

respectively. For horizontal reference, the vegetation line and the Beach Villa structure boundaries (intersecting the shoreward edge of the pool) are also shown.

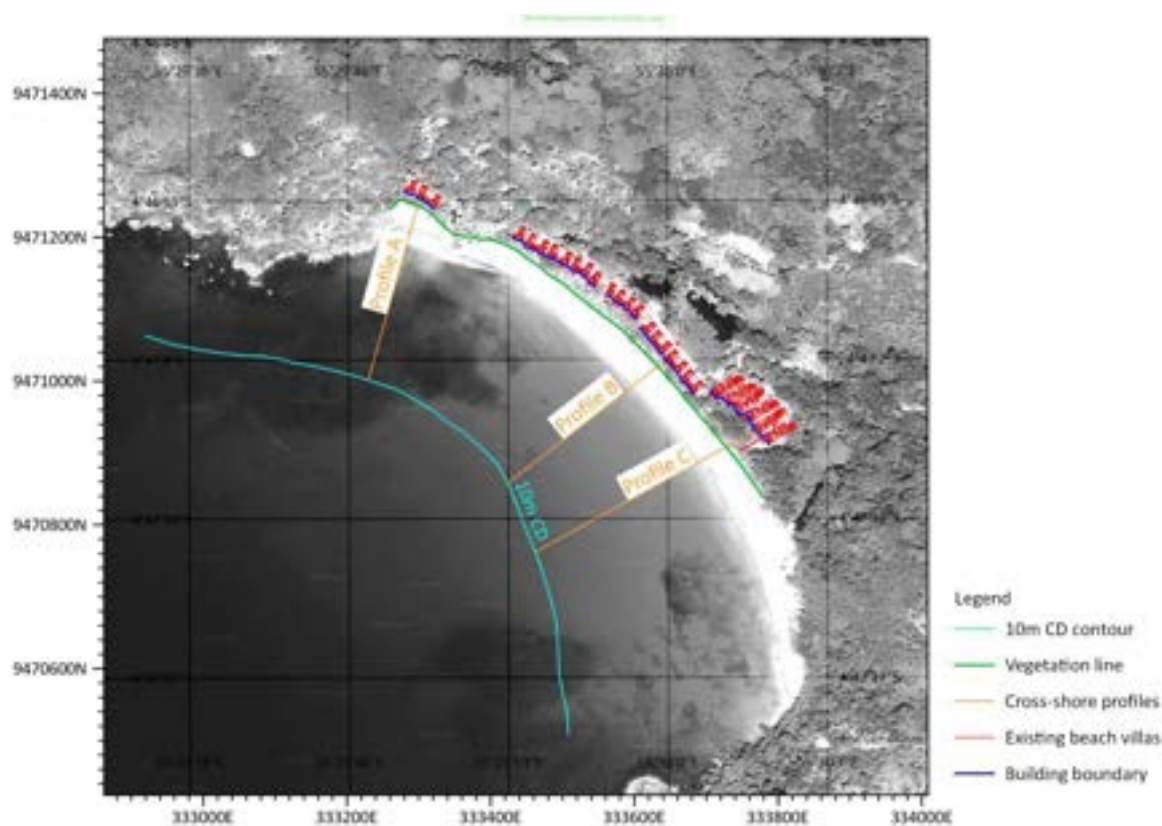


Figure 6-20: Positions of modelled cross-shore profiles. The profiles extend to the -10 m CD contour.

The horizontal extent of cross-shore erosion was the worst for Profile A where the distance between the vegetation line and existing building boundary is the lowest. For a 50-year return period storm event or larger (33% chance of occurrence between 2020 and 2040) the natural ground level at Profile A is expected to be eroded beyond the boundary of the existing structure, although the structure is elevated above the natural ground level. Although significant erosion was observed for the other two profiles, the erosion did not infringe on the existing building boundaries.

6.7.3.2 End of the design life (2040)

Considering the existing building boundaries, the natural ground level below the elevated Beach Villa at Profile A would be at risk to be undermined by erosion

during 10-year return period storm event (87% chance of occurrence between 2020 and 2040). The Beach Villa at Profile B are only at risk during a 100-year return period storm (18% chance of occurrence) while the Beach Villa at Profile C is sufficiently set back from the shoreline and therefore naturally protected against cross-shore erosion.

It is recommended to build any structure behind the erosion line as determined for a 100-year return period storm event the end of design life (2040). The results indicate that the Beach Villa at Profile A require approximately 4.5 m of additional setback while the Beach Villa at Profile B require approximately 0.5 m additional setback.

Alternative mitigation measures include erosion protection, e.g. by means of sleeping revetments in front of the structures.

Note that the cross-shore erosion modelling excludes the vegetation which may provide some natural protection against erosion.

6.7.4 Runup Calculations

Wave runup ($R_{2\%}$) was calculated to evaluate the required floor levels of the Beach Villas. Wave runup is defined as the level, measured vertically from the still water level, which is exceeded by 2% of the number of incident waves, and is traditionally used to define the practical upper limit which waves will reach during a given sea state. The runup level for a given environmental condition is a function of the incident wave parameters, the still water level and the slope of the beach face.

For the purpose of this calculation runup assumes a constant beach slope extending beyond the vegetation line. The still water level (SWL) was chosen at a mean high water springs (0.62 m MSLD) plus the storm surge and sea level rise.

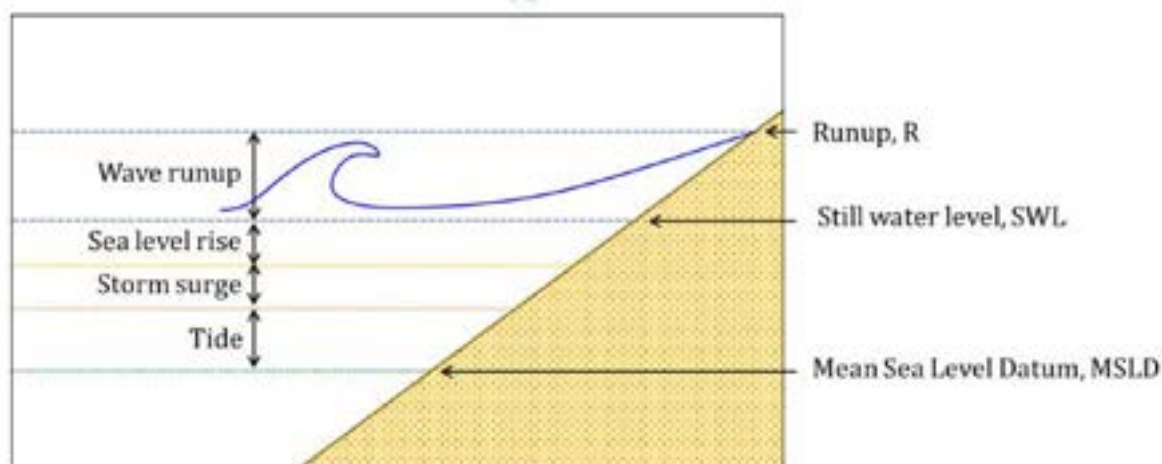


Figure 6-21: Schematic representation of water level components included in runup calculations.

For storm events with 10-year return periods and above, the ground level below the existing Beach Villa at Profile A and Profile B is expected to be inundated by wave runup. An approximate 0.3 m increase in wave runup levels is expected to occur over the design life due to climate change. As a result, the ground level below the existing Beach Villa at Profile C could be flooded during 100-year return period storm event end of the design life. The total wave runup levels did not exceed any of the existing floor levels of the Beach Villas at Profile A, B or C during any of the storm events.

To minimise the risk of flooding it is recommended that floor levels should be constructed above the total wave runup level for a 100-year return period storm event the end of design life (2040).

Note that the runup calculations excludes any influence from the vegetation which may reduce the runup levels.

6.8 Visual Impact

6.8.1 Existing Architecture

Creole styled villas comprised of timber shingled roofs with a combination of painted plastered walls and decorative timber paneling.

6.8.2 Proposed Architecture

A contemporary interpretation of the Creole style which makes use of the strong colonial influences on the architecture of Seychelles. Materials will consist of stone-clad roofs with painted plaster finished walls. All pergolas will be white aluminum framed structures with fine timber lattice, painted white.

6.8.3 Visual Impact

The site can be divided into three zones which are characterized by different environmental experiences i.e.

- ◆ **Zone 1 - the wetland,**
- ◆ **Zone 2 - the beach, and**
- ◆ **Zone 3 - hill forests/jungle.**

6.8.3.1 Zone 1 - Wetland

The wetland is seen as a highly sensitive and key attribute to the resort. Over the past several years the wetland has been left with little or no maintenance or upkeep which has resulted in invasive plant species taking over. The proposed resort sees to rehabilitate the wetland and incorporate it into the guest experience. Where possible there will be more space provided for screen planting between the Beach Villas and the wetland edge.

6.8.3.2 Zone 2 – the Beach

The Beach zone has the highest visual impact probability as the beach can be accessed by the public and is visible to tourist boats that use Intendance Bay. To mitigate the visual effects the proposed renovations to the Beach Villas will have, the existing setback lines from the sea have been maintained. The number of Beach Villas has been reduced. This will reduce the massing of the resort allowing more space for further indigenous planting of the sand dunes and screening between the villas.

6.8.3.3 Zone 3 – Hill Forest/Jungle

The proposed Hill Villas will make use of the existing Hill Villa structural footprints. The Hill Villas form part of the existing jungle canopy and therefore will also be visible from the beach and the sea. For this reason, the indigenous trees have been retained and the proposed buildings adjusted to suit the individual site conditions.

6.8.4 Findings

During the demolition and construction phases of the project, there will be a temporarily negative visual impact on the site. This impact will however be minimized based on the recommendations received by the consultants during the specialist study stage of the EIA process.

Once the resort is operational and the landscape has had time to re-establish itself, we see the proposed upgrades and renovations to the existing hotel as having no negative visual impact on the site and surrounding areas in the long term.



CHAPTER 7: RECOMMENDATIONS AND MITIGATORY MEASURES

7.1 Introduction

The Environment Protection Act (EPA) 2016 provides for the mandatory introduction of the formal EIA procedures in Seychelles. The Environment Protection (Impact Assessment) Regulations, 1996 makes provision for the identification and assessment of activities that are potentially detrimental to the environment and which require authorisation from the relevant authorities based on the findings of an environmental assessment. A developer who intends to pursue a significant development which may present risks or impacts to its immediate environment needs to do an assessment which is aimed at identifying all potential environmental impacts including mitigation measures to address these impacts before the projects are being approved and subsequently implemented. Environmental impacts are conditions that can cause harm to the immediate environment where the project is to be implemented and this includes effects onto the neighbouring environment and people.

The potential impacts need to be assessed by qualified and reputable professionals recognised in the fields of expertise. Each specialist needs to present his/her findings in a clear and concise manner together with pragmatic recommendations and mitigatory measures.

A number of potential impacts have been identified during the Scoping Phase by the Environmental Assessment Practitioners, the professional project team members, relevant government officials, stakeholders and attendees at some of the meetings. To this end, the following Specialist Studies have been identified and was undertaken by qualified and reputable specialists in the field.

- Terrestrial Ecology (Biodiversity & Vegetation Surveys)
- Freshwater Assessments (Wetlands and River Ecology)
- Water Sampling and Laboratory Testing
- Hydrology and Surface Flow Regime
- Socio-Economic, Community and Public Health Impact Assessment
- Coastal Setback Study (Climate Change and Sea Level Rise)

This section details all the **recommendations and mitigatory measures** proposed by the relevant specialist.

7.2 Biodiversity, Vegetation and Rehabilitation Surveys

7.2.1 Reducing impact to the beach crest

- Low-cost boardwalks over the beach crest could be built to prevent trampling, erosion and hence keep the crest intact.
- Beach access for each villa should not be allowed. Instead a single access for a cluster of villas is more eco-friendly.

7.2.2 Biodiversity surveys, studies and long-term monitoring

There is an opportunity to do further studies to understand the biology and ecology of critical species as well as the ecosystem functioning.

- It is necessary to assess with more detail the population dynamics and ecology of species that are good environmental indicators such as the Yellow-bellied terrapin, Black mud terrapin, Yellow bittern and the Black crown night herons.
- Potentially more aquatic species could be present in those marshes and more detailed surveys are required.
- Establish a long-term wetland monitoring programme.

7.2.3 Education and awareness for clients and schools

There is a great opportunity to use the wetland and surrounding areas as a tool for education an awareness amongst the hotel clients but also with the local schools. An observation platform/kiosk equipped with a fixed telescope could be set up for use by the users.

7.2.4 Terrestrial and Wetland Rehabilitation Plan

Implement the Terrestrial and Wetland rehabilitation and management plan with the following objectives:

1. Establish and improve on the current baseline environmental conditions including indicators of wetland health (flagship species inventories, microbiotic and abiotic ones (e.g. acidity, phosphate and nitrate loads, upland land use development, etc.);
2. Conduct long-term ecosystem monitoring (monitoring of pollutants, water quality and biodiversity) to evaluate the success of the R & M plan;
3. Manage invasive fish in the wetland;
4. Manage both terrestrial and aquatic Invasive Plant Species invading the forest and the wetlands;
5. Manage the dense Freshwater fern area to improve hydrology and biodiversity;
6. Replant and manage the beach crest and plateau along the coast;
7. Train and enhance restoration skills and knowledge amongst Hotel staff, local communities and participating organisations;
8. Enhance public awareness on the importance of wetlands, their rehabilitation and management.

The Terrestrial and Wetland rehabilitation and management plan is detailed as a separate document (See [Annexure S](#)).

7.3 Species of Special Conservation Concern

7.3.1 Wetland

- No development works should take place in the wetland and a protective buffer zone should be delineated to protect the area and species from any impacts from development in the terrestrial areas of the site.
- If wetland rehabilitation work is to be carried out, all terrapins must first be trapped and translocated to a suitable temporary habitat in order to mitigate against any potential disturbance of or harm to terrapins. This would entail the intense trapping

effort during the rainy season (December to March), when the highest number of captures have been recorded.

- Both species of terrapin require aquatic and terrestrial areas (sandy soil, in particular) for nesting and aestivation, and as such, natural banks along the wetland should be preserved and stabilized with anti-erosion vegetation, and protected by a terrestrial buffer zone to mitigate any potential disturbances to the species and its successful reproduction.

7.3.2 Beach

- Ideally, all demolition and renovation of the infrastructure near or along the beach should take place outside of the Hawksbill nesting season (October to March).
- As nesting Green turtles, as well as emerging Hawksbill hatchlings, may use the beach outside of that period, it is recommended that a barrier is erected for the mitigation of noise, debris and anthropogenic disturbance to nesting turtles, as far back on the beach as possible, well behind the vegetation and high water mark.
- It is recommended that all employees involved in the demolition and renovation works are sensitized on the correct conduct in the case of turtle encounters. The awareness and education training will happen in an induction session with the ECO to ensure all construction staff understand the Do's and Don'ts on site.
- No artificial light should be visible from the beach during demolition and construction. Both nesting and hatching turtles are extremely sensitive to light, which is how they navigate safely back to sea. Artificial lights thus dis-orient them, causing them to get lost or stuck in developed areas, which, frequently in the case of hatchlings, leads to mortality.

7.3.3 Environmental monitoring

- Periodic monitoring and recording (monthly) of wetland water parameters (water level, water temperature, light intensity and water quality) is recommended to ensure the health and function of the wetland ecosystem.

7.3.4 Invasive species control

- Mechanical removal of both water hyacinth and duckweeds should be undertaken on a weekly basis for the first 6 months and on a monthly basis thereafter. The frequency can be decided between the ECO and client depending on the enormity of the problem.
- Removal of duckweed in smaller ponds can be performed using fine-mesh nests to remove the floating plants, or in larger ponds using a floating boom. As duckweeds prefer still water, creating some disturbance in the water ie. by way of a water pump, may assist in the control efforts of this species. Most importantly, nutrient levels should be closely monitored and appropriate management measures put in place to address the cause of the invasion of these species.
- It is advisable to compost the invasive plant material anaerobically in order to effectively destroy the seeds.

7.3.5 Promotion of biodiversity

- Both guests and staff of the hotel should be sensitized on the importance of the beach and wetland habitats and their species.
- Behavioural guides on nesting and hatchling turtles should be distributed to all guests of the resort and hotel security staff should be trained on the correct conduct when encountering emerging turtles and hatchlings.
- The shoreline should be stabilized to reduce erosion and destroyed turtle nests through the rehabilitation of beach fringe vegetation, in particular *Scaevola taccada*, which is suitable for turtle nesting habitat. To support this effort, beach access should be kept to a minimum of 3 pathways.
- If artificial light outside infrastructure along the beachside is crucial once the development is complete, only turtle-friendly lights should be used in these areas, and *only* outside of the nesting season, while internal lights should be minimized with the use of curtains and/or blinds.

7.4 Species of Special Conservation Concern

7.4.1 Rehabilitation and Management (R&M) – Wetland

Long-term monitoring programme should include:

- a. Hydrological characteristic: water regime and flow (flowing water, standing water, saturated soils, floating mat etc)
- b. Biological/ecological characteristics:
 - i. Habitat types (forested, shrub, emergent, moss-lichen, aquatic bed, unconsolidated bottom, rock bottom etc),
 - ii. Species inventory: aquatic and terrestrial plant and animal species presence and abundance (rare, frequent, occasional, common, abundant). Species status (native or exotic).
 - iii. Dominant, rarest and indicator species.
- c. Physio-chemical characteristics of water including water quality: pH, salinity, conductivity, turbidity, colour, nitrates, phosphates, POPs, dissolved oxygen, biological agents like bacteria (*E.coli*)
- d. Geomorphological characteristics:
 - i. Substrate type (organic or mineral)
 - ii. General composition (silt, sand, clay, loam, mud, rubble, rock etc)
 - iii. Hydric soil indicators (high organic content, sulphuric odour, organic streaks)
 - iv. Substrate colour
 - v. Micro-topographic features of the wetland (channels, islands, mounding)
- e. Threats and disturbances: presence of waste, pollution, drainage, reclamation, farming, algal bloom, salting, clearing, invasive alien species etc.

These parameters will be used to define, classify and characterize the changes in wetland. The data will also build up on the baseline for the future studies or monitoring.

7.4.2 Ecosystem monitoring

The following are to be monitored at least once a year.

1. Water quality: analysis of water to detect pollutants such as waste and fertilisers from the farm (e.g. nitrate, phosphate etc), and biological contamination through the presence of *E.coli* as well as other general characteristics of the water (conductivity, pH, biological oxygen demand)
2. Environmental indicator species or species of special conservation value
 - a) Yellow bittern (*Ixobrychus sinensis*)
 - b) Black crown night heron (*Nycticorax nycticorax*)
 - c) Seychelles Kestrel (*Falco araea*)
 - d) Yellow belied mud terrapin (*Pelusios castanoides*) and the Black mud terrapin (*Pelusios subniger*)
 - e) Green (*Chelonia mydas*) and Hawksbill turtle (*Eretmochelys imbricata*)
 - f) Freshwater crustaceans (freshwater prawns and shrimps)
 - g) Freshwater endemic fish Golden panchax (*Pachypanchax playfairii*) and Eel (*Anguilla bicolor*)
 - h) Amphibians Seychelles Tree frog (*Tachycnemis seychellensis*)
 - i) Other interesting fauna that may be captured during the other monitoring
3. Invasive Alien Species
 - a. Invasive fish Tilapia (*Oreochromis mossambicus*)
 - b. Invasive creeper in the forest, Merremia (*Merremia peltata*) and Centipede tongavine (*Epipremnum aureum*)
 - c. Invasive water weeds in the wetland
 - i) Duckweed (*Lemna perpusilla*)

- ii) Hydrilla (*Hydrilla verticillata*)
- iii) Water hyacinth (*Eichhornia crassipes*)
- iv) Water lily (*Nymphaea lotus*)

Management of invasive species Tilapia fish in wetlands

Tilapia management tools

Physical removal

- a. Netting techniques such as gill and seine netting can remove substantial numbers of fish, particularly in small enclosed waterbodies where fish are unable to escape. Nets need to be monitored regularly for by-catch of native species, which should be released if captured. These techniques are relatively simple and cost-effective when compared to other techniques.
- b. Electrofishing done on a regular basis is a relatively cost-effective way of controlling tilapia in small waterbodies. Electrofishing works by passing an electrical current into the water to stun fish, and enables a person to capture unwanted fish with a net. This can be done with a battery-operated electrofisher. This equipment is fairly expensive (USD 600), potentially hazardous to operators and should only be used by highly trained staff.
- c. Angling can be used to remove relatively small numbers of fish from selected watercourses (e.g. during fishing competitions or recreational fishing). Angling or recreational fishing are not effective means of population control and/or eradication. However bringing the clients or community together to focus on tilapia removal from local watercourses does help to raise public awareness of the pest fish issue.

Integrated control

The use of two or more control methods simultaneously may be a more effective means of controlling introduced tilapia. The strategic placement of gill nets in a waterbody followed by night-time electrofishing can substantially increase the catch rate of large tilapia in a closed system. Other possible control options could work to exploit different behavioural aspects of the species, or combine technology to locate natural aggregations

of target animals (e.g. using 'Judas' fish – a radio-tagged fish whose movements can be tracked) and breeding 'hotspots', which could then be targeted using traditional techniques (e.g. netting, electrofishing or poisons).

Management of Alien Invasive Creepers

Two invasive creepers are found on the site:

- The Centipede tongavine (*Epipremnum aureum*) which is in an early stage of colonisation (and hence can be eradicated)
- *Merremia* (*Merremia peltata*) which is widespread on the property particularly in the eastern side and for which complete eradication will be difficult but it can be controlled.

The invasive creepers can be controlled in the following ways:

Physical management:

Physical control alone is not effective in controlling and eliminating invasive creepers because any roots, stems or pieces left behind will sprout. Nonetheless, the following protocol can be followed for physical control of creepers:

- In the dry season, cut the lower part of the creeper and remove it from the trunk as high up as possible by hooking and pulling the parts in the trees; Uproot and remove the tubers and rhizomes from underground; Place all plant materials removed on a rock or a raised platform to dry; Conduct post-treatment planting in gaps to prevent re-colonisation of invasive creepers and soil erosion.

Chemical management:

The active ingredients of herbicides such as 2,4-D, Dicamba, Triclopyr, Picloram are effective in controlling creepers. The following protocol can be followed for chemical control of creepers:

- a. For cut stump application: Cut the stems at 10 cm above the ground; treat both parts of the cut stem by applying the recommended dosage of the herbicide and leave the plant to die; cover the treated stems with plastic bags to avoid leakage of product onto the ground.

- b. For foliar-spray application: Spray the whole plant with the recommended dosage of the herbicide; follow-up by repeating the control programme 2-3 times at 3 monthly intervals until all creepers have been eliminated; avoid doing the treatment during rainy periods.

Management of Wild Tamarin (Kasi, *Leucaena leucocephala*)

Kasi is a fast-growing shrub or small tree growing 2-10 m tall. Kasi grows very fast in suitable sites; forming dense, thickets that are difficult to control once established. Invaded areas become unusable and inaccessible. It displaces native vegetation and can promote suitable conditions for the establishment of even more aggressive invaders. Nominated among 100 of the "World's Worst" invaders by the IUCN Invasive Species Specialist Group.

Physical management:

The control of Kasi can be done by cutting and uprooting them using a machete, chain or a small excavator in the case of dense stands. The site replanted with appropriate native species.

Chemical management:

Cut stump treatment: Cut the whole tree as close to the ground as possible and apply the recommended dose of herbicide to the cut stumps using a paintbrush or a sprayer. Apply the herbicide to the cut stump as quickly as possible for more effective treatment. The following herbicides can be used: Picloram (Tordon[®], Grazon[®]), Dicamba (Vanbel[®], Oracle[®], Vanquish[®]) and Triclopyr (Garlon[®], Release[®]).

Management of invasive water weeds

Management of Duckweed (*Lemna perpusilla*)

Duckweed is a very small floating plant. It has shoe-sole shaped leaves with a small hair-like root hanging below. Once established, duckweed in ponds can cover the entire water surface and resemble a golf course green. It can cut off sunlight to submersed plants and cut off oxygen to fish and other wildlife.

Physical management:

One duckweed control method is by raking and skimming it off the water's surface. Duckweed typically prefers stagnant and slow-moving water and hence by adding an aeration system duckweed can be eliminated or limit the growth to the edges which are easily reachable with a hand net.

