Department of Environment
Cayman Islands Government

Coastal Works Review

CWL 513

Island Rum Holdings Ltd (Brad Pavloski)

Dock

Block: 33E Parcel: 35

21 January 2026

Prepared by the Department of Environment

Prepared for the Ministry of Health, Sustainability and Environment

Coastal Works Review CWL 513

Island Rum Holdings Ltd (Brad Pavloski) - Dock – 33E/35

Project Proposal

This review is provided by the Director of the Department of Environment (DoE) under delegated authority from the National Conservation Council (section 3(1) of the National Conservation Act, 2013).

The applicant – Island Rum Holdings Ltd (Brad Pavloski) – is seeking permission to construct a dock and cabana on Crown property adjacent to Block 33E Parcel 35, which is Finger Cay Rd, Rum Point, North Side, Grand Cayman (see Figure 1).

The submitted plans indicate that the dock walkway will extend 54 ft 2 in into the bay and end in a 13 ft x 13 ft cabana with standing seam roofing. The proposed dock will be supported by 10 in concrete reinforced PVC piles embedded into the seabed by manual drilling. The dock surface will consist of 2 in x 6 in pressure-treated lumber. Decking is to be supported on a sub frame of 2 in x 12 in timber joists, with 2 in x 10 in pressure-treated lumber surround. As confirmed by the applicant's agent, the shore-terminal end of the dock will begin with a ramp at the Mean High Water Mark (MHWM) that extends 14 ft upwards to 4 ft 2 in above Mean Sea Level (MSL). Although the submitted plans indicate that there are to be pedestrian steps 14 ft seaward from the shore-terminal end on either side of the dock, the applicant's agent confirmed that these are to be removed from the plans and will not be constructed. Although details for the side skirting were indicated on the submitted plans, the applicant's agent confirmed that the bottom of the side skirting will be 16 in above MSL and there will be 5.5 in spacing between the planks. The application indicates that silt screens / turbidity barriers will be used to contain the entire area of the works whilst it is being carried out. The application indicates that the construction of the dock will take place from a floating platform.

The application proposes that the use of the dock be limited to personal use and for a personal watercraft up to 24 ft, with a 28 in max draft.

The applicant has indicated that the works will affect 410 sq ft of Crown seabed. Based on the DoE's calculations, the proposed works will affect 494 sq ft of Crown seabed, after the agreed modifications are incorporated. The dock walkway is seaward of the MHWM and is proposed to be 54 ft 2 in long and 6 ft wide which occupies 325 sq ft of Crown seabed. It will end with a cabana that is 13 ft x 13ft which occupies 169 sq ft of Crown seabed. Therefore, the total area of Crown seabed occupied according to the submitted plans is 494 sq ft.

