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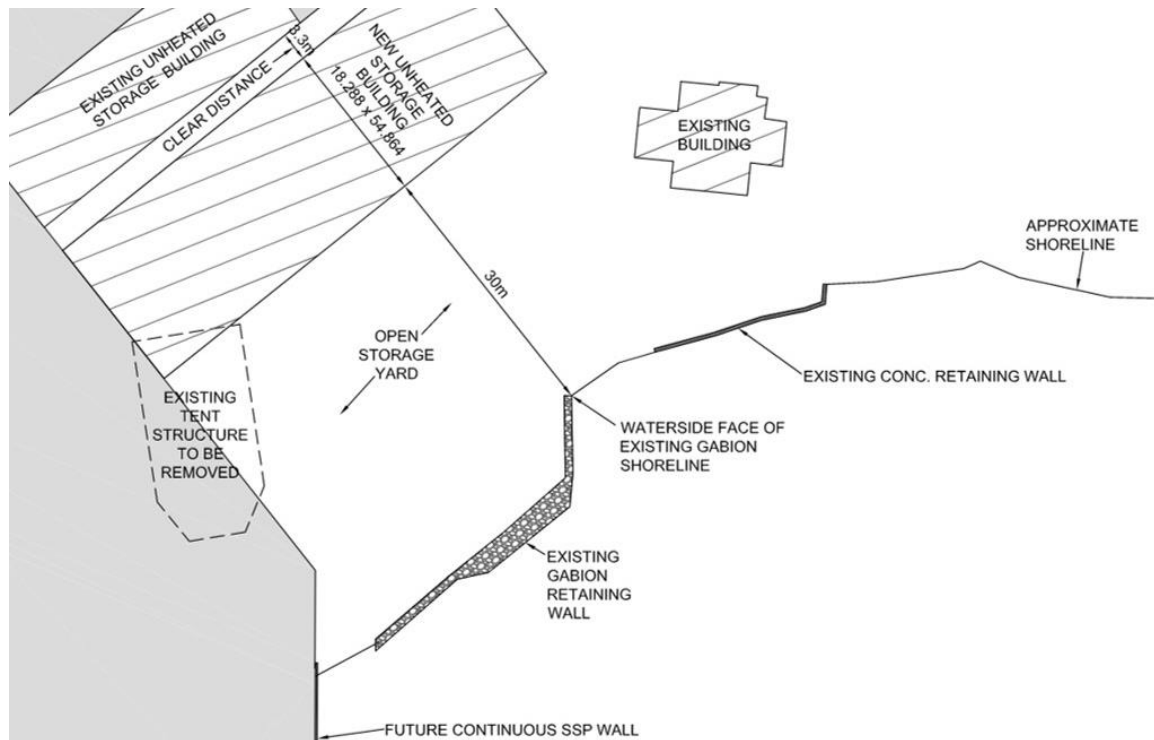
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**RE: EIA Addendum**

The following information is provided as an addendum to our 2020 Environmental Impact Assessment<sup>1</sup> of the Kehoe Marine site in relation to shoreline upgrade work. Specifically, this addendum refers to site alterations at the Kehoe Marine site (see Open Storage Yard and New Unheated Storage Building in Figure 1) that are being undertaken to provide temporary storage of construction materials for transport off site via barges that will load at the upgraded pier (see Future Continuous SSP Wall in Figure 1). The open storage yard will have a graveled surface.



**Figure 1.** Proposed site alteration to include open storage yard and an unheated storage building.

<sup>1</sup> Ecological Services. 2020. Environmental Impact Assessment. McCrae Bay Pier Improvement.

It is our understanding that proposed New Unheated Storage Building in Figure 1 will be at least 30 m from the river and the associated Ivy Lea PSW, although this distance will need to be confirmed.

