

# Project Appraisal

*KITTITIAN HILL*

Planning & Design Stage

Golf Environment Organization  
Legacy™ Program

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Legacy™

Guidance and mentoring  
with credible assurance  
for golf developments

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## **1. RECOMMENDATION**

**The Recommendation of the Verifier further to the Project Appraisal process outlined by this report is that Kittitian Hill should be formally enrolled in the GEO Legacy™ Programme.**

The primary reasons for this recommendation are:

- The project components collectively reflect a coherent, holistic philosophy which covers all areas of the sustainability agenda, and has the potential to establish a new and very positive model for golf resort development throughout the Caribbean region;
- The resort forms a major component of the wider Whitegate Development Area of St. Kitts, and its construction will be a key step in implementing the government strategy to promote tourism in regenerating the island's economy as part of the National Physical Development Plan;
- The social and economic benefits of the project to the neighbouring communities, and more widely to the island and the Federation of St Kitts and Nevis, form a key objective which is successfully integrated with commercial imperatives through a wide range of innovative measures; with art and culture, and food production, as key elements;
- The emerging details of the design and construction of the golf course demonstrate a very sensitive and enlightened approach which will incorporate opportunities to re-imagine traditional components in harmony with the innovative overall philosophy;
- The project concept originates from, and is focussed on, the principles and objectives of an aspirational initiative to realise a vision of the Federation as the world's first 'Sustainable Island-State', which will drive further synergy between the project and strategic benefits to the island.

Given the outstanding levels of commitment and energy already demonstrated to date by the development team, the universal strength of the individual elements of the concept, and the collaborative support by multiple government agencies, I am confident that the Kittitian Hill project has the potential to deliver significant multiplier benefits in enhancing the environment, society, and economy of St. Kitts and Nevis.

Mike Wood  
GEO Legacy Verifier  
June 2011

## **2. INTRODUCTION**

### **PURPOSE OF REPORT**

The purpose of this Project Appraisal Report is to provide a recommendation to the Golf Environment Organisation regarding formal enrolment in the GEO Legacy™ certification programme.

The recommendation is informed by a review of the fundamental sustainability opportunities and challenges the project is likely to generate, to ensure that it has the potential to deliver the very highest standards in sustainable development.

The report has been prepared by a quality assured GEO Sustainability Adviser (GEOSA), who has been trained and accredited by GEO to support the creation of outstanding golf developments which fulfil Legacy™ requirements.

### **CLASSIFICATION**

Kittitian Hill has been classified as falling within the category “Large-scale projects” for the purposes of the GEO Legacy Programme.

### **SCOPE OF PROGRAMME**

It is regarded as fundamental to the aims of the GEO Legacy Programme that the project has the potential to deliver a fully-integrated sustainability concept, in which golf is embodied within a wider resort entity. Accordingly it is proposed that the Programme should cover all development within the site boundary as defined in the Master Plan for the resort including:

- 18-hole golf course
- Practice academy and driving range
- Village and Spa

- Boutique Hotel Cottages
- Other residential units:, Apartments, Townhouses, Villas
- Clubhouse
- Maintenance Facility
- Plant Nursery

Moreover, the Legacy programme philosophy requires that the sustainability potential of the project extends “beyond the property boundary”, to interface with, and embrace, the wider social, economic and environmental context of the island of St Kitts, and of the Federation of St Kitts and Nevis.

## **METHODOLGY**

Project Appraisal constitutes an *initial* review of the *core* aspects of the development project. Should the project be formally enrolled in the Legacy™ programme, this process will be extended incrementally to explore the relevant sustainability issues at progressively more detailed levels, corresponding to the programme’s key milestones:

- Planning & Design
- Construction
- Management hand-over

Screening therefore focuses on investigating the broad compatibility of the project with GEO values and aims, rather than detailed specifics. It includes the following key tasks:

- Overview of the policy and legislative context into which the project will fit,
- Review of the main components of the project as currently defined;
- Appraisal of the project against core sustainability concepts

- Appraisal of key sustainability issues generated by the project, in order to identify and understand the main opportunities and challenges in relation to the GEO sustainability agenda;
- Identifying the priority issues to be followed-up in developing the project through the subsequent stages of the process.

