

INTER-AMERICAN DEVELOPMENT BANK

JAMAICA

CARIBE HOSPITALITY KINGSTON

(JA-L1045)

CATEGORY: "B"

FOR INTERNAL USE ONLY

**ENVIRONMENTAL AND SOCIAL MANAGEMENT REPORT
(ESMR)**

5th November 2012

Project Team: Stefan Wright (CFI/CJA), Project Team Leader, Alejandra Durán-Böhme (SCF/CFI), Jae Cheol Kim (SCF/CFI), Ashley McKean (LEG/NSG), Natasha Ward (VPS/ESG), Tracy García (SCF/PMU), Kentaro Minagawa (SCF/SYN), with the support of Mariana Williman (SCF/CFI), under the supervision of: Carlos Rakowszczyk, Division Chief a.i. (SCF/CFI).

Table of Contents

- I. Introduction
- II. Project Description
- III. Compliance Status and Project Standards
- IV. Environmental and Social Impacts and Risks
- V. Management and monitoring of ESHS and Labor Risks and Impacts
- VI. Requirements to be included in the Legal Agreements

List of Acronyms

ASTM	American Society for Testing and Materials
ECHO	Environmentally Conscious Hospitality Operations
EIA	Environmental Impact Assessment or Environmental Impact Study
EMP	Environmental Management Plan
ESA	Environmental and Social Assessment
ESDD	Environmental and Social Due Diligence
ESHS	Environmental, Social, Health and Safety
ESHSMS	Environmental, Social, Health and Safety Management System
HVAC	Heating Ventilation and Air Conditioning
IDB	Inter-American Development Bank
ISO	International Organization for Standardization
KSAC	Kingston & St. Andrew Corporation
LFF	LEED Financing Facility
LEED	Leadership in Environment and Energy in Design
NEPA	National Environment and Planning Agency
NWA	National Works Agency
NWC	National Water Commission
ODPEM	Office of Disaster Preparedness and Emergency Management
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyls
SWPPP	Storm Water Pollution Prevention Plan
UDC	Urban Development Corporation
USEPA	United States Environmental Protection Agency
USGBC	United States Green Building Council

**Caribe Hospitality Kingston
Draft Environmental and Social Management Report (ESMR)**

I. INTRODUCTION

A. Project Summary

Country	Jamaica
Sector	Tourism
Project Name	Caribe Hospitality Kingston
Borrower	Caribe Hospitality of Jamaica Limited
Transaction Type	Loan
Total Project Cost	US\$21.42 million
IDB A-loan	US\$6.75 million
Co-lender (IFC)	US\$5.03 million
Environmental Category	Category B

B. Background

1.1 Caribe Hospitality S.A (“Caribe”) is one of the key hotel development partners of Marriott (“Marriott”) Corporation in Latin America and the Caribbean. Over the next three years, Caribe intends to construct a series of hotels to be partially financed by the IDB under the Caribe Hospitality LEED Financing Facility (“CHLFF”) that will subsequently be operated, on their behalf, by Marriott. All of the hotels will be certified under the LEED (Leadership in Energy and Environmental Design) program, an initiative of the U.S. Green Building Council that has become one of the international standards for green buildings. The hotels financed under this CHLFF will be the first LEED-certified, Marriott-operated business hotels in the region. The operation under consideration for IDB financing will be the second hotel¹ under the CHLFF. The hotel is to be a six-story, 130-room structure located in the business district of New Kingston, adjacent to Emancipation Park. Adjacent commercial developments (not part of the IDB project) will include a restaurant and commercial center.

II. PROJECT DESCRIPTION

A. Key Project Infrastructure Components and Schedule

2.1 The hotel will be a six-story, 130-room structure located in the business district of New Kingston, adjacent to Emancipation Park. The Project will occupy about 6,000 m2 to include above-ground parking and a small landscaped area, a pool, workout room, business center, and meeting rooms. The hotel structure will have one floor for common and service areas, and five floors (for the guest rooms). The design follows Marriott’s “Courtyard” brand specifications, meaning urban, business-oriented hotels for business travelers with short and extended stays.

¹ The first hotel financed under the CHLFF by the IDB was the Courtyard Alajuela in Costa Rica, which was approved in December 2010. For more information click [here](#).

- 2.2 The Hotel is part of a larger property encompassing a total of 15,000 m² which is to be transferred from UDC (Urban Development Corporation) and subdivided into two parcels, one for the hotel, and another to be retained by the property management partner, Jamaica Property Company Limited. The hotel structure is to be located on the south side of the property, and is the only development to be financed by IDB. The northern part of the site is likely to be used for a residential complex. The hotel itself will therefore be part of a mixed use development. Jamaica Property Company Ltd., the real estate partner of Caribe, is to develop the other parts of the project in the future.
- 2.3 The Project is currently in the design phase. Ground-breaking is anticipated in January, 2013. An 18- to 20-month construction schedule is envisioned, with opening in spring or summer of 2014.
- 2.4 Existing infrastructure will be utilized for the project. Access to the property is by bordering established roadways, water and wastewater connections are either adjacent to the property or accessible by easement agreements, and electric service borders the property. Solid waste pickup is available through local registered providers, and disposal is at an authorized regional landfill. Stormwater will be retained on-site, to reduce loading on area storm sewers.

B. Environmental and Social Setting

- 2.5 The direct area of influence of the project is the property upon which the development will be located, with a footprint of about 6,000 m², and the adjacent property of 15,000 m² which will be cleared and used for laydown, storage and work areas. The area of indirect influence is described as the recreational areas to the south (Emancipation Park), north and east (Liguanea Club and former golf club), and the commercial properties east of the site (Richmond Great House).