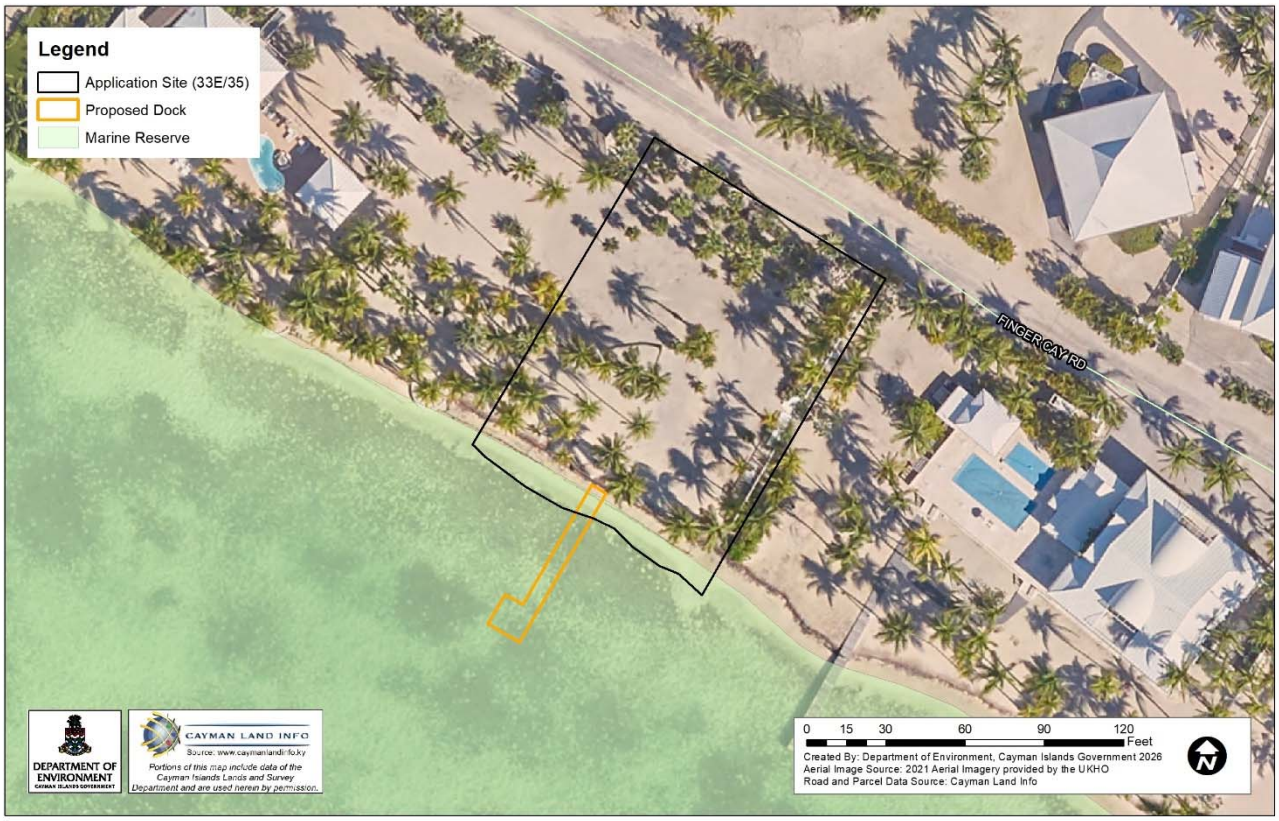

Figure 1: Aerial imagery showing the application site with the proposed dock and cabana outlined in orange (Source: United Kingdom Hydrographic Office, 2021)