These tasks have been informed by:

- Review of documents provided by the developer both directly and via the sustainability adviser;
- A site visit carried out between 5<sup>th</sup> -7<sup>th</sup> April 2011 , incorporating orientation within the regional context, on-site observations, and discussions with members of the project team;
- Discussion with the project sustainability adviser prior to, during, and after the site visit period.
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### 3. CONTEXT

#### ENVIRONMENT

The Kittitian Hill development site which extends to approximately 400 hectares, is located near the north-west coastline of St Kitts, on the lower slopes of Mount Liamuiga, a cratered volcanic cone dating from Pleistocene times, which rises to a height of 1156m (3792') and forms the dominant topographic feature of the island.

The site topography is characterized by relatively gentle slopes with northerly or north-westerly aspects, dissected by a number of deep, steep-sided gullies known locally as "ghauts", which normally carry watercourses only during storm events in the wet season, from around August to November. The vegetation cover emphasises these features, which carry remnant trees and scrub, together with a number of species of taller palms, in contrast to the majority of the site which is characterized by secondary growth dominated by cane-grass.

The soils of the island are naturally fertile, being rich in minerals derived from the rapid weathering of their volcanic parent materials, and despite three centuries of intensive cultivation are generally still in relatively good condition, albeit with a tendency for deficiencies in organic matter, nitrogen and potassium. The site-specific conditions are fairly typical of the island, characterized by young, coarse-textured, well-drained soils overlying loose volcanic ash.

Upslope, the cane plantation land gives way to zones of dense evergreen forest and cloud forest, dominated by tree species including *Podocarpus*. The mountain interior throughout the island, although protected by an embryonic nature conservation designation, is thought unlikely to contain any extensive areas of virgin forest, due to extensive clearance for agriculture and charcoal burning. A hiking trail leads from the upper part of the site to the Liamuiga crater and there

are spectacular views from the lower ground towards the normally cloud-capped summit.

Looking north and north-west from the site, there are magnificent long-distance views to the coast and the neighbouring island of St Eustatius. In clearer weather, more distant islands including St. Barts (St. Barthelemy) may also be visible. These views have been one of the key factors influencing the design concept for the resort.

### **SOCIAL AND ECONOMIC**

St Kitts, (shortened from Saint Christopher), is part of the Federation of St Kitts and Nevis, a member of the international alliance of Small Island States. The island has a small population, around 35,000 at the 2001 Census, of which more than a third lived in the capital, Basseterre. It is a young nation, having been granted independence from Britain as recently as 1983, following a long colonial history dating back to the 17<sup>th</sup> Century, which included many periods of dispute between Britain and France.

In many respects Kittitians are still engaged in a transition from the “plantation” economy, centred on sugar cane production, which dominated the agriculture of the island and was only finally wound up in the last decade. Tourism is the primary driving force for this change, earning very significant foreign exchange income, both from seasonal visitors, and increasingly, from real estate development incentivised by the government’s Citizenship by Investment scheme.

Bound up with the drive for social and economic regeneration is the need to halt and reverse trends of environmental degradation, primarily in the areas of solid waste disposal and marine pollution, backed by education and awareness-raising, and the promotion of community-based actions focused on conservation



of natural environment. This also requires to be supported by a coherent programme of protection and management of threatened biodiversity resources throughout the island, including the valuable remaining forested areas and marine habitats.

The Kittitian Hill project has been conceived within this wider socio-economic context and presents a coordinated response to its most fundamental forces. Its central philosophy, which is outlined in further detail later in this report, is built around “People and Communities” in GEO terms, with human capital regarded as the most important resource, and with every aspect of the proposals tied-in wherever possible to the development of an enhanced sense of identity, self-sufficiency, and quality of life. Opportunities to develop and promote education, both formal and informal, form a recurring theme, addressing entrepreneurship in the widest sense, and including specific work skills required within the island economy which dovetail closely with the project concept including organic farming, art and culture, and environmental stewardship.

## **4. PROJECT**

### **PROJECT TEAM**

The key members and roles are:

- Developer:
  - Legal Entity: Kittitian Hill, PO Box 10, A-10, Sands Complex, Basseterre, St Kitts.
  - Client Representative: Valmiki Kempadoo
  - Project Liaison: Michael el Khoury
- Golf Course Architects: European Golf Design
- Environmental Consultants:
  - EIA BBFL Consulting
  - Sustainability Engineers: WSP Environment and Energy
- Architects: Bill Bensley, Vincenzo de Rosa
- Resort Management: Sedona Resorts

The calibre of the development team for the Kittitian Hill resort reflects its ambitious sustainability objectives. In particular, Mr Kempadoo is very clearly evident as the primary driving force behind the project: his vision and leadership has been instrumental in shaping the broad philosophy of the project, and his energy and attention to detail are now ensuring its realisation.