Environmental

- 2.6 The site is located on vacant land in an urban setting, with gated access, in the business district of New Kingston. The Norman Manley International Airport, Kingston Harbor and Downtown Kingston are located several kilometers south of New Kingston. Major government and business offices are located in New Kingston, as well as lodging and accommodations for business travelers. Emancipation Park is a public open space in New Kingston that is popular with joggers, visitors and tourists.
- 2.7 The site is near the intersection of Oxford Road and Halfway Tree Road, major thoroughfares in the New Kingston area. Access to the proposed development site is by Knutsford Road on the eastern side of the property circumventing Emancipation Park, then west along Park Boulevard on the northeast side of the park. Park Close is a dead-end street that leads to a three-story parking garage and offices of the National Housing Trust, the managers of Emancipation Park and the parking garage. Other neighboring properties include the Liguanea Club to the east, and a former golfing club and driving range to the north. To the west side is the Richmond Park Great House, an historic building used as a commercial and office complex. Figures 1 and 2 provide maps of the site location and a satellite image.



Figure 1. Location Map, New Kingston

- 2.8 Aesthetic and visual qualities are considered significant for the Project. The location is highly visible to the public directly on Emancipation Park, and neighboring Liguanea Club.
- 2.9 The area is flat-lying, and has been cleared of vegetation and partly paved for use as parking. It has been undeveloped, open space for many decades. A 1965 Zoning Map shows the land use as "open green space" and historical title searches show it was part of a horseracing park. Previous land use appears to be rural and recreational throughout the last century. There has been no formal change of zoning status however the issuance of the permit by KSAC is a de facto change of zoning status and in effect represents a land use permit for the hotel and commercial development.
- 2.10 There are no significant biological resources which could be affected by the project, other than a few small trees on the edges of the property.
- 2.11 The closest historical structure is the Richmond Great House, which is not under special protection status and is currently used as a commercial office complex.
- 2.12 No evidence of contamination has been found at the site.
- 2.13 Daytime traffic and airport noise averaged about 78 dB(A). The source of the noise was wind and traffic.
- 2.14 Groundwater was not encountered in the borings, which reached a maximum depth of 49 feet. There is an irrigation well just off the northeast corner of the site, with a reported depth of 200 to 300 feet. The well is used for irrigation of Emancipation Park, and any new wells would require additional permitting. The groundwater in the Liguanea Plains is reportedly high in nitrate due to septic infiltration, but is adequate for irrigation use; accordingly, water supply through the National Water Commission is preferable.

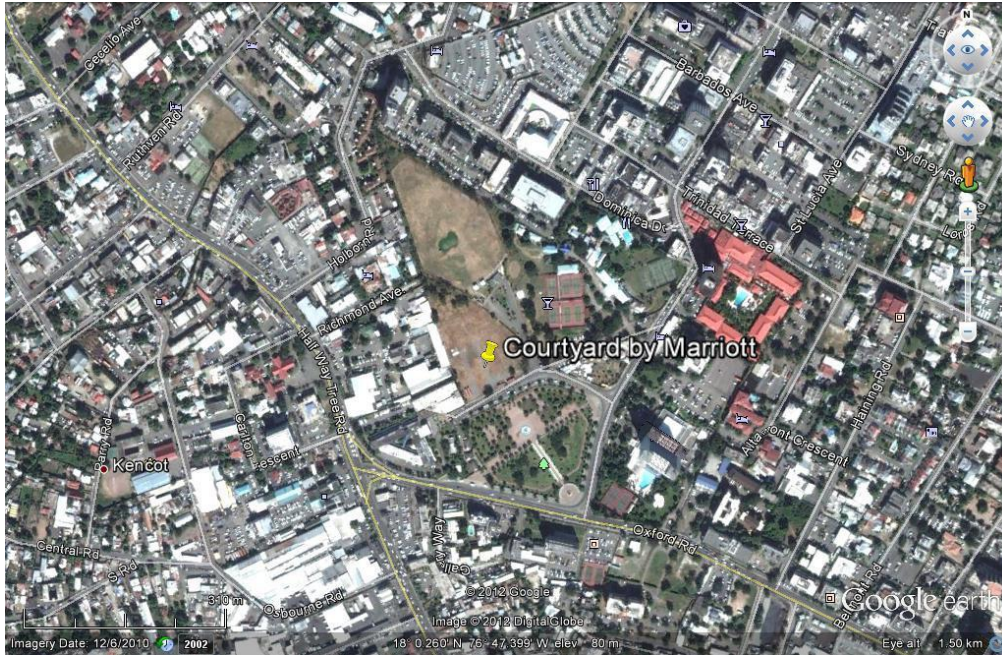


Figure 2. Satellite Image of Project Site

- 2.15 Hurricanes and tropical storms frequently impact Kingston and bring strong winds and flooding. Hurricane Ivan in 2004 generated winds of up to 150 mph in parts of Jamaica, and caused major flooding in Kingston; and in 2007 Hurricane Dean caused significant damage in Kingston, including the Liguanea Club area. Statistically hurricanes affect or brush southern Jamaica every 4 years, and hurricanes with winds of at least 110 mph reach Kingston every 10 years.
- 2.16 Eastern Jamaica is an area of active fault zones and high seismic hazard. Major earthquakes occurred in 1692 (Magnitude 7.5) and in 1907 (Magnitude 6.5) along this fault zone, devastating Port Royal (south of Kingston Harbor) and the town of Kingston. The soils of the Liguanea Plains are not subject to liquefaction, and the area is sufficiently distant from the coast to remove tsunami threat.

Social-Economic

- 2.17 The project area in New Kingston is in the most important business district of the Kingston metropolitan area. New Kingston is a specially designated commercial area of about 1 km² in size, with a permanent population of less than 1,000. There are 231 residential units in New Kingston, of which about half are owned and half are rented. Many are multistory apartment buildings. Business and government buildings are occupied during work hours, and traffic is very heavy south of the site on Oxford Road.
- 2.18 Water and sewerage are supplied to almost all residents and businesses of New Kingston. Gas and electric, solid waste collection, public transportation and other services are available throughout the area. There are several schools and churches in New Kingston, as well as numerous restaurants and hotels.
- 2.19 The project site is within a highly urbanized area. In the area, Emancipation Park is visited by tourists and used by joggers and for public events. To the north and east, the Liguanea Club

and former golf driving range are also green spaces which offer important aesthetic and recreational value.

