

## ***CHANCE FINDS PROCEDURE FOR THE KAIHA 2 MINI HYDROPOWER PROJECT CONSTRUCTION***

### ***1 PURPOSE AND SCOPE***

#### ***1.1 INTRODUCTION***

The Kaiha 2 Mini Hydropower Project is 2.5 megawatt (MW) hydropower project that will be built on the Kaiha River in northern Liberia (the *Project*). The Project is intended to provide affordable electricity supply to rural and urban communities in Lofa County in northern Liberia.

There is a risk that cultural resources would be affected during the construction phase of the Project. This Chance Finds Procedure outlines the actions to be taken if previously unknown cultural resources are encountered during the Project construction phase.

#### ***1.2 PURPOSE***

The Chance Finds Procedure is a project-specific procedure that outlines the actions to be taken if previously unknown cultural resources are encountered (ie. chance finds) during the Project construction phase. It also defines the protocols and procedures for assessing any unanticipated cultural resources sites or materials encountered during the Project construction phase. These protocols include:

- Localized stop work authority and procedures for protecting cultural resources encountered during construction;
- Procedures for the documentation and assessment of cultural resources to determine if additional investigations are required; and
- Protocols for consultation with Project management, cultural resource specialists, and national regulatory bodies to design and implement additional investigations.

#### ***1.3 SCOPE AND APPLICABILITY***

This procedure is mandatory and applies to all of the Project's sites and activities, and to all new and existing employees and contractor employees. It is also applicable to all of the Project's Contractors and needs to be communicated as such.

The procedure is applicable to the Project's construction phase.

## **1.4** *LEGAL AND