Chemical management:

Chemical treatments can also be used. Two herbicides are labelled for duckweed control: diquat and fluridone.

Management of Hydrilla (*Hydrilla verticillata*)

Hydrilla verticillata or Water thyme is a submerged, perennial aquatic plant listed as the “world’s worst invasive aquatic plant”. Dense infestations of hydrilla can shade or crowd out all other native aquatic plants, alter water chemistry, cause dramatic swings in dissolved oxygen levels, increase water temperatures and affect the diversity and abundance of fish populations. Unfortunately, once hydrilla infests a water body, it is difficult and very costly to eradicate. The best method of controlling hydrilla is preventing new infestations through public outreach and education.

Physical management:

Hydrilla can be removed by raking or seining it from the wetland, but will re-establish from any remaining roots.

Biological management:

Grass carp can be introduced to control aquatic vegetation although it may take over a year to observe any noticeable difference. Grass carp readily consume weed thus controlling it. It is recommended to use only triploid grass carp which are reproductively sterile and a permit from the Biosecurity Agency will be required before they can be imported into the country.

Chemical management:

Control is best achieved through killing of the root system by application of a systemic or contact herbicide to the leaves above the water. Herbicide travels throughout the plant, killing both the roots and vegetative portions. Using a sprayer, spray on the leaves of the water lilies above the surface of the water.

Management of Water hyacinth (*Eichhornia crassipes*)

Water hyacinth is a freshwater invasive plant which floats on the water surface forming dense mats which can block waterways, hindering flood control, prevent sunlight from reaching underlying water, killing native submerged plants. The dense mats also serve as a breeding ground for mosquitoes.

Physical management:

Water hyacinth can be removed by raking or seining. The plants are then chopped into small pieces for disposal. It can also be composted to be used in the garden or rehabilitation programme.

Chemical management:

Contact herbicides like Endothall (dipotassium salts) and Reward (a diquat formulation) can be used to control water lettuce.

Management of Water lily (*Nymphaea lotus*)

Water lilies are colonial plants rising from creeping stems called rhizomes. The creeping rootstock of underground rhizomes is one means of reproduction to rapidly spread water lilies.

Physical management:

It is NOT recommended to cut water lilies under the waterline because this can stimulate

growth. The rhizomes can be dug up by raking them out of the sediment, but physical control is difficult because it can re-establish from seeds or remaining rhizomes.

Chemical management:

Control is best achieved through killing of the root system by application of a systemic or contact herbicide to the leaves above the water. Herbicide travels throughout the plant, killing both the roots and vegetative portions. Using a sprayer, spray on the leaves of the water lilies above the surface of the water.

Manage the dense Freshwater fern (*Acrostichum aureum*) area to improve hydrology and biodiversity

The Freshwater fern is a large understory fern that occurs in mangrove forests and other wetlands. The distribution of Freshwater fern is associated with areas having lower salinity, frequently protected from tidal influence by growing in the landward ecotone or on slightly elevated ground. Prior to the control of the freshwater fern, it is important to better understand the distribution of the fern and determine where its removal will have the biggest positive impacts. It may be necessary to trap and temporarily remove the freshwater terrapins to reduce impact on them during the operation.

Control measures

The Freshwater fern can be controlled through physical removal. The fern can be dug out or its fronds can be continuously cut to reduce growth. The ferns should then be disposed properly such as on a composting site. Areas along the main channel with major flows and near the culverts under the roads should be targeted in instances where hydrological flows need improving.

Removal should be done in small patches of 10 m² to reduce environmental impact. The patches should then be replanted with appropriate species such as reeds (*Typha javanica*), Chinese waterchestnut (*Eleocharis dulcis*) and Mangrove species (e.g. Red mangrove, Black mangrove, Oriental mangrove).

Replant and manage the beach crest and plateau along the coast

The beach crest is quite intact, in good condition and consists of native species. It is a habitat that is extremely important for the 2 nesting turtle species. There are disturbed patches in the beach crest vegetation created by footpaths for beach access. These footpaths will have to be vegetated with the appropriate species like Veloutye, Bwa savon and the Morning glory (Patatran). Considering the effects of climate change, which leads to beach erosion, there might be a need to first line the targeted areas with geotextile mats to hold the substrate and then plant the seedlings in the mat.

The Plateau behind the beach crest is in need of re-vegetation with appropriate species like Takamaka, Bwadroz, Porse, Bwa blan and Bonnen kare bordemer.

Train and enhance rehabilitation skills and knowledge amongst Hotel staff, local communities and participating organisations

The implementation of the R&M plan will need to be done and guided by an experienced team. The team should also provide training to hotel staff, the community and other interested parties for the long-term sustainability of the rehabilitation programme.

Training in: plant propagation techniques, planting techniques, pesticide management, IAS management, ecosystem recovery monitoring, biodiversity and water quality monitoring are some examples of the trainings.

Enhance public awareness on the importance of terrestrial, marine and coastal rehabilitation and management

Public awareness can play a major role in environmental protection and management. It would be important to raise the awareness of the clients of the activities being undertaken to improve environmental conditions at the hotel. This may create more interest from the clients to contribute to rehabilitation as well as conservation efforts.

7.5 Terrain, Topography, Hydrology & Storm Water Management Surveys

Site Regime Flow Description

For the ease of description and detailing of the hydrological characteristics of the site, the entire area of development has been divided into various zones of which the general hydrology and flow characteristics displays different regimes. This attributes to the

variation in the topography of the project area, the already-existing infrastructures. Among the things to consider are flow paths, flow direction, flow regimes (sheet, semi-concentrated and channeled flows), covered areas such as roofs, road accesses, parking area etc., flood prone areas, presence of main water bodies (wetland and Intendance River).

Upper Road Access

there is little need for introduction of any roadside drains, whereas the flow control strategy in this instance is to optimize the thalweg flow and ensure the flow is controlled and evacuates eventually into a properly-designed outlet. The culverts are all operating under inlet control and as such, proper hydraulics design needs to be undertaken and hydraulics checks needs to be done for existing ones.

Flood prone area – Main Road

Owing to the location of the main road, being within the water body, the only viable counter-flood measure in this case is to raise the level of the existing road and introduce a system of wider culverts (600mm diameter preferably) to allow for better flushing of the water body and thus eliminate the onset of eutrophication.

Wetlands Flow Management

The area of the wetland immediately after the main road, adjacent to the existing security hut is currently displaying heavy vegetation overgrowth and siltation, which is also resulting in water over-stagnation. As such, de-silting/de-vegetation activities are recommended in this area. During construction/demolition phase of the project, sedimentation and disturbed soil wash-down can be a potential contaminant to the wetland. As such there is a proposal to make use of sedimentation barrier and trap systems, to be placed at strategic locations within the wetland itself and within the feeding river. The strategy is to close off the wetlands at various narrow points to act as a “valve” mechanism in case of sediment wash-down. The sediment control systems can be transformed into more permanent weirs for wetlands flow controls during operation phase of the project.

The wetland consists of only 1 sea outfall outlet, which is found at the start of the main Intendance beach. The outlet is constantly blocked as a result of beach sand intrusion and accumulation. In order to optimize the flow at the outlet, it is recommended that a raised sluice gate system be installed such that same can be operated manually. Onus shall be on the developer to ensure the adoption and operation of the sluice gate during significant precipitation events. **During construction phase however, the outlet shall be modified to a sediment trap system that allows sediment to settle at the bottom of the trap and water to flow out. This is of utmost importance to prevent soil contamination of the pristine beachfront of the area.**

Findings and Recommendations of Hydraulic Analysis

Assumptions:

1. The ARI of storms to be used = 10 years for Central Regions, 5 years for Other Regions
2. Roads are concrete-surfaced
3. Road widths = 2.5m, 4.5m
4. Roadside drain to be lined smoothly (no lateral water absorption)
5. All roads are super-elevated with a max. cross gradient of 7%
6. Minimum longitudinal Gradient = 1 in 200 as any gentler gradient will result in sedimentation and water stagnation, even at very low roughness coefficients
7. Standard dish drains of internal width 300mm and depth 100mm have hydraulic radius value = 5.68×10^{-2} m and c.s area 2.17×10^{-2} m²

Existing Drains Checks

Drain Ref No.	Description	Length of road/drain (m)	Longitudinal Gradient of road/drain (%)	Road Edge - drain flow time (3-D flow) (mins)	Rainfall Intensity (mm/hr)	Peak discharge from road surface watershed (m ³ /s)	Computed Hydraulic Radius of drain (m)	C.S area of drain (m ²)	Channel slope (m/m)	Manning's Roughness coefficient of channel (n [*])	Discharge capacity of channel (m ³ /s)	Conclusion
D1	Existing Dish Drain of dimensions 300mm width x 150mm depth - taking water from road surface and thalweg -	500	15	8.78	135	6.59×10^{-2}	5.68×10^{-2}	2.17×10^{-2}	15	0.012	0.371	Channel adequate to cater for flow
D2	Existing lined channel (1200mm depth x 500mm width) - taking water from seasonal stream of computed peak flow of 0.25m ³ /s (see sub-watershed)	-	-	-	105	0.25m ³ /s	0.207	0.80	0.05	0.012	4.64m ³ /s	Channel adequate to cater for flow
D3	Existing lined drain channel (250mmmm width x 400mm depth), taking flow from overlying watershed of computed peak flow of 0.16m ³ /s. (see sub-watershed)	-	-	-	105	0.16m ³ /s	9.5×10^{-2}	0.10	0.05	0.012	0.84m ³ /s	Channel adequate to cater for flow
D5 and D6	Existing road side drain (200mm x 200mm), with a proposal for extension (steep at 15%)	200	15	8.78	135	2.2×10^{-2} m ³ /s	6.87×10^{-2}	4.0×10^{-2}	0.15	0.012	0.61m ³ /s	Channel adequate to cater for flow
D7	Existing short side drain (200mm x 200mm)	100	8	8.78	135	1.10×10^{-2}	6.87×10^{-2}	4.0×10^{-2}	0.08	0.012	0.48m ³ /s	Channel adequate to cater for flow
D8	Existing road side drain (150mm x 150mm), with a proposal for extension	400	8	8.78	135	5.49×10^{-2}	5.0×10^{-2}	2.25×10^{-2}	0.08	0.012	0.28m ³ /s	Channel adequate to cater for flow
D9	Existing road side drain (300mm x 300mm) - proposed to take flow from completely paved area of 0.01km ²	-	-	-	105	0.290	0.100	9.00×10^{-2}	0.05	0.012	0.801	Channel and outlet adequate to cater for flow
D10	Existing lined open drain (250mm width x 200mm depth) - draining into wetland	200	8	8.78	135	2.20×10^{-2}	7.70×10^{-2}	5.00×10^{-2}	0.08	0.012	0.257	Channel adequate to cater for flow
D11	Existing road side drain (150mm x 150mm)	100	8	8.78	135	1.10×10^{-2}	5.0×10^{-2}	2.25×10^{-2}	0.08	0.012	0.108	Channel adequate to cater for flow
D12	Existing road side drain (200mm width x 150mm depth), with a proposal for extension	200	4	8.78	135	2.20×10^{-2}	3.00×10^{-2}	6.00×10^{-2}	0.04	0.012	0.248	Channel adequate to cater for flow

Proposals for New Drains												
Drain Ref No.	Description	Length of road/drain (m)	Longitudinal Gradient of road/drain (%)	Road Edge - drain flow time (3-D flow) (mins)	Rainfall Intensity (mm/hr)	Peak discharge from road surface watershed (m ³ /s)	Computed Hydraulic Radius of drain (m)	C.S area of drain (m ²)	Recommended C.S area (m x m) (Based on Manning's Formula)	Discharge capacity channel (m ³ /s)	Recommended C.S area after 30% freeboard (m x m)	Recommended Practical designs
D4	Proposed 100m extension to existing roadside drain D5	100	15	8.78	135	1.10 x 10 ⁻²	3.33 x 10 ⁻²	1.00 x 10 ⁻²	0.10d x 0.10w	1.60 x 10 ⁻²	0.15d x 0.10w	Open rectangular c.s 0.20m x 0.20m to match D5 dimensions
D13	Proposed 200m extension to existing roadside drain D12	200	8	8.78	135	2.20 x 10 ⁻²	5.00 x 10 ⁻²	2.25 x 10 ⁻²	0.15d x 0.15w	3.85 x 10 ⁻²	0.20d x 0.15w	Open rectangular c.s 0.20m x 0.15m to match D12
D14	Proposed major open channel to take water from Thalgweg T2, which in turn is evacuating water from 500mm of road surface + flow from D1. - Same	-	-	-	-	-	-	-	-	0.371 - see D1	0.30m width x 0.30m depth	0.30m width x 0.30m depth

Proposals for New Drains

Thalgweg Ref No.	Description	Peak discharge from watershed (m ³ /s)	Gradient of stream (m/m)	Recommended C.S area (m x m) (Based on Manning's Formula)	Discharge capacity of channel (m ³ /s)	Flow velocity (m/s)
T1	Open channel conveying flow from upper watershed of computed discharge 0.42m ³ /s	0.42	0.38	0.25m water depth x 0.25m bottom width	0.52	6.12

Thalgweg Ref No.	Description	Peak discharge from watershed (m ³ /s)	Gradient of stream (m/m)	Recommended C.S area (m x m) (Based on Manning's Formula)	Discharge capacity of channel (m ³ /s)	Flow velocity (m/s)
T2/T3	Open channel conveying flow from upper watershed of computed discharge 0.066m ³ /s	0.066	0.15	0.20m water depth x 0.20m bottom width	0.16	3.21

Thalgweg Ref No.	Description	Peak discharge from watershed (m ³ /s)	Gradient of stream (m/m)	Recommended C.S area (m x m) (Based on Manning's Formula)	Discharge capacity of channel (m ³ /s)	Flow velocity (m/s)
T4	Open channel conveying flow from roadside drains D4, D5 and D6, with a cumulative flow of 0.034 m ³ /s	0.034	0.10	0.20m water depth x 0.20m bottom width	0.14	2.62

Assumptions:

1. All culverts are operating under inlet control i.e. on sloped surfaces, gravity-fed (except for C4 and C5, which are connecting bridges)
2. All proposed culverts are single-barrel pipe culverts with no flanges
3. Formula used for culvert discharge capacity = $Q = N \cdot 1.62 \cdot D^{0.87} \cdot HW^{1.63}$ (HW/H > 1.20)

Culvert Ref. No.	Description	Peak discharge into culvert inlet (m ³ /s)	No. of barrels	Headwater height (HW) equivalent to diameter of culvert + road thickness @0.3m	Recommended Diameter (D) (m)	Discharge capacity of culverts (m ³ /s)
C1	Culvert evacuating flow from T1, at 0.42m ³ /s	0.42	1	0.75	0.45	0.51
C2	Culvert evacuating flow from T1, at 0.42m ³ /s	0.42	1	0.75	0.45	0.51
C3	Culvert evacuating flow from D1, at 0.371m ³ /s	0.37	1	0.75	0.45	0.51
C6,C7	Culvert evacuating flow from D4, at 0.61m ³ /s	0.61	1	0.75	0.60	0.65
C8	Existing 150mm pipe Culvert, evacuating flow from D8, at 0.26m ³ /s	0.26	1	0.75	0.30	0.36
C9	Existing 150mm pipe Culvert, evacuating flow from D10+ D12 at 0.505m ³ /s	0.51	1	0.75	0.60	0.65

It is thus recommended that C8 be upgraded from a 150mm diameter pipe culvert to a 300mm diameter pipe culvert

It is thus recommended that C8 be upgraded from a 150mm diameter pipe culvert to a 600mm diameter pipe culvert

7.6 Coastal Setback Study

7.6.1 Climate Change and Sea Level Rise

It is recommended to build the new structures landward of the erosion line as determined for a 100-year return period storm event the end of design life (2040), i.e.:

- Profile A: 12.5 m behind the existing vegetation line
- Profile B: 15.0 m behind the existing vegetation line
- Profile C: 14.5 m behind the existing vegetation line

Considering the existing structures, the Beach Villas at:

- Profile A requires approximately **4.5 m of additional setback**
- Profile B requires approximately **0.5 m additional setback**.
- Alternative mitigation measures include erosion protection, e.g. by means of sleeping revetments in front of the structures.

To minimise the risk of flooding it is recommended that floor levels should be constructed above the runup level for a 100-year return period storm event the end of design life (2040), i.e.:

- Profile A: above 5.21 m MSLD
- Profile B: above 4.99 m MSLD
- Profile C: above 4.87 m MSLD.

▪ (See Specialist Report, [Annexure R](#) for Profile locations)

7.7 Social

Construction Phase

Land take**Mitigation measures:**

- Those living along the access road will require sensitization and awareness about the project, the construction timeframe as well as any grievance mechanisms implemented for complaints

Traffic and Congestion**Mitigation measures:**

- The contractor will control haulage speed especially near the junction leading to the property by placing requisite warning signs.
- Drivers will be inducted at the start of the Project about road safety and due diligence to ensure safety of other road users.
- No haulage of materials will occur during the school's at starting and finishing times, or during night periods, unless materials quality is at risk (such as bitumen and concrete) and/or special permissions are sought from the authorities.

Interaction between workers and the local community**Mitigation measures:**

- The project should have a suitable policy for interaction between workers and local people
- Non-project workers except official visitors must not be allowed on site.
- The work site should provide free condoms to their workers and HIV/AIDS information posters
- The contractor will sensitize workers on HIV/AIDS and responsible living. Orientation on HIV/AIDS shall be conducted for workers and continual sensitization done during weekly toolbox meetings.
- As a contractual obligation, the contractor shall have an HIV/AIDS policy and action plan to implement it for this project

- n HIV/AIDS training and awareness campaign should be conducted to target construction workers and the community. The goal of training and awareness will be to reduce the risk of transmission of HIV/AIDS during and after construction and will entail; training, support for behaviour change and provision of condoms.
- Similar health protocols in relation to the COVID-19 pandemic should also be implemented, pertaining to vigilance, hygiene and prevention measures.

Operational Phase

Prohibited human interactions with the facilities

Mitigation measures:

- Improve security measures by placing guards and/or more signage in different languages. Notably, warning signs regarding the swimming conditions should be erected.
- Access to the facilities should be strictly regulated during construction, given the health and safety hazards involved.

From these consultations, the following summary recommendations are made for consideration:

- To formalize the relationship between hotel and district via an MOU with Takamaka District Administration which will seek to prioritize the district's needs especially in relation to early engagement with small scale entrepreneurs and business owners during all phases of the project;
- Careful traffic management plan in place and measures to be taken to mitigate noise and dust emissions during construction phase;
- Client to maintain discreet security on the beach and consider placing lifeguards on site given the latest near drowning reports;
- Primary consideration of employment of Takamaka residents and re-hiring of ex-BTS employees;
- MEECC to continue engagement around environmental conservation program;

- MEECC to integrate community into wetlands cleaning program and consider initiating a national wetlands sponsorship;



CHAPTER 8: ENVIRONMENTAL AND SOCIAL RISKS & IMPACT MITIGATION

8.1 Introduction

In accordance with the Environmental Protection Act (2016) of Seychelles, any developer who intends to pursue a significant development, which may present risks or impacts on its immediate environment require a study which is aimed at identifying all potential environmental impacts and recommends mitigation measures to minimise negative impacts and enhance positive impacts, before the project is approved and subsequently implemented.

The Public Health Act of the Seychelles stipulates certain criteria of how public health and safety should be safeguarded and that no development whatsoever shall cause a nuisance to the public, health and safety. Furthermore, the Town and Country Planning Act makes provisions for minimum standard of construction and building requirements. In order to remain lawful and compliant to legal obligation and to prevent any unwanted environmental and public health and safety issues, an Environmental Impact and operational risks assessment was initiated to determine the potential impact to environment and public health and safety in view of the proposed project. The core activities related to the Demolition, Re-building and future operations were identified and classified according to the level of impact these activities would generate. Next, the site's receiving environment was considered, and a 3-tier approach was used, integrating the Foreseeable impacts, the resulting site Terrain, Biodiversity and overall Site sensitivity to construction.

A series of practical mitigations measures has also been provided, which seeks to lower the risk levels of the identified impacts, while enforcing good site principles of storm-water and sedimentation management. Moreover, the survey identifies sector specific impacts of debris and pollution control points, adding matters of vehicular and transportation/traffic management and cart away during the construction, while taking baseline measurement on Noise acoustics, Water sample qualities and associated social impacts from a very detailed door to door public scoping process.

The majority of impactful activities have been considerably modified or removed such as the potential wetlands backfill, while also urging coastal retreat for construction, allowing climate change and erosion risks to be holistically tackled by densification and native coastal tree rehabilitation programs. Timing such works with the Turtle nesting season and use of coastal hoarding shall also add to species protection, while deterring negative aesthetics from beach users.

The Uphill zone sees moderate to Low impacts ranging mostly within well controllable demolition of pillars, minor rock breaking and dealing with hoarding and sedimentation protection of downhill facades.

The Wetlands received the highest attention, ensuing strict Non Demolition of any Island's, Terrapin and native species conservation, wetlands enhancement for flow and drainage, the rehabilitation and edge protection while reducing risk level of pollution and debris via wetlands hoarding, Terrapin Monitoring, Rehabilitation of Island's from Exotic Trees and ensuring baseline parameter monitoring by ECO during the construction process.

In view of the detailed identification of Core Demolition and Re-construction activities and associated Risks/Hazard threat, and having applied practical site mitigation measures that can be objectively verified and audited on site by an ECO, and having baseline parameters to further bench mark progress against , the attenuated risk levels allow the project to be wholly feasible with due care to the adherence of the EMMP and mitigation measures further provided in the Risk matrix (*Environmental and Social Risk/Hazards & Impact Mitigation Survey, October 2020*).

8.2 Impact Rating

Four factors were considered when assessing the significance of all the social impacts, namely:

- i. Relationship of the impact to temporal scales (relating to measured time). The temporary scale defines the significance of the impact at various time scales, as an indication of the duration of the impact.

- ii. Relationship of the impact to spatial scales (relating to space). The spatial scale defines the physical extent of the impact.
- iii. The severity/beneficial scale (state or extent of badness or benefit). The severity of the impact is used in order to scientifically evaluate how severe negative impacts would be, or how beneficial positive impacts would be on a particular affected system (for ecological impacts) or a particular affected party.
- iv. The likelihood (degree of probability) of the impact occurring. The likelihood of impacts taking place as a result of project actions differs between potential impacts.

Each criterion is ranked with scores assigned as presented in the ranking table (below) to determine the **overall significance** of an activity. The criterion is then considered in two categories, **effect of the activity** and the **likelihood of the impact**. The total scores recorded for the effect and likelihood are then read off the matrix presented in the following table to determine the overall significance of the impact. The overall significance is either negative or positive.

Table 8-1: Ranking of Evaluation Criteria

	Temporal Scale		Score	
	EFFECT	Short Term	Less than 5 years	1
Medium Term		Between 5 and 20 years	2	
Long Term		Between 20 and 40 years	3	
Permanent		Over 40 years and resulting in a permanent and lasting change that will always be there	4	
Spatial Scale				
Localised		At Localised Scale and a few hectares in extent	1	
Study Area		Proposed Site and its immediate environment	2	
Regional		District and Provincial level	3	
National		Country level	4	
International		Internationally	5	
*		Severity	Benefit	
Slight /Slight Beneficial		Slight impact(s) on the affected system(s) or party(ies)	Slight beneficial to the affected system(s) or party(ies)	1
Moderate /Moderate Beneficial		Moderate impact(s) on the affected system(s) or party(ies)	Moderate beneficial to the affected system(s) or party(ies)	2
Severe /Beneficial		Severe impact(s) on the affected system(s) or party(ies)	Substantially beneficial to the affected system(s) or party(ies)	3
Very Severe/Very Beneficial	Very Severe impact(s) on the affected system(s) or party(ies)	Very beneficial to the affected system(s) or party(ies)	4	
LIKELIHOOD	Likelihood			
	Unlikely	The likelihood of these impacts occurring is slight	1	
	May Occur	The likelihood of these impacts occurring is possible	2	
	Probable	The likelihood of these impacts occurring is probable	3	
	Certain	The likelihood is that this impact will definitely occur	4	

The score is inserted in the significance matrix for the magnitude calculation of the impacts based on likelihood and effect. See below the significance matrix table.