- 2.20 Neighboring businesses include the commercial office complex west of the property at the Richmond Great House, and a number of restaurants and shops on the east side of the property. The National Housing Trust offices are on the southwest side of the property, and operate Emancipation Park as well as the parking structure adjacent to the site. A promenade (public walking space) with shops and restaurants is under discussion for the north side of Emancipation Park. An informal taxi stand is located on the east side of the property on Park Boulevard.
- 2.21 A formal public perception survey was not conducted for the project. However, support has been expressed for the development and optimism that the project would improve the New Kingston area. The main concerns expressed were regarding traffic, possible visual impacts, noise and dust during construction, access, and setback from Park Boulevard.

C. Alternative Analysis

- 2.22 The Project location was selected based on land availability and market considerations, such as the existence of commercial properties and business centers in the area. The site was selected before the CHLFF was financed or Caribe's internal Environmental, Social, Health and Safety Management System (ESHSMS) was developed. A formal alternative analysis was therefore not conducted for this site.
- 2.23 Relative to social and environmental aspects, screening criteria developed by Caribe use a type matrix of studies and permits for hotel developments. For other developments the property evaluation phase included market factors such as access to nearby businesses, the availability of downtown vs. cross-town hotel brands, and the economic growth and expansion in the local area. It also included land ownership and title, land use, access and easements, zoning rules with respect to building height and footprint, infrastructure and services (water, wastewater, solid waste, gas, electricity, and communications), as well as a preliminary environmental screening to determine whether or not there are concerns with natural protected areas or special permitting requirements, a consultation with local environmental authorities, and a screening for archeological and historical resources. It is expected that this procedure will be used in future CHLFF projects.

III. COMPLIANCE STATUS AND PROJECT STANDARDS

A. Environmental and Social Licensing and Appraisal Process

- 3.1 The project's federal environmental permit was issued by the National Environment and Planning Agency (NEPA) in March 2011, and is valid for five years to begin the construction. NEPA determined that an Environmental Impact Assessment (EIA) was not required because the Project is located in an urbanized setting and impacts are expected to be low to moderate, and mitigated with the application of an Environmental Management Plan (EMP).
- 3.2 The NEPA application was reviewed by a Technical Committee consisting of the line agencies for water, sewer, solid waste, traffic, fire and emergency issues, and their approvals incorporated into the federal NEPA permit.

- 3.3 The EMP required by the NEPA permit specifies that a series of plans and programs be developed and approved by NEPA and the National Works Agency (NWA) within two to three months of permit issuance, including monitoring for air quality and noise, and plans for waste management, landscaping, storm water drainage, and traffic management. A meeting was held between the Borrower and NEPA in September 2012, where it was agreed upon, in principal, that an extension on these dates would be granted, since NEPA permits are normally issued with the understanding that construction will begin immediately. The IDB will require that the Borrower provide evidence that it has submitted a formal request for amendment of these dates, and agreement, by NEPA, in writing, prior to ground breaking to ensure that the plans and programs would not be deemed overdue. Due consideration should be given to review and approval time for these plans (typically 30 days) and the schedule for breaking ground; accordingly, the IDB will require an appropriate permitting strategy and engagement of qualified local consultants to develop the plans.
- 3.4 For water and sewer hookup, the NWC (National Water Commission) issued a statement of availability of service, and in meetings confirmed that there is abundant existing capacity for the facility. Requirements to be included in the formal application for water supply include site plans, water demand analysis, surveyed maps, and a computer model for piping and instrumentation layouts with a Professional Engineer's Report. Wastewater requirements include facility layout plans, manhole details, laterals and connections, elevation surveys, also with a Professional Engineer's Report. Estimated annual operating costs for all electro-mechanical equipment are to be included in both submittals. The NWC will require monitoring of water supplied to the facility, and will base wastewater billing on that quantity with no additional requirement to monitor effluent quantity.
- 3.5 The municipal authority, KSAC (Kingston & St. Andrew Corporation), maintains close contact with NEPA and was informed and consulted during the issuance of the NEPA permit. KSAC issued a separate building permit authorization (March 2012) which includes provisions for periodic inspections during construction. The KSAC permit in effect constitutes the municipal Land Use Permit for the Project. The project must be completed within two years or the permit must be revalidated (it is expected that KSAC would approve such renewal request). Updated design plans, layout drawings, and final architectural plans must be provided to both KSAC and NEPA, as changes to the submitted design plans could trigger a reevaluation procedure, or for example redesign of the stormwater drainage plan, and be accepted by KSAC and NEPA, prior to breaking ground.
- 3.6 Worker health and safety matters are governed by the Ministry of Labor and the Ministry of Health. The Environmental Control Division is in charge of enforcing occupational health regulations. No additional licensing is required.

B. Compliance with IDB Policy Requirements

- 3.7 The Project is not expected to have significant and/or irreversible negative impacts on the social or biophysical environment. Rather, it is expected to have mostly local and short-term impacts typically resulting from construction and operation of a mid-size hotel, the most noteworthy of which are expected to be noise and traffic disruption; as such, it is classified under as a Category "B" in accordance with Directive B.3 of the IDB Environment and Safeguards Compliance Policy OP-703.

