

Coastal Works Review

**Shoreline Ltd– After-the-Fact Excavation
Block: 11D Parcel: 110H2**



PREPARED FOR: MINISTRY OF HEALTH, ENVIRONMENT, CULTURE AND HOUSING

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Authored by: Technical Review Committee - Department of Environment, on behalf of the Director,
Department of Environment

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SHORELINE LTD- AFTER-THE-FACT EXCAVATION BLOCK: 11D PARCEL: 110H2

Project Proposal

The applicant – Shoreline Ltd – is seeking after-the-fact permission for excavation offshore of Block 11D Parcel 110H2. The works affected approximately 1,400 square feet¹ of Crown property. The volume of material removed was approximately 20 cubic yards². The excavation was carried out using an excavator and no silt screens were installed to contain turbidity. Figure 1 below is drone imagery taken by the Department of Environment in 2018 when the unauthorised works were identified.



Figure 1: Drone Imagery of unauthorised excavation area off shore of Block 11D Parcel 110H2 (Source: DOE, 5 October 2018)

Environmental Impacts

The after the fact works are located within Mitchell's Creek, a Crown owned body of water. It is not a Marine Protected Area. The environmental impacts are described below.

¹ Calculated from DoE drone photography as the applicant confirmed that they are unable to provide a plan showing the area and volume excavated from site.

² The applicant confirmed by email that two half full dump trucks of material were removed from site. Two full dump trucks yield approximately 40 cubic yards of material, therefore half of this would be 20 cubic yards.

Loss of Benthic Habitat

The seabed in this location is comprised of seagrass and algae, which is important marine habitat for a variety of species and helps to contribute to good water quality within the waterbody. Direct removal of these habitats through excavation results in the immediate loss of this habitat.

Construction Impacts

When the works were discovered by the Department of Environment there was no evidence of silt screens having been used to confine sediment and turbidity to the area of works. This will have created adverse impacts for the surrounding seagrass beds for the duration of the excavation works.

Fee Calculation

The application form for the after-the-fact excavation states that the volume of material removed is 8 cubic yards and the area of impact is 200ft². However, the applicant had previously confirmed that he is unable to provide us with an accurate quantification of volume and area of seabed impacted (see attached email). It is difficult to confirm from the bathymetric survey provided the actual volume of material removed. The applicant stated in his email that material removed equated to two half full dump trucks. A dump truck will generally accommodate 20yds³ when full and therefore when a dump truck is half full it is carrying 10yds³. We have used this quantification for the purpose of calculating fees (i.e. two half-full dump trucks yield 20 cubic yards). When the DOE first documented the unauthorised works and calculated the area impacted from drone imagery, using ArcGIS software, the area of excavation was approximately 1400ft². We have overlaid an area of 200ft² on the aerial imagery (see Figure 2), which illustrates that the area impacted is significantly greater than 200ft². Therefore we have calculated the after the fact figures for Royalty and Mitigation using 20 yds³ and 1,400ft² respectively.



Figure 2: Showing the full extent of the excavation area (outlined in green) and the comparison of what 200 square feet area look like.

Comments & Recommendations

Given that it would be difficult to reinstate the area back to its pre-excavation state, which would more than likely cause further environmental impacts, the Department **recommends this application for approval** subject to the application of after-the-fact permit fees (Royalty, Environmental Mitigation and Administration) appended.

Technical Review Committee – Department of Environment
On behalf of the Director, Department of Environment