Table 8-2: Significance matrix of the impacts based on likelihood and effect

LIKELIHOOD		EFFECT										
		3	4	5	6	7	8	9	10	11	12	13
1		4	5	6	7	8	9	10	11	12	13	14
2		5	6	7	8	9	10	11	12	13	14	15
3		6	7	8	9	10	11	12	13	14	15	16
4		7	8	9	10	11	12	13	14	15	16	17

The impact significance scale is an attempt to evaluate the importance of a particular impact. This evaluation needs to be undertaken in the relevant context, as an impact can either be ecological or social, or both. The evaluation of the significance of an impact relies heavily on the values of the person making the judgment. For this reason, impacts of especially a social nature need to reflect the values of the affected society. The following table shows the significance ratings of the impacts.

Table 8-3: Description of Significance Ratings

Significance Rating	Description	Score Range
Low	An acceptable impact for which mitigation is desirable but not essential. The impact by itself is insufficient even in combination with other low impacts to prevent the development being approved. These impacts will result in either positive or negative medium to short term effects on the social and/or natural environment.	4 - 7
Moderate	An important impact which requires mitigation. The impact is insufficient by itself to prevent the implementation of the project but which in conjunction with other impacts may prevent its implementation. These impacts will usually result in either a positive or negative medium to long-term effect on the social and/or natural environment.	8 - 10
High	A serious impact, if not mitigated, may prevent the implementation of the project (if it is a negative impact). These impacts would be considered by society as constituting a major and usually a long-term change to the (natural &/or social) environment and result in severe effects or beneficial effects.	11 - 13
Very High	A very serious impact which, if negative, may be sufficient by itself to prevent implementation of the project. The impact may result in permanent change. Very often these impacts are unmitigatable and usually result in very severe effects, or very beneficial effects.	14 - 17

The evaluation of the impacts is used to prioritise which impacts require mitigation measures. Negative impacts that are ranked as being of “**VERY HIGH**” and “**HIGH**” significance should be investigated further to determine how the impact can be minimised or what alternative activities or mitigation measures can be implemented. These impacts may also assist decision makers i.e. lots of HIGH negative impacts may bring about a negative decision.

For impacts identified as having a negative impact of “**MODERATE**” significance, it is standard practice to investigate alternate activities and/or mitigation measures. The most effective and practical mitigations measures will then be proposed.

Impacts ranked as “**LOW**” significance, will have no or minor mitigation measures and slight alternatives could be considered. Such measures will ensure that the impacts remain of low significance.

The management plan of the mitigation measures identifies feasible and cost-effective measures that may reduce potentially significant adverse environmental impacts to acceptable levels.

8.3 Impacts and Mitigation Measures

Find below the sectorial analysis of the identified impacts and proposed mitigation measures for each Development Zone.

8.3.1 Beach Villas

8.3.1.1 Demolition

Negative Impacts		Mitigation Measures
1	Pollution to beach and marine environment from generation of building material wastes on site (concrete, cement boards, timber, (copper, PVC and Ductile Iron pipes), electrical panels and cables, glass panels, broken tiles, old	Screening of site to prevent waste deposits into beach and marine environment. To conduct monitoring of beach cleanliness and prompt removal of any unlikely escaped debris to beach. Identify safe waste receptacle areas away from possible water run-off path to beach which may convey waste and debris to beach

	furniture and other remains from existing beach villas.	and cause pollution.
2	Damages to existing endemic Takamaka Trees and other vegetation with high biodiversity value by (Coconut trees, palm trees and Indian Almond trees)	Protect Takamaka trees on coastal line with tyre ring protection as a cushion for possible impact from demolishing works which may cause damaged to trees. Tag native and protected trees to maintain awareness of native tree protection. Younger native plants that are able to be re-located shall be transferred to nursery for preservation and rehabilitated back into native environment once construction is done as part of the development landscaping plan.
3	Visual / aesthetic impact due to demolished buildings remains at beach front.	Installation of site hoarding at beach front. Hoarding must be of solid materials to both prevent easy public access to site from the beach (site perimeter security) and well camouflaged to prevent aesthetic/ visual impact of hoardings from beach area. The hoarding must be built behind the beach vegetation buffer zone as to prevent maximum visual impact and maintain beach environment suitable for turtle activities.
4	Interference with turtle nesting activities. Noise and excessive lighting are conditions that affects turtle nesting activities. Reduction of turtle nesting activities is a reduction in turtle population growth in the region.	All demolishing works at coastal areas must be done noting Turtle Nesting events and mindful of Acoustics and Vibrations. Site Hoarding is a must. MCSS will be activated under SOP for any Turtle emergence and nests are to be carefully identified, photographed and data provided to MCSS. A vegetation buffer between the beach and villa area will be maintained as to provide sufficient conducive and protected turtle nesting zones for continuous turtle nesting and eggs hatching activities.

8.3.1.2 Reconstruction

	Negative Impacts	Mitigation Measures
1	Washing away or spillage of construction materials onto the beach and marine environment during heavy rain season.	Building materials shall be transported in appropriate proportion/ quantities depending on pace of construction to prevent accumulation of construction materials near coastline which may lead to beach and marine pollution in the event they are accidentally deposited to the beach environment by adverse weather conditions.

		Only Minor Wet works will be allowed subject to Engineer/Contractor needs
2	Generation of construction wastes including hazardous waste from hazardous substances to be used during construction. (Paints, varnishes, undercoats)	The contractor will set up a waste management plan, with appropriate and suitable waste receptacles areas. Conduct waste management awareness to site workers. All waste not recyclable should be disposed of on designated landfill as per land waste management protocols through an effective waste management contract.
3	Vegetation removal (tree felling) for the purpose of building two new beach villas south to existing beach villas and diverting of existing public beach access to closer proximity of wetland estuary.	The area is of tall casuarina tree dominant, for safety reasons most of the tall tree in close proximity to proposed villa will be removed and where appropriate native trees/ plants will be planted as part of final landscaping plan. Access to Public will not be denied but discreet security will ensure safe usage of beach frontage during construction period COVID 19 contact tracing may be required at Gate .

8.3.2 Hill Villas and Tennis court Zone

8.3.2.1 Demolition

	Negative Impacts	Mitigation Measures
1	Washing away of debris downhill potentially to marine/Wetlands environment in the event of heavy rain fall.	Installation of sediment trap at strategic location to trap any debris that may likely be washed away by run-off water to the downhill environment. These sediment traps or screens shall be periodically cleaned and debris /waste trapped shall be disposed-off accordingly. Drainage and Storm water Management plan to reflect in upgrading of required drainage sectors, additions of required culverts as well as the screen protection of existing drainage sumps to filter demolition and surface debris run off
2	Destabilization of surface rocks. Risk of rolling downhill and cause	Rock breaking and removal shall be kept to the minimum. Identification of surface rocks

	injuries to human working on site. Rock destabilization will also expose soft topsoil and cause land erosion. Land erosion will cause surface running water to trap sediments and convey them down to coastal areas thus polluting the beach area and wetland with red earth sediments / deposits.	with the potential to roll downhill and cause further damages shall be done. These rocks shall be preferably secured by building of small concrete retaining wall which blends into the existing environment or the manual removal if deemed high risk based on Engineers and Structural advice.
3	Minor enlargement of limited existing buggy roads to allow vehicles to access the villas for collection of debris from demolition works.	The majority of materials to and from site shall be transported through the back of house road leading all the way up to the water reservoir areas. From the back of house road, transportation of materials shall be done by use of smaller vehicles, example tractors or dumpers to minimize and prevent damages to existing vegetation and prevent unnecessary site clearing which can be an added impact to the environment. Use of cranes to lift and deposit debris from villas to vehicles can also be done to limit vehicle movement in sensitive areas of the site.

8.3.2.2 Reconstruction

Negative Impacts		Mitigation Measures
1	Rock breaking and piercing for erection of additional pillars	Rock breaking shall be limited to the minimum. Loose rocks shall be identified and secured with appropriate retaining techniques.
2	Removal, felling and pruning of some mostly exotic trees / vegetation, to allow space for erection of new pillars for villa extension.	Limited tree clearing shall be done to preserve natural beauty. Only trees that will fall in the new proposed extension footprint that will be removed or trimmed but this will also be done carefully as to keep site camouflaged from visual impact from ocean view. There will be no mass tree removal on hills and strict adherence to biodiversity guideline shall be maintained.
3	Destabilization of sloppy land environment causing high risk of land erosion.	No major excavation on land to be done. Villas will be erected on pillars as to prevent land destabilization and land erosion which may transport run-off debris and polluted run-off water with red soil sediments onto

		the beach and marine environment downstream.
4	Washing away of disturbed and exposed red soil downstream can cause pollution of wetland, thus eventually polluting the beach and marine environment.	Installation of construction screening to trap any debris or sediments that might be generated from the works on the hill side. The screening shall be periodically cleaned during construction period and any trapped wastes or debris removed and disposed of accordingly.

8.3.3 Wetland

8.3.3.1 Reclamation (Building of Buggy road network)

NOW Cancelled in Favor of Elevated Pillar Road

Negative Impacts		Mitigation Measures
1	Disturbance of existing wetland eco-system due to introduction of foreign materials into the wetland environment for reclamation purposes. Reclamation of wetland may result in sedimentation pollution of coastal line and marine environment.	NO RECLAMATION/BACKFILL to be allowed in Wetlands. All Pillar works shall be Pre Cast to avoid any wet works in Wetlands Periphery. Install sedimentation trap, desilt and unblock wetland outland as required by the contractor during construction. Both ECO and MCSS to be alerted for any Species relocation/ capture release programs as needed.
2	Disrupt and impact the existing Terrapin habitat. This may impact on breeding potential and nesting environment. Disruption of this species natural habitat will lead to population growth reduction and loss of this sensitive species.	Trap and relocate all terrapin in wetland by blocking sections of marsh into individual ponds with overflow pipes to allow continuous flow of wetland. Temporarily relocate terrapin into turtle house,. Wetland/marsh shall then be provided with sufficient time to settle to allow water clearance suitable for terrapin and other wetland species to safely survive before relocating them back into the wetland.
3	Reduction in the width of wetland which may increase risk of flooding during heavy rainfall and extreme high tides. This is minimal but given the length of the wetland it can cause harm if	Long Term potential for Re profiling / de-silting of wetland to increase depth to cater for maximum flow of water as the wetland width will slightly narrow during the proposed minor reclamation. This will minimize and prevent risk of flooding during heavy rainfall

	not properly managed.	and extreme high tide. Back Farm Zone together with Staff Accommodation zones are hydrologic low points and in need of raising and placement of proposed Culverts connections within the Storm water management plan
4	Loss of existing flora on the wetland banks (flora will have to be removed to gain access to the wetland edge for the purpose of reclamation. In most areas of the wetland banks the vegetation are of mixed-woodland type consisting of exotic and native plant species and doesn't not allow easy access to the wetland banks for cleaning and fauna monitoring.	Minimal removal of flora as the originally proposed wetland reclamation has been cancelled thus vegetation loss will be minimal which will also be rehabilitated by planting native wetland species as far as practicable in areas where flora loss has occur for the purpose of the minor proposed backfilling.
5	Disruption of existing wetland habitat and existing animal species breeding sites. Negative impact on species breeding sites definitely impacts on the protected species population growth rate which if not adequately protected may result into complete loss over time.	Work in wetland shall be done during the dry season which is from April to November where terrapin nesting and breeding activities are minimal. This will ensure continuous population growth of this highly sensitive species and prevent loss.
6	Affects the flow in wetland and cause stagnant water accumulation which may lead to aqua-pest breeding sites like mosquitoes which can cause transmission of deadly diseases like dengue fever.	Periodically desilt and unblock wetland at identified stagnant point to allow continuous flow thus eliminates the risk of insect/ pest breeding in stagnant water. Periodic monitoring of wetland will be done to ensure constant flow and circulation of wetland.
7	The original concept plan was to have island in wetland completely removed. This would have had a major catastrophic effect of the wetland biodiversity by significantly increasing water turbidity, increased sedimentation into wetland which would result in direct wetland biodiversity loss. Killing of terrapin and wetland fishes	The concept or removing the island has been declined and new proposed plan is to only perform exotic vegetation clearing of the island and rehabilitate the island with native vegetation species.

	would have been inevitable.	
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8.3.4 Construction of Kids club, Gym and Reception

Negative Impacts		Mitigation Measures
1	Significant vegetation loss / removal and tree felling will be required as to build the new proposed development on site. Main trees species in this area are Casuarina and Indian Almond. There is also an abandoned sugar-cane farm, which will also be removed including exotic creepers and abandoned flower nursery to allow space for the new proposed construction.	Tree and vegetation clearing will be done according to strict environmental guidelines. All major trees posing health and safety risk to the final development will be removed and replaced by native vegetation after construction as part of landscaping plan.
2	Pollution of wetland by construction wastes generated from the construction of the new amenities.	Provide and install sedimentation or waste trap alongside wetland where construction is to be done. Daily monitor waste management near wetland and ensure waste generated from construction at wetland areas are properly managed and disposed of appropriately without risk of pollution to wetland environment.
3	Spillage of construction hazardous substances (paints, varnishes) into the wetland causing wetland pollution and intoxication of wetland species.	Minimize the use of hazardous substances at wetland areas as much as possible. All construction chemicals to be used must be environment friendly and managed properly by competent persons as to prevent any possibility of spillage into wetland.

8.3.5 Common Impacts

Common Impacts for Demolition, Rebuilding and Building of New Amenities at Beach area, Hill area and Wetland.

Negative Impacts		Mitigation Measures
1	Dusts emission from concrete structures demolition activity settling and polluting beach and marine environment.	Demolition will not be done during heavy wind season to prevent propagation of dusts into neighbouring environment. Water sprays will be used as and when necessary to suppress dust emission on site

		as much as possible.
2	Excessive noise emission from drilling equipment and other plant that will be used to facilitate demolition activities.	Drilling equipment and other heavy equipment shall be selected taking into consideration, average permissible noise emission level which should comply with the Local environmental noise acceptable limit. Demolition shall be done strictly during day time. Mainly between 8-am – 5pm from Mondays to Saturdays and 8am-1pm on Sundays. Noise monitoring shall be conducted periodically to assess and monitor noise emission level and in the event that excessive noise level are detected according to set environmental noise emission level, appropriate noise attenuation actions will be taken to resolve the issue. This may be done by providing noise screening to equipment, substitution of noise emitting equipment and review of work process.
3	Environmental contamination with Sewerage residue from decommissioned sewerage networks which can cause transmission of bacterial infections and parasitic infections.	Decommissioned sewerage networks shall be disinfected, carefully removed and immediately disposed-off correctly to avoid contact with humans. Employees handling decommissioned sewerage infrastructure shall be well protected by wearing appropriate safety gears and well trained in bacterial contamination prevention.
4	Damages to existing endemic Takamaka Trees and other vegetation with high biodiversity value. (Coconut trees, palm trees and Indian Almond trees)	The takamaka trees and other native trees that might be damaged during the work process shall be protected with rubber tyre rings around the trunk to act as a cushion against unforeseen impact during work. Young trees that are able to be relocated will be relocated to nursery area and rehabilitated as part of landscaping plan.
5	Visual / aesthetic impact due to demolished buildings remains at beach front and hill areas.	The beachfront area should be properly hoarded with a strong green colour material that will provide camouflage of demolished building remains and at the same time provide perimeter security to members of the public accessing the beach area. Tree pruning and removal at hill villas will be done to a height that will provide enough natural screening from beach and ocean

		view.
6	Tree felling and de-vegetation by the use of heavy machinery.	As far as possible tree felling will be manually done to prevent excessive noise emission and prevent unwanted loss of protected vegetation.
7	Increased heavy traffic on the roads may lead to congestion and risk of vehicular incident.	Heavy traffic movement shall be limited to off-peak hours when mass community movement on the road is minimal. This will be generally between 8am-5pm Monday to Saturday and 8am-1.00pm on Sundays.
8	Noise emission nuisance from continuous heavy truck movement on site and operation of other heavy construction machinery.	Heavy machinery movement and operation shall be limited between 8am-5pm Mondays to Saturdays and 8am-1.00pm on Sundays. Periodic maintenance of these vehicles to ensure they perform in accordance to permissible noise emission exposure level.
9	Emission of fumes and hazardous exhaust gases into the atmosphere from operation of heavy plants and machinery.	All machinery to be used on site shall be in good working order, approved by relevant competent authority (Heavy vehicles to be approved by vehicle testing station). Periodic maintenance shall be done on all machinery to ensure optimum performance with less environmental impact. Replace or substitute any plant, vehicles or machinery that during the course of the work are identified to be emitting excessive amount of exhaust fumes into the environment.
10	Environmental fires due to hot works on site.	Minimize or prevent to the maximum naked flames and hot work on site on site. In the vent that hot will be required, implement a hot work permit system which will provide guides on how to safely conduct hot works including availability of fire fighting equipment and train employees on the correct usage. Design and implement a fire response plan, and train employees in its implementation with specific responsibilities. E.g: who will fight the fire and who will coordinate evacuation.
11	Generation of effluent and human wastes from construction employees sanitation activities.	Provide suitable sanitation and other welfare facilities for employees on site. Implement a sanitation management plan with cesspit emptier to back with

		emergency sewerage pumping if necessary. The latest plan is to not have workers stay in staff accommodation on site. Staff will be transported to the site every day and temporary ablution facilities will be provided.
12	Introduction of a significant amount of construction workers on site. This may cause conflicts with local residents and increase risk of environmental pollution from their domestic activities (food preparation and food waste management, sanitation management) interference with sensitive environmental aspects (turtle nests and endemic plants)	Conduct comprehensive environmental protection and preservation awareness to site employees. This shall include topic such as, waste management, social and cultural tradition of the Takamaka community, environmental protection and preservation techniques, sensitive environmental aspect of site and community (this shall include general behaviour of protected species present on site environment), sanitation management, dust emission control and noise control. Induction courses will be undertaken with every staff member that works on site.
13	Removal of surface laid power lines to villas	All power and telecommunication lines should be laid underground in protected utility corridors to avoid risk of electrical related incident (exposed damaged electrical cables may result in electric shock, electrocution and electrical fires) and visual impact.
14	Public access to beach.	Public will still be granted access to the beach as per local authority agreement. Public will have to access the beach through designated foot access which will be properly secured to prevent unauthorized access to demolition and construction site. Given that the entire site perimeter along the coastline and along the public access will be hoarded, public access to the site will be strictly prohibited. Site security will be available on site on a 24/7 basis to ensure no unauthorised entry to site.

CHAPTER 9: STAKEHOLDER ENGAGEMENT PROCESS

9.1 Introduction

There is a growing dissatisfaction by stakeholders around the world in general of being inadequately engaged in processes and decisions that affect their biophysical, social, cultural and economic environment.

Cheval Blanc Seychelles, Hill View Resort Development unequivocally adheres to the principle of public accountability throughout the project lifecycle. The initiation of a comprehensive public participation process that will ensure effective and adequate engagement of stakeholders, which will assist with the identification of issues of concern and contribute to possible solutions, is a vital component of our approach and it is critical to the success of the project.

The public participation process (PPP) forms a key component of the Class 1 (Scoping and EIA) process and has resulted in the identification of a number of issues.

The objectives of the PPP are outlined below, followed by a summary of the approach and issues raised to date.

9.2 Objectives of the stakeholder engagement process

The overall aim of the consultation process is to ensure that all stakeholders have adequate opportunity to provide input into the EIA process. More specifically the objectives of public consultation are to:

- Identify stakeholders and inform them about the proposed development of Cheval Blanc Hill View Resort Development, Seychelles;
- Provide stakeholders with the opportunity to identify issues and concerns associated with the proposed project; and
- Identify mitigation and management options to address potential environmental issues.
- Ensuring that all relevant and “silent” voices have been consulted and that such consultation is meaningful;

- Raising of awareness, educating and increasing the understanding of stakeholders;
- Ensuring that the public has access to documentation and information to make an informed input to the project;
- Identifying sources of information and the knowledge of local and other stakeholders;
- Assisting in the identification of key issues of concern that need to be considered and contribute to possible solutions;
- Ensuring transparency
- Ensuring greater credibility and legitimacy in decision-making process;
- Generating a sense of joint responsibility and ownership for the environment.

9.3 Approach and Methodology

The PPP was undertaken in accordance with the requirements for an EIA Class I as per the Environment Protection Act, 2016. The proposed approach and methodology are fully compliant with the guidelines for public participation as prescribed by the MEECC and also take cognisance of the latest Covid-19 protocols.

9.3.1 Stakeholders consulted during the Scoping and EIA phase

- Statutory bodies / Governmental stakeholders
- Public Stakeholders
- Abutting Neighbours
- Other

A list of all the statutory bodies or governmental organisations that participated is included in [Table 9-1](#) below.

A list of the stakeholders that participated in the engagements with the SIA team has been included in the SIA report. For purposes of duplication we did not include it in the main Public Participation Process document.

9.3.2 Methods of consultation with the stakeholders

- Public/ Open House Meetings

- Telephone Interviews
- Email Correspondence
- Focus Group Meetings
- Community Surveys
- Door-to-door interviews
- Government Scoping Meetings
- District level public consultations
- Community level consultations

9.3.3 Identification of Interested and Affected Parties

Various key stakeholders were identified to ensure that our engagement strategy is comprehensive and that all stakeholders are meaningfully engaged throughout the EIA process. The environmental regulatory authority, MEECC assisted with the statutory stakeholders and sent out invitations to them to participate in the Scoping Meeting and Site Visit. They also sent out all base documentation including the Master Plan to all statutory stakeholders.

9.3.4 Advertisements and Notifications

Advertisements were placed in the local newspapers as per the public participation requirements of the MEECC. A copy of these adverts has been attached in [Annexure P](#). There were also two broadcasts on the national television. Both news broadcasts made a very strong point on providing jobs during the demolition phase onwards and they also made mention of biodiversity and road safety. See below hyperlinks to the audioclips.

September 26th, 2020 7: p.m. News in English on SBC1

<http://media.sbc.sc/ftproot/Television/News/2020-09-26%20TV-7PM-News.mp4>

from 2:42 minutes to 4:14 minutes

September 26th, 2020 8: p.m. News in Creole on SBC1

<http://media.sbc.sc/ftproot/Television/News/2020-09-26%20TV-8PM-News.mp4>

from 2:30 minutes to 8:39 minutes

All other invitations or notifications to stakeholders to participate came directly from the MEECC.

9.4 Scoping meeting

The **Inception Meeting** (Zoom format) with the officialdom of the Ministry of Environment Energy and Climate Change (MEECC) took place on Tuesday 30 June 2020. This meeting was then followed up with the **Scoping Meeting** with the relevant statutory stakeholders which took place **on site** at the existing Banyan Tree Resort on 9 July 2020. The stakeholders were provided with an “**information pack**” on 6 July 2020 outlining the proposed project in order to prepare them for the meeting. The meeting was well attended, and various questions were raised.

9.5 Overview of stakeholders consulted

Due to the international travel restrictions as a result of the COVID-19 pandemic, the scoping meeting included a **Google Meet presentation** of the project by the project manager. The independent environmental consultants, DJEC was present on the digital platform and the local Environmental Consultant, Mr Ian Charlette facilitated the meeting at the venue. The presentation focussed on the areas proposed to be renovated and the areas for new constructions and extensions. A Questions and Answer session was held immediately after the formal presentation. The stakeholders were invited to provide comments in writing and complete the initial scoping comments form as well as the standard Scoping Verification Form. Minutes were recorded.

9.5.1 One-on-One Engagements

Various **one-on-one engagements**, telephonic interviews, email correspondence and door-to-door contact sessions were held by the appointed Socio-economic specialist which are reflected in their specialist report. The purpose of this exercise was to illicit comments from the local communities in the Takamaka District. See [Annexure S](#) for the SIA report.

9.5.2 Focus Group Meeting

Focus Group Meeting: A briefing meeting and site visit was held by the SIA specialist on 5 September 2020 with representatives from Non-Governmental Organisations (NGO's). Representatives from Preserve Seychelles, Leritaz Takamaka and Grand Police Citizens Initiative were present. Various comments were raised which are captured in [Table 9-1](#) below.

9.5.3 Public Meeting

Public Meeting: A public meeting was held on 12 September 2020 for the general public to attend. A total of 42 people attended the meeting. The Scoping Public Meeting was facilitated by an independent moderator and the full proceedings was recorded. The minute of the Public Meeting is attached (see [Annexure P](#)). A collage of photos is also appended to this report (see [Annexure S](#))

To date a total of 25 Scoping Verification Forms were received, 3 responses were received via email from Ms Mariette Esparon and Mr Domaine and Ms Lena Desaubin (x2), the rest of the issues were extracted from the Minutes of the Meetings held with Stakeholders during the Scoping Engagement Process.

