.
   c. Until the site specific mitigation measures of the HIA are implemented, a construction buffer shall be established to reduce the risk of accidental damage from vehicles, heavy equipment operation, or other activities of the mineral aggregate operation. The area of cultural heritage potential includes a 50 metre construction buffer. This construction buffer shall be demarcated with temporary fencing and clearly marked as a "no-go-zone".
   d. Until the site specific mitigation measures of the HIA are implemented the licensee shall implement the recommendations of the Blast Impact Assessment related to the areas of cultural heritage potential to ensure the structural integrity of the built heritage resources are maintained.
   e. Until the site specific mitigation measures of the HIA are implemented, if the property is vacated, a qualified specialist shall develop a mothball plan for the property to conserve its heritage attributes during the vacancy period.
5. Archaeology
   a. A Stage 3 Archaeological Assessment 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 (AkHa-29), Location 15 (AkHa-52), Location 16 (AkHa-30), Location 18 (AkHa-31),Location 22 (AkHa-32), Location 26 (AkHa-33), Location 27 (AkHa-34), and the Cameron Site (AkHa-9).
   b. The limits of these archaeological sites, plus a 70 metre buffer, are identified on the plan view of this drawing and referred to as an 'Archaeological Protection Area'.
   c. Alterations are prohibited within the limits of the "Archaeological Protection Area" until such time that the Ministry of Tourism, Culture and Sport (MTCS) has entered a report(s) in the Ontario Public Register of Archaeological Reports where the report(s) recommends that the archaeological site is of no further cultural heritage value or interest.
   d. Any archaeological site that is of further cultural heritage value or interest that remains within the licenced area at the time of surrender of the licence shall be protected through a restrictive covenant on title.
   e. The protected sites shall be fenced prior to commencing extraction.
   f. Should deeply buried archaeology remains be found during the course of site preparation and/or extraction related activities, the MTCS shall be notified.
   g. In the event that human remains are encountered during construction or extraction activities, the licensee shall immediately contact both the MTCS and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Government and Consumer Services (MGCS).
6. Visual
   a. Berms shall be designed to mitigate visual effects and shall be constructed 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 metres in height and constructed with material from each extraction area, prior to extraction commencing in the Main Area, North Area and South Area.
   b. Berms shall remain in place throughout the operational phases in each of the Main Area, North Area and South Area until 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.
   c. The berms shall be seeded with a grass/legume seed mix in order to stabilize the soils on the berms. The grass/legume seed mix shall be applied at a rate of 125 kg /ha. The mix should 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 (Festuca 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 screening.
   e. 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:
      - Trembling aspen (Populus tremuloides) - 10 %
      - 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 %
   f. 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. Monitoring of tree survival shall be conducted within the first year following planting and equivalent replacement planting shall be carried out if more than 20% of the trees did not survive.
   g. Rehabilitation shall be implemented as illustrated on drawing 3 of 3.
7. Water
   a. The maximum predicted groundwater table, based on groundwater levels monitored over a 12 month period from January to December 2021, are as follows:
      - Main Area - Ranges from 420.7 to 393.5 masl (north to southwest)
      - North Area - Ranges from 407.0 to 397.3 masl (northwest to southeast)
      - South Area - Ranges from 405.3 to 391.0 masl (northwest to south)
   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 participation in this private well survey is voluntary.
   c. Prior to below water extraction, the licensee shall obtain and operate in accordance with a Permit To Take Water and Environmental Compliance Approval under the Ontario Water Resources Act to permit the water management activities needed to operate the pit and quarry. These activities include:
      - Pumping, collection, storage and discharge of pit and quarry water; and
      - Construction and operation of an aggregate wash plant.
   d. The approved monitoring programs defined in the Permit to Take Water and/or Environmental Compliance Approval shall, at a minimum, include all groundwater and surface water monitoring requirements as outlined below:
      - On-site monitoring shall include the wells, surface water stations and mini-piezometers listed in Table 1 on drawing 1 of 3, and shall include the scope and frequency specified in Table 1.
      - Off-site monitoring shall include the wells, surface water stations and mini-piezometers listed in Table 2 on drawing 1 of 3, and shall include the scope and frequency specified in Table 2, subject to landowner approval.
   e. In the event a well complaint is received by the licensee for a private (domestic / farm) well located within the estimated zone of influence (1,000 metres), the licensee shall implement the following Well Complaint Response Protocol:
      e.a. A representative of the licensee shall meet with the resident and discuss the complaint. If warranted, the licensee shall contact a local well contractor, and the resident shall be immediately supplied a temporary water source if the issue cannot be easily determined and rectified (see steps below).
      e.b. If the issue raised by the resident is related to a loss of water supply, the licensee shall have a consultant / well 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 and the results of the assessment shall be provided to the resident.
      e.c. The consultant / well contractor will be able to readily determine if pump failure is the problem and, should the resident choose to have the pump repaired or replaced at their expense, the well contractor would correct the situation for the resident. If 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 consideration, implementation of which would be at their expense.
      e.d. If, however, well interference is determined to potentially have been caused by aggregate extraction and dewatering 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 expense. For instance, if the water level in the well is lowered to a point where it has interfered with pumping, then practical solutions shall be evaluated including adjusting the pump pressure and / or lowering the pump level in the well.
      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 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).
   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 licensee to address the issue.
   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 quarry floor. The position of the sump at any given point in time will be dictated by direction of extraction and elevation of the base of the current pit and quarry floor within each quarry area, and shall generally be as follows:
      - Main Area - the sump shall be located in the most southwestern area of the current pit and quarry floor, at the point of lowest elevation.
      - North Area - the sump shall be located in the most southwestern area of the current pit and quarry floor, at the point of lowest elevation.
      - South Area - the sump shall be located in the most southwestern area of the current pit and quarry floor, at the point of lowest elevation.
   h. 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 Credit River.
   i. Subject to an agreement with CVC, the licensee shall install an armoured channel with rip rap on lands owned by CVC to convey the water from the settling pond to the well house in the Credit River.
   j. 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.
   k. An aggregate washing operation may be established in the Main Area 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 to assist with future blast designs. This shall entail establishing monitoring stations between the blast site and neighbouring receptors (residences).
   l. All fuel storage and handling on-site shall be completed in accordance with applicable Technical Standards and Safety Authority (TSSA) standards. The on-site refueling and servicing of machinery shall be carried out in accordance with established best practices and in 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.
8. Noise
   a. On-site equipment shall meet the following noise limits as indicated in the table below:

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

Notes:
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
3. Number of round trips in a given hour
4. 26 unloading events

   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 shall be installed around the Main Area, North Area and South Area prior to extraction commencing