



NELSON AGGREGATE CO.

**Burlington Quarry Extension
Aggregate Resources Act Update**



November 25, 2021

Brian Zeman, MHBC

Agenda

1. Results on 45 day review period;
2. What has happened since the 45 day process concluded;
3. Updated technical reports/site plans;
4. Next steps for the ARA Process: Burlington Quarry Extension;
and,
5. Existing Burlington Quarry Site Plan Amendment.

Aggregate Resources Act Process – Burlington Quarry Extension

45 Day Review Period Resulted In:

- 225 Objectors
 - 218 Public Objectors (i.e. Special Interest Groups/Community Associations)
 - 6 Agency Objectors
 - 1 Utility Objector

Aggregate Resources Act Process – Burlington Quarry Extension

Since Conclusion of the 45 Day Review Period:

- On-going meetings with JART/Peer Reviewers;
- On-going meetings with Provincial Agencies;
- Department of Fisheries and Oceans review;
- Detailed responses submitted to JART comments;
- Submission of updated technical reports;
- Submission of updated ARA site plans;
- Circulation of site plan amendment for Existing Quarry;
- Survey of wetland boundaries with NDMNRF;
- Public information session – December 10, 2020;
- Region of Halton; and, Planning Act Public Meeting – September 15, 2021; and,
- Survey of woodland boundaries with Region of Halton – December 3, 2021.

Aggregate Resources Act Process – Burlington Quarry Extension

Status of Agency Utility Review:

No Objections or Outstanding Concerns:

- Department of Fisheries and Oceans;
- Ministry of Heritage, Sport, Tourism and Culture Industries;
- Ministry of Environment, Conservation and Parks – Water Resources;
- Sun-Canadian Pipe Line Co. Ltd; and,
- Hydro One Networks Inc.

Aggregate Resources Act Process – Burlington Quarry Extension

Status of Agency Utility Review:

Review Still On-Going:

- Niagara Escarpment Commission;
- Ministry of Northern Development, Mines, Natural Resources and Forestry;
- Ontario Ministry Agriculture, Food, Rural Affairs;
- Region of Halton;
- City of Burlington;
- Conservation Halton;
- Ministry of Environment Conservation and Parks – Species at Risk; and,
- Burlington Hydro Inc.

Aggregate Resources Act Process – Burlington Quarry Extension

Updated Technical Reports Submitted

- Wetland Characterization Report prepared by Earthfx, Savanta and Tatham Engineering, March 2021
- Watercourse Characterization Report prepared by Earthfx, Savanta and Tatham Engineering, March 2021
- Aggregate Resources Act Site Plans, April 2021
- Safety Review prepared by True North Safety Group, June 2021
- Blast Impact Assessment prepared by Explotech, June 2021
- Cultural Heritage Impact Assessment prepared by MHBC, June 2021
- Visual Impact Assessment prepared by MHBC, June 2021
- Financial Impact Study prepared by Altus Group, September 30, 2021
- Noise Impact Assessment prepared by HGC Engineering, November 2021

Note: all updated reports are found on Nelson's website at:
<https://www.mtnemoquarrypark.com/copy-of-technical-documents>

Aggregate Resources Act Process – Burlington Quarry Extension

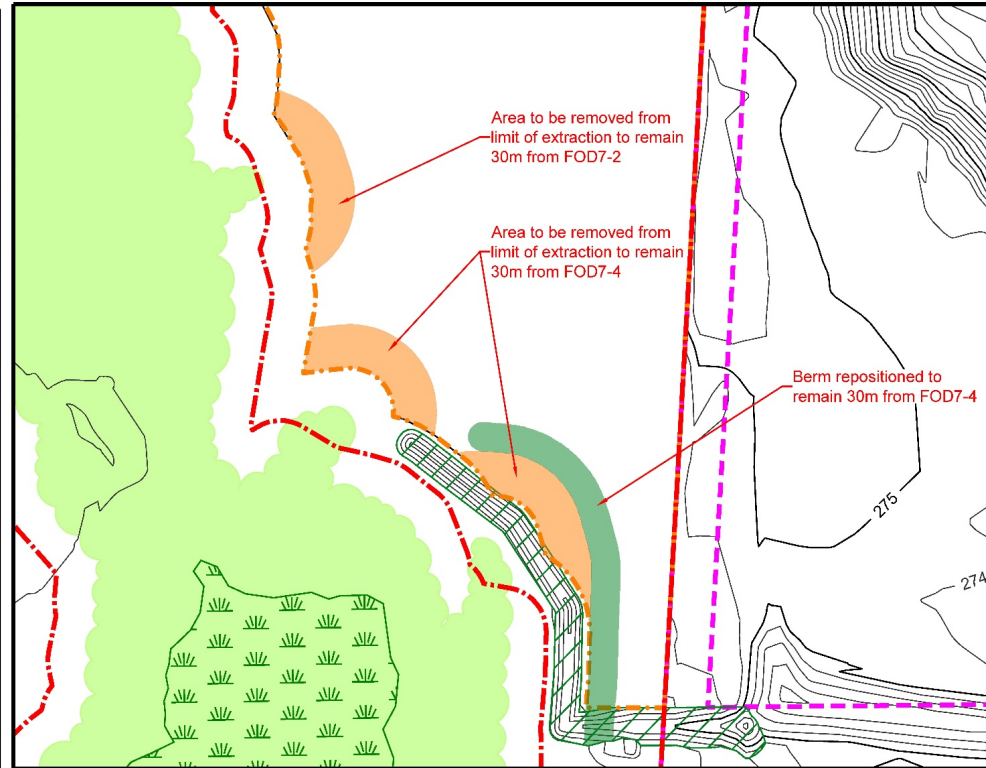
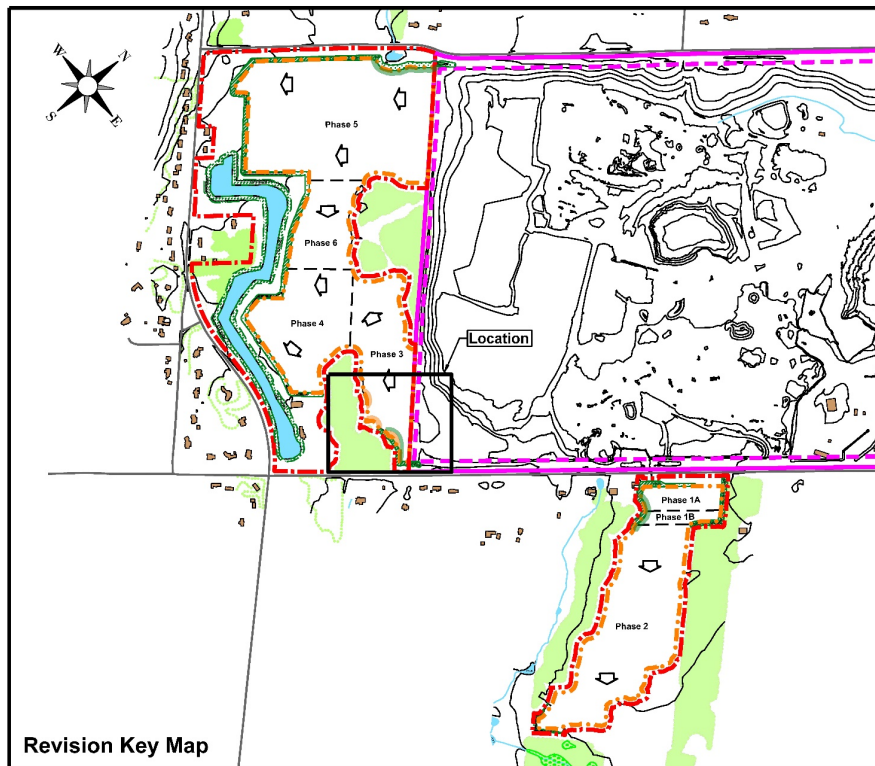
Nelson's Technical Responses to JART