- 3.8 The Project triggers the Directives B.3 through B.7, B.10 (Hazardous Materials), and B.11 (Pollution Prevention and Abatement) of the IDB Environment and Safeguards Compliance Policy (OP-703); OP-102 (Access to Information) and the Disaster Risk Management Policy (OP-704). No involuntary resettlement is anticipated and no adverse gender impacts were identified therefore Involuntary Resettlement (OP-710) and Gender Equality for Development (OP-270) are not triggered.
- 3.9 **Environmental Assessment (Directive B.5):** NEPA did not require Caribe to submit a formal EIA, however in accordance with this directive the IDB asked the Borrower to prepare an Environmental and Social Assessment (ESA) using the IDB Technical Note² on Environmental and Social Analysis for Small Hotels and Resorts (Category B). A draft was submitted to the IDB in September 2012, and comments were provided. The final ESA was delivered in October 2012. Minor clarifications are still under discussion.
- 3.10 **Consultation and Access to Information (B.6 and OP-102):** Public consultation was not required under Jamaican law or required in the NEPA permit. However, to conform with IDB requirements a public consultation event was conducted in October 2012, a summary of which is annexed to the ESA. Easements and access remain to be negotiated, which may present challenges and issues to be resolved. The local perception is that the project will bring economic benefits and therefore appears to be widely supported; however, there are local concerns with traffic and visual aesthetics that should be explored and considered. Caribe has also made the ESA and general Project information publically available for review by the public at its partner's office in Kingston. The ESA has been made public on the IDB Project website, in accordance with IDB requirements³.
- 3.11 **Hazardous Materials (B.10) and Pollution Prevention (B. 11):** The risks to the Project from hazardous materials and pollution are minimal. Containers currently stored on the Project site are owned by Emancipation Park and are used for storage of materials and supplies for public events, and will be removed by the Park. The NEPA permit requires that controls on the storage, handling and disposal of hazardous materials are in place during construction. Marriott's operational practices also include controls on the storage, use and disposal of hazardous materials, as well as minimization and waste reduction aspects. The IDB will require that these control measures be included in the EMP.
- 3.12 **OP-704 Disaster Risk Management Policy:** Jamaica falls under the Type 1 Disaster Risk Scenario: "Developments located in coastal zones of the Caribbean are likely to be affected by hurricanes, tropical storms and coastal flooding due to storm surges." The Project as proposed has been designed to national (Jamaica National Building Code, 2009) and international (International Building Code, 2011) standards to provide protection against earthquakes, and follows the Florida Building Code, with Miami-Dade wind loads and window specifications to withstand high winds. Together with the Borrower's and the Operator's proposed mitigation and management measures the Project is expected to comply with OP-704.

² [IDBDOCS-#36554958-ESG-TN-334: EA small hotel or resort](#)

³ <http://www.iadb.org/en/projects/project-description-title.1303.html?id=JA-L1045>

C. Other Standards to be Applied to the Project

- 3.13 A number of provisions within the IFC General Environmental Guidelines apply to the Project such as noise levels and health and safety. The IDB will require that the Borrower incorporate the relevant aspects of these into its plans, policies and procedures.
- 3.14 The Project is being designed and constructed using the USGBC LEED for New Construction. The target certification is Silver.
- 3.15 A prerequisite of LEED certification is the development of SWPPP. Caribe has prepared a SWPPP consistent with LEED and the US Environmental Protection Agency (EPA) guidance for Storm Water Management for Construction Activities (Document No. EPA-832-R-92-005). Minor improvements are required to meet with NWA additional requirements to protect against particular conditions that may present at this site (see 4.4).

IV. SUMMARY OF ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS AND MITIGATION MEASURES

- 4.1 The Project has the potential for positive environmental and social impacts, specifically in terms of direct and indirect creation of employment and demonstrating the viability of green buildings in Jamaica. The potential negative environmental, social, health and safety (ESHS) and labor impacts of the Project are greatest during the construction phase, but these are mostly minimal to moderate and effective ESHS mitigation measures are available. Mitigation measures will be described primarily in the EMP (Environmental Management Plan) for construction (sub-section A below), in Marriott procedures during operation (sub-section B below), and tracked by Caribe's corporate ESHSMS throughout (see Section V).

A. Key Environmental Impacts and Risks during the Construction Phase

- 4.2 During the construction phase of the Project, there are a number of localized, short-term impacts and risks that can be moderated or eliminated through the application of mitigation measures in the main part required in the NEPA Permit, which will be presented as an EMP for the construction phase. These risks and impacts and their respective mitigation measures are summarized below:
- 4.3 **Noise:** There is a risk of noise pollution during the construction period of the Project, however, blasting and pile driving are not anticipated and therefore significant increase in noise levels is not expected. Emancipation Park, the Liguanea Club, and the Richmond Great House may represent noise-sensitive receptors, however, given their open-space character. Preliminary background noise levels reported in the ESA were 78 dBA, which is in excess of default standards of the NEPA permit (70 dBA at the property line) and IFC standards (70 dBA at the nearest receptor). The source of the noise was traffic and wind. The IDB will require that additional background studies be completed, including identification of nearest receptors, and that alternative standards be submitted to NEPA for approval, along with quarterly monitoring. IFC Guidelines specifies no more than 3 dB(A) increase in ambient noise levels over background at the nearest receptor, and to that end the Borrower is advised to undertake further background studies to ensure that these standards will be met. NEPA require the development and implementation of an Environmental Monitoring Program, due to be submitted within 3 months of the issuing of the Permit (extension to be requested by the

Borrower), and prior to start of construction. The IDB will require that the Borrower demonstrate compliance with both the permit conditions and the IFC Guidelines.

- 4.4 **Natural Disasters:** There is a moderate to significant risk of structural damage due to seismic activity and flooding due to the prevalence of seismic activity, hurricanes and strong storms that affect this area of Jamaica, if adequate measures are not incorporated. The Project design proposed by the developers includes sufficient mitigation measures to control storm water run-off and reduce the potential for flooding from on-site sources. Near-surface soils have adequate infiltration to accommodate drainage during construction. As the Project site topography is flat, the SWPPP (Storm Water Pollution Prevention Plan) prepared by the Borrower (a LEED requirement) provides for on-site storm water containment using silt fencing, sediment traps and basins. However minor adjustments (additional perimeter berm on the South side) will be required to protect against potential encroachment of storm water from drain back-up of the New Kingston system during storm events. Additional conditions were set by NWA and must be incorporated into the SWPPP and include percolation testing and the installation and maintenance of on-site silt, oil and grease traps. Percolation tests have been already been undertaken and silt traps been designed to address these conditions. The IDB will require that the SWPPP be amended to address how grease traps are being developed for the operations phase of the Project. Caribe has As well, Caribe's construction contracts reference the SWPPP as a contract document, and require that it be adhered to.
- 4.5 Additionally, the hotel design applies national and international standards for seismic construction and storm protection (see 3.18). A backup generator capable of supplying all the electrical needs for the hotel, for at least short periods of time, is also being included in the design specifications. For the construction phase, the borrower will be required to develop an internal contingency plan that includes emergency procedures, as well as procedures for responding to spills, hazardous materials releases, floods, quakes and other accidental events.
- 4.6 **Labor, Health and Safety:** Jamaican construction and labor contracting codes are not well defined, and enforcement is normally not prioritized, there is therefore a potentially high risk that contractors and sub-contractors do not meet international labor standards. Internal worker safety and occupational health practices must therefore be sufficiently detailed to minimize risk, and proper implementation should be ensured by contracting requirements, inspections and follow-up. Occupational health and safety concerns can be managed through implementation of procedures to reduce and control identified risks, including improved occupational health and safety training and use of personal protection equipment, in addition to implementation of life and fire safety precautions and emergency response plans. While the NEPA permit calls for an Emergency Response Plan and Evacuation Plan for the hotel, worker health and safety is not specifically detailed. The IDB will require that the Borrower develop and implement a Health and Safety Plan, including, but not limited to, safe working conditions, use of protective gear, air quality measures focused on dust control, waste management, hazardous materials handling and drainage control. The IDB will also require that the Borrower's agreement with the construction Contractor include references to compliance with all applicable worker health and safety requirements, and reference the EMP as a contract document and that the Contractor establish a Workplace Safety Program and carry an insurance policy against workplace accidents.
- 4.7 **Security:** Given high crime rates in Kingston, Caribe is expected to contract a security company during construction, for the safety of all employees. While there will be no visible use of firearms by security personnel on the property, the IDB will require that the Borrowers