[Table 9-1](#) provides a list of stakeholders consulted during the Scoping study for the project and comments received via the Scoping Verification Forms and e-mails. It does not include all the people already consulted as part of the door-to-door sessions and focus telephone sessions. These will be included in the SIA specialist report as well as the Issues Trail Table in this EIA document. The attendance register for the Public Meeting will include people that have been consulted because of their attendance at the public meeting. (see [Annexure P](#), with the contact tracing list of attendees)

Table 9-1: Overview of Stakeholders consulted for the Scoping Phase of the Project

Stakeholder	Name of person / representative	Scoping Verification Form		Annexure Reference
		Received	Date completed	

1	Leritaz Takamaka	Mr Michel Savy <i>(Chairperson)</i>	✓	02/09/2020	Annexure N
2	Family affairs Department	Gerald Kiwale <i>(Principal Research Officer)</i>	✓	02/09/2020	Annexure N
3	Local Government (Takamaka)	Delna Larue <i>DA</i>	✓	undated	Annexure N
4	Owner of Residence on the rocks	Karl Ammann	✓	20/08/2020	Annexure N
5	Marine Conservation Society Seychelles	Rabia Somers <i>Scientific Coordinator</i>	✓	02/09/2020	Annexure N
6	Climate Change Department	Cynthia Peton	✓	02/09/2020	Annexure N
7	Public Utilities Corporation, Electricity Division	Said Afif <i>Planning & Research Manager</i>	✓	26/08/2020	Annexure N
8		Mariette Esparon	✓	02/09/2020	Annexure N
9	Environment (EAPS)	Marie-Alise Rosette	✓	02/09/2020	Annexure N
10	Seychelles Fire and Rescue Services Agency	Terrence Arnephy <i>Station Officer</i>	✓	03/09/2020	Annexure N
11	Department of Risk and Disaster Management	Cliff Alissop	✓	10/07/2020	Annexure N
12	Water Resource Manager (PUC)	Ginnie Alexis <i>Water Resource Manager</i>	✓	02/09/2020	Annexure N
13	Department of Land	Claudia Marie <i>Project Officer</i>	✓	02/09/2020	Annexure N

	Transport				
14	Tourism Department	Amelie Desaubin <i>Policy Analyst</i>	✓	02/09/2020	Annexure N
15	Public Health Authority	Kevin Pompey <i>Public Health Officer</i>	✓	02/09/2020	Annexure N
16	SIB	Jeannette Lesperance <i>Senior Investment Analyst</i>	✓	19/08/2020	Annexure N
17	MEECC (Quality Standard).	Michelle Azemia	✓	19/08/2020	Annexure N
18	Biodiversity Conservation Section	Asley Pothin <i>Conservation Officer</i>	✓	04/09/2020	Annexure N
19	Grand Police Citizens Initiative	Sabrina Mancienne <i>Chairperson</i>	✓	05/09/2020	Annexure N
20	Preserve Seychelles	Julia Morin <i>Chairperson</i>	✓	07/09/2020	Annexure N
21	Leritaz Takamaka	Mariette Esparon	✓	Undated	Annexure O
22		Domaine Desaubin	✓	Undated and	Annexure O
23		Ms. Lena Desaubin		15/09/2020	
24		Elke Talma	✓	14/09/2020	Annexure N
25		Gary Souris	✓	12/09/2020	Annexure N
26	Southern Region Committee	Lena Desaubin	✓	21/09/2020	Annexure N

9.6 Approach and Methodology of SIA

The sections below describe the methodology and scope of the consultation process indicating the approach that was used to identify, evaluate and recommend mitigation measures for social impacts. The consultations sought to identify social economic activities within the project area, identify disadvantaged people such as women, elderly people, terminally ill and described their social and cultural characteristics.

Consultations with key stakeholders is a continuous process that was carried out throughout the ESIA process. During the study, stakeholder analysis was undertaken to identify Interested and Affected Parties (I&APs) to the project. Consultation was critical in enabling the understanding of the local conditions and socio-economic impacts and feasible mitigation measures. Consultations were carried out through:

- Government Scoping Meetings
- District level public consultations
- Community level consultations
- Telephone/email discussions

Consultations also engaged PAP's through a public district meeting held to sensitize people about the project, its potential benefits and negative impacts and obtain their views about the project including impact avoidance and mitigation opinions. This meeting was held on Saturday 12 September 2020 at the Takamaka District Administration.

Field surveys

Upon completion of the literary review, field work was undertaken in the area. Primary social data collection was undertaken on 24 August 2020 via a participatory approach, which included the collection of raw baseline demographic and socio-economic information via a drive through of the area as shown in [Table 9-2](#) below.

A transect drive allows for the visual observation of social infrastructure and community behaviour patterns in the area of impact.

Table 9-2 : Observational / Transect drive, raw socio-economic data

Takamaka	Count	Notes
Small retail shops	>3	Small shops that stock a range of everyday items such as groceries, snack foods, confectionery, soft drinks, tobacco products, toiletries, and newspapers
Supermarkets/Butchers	>1	Supermarket that sells a variety of other household products that are consumed regularly, such as alcohol (where permitted), medicine, and non-food products
School	1	Takamaka primary school which will soon have a daycare

Daycare Facilities	1	Soon to be moved to the Takamaka primary school
Factories	0	None observed in the area of influence
Primary Sector facilities	>2	Farms and fishing boats observed
Petrol Station	0	None observed in the area of influence
Tourist establishments	>5	Souvenir shops, restaurants, guest houses observed
Small-med businesses/ Self-catering establishments	>4	Small self-catering establishments observed
Primary Health Centre	1	Takamaka Primary Health Clinic
Police/Fire Department	1	The district is served by the Anse Boileau F&RS but has a Police Post (Quatre Bornes).
Closed tourism establishments	1	Ex-Banyan Tree Hotel
Home for Elderly	0	
Administrative Offices	1	The district is served by the Takamaka District Administration
Physical activities and sports facilities	2	Multipurpose court and a playing field close to the D.A
Religious sites	1	Takamaka Roman Catholic Church

The drive through allowed for a visual guide into the area, the businesses in operation as well as gaining insight into local economic opportunities and the availability of goods and services.

In order to disclose more detail of the project and obtain views of the community further, social impact assessment consultations were conducted within the identified area of impact. Scoping was carried out on two levels encompassing social infrastructure establishments such as the District Administration and Police Station and the households closest to the project site which were scoped individually. The aim of this scoping was to conduct interviews with communities and social infrastructure stakeholders identified and to ground truth information collected from secondary literature. A special focus group was also held with concerned NGOs on Saturday 05 September 2020. Minutes of this meeting was captured and is attached ([Annexure O](#)) to this report.

Conceptual consultation design

To understand the likely social impacts of a large project of this scale, it was important to collect views of households and stakeholders in communities to be affected. In particular, it was important to collect information relating to the following issues:

- The amount of information households and stakeholders within the project area currently had about the project?
- How important they thought the project was?
- What benefits they hoped the project might bring?
- What negative effects worried them?
- What suggestions they had about increasing positive benefits?
- What suggestions they had for mitigating negative effects?

Since the project could also have wider community impacts, such as creation of construction jobs, it was also important to understand what the broader community perspectives were in regard to the project.

Data reliability

It is assumed and largely expected that what people said about themselves, the Project and development prospects for their communities, was accurate. However, broader questions about possible bias and reliability were addressed as below:

Reliability of information collected depended primarily on the diversity of households interviewed and effort was made to ensure the overall population within the flood area were covered. Another potential source of bias is the time of day when interviews were conducted. In district areas, people are often busy during daylight hours at their workplaces or elsewhere. The people at home during this time are often preschool children, unemployed dependents, or elderly persons. To offset these problems, the scoping was conducted during weekends and after work hours when possible.

Assumptions and limitations

Major challenges came with the lack of identifying post codes and house numbers in the Seychelles, which made registering, tagging and surveying households difficult. The lack of online availability of data and records on a district level also rendered some research and surveying aspects challenging, especially around updated population numbers, housing and employment levels etc. Local knowledge and first-hand

information from the residents of Takamaka was employed to meet the gaps in data and any perceived limitations to the data.

The following assumptions and limitations were also relevant and worth noting briefly:

- The social environment constantly changes and adapts to change, and external factors outside the scope of the project can offset social changes, for example changes in local political leadership, environmental disasters or economic conditions. It is therefore difficult to predict all impacts to a high level of accuracy, although care has been taken to identify and address the most likely impacts in the most appropriate way for the current local context within the limitations. In addition, it is also important to manage social impacts for the life of the project, especially in the light of the changing social environment.
- Social impacts can be felt on an actual or perceptual level, and therefore it is not always straightforward to measure the impacts in a quantitative manner.
- Social impacts commence when the project enters the public domain. Some of these impacts will occur irrespective of whether the project continues or not, and other impacts have already started. These impacts are difficult to mitigate and some would require immediate action to minimise the risk.
- There are different groups with different interests in the community, and what one group may experience as a positive social impact, another group may experience as a negative impact. This duality will be pointed out in the impact assessment phase of the report.
- Social impacts are not site-specific, but take place in the communities surrounding the proposed development.
- The social impact assessment used the information and project description that was available at the time of the writing

Participant observation and photographic records

During field surveys, information obtained from household surveys and interviews on a district level and public meetings was corroborated through direct observation by the

study team. Photographic evidence was taken when consent was given by the participant. All participants were also requested to provide contact details for further updates and as proof of consultation (See Annexures to the SIA report in [Annexure S](#)).

9.7 Summary of Comments raised during PPP

- **Reclamation** – Based on the responses from the MEECC, the professional team members and the input from the different specialists, the proponent decided to not include any reclamation in the proposed development. This has been captured in the final Master Plan presented at the Scoping Public Meeting. Also see the section on the Alternatives (Chapter 2).
- **Social Investment Opportunities** – This aspect was highlighted by various stakeholders, public and private and it was captured in minutes of meetings and completed Scoping Verification forms. This issue was also highlighted in the notes from telephone interviews, door-to-door interviews and focus meetings and surveys conducted with key stakeholders. It included a whole host of aspects, e.g. job creation opportunities throughout the different phases (Demolition, Construction and operational phases), continuation of current initiatives that was in place with Banyan Tree Hotel, re-hiring of ex-Banyan tree Hotel Staff, etc.; potential off-set opportunities for locally produced products (fruit, vegetables, locally caught fish, etc.); beneficiation of the local communities in the Takamaka District; and many others. The proponent will endeavour to support local business as far as possible as well as maximising employment opportunities for local people of the Takamaka District first. This will have to happen in a coordinated and managed fashion to ensure that the quality of services offered is not compromised. For more detail see our responses to comments made in the Issues Trail Table ([Annexure P](#)) as well as the SIA Specialist Report.
- **Protecting the natural environment** – the sole purpose of the Environmental Impact Assessment is to determine all the potential environmental impacts, to assess each of these potential impacts and recommend mitigatory measures to minimise the potential impacts. As this is a very sensitive area numerous people were concerned about the potential impacts on the terrapins, sea

turtles, biodiversity loss, impacts on the fauna and flora, and many others. The project team decided to appoint a number of specialists to provide a comprehensive list of potential impacts, to assess these potential impacts and to provide the project team with recommendations of mitigatory measures to minimise these impacts. Each of the studies including the terms of references used by the specialists as well as their findings have been included in this draft EIA document to reflect the openness and transparency of the process followed to ensure a sustainable development with a balance between Social, Economics and Biophysical. We have responded to the specific comments received via the Scoping Verification Forms in the Issues Trail Table attached. Also see all the Specialist Study reports annexed ([Annexure S](#)) to this draft EIA for more detail on the issues identified as well as the recommended mitigatory measures. It would also be important to have a look at the Environmental Risk Assessment ([Annexure S](#)) related to all the potential risk after mitigation has been implemented.

- **Infrastructural Requirements** – A number of people were concerned about the infrastructural requirements for this development. Very important to note is that this is only a renovation and upgrading project and not a new project on virgin territory. There will thus not be any significant impacts on the infrastructural requirements as the end-product will not have a major impact on the existing system. The professional team is also working in close collaboration with the officials of the PUC to make sure that we are able to comply with all the legislative requirements for Water, Sewage, Electricity, Solid Waste, etc. The project engineers prepared Services reports which has been included in the draft EIA documentation for further scrutiny ([Annexure Q](#) and [Annexure T](#)).
- **Impact of Climate Change and Sea Level Rise** – This issue was raised by a number of stakeholders specifically related to the High Water Mark and potential impact in future. The proponent commissioned a Climate Change and Sea level Rise (CCSLR) study to determine its impact on the proposed development to ensure that it does not have a devastating impact in future.

For more detail see the Climate Change and Sea Level Rise study under [Annexure R](#).

- **Biodiversity Loss** – Numerous stakeholders including some statutory bodies wanted to know what the potential impact would be of this development, specifically the potential impact of the demolition activities on biodiversity loss. The specialists have done a detailed study to determine this impact and recommended certain mitigatory measures to minimise the impact on Biodiversity loss. See Biodiversity Specialist studies ([Annexure I](#)) for the main site as well as the demolition activities.
- **Public Access to the beach** – This was an issue that was again raised by numerous stakeholders. Detailed comments were provided in our responses to the issues captured in the annexed Issues Trail Table. The client acknowledged the situation of the access road as well as the parking and the lack of ablution facilities at the Public Beach area. The proponent committed to a contribution of \$25 000 towards the Public Ablution Facilities, but the authorities have to make a further financial contribution and the Takamaka District Authority must manage the ongoing upkeep and maintenance of the facility. The Public Access road will be upgraded and the parking area paved. For more information see the final Master Plan ([Annexure B](#)).
- **Demolition Application** – This was a major aspect that was discussed with the Ministry of Environment, Energy and Climate Change (MEECC) as it was on the critical path of the project programme in order to open the resort on the scheduled date in 2022. As the purpose of the demolition application was to show that the proponent has taken cognisance of all the potential negative impacts of the demolition activities and that there is no impact that cannot be adequately mitigated. It is for this reason why the proponent prepared and submitted a Demolition Application ([Annexure I](#)), an Environmental Management and Specifications Document ([Annexure J](#)) and lastly a Biodiversity, Wetland, Hydrology study ([Annexure I](#)) for the demolition activities. The proponent also appointed an Environmental Control Officer to

manage the demolition construction phase to ensure the environment is protected.

- **Architectural Style** – Some people wanted to know what informed the architectural style of the proposed development. Please see a report prepared by the architects to show how the proposed architectural style has been grounded in the local creole architectural style. See the attached report on Architectural Language ([Annexure U](#), Visual Assessment).
- **Health and Safety issues during Demolition** – This issue was raised by the Health and Safety department of the PUC. The developer will comply to these regulatory issues prior to commencement of the demolition phase. They also raised issues related to health and safety of the staff accommodation and the Sewage Treatment Works and did a site visit on 12 October 2020. All these aspects are covered in the Demolition Application and Approval ([Annexure I](#)) and Services Reports ([Annexures Q and T](#)).

9.8 Comments by Interested and Affected Parties (I&APs)

Comments received during engagement sessions with key stakeholder groupings have been captured and responded to in detail and are attached in [Annexure P](#), Issues Trail Table.. See [Annexure N](#) for Scoping Verification Forms and [Annexure O](#) for Minutes of Focus Group Meetings.

Table 9-3: Questions raised during the Scoping Phase

QUESTIONS / COMMENTS RAISED DURING SCOPING MEETING					
	Questions / Comments	Platform	Date	Response	Specialist Assessment
1	On which areas will there be construction on undeveloped land.	Scoping Meeting	9 July 2020	Construction on undeveloped land will be restricted to those areas indicated on the presentation i.e. the two new Hill Villas and the kid's club and gymnasium.	

2	What will the status be of the public access?			The public access will remain and be upgraded.	Social Impact Study
3	Will the existing Banyan Tree in front of the reception area remain?			The existing Banyan Tree will remain and two additional Banyan Trees will be planted.	Landscaping Plan Biodiversity Impact Study
4	What will the new name for the Resort be and why?			The new name will be Cheval Blanch Seychelles and it will have new operators.	
5	What will the architecture be like?			The design principles are to retain a sense of local and traditional core, intertwined with modern design principles.	Architectural Study
6	Will there be any benefits for the local community?			Yes, there will be, and it will be further elaborated and investigated during the EIA process and the Social Study. There will be amongst others, job creations, environmental protection and other environmental initiatives.	Social Impact Study
7	Can there be elaboration on the slide in the presentation dealing with rehabilitation			Rehabilitation will be done with the relevant specialist and landscape architect. Wetland rehabilitation will be done in close collaboration with the MEECC to ensure compliance.	Biodiversity Specialist Landscape Specialist Freshwater Specialist / Wetland
8	Are there any baseline studies done?			The site has been investigated on various levels and a number of baseline and specialist studies have been undertaken in the past. For	

				the proposed renovation and extension, the identified specialist studies will be undertaken as part of the EIA process.	
9	What will happen with the demolition waste?			Demolition waste will be divided in three categories: <ul style="list-style-type: none"> i) Re-usable - Items that can be re-utilised in development. Others can be put up for sale or collection. ii) Concrete material – used in appropriate areas e.g. foundations. iii) Balance of material – disposed of at an approved landfill site. 	Demolition BOQ Demolition Application including Method Statement Demolition Environmental Specifications
10	Has the waste been quantified?			The demolition bill of quantities is currently being drafted and will be included with the demolition application documentation. This information was provided to the MEECC as part of the Demolition Application.	Demolition BOQ
11	What consideration will be given to the nesting sea turtles?			Detailed investigations on the sea turtles has been undertaken and the intention is not to have a negative impact on the beach area where the	Faunal Specialist focussing on sea turtle's assessment

				turtle's nest. Various mitigatory measures have been recommended by the wetland specialist who worked in close collaboration with MCSS.	
12	What is the scheduled date for the demolition activities?			Demolition is planned for October 2020. Tender for the demolition works will go out in the coming week. The demolition is on the critical path in order for the Resort to open on the planned date. This will be finalised in conjunction with the MEECC.	Biodiversity, wetland and drainage Specialists
13	How long will the demolition activities be?			Demolition activities will take ±4 months.	
14	The demolition activities will coincide with the turtle nesting season which is in September.			Special precautionary measures will be put in place. The site will be bordered / cordoned and no movements or activities will be in close proximity of the nesting areas or on the beach. Turtle nesting areas will be marked off and secured. More detailed information is contained in the specialist studies.	Sea turtles' study in Fauna Specialist Report
15	Will the sustainable use of energy be employed?			Energy efficient measures will be explored and used where practical and relevant.	Energy saving measures
16	Where exactly will solar panels be installed?			The use of solar panels will be investigated and the position and located where possible, practical	Energy saving measures

				and efficient.	
17	Where will your water be sourced from?			A large portion of the water supply for the resort will be from desalinisation. There are currently two RO plants on the site which should be sufficient for water supply. More details will be provided in the EIA documentation. See Services Report.	Water saving measures
18	Is the intention to start with the demolition activities while still busy with the EIA process?			The intention is to start with the demolition as it is on the critical part for the resort to open on the planned date. All measures will be put in place to ensure proper demolition protocol is followed. A detailed Environmental Management Specification document, which will address all potential issues of concern to prevent/minimise/mitigate environmental impacts will be submitted together with a biodiversity study for the demolition areas and a Demolition Application will be submitted to the MEECC for consideration and decision-making. All of this will be done in close consultation with the MEECC to ensure all aspects have been covered.	Demolition Application with Method Statement Demolition BOQ Demolition Environmental Specifications (Management Plan) Biodiversity specialist study on the impact of demolition activities
19	How many rooms is intended with the proposed new resort?			There will be a reduction from 60 to 53 villas resulting in 71 rooms.	Department of Tourism approval

				Discussion on this is being done with the Seychelles Department of Tourism.	
20	How will excavation be executed knowing that there are two species of terrapins in the area?			All the necessary precautions will be taken to safeguard any sensitive or protected species. A wetland specialist will be appointed to assess and make recommendations or propose mitigatory measure to safeguard these species. For more detail see the Specialist study report.	Fauna study with focus on terrapins.
21	Concluding remark			The intention is to create one of the best resorts in the world, by being conscious of the environment and applying the “touching the earth lightly” principle.	
COMMENTS MADE DURING SITE VISIT					
	Comments/Questions	Platform	Date	Response	Specialist Assessment
22	Setback distance of proposed beach access from wetlands. The area is flooded during rainfall.	Site visit after scoping meeting	9 July 2020	Flooding has been taken into account. Please see final Master Plan.	Flood risk study Climate Change and impact of Sea Level Rise Study
23	Drawings shown in the presentation lack some details, especially the dimensions of the infrastructures and distance to natural features such as wetland, high water			All this information is included in the updated Master Plan and more detail is available in the Biodiversity, Wetland and Climate Change and Sea Level Rise specialist studies. All these studies have been completed and	Design drawings detail

	mark, location of tree species, rocks and boulders.			the reports have been appended.	
24	The overlay or layers need to be properly defined or labelled so that there is clear distinction between existing and proposed infrastructures			The new Master Plan covered these aspects	Design drawings detail
25	Extent of reclamation has to be more specific suggesting that the dimensions and surface area has to indicated at the two locations where reclamation is being proposed			No reclamations will be allowed. Covered in the revised Master Plan which was presented at the Scoping Public Meeting.	Design drawings detail
26	Wetland area lacks information as the participants are unaware of the hydrology, biodiversity, water quality, etc.			More detailed information is contained in the EIA report	Freshwater and Wetland Assessment
27	The nesting peak period of sea turtles is from September till April, and they place their nests out all the way under the beach villas. The demolition work is therefore the very critical in terms of timing			All of this has been covered by the specialists and will be reflected in the EIA report	Sea turtle assessment as part of Fauna
28	The reclamation of the wetland area will involve excavation and other construction			More detail will be made available in the EIA report	Wetland Ecology Study

	activities, while all the species might have to be relocated temporary.				
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All comments received from the completed Scoping Verification Forms have been collated in an Issues Trail Table which is annexed to this draft EIA document. (See [Annexure P](#)). All of the Scoping Verification Forms have been appended to the draft EIA report as annexures. See [Annexure N](#).

9.9 Stakeholder Consultations by the SIA Specialist

This section speaks to the outcomes of the stakeholder consultation undertaken by the SIA specialist team. These aspects are elaborated on further in the SIA specialist study report ([Annexure S](#)).

9.9.1 National-level consultations – Ministry of Environment

Upon the request of the proponents for the Cheval Blanc development, a meeting was held on 4 September 2020 between representatives of the Ministry of Environment, Energy and Climate Change (MEECC) and the appointed environmental specialists and ECO officers for the project, ECO-SOL. A total of ten participants attended the meeting, including the Principal Secretary for the MEECC, members of the Conservation Section, the EIA Section, and CAMS.

Following a presentation by Mr Senaratne around the environmental surveys being conducted presently on the site, the participants raised concerns around the wetlands backfill proposal, the aesthetics of the villas, lighting around the gazebos and continuation of the environmental programs presently being conducted by the MCSS. It was further agreed the Client would provide the MEECC with a formal letter and outlined demolition plan requesting the start of the demolition phase of the project for the legal review of the MEECC.

9.9.2 National-level consultations – Non-Governmental Organizations

A site visit and briefing were held on 5 September 2020 between representatives of various non-governmental organizations (NGOs) and the appointed environmental

specialists and ECO officers for the project, ECO-SOL. A total of eight participants attended the meeting, including representatives from Preserve Seychelles, Leritaz Takamaka and Grand Police Citizens Initiative. Following a briefing by Mr Senaratne around the environmental surveys being conducted presently on the site, the participants raised concerns around the wetlands backfill proposal, the need for the use of renewable energy, and the continuation of the environmental programs presently being conducted by the MCSS, amongst others. After the brief Q& A session, the group split up into 3 buggy rides lead by Eco-Sol Field team to various project components such that they could see for themselves, first-hand the works required. A minute of this meeting is attached to the SIA report.

