

Sent by Email

November 20, 2020

Integrated Aggregate Operations Section  
Ministry of Natural Resources and Forestry  
4th Flr S, 300 Water St,  
Peterborough, ON K9J 3C7

Attn: Graham Buck,  
Planning Ecologist

Dear Mr. Buck:

RE: Response to MNRF October 20, 2020 Comments on the Access Road Management /Ecological Enhancement and Compensation Plan /Capital Paving Inc. - Proposed Shantz Station Pit.  
OUR FILE 16313B

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Based on the comments received by the MNRF and the Region of Waterloo Environmental Ecological Advisory Committee (EEAC), and through subsequent discussions, a number of changes have been made to the Shantz Station Pit *Access Road Management /Ecological Enhancement and Compensation Plan* (ARM/EECP) as follows:

- Updating the species planning lists for the pond;
- Adding additional tree planting in Zone 6,
- Adding pit-closure rehabilitation requirements along the existing driveway;
- Adding road mortality monitoring and signage;
- Revisions to the maintenance of the turtle nesting sites, and,
- Strengthening the language throughout the document.

This letter provides a response to the specific comments provided by MNRF on October 20, 2020 via email. MNRF's comments are outlined below in **bold** with a response from the Project Team immediately below.

**MNRF Comment #1 - Since wildlife barriers are only proposed for the section of the haul route that bisects the wetland, it is important to ensure the proposed haul route is not negatively impacting reptiles and amphibians within the Wagner Woodlot. Therefore, details on mitigation measures**

(wildlife barriers, eco-passages, monitoring, adaptive management etc.) that are proposed for the section of road through the Wagner Woodlot are appreciated. This will allow MNRF to ensure the haul route will not have a negative impact on the proposed wildlife habitat enhancement measures.

In subsequent discussions between MNRF and Riverstone staff, it was agreed that no additional wildlife barriers or eco-passages are warranted for the new road proposed through the Wagner Woodlot if confirmatory monitoring is conducted.

The following has been added to section 3.4.2.2, Page 12 of the ARM/EEAC:

Shantz Station Pit staff and truck drivers will be asked to report observed wildlife mortality on the new access road to the site office where it will be logged for review by a qualified biologist annually. In addition, signs will be installed along the access road identifying a maximum speed limit of 20km/h and alerting drivers to watch for wildlife crossing.

**MNRF Comment #2 - More information on the logs proposed for the pond is appreciated. Further details, such as how many logs, how large of logs/trees and log anchor points (partially buried or secured to the shoreline) could be included in this section. Also, the plant list for the pond could be expanded to include a larger diversity of plants. The following list is provided for your consideration: Yellow pond-lilies (Nuphar spp.), Bur-reeds (Sparganium spp.), Softstem Rush, Sedges (Carex spp.), Bullrushes (Scirpus spp.), Northern Blue Flag, Sweet Flag, Marsh Marigold, Eupatorium (Joe-pye-weed, Boneset), Blue Vervain, Lobelias (Cardinal Flower, Great Blue Lobelia), Monkeyflower, Bur-marigold. In my experience, it is beneficial to create a diverse plant community in the early stages, before Typha spp. Establish**

Additional information regarding the logs proposed to be incorporated into the new pond features has been added to section 4.1.2.1 on Page 14, including:

- The pond should include 5-6 basking structures such as logs, rock piles, root balls, hummocks etc.);
- Basking structures will allow for easy access out of the water and space for multiple turtles;
- Any created hummocks should be at least 1-2m x 1-2m and be sloped to allow for turtles to bask on the edge; and
- Logs used for basking structures should be a minimum of 30cm in diameters. Where available, full trees (canopy and root ball), or trees with limbs, can be used as basking structures. Logs/trees should be anchored to the pond, but not necessarily to the shore in a manner that would not allow predators to access from the shore.

In addition, we have updated the species planting list in Table 1 on Page 15 to add the species suggested in MNRF's comment above.

**MNRF Comment #3 - Although weeding of the turtle nesting areas is beneficial to ensure use by turtles; the timing of the scheduled disturbance is critical to ensure the successful use of the feature. Since turtle eggs can remain viable underground until the following spring, weeding should occur as close to the new turtle nesting season as possible. This will provide the maximum amount of time for last year's eggs to hatch. The ideal time for mechanical weeding, in this part of Ontario, is after May 1st and before May 15th, which is just before the new turtle season begins. It**

is probably safe to assume that any eggs which have not hatched by May 1st of the following year are probably not viable.

We have revised Section 4.1.3 on Page 15 to indicate that the turtle nesting habitat will be maintained using MNRF Best Management Practices and that any required weeding of the area is to occur after May 1<sup>st</sup> and before May 15<sup>th</sup>.