### **PROJECT COMPONENTS**

The Kittitian Hill golf course and practice facility cover 160 hectares. As summarised above, the additional components include:

- The golf course, to be known as the Mango Walk golf course, is an 18-hole par 72 resort course with a preliminary design length of 6240m (6800 yards). The neighbouring practice academy will include a driving range, putting green and short game area. The total area covered by the golf

facility including practice area will be approximately 94 hectares. The resort real estate will be constructed in two phases. The following Phase 1 components will be included:

- Village and Spa: the village forms the heart both of the physical plan of the resort and its sustainability concept. In plan, the layout will be focussed on a linear street at a pedestrian/human scale, (no vehicles will be allowed), with a town hall and administration building. In addition to luxury amenities including a swimming pool, spa, fine dining restaurant, shops, and cafes, the village will have a range of facilities centred on the arts and culture, including a cinema, film studio, gallery, craft workshops, and a range of artisan shops.
- Boutique Hotel Cottages: 110 one-bedroom cottages and 12 spa cottages.
- Other Residential units: to include 74 two- and three-bedroom Townhouse units, and 69 three- and four-bedroom luxury villas to 5 alternative designs.
- Clubhouse: The design of this facility, to be named the Cocoa House, has recently been fully reworked on an amended site. It will include a restaurant with patios, bar, and banquet area, as well as locker room and pro-shop.
- Maintenance Facility: approximately 1.5 hectares
- Plant Nursery: approximately 3 hectares.

## **TIMESCALE**

This project is already at an advanced stage relative to the screening process. The current projected opening date for the golf course is December 2012, with construction of phases 1, 2, and 3 all under way. I have taken account of the special circumstances which apply to this pilot project and a 'customised' programme of inputs has been set out below at Section 6.

## **5. EVALUATION**

### **GOVERNMENT POLICY**

The purpose of this test is to ensure the project will contribute to the delivery of local, national and international policy across the full sustainability spectrum including economic development, recreation provision, environment, cultural heritage, tourism, health and education.

#### National Physical Development Plan

The key document with regard to sustainable development policy on the island is the National Physical Development Plan (NPDP), published by the Government of St Kitts and Nevis (GOSKN) in 2006. This sets out the vision for St Kitts looking ahead to 2021 and forms the foundation for all major decisions that will guide the planning of island's future spatial development. The NPDP embraces sustainable development at the heart of this vision, seeking to balance economic growth, protection of the environment, and an improved quality of life for its citizens. One of 11 main goals of the NPDP is specifically targeted at tourism development, focussing on "low impact tourism strategies that minimise the environmental and socio-cultural impacts and take advantage of the unique qualities of the island".

It is considered that the philosophy of the Kittitian Hill project is very closely aligned to this primary objective, as well as conforming to the other relevant fundamental aims of the plan, and is recognised at National level as the flagship sustainable tourism model.

The NPDP includes a further level of detail in the form of Local Area Plans (LAPs) setting out strategic aims for specific areas of the island. The relevant LAP, under tourism development, identifies the aim to "Promote the implementation

of the proposals of the Whitegate development project". A specific legislative instrument, the Whitegate Development Corporation Act, has been introduced to facilitate its implementation.

Kittitian Hill is the core development within the wider Whitegate plan and as such is a key component in realising the LAP.

### **PLANNING CONTEXT**

The purpose of this test is to review compatibility with spatial plans, land use zonation and policies for the use of natural resources, to ensure the project conforms to defined frameworks for the allocation of land and resources in the region.

Through approval of the EIA, planning consent is already in place for the golf element of the project. The built components are approved at masterplan level under the wider Whitegate project, and discrete building packages and phases will go through due process as detailed design progresses.

### **LEGAL COMPLIANCE**

This is a fundamental test which must be satisfied to ensure that the project will be free from legitimate legal challenge and dispute going forward.

Compliance with all relevant legislation and regulations relating to environmental aspects of the project is deemed to be inclusive in the consent to develop. A formal declaration to this effect will be required to be submitted by the promoter to GEO prior to formal enrolment in the Legacy Programme.