- Archaeological Response – June 16, 2021
- Blasting Response – June 18, 2021
- Traffic Response – June 24, 2021
- Registered Agreements and Reference Plans Response – June 28, 2021
- Progressive and Final Rehabilitation Response – June 29, 2021
- Visual Impact Response – June 30, 2021
- Cultural Heritage Impact Assessment Response – June 30, 2021
- Financial Impact Study Response – July 5, 2021
- Ground Water, Surface Water, Natural Heritage Responses – July 16, 2021
- Air Quality Study Response – July 20, 2021
- Financial Impact Study Response – September 30, 2021
- Noise Impact Assessment Response – November 16, 2021









Note: Nelson's responses to JART are being posted by the Region on their website.

Aggregate Resources Act Process – Burlington Quarry Extension

Updates to Site Plans: Reduction to Extraction Area

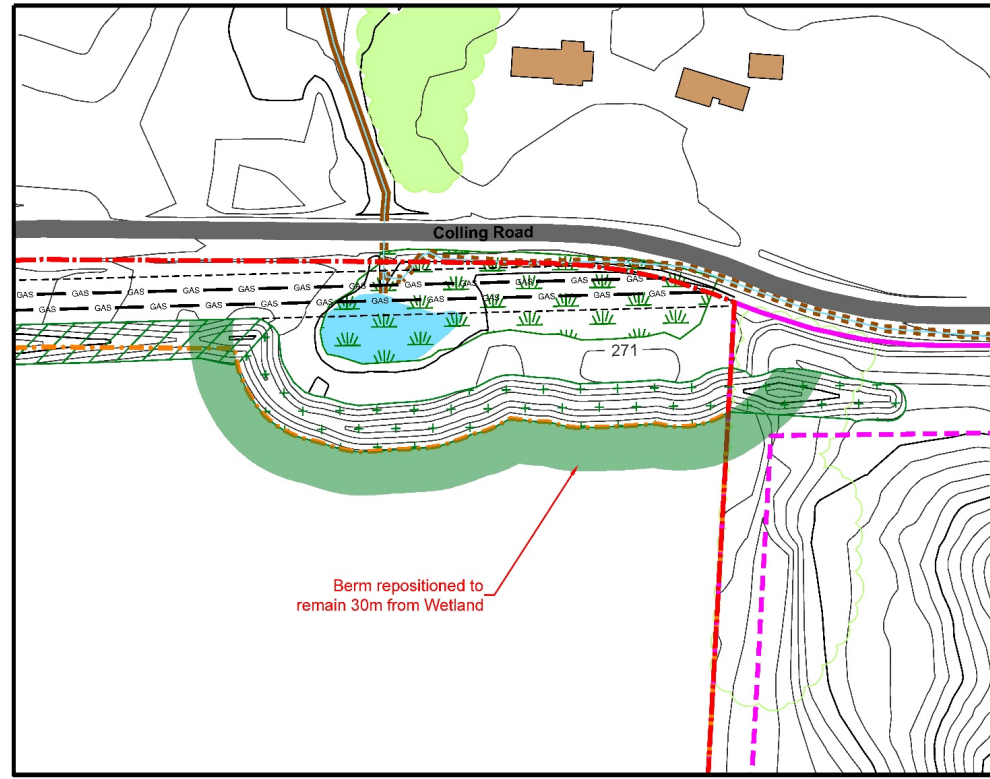
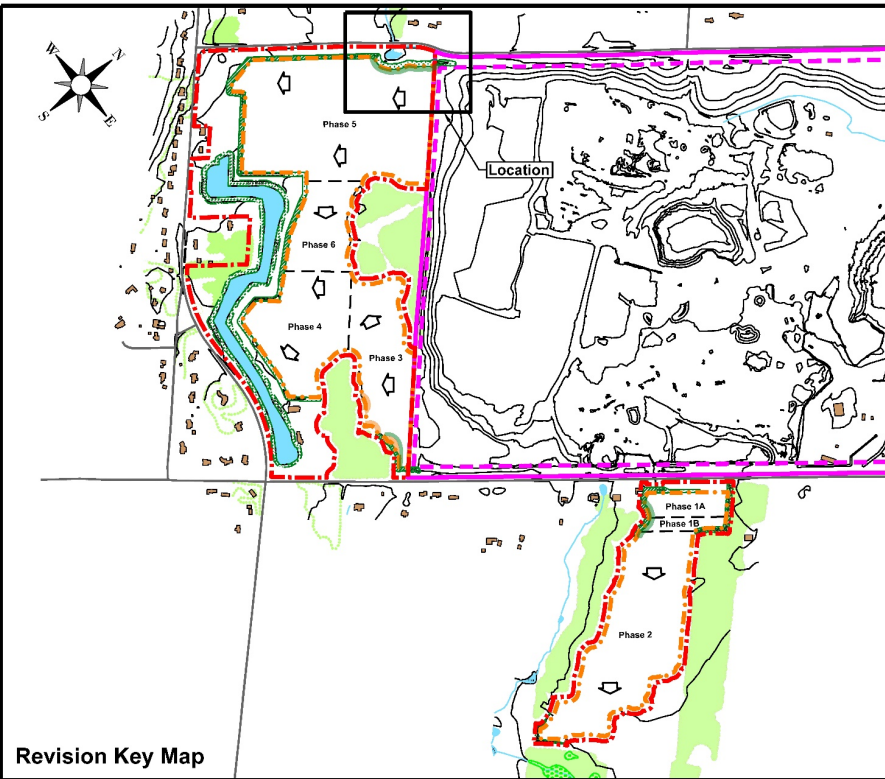