9.9.3 District-level consultations – Social Infrastructure Establishments

Consultations were conducted with community-based stakeholders to introduce the project, its potential benefits and impacts as well as addressing any concerns. These establishments included the District Administration, the Police Station, the Primary Health clinic and the souvenir stores/retail stores that dotted the main road. A total of eight social infrastructure establishments were scoped and their comments were recorded on the Scoping Forms as provided by the Ministry of Environment. Issues raised by these stakeholders are summarized in the box below and were mostly related to socio-economic conditions and environmental conservation. These issues are addressed in detail in the Safety and Risk Assessment Matrix.

9.9.4 Community-level consultations – Community and ex-Banyan Tree

employees

Door-to-door consultations and phone interviews were carried out with the residents of the district closest to the project site. Residents living along the access road were scoped on weekdays after work hours from 4pm onwards Ex-employees of Banyan Tree hotel were also contacted by phone to ascertain their present employment status and whether they were open to being re-hired under new management. Out of 34 ex-employees, 20 were randomly contacted from a list provided by the Banyan Tree Human Resources Department. All respondents expressed willingness to be re-hired under new management. Over 50 stakeholders were scoped during these exercises.

The Minutes of Meeting in the Annexed to the SIA Specialist report covers the feedback raised during the national level consultations. The table below outlines some of the key feedback received during the district level community scoping:

Table 9-4: Key Issues Raised from Consultations held by the SIA specialist team

Key Issues Raised from Consultations	Summary feedback
Project Feasibility and Viability	The majority of the stakeholders scoped noted the development was feasible and beneficial for the district of Takamaka. They pointed out the development should increase the possibility of employment for the district's population. The ex-employees of the Banyan Tree hotel were open to being re-hired under new management as many of them had had to find work outside of the district.
Possible impact on environment	Stakeholders made reference to the environment and ecology of the site and stressed the need to minimize the impact of the project on the environment, especially the site's wetlands. Some also recommended mitigating impacts of noise, traffic, dust and vibrations during the construction phase. Covered in the Environmental Management and Monitoring Programme.
Public access road to the beach	Stakeholders noted the present access road was not in a good condition and prone to flood. They welcomed the new access road that would come with parking and toilet facilities for the public.
Leisure / tourism impact:	Stakeholders with businesses in the area noted that tourism had trickled to a stop with not only the closure of the hotel but the pandemic. They expressed hope that the re-opening of the hotel would eventually rejuvenate business in the district.
Public Health impact	Primary Health stakeholders in the Primary health clinic noted their facilities would not cater for a large scale construction accident. With a doctor visiting twice a week and no ambulance on-site, they recommended the proponent consider having trained First Aiders and a Health Unit on site during construction. Having received cases of near-drowning events close to the property, they recommended the proponent place safety warning sign boards and ensure lifeguards are present.
Socio-economic ills	Some stakeholders, such as the police, noted that security would be required during the construction phase to deter theft. The police noted that they received beach theft reports from that area to a large extent. It was recommended that the proponent maintain a discreet security presence on the site

	during and after construction.
CSR and other initiatives	Most stakeholders, such as the souvenir store and the District Administrator, noted that Banyan Tree had maintained a healthy relationship with the district. It was recommended that the Client continue this existing relationship in the form of CSR and other initiatives that would prioritise the Takamasa residents, possibly through an MOU.

9.10 Comments received from the MEECC on the Scoping Report

The MEECC reviewed the Scoping Report and accepted it with a clear set of Terms of Reference (Chapter 3). The purpose of the terms of reference is to give an indication of what should be covered in the EIA phase and what level of detail is expected in the draft EIA documentation. It also gives a clear indication of the terms of references for the specialists that should be appointed to undertake certain specialist studies. These specialist studies will provide recommendations for mitigatory measures to be implemented and incorporated in the Environmental Management and Monitoring Programme.

9.11 Way Forward

This draft EIA report will be made available to the general public for their review and input. The availability of the document will be advertised by the MEECC and the public will have 14 days to comment. Once the comment period is over the EIA consultants will incorporate the comments received on this draft EIA and prepare the final EIA for submission to the MEECC for decision-making. Once they have concluded their review they will issue a Notice of Acceptance with certain conditions.

CHAPTER 10: EMMP

The Environmental Management and Monitoring Plan (EMMP) is as a tool used to minimise the impacts of the proposed development on the immediate and surrounding environment. Potential impacts or during construction may include such aspects as noise, dust, pollution, litter, traffic and safety and impacts on flora and fauna.

A number of specific management recommendations have been made in this document; however these should be used as a guide only. These recommendations and mitigatory measures proposed by the environmental practitioners, project team member, specialists and statutory bodies have been incorporated into the EMPP which is annexed to this document. It should be noted that other types of impacts are possible and that these should be identified during the activities at the site. The EMMP is a dynamic document that is updated with the availability of additional information. Additional mitigatory measures and procedures may be required, and these should be included on an ad hoc basis to improve the overall document.

Additional to the Environmental Management Specifications, the EMMP also include amongst others, the responsible parties, the communication structures on site, site clean-up and rehabilitation for the construction and operational phase as well as the mitigation and monitoring plan. Important to note in the EMMP is the Method Statements that is required prior to the undertaking of a specified activity that might have a negative impact on the environment. The proposed method statements are highlighted in the EMMP document but can be added on at the discretion of the Authorities, ECO or Resident Engineer.

It is recommended that a copy of the decision/notice of acceptance from the Ministry of Environment, Energy and Climate Change (MEECC), and the EMMP be included in the contract document during tender negotiations for the project. The contents of the EMMP should be made known to all parties involved at the site and a copy should be available on site at all times.

The broad objectives of the EMMP are to ensure that:

- all environmental safeguards are carried out correctly
- site activities are well-managed
- adverse impacts on the environment are minimised
- the biodiversity of the site is conserved or enhanced
- all relevant legislation is complied with, and
- the project is monitored for possible environmental impacts.

It is an open-ended or dynamic document implying that information gained during construction and monitoring of procedures on site could lead to changes in the specifications. The appointed ECO will ensure compliance with these specifications and other conditions as set out by the Authorities. These specifications give direction and guidance to all responsible parties. The responsible parties are expected to co-operate closely to minimise or avoid unnecessary environmental impacts.

The Contractor is obliged to inform the ECO immediately of events that may cause serious environmental damage or breach of the specifications. The ECO in turn will immediately inform the Engineer and Developer and, if necessary, the Authority, of such events. Jointly they will have to speedily resolve any challenges on site.

The EMMP is annexured to the EIA Report as it is a very comprehensive document and thus large in size with its own set of appendices. We are also of the opinion that the EMMP is a vital important document in the EIA process and should also be a “stand alone” document for ease of reference, physical and logistical handling and electronic transmission. For this reason the EMMP is annexed to the EIA Report as [Annexure Y](#).

CHAPTER 11: LEGISLATIVE FRAMEWORK

11.1 Introduction

The proponent of the proposed “Cheval Blanc Hill View Resort Development” are determined to adhere to the legislative and policy frameworks (statutes, policies, regulations, etc.) of the Seychelles.

This section of the draft EIA report examines the relevant legislation, and charters both locally and internationally, that are relevant to the setting of the proposed Cheval Blanc Hill View Resort Development on the ex-Banyan Tree Seychelles site. It provides a brief overview of the policy, legislative, and regulatory framework to which the proposed project should comply, key being the Environmental Protection Act (2016) and its associated regulations.

National Plans, Strategies and Regulations are discussed along the international conventions to which Seychelles is a party. In Seychelles, key legislations governing the conduct of EIA is the Environmental Protection Act (2016). The Act charges the Ministry of Environment, Energy and Climate Change (MEECC) with responsibility to ensure compliance with the prescribed EIA process in planning and execution of projects.

11.2 Plan and Policy Framework

11.2.1 The Environmental Management Plan of Seychelles (EMPS)

The EMPS documents extensive issues raised on thematic zones of the country being Environment, Economic, Social and Political Sector’s. This multi-disciplinary output has selected sustainable growth programmes that are cross cutting in several sectors of growth in the Seychelles today. By designing and fitting the project components to its site, by having surveyed an understood the baseline environment related impacts and by having provided practical mitigation measure, the project seeks to align itself to a sustainable model showcasing the ability to integrate into its environment and position the core components of circulation/roads around the natural eco system it is located within.

11.2.2 Seychelles Sustainable Development Strategy 2020

The overall objective of the EMPS 1990-2000 and EMPS 2000-2010, was to promote, coordinate and integrate sustainable development in Seychelles. The need to transform the EMPS into a strategy for national sustainable development is of importance and merit. This is particularly crucial as many of the issues tackled in the previous two EMPS's are closely linked to development and social issues. There is also the need to cater for the increasing complexity of ongoing and emerging environmental concerns and threats. The institutional dimension of the EMPS also needed to shift from being seen as exclusively an environmental matter to become a national matter of prime importance for the future prosperity and security of the people. The rationale for shifting from an environment plan to a Sustainable Development Strategy is derived from extensive multi-stakeholder consultations associated with the review of the EMPS 2000-2010, and consultations in preparation for this new plan. Sustainable development principles form a core part of the new strategic plan, which should be reflected in the vision and overall objective of the new strategy and plan.

11.2.3 National Wetland Conservation and Management Policy

The National Wetland Conservation and Management policy was developed with the intention to regulate the developments in and around the wetland areas and support EIA process through its classification system. The policy is presently under review to make it more fitting in dealing with the wetland related developments and regulations with the support of the new Environment Protection 2016 as well as the Protected Area Policy. Since 2004 the Seychelles has become member of the International Ramsar Convention on Wetlands and so far has declared three Ramsar sites of wetlands of international importance from Seychelles. Port Launay – Port Glaud coastal wetland areas, Mare Aux Cochons high altitude wetland areas, and Aldabra Atoll – a UNESCO World Heritage site as the third one.

11.3 Legal Framework and Regulatory Standards

11.3.1 Seychelles Constitution of the Third Republic (1993)

The Constitution of the Republic of Seychelles (approved on 18 June 1993, amended by Act No 14 of 1996) is the supreme law of Seychelles. Article 38 of the Constitution declares that *“The State recognizes the right of every person to live in and enjoy a clean, healthy and ecologically balanced environment and with a view to ensuring the effective realization of this right”*. The State undertakes:

- To take measures to promote the protection, preservation and improvement of the environment;
- To ensure a sustainable socio-economic development of Seychelles by a judicious use and management of the resources of Seychelles;
- To promote public awareness of the need to protect, preserve and improve the environment.

This policy is relevant to the project in that it requires the promoters to comply with the regulations set therein.

11.3.2 The Environment Protection Act of 2016 (EPA)

The Environment Protection Act (EPA) 2016 provides for the mandatory introduction of the formal Environmental Impact Assessment (EIA) procedures in Seychelles. The Impact Regulations under this Act were gazetted on May 1996.

The aim of the EPA is stated as being –

... to provide for the protection, improvement and preservation of the environment and for the prevention, control and abatement of environmental pollution.

In accordance with Clause 6(1) of the Environment Protection (Impact Assessment) Regulations, 1996, the Competent Authority undertakes the preparation of the Terms of Reference (ToR)² for the EIA. In accordance with established procedures, this is done on the basis of a scoping exercise, where the Proponent and the Proponent’s consultants, if applicable, first meets with the Competent Authority to discuss the project and identify the stakeholders to be consulted during the scoping

² EPA (Act 18 of 2016), Environment Protection (Impact Regulations) Regulations (S.I. 39 of 1996), Clause 6(1)

study. This is then followed by the scoping exercise where stakeholders are consulted on the issues that need to be taken into account in the EIA process.

Upon preparation of the EIA, public review of the EIA Report is required in accordance with Clause 8(1) of the Environment Protection (Impact Assessment) Regulations, 1996.

To apply for environmental authorisation, an EIA process that includes a Scoping Study and an EIA Phase must be undertaken to provide the authorities with information on the potential impacts associated with the proposed activity.

The Environment Protection (Impact Assessment) Act, 2016 also makes provision for appeal under regulation 10 (4) by any person against any decision issued by the relevant authorities³. In terms of the Regulations, appeals have to be lodged with the Minister within 30 days from the date receipt of the decision or order. An appeal shall be accompanied by a fee of Seychelles Rupee 250.

The proposed renovation and extension of the existing Banyan Tree Resort, Seychelles constitutes prescribed activities that requires authorisation as per Section 44 of EPA 2016. The development is consequently obligated, in terms of Act 18 of 2016 of the Environment Protection Act, to conform to the Environment Protection (Impact Assessment) Regulations. ATVANTAGE has appointed DJEC as independent consultants in collaboration with a local Environmental Consultants i.e. Mr Ian Charlette and EcoSol as the environmental specialists and Environmental Control Officer (ECO), to undertake the Class 1 EIA and ensure compliance to the relevant legal requirements. The regulatory authority responsible for evaluating the EIA is the Ministry of Environment, Energy and Climate Change (MEECC), Environment Assessment and Permit Section. Once all compliance aspects have been met, the MEECC will issue a Notification of Acceptance to the developer for the proposed Cheval Blanc Hill View Resort Development.

³ S.I. 39 of 1996, Section 11(1) and (2)

11.3.3 Environmental Impacts Assessment Regulations (2016)

The Environmental Impact Assessment Regulations 2016 (within the EIA Regulations 1996) governs the procedures for Environmental Impact Assessment in Seychelles prior to the commencement of any project or activity as prescribed in the Schedules of the Environmental Impact Assessment Regulations 1996. This law is administered by the Environmental Assessment and Permits Section of the Environment Department. The EAPS is responsible for the collection and assess data on the state of the environment and physical nature resources. It also supervises and provide assessment for projects or development that are likely to have an impact. It also undertakes appraisal of ad-hoc Environmental Impact Assessments and recommendations for the Town and Country Planning Authority, the Project Appraisal Committee and other government organizations. For any development, the Environment Department has developed a set of thirteen (13) guidelines that sets out preliminary environment assessment to be undertaken as assistance in project implementation that respects minimum environmental guidelines to ensure its environmental sustainability.

11.3.4 Effluent Discharge Quality Standards

Seychelles standards of effluent discharge are prescribed under the EPA 1994 (revised 2016), Environmental Protection (Standards) regulation and are relevant to the project that its effluent monitoring program is well established and capable of meeting all national standard set. Moreover, emergency and mitigation activities must be pre-scribed in the case of effluent or discharges not meeting the standard during operational testing. Standard Operating Procedure's (SOP) are to be integrated into the Construction Environmental Management Plan (C.E.M.P) as and when contractors for site are hired and official commissioning begins. The Ministry is mandated to also prevent, control or abate water pollution from natural causes or from abandoned works or projects or activities.

11.3.5 Noise and Ambient Air Quality Standards

Under the EPA the Noise Emission Standard and regulation, 1999 cover the limits of sound pressure in Db (A) that needs to be met at varying levels and hours of

construction. Extensive and prolonged noise with certain frequency can have detrimental effect on wildlife and human settlements. The projects location naturally acts as an absorption zone given that dense vegetation is a good damping agent of sound waves. However, the surrounding population need consideration and mitigation measure have been described to this effect. Moreover, the Environmental Monitoring Program to be run parallel to the construction phase ensures decibel recordings during construction phase allowing for maintaining acceptable levels of Noise Emission from site.

Suspended solids in air columns and gaseous emission are key contributor to reduction in localized air quality. Such issues are relevant to the project's construction of roads etc. Therein mitigation measure akin to site hoarding, watering and dust suppression techniques will be used. Moreover, careful timing of works for seasonal climatic conditions, shall allow the project to meet the attached standard being those adopted from WHO 2002 ambient air quality guidelines.

11.3.6 Environment Protection (Seychelles National Parks Authority) Order

These Regulations constitute the National Parks Authority as a body corporate. They also provide for internal matters of the Authority and define its functions. The agency, newly autonomous, regulates the felling and sale of commercial timber from State Land. It is to be noted that the SNPA is in the process of becoming an autonomous body once again in Seychelles.

11.3.7 Health Act, Cap 194

Under the Public Health Ordinance Chapter 194, strict regulatory frameworks are placed for the cleanliness, disease prevention and sanitation controls. It is geared to maintain and improve the public health of work force, surrounding human populations and immigrant work force while on the job. This is important for the Project given that it is understood that attention must be given to the role and responsibilities of health officers on site, the obligation of the promoter to ensure adequate measures are in place to prevent mosquito and vermin related diseases from entering or spreading outside the site confines, and to provide basic sanitary

and ventilation needs for temporary work force. Health and safety aspects are crucial and will have to be monitored at the staff accommodation during the demolition, construction and operational phases of the project.

11.3.8 The PUC Act & PUC supply regulations

This act provides for unlawful contamination of treated water by breakage or external entry. This is relevant in so much that PUC water is also being proposed for the development and thus onus is placed on project contractors in ensuring that MEP connectivity are strengthened against possible break in and contamination. One regulation is outlined below in brief:

11.3.8.1 PUC Sewerage regulations

The 1987 Regulation makes provision for controls and regulation permitting to sewerage connections outside the sewer network areas of greater Victoria and Beau Vallon. If private sewerage disposal units are owned project promoters are responsible in meeting all the requirements of the Public Utilities Corporation (PUC) for its implementation. Moreover, administrative clearances are needed by the Seychelles Bureau of Standards (SBS) and standard testing for its operational continuance at agreed frequency of sampling.

The functions of the Corporation shall be:

- (a) The supply of electricity;
- (b) The supply of water;
- (c) Provision of sewerage;
- (d) Such other functions as may be conferred on the Corporation by any other Act or by regulations made under this Act.

11.3.9 The Town and Country Planning Act, 1972

This Act provides for the control and planning of development and for the acquisition and disposal of land for planning purposes under the Lands Acquisition Act. The Town and Country Planning Act (TCPA) is responsible for controlling and issuing planning and building permits. Planning Authority permission is a legal document that allows a development to be carried out at a particular location. It is

issued only by the Planning Authority on receipt of an application for developments which are found not only to be acceptable but conform to all existing laws, policies or guidelines. In all cases, the Department for Environment (MEECC) becomes involved since they are custodian of the Environment Protection Act which also guides matters relating to development on land. An Environment Impact Assessment (EIA) Class 1 is required for the proposed CBS Hill View Resort developments as indicated by the MEECC prior to receipt of Planning permission.

When approval or Notice of Acceptance (NOA) is granted by the MEECC, the Notice of Acceptance with the conditions of approval is forwarded to the Planning Authority which then considers the Planning Submission of the same project. The environmental process will inform the planning process and the proponent must submit an application under the Town and Country Planning Act to the Planning Authority for all proposed land uses and rezoning requirements.

11.3.10 The National Parks and Nature Conservancy Act (1969)

Most of the relevant protected areas (National Parks and Special Reserves) have been set up under this Act and its associated regulations. It is the primary protected area legislation in the Seychelles and it regulates the establishment, management, use and development of the categories of protected areas. This Act establishes the National Parks and Nature Conservancy Commission as a body corporate. The Commission may, with the approval of the Minister, by Order published in the Official Gazette, designate any area as a National Park, a Strict Natural Reserve, a Special Reserve, or an Area of Outstanding Natural Beauty.

11.3.11 State Land and Rivers Act

The hydrology and flow regime on receiving environment is protected by the 1903 State land and rivers reserves whereby strict adherence to provision for protection of surface and sub-surface flows and rivers are prescribed. Development must maintain the required set back as well as provide mitigation measures for any possible sediment loading and contamination of these water sources during

construction. Moreover, there are regulations pertaining to the removal of only authorized tree species as per findings of the EIA.

11.3.12 Breadfruit and other Protected Trees Act

The act seeks to protect and conserve various commercial woody plant species and authorized felling of protected tree is supervised by permitting from department of Environment. This is of importance and relevance to the project as the tree removal and subsequent relocation and landscaping must be done in conformity to the national standards. As Mitigation measure rehabilitation and vegetation, management plans have been integrated into this document pertaining to the concept of biodiversity off setting as being a practical method for compensation of tree loss to road alignment or any of the buildings. A comprehensive biodiversity study was undertaken to ensure we make certain recommendations for mitigatory measures to be implemented wherever necessary. These measures will minimise biodiversity loss during the demolition, construction and operational phases of this development.

11.3.13 Wild Animals and Bird Protection Act (1961) - Chapter 247

This act prohibits the following:

- (a) Prohibit the shooting, killing or taking of any wild animal or bird;
- (b) Prohibit the purchase, sale or exhibition for sale of any wild animal or bird, or of any wild birds' eggs;
- (c) Prohibit the taking or destroying of, or tempering with, any wild birds' eggs or nest;
- (d) Prohibit the exportation of any wild bird or of the plumage or skin thereof;
- (e) Provide the contravention of or failure to comply with any regulations shall be an offence.

During the demolition and construction phase of the proposed CBS Hill View Resort development, the environmental control officer will undertake induction courses will all staff that enters the site. In the content of the presentation material, the

DO's and DON'T's will be communicated to ensure that everybody will strive to not have any further adverse impacts on the environment.

11.3.14 The Road Transport Act

This act along with priori amendment being in 2000 specifies the dimensions and weight of transports that can use public roads. The act also restricts the use of specified roads for particular time of the days giving specifications on speed, installations of traffic lights, traffic crossing and other legalities for road users. It also covers special vehicle categories more important for this project such as heavy transportation and associated axle loading and use of trailer, canes, excavators on public road and the need for authorization. This act is important to this project as the promoter will use public road to transport and haul all raw material and equipment to site and all this shall be done through the approvals of the Road Commissioner.

11.4 Applicable International Treaties and Charters

The Small islands state of Seychelles is an active member to a number of international treaties mainly focused towards the general social protection and enhancement of Seychelles pristine environment, biodiversity and overall natural asset protection. Listed below are some key international treaties that become relevant to the setting of this project.

11.4.1 The Nairobi Convention

The Nairobi Convention is a partnership between governments, civil society and the private sector, working within the Western Indian Ocean Region towards healthy rivers, coasts and oceans. The Convention offers a regional legal framework and coordinates the efforts of the member states to plan and develop programmes that strengthen their capacity to protect, manage and develop their coastal and marine environment.

11.4.2 Convention on Biological Diversity

This Convention on Biological Diversity (CBD) in which Seychelles has been a member since 1992, has as its main objective to develop strategies for the

conservation and sustainable use of biological diversity. This sits very well with this project as the proponent supports mechanism to be used to help support tree relocation and rehabilitation wherever possible. The CBD also covers aspects of species and genes and as such, the project again aligned itself by ensuring the protection and non-disturbance of key groupings of KBA species as per the detailed assessment and findings of the Vegetation and biodiversity studies.

11.4.3 United Nations Sustainable Development Goals

The Sustainable Development Goals (SDGs) are the blueprint to achieve a better and more sustainable future for all. They address the global challenges faced, including those related to poverty, inequality, climate, environmental degradation, prosperity, and peace and justice. The SDGs are part of Resolution 70/1 of the United Nations General Assembly: "Transforming our World: the 2030 Agenda for Sustainable Development."

It is thus important that we adhere to the above-mentioned international treaties and charters.

11.5 Institutional Arrangements

11.5.1 Ministry of Environment, Energy and Climate Change (MEECC)

The Environment Protection Act provides the Ministry of Environment, Energy and Climate Change as the principal agency responsible for coordination, monitoring and supervision of environmental conservation activities. Specifically, the Environmental Impact Section within the Ministry is mandated to oversee the conduct of EIA through issuance of the EIA guidelines, regulations and registration of practitioners. It reviews and approves environmental impact assessments through the issuance of a Notice of Approval (NOA).

The section also includes an enforcement branch that is are responsible for ensuring that promoters comply with the various environmental regulations and standards. The Ministry is linked to sectoral lead agencies that are charged with implementation of environmental programmes and integration of environmental

concerns in sectoral policies, laws, regulations and programs. Relevant agencies are considered stakeholders in the Project and will provide input during the process. For the purpose of this project, the EIA Section of the Ministry will review and approve the EIA prepared through a Notice of Approval.


11.5.2 Ministry of Habitat, Infrastructure and Land Transport, Infrastructure

Departments

The mission is to facilitate the national socio-economic development through sustainable and efficient use of land resources for habitat, economic, social and infrastructure needs through effective policy framework, regulations and provision of ancillary technical services to the clientele. The MHILT envisions having the necessary tools and framework to be a dynamic agent for promoting sustainable and responsible development of Seychelles.