In discussions during the visit, it was confirmed that there are no significant outstanding potential legal challenges to the project, although it is noted that an

agreement has yet to be concluded between GOSKN and one subsistence farmer currently resident on the site, whereby Kittitian Hill have committed to fund construction of a new dwelling on land to be provided by the government.

### **CORE SUSTAINABILITY CONCEPTS**

The purpose of this test is to assess the project in light of important sustainability concepts. It considers whether the project adds value to the existing economic, social and environmental fabric of the region, and if it conforms to fundamental principles including the precautionary principle, adhering to the carrying capacity of natural ecosystems, and whether it exceeds thresholds for development and cumulative development impacts.

The spatial strategy set out within the NPDP has taken account of the principle of zoning of development to reflect carrying capacity and development potential, with an overarching emphasis on the need to maintain the quality of the island's environment<sup>1</sup>. The Whitegate Development Area was conceived within this context and is promoted as a key component of the overall tourism strategy.

The sustainability philosophy which underpins the project is a key element of its marketing strategy and is stressed in promotional material including the resort website ([Kittitian Hill](#)). It has been one of the main objectives of the Screening process to test this material through observation and informal questioning on site, and in the structured interviews which took place at the project office. Through this investigation I am satisfied that the philosophy is soundly based and that its fundamental strategic elements are practical and deliverable. Taken together, they form a coherent, holistic vision which forms a very good fit with GEO's published Action Areas, with a focus on People and Communities at its heart. The business model appears to be a genuinely innovative one, based on a credible and well-articulated objective to address regional socio-economic concerns and issues within the reality of the commercial context of the resort. A

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<sup>1</sup> National Physical Development Plan 2006 ("Development Priorities" p.53)

key mechanism, which has yet to be realized, is the instigation of a Kittitian Hill Trust, which will allow a proportion of profits, with contributions from other sponsors, to fund project work focused on “capacity building” within the local economy, including a number of training institutes. Clearly this will be a very important determinant of the ultimate success of the sustainability goals of the project and its implementation is seen as essential in the subsequent stages of the Legacy Programme.

Specific components of the philosophy together with other project elements are outlined in more detail below within the standard GEO Action Areas structure.

## **SUSTAINABILITY OPPORTUNITIES AND CONSTRAINTS**

This section identifies sustainability opportunities and constraints identified within the project documentation available for review: specifically, it considers what the development will contribute in terms of direct and indirect benefits to the six sustainable golf themes as outlined below, and whether there are possible problems or negative impacts relating these.

### **Nature**

- One of the key strands of the resort concept is the aim for maximum sustainable use of the site’s ecosystem services for food production. An “Edible landscapes” policy will utilize innovative cultivation and husbandry practices, bringing extensive areas of the site which would normally be maintained for example as ornamental landscaping or as mown grass roughs, into productive use.

### **Water**

- Kittitian Hill will include the implementation of a comprehensive sewage treatment system.
- There will be a strong emphasis on minimizing water consumption within the resort, with measures including rainwater collection cisterns set in to

property foundations, low flow taps and appliances, and eco-friendly water treatment for swimming pools.

- The golf course irrigated area has been restricted to 32 hectares through innovative measures as discussed below, and through efforts to achieve precision irrigation.

### **Energy**

- The developer has commissioned leading energy and environmental consultants WSP to develop a comprehensive energy strategy for the resort construction and operation. As part of the Legacy Programme, GEO will review detail information as this emerges and will be pleased to cooperate in the refinement of all proposals, in particular for the golf course elements. Proposals for which information is currently available were reviewed and considered to demonstrate significant potential.

### **Supply Chain**

- Socially and environmentally responsible procurement policies are at the heart of the Kittitian Hill project aims and also cut across several of the other themes discussed above

### **Pollution Prevention**

- The resort has an aspiration to become the first “warm season” fully organically maintained golf course. The development team confirmed that there are no plans to make public claims before delivery and that in any case the aspiration will require to be ‘owned’ by the future course manager before it can be progressed.
- Soil erosion is potentially a significant problem given the site location on the volcano slopes and the nature of specific rainfall events. Although this is recognised in the EIA, and some basic mitigation strategies are referred to, GEO would wish to see precise erosion control measures outlined at an early stage, given that earthworks are already under way. During the Screening visit this issue was discussed in some detail, and it was clear that a range of



proposals including phased clearance, mulching, erosion control fencing, and colonization by native grasses prior to final sprigging and planting, were already in hand. It was agreed that a comprehensive CMS would be prepared by EGD in consultation with the developer, and that GEO would comment and advise on this as appropriate at the next stage of the Legacy programme.