security contractor have strict control measures in place including safe storage of any weapons, is in place on the Project Property at all times.

- 4.8 **Contamination:** The risks posed by historical contamination from previous land use are considered minimal based on the site inspection, geotechnical borings, and past use. The risk of other liabilities from past claims or issues is low. Containers currently located on the Project site are owned by Emancipation Park and are used for storage of materials and supplies for public events, and will be removed by the Park. Notwithstanding this, as a precautionary measure, the IDB will require that the Borrower ensure the necessary measures to address chance-finds of hazardous or unknown materials.
- 4.9 **Cultural and historical sites:** There are no known cultural or historical sites on the Project site; however there is a low risk that objects of historical importance may be uncovered during excavation. To that end the IDB will require that the Borrower develop and implement a chance-find procedure for historical artifacts, prior to the commencement of site clearing and digging, which should include periodic inspection by the Caribe resident engineer, during site cleaning, earth moving and excavation, and include this Plan in the EMP.
- 4.10 **Natural habitats:** Impacts on natural habitats are not considered an issue on the Project site or direct area of influence as the land has been cleared for a significant period of time. The trees on the site are not protected or endangered species.

B. Key Environmental Impacts and Risks during the Operation Phase

- 4.11 During the operation phase, there are a number of potential negative environmental and social risks and impacts, however these are expected to be minimal to moderate, and can be mitigated and/or managed by the Borrower's and hotel operator (Marriott)'s existing or proposed plans and management systems. These risks and impacts, and corresponding mitigation measures are summarized below:
- 4.12 **Health and Safety, and Security:** During operations, there is the potential risk for health and safety risks to worker and guests, as well as general security risks due to high crime rates in Kingston, as a whole. Standard Marriott International plans and procedures will be implemented, and in particular a Property Emergency and Contingency Plan. Given high crime rates in Kingston, Marriott is expected to contract a security company during operation for the safety of its guests and employees. While there will be no visible use of firearms by security personnel on the property, the IDB will require that the Borrowers security contractor have strict control measures in place including safe storage of any weapons, is in place on the Project Property at all times.
- 4.13 **Natural Disasters:** Jamaica is subject to occasional seismic activity and strong storms, and as such potential the potential risk of damage to property and life is considered moderate. The NEPA permit requires an Emergency Response Plan and Evacuation Plan, which includes disaster preparation, response and recovery, be submitted to the Office of Disaster Preparedness and Emergency Management (ODPEM) and Fire Department, within 8 weeks of the Permit date (which will be requested to extend prior to operations). In addition Marriott International requires a Property Emergency Plan for all of its properties. The IDB will require that this Plan also include measures to mitigate and manage the high risk of flooding and seismic events in the Kingston area, as well as the more typical aspects such as fire safety, and include this part of the Project EMP.

- 4.14 **Natural habitats:** Impacts on natural habitats are not considered a significant issue on the Project site or direct area of influence as the land has been cleared for a long period of time. The trees on the site are not protected or endangered species. The NEPA permit requires that the Borrower submit a Landscape Plan within 3 months of the date of the Permit (which will be requested to extend prior to operations) which must include (but not be limited to): a list of the species to be used in landscaping; the source of the vegetation to be used during landscaping, especially large trees, and a landscaping map. The IDB will require that this requirement be fulfilled, and the Plan included in the Project EMP
- 4.15 **Hazardous materials:** The Project includes the installation of a small diesel powered backup generator. The generator being considered uses a double-wall base as containment and will not require additional permitting by NEPA. Storage of diesel and other small amounts of hazardous materials (pesticides and other maintenance chemicals) is considered to pose a minimal risk. The NEPA permit requires measures to ensure correct storage and handling of these. Such measures will be included in the EMP.
- 4.16 **Resource use and emissions:** Once in operation a Hotel can place high demands on water and energy use and has the potential to draw upon scarce resources. Given that this is a mid-size business hotel, however, and that the hotel is being designed with efficiency measures in mind (to comply with LEED Silver) this is not expected to represent a significant issue. Additionally through Marriott, resource efficiency measures will be put into place. As with the previously financed operation in Costa Rica, the IDB will however require a Carbon Management Plan be applied to this Project, to calculate and track carbon emissions associated with the operational phase.

C. Key Social Impacts and Risks

- 4.17 **Community Relations:** As with similar medium to large urban construction projects, there is a risk of public complaints being made by local neighbor residents during the construction process. These are most likely to be related to dissatisfaction regarding dust, noise, or traffic during construction, or simple misinformation. To date formal consultation has not been undertaken with local business and residents; however a consultation event is being planned (Section 3.12). To that end the IDB will require that the Borrower assign community liaison responsibilities to the onsite Engineer, including the development of a public relations and information program, hiring of locals, and measures to reduce construction nuisance such as noise, traffic and light pollution, and particularly to monitor noise and vibration.