**MNRF Comment #4** - Since Blue Vervain is a wetland species Hoary Vervain (*Verbena stricta*) might be more appropriate species for a dry site. Also, since Dense Blazing-star receives Endangered Species Act protection, it could be removed from species list.

We have made this edit as suggested in Table 4 on Page 18.

**MNRF Comment #5** - Since the rehabilitation site plan references the Access Road Management /Ecological Enhancement and Compensation Plan, the wording used throughout the document needs to be definitive. Since this document will be issued by MNRF undertaking inspections of the site, wording such as "should" and "where possible" need to be replaced with words such as shall, must, is, are to be, etc. Also, whenever possible, definitive numbers, species, dates etc. need to be used.

Throughout the document we have updated the language to be more definitive and provided definitive species numbers, densities etc. However, it should be recognized that some degree of flexibility is needed to account for the site-specific conditions encountered during the completion of the rehabilitation and enhancement activities. For example, using a lower specified planting density in an area that has strong natural regeneration. In addition, some flexibility is needed in the species planting lists and size requirements to account for local nursery stock availability.

The September 2020 Site Plan revisions include updated references to the ARM/EEAC in notes 1.3.3 & 1.4.3 on Page 4 of 5. The Site Plan specifically states that "*the mitigation, enhancement, and rehabilitation activities outlined in the ARM/EECP will be implemented in full.*" In addition, the Rehabilitation Page of the Site Plan (Page 4 of 5) has been updated to identify the Planting Zones referenced in the ARM/EEAC. Excerpts from the revised Rehabilitation Notes are included as an attachment to this letter.

If you have any questions please let us know.

Yours truly,

**MHBC**



**Caitlin Port, MES, MCIP, RPP**

cc. Steve Strong, MNRF  
George Lourenco, Capital Paving  
Kevin Trimble, Riverstone

## Shantz Station Pit – Rehabilitation Plan Page 4 of 6 (September 2020 revision)

### Proposed Vegetation

**1.3.3 & 1.4.3** The extraction area ( $\pm$  67.9 ha.) will be returned to agricultural use, to a condition in which substantially the same areas and same average soil capability for agriculture are restored (Class 2), in accordance with the "Pit Floor Agricultural Rehabilitation Sequence" detail on this page.

The rehabilitated side-slopes shall be seeded with a grass/legume seed mixture comprising white clover, timothy and perennial ryegrass or planted with agricultural crops. The rehabilitated side slopes identified as part of the Shantz Station Pit Access Road Management / Ecological Enhancement and Compensation Plan, February 2020 (ARM/EECP) will be revegetated in accordance with the planting plan outlined in Tables 1 through 5 the Shantz Station Pit ARM/EECP.

The area cleared for the access road, through the woodlot, used during operations shall be rehabilitated in accordance with the requirements outlined in the ARM/EECP.

The habitat compensation measures as outlined in the Natural Environment Report and further detailed in the ARM/EECP will be implemented in full to offset potential impacts associated with the construction of the Proposed Access Road through the significant woodland.

The mitigation, enhancement, and rehabilitation activities outlined in the ARM/EECP will be implemented in full. All rehabilitation activities must be completed, and vegetation in a self-sustaining condition, prior to the License being surrendered.

The intent of the proposed ecological enhancements is to create an ecological linkage between the northwest woodland/wetland and the Hopewell Creek valley system as well as to create enhanced ecological buffers for existing natural features. The enhancement and compensation activities outlined in the ARM/EECP includes approximately 6.5 ha of new reforestation and naturalization areas, including a new pond approximately 0.2 ha in size.

The list of plant species identified in the ARM/EECP will be used in the areas subject to reforestation and naturalization that blends with the adjoining vegetation communities. Any compensation activities proximate to or within identified species at risk habitat shall be reviewed to ensure compliance with the ESA.

### Progressive Rehabilitation

**1.3.5** Progressive rehabilitation shall follow the Sequence of Operations diagram/notes on page 2 of 5 and Progressive Rehabilitation Sequence on this page. The timing for the proposed ecological enhancement and compensation activities, as well as the reforestation of the access road, will occur progressively as outlined in Table 5 of the ARM/EECP.

### Internal Haul Roads

**1.4.6** There will be no internal roads remaining on the site. Farm field access will generally be from the existing entrance off Foerster Road (Township Road #68) by laneway as shown. Upon completion of pit operations, the existing driveway off Shantz Station Road will be rehabilitated by reducing the width of the driveway to 4 m. Approximately 2 m of asphalt on either side of the driveway will be removed. The jersey barriers will also be removed. The remaining driveway will remain paved. The removed portions of the driveway will be planted with native grasses and forbes in accordance with the Naturalization Planting Plan in Section 4.3.3 of the ARM/EECP.