The core functions of the Ministry of Land Use and Housing are:

- Management of all state land including Acquisitions, Sales and Leases;
- Implementation of Land Bank Project as per Capital Budget allocations;
- Administration of Immovable Property (Transfer Restriction) Act and the responsible for the processing of all applications for purchase or lease of an interest in Immovable property including corporate shares dealings;
- Responsible for land policy and land related legislation and timely review thereof;
- All survey related Infrastructure including cadastral surveys and registration to tiles;
- Developing the Geographic Information System (GIS) Centre of the Ministry and ensuring the efficient use of acquired digital data throughout Government with the set objective of improving performance and decision - Preparation of land Use Plans and Urban development guidelines;

- Responsible for housing and provision of decent and affordable shelter as per requirements of the Seychelles Constitution and Government housing policy;
 - Management of the land and Housing Application Database
- 

CHAPTER 12: CONCLUSION AND RECOMMENDATIONS

12.1 Recommendations

In light of the key findings of the EIA, the following general and specific recommendations are provided.

12.1.1 General Recommendations

Potential impacts associated with construction and maintenance activities should be minimised by the effective implementation of the Environmental Management and Monitoring Plan (EMMP) which should be incorporated into the civil tender and contract documentation. To give appropriate effect to the environmental controls, it is essential that the EMMP be enforced by an independent appropriately qualified Environmental Control Officer (ECO). See the Environmental Management and Monitoring Plan for the proposed development under [Annexure Y](#).

12.1.2 Specific Recommendations

Applicable mitigation measures are listed under each issue discussed in Chapters 7 and 8. These measures are transferred to the EMMP and should be implemented as appropriate to the authorised activity.

12.2 EAP Recommendation

Based on the findings of all the credible specialists who undertook their respective specialist studies and the professional opinion of the environmental assessment practitioners, it is concluded that if the recommendations and proposed mitigatory measures are implemented, the overall impact of this development is considered to be positive. This development has been reviewed by using the triple bottom line approach, which clearly shows that this is a sustainable development with a balance between the biodiversity, social and economic elements. The benefits that this proposed development contain in these crucial three spheres outweigh the negative impacts.

All mitigatory measures and recommendations proposed by the various specialists are considered achievable and should be included as conditions of approval. The

Environmental Management and Monitoring Plan should also form part of the conditions of approval.

It is thus concluded that based on the assessment of all the possible impacts that there are no negative impacts that cannot be adequately mitigated and that this development should be approved.

12.3 Conclusion

This Draft Environmental Impact Report is now being submitted to the Ministry of Environment Energy and Climate Change and the public for review and comment.

QUINTON TERHOVEN

Senior Environmental Scientist

DUDLEY JANEKE

Principal Environmental Scientist

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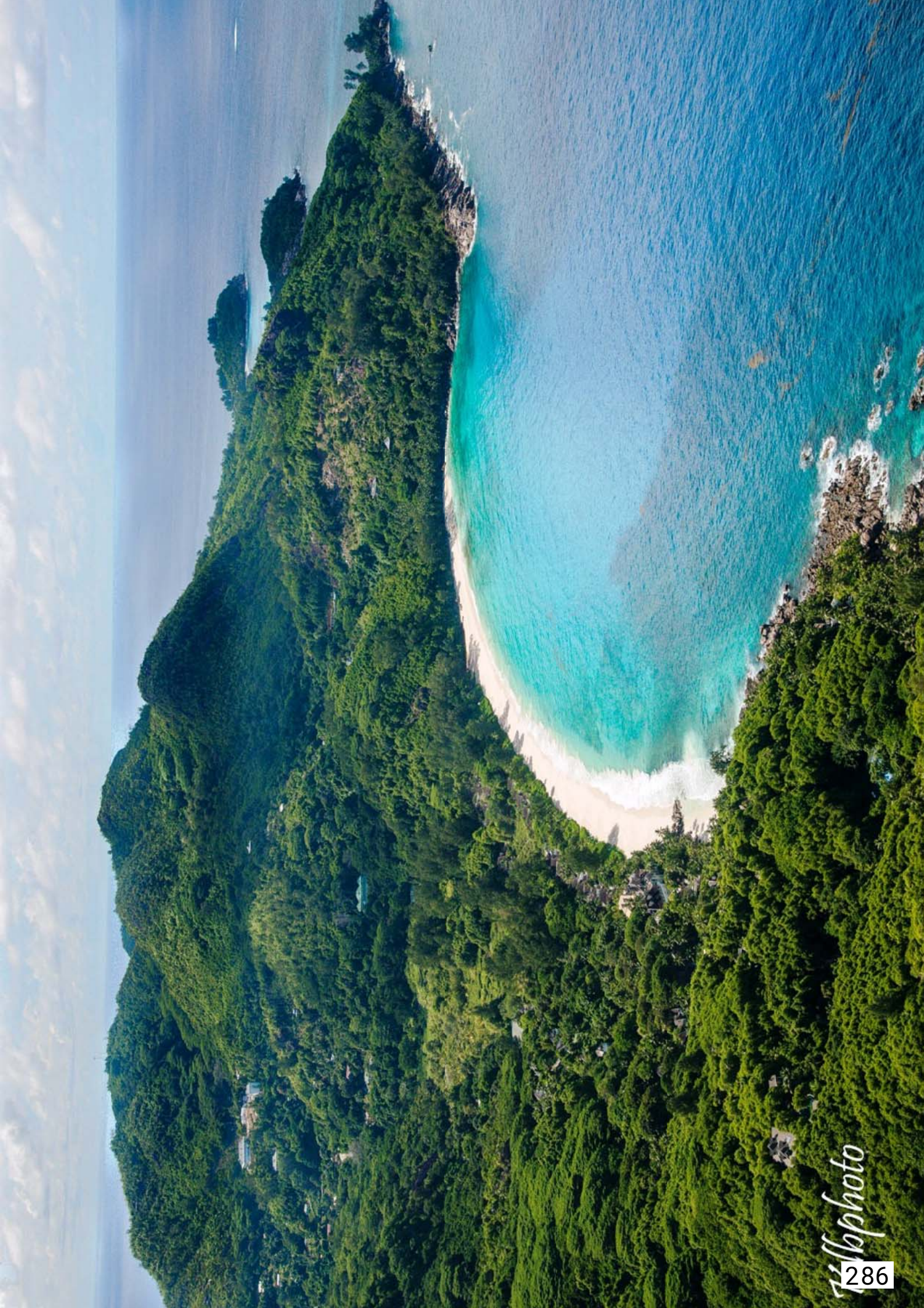
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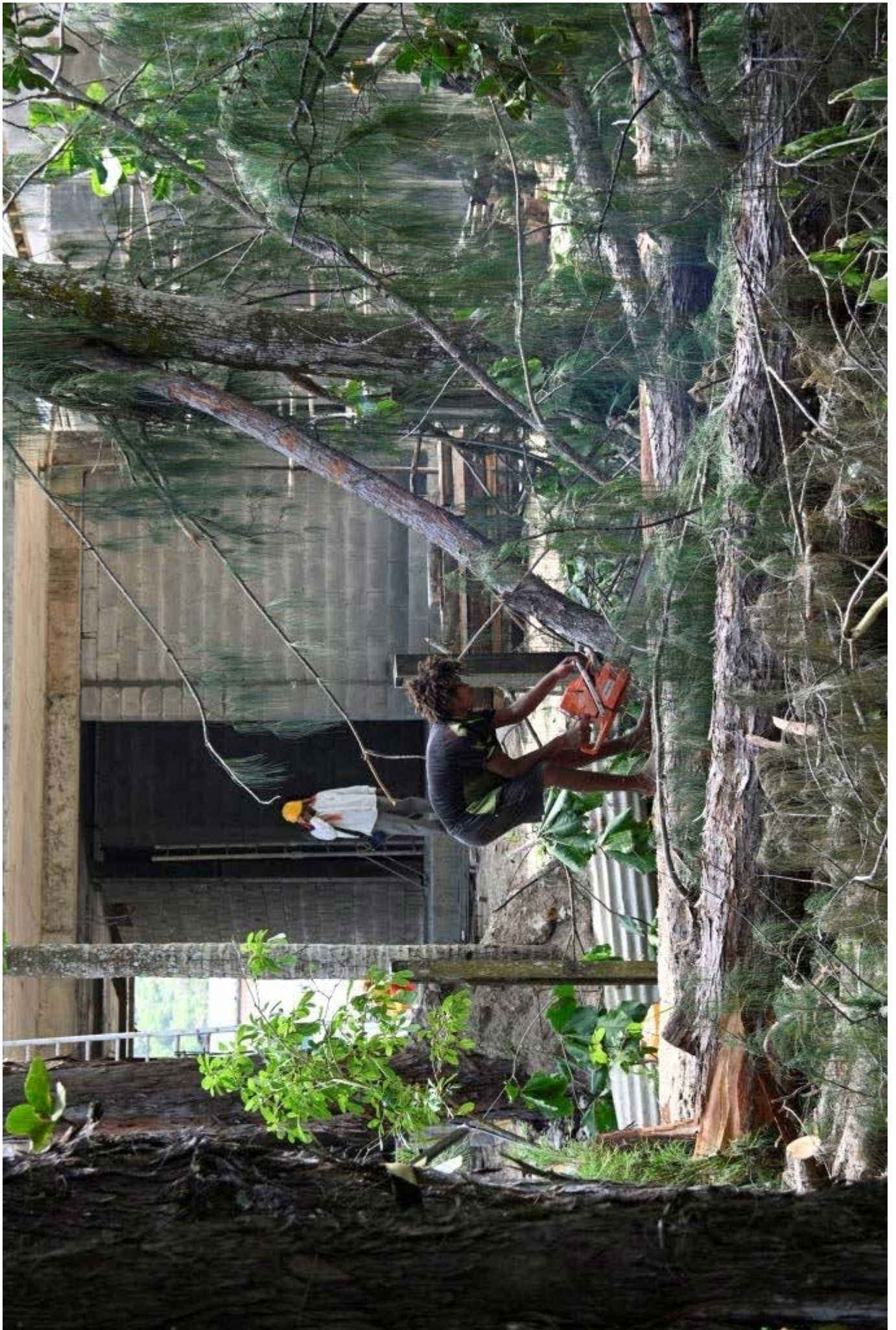
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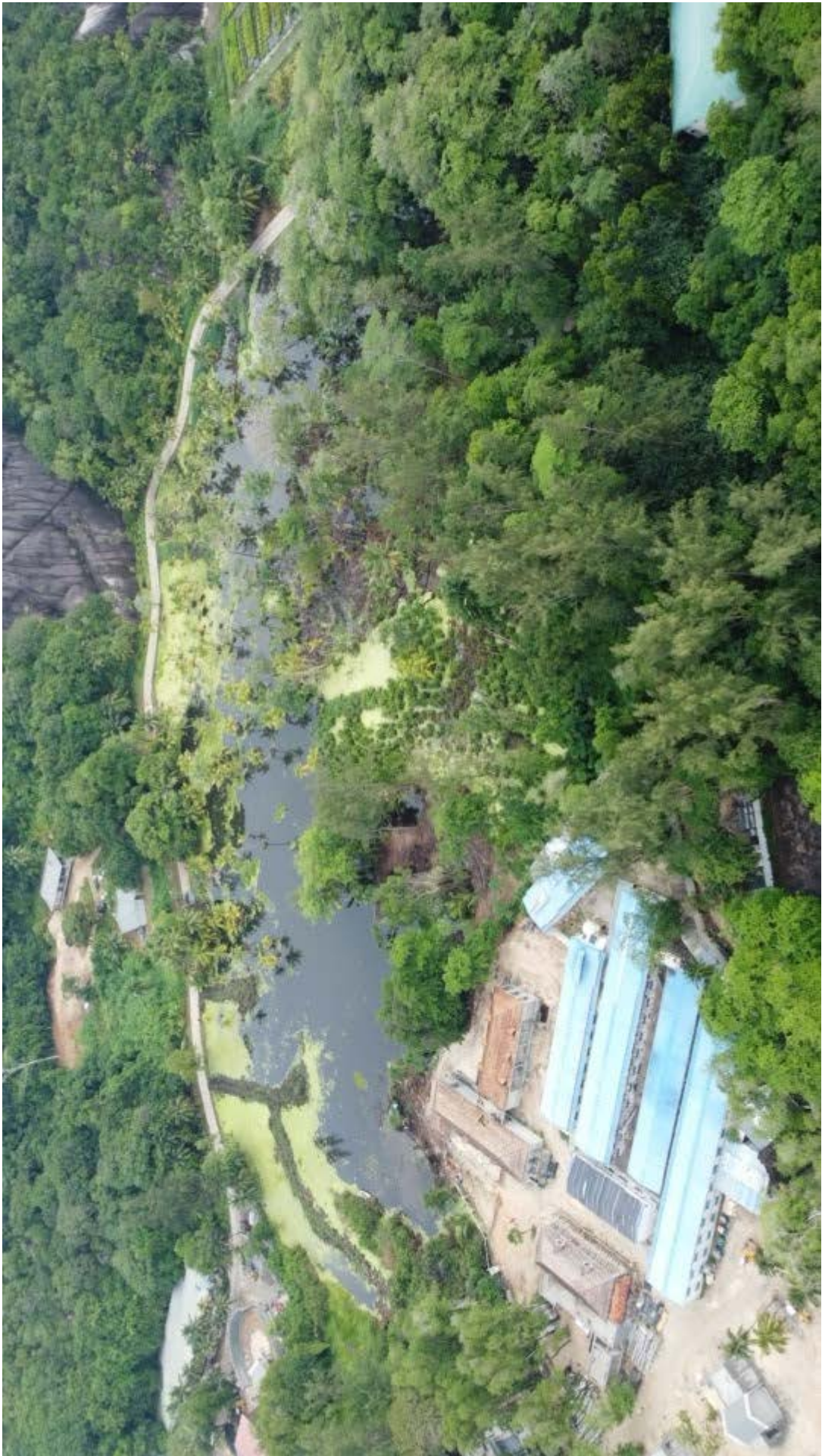












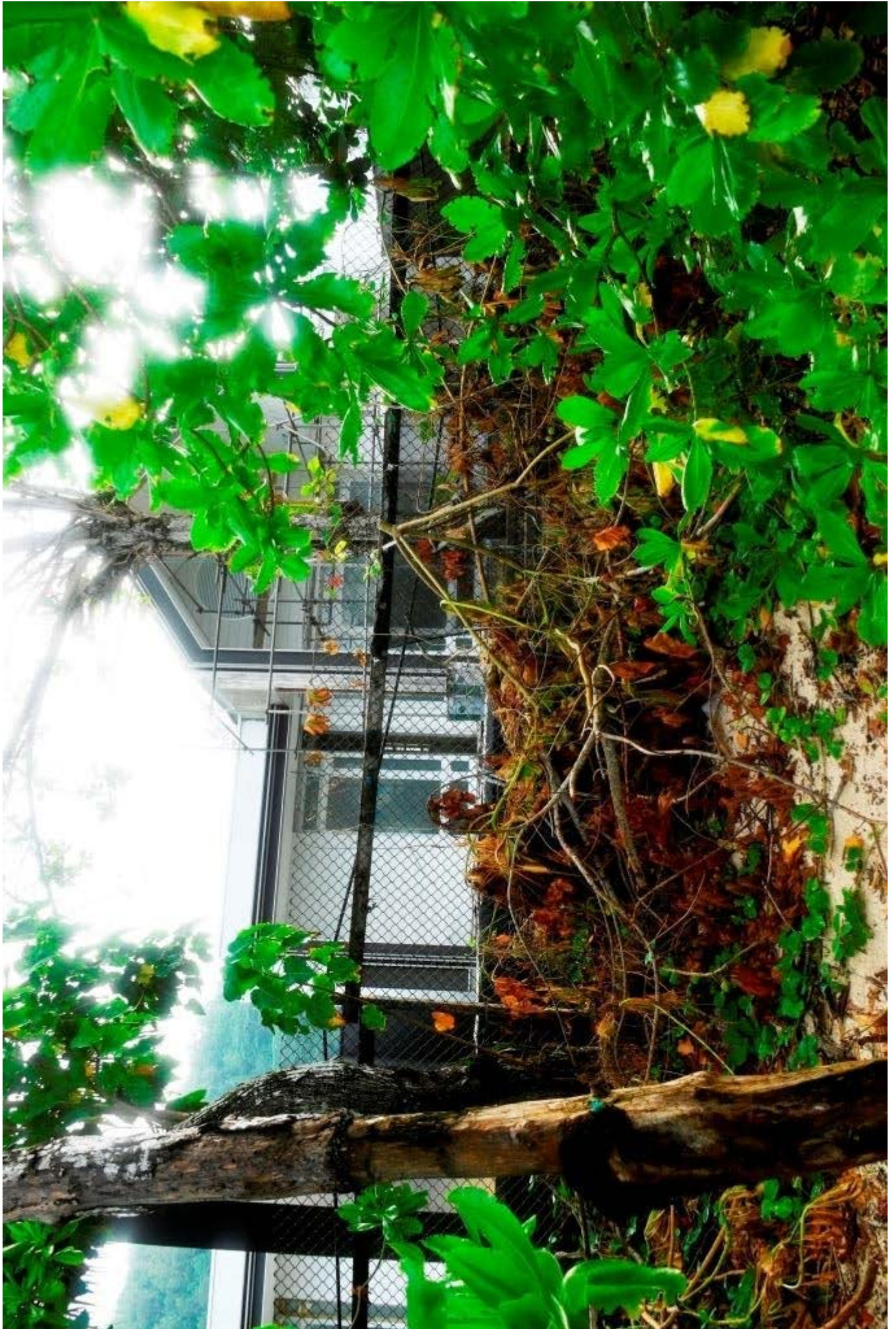




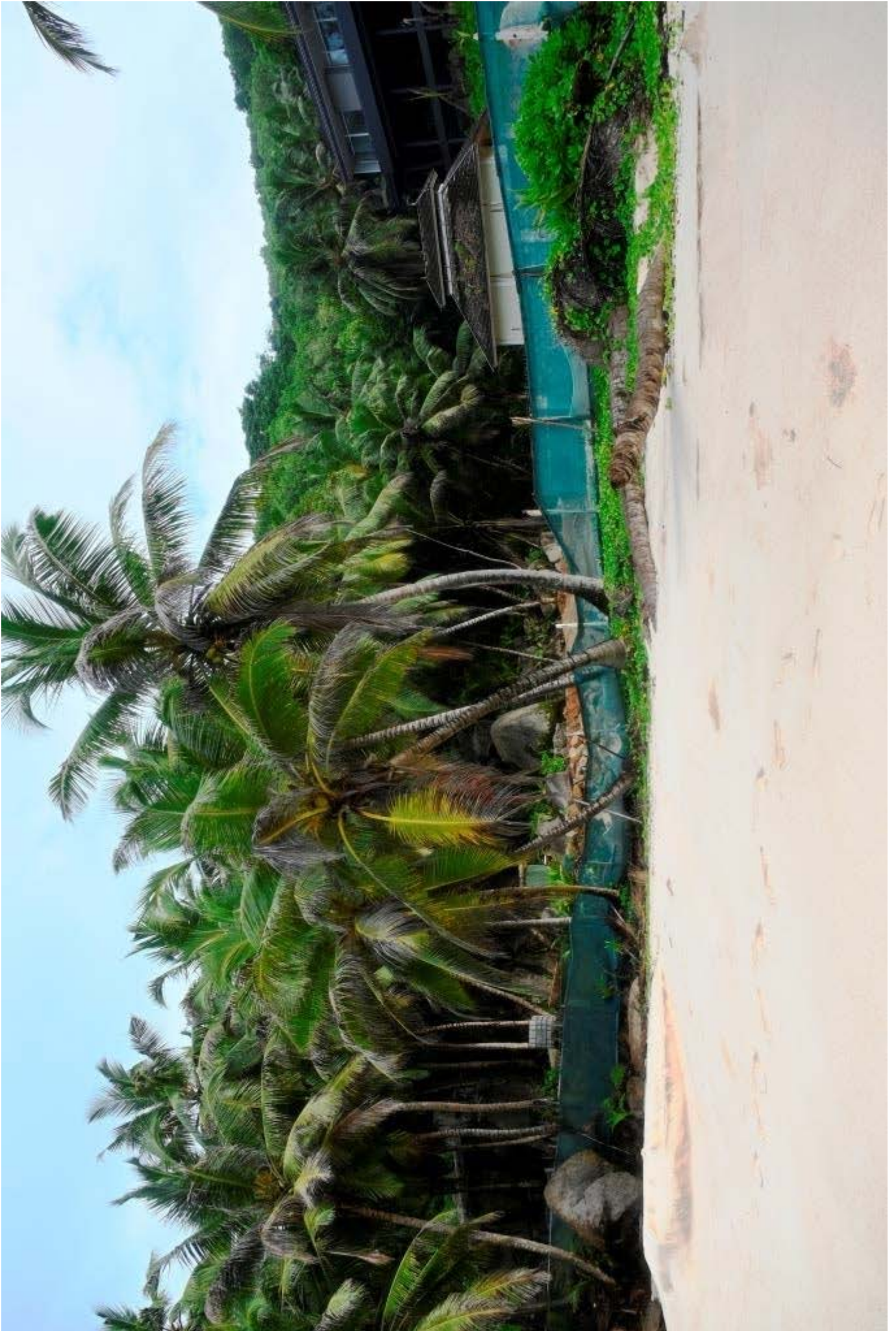








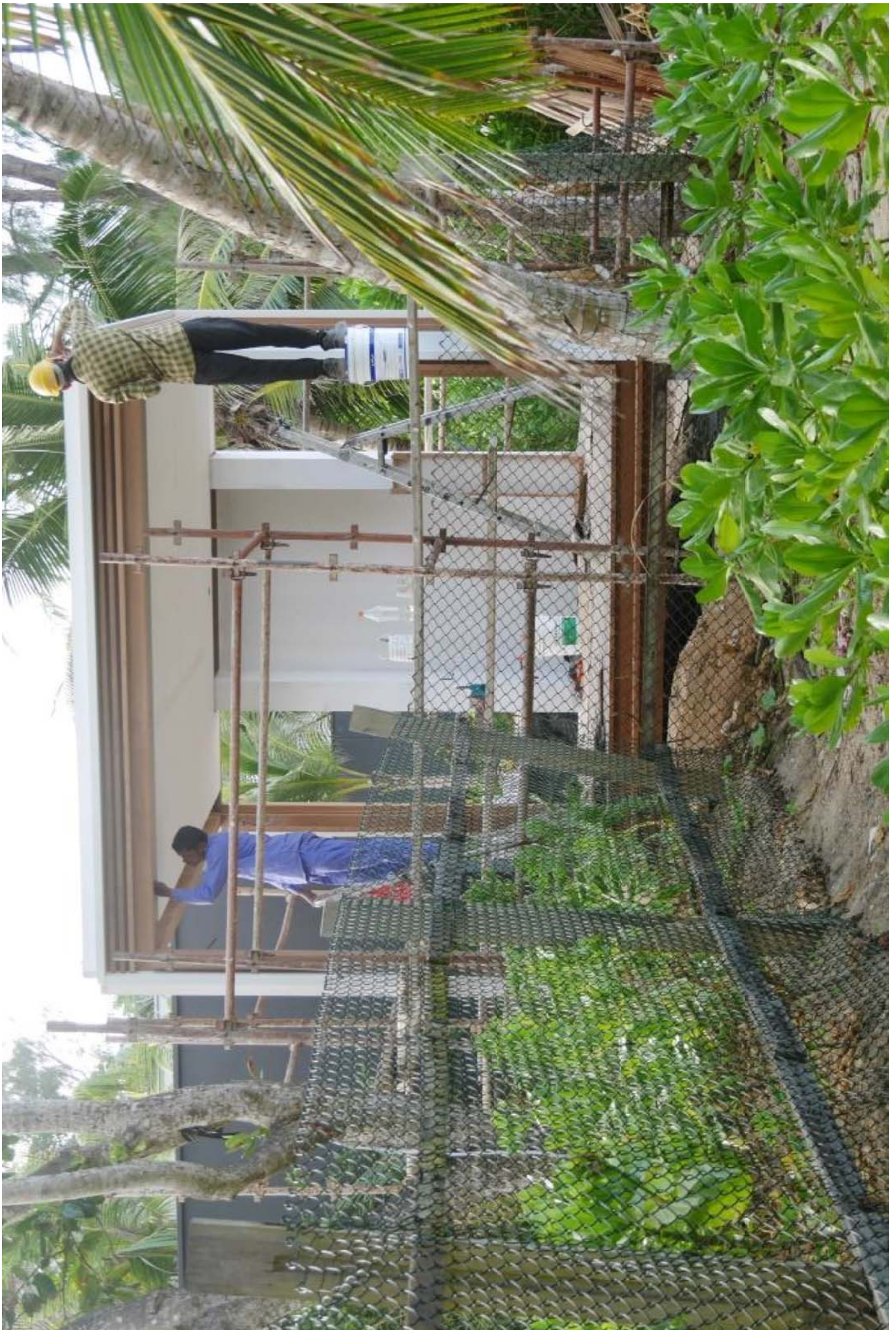






















HOWARD KENNEDY

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Avocats à la Cour
1 rue Paul Baudry
75008 Paris
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Our ref DB10/74047.3
Doc ref DB10/59169309.3

By email only: Eric.Lasry@bakermckenzie.com

Dear Baker & McKenzie

29 August 2023

Our Client: Karl Ammann
Re: Cheval Blanc Resort, Mahé, Seychelles

1. INTRODUCTION

- 1.1 We acknowledge your letter dated 5 August 2023 ("**Your Letter**"), written in response to our letter dated 4 July 2023 ("**Our Letter**").
- 1.2 Regrettably, Your Letter does not engage with Our Letter in a meaningful way. Your Clients appear to have instructed you to respond to only a few of the matters raised, and ignored some aspects of Our Letter entirely. Where you have addressed the concerns raised in Our Letter, your comments are superficial and lack substance.
- 1.3 Your Letter contains general and non-specific assurances, and your Clients have not provided supporting documentation in relation to several of the assertions made. Your Clients have also not provided adequate responses to our client's requests for further information and documentation set out in the Annex to Our Letter: indeed, you have provided an answer to only one of the 32 requests made.
- 1.4 Perhaps most disappointing for our client is your Clients' apparent reluctance to accept their legal and ethical responsibilities in relation to the concerns raised by our client.
- 1.5 In the interests of cooperation, and in view of your Clients' expressions of concern regarding the protection of wildlife and biodiversity, our client is prepared to give your Clients a further opportunity to respond to these issues. Our client expects to receive a full and detailed response to this letter, and one which properly engages with the serious matters raised.