D. Cumulative Impacts

- 4.18 The cumulative impacts associated with the Project are largely positive (see below). However, the loss of open space in urban New Kingston has potentially negative consequences. The development of the project will result in the subdivision of the existing property into two parcels, and will stimulate the additional development in the northern part of the property of a residential complex in the future. In a meeting with NWC, officials confirmed that the New Kingston area benefits from excellent water quality, abundant water supply, and more than adequate wastewater disposal capacity. Drought contingencies are also well developed in the Kingston area, as surface reservoirs can be supplemented by wells. The water demand for the Project is not significant compared to the available supply.

E. Positive Impacts/Benefits

- 4.19 The Project has the potential to create a positive impact on the New Kingston area and the immediate environs of Emancipation Park. Restaurants and businesses in the area could benefit from the increased foot traffic and increased visitor presence.
- 4.20 The Project will create temporary employment during the construction period (up to 200 persons, of which, according to the ESA and statistics from other Caribe Hospitality hotel developments, 85 percent is expected to be locally hired) and longer term employment once the Hotel is operational (60-65), with an expected distribution of 50 percent male, 50 percent female. In addition, it is expected that for every direct job, 3 indirect jobs will be created.
- 4.21 The use of LEED design and construction not only has a positive impact on public health and the environment, it also reduces operating costs, enhances building and organizational marketability, potentially increases occupant productivity, and helps create a sustainable community. The planned Courtyard Jamaica hotel has the potential to be a highly visible showcase to demonstrate the application of LEED certification in the tourism and hospitality sector. Through the promotion of water, waste and energy efficiency measures in both construction and operation

V. MANAGEMENT AND MONITORING OF ENVIRONMENTAL, SOCIAL, HEALTH AND SAFETY AND LABOR IMPACTS AND RISKS

A. Description of Management Systems and Plans

- 5.1 The Borrower is in the process of developing a series of environmental management plans and procedures which will contain construction mitigation and management measures linked directly to the potential impacts identified during the ESA, and also identified and detailed in Section IV above, and the requirements stipulated in the NEPA permit, to be complimented by additional measures required by the IDB. These can be summarized as follows:
- Environmental and Social Management Plan (EMP)
 - Health and Safety Plan
 - Waste Management Plan
 - Emergency Response Plan and Evacuation Plan
 - Landscape Plan
 - Traffic Management Plan
 - Chance Find Procedure (requested by the IDB)
 - Contingency Plan (requested by the IDB)
 - Security Control Plan (requested by the IDB)
 - The Stormwater Drainage Plan
 - Environmental Monitoring Program (including but not limited to waste handling and disposal, air quality and noise levels)
- 5.2 The IDB will require that these plans and procedures be provided to all parties involved in the execution of the project (contractors, inspectors, etc.), and that they be referenced in all contracts and/or agreements. In particular, the agreement for the construction contractor should require that basic environmental functions be performed, such as waste and debris management, obtaining potable water permits, and supplying sanitary facilities, and charge the contractor with minimizing disturbance and annoyance to neighbors. Caribe's Resident

Engineer will conduct periodic inspection to ensure correct implementation of the environmental mitigation plans and measures.

- 5.3 **Caribe Environmental, Social, Health and Safety Management System (ESHSMS):** Caribe has developed a formal ESHSMS consistent with ISO management systems for its internal use on CHLFF projects. The document is currently in Version 2 and is being updated and translated into English. The ESHSMS is the vehicle used by Caribe to implement the respective environmental and social management plans and procedures for the individual Projects it develops. The ESHSMS includes;
- Caribe’s environmental policy
 - Description of its activities (planning and design, construction, and operation phases)
 - Risks and impacts associated with its activities
 - Indicators
 - Corporate programs, plans and procedures
 - Training
 - Audit
 - Documentation and reporting
 - Responsibilities
- 5.4 The ESHSMS was developed during preparation of the first Caribe project under the CHLFF (the Courtyard Alajuela, Costa Rica), and applied to the construction phase of the project a requirement of IDB financing, demonstrating the capacity of the management team to successfully implement a series of environmental and social plans and procedures. However at the time of commencement of operations of this first project, a number of operational plans and procedures were pending. These were subsequently provided and are under review by the IDB. Improvements to the ESHSMS are being incorporated into the subsequent version, which will also be translated into English so as to facilitate its implementation to both the Caribe Kingston Project and other future projects in English speaking countries in the region.
- 5.5 **Hotel Operator Environmental Management Initiatives:** In addition to the mitigation measures discussed in Section 4 above, the hotel operator, Marriott International, has developed a broad set of corporate policies, practices and guidelines for individual hotel operators to follow environmental and social initiatives that are part of their corporate operations. These are verified periodically by questionnaires and surveys from corporate headquarters.
- 5.6 The ECHO program (Environmentally Conscious Hotel Operations). A set of 17 modules provides an integrated framework of corporate policy and directives and forms the “Environmental Guide for Marriott International”. Checklists and guidelines are provided for waste management, energy and water conservation; and for hazardous materials management including USTs, refrigerants, asbestos, PCBs, and other hazardous materials. Marriott monitors the compliance of individual hotels with ECHO through its annual Global Environmental Baseline Survey. The Survey queries whether individual hotels are certified by Energy Star, LEED, or ISO-14001. It appears that Marriott has incorporated many of the elements of a corporate ESHSMS, although no formal program is in place at present.
- 5.7 Additionally Marriott has a number of other guidance documents, for example, a sample Property Emergency/Contingency Plan, as a guide for developing their own detailed plan (the document includes templates for training, organization, contact lists, identification of emergency situations, and response procedures); as well as Safety Training and Reporting

forms (including modules on bloodborne pathogens, fire extinguisher use, hazard communications, and lockout/tagout for electrical safety, OSHA reporting forms for accidents and work-related illness and injury).