Legend









 Proposed Licence Boundary	 Existing Licence Boundary	 Acoustic Berm	 Area To be Removed from Limit of Extraction
 Proposed Limit of Extraction	 Existing Limit of Extraction	 Visual Berm	 Proposed Adjusted Berm Location

Aggregate Resources Act Process – Burlington Quarry Extension

Updates to Site Plans: Increased Vegetation Protection Zones

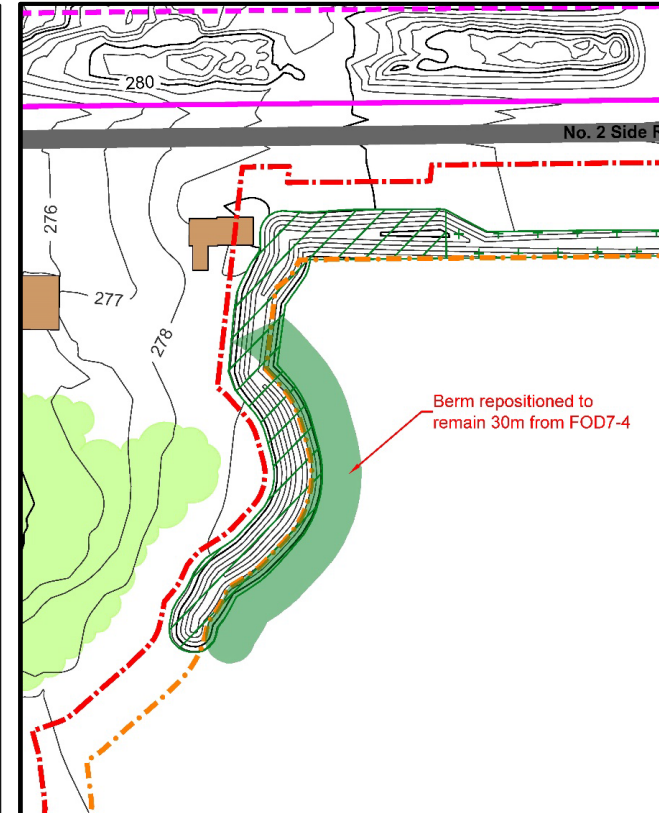
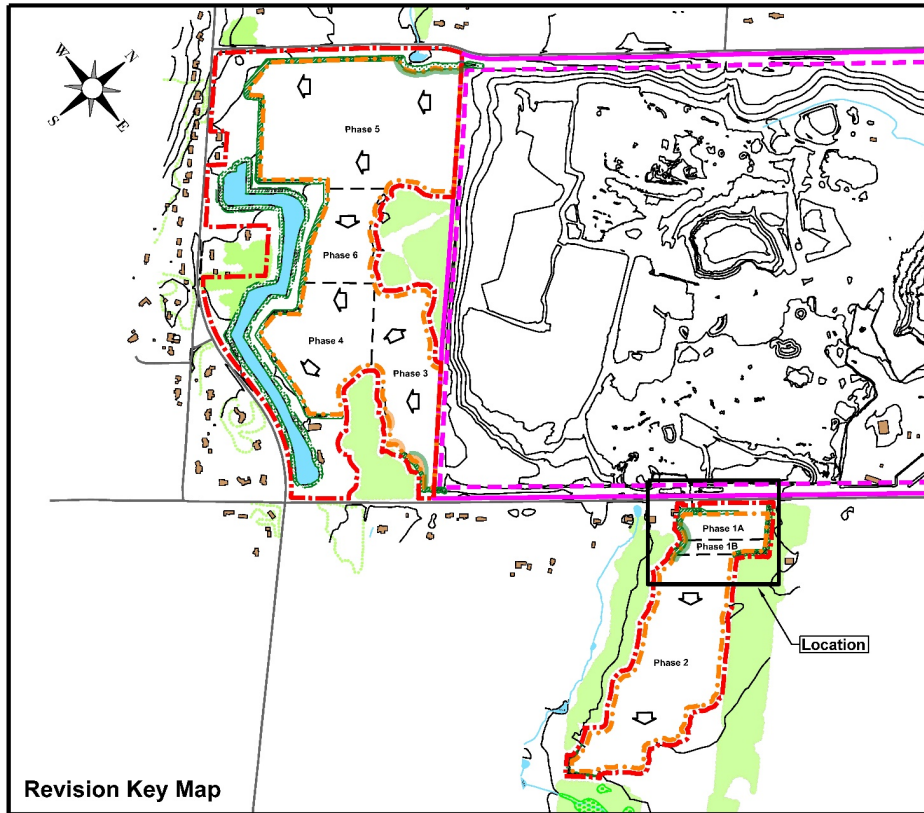