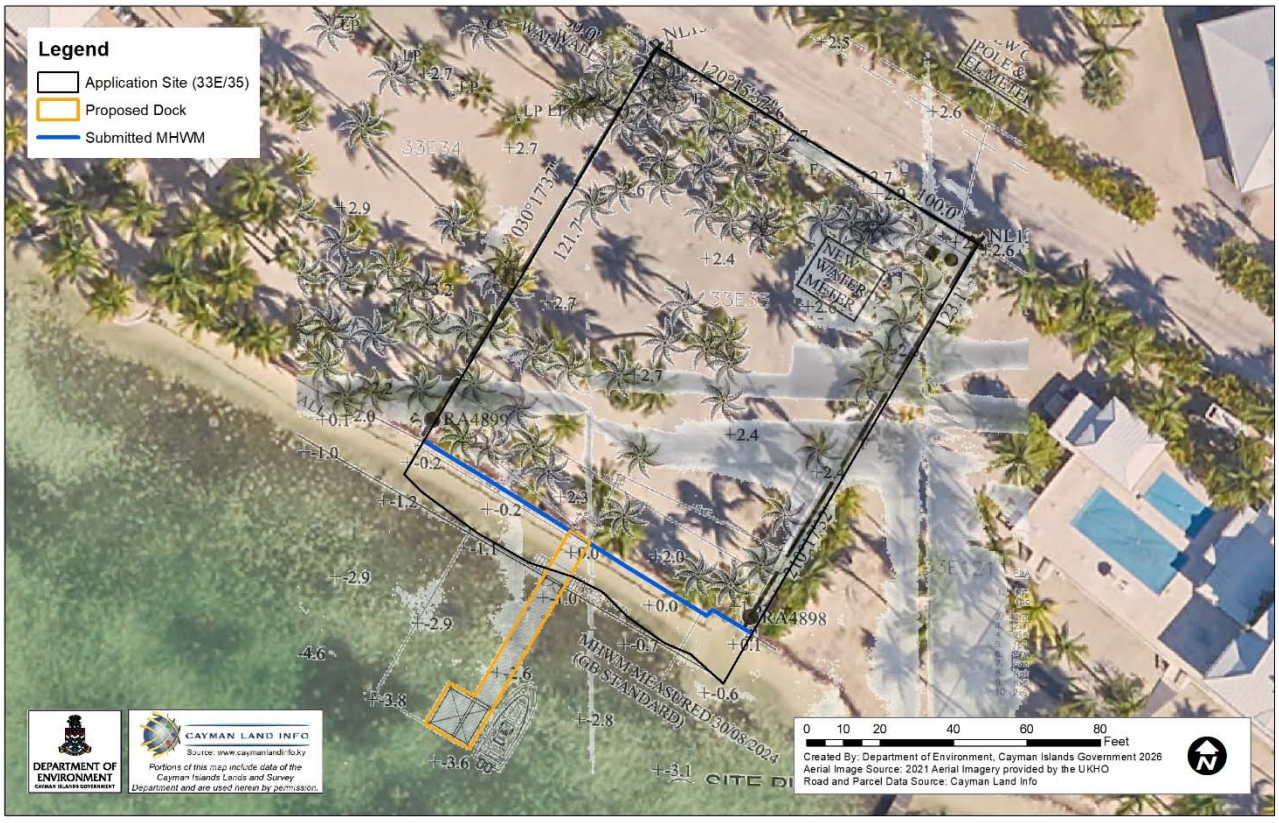

Figure 2: Site plan of the proposed dock and cabana (Source: Coe Group Ltd, 2025 & United Kingdom Hydrographic Office, 2021)

Application History

The site is currently under construction for a house and pool associated with a planning application (P22-1125) that was granted permission in 2023 (CPA/08/23; Item 2.15). The applicant is reminded that any additional structures at the site will require Planning Permission (landward of the MHWM) or another Coastal Works Permit (seaward of the MHWM).

Environmental Overview and Impacts

Site Overview

The site is located within a Marine Reserve (a Protected Area under the National Conservation Act).

This coastline and many of the parcels in this area (i.e. Water Cay Rd, Sand Point Rd, Finger Cay Rd, and Kaibo Crescent) were created in the 1970s from an offshore dredging exercise. As this coastline is man-made, it is not subject to natural erosion and accretion processes. In other words, there are no natural processes replenishing sand that has been eroded. The DoE appreciates that this area is heavily impacted by erosion and has previously highlighted the need for a regional coastal management scheme for this area.

The environmental impacts of the project are:

- The construction impacts from the dock and cabana, and
- The loss of 494 square feet of benthic habitat, namely seagrass, including long-term shading impacts.

Construction Impacts

General Construction Impacts

Direct environmental impacts will result from the construction of the dock, mainly through the placement of the concrete reinforced PVC dock piles into the seabed. The sand and fine silt of the seagrass beds are easily disturbed and suspended resulting in detrimental sediment plumes which can impact surrounding seagrass communities and marine organisms that depend on good water quality. Therefore, it is important to limit the impacts of sediment plumes generated during construction of the dock through the use of silt screens. It is an important aspect of the project that no heavy equipment or machinery be used in the water, only an excavator working from shore or the floating platform shall be used to install the dock pilings.

Storage of materials too close to the water's edge can result in pollution of the marine environment. The DoE has responded to numerous incidents where poor construction management practices such as the storing of aggregates or loose materials at the water's edge has resulted in that material entering the marine environment, causing turbidity and impacting water quality. Sedimentation and pollutant-laden runoff also can affect marine species such as seagrass and corals as they rely on good water quality to survive. Depending on the amount of turbidity that occurs and the length of time that it is present, it could adversely and irreversibly affect the marine organisms that have been exposed. The location of stockpiles needs to take into account storms such as hurricanes and nor'westers, and temporary or informal stockpiles can still be impacted.

Loss of Benthic Habitats

Seagrass

The benthic cover beneath the proposed dock and cabana is healthy seagrass (see Figure 3-5).

Figure 3 and 4: Healthy seagrass is present at the site (Source: DoE, 2026 & 2025).

