

Water Resource Management Plan

EA#2348 – Long Harbour Quarry

Anytime Heavy Haul

April 2026

1. Prepare a location map identifying all streams and water bodies within 30 meters of the project footprint area.



Figure 1: Quarry Boundaries with Vicinity Water Bodies

Water Body 1: 74.4 m

Water Body 2: 83.5 m

1. Identify all streams or water bodies located inside the project footprint area. Within the proposed boundaries, there are various small water bodies.



Figure 2: Several small water bodies within the boundary.

2. Describe how to manage the stream or water body situated inside the project footprint boundary (eliminate it, divert it, or keep it in place).

The use of a settling pond will help with water management in the proposed area. The settling pond water will be used in quarry operations. If possible, the pre-existing water body will be diverted through the use of culverts or check dams. If not plausible, the existing water body will be modified in a way that it could be used as a settling pond, by eliminating any drainage to or from.

3. Determine the amount of stormwater runoff for a 1 in 100-year 24-hour climate change rainfall event.

This amount is unknown.

- Describe how to manage the runoff or on-site drainage water (1:100-year stormwater runoff amount) – either discharge it directly into the nearby stream/water body or store it in a detention pond and release it gradually.

Runoff will be stored in the settling pond and will either be used in the different quarry processes, like a water truck for dust suppression, or will be slowly drained over a vegetated area by a culvert. There is no use for water in the desired operations besides dust suppression.

- Prepare a schematic diagram of the on-site drainage plan.



Figure 3: Quarry Layout Plan with Proposed Runoff Based on Land Topography

As stated on the schematic, drainage shall be favoured by the natural topography of the proposed site. The highest elevation lies on the Northern boundary and the lowest on the southern. If the existing small water body within the boundaries is suitable for a settling pond, it will be used as such. If not, one will need to be constructed, see “Settling pond B” for the desired location. The check dam will act as a control for the flow of water, both naturally, and from the connection of a culvert from the settling pond.

6. Describe how to manage the dewatering of the mine pit/quarry pit, if required.

If dewatering needs to occur, the use of pumps will be the solution. The hoses will direct the water to the settling pond to allow sediments to settle. From there, the water will be controllably dispersed across vegetated areas, which will allow the water to be naturally percolated. The use of a check dam will also aid in diverting water within the quarry boundaries and aid in the reduction of water buildup. The natural topography of the desired area favours water distribution, as elevation is highest in the northern border and lowest in the Southern one.

7. Outline preventive measures to be taken to prevent land erosion from runoff, on-site drainage water, and/or dewatering, as these have the potential to impact the water quality and quantity of natural water bodies.

Water flow will be redirected through the use of settling ponds and check dams. Once entering the settling pond, the water will be controllably drained via a culvert into vegetated areas. The settling ponds and vegetated areas will act as a containment area for any contaminants or sediments that may risk reaching a pre-existing water body. The use of a check dam is also possible to aid in stability and manage water runoff.