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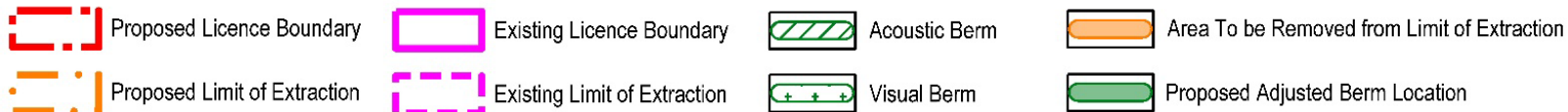
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Aggregate Resources Act Process – Burlington Quarry Extension

Updates to Site Plans: Increased Vegetation Protection Zones

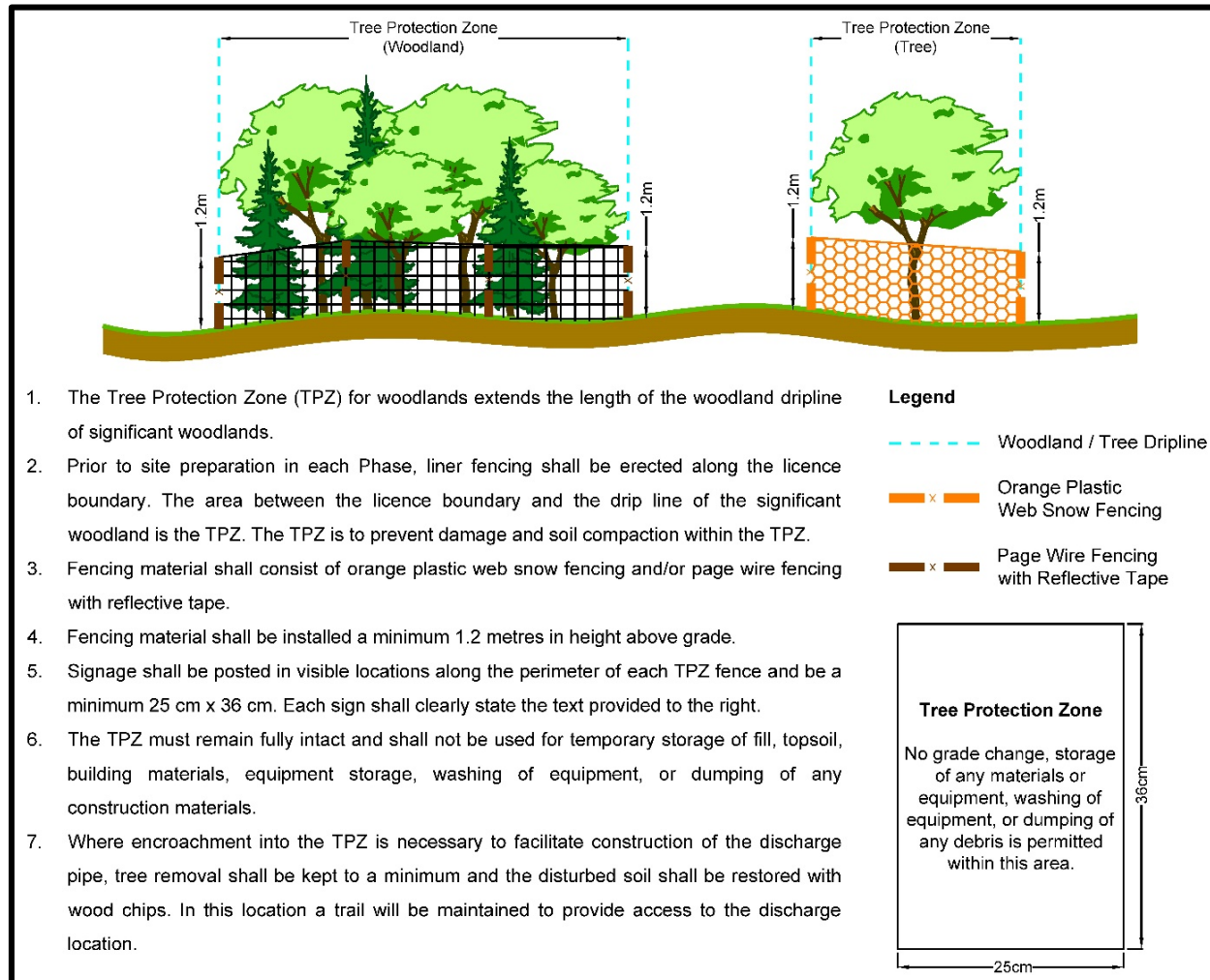


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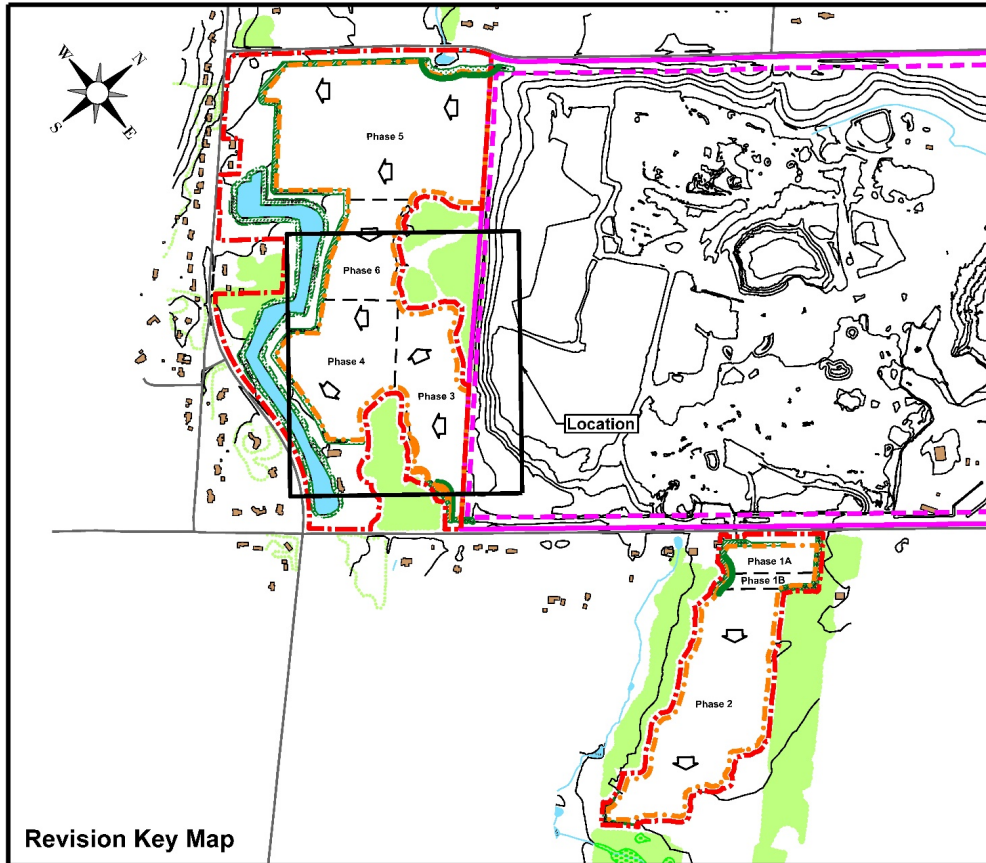
Aggregate Resources Act Process – Burlington Quarry Extension

Updates to Site Plans: Tree Protection Detail



Aggregate Resources Act Process – Burlington Quarry Extension

Updates to Site Plans: Enhance Connectivity Between Features



- | | | |
|---------------------------|---|--|
| Pond | Setback - forested - planted during operations | Gradual grade (with trees & vernal pools) or islands |
| 3:1 slope (tree planting) | Setback - forested - planted when berms removed | |
| 2:1 slope (tree planting) | Restored to existing grade (tree planting) | |

Aggregate Resources Act Process – Burlington Quarry Extension

Updated Site Plan Notes

- Additional noise controls;
- Protection of fish habitat;
- Increased tree planting densities for rehabilitation; and,
- Strengthened site plan notes for NDMNRFs enforcement.

Aggregate Resources Act Process – Burlington Quarry Extension

Next Steps / Anticipated Timelines

- January/February 2022 – Nelson to submit written ARA objector response (20 day objector response period).
- March/April 2022 – Nelson to submit final ARA notification and consultation report.
- If there are still ARA objectors following the 20 day objector response period, Nelson will request NDMNRF to refer outstanding objectors to a hearing.
- The hearing will be consolidated with the Planning Act and Niagara Escarpment Planning and Development Act.