2. ESG: YOUR CLIENTS' OBLIGATIONS AND RESPONSIBILITIES

- 2.1 Our client is very concerned by your Client's apparent attempt to distance itself from Hill View Resorts (Seychelles) Ltd ("**HVRSL**"), which your letter describes as the "Owner" of the Resort.
- 2.2 Specifically, you say in Your Letter that your Client "*is neither in charge of the redevelopment plan, nor in the capacity to give instructions to the Project Design and Works Team or the contractors working on site*"; and that your Client's "*role during the Works period is limited to providing general advisory services to the Owner to ensure that the Works are carried out and the Project is redeveloped in compliance with the Cheval Blanc technical and aesthetical standards*". We also note the penultimate paragraph of your letter, in which you suggest that we direct any further questions to HVRSL, which you say "*is effectively conducting the Works on site with its Project Design and Works Team and will therefore be better positioned to address them*".
- 2.3 It is entirely irrelevant to these exchanges that it is not LVMH or LVMH HM which owns the land on which the Resort is to be operated, nor is it significant, in this context, that LVMH is not itself carrying out the redevelopment works at the Resort. It is entirely normal for a brand company to provide products and services using subcontractors and using sites and facilities which are owned by others. Just as LVMH may lend its brand to luxury consumer products which it does not itself manufacture, it may also operate a hotel resort which it neither owns nor was directly responsible for building.
- 2.4 That is hardly to the point. The new Resort has been built to operate under the Cheval Blanc brand, by a company which is directed by standards imposed by your Clients. Even if we were not already aware of the fact, it is clear from a review of the Cheval Blanc website (a website which is, on its face, published by LVMH Hotel Management) that the various resorts operate under the LVMH brand. If one were to ask a guest at the resort when it is open, "whose hotel is this?", the answer would plainly be "Cheval Blanc" and not "HVRSL". Likewise, if the hotel pollutes the surrounding waters, the answer to the question "who is polluting the waters?" would be the same.
- 2.5 The hotel is being built to operate as a part of your Clients' business, and as a revenue source for your Clients, it is plainly within your Clients' responsibility to ensure that works at the Resort do not negatively impact the local environment and biodiversity. In the same way, LVMH should ensure that the manufacture and supply chain for its products conforms to acceptable ESG standards even if other companies carry out the actual work done in some parts of that chain.
- 2.6 It is notable that, in recent years, the LVMH brand has faced criticism for its lack of transparency in relation to its supply chains. For example, in 2021 advocacy group KnowTheChain published an Apparel and Footwear Benchmark Report, awarding LVMH an overall score of 19 out of 100 in relation to various criteria including traceability and supply chain transparency in the context of seeking to guard against forced labour and other concerns.¹
- 2.7 Your Letter only perpetuates this apparent disregard by LVMH for the consequences of its business activities, and the incompatibility between LVMH's purported position on ESG issues and the ongoing degradation of the environment in Mahé, as a result of the redevelopment works to create a hotel to be operated as part of the Cheval Blanc portfolio. We have identified

¹ https://knowthechain.org/company/lvmh_2021/

in Our Letter that LVMH has been increasingly vocal in its ostensible support for environmental issues, and in its discussion of how corporations may manage and promote these. We further note, for example, that in October 2020, as part of its Climate Week, LVMH held an online round table discussion event on the question, *Carbon offsetting: real change or greenwashing?*². LVMH personnel frequently appear in high profile publications discussing environmental issues; for example Christelle Capdupuy, Global Head of Sustainability, was recently interviewed for Vogue Germany.³

2.8 The applicable legislation and legal standards, addressed in Our Letter and below, reinforce the position that it is not acceptable for companies to pass their environmental obligations to subcontractors.

2.9 LEGISLATION AND LEGAL STANDARDS

2.10 Your Letter makes no attempt to address the applicable EU legislation which is outlined in Our Letter. It appears clear that LVMH (as a corporation based in France) has legal obligations in relation to the redevelopment of the Resort, which must be addressed.

2.11 We repeat our request for:

2.11.1 Any reports/assessments/studies which deal with the potential environmental damage as it relates or may relate to the legislation outlined at paragraph h 6.1.2 of Our Letter; and

2.11.2 Evidence of LVMH's compliance with the European Commission's proposal for the Corporate Sustainability Due Diligence Directive.

2.12 In Our Letter, we refer to the French Corporate Duty of Vigilance Law, as adopted by the French Parliament in 2017. As mentioned in Our Letter, this law establishes a legally binding obligation on parent companies to identify and prevent environmental impacts resulting from their own activities and also from activities of companies they control, and the activities of their affiliates and subcontractors.

2.13 You will be aware that the question of whose activities a parent company is responsible for is answered generously, and the French Government's observation before the Constitutional Court in Decision 2017-750 DC of 23 March 2017 was, "*The vigilance Plan should therefore include measures relating to subcontractors and suppliers involved in the production chain of the group concerned, either directly for the parent company or indirectly for one of its subsidiaries.*"

2.14 In light of the above, and in circumstances where the objective of a certain piece of legislation is to hold companies responsible for their ESG commitments, it is both legally and ethically inappropriate to assert that the development of the Resort in Seychelles has been conducted by HVRSL and on that basis to deny that LVMH has any responsibility for ensuring that local laws and regulations, including environmental standards, are being met during the development.

² <https://www.lvmh.com/news-documents/news/lvmh-climate-week-carbon-offsetting-real-change-or-greenwashing/>

³ <https://www-vogue-de.translate.goog/mode/artikel/louis-vuitton-modehaus-luxurioese-designs-nachhaltigkeit-interview-christelle-capdupuy? x tr sl=auto& x tr tl=en& x tr hl=en-US& x tr pto=wapp>

2.15 You acknowledge, at paragraphs 3 and 5 of Your Letter, that LVMH is acting as a consultant to HVRSL to ensure that the Resort is being developed in compliance with the Cheval Blanc technical and aesthetical standards. Your Clients accept therefore that they have a level of control over the development of the Resort. It is unsustainable for your Clients to deny that they bear responsibility for any breaches of environmental standards in the construction or operation of the Resort, in these circumstances.

2.16 We repeat our request for a copy of the vigilance plan that was prepared in compliance with the French Corporate Duty of Vigilance Law, insofar as it relates to or encompasses the activities of LVMH's company operating the Cheval Blanc resort.

3. **OTHER OUTSTANDING MATTERS**

3.1 Your Clients have chosen to ignore certain sections of Our Letter entirely. In particular, we note that:

3.1.1 You advance no comment at all in relation to section 4, in relation to the breach of conditions of transfer.

3.1.2 Similarly, you have not responded properly to section 5 of Our Letter, which deals with other breaches of Seychelles Law.

3.2 Although you address some of the concerns set out in Our Letter, you fail to provide a complete response and address the various facets of each request. It is notable that only certain points are dealt with, and it is difficult to understand your Clients' position in relation to various of the issues raised. Section 3 of Our Letter deals with breaches of local environmental law and the EIA: in response to this section (which runs to some three and half pages) you make only limited comments.

3.3 By way of example, you confirm that there has indeed been a reduction of the number of keys compared to the Banyan Tree Resort, which is queried at paragraph 3.2.1(a). However, you do not comment on our query at paragraph 3.2.1(c) about the effectiveness of this reduction in circumstances where the existing foundations have been expanded and additional floors added to villas and the main lodge.

3.4 Further, in relation to turtle nesting and the current condition of the wetlands, you make sweeping denials, asserting that turtle nesting has continued and that, contrary to Mr Ammann's concerns, the quality of the wetland has in fact seen a significant improvement. However, you provide no detail or evidence to support these assertions. In addition:

3.4.1 You fail to deal with the requests at paragraphs 21 and 23.1 of the Annex to Our Letter, relating to turtle nesting.

3.4.2 You make reference in Your Letter to the Wetland Rehabilitation Plan, however, you do not provide a copy of this (as requested at paragraph 14.3 of the Annex Our Letter).

3.5 While we do not intend to rehearse each of our requests here, we would request that you revisit the Annex to Our Letter, and now provide full responses to each of the requests made.

4. SPECIFIC ISSUES RAISED IN YOUR LETTER

- 4.1 We have considered the assertions and comments made in Your Letter. For ease of reference, we enclose a further version of Your Letter, with the paragraphs numbered in red text. We now make the below requests for further information and supporting documentation in relation to the points you raise.
- 4.2 At paragraph 7 of Your Letter, you say that LVMH HM has conducted a review of the situation. On the basis that this review was recorded in writing, please let us have a copy of the review. If it was not, please explain:
- 4.2.1 The persons (or at least the roles of the persons) who conducted the review;
 - 4.2.2 The objectives of the review;
 - 4.2.3 The documents considered;
 - 4.2.4 Whether site visits were undertaken;
 - 4.2.5 The outcomes and identified next steps.
- 4.3 In relation to paragraph 8 of Your Letter:
- 4.3.1 Please provide us with evidence, or at least further explain, the ways in which the environment was "*inadequately maintained and protected for several years*".
 - 4.3.2 Please also elaborate upon your comment that the "*poor condition of nature and the environment at the Resort, as illustrated by the invasive species that had been allowed to get out of control, required therefore a major rehabilitation*".
 - 4.3.3 Please also identify the parts of the EIA which deal with the asserted poor condition of the environment or evidence of inadequate maintenance.
- 4.4 Please explain the comments made at paragraph 9, which are not understood. That is, it does not follow that the asserted "*poor condition of nature and the environment at the Resort*" would or should necessitate enhancements in terms of "*scale and services*".
- 4.5 In relation to paragraph 10, please provide us with copies of the documents shared with you by HVRSL.
- 4.6 At paragraph 11 of Your Letter, you refer to the EIA which was "*initially drawn up on 18 November 2020 and subsequently accepted in the notice of acceptance dated 20 January 2021*". As requested at paragraph 12 of the Annex to Our Letter, please provide any further iterations, including the final version, of the EIA. Please also provide a copy of the notice of acceptance dated 20 January 2021.
- 4.7 By way of paragraph 12 you inform us that "*[t]he project for the redevelopment of the Resort was amended on various occasions to adapt it either to technical constraints which arose during the demolition and/or redevelopment process or to specific requests made by the local environmental authorities*". Please provide copies of these specific requests, along with the documents setting out the amendments to the redevelopment.

- 4.8 At paragraphs 13, 14 and 16, you refer to "our review". Please clarify whether this is the same review as that referred to in paragraph 7.
- 4.9 Further in relation to paragraph 13, please explain the basis on which you have concluded that the Works have been "*conducted in a manner consistent with the initial plan*", as amended. Please also provide copies of the initial plan and the subsequent variations submitted, and each of the approvals received from the local environmental authorities.
- 4.10 Paragraph 14 is striking in its brevity and generality. Please identify the relevant:
- 4.10.1 Local laws; and
- 4.10.2 Suggestions and/or recommendations issued by the local environmental authorities, and identify the ways in which the Works have been carried out in compliance with those.
- 4.11 In respect of paragraph 15, please let us have copies of the monthly reports generated at the on-site inspections and meetings.
- 4.12 In relation to paragraph 16 of Your Letter:
- 4.12.1 Please confirm the identity of the Environmental Control Officer mentioned at paragraph 16.
- 4.12.2 Please also confirm the reasons for the appointment of another Environmental Control Officer.
- 4.12.3 Please explain the basis on which you are able to say that, "*to the best of your knowledge*", the Environmental Control Officer has not reported "*any environmental breaches or damages caused to the environment or wildlife as a result of the Resort's redevelopment, nor any violation of the redevelopment plan*". Needless to say, our client does not agree that the redevelopment works have not caused damage to the environment or wildlife: on the contrary, it is clear that the redevelopment works are having a significant and detrimental impact on the local environment.
- 4.13 Please provide us with copies of any communications, reports or notes obtained from the Environmental Control Officer(s), and evidence of the recommendations made (referred to at paragraph 17).
- 4.14 Thank you for confirming that the Works involve a reduction of the number of keys as compared to the Banyan Tree resort (from 59 under the previous operator to 52 after the redevelopment of the Resort). It appears however that, despite a reduction in the number of keys, the number of rooms, and indeed the footprint of the villas, has in fact dramatically increased. As stated in paragraph 3.2.1(c) of Our Letter, the foundations of the existing villas have been expanded and additional floors have been added to the double room beach villas, the main lodge and the Owner's villa. Further, we are now instructed that the Presidential Villa has almost quadrupled in size since construction began, and the areas devoted to the beach villas and the Owner's villa have expanded significantly towards the beach, negatively impacting the vegetation buffer between the beach and villas. We request that you:
- 4.14.1 Confirm the room count of the redeveloped Resort;

- 4.14.2 Provide your comments on the apparent increased footprint of the Resort, including as to how the increased footprint can be reconciled with the stated "*renovation principle...to use the existing footprint of the resort and limit new buildings to the minimum*".⁴
- 4.15 At paragraph 19 of Your Letter, you advise that turtle nesting has continued throughout the redevelopment of the Resort and has been closely monitored, without any adverse impact being observed. Please provide copies of the monitoring logs and any reports produced.
- 4.16 At paragraph 20 of Your Letter, it is said that the wetland was in poor condition before the project started and the redevelopment has involved removal of invasive plants and trees. You also state that the removal of the invasive species constitutes a significant improvement of the wetland. This is contrary to our client's observations: paragraph 3.2.4(b) and (c) of Our Letter refers. Please let us have:
- 4.16.1 evidence of the asserted poor condition of the wetland prior to the works;
- 4.16.2 details of the remedial steps that have been taken and their result;
- 4.16.3 a copy of the Addendum to the EIA that was submitted;
- 4.16.4 a copy of the approval of the local authorities; and
- 4.16.5 if different, a copy of the Wetland Rehabilitation Plan and the Wetland Rehabilitation Plan Approval.
- 4.17 Thank you for the detail provided in relation to the trees on site and the overarching methodology applied by HVRSL. At paragraph 21-26, you discuss tree felling at the site and confirm that all trees have been felled pursuant to relevant permits. Please provide:
- 4.17.1 A copy of the Statutory Approval Process referred to at paragraph 22;
- 4.17.2 Copies of the approvals which have been secured by HVRSL, referred to at paragraph 22;
- 4.17.3 Copies of all tree felling applications submitted to the Forestry Department, along with copies of the relevant Approved Planning Applications for each specific building, referred to at paragraph 24;
- 4.17.4 A list of the protected trees which have been removed, along with confirmation of the number of the protected trees which have been removed;
- 4.17.5 Details of additional trees which have been introduced for biodiversity purposes (paragraph 25 refers);
- 4.17.6 copies of all permits obtained for tree felling.

⁴ See the Executive Summary at page 16 of the draft EIA

4.18 We would urge your Clients to acknowledge the seriousness of this matter and to provide a more comprehensive response to the issues raised.

5. **CONCLUSION**

5.1 As previously indicated, Mr Ammann is ready, willing and able to invest in a significant campaign of legal action and awareness-raising to bring his concerns to the attention of the relevant authorities and the public. Mr Ammann has a reputation and profile as a leader in the world of environmental protection, and we would imagine that LVMH would be concerned to give the issues raised by our client due attention and to respond to his queries in a considered and meaningful manner.

5.2 Mr Ammann is committed to pursuing this matter as necessary, and has instructed an expert in the field to prepare a report in relation to the redevelopment works and their impact on the local environment and biodiversity.

5.3 In the meantime, we request that your Clients provide a substantive response within 21 days of the date of this letter, that is by 19 September 2023. In the absence of an adequate response, Mr Ammann will consider taking further steps in Seychelles or elsewhere without further reference to LVMH, and his legal rights in this respect are reserved.

We look forward to hearing from you.

Yours faithfully

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By email only: Eric.Lasry@bakermckenzie.com

Dear Baker & McKenzie

22 November 2023

Our client: Karl Ammann
Re: Cheval Blanc Resort, Mahé, Seychelles

1. RECENT CORRESPONDENCE

- 1.1 We are in receipt of your letter dated 5 October 2023.
- 1.2 We do not understand, or accept, your "surprise" at the contents of letter of 29 August 2023. Your letter of 5 August 2023 failed to engage with the issues raised in any meaningful way, and it was entirely appropriate for us to point that out. Of the various requests made, your Clients have sought to cherry-pick a handful of issues, in response to which your Clients offer substantive comment, whilst ignoring the balance.
- 1.3 Your comments in relation to the LCIA arbitration proceedings against HVRSL have no place in this dialogue. As we explained in our initial letter dated 4 July 2023, our client brought those proceedings in order to enforce his rights under the agreements with HVRSL, and to compel HVRSL to provide services to the Residence. Those proceedings were for a separate and discrete purpose, and there would be no reason for our client to request the information and documentation now sought in the context of that arbitration. We would also remark that, as you, your Clients and HVRSL ought to be aware, the details of that arbitration are confidential between the parties to it.
- 1.4 To be clear, our client has made no threats, nor has he made any attempt to intimidate the LVMH Group. Our client has put a number of legitimate concerns to you which your Clients have failed to answer. It is entirely appropriate that these concerns are addressed to your clients in their capacity as operator of the Resort.



1.5 We do not understand your comment that our client has in some way attempted to "tarnish [your Clients'] reputation by any means possible in a manner which seems to reveal a rationale not solely motivated by [our client's] general interest for the environment". This does not accord with comments previously made, by way of your letter dated 5 August 2023, that you "understand that Mr Ammann is genuinely concerned by the environment and especially the preservation of biodiversity and resources on the island where his villa and the Resort are located". Our client is a proven, celebrated and committed conservationist and wildlife crime investigator who has devoted much of his life to campaigning for ecological issues. It is groundless to suggest that he has anything other than real and legitimate concern about LVMH's disregard for the environmental damage and delinquency being exhibited in the construction of its Cheval Blanc resort.

2. ESG AND SUPPLY CHAIN SUSTAINABILITY

2.1 We note that your Clients persist in their attempts to absolve themselves of responsibility for the continuing destruction of the environment and biodiversity occurring as a direct consequence of the redevelopment works. You say that your Clients "are not the owners, nor in charge of performing or even supervising the works being carried out at the Resort which is owned and operated by [HVRSL]".

2.2 We have acknowledged that your Clients are not the owners of the Resort. That is irrelevant to the legitimate environmental concerns that arise. Your Client's attempt to rely on the legal ownership of the site, and the identity of the building contractor, shows a total disregard for supply chain sustainability and your Client's environmental impact. As we have pointed out, your Clients are eager to use their apparent ESG credentials to promote their business in a market which is increasingly sensitive to such matters. However, LVMH appears unwilling to address such matters in practice, even where they clearly have the power to do so. It is notable that LVMH has (and has had for c. 5 months now) its own executive staff in situ.

2.3 It is not an adequate response for your Client to suggest that our client "have direct exchanges with the Owner", or to offer to facilitate a meeting with the Owner. This represents nothing more than an attempt to disassociate LVMH from the environmental consequences of the development of the resort, from which LVMH will go on to profit directly. In any case, and as you have alluded to in your letter of 29 August 2023, there have been previous dealing between Mr Ammann and the Owner on separate matters. However, our client's attempts to meet with the Owner to discuss matters or resolve issues have consistently been ignored or resisted. Our client has also attempted to engage with your Clients, in a constructive manner, to discuss these issues. By way of our initial letter dated 4 July 2023, our client offered to meet with your Clients in an effort to find an amicable solution; this proposal has been ignored. Given the issues at hand, our client had anticipated that LVMH would be eager to take action in order to rectify the ongoing damage, especially in view of its public commitment to protecting the environment. It appears however that environmental concerns are not in fact a priority for your Clients, which is surprising, especially in view of the recent developments in environmental law. You may be aware, for example, that EU co-legislators have very recently finalised elements of the revised EU Environmental Crime Directive. The revisions to the Directive extend the list of offences which are considered to be the most severe environmental crimes, and which are punishable by higher sanctions.

2.4 Mr Ammann's approach to LVMH was an attempt to make LVMH aware, to the extent that it was not, of what was occurring "on the ground", and to offer to work with LVMH to rectify these issues. Indeed, LVMH was informed of the negative environmental impact of the works back in January 2021, by way of email from Mr Chris Evans to Mr Lefebvre (copy email enclosed¹). It is now approaching 3 years later and your Clients appear unwilling to take remedial action.

3. THE EXPERT REPORTS OF DR EBRAHIM

3.1 By way of our letter dated 29 August 2023, we informed you that Mr Ammann had instructed an expert to prepare a report in relation to the redevelopment works and their impact on the local environment and biodiversity. We have now received the expert report of Dr Ameer Ebrahim, a marine ecologist and a registered EIA consultant, which confirms Mr Ammann's fears in relation to the extent and severity of the damage being caused by the ongoing redevelopment.

3.2 We enclose a copy of Dr Ebrahim's first report dated August 2023². While we do not propose to rehearse each point made in the expert report, we would draw your attention in particular to the following.

3.3 The EIA dated November 2020

3.3.1 Clear breaches of the EIA have been observed³. The suggestion in your letter of 5 August 2023⁴ was plainly inaccurate. We note that you referred in that letter to "variations to such initial plan". If you provide details of those variations, then Dr Ebrahim may consider them and their impact on his conclusions.

3.3.2 Dr Ebrahim further confirms that "*there have been minimal, if any, observable and genuine attempts by the Resort to mitigate the damages being caused to the environment by the development work, with critically endangered wildlife such as turtles and terrapins being irreversibly impacted by the disturbances and pollution to their habitats*". This directly contradicts comments made in your letter of 5 August 2023, including that "*to date, to the best of our knowledge, the Environmental Control Officer has never reported any environmental breaches or damages caused to the environment or wildlife as a result of the Resort's redevelopment, nor any violation of the redevelopment plan*".

3.4 Footprint

3.4.1 Dr Ebrahim confirms that, contrary to the EIA, which stated that the redevelopment would use the existing footprint of the current resort, and limit new building to a minimum, there has in fact been a significant extension to the existing footprint.

3.4.2 Dr Ebrahim explains that, "*[i]n numerous instances, the developers have built higher on the existing foundations than anticipated by the approved site plan*". This is

¹ See pages 1-3 of the enclosed bundle.

² See page 10.

³ See Non-Compliance Assessment at page 23

⁴ "it appears that the Works have been conducted in a manner consistent with the initial plan, as submitted to, and approved by, the local environmental authorities"

evidenced by the annexed photographic evidence. Dr Ebrahim goes on to opine that, *"the additional construction along the beach front will not only influence the coastal vegetation, but also cause disruption to the nesting turtles⁵."*

- 3.4.3 This increase in the existing footprint of the resort, contrary to the design proposed to the authorities and the EIA, will put a greater strain on the coastal environment, and specifically on the endangered nesting turtles. In spite of being specifically raised in our letter of 4 July 2023, this has not been addressed by your client.