Prior to 2023, the proposed location of the Open Storage Yard and New Unheated Storage Building in Figure 1 contained three residential buildings, some outbuildings, a boathouse, ornamental trees, and lawn that was kept mown to the river, with no natural buffers. All three buildings were fronted with a hardened shoreline composed of either rock rubble or gabion basket. The Kehoe shoreline alteration work that was approved in 2022 will convert the rock rubble area to a barge loading structure composed of sheet pile walls (see Future Continuous SSP Wall in Figure 1). The remaining shoreline in question will consist of the existing gabion basket area shown in Figure 1.

From our 2020 EIA it was determined that the area where the storage yard and storage building will occur had no natural heritage significance for the purposes of the Provincial Policy Statement and the Township of Leeds and Thousand Islands Official Plan, nor did it was it used by any species at risk.

The adjacent river to the site alteration area contains fish habitat, possible species at risk fish, and the Ivy Lea Wetland, a provincially significant wetland (PSW). The site alteration will not involve any intrusion into the adjacent Ivy Lea wetland and associated fish habitat, and the existing gabion basket shoreline will continue to be the separation point between the upland and the aquatic habitat.

When considering impacts to a wetland, the value of the adjacent upland to wetland features and functions is considered.

1. Key Question: Are there transitional wetland species that require the adjacent upland to complete their life cycle?

Response: Examples of such species would be certain herpetofauna and avifauna, primarily for nesting purposes. From our 2020 EIA work we can confidently say that the site alteration area did not supply habitat to these transitional species, and therefore there would be no negative impact from that perspective. Upland access by wetland/river associated species will continue to be hindered by the gabion baskets, and the mowed lawn and proximity of the houses would limit habitat functionality for transitional species.

2. Key Question: Are the wetland species adjacent to the site alteration area sensitive specialists that would be susceptible to adjacent upland activity or robust generalist that would be tolerant of adjacent upland activity?

Response: As was discussed in our 2020 EIA, the adjacent wetland plant community is dominated by robust generalist species that have a high tolerance to adjacent upland activity. As such, they will continue to provide food web dynamics for the aquatic animal species.

3. Key Question: Will the site alteration impact the fish habitat of the adjacent wetland.

Response: The proposed site alteration will not involve any intrusion into fish habitat, which may contain species at risk fish.

A common concern normally discussed for fish resulting from adjacent upland work are those associated with stormwater runoff, in that sediment laden stormwater will enter the adjacent water body and cause harm to its inhabitants. One of the arguments that we made for supporting the pier improvement in the 2020 EIA was that the created shoreline would help reduce turbidity associated with the existing marina operations. This was seen as a positive outcome, as turbidity can cause a negative impact to fish by depositing sediments on fish spawning surfaces, depositing sediments on feeding areas, and impairing gill function. The stormwater controls associated with the pier improvement work were seen in a positive light in that they would not only reduce turbidity, but also reduce the amount of surface oils that might get washed into fish habitat and the wetland.

The site alteration work is intended to provide temporary storage for materials that will be loaded onto barges. It will have a gravel surface, and this is seen as a positive in that gravel has a reduced potential for turbidity and oil impacts to the adjacent wetland and fish habitat. However, we do not have expertise in stormwater runoff engineering, and it is our understanding that Riggs Engineering will be providing the stormwater plans. As such, we defer to their expertise in this matter to demonstrate that the stormwater controls for this project will include appropriate measures to prevent stormwater associated impacts to adjacent fish habitat and the wetland.

As a final note, it may be helpful to note that the site preparation work for the storage yard area of Figure 1 included several outcomes that on balance, may result in a net positive benefit to the wetland and fish habitat for the proposed work. These include:

- Removal of three residential buildings that were 14m, 14m, and 23 m to the river, as well as associated residential outbuildings that were even closer.
- Removal of three old (i.e., >50 years) septic systems that were about 10 m from the river and the Ivy Lea PSW
- Removal of a derelict boathouse and structural railway ties containing creosote that were in the river and the Ivy Lea PSW.

Respectfully submitted,



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Ecological Services