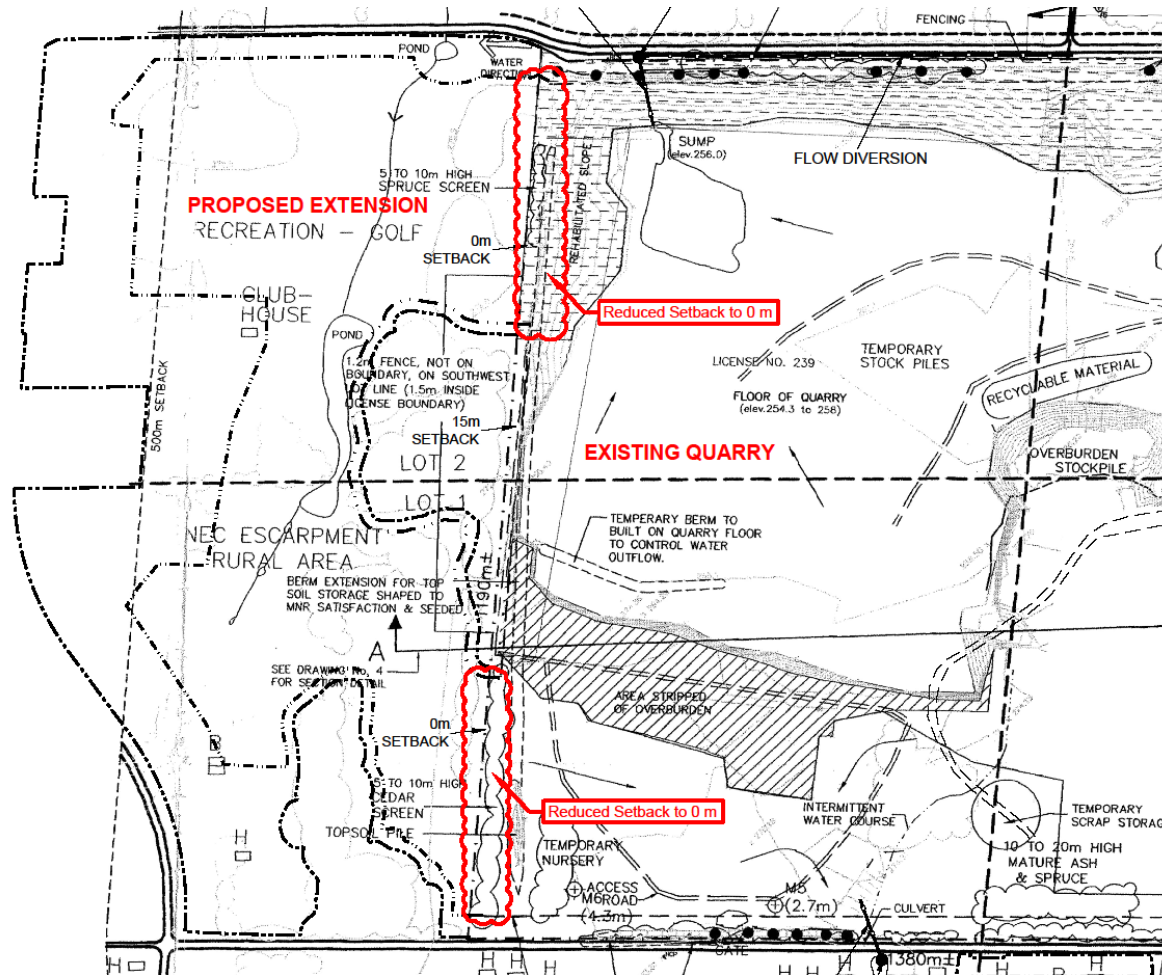
Aggregate Resources Act – Existing Burlington Quarry

Site Plan Amendment

- Submitted to NDMNRF - April 20, 2021
- NDMNRF provided Nelson instructions agency and public for circulation - October 20, 2021
- Agency circulation – November 4, 2021
- Notice circulated to landowners within 120 metres of existing quarry – November 5, 2021
- Deadline for comments – December 8, 2021

Aggregate Resources Act - Existing Burlington Quarry

- 1) Adjacent to the proposed west extension, existing extractions limits in the existing quarry will be revised to allow for an integrated operation and rehabilitation design (e.g. removal of 15 metre setback);



Aggregate Resources Act - Existing Burlington Quarry

2) Adding permissions for material extracted within the extension to be transported to the existing quarry for processing and shipping;