3.5 Wetland

- 3.5.1 Dr Ebrahim confirms that there has been significant impact and destruction to the wetland, including dredging, pollution and eutrophication.⁶ This is evidenced by the photographic evidence at Appendix 3⁷ and the laboratory report of the water samples taken from the wetland, that can be seen at Appendix 4⁸.
- 3.5.2 Dr Ebrahim notes that while it is unclear whether sedimentation barriers were created, *"there has been major eutrophication that has occurred"* which is *"apparent from the significant proportion of duckweed that has covered the surface"*⁹. Dr Ebrahim notes that the wetland at Anse Intendance is home to several species of high conservation value and one of the last remaining sanctuaries for the Seychelles yellow-bellied mud terrapin and the Seychelles black mud turtle, both of which are considered critically endangered on the International Union for Conservation of Nature (IUCN) Red list.¹⁰
- 3.5.3 We note the comments made in your letter dated 5 August 2023, regarding rehabilitation of the wetland. You refer to a Wetland Rehabilitation Plan Approval, pursuant to which you say that removal of invasive plants and trees took place. We have requested a copy of the Wetland Rehabilitation Plan Approval but we are yet to receive this from you. In absence of this plan, we can only comment on what has been observed by Mr Ammann and Dr Ebrahim. As summarised above, there is clear evidence of continued and unremedied destruction of the wetland.
- 3.5.4 In addition, Dr Ebrahim confirms that no terrapins were caught or trapped prior to wetland rehabilitation work, as required by the EIA.¹¹
- (a) As noted above at paragraph 2.3.3, you have confirmed in your letter dated 5 August 2023 that rehabilitation of the wetland did in fact take place. As such, please can you confirm whether any terrapins were trapped and translocated

⁵ See item 1 at page 12.

⁶ See item 2 at page 13.

⁷ See pages 280-285.

⁸ See page 287.

⁹ See item 5 at page 16.

¹⁰ We note that LVMH was a partner in the UNESCO Man and the Biosphere (MAB) program and previously "confirmed its commitment to protecting biodiversity during the IUCN World Conservation Congress, from September 3-11, 2021" - <https://www.lvmh.com/group/lvmh-commitments/social-environmental-responsibility/iucn/>.

¹¹ See item 18 at page 22.

to a suitable temporary habitat, as envisaged by the EIA, to mitigate against any potential disturbance of or harm to terrapins?

- (b) In any case, we are advised that the current condition of the wetland is such that no terrapins, which are considered critically endangered by the International Union for Conservation of Nature, could survive. We understand from Mr Ammann that the result of this is likely to be that half of the remaining gene pool of the terrapins has now been eliminated. We understand that it appears that a large number of terrapins have in fact disappeared. Please confirm whether any investigation has taken place in relation to this issue.

3.5.5 We would repeat our request for a copy of the wetland management plan /Terrestrial and Wetland Management Rehabilitation Plan as referred to the in the EIA.

3.6 Water contamination

3.6.1 Dr Ebrahim sets out the results of the water testing of the wetland.¹² In summary, the results reveal a significant level of coliforms, which is a form of bacteria. Notably, the report identifies the 'normal' level expected in this ecology and you will note that the actual levels are far in excess of normal levels.

3.6.2 The water also contains sewage and faecal coliforms. Mr Ammann has observed Seychellois workers coming out of the wetland after having removed invasive species. Given the level of biohazard in the water, this raises a serious concern that wildlife and humans are exposing themselves to a significant health risk.

3.6.3 Enforcement notices from the Ministry of Agriculture, Climate and Environment have been issued again the Owners of the Resort requiring that they stop discharge of effluent into the wetland, and pump and dispose of it at the PUC Centralized Sewage Treatment Plant. Copies are enclosed with this letter¹³. It is a matter of deep concern to Mr Ammann that some 700 workers have been on site for three years, and it appears that untreated sewage has been discharged into the wetland during that time.

3.6.4 Dr Ebrahim has produced a separate report dealing in detail with the effects of the waste water on the local environment. A copy of Dr Ebrahim's second report dated November 2023 is enclosed¹⁴. We would draw your attention in particular to the following:

- (a) It is confirmed that the water samples taken from the wetland contain faecal coliforms, Escherichia coli (E. coli) and salmonella.

- (b) Dr Ebrahim states that:

- (i) *"Coliform presence in aquatic environments is considered one of the most toxic forms of pollution (Havens et al. 2008), posing tremendous threat to*

¹² See item 21 at page 23. Full report is at page 4

¹³ See pages 6-9.

¹⁴ See page 322.

human health (Omer 2019), and detrimental consequences for freshwater ecosystems, biodiversity, and food webs (Bhat & Qayoom 2021)."

(ii) *"Salmonella in aquatic environments is considered among the most significant human pathogens originating from faecal contamination [...] Salmonella also poses a serious threat to wildlife in aquatic environments".*

(c) Other possible impacts of wastewater in an aquatic environment include eutrophication; this is the *"abundant growth of phytoplankton, causing an imbalanced system of primary and secondary productivity within an ecosystem"*. It is observed that *"[s]igns of eutrophication were documented within the wetland at Anse Intendance, by the presence of excessive amounts of duckweed at the surface"*.

3.6.5 Please let us have your client's comments on Dr Ebrahim's findings. Please also confirm what steps are being taken to address that pollution of the wetlands and the consequent damage to the local environment (and the resultant risks to human health).

3.7 Coastal zone

3.7.1 Dr Ebrahim has observed that the coastal zone setback seems to have decreased with additional development of lap pools and dining terraces. At the time that the EIA was issued, it appears that the setback from the coastal zone had increased with the development.¹⁵ This has been reversed. The Drone imagery referred to in the EIA has been requested by Dr Ebrahim to assess this point further.

3.7.2 The reduction of the coastal zone setback is a threat to the turtle population at Anse Intendance and is contrary to the EIA which recommended at section 6.1.6.3¹⁶ that, to protect the critically endangered Hawksbill turtles and endangered Green turtles, the coastal frontage be heavily densified with native plant species. As identified in our letter dated 4 July 2023, an additional mitigation method proposed by the EIA was to maintain a vegetation buffer between the beach and villa area *"to provide sufficient conducive and protected turtle nesting zones for continuous turtle nesting and egg hatching activities."*

3.7.3 Considering the various methods proposed to increase the vegetation buffer, or at the very least maintain it, it is unacceptable that the redevelopment of the Resort has had the opposite effect.

3.7.4 Together with Dr Ebrahim's observations mentioned at paragraph 2.3.3 above, Mr Ammann is understandably concerned about the current state of the various turtle species at the island, which he inexplicably has not received any information from your client about.

¹⁵ See item 10 at page 18.

¹⁶ See page 148.

3.8 Tree felling

- 3.8.1 Dr Ebrahim has also observed the notable tree felling in the area.¹⁷ This is in contrast with the EIA which states that *"some exotic trees will be removed for the construction site of new villas, but these are expected to be minimal."*
- 3.8.2 We note the comments in this respect in your letter dated 5 August 2023, advising that all trees have been felled pursuant to permits. We have requested copies of the tree felling permits which you refer to therein, in the August Letter. However, we have not yet had sight of these.

4. **NEXT STEPS**

- 4.1 LVMH has a clear choice to make as to whether it takes action to stop the environmental damage being done by the development of its resort.
- 4.2 Mr Ammann is anxious that your Clients fulfil their stated commitments to environmental responsibility. We enclose a bundle of photographs relating to his last visit in September 2023 with descriptions, of different aspects of the redevelopment which Mr Ammann finds problematic in relation to environmental protection¹⁸. You will see that these photographs show the environmental damage being caused to Anse Intendance.
- 4.3 Mr Ammann considers that your client's continued refusal to accept responsibility for the consequences of the development of the resort leaves him with little choice but to raise public awareness of what will inevitably be perceived as LVMH's hypocrisy.
- 4.4 Our client understands that the Seychelles Broadcasting Corporation is producing a multi -part series about the redevelopment of the Resort and the extent of environmental impact this has had on Anse Intendance and Seychelles. Clearly, if our client decides to take court action in Seychelles to injunct further damage being done, this will also attract further media attention.
- 4.5 Mr Ammann is eager to work with LVMH, in a constructive and cooperative manner, with a view to ultimately resolving these issues. As previously explained, Mr Ammann wishes to resolve this matter amicably and would urge your client to engage properly with our correspondence to prevent this matter escalating further.
- 4.6 Our client would be happy to meet with you and representatives of your Clients to discuss remediation of the environmental damage that has taken place in Seychelles, due to the redevelopment of the Resort. In such a meeting, Mr Ammann would consider it helpful to discuss your Client committing to providing or funding:
- 4.6.1 Rehabilitation of the wetlands;
- 4.6.2 Reactivation of the Terrapin and Sea Turtle Conversation Centre, which was set up by the former hotel management company with the participation of the Marine Conservation Society Seychelles for the conservation of these reptiles.

¹⁷ See Item 12 at page 18

¹⁸ See page 336.

4.6.3 Continued financial support of the Conversation and Rehabilitation Centre;

4.6.4 Undertakings regarding the further development of the resort and breaches of the parameters set by the EIA.

4.7 Please do let us have your availability for a meeting time so that we may discuss the various points above and determine acceptable remedies in the interest of your and our client's mutual concern for the environment. Please note that our client will be in Seychelles in December 2023 and would be happy to discuss matters with the hotel's General Manager in the first instance, with the minutes of such meeting to be circulated to our respective clients' legal teams for further discussion as necessary.

We await hearing from you.

Yours faithfully



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Enc.:

- Email from Mr Chris Evans to Mr Lefebvre
- H2O/BWT Interpretative Report dated 9 July 2023
- Variation Notices dated 7 August 2023
- Report of Dr Ameer Ebrahim dated August 2023 and Appendices
- Report of Dr Ameer Ebrahim dated November 2023 in relation to the effects of waste water
- Assorted photographs

HOWARD KENNEDY

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Our ref DB10/74047.3
Doc ref SA7/60404532.1

By email only: Eric.Lasry@bakermckenzie.com

Dear Baker & McKenzie

25 January 2024

Our Client: Karl Ammann
Re: Cheval Blanc Resort, Mahé, Seychelles

1. We refer to our letter dated 22 November 2023, and to your email of 23 November 2023, querying whether our letter could be shared with your client (which we subsequently confirmed).
2. Our client is concerned that it is two months later, and we are yet to receive a substantive response. This is especially concerning in circumstances where photographic evidence was enclosed with our letter, evidencing the extent of damage being caused by the redevelopment works, and indirectly, by your clients. In addition, we provided you with Variation Notices dated 7 August 2023. We now enclose the original Enforcement Notice to those notices, also dated 7 August 2023, which sets out the levels of various substances present in the Sewage Treatment Plants located in staff accommodation and inside the hotel premises.
3. It is crucial that your clients properly engage with this matter. Separately, with the benefit of the various expert reports and photographic evidence that Mr Ammann has collated, our client is considering launching a constitutional claim against the Government of Seychelles, pursuant to paragraph 38 of the Constitution of the Republic of Seychelles. Mr Ammann is also aware that Seychelles Broadcasting Corporation are taking an interest in this matter and are looking to report on it. Our client is committed to pursuing this matter, through various routes and in different fora as appropriate.
4. Notwithstanding our client's commitment to seeking legal redress, and as explained in Our Letter, our client is amenable to working with LVMH to resolve the issues raised. Mr Ammann has made efforts to identify and narrow the key issues for resolution, and Our Letter sets out our client's very reasonable, and limited, requests at paragraph 4.6. Mr Ammann remains eager



to meet with your clients to discuss these issues, and we would be grateful if you could please directly address this invitation.

5. We look forward to hearing from you with your availability for a meeting, or alternatively, a substantive response to the various queries and concerns we have raised on behalf of our client in our numerous letters.

Yours faithfully

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By email only: Eric.Lasry@bakermckenzie.com

Dear Baker & McKenzie

18 March 2024

Our Client: Karl Ammann
Re: Cheval Blanc Resort, Mahe, Seychelles

We write further to our letters dated 22 November 2023 and 25 January 2024, to which we are yet to receive a substantive response.

1. Mr Ammann's proposals
 - 1.1 At paragraph 4.6 of our letter dated 22 November 2023, we set out Mr Ammann's limited proposals as to steps which your clients should take to mitigate the extensive damage being done, by the development works, to the local environment and habitats at Anse Intendance. Specifically, we raised the prospect of your clients:
 - 1.1.1 providing funding in relation to the rehabilitation of the wetlands;
 - 1.1.2 providing funding in relation to the reactivation of the Terrapin and Sea Turtle Conversation Centre (which was set up by the former hotel management company with the participation of the Marine Conservation Society Seychelles for the conservation of these reptiles);
 - 1.1.3 providing continued financial support of the Conversation and Rehabilitation Centre; and
 - 1.1.4 providing undertakings regarding the further development of the resort and past breaches of the parameters set by the EIA.
 - 1.2 We have also repeatedly suggested a meeting, on behalf of Mr Ammann, to discuss these issues. It is unhelpful and discourteous of your clients to ignore this proposal.
2. We do however understand that your clients have approached the Marine Conservation Society of Seychelles and offered to finance the re-establishment of the Turtle and Terrapin



Conservation Centre, as well as additional conservation work and mitigation. In absence of any correspondence from you, we assume that this step was taken in direct response to Mr Ammann's proposals. If that is the case, and in any event, Mr Ammann welcomes your client's cooperation in this regard. It would greatly assist if you were able to provide us with further detail as to the steps your client intends to take in relation to Turtle and Terrapin Conservation Centre, including in respect of measures designed to reverse the recent loss of, and damage to, biodiversity. International media attention

- 2.1 As previously noted, LVMH has a clear choice as to whether it takes any meaningful action to ameliorate the environmental damage being done by the development of its own resort.
 - 2.2 Your client is aware that the Seychelles Broadcasting Corporation ("SBC") is producing a multi-part series about the redevelopment of the resort and the extent of environmental impact this has had on Anse Intendance and Seychelles. We understand that the first segment in the series has already been broadcast on YouTube. We also understand that the multi-part series has attracted interest from various international print and television outlets, such that SBC intends to publish the series on social media platforms in order to capture a larger audience. The first segment is currently available on YouTube (with subtitling, and indeed further segments, to follow). Significant and wide-ranging research and fact checking has contributed to these productions. We understand that your client was provided with an opportunity to comment or respond, but that they declined to do so.
 - 2.3 Your client will of course be mindful of the reputational risk, potential for brand damage and the resultant effect on share price, amongst other considerations.
3. Next steps
- 3.1 Further to paragraph 1.3 above, we look forward to receiving further detail as to the steps your client intends to take in relation to Turtle and Terrapin Conservation Centre, and generally.
 - 3.2 As previously advised, our client has decided, with the cooperation of various third parties, to launch a constitutional claim against the Government of Seychelles, pursuant to the Constitution of the Republic of Seychelles, in relation to the with the environmental impact and the biodiversity loss caused and being caused by the redevelopment works.
 - 3.3 If you do not respond, and subject to the further steps which your clients may commit to taking, our client may reach the conclusion that he has exhausted all attempts to resolve this matter amicably, and feel compelled to take legal action. Your client should consider whether its protestations, that it has no responsibility for the effect of the construction of the Cheval Blanc resort and associated works, would be accepted by a court in Seychelles or France, or in the public perception.

Yours faithfully



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By email only: Eric.Lasry@bakermckenzie.com

Dear Baker & McKenzie

[] May 2024

Our Client: Karl Ammann
Re: Cheval Blanc Resort, Mahe, Seychelles

We write further to our previous correspondence.

We write in circumstances where our client has been contacted for comment by journalist Yann Philippin, who is investigating the construction works at the Cheval Blanc resort in Mahé, Seychelles. Mr Philippin is copied to this letter.

1. Background

- 1.1 By way of brief background, we wrote to your client on 4 July 2023 to call attention to Mr Ammann's grave concerns regarding the environmental damage being done by the redevelopment of the Resort at Mahé, Seychelles, in LVMH's name. That letter identified breaches of local environmental law, breaches of the original conditions of transfer and breaches of other Seychelles law, as well as potential infringement of European Union legislation, including the French 'Corporate Duty of Vigilance' Law. Your response dated 5 August 2023 contained only brief comment in relation to some of the matters raised, and failed to engage with Mr Ammann's concerns in any meaningful way. Perhaps most alarmingly, your response sought to distance LVMH from Hill View Resorts (Seychelles) Ltd ("**HVRSL**"), which you described as the "Owner" of the Resort.
- 1.2 We wrote to you again on 29 August 2023, drawing attention to your client's legal and ethical responsibilities, and explaining that as the hotel is being built to operate as a part of LVMH's business, and indeed as a revenue source for LVMH, it is entirely within LVMH's responsibility to ensure that the redevelopment does not negatively impact the local environment and biodiversity. Mr Ammann would have expected LVMH to take this matter seriously, in view of LVMH's publicly stated commitment to conform to ESG standards. Disappointingly, your response of 5 October 2023 failed to adequately address the concerns raised.



1.3 We wrote to you again on 22 November 2023, noting your client's attempts to absolve themselves of responsibility for the destruction of the local environment occurring as a direct consequence of the redevelopment works (which is entirely contrary to LVMH's advertised commitment to ESG and supply chain sustainability). Our letter also enclosed an expert which confirmed Mr Ammann's fears regarding the extent and severity of the destruction being caused by the redevelopment. The expert report addressed, amongst other matters, the damage being caused to the local wetland, the severity of the water contamination, the extension of the Resort's footprint, the reduction to the coastal zone, and the flagrant breaches of the original Environmental Impact Assessment (EIA).

1.4 Absent a response, we wrote to you, again, on 23 January and 18 March 2024. To date no response has been received to those letters.

2. **Allegations made by LVMH Group**

2.1 Clearly this is a serious matter which is now attracting international media attention. We understand that Mr Philippin recently confronted your clients with the results of his investigations, in order to give them the opportunity to comment before publication. Mr Philippin has relayed your client's comments, which call for a response from us on behalf of Mr Ammann.

2.2 Expert report of Dr Ebrahim

2.2.1 We understand that, by way of their comments of 4 April 2024, your clients have alleged that they were somehow unable to utilise the expert report provided, due to an alleged lack of methodological or scientific rigour.

2.2.2 The expert report was prepared by Ameer Ebrahim, who is a PhD in Marine Ecology and registered EIA consultant. Dr Ebrahim is a highly experienced ecologist and holds a number of relevant offices including Head of Fisheries Management and Technical Coordination at the Seychelles Fishing Authority, Chief Scientific Advisor to the James Michel Foundation and Director of Conservation and Science at the Island Conservation Society.

2.2.3 Dr Ebrahim's detailed and thorough report analyses and interprets contemporaneous evidence, including drone surveillance, photographs and laboratory results of water samples taken from Mahé. Dr Ebrahim's comprehensive exposition compares the EIA to the actual position on the ground, identifying various breaches, and concludes with recommendations as to how the environmental damage should be mitigated.

2.2.4 LVMH's criticisms of Dr Ebrahim's report are baseless and unjustified. It is notable that your clients have apparently taken no steps to instruct their own expert to assess the damage being caused as a consequence of the redevelopment works.

2.2.5 In any event, the comments made are simply inaccurate: your clients have said that they are unable to utilise the expert report provided, but it seems apparent that they have in fact followed (a very limited element) of Dr Ebrahim's recommendations. At the conclusion of his report, Dr Ebrahim's final recommendation is that "*the original wetland, turtle and terrapin conservation projects that were initiated in 2015 under the Banyan Tree Resort be reinstated, with financial and logistical support from the*

new owners, to attempt to reverse the negative impacts that the Development has inflicted upon the local environment". In apparent compliance with this recommendation, we note that LVMH has approached the Marine Conservation Society of Seychelles and offered to finance the re-establishment of the Turtle and Terrapin Conservation Centre. Mr Ammann welcomes this development, although it a very limited step in damage limitation.

2.3 Mr Ammann's concerns

2.3.1 LVMH has we understand alleged that Mr Ammann became interested in the environmental issues related to the construction when negotiations around the sale of his villa, instigated at Mr Ammann's request, failed due to a disagreement about the purchase price of the villa (which is adjacent to the construction site). These allegations are untrue and defamatory.

2.3.2 Mr Ammann is a celebrated conservationist, activist, photographer, author, filmmaker and wildlife crime investigator who has dedicated his life to the promotion and protection of environmental issues. It is entirely inaccurate and erroneous for your clients to imply that Mr Ammann is motivated in this matter by financial considerations: Mr Ammann has been raising the issue of the environmental damage for years. Mr Ammann is profoundly disappointed that your client, which holds itself out publicly as responsible and progressive, is making such comments, especially so in view of Mr Ammann's standing and reputation as a renowned environmentalist. We would have thought that LVMH would prefer to be seen as sharing in and supporting Mr Ammann's concerns rather than seeking to attack him personally to avoid addressing them.

2.3.3 Indeed, the first correspondence to LVMH regarding this issue was sent by Mr Chris Evans, at Mr Ammann's instigation (in circumstances where Mr Evans is a friend of both Mr Ammann and of Oliver Lefebvre of LVMH). That initial correspondence was sent well over three years ago; a copy is enclosed with this letter. In his email dated 13 January 2021, Mr Evans draws Mr Lefebvre's attention to the potential reputational risks to LVMH, and then writes:

"Less tangibly, but arguably even more important than the issues addressed above, I understand that the negative environmental impact of the works underway on-site are substantial. The EIA agreement has been ignored- many tons of timber from the demolished villas have been burnt in the original parking lot /heli port area. Not a single one of the staff toilets installed for the workers under the EIA for the demolition crew is actually working at the moment (I have tons of pictures)."

2.3.4 There have been no negotiations as to the purchase of Mr Ammann's villa on Mahé. Mr Ammann has been in receipt of two unsolicited offers, from Murban, both of which he declined. It is also significant that LVMH is aware that offers were made by the Murban Group, and indicates that LVMH has decided (apparently for commercial reasons) to align itself with Murban in this matter.

2.3.5 In any event, the relevant chronology makes it abundantly clear that there is no connection between Mr Ammann's concerns and Murban's offers to purchase the villa:

- (a) In November 2018, Murban acquired HVRSL and the Banyan Tree Resort.
- (b) In July 2020, the Seychelles Ministry of Tourism approved plans for the redevelopment of the Resort and the redevelopment works commenced shortly thereafter.
- (c) On 13 January 2021, Mr Evans wrote to LVMH, on behalf of Mr Ammann, to raise Mr Ammann's concerns regarding the destruction being caused to the local environment by the redevelopment works.
- (d) In June 2021, Mr Amine Abid (director of HVRSL) telephoned Mr Ammann with an offer to purchase his villa, on instructions from the principal of Murban. That offer was declined.

2.3.6 In the Autumn of 2022, a further offer was made to Mr Ammann by Murban, which was declined. At no point has Mr Ammann sought to enter into negotiations for the sale of his villa. It appears that LVMH is seeking to use Murban's unsolicited offers as a means to discredit Mr Ammann.

3. **Next steps**

- 3.1 Mr Ammann's sole motivation in this matter is and always has been to draw attention to the potentially irreparable damage being done to the local environment of Mahé, and to encourage LVMH to take steps to mitigate that damage. The comments made to Mr Philippin by or on behalf of LVMH are false and they are defamatory. They must be retracted immediately.
- 3.2 It is notable that the EU Parliament adopted the Corporate Sustainability Due Diligence Directive (CSDDD). The rules contained with the CSDDD will apply to EU companies and parent companies with a worldwide turnover higher than €450 million: clearly they will apply to LVMH (which reported revenue of €96.3 billion in 2023). A key objective of the CSDDD is to require companies to undertake due diligence to avoid adverse environmental impacts and, importantly, to ensure accountability in case of adverse impacts being caused. Penalties on non-complying firms will include fines of up to 5% of companies' net worldwide turnover. Mr Ammann would be interested to see LVMH's plans for compliance with the CSDDD, in the context of the damage that is currently being caused at Mahé, in LVMH's name.

Yours faithfully

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Enc. Email from Chris Evans to LVMH dated 21 January 2021

Cc. Yann Philippin
yann.philippin@mediapart.fr