Figure 5: Healthy benthic habitat present at the site including seagrass and West Indian Sea stars (Oreaster reticulatus) which are a Part 1 Schedule 1 Protected Species (Source: DoE, 2026).

The proposal would result in impacts to turtle grass (*Thalassia testudimum*) which is a Part 2 Schedule 1 Protected Species.

In addition to the direct impacts within the 494 sq ft of the proposed dock, there will be impacts from long-term shading. Sea grass requires light to grow, and the dock structure will reduce vital light penetration required. Therefore, shading will inhibit further growth and ultimately result in loss of seagrass. The DoE supports the applicant's proposal to mitigate shading impacts by installing decking with a minimum of ½ inch spacing, as currently shown on the application plans. In addition, due to the surrounding shallow waters there will likely be severe disruption to the seabed and benthic habitats through the operation of boat traffic and resulting propeller wash and grounding incidents.

One of the vital functions of seagrass beds is to provide habitat. Shallow seagrass beds are important habitat for a considerable array of species, in particular juvenile lobster and conch. While only a few inches long or smaller, juvenile lobster settle from the ocean to the safety of the seagrass meadows to hide from predators and hunt for prey. Juvenile conch also settle from their free-floating life stages to spend most of their early life buried among the seagrass roots hiding from predators, emerging occasionally to eat algae off the turtle grass and other substrates.

Seagrasses also one of the most valuable and vulnerable ecosystems.[1] Given the climate change predictions for the region, which include rising temperatures, sea-level rise and increased intensity of storm events (including storm surge), another beneficial function of seagrass beds is that they provide flood reduction and reduce erosion from wave action aiding in shore protection, particularly along beaches and shallow areas. Although often

[1] United Nations Environment Programme (2020) *The State of Nearshore Marine Habitats in the Wider Caribbean*. Available at: https://wedocs.unep.org/20.500.11822/36352 (Accessed: 30 August 2022)

overlooked in comparison to mangroves, seagrasses are also nutrient sinks, buffering or filtering nutrients and chemical inputs to the marine environment aiding in water quality. The deposition and stabilisation of sediments provided by seagrasses assist other important adjacent marine ecosystems such as coral reefs.

Seagrass communities are also important carbon sinks and contribute to our islands' natural capital. Carbon accumulates in seagrass over time and is stored almost entirely in the marine sediments incorporated in the root systems. This means that the direct removal of seagrass results in carbon being released back into the atmosphere. Although in-depth local studies have not been undertaken, the Blue Carbon Initiative (a global program working to mitigate climate change through the restoration and sustainable use of coastal and marine ecosystems) acknowledges that *'although seagrasses account for less than 0.2% of the world's oceans, they sequester approximately 10% of the carbon buried in ocean sediment annually (27.4Tg of carbon per year)*. Per hectare, seagrass can store up to twice as much carbon than terrestrial forests*. The global seagrass ecosystem organic carbon pool could be as high as 19.9 billion metric tons*.*[2]

Deviations from the Department's Guidelines

Dock Height

As confirmed by the applicant's agent, the shore-terminal end of the dock will begin with a ramp at the MHWM that extends 14 ft upwards to reach 4 ft 2 in above MSL. Therefore, approximately 14 ft of the dock will be below the recommended 4 ft above MSL. However, we have limited environmental concerns with this given that only 84 sq ft (17%) of the proposed dock will be below the recommended 4 ft above MSL and the 84 sq ft does not contain dense seagrass. Access along the foreshore will still be possible with this design, although there are existing seawalls nearby that impede pedestrian access.

Comments and Recommendations

We have considered the environmental impacts associated with the proposed dock and cabana above and the mitigation measures proposed by the applicant. On this basis, the Department recommends this application for **approval** subject to the conditions outlined below with the standard Permit conditions and recommended Permit fees (Royalty, Environmental Mitigation and Administrations & Monitoring) outlined in Appendix 1.

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Director, Department of Environment

[2] The Blue Carbon Initiative (2019) *About Blue Carbon.* Available at: https://www.thebluecarboninitiative.org/about (Accessed: 30 August 2022).