DEPT. OF ENVIRONMENT

Cayman Islands

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Screening Opinion for Proposed Removal of Beachrock, Seven Mile Beach

Prepared by the Department of Environment for the National Conservation Council

Originating Entity for Section 41 Consultation – Cabinet

(Applicant – Crymble Landholdings Ltd (Subsidiary of Dart Real Estate))

The ***National Conservation Council's (NCC) Directive for Environmental Impact Assessments*** issued under section 3(12)(j) and which has effect under section 43(2)(c) of the National Conservation Law (NCL), notes that all activities listed in Schedule 1 will be considered against the screening criteria outlined in sections 1 to 3 of Schedule 1 of the Directive to determine whether an EIA may be required. These screening criteria are: the type and characteristics of development, the location of the development and the characteristics of the potential impacts.

Summary of Proposed Project

The **proposed project** is for the removal of 1,225 linear feet of submerged beachrock and peat (approximately 8,410 cubic yards) from offshore Block 11B Parcels 61 and 17, and Block 10E Parcel 14 – see plan attached. The excavated void will be filled with "beach compatible sand" (approximately 9,000 cubic yards). The works are anticipated to take 5-6 weeks and will be conducted using a tracked excavator and haul trucks. The Applicant has indicated that the works are required to provide "a safe swimming environment for a proposed 5 star hotel development and improve the sand replenishment immediately south". The Applicant has not submitted a planning application for any of the landward works, therefore the full extent of these works are unknown.

Opinion

Having considered the Coastal Works Application against the screening criteria outlined in the EIA Directive, the Department of Environment (DoE) is of the opinion that **the proposed beachrock removal requires an Environmental Impact Assessment (EIA) prior to making a decision** based predominantly on the following factors:

1. **Screening Criteria**: The proposal falls within Clauses 10 and 16 of Schedule 1 of the EIA Directives i.e. *hotel and resort developments and marine excavation.* Other screening criteria triggered by the works include:
    a. The characteristics of the development in terms of size and use of natural resources i.e. the removal of approximately 77% of the beachrock formation in this location (screening criteria 1 (a) and (c));
    b. The location of development within a Marine Park (screening criteria 2 (c)(vi)); and,
    c. The extent of the impact (national implications), the magnitude and complexity (complex coastal processes affect the area), and the duration and reversibility of the

impact (the removal of beachrock will be permanent and irreversible) (screening criteria 3).

2. **Marine Ecology:** The application site is located within the **Seven Mile Beach Marine Park**, which was established to provide a higher level of protection to the coral reefs and other marine resources present in the area as they represent environmentally valuable resources which are susceptible to human impacts. The Marine Park is a formally Protected Area under the NCL.

   The Shoreline Resource Assessment report submitted with the application indicates that the beachrock in this location supports NCL Part 1 listed species, including corals, sponges, urchins, molluscs and fish. The beach which runs parallel to the excavation area is an active turtle nesting beach (DoE's Sea Turtle Nesting Monitoring Programme 1998 to present), with turtles also being a Part 1 Protected species. There are also IUCN Red List endangered species found in the rock removal area, including *Acropora palmata*.

   Beachrock represents a unique habitat with environmental and cultural attributes. Removal of 1,225 linear feet of beachrock represents over 30% of the linear beachrock, and its associated biodiversity, in the Seven Mile Beach Marine Park (DoE GIS Habitat classification). Large Parrotfish and other herbivorous fish feed on the algal mats growing on the shallow rock ridges and baitfishes (e.g. fries) typically congregate in these beachrock associated areas.

   An ecological assessment is therefore required, which complies with the EIA Directive and informs the assessment of impacts, as outlined above.

3. **Coastal Processes**: The evolution of Seven Mile Beach and its characteristics have been documented in a number of studies and reports (Clark, 1988; Seymour, 2000 and the Beach Review & Assessment Committee 'BRAC' report, 2003). These three studies reference the presence of beachrock along Seven Mile Beach and hypothesise on the way in which it functions within the coastal system. Given the complexity of the coastal processes along Seven Mile Beach, and the economic value of the beach (not only to tourism, but also culture and recreation), the potential risks associated with substantial shoreline modification are high, and the works will likely result in an irreversible action being undertaken. As such, it needs to be considered within the context of a comprehensively and robustly scoped coastal engineering report that objectively evaluates the impact of the proposed works and complies with the EIA Directive. This evaluation should focus not only on the immediate locale but also the wider context of the SMB coastal system.

4. **Cultural Heritage**: Aside from its role in influencing coastal processes, the nearshore biologically productive beachrock resources represent a cultural asset which will be adversely affected by the proposal. The beachrock in this location attracts fishermen, snorkelers and beach goers for various reasons. Snorkelers benefit from easy access to a diverse array of fish and coral not typically present in the purely sandy areas of Seven Mile Beach. This area has not been appropriately addressed in any of the Applicant's supporting documentation and requires further exploration, as part of an EIA which will include public consultation.

5. **Socio-Economic Issues**: The Applicant has provided an Economic Impact Assessment in support of the proposal, however, it focuses exclusively on the economic benefits to be derived from the construction and operation of the hotel/resort, which is not the subject of this Coastal Works application and has not yet been applied for. It does not address any

potential adverse socio-economic effects, resulting from the works e.g. permanent removal of a culturally important recreational resource. A socio-economic assessment is therefore required, which complies with the EIA Directive and informs the assessment of impacts, as outlined above.

Additional Considerations

Given that the Applicant has indicated that the beachrock removal is required for a proposed hotel development, it is recommended that the EIA should cover both the land and coastal elements of the proposed project, as the two are presented by the Applicant as being inextricably linked.

The Applicant has provided a series of documents in support of the Coastal Works Application which have not been scoped with the DoE or members of the Environmental Assessment Board (EAB) which will be appointed. The preparation and submission of these documents did not follow the requirements outlined in the EIA Directive, which were formulated in order to ensure that:

- Consultants undertaking the assessment are independently vetted by an EAB when appointed.
- Any assessments are scoped in conjunction with the relevant Government department/agency, convened under the auspices of the Environmental Assessment Board.
- Public consultation is incorporated into the scoping stage (and upon completion of the relevant studies and assessment).
- The assessment of impacts follows a clear progression from identification, through characterisation and assessment of the significance of the effects of the project. The significance of effects is based on the frequency (how often the effect will occur), duration (short, medium, long term), reversibility (permanent, temporary, irreversible), magnitude (major/minor, positive/negative) and probability (level of confidence) of the impact occurring.
- Mitigation measures are identified, together with any residual effects i.e. those effects which remain once mitigation has been applied.

The data and information contained in the Applicant's supporting documents can be utilised as part of the EIA process e.g. they can be used in the formulation of the Terms of Reference and, subject to meeting the scope of the Terms of Reference, relevant data and information can be used in the assessment of impacts. However, as it stands, no documents were scoped in conjunction with relevant Government entities and therefore the brief provided to the Applicant's consultants (which ultimately influences the conclusions of these reports) is unknown e.g. the outcome of the modelling conducted as part of the coastal engineering studies submitted is highly dependent on the assumptions and data utilised as input to the models and requires objective evaluation.

After considering the Screening Opinion detailed above, the NCC is required to issue its decision to the originating entity on the requirement for an EIA, pursuant to Section 43 (1).

Proposed Beachrock Removal Area