### **Community**

- The project includes substantive measures to achieve real integration between the resort's business enterprise and the economy and society of the island, the Federation and the wider Caribbean.

## 6. GUIDANCE AND ADVISORY

The key theme to be communicated with regard to ongoing advice and guidance on this project is simple and clear: continuing commitment to the highest standards of sustainable development.

The challenge and opportunity lies in follow delivery of early stage planning, with increasingly detailed design and construction stages with the support of the Legacy™ Programme. True success in this will be dependent on maintaining close attention to detail *consistently across all sustainability themes*, under the pressures associated with a very demanding timescale.

Specific design development issues where GEO will seek to provide continuing inputs in subsequent stages include (those already discussed above). In addition, points worthy of further close attention include:

The issues include, but may not necessarily be limited to, the following:

- Details of the emerging Energy Strategy being prepared by consultants WSP are not yet available. This is regarded as a core area of the resort's sustainability credentials and the detail will form an important part of the subsequent Sustainability Blueprint stage. GEO will be pleased to cooperate in discussions on the refinement of all aspects of energy provision and efficiency, in particular for the golf course elements.
- Building Design. While the commissioning of notable and highly respected architects provides confidence that the use of passive design methodologies and "green" technologies will be optimised for all work, significant further information on this will be required at subsequent stages.
- As noted above, turfgrass species selection is to be finalized following a decision matrix methodology applying criteria to be agreed with GEO.

- Continuing development of the detail of the landscape strategy, in particular for the out-of-play areas of the golf course, formed a fruitful area of discussion during the screening visit and the opportunities to maximise sustainability benefits through collaboration in this area was recognised.
- Similarly, specific opportunities for collaboration in the preparation of the Construction Method Statement were agreed.
- Maintenance Facility: The facility has yet to be designed in detail and clearly there are fundamental sustainability questions to be resolved during this process, relating in particular to Environmental Quality, Water, and Energy and Resources.
- It was considered that the general principles of ‘walkability’ within the resort, and the promotion of ‘bicycle culture’ were worthy of exploration, to further reduce vehicle use, develop additional walking and jogging trails around the resort including the golf course where appropriate, and to maximise links to off-site trails being considered within the Liamuiga National Park, and the resort beach.
- More generally, there are opportunities to develop further synergy between resort activities and its setting, nestling on the volcano slopes, forging closer relationships between the guests’ experience and the stewardship of the adjoining protected forest areas. Guided walks are one obvious area to be developed, also giving opportunities for training local residents and providing employment.

## 7. NEXT STEPS

The advanced stage of project development of Kittitian Hill and its status as a pilot project within the Legacy Programme is acknowledged. GEO have confirmed that the “standard” programme of evaluation and verification can be slightly customised - determining the following inputs between now and project completion.

<b>Stage/Milestone</b>	<b>Standard Legacy Verification Inputs</b>	<b>Proposed Kittitian Hill Inputs</b>
Screening	1 x Site Visit and Screening Report	1 x Site Visit and Screening Report
Conceptualisation & Masterplanning	2 x Site Visits, interim Feedback, and Concept Report	1 x Site Visit, Concept Report
Design	2 x Site Visits, interim Feedback, and Design Report	1 x Site Visit (joint sign-off on Design and Construction) Design Report, Construction Report
Construction	Desk based review, 1 x Site Visit, and Construction Report	
Management	Desk based review and Management Report	Desk based review and Management Report
Certification	Site Visit and Legacy Certification Report	Site Visit and Legacy Certification Report

(The above shows a reduction in the fee inputs / expenses relating to 3 site visits, against the number required by the standard programme).

### **Immediate next steps**

- Agreement of formal enrolment of project in GEO Development programme<sup>2</sup>;
- Preparation of Sustainability Blueprint from template to be forwarded by GEO;
- Conceptualisation & Masterplanning phase site visit by Verifier, evaluation and sign off (Concept Report)

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<sup>2</sup> Requires payment of €10,000 programme administration fee to GEO