- 5.8 The Courtyard Jamaica hotel should include sufficiently detailed environmental documents and instructions to insure that the operator, Marriott International, has clear and concise instructions to manage environmental, health and safety and labor factors, as well as regulatory compliance and social aspects. Given that the operations has already been signed (and includes a requirement for the operator to comply with local environmental and social regulations), further discussion will be required to determine how in the short term (for this particular hotel) Caribe ensure that Marriott will comply with their environmental policies and procedures (ESHSMS); and in the long term (future hotels to be financed by the IDB) that the agreement include appropriate contract language, reporting and monitoring of these aspects in the operations contract, and specifically including the EMP, its reporting and mitigation measures. For the purpose of the short-term it is recommended that Caribe explore the option of a Memorandum of Understanding on environmental and social matters, which would serve as an opportunity for both parties to mutually recognize the environmental policies, procedures and experience in their respective areas (as developer, and as operator).

B. Monitoring and Supervision

- 5.9 **Construction:** Caribe must provide evidence of compliance with the EMP in monthly reports to NEPA for the first 3 months, and then quarterly until the end of the Project and by the submittal of monthly monitoring reports for air, noise, and waste. A logbook ("Site Diary") must be kept at the construction location along with a current set of plans. NEPA and KSAC are likely to visit the project during construction at least once to inspect the project and verify that the logbook is current, and that the EMP is being carried out. The SWPPP also requires monitoring during the construction phase after significant rainfall events. These reports will also form a useful basis for compliance assessment of EMP requirements. The IDB will require evidence that environmental matters have been incorporated into the responsibilities of a Resident Engineer (with overall inspection and oversight functions).
- 5.10 **Operations:** During operation, Caribe must report to NEPA on a bi-annual basis. Mitigation measures in the EMP will include testing and metering of incoming water quality and volume. Payments for wastewater and water use to NWC will be based on these monitoring results. The NEPA permit also requires that energy and water conservation measures be incorporated into an EMP for the operations phase. Additionally LEED requires periodic reporting of environmental indicators such as water and energy use, and Marriott International performs an annual survey to individual hotel managers (the Global Environmental Baseline Survey). The survey covers the key items detailed in the ECHO Manual and the "Green Council" initiatives. The stated objective is to verify that all properties are in compliance with ECHO policy. The model agreement for the operations contractor (Marriott) allows monitoring and inspection by the owner (Caribe). However, environmental and safety inspections and compliance with EMP requirements are typically not specifically included within the model contract language. As per 5.8 above, a Memorandum of Understanding should be explored by Caribe with Marriott to address this.

VI. REQUIREMENTS TO BE INCLUDED IN THE LEGAL AGREEMENTS

6.1 Based on the conclusions of the environmental and social due diligence, the conditions described below are required to be fulfilled for the Project prior to loan approval/signature and throughout the life of the loan, in form and substance satisfactory to the IDB:

A. Throughout the life of the Loan

6.2 The IDB will require within its Loan Agreement that the Project and the Borrower, and other Project/Environmental parties, including construction companies and operators, and any contractors and sub-contractors will, at all times during the life of the Loan Agreement, comply with the following requirements:

- (i) All relevant IDB policies such as the Environment and Safeguards Compliance Policy (OP-703), the Disaster Risk Management Policy (OP-704) and the Disclosure of Information Policy (OP-102), and should they become applicable, the Involuntary Resettlement Policy (OP-710) and the Gender and Equity in Development Policy, (OP-270) and their respective guidelines.
- (ii) Applicable IFC Environment, Health and Safety (EHS) Guidelines.
- (iii) All applicable environmental, social, health and safety, and labor regulatory requirements of Jamaica, including all requirements associated with any environmental, social, health and safety, and labor related permits, authorizations, or licenses that apply to the Project, the Borrower or any party responsible for executing the Project or its mitigation measures.
- (iv) All environmental, social, health and safety, and labor requirements of the Project contracts and any subsequent modifications.
- (v) All aspects and components of all of the Project's environmental, health and safety, social and labor documents, specifically the Project EMP and the revised Caribe ESHSMS.
- (vi) Notice of any and all noncompliance with any environmental, health and safety, social and labor requirement of the loan agreement and any significant environmental, social, labor, health and safety accident, impact, event, claim, material complaint or other known risk.
- (vii) Ensuring that all the Borrower's contractors hired for construction and Project activities comply with the applicable environmental, labor, social and health and safety requirements of the loan agreement.
- (viii) Comply with all the requirements indicated in the Environmental, Health and Safety Action Plan.

B. Prior to Construction (Ground-Breaking)

6.3 Prior to the commencement of Construction of the Project (understood as the day breaking ground occurs, and expected, at time of writing, to be in January 2013) the Borrower shall submit, in form and substance satisfactory to the IDB, the following:

- (i) Evidence of the formal request for amendment of dates of environmental and social plans set out in the NEPA permit, and agreement, by NEPA, in writing.
- (ii) Evidence that updated design plans, layout drawings, and final architectural plans have been submitted to, and approved by NEPA and KSAC. A copy of said plans and drawings should be sent to the IDB at the same time as the submission is made to NEPA and KSACA.

- (iii) Present an Environmental, Social, Health and Safety Action Plan (ESHSAP), in form and substance satisfactory to the IDB that sets out the timetable for the EMP, pending plans and activities with their associated milestones, responsibilities, and status.
- (iv) The following construction plans and procedures, including all plans detailed in the NEPA permit, and additional plans and programs required by the IDB (and as laid out in this document) including but not limited to:
 - The environmental and social management plan (EMP)
 - Health and Safety Plan
 - Noise Management Plan
 - Waste Management Plan
 - Landscape Plan
 - Chance Find Procedure
 - Traffic Management Plan
 - Contingency Plan
 - Security Control Plan (requested by the IDB)
 - Environmental Monitoring Program
 - The Stormwater Drainage Plan

Said plans and procedures should be submitted to the IDB concurrently with the submission to NEPA.
- (v) Evidence of NEPA and/or NWA approval of the EMP and plans detailed in the NEPA permit.
- (vi) Evidence that the EMP has been included/ referenced in contracting requirements (the Construction Agreement etc.), and in particular the Health and Safety practices detailed in the Health and Safety Plan.