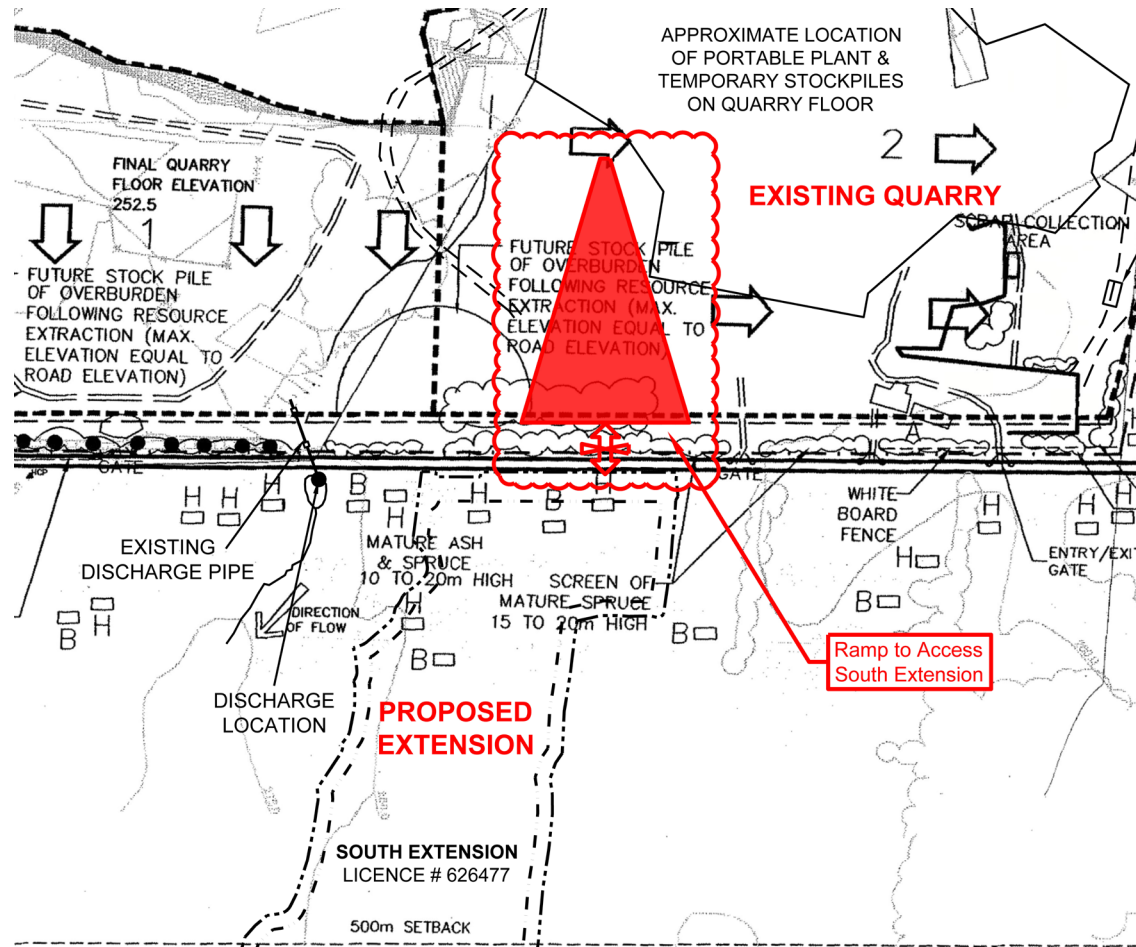
General Notes

Aggregate Extraction – Note 7

This Plan permits aggregate extracted at the Burlington Quarry Extension to be transported on-site for processing and shipping. The Burlington Quarry South Extension will transport aggregate from an at-grade crossing on No. 2 Sideroad in the location shown on this Plan. The Burlington Quarry West Extension will transport aggregate on the quarry floor within the extraction area connecting the two sites. The final area to be extracted on-site is the southeast corner of Licence No. 5499 after the completion of extraction of the Burlington Quarry Extension.

Aggregate Resources Act - Existing Burlington Quarry

3) A new entrance/exit access ramp adjacent to No. 2 Sideroad to transport material from the south extension into the existing quarry;



Aggregate Resources Act Process – Existing Burlington Quarry

4) Requests for provincial overrides to facilitate an integrated operations and rehabilitation between the extension and existing quarry;

Variations from Control and Operation Standards

Section 0.13 Standard	Variation	Rationale
(3)(a)	The west licence boundary will not be fenced.	The west licence boundary abuts adjacent Licence # 626477 and additional land which are owned by the same licensee.
(1)1 & (1)2	Gates will not be required where haul roads cross the common boundary with the West Extension (Licence # 626477).	This will eliminate constraints to the movement of equipment between licences and access to additional lands owned by the same licensee.
(1)10.i	A 0 metre setback will be provided where the licence boundary abuts the West Extension (Licence # 626477).	This will enable material to be extracted along the common boundary and for rehabilitation to transition between licences.
(1)9 & (1)11	Excavation within the setback will occur to construct hydrological features and an access point for the South Extension.	Setbacks shall be temporarily excavated and disturbed to install diversion and discharge pipes as well as to construct an at grade roadway crossing on Side Road No. 2.
(1)13.i	Topsoil and overburden may be temporarily located within 30m of the West Extension (Licence # 626477).	The adjacent Licence # 626477 is owned by the same licensee.
(1)17 & (1)18	Topsoil and/or overburden may be transferred between this licence and the West and East Extensions (Licence # 626477).	This will allow stripped material from site preparation to be used immediately for progressive rehabilitation in other parts of this licence or the extensions.
(1)19.ii	Portions of the quarry face shall remain vertical.	Vertical faces above and below the final lake level will create a more diverse habitat and visually appealing rehabilitated landform.

5) A revised rehabilitation plan to facilitate cohesive rehabilitation with the proposed quarry extension, changes to the final end use from a deep lake system to a shallow lake with surrounding lands including an agricultural area (14.5 ha);



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Burlington Quarry and Extension

Part of Lots 1 and 2, Concessions 2 and 3
Part of Lots 17 and 18, Concession 2 NDS
Geographic Township of Nelson
City of Burlington
Region of Halton

Legend

- | | |
|---|---|
|  | Extension Licence Boundary |
|  | Extension Limit of Extraction |
|  | Existing Licence Boundary |
|  | Existing Limit of Extraction |
|  | Land to be Conveyed |
|  | Beach |
|  | Pond |
|  | Swim Area |
|  | Lake |
|  | Wetland / Shoreline Wetland |
|  | 3:1 Slope (Tree Planting) |
|  | 2:1 Slope (Tree Planting) |
|  | Setback - Grassland & Existing Trees |
|  | Setback - Forested - Planted During Operations |
|  | Setback - Forested - Planted When Berms Removed |
|  | Restored to Existing Grade (Tree Planting) |
|  | Gradual Grade (With Grass Legume Mixture, Trees and/or vernal Pools) or Islands |
|  | Agricultural Rehabilitation Area |
|  | Vertical Face |
|  | Access Road |

Date October 2021

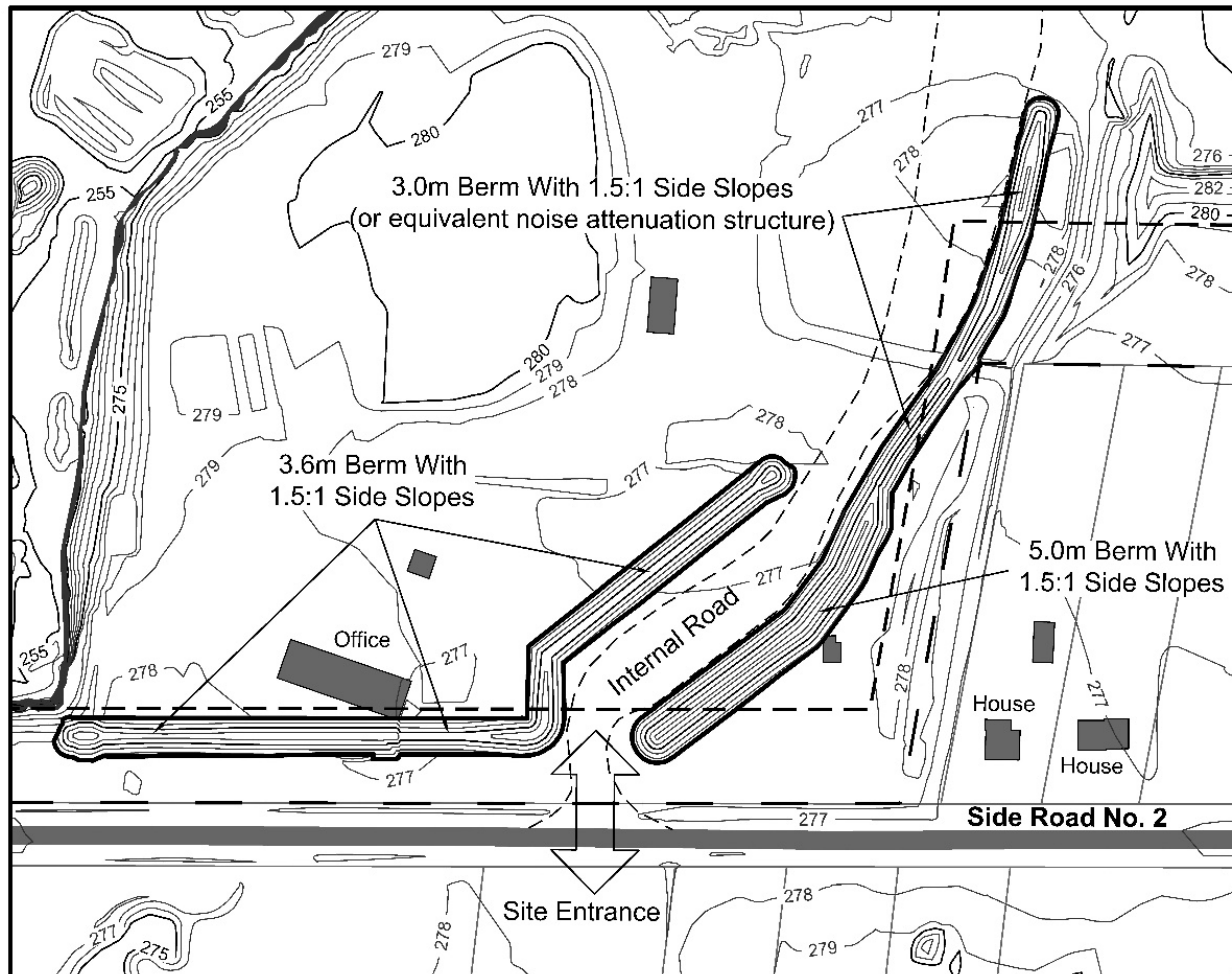
Sources: Aerial photography from Microsoft Bing, date unknown
Base information from the Burlington Quarry dated September 10, 2021
and Burlington Quarry Extension Site Plan dated April 19, 2021

Scale - 1:10.00%



Aggregate Resources Act Process – Existing Burlington Quarry

- 6) Added noise attenuation recommendations identified through the quarry extension application process that relate to the existing quarry;



Aggregate Resources Act Process – Existing Burlington Quarry

6) Added noise attenuation recommendations identified through the quarry extension application process that relate to the existing quarry;

General Notes

On-Site Operations

- 2) The processing of extracted materials shall occur between 7:00 and 19:00 only.
- 5) No drilling or extraction activities will occur within this quarry simultaneously with extraction activities within the Burlington Quarry Extension.
- 6) The maximum sound power level of equipment operated within the quarry will be as follows:

Source	Sound Power Level [dBA re: 10 ⁻¹² Watts]
Front-end Loader - Processing Area	101
Jaw Crusher	113
Cone Crusher (a set of two)	117
Screen Plant	123
Power Generator	109
Moving Haul Truck	114
Moving Highway Truck	101

- 7) Up to three haul trucks will be used to transport material from the Burlington Quarry Extension to the processing area, with a posted speed limit of 35 km/hr along this route.
- 8) Up to 30 highway trucks can arrive and depart the site per hour, travelling between the No. 2 Side Road access and the processing area, with a posted speed limit of 20 km/hr along this route.
- 9) The asphalt plant will be equipped with noise control measures and operate within the conditions stipulated in the ECA issued by the MECP.
- 10) Equipment used for site preparation and rehabilitation shall satisfy the noise emission levels of the MECP guideline NPC-115, “Noise Construction Equipment”.
- 11) Existing perimeter berms along the north, east and south property lines shall be retained and a new berm/acoustic barrier shall be constructed at the entrance/exit in the southeast corner of the site. See berm detail on this page.

Aggregate Resources Act Process – Existing Burlington Quarry

7) Updated site plan notes throughout drawings to address all changes, including proposed variations to the Control and Operation of Pit or Quarry (O. Reg. 244/97 Section 0.13); and

Variations from Control and Operation Standards

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Aggregate Resources Act Process – Existing Burlington Quarry

8) Minor housekeeping items.

Updated items such as...

- Building locations;
- Current internal haul route;
- Site Plan Amendment box;
- Current location of portable plant; and,
- Added existing discharge location labels.

Aggregate Resources Act Process – Existing Burlington Quarry

Next Steps

- Comment period ends December 8, 2021;
- Final decision on Burlington Quarry Site Plan Amendment Application cannot be made by NDMNRF until a decision is made on the Burlington Quarry Extension Application.

THANK YOU