C. Prior to Financial Close

- 6.4 Prior to Financial Close the following conditions need to be fulfilled:
- (i) The revised Caribe ESHSMS (v.3 in English) detailing how, in particular this is being implemented to the construction phase of the Project.
 - (vii) Evidence that the construction plans and procedures, including all plans detailed in the NEPA permit, and additional plans and programs required by the IDB (and as laid out in this document) have been satisfactorily implemented. These plans and procedures include but are not limited to:
 - The environmental and social management plan (EMP)
 - Health and Safety Plan
 - Noise Management Plan
 - Waste Management Plan
 - Landscape Plan
 - Chance Find Procedure
 - Traffic Management Plan
 - Contingency Plan
 - Security Control Plan
 - Environmental Monitoring Program
 - The Stormwater Drainage Plan

D. Prior to Initiation of Operations

- 6.5 No later than 30 days prior to the commencement of operations, the Borrower shall submit to IDB the following:
- (i) Evidence of OPDEM approval of the Emergency Response Plan and Evacuation Plan.
 - (ii) The Carbon Management Plan.
 - (iii) A copy of the most recent version of Caribe ESHSMS (v.3 or higher) detailing how, in particular this is being implemented to the operational phase of the Project.
 - (iv) Details of proposed Memorandum of Understanding or agreement on environmental principals between Caribe and Marriott.

E. Prior to Each Disbursement

- 6.6 Prior to Financial Close the following conditions need to be fulfilled:
- (i) The Borrower shall certify compliance with all ESHS and labor requirements in the Loan Agreement, including any Corrective Action Plans if applicable.
 - (ii) The Environmental and Social Consultant (to be contracted by the Borrower) shall certify compliance with all ESHS and labor requirements of the loan agreement, including any Corrective Action Plans if applicable.

F. Reporting, Monitoring and Supervision

- 6.7 During the life of the Loan Agreement, the Borrower must prepare and submit an Environmental and Social Compliance Report, in form, content and frequency acceptable to IDB (semi-annually during construction, semi-annually for the first year of operation, and annually thereafter). These reports will annex the periodic NEPA compliance reports.
- 6.8 The Bank will monitor the Project's environmental, health and safety, social and labor aspects via direct Bank supervision (e.g., site visits, review of documentation, etc.) and will contract an external independent environmental consultant to perform more detailed supervision actions during construction and operation. This supervision will be conducted by the IDB with the assistance of an external independent environmental and social consultant according to the following schedule: 1) During construction: quarterly; 2) during the first 18 months of operation: semiannually; 3) From 18 months through the life of the loan: annually. All costs of supervision will be covered by the Borrower: (a) consultant costs will be as agreed in the Monitoring Agreement, (b) IDB annual supervision out-of-pocket expenses are estimated at \$10,000

Annex 1. Requirements of IDB Policies and Directives

<i>Policy/ Directive</i>	<i>Applicable aspect</i>	<i>How requirement is met/not met</i>	<i>Actions required for future/continuous compliance</i>
OP-703			
B.2	<i>Compliance with NEPA Permit</i>	<i>NEPA Permit granted detailing requirements for an EMP including specific plans to be completed in designated time frames (mostly within 3 months of issuance of permit) and prior to commencement of construction. Construction has not yet commenced but 3 month period has passed as such there is a minor non-compliance at this stage.</i>	<i>A formal request must be made by the Borrower to NEPA to amend the timeframes stipulated in the Permit for the submission of the Plans. The EMP and plans must be submitted prior to commencing construction and must account for up to 30 days (sometime longer) review period by NEPA and other agencies in the construction schedule.</i>
B.4 and OP-704: Disaster Risk Mgmt.	<i>Vulnerability to Natural Disasters and Earthquakes.</i>	<i>Project designed to IBC (2009) for seismic, Florida Building Codes (2011) for wind, and Jamaica National Building Codes.</i>	<i>Emergency response plan during construction and operation required.</i>
B.5	<i>Project has undergone or will undergo an adequate assessment process</i>	<i>An EIA was not required by NEPA; however an ESA was undertaken by the client to comply with IDB requirements.</i>	<i>Minor amendments are being made to the ESA.</i>
B.6	<i>Appropriate consultation in preparation phase</i>	<i>Project underwent consultation in October 2012.</i>	
	<i>Project has appropriate Stakeholder Engagement Plan for implementation/ operation phases</i>	<i>Project does not have a Stakeholder Engagement Plan in place.</i>	<i>Community liaison responsibilities will be assigned to the resident Engineer, as per the Caribe ESHMSM's Community Relations Procedure.</i>
	<i>Project has adequate provisions for Grievance Management</i>	<i>Worker H&S standards are not yet in place.</i>	<i>Review of construction contract H&S provisions prior to the commencement of construction.</i>
B.7	<i>Project has adequate internal supervision and reporting requirements</i>	<i>Project will implement an ESHSMS with periodic reporting to IDB.</i>	<i>Provision of the ESHSMS v3 (English) prior to Financial Close.</i>
	<i>Project has adequate external performance assurance</i>	<i>Project will provide monthly monitoring reports and quarterly compliance reports</i>	<i>Periodic compliance verification by IDB will be conducted during</i>

		<i>to NEPA</i>	<i>construction/operation.</i>
B.10/B.11	<i>Project has adequate waste management and pollution control measures: Waste water, Solid waste, Air emissions (CO2), Noise</i>	<i>Project must meet KSAC wastewater standards as part of water and wastewater permit. During construction, project must monitor air quality and noise as part of NEPA permit, and implement a solid waste management plan. A separate SWPPP ensures control of sediment and erosion during construction. During operations, Marriott and LEED requirements include control measures for all parameters including CO2.</i>	<i>Results of air quality and noise monitoring must meet proposed NEPA standards during construction and LEED performance standards during operation.</i>
OP-102: Disclosure		<i>The draft ESA has been made public on the IDB Project website.</i>	<i>The IDB will require that the final ESA, NEPA permit, EMP, design drawings, and other documents be made publicly available, in addition to the placement of a notice-board at the Project site to give details on who to contact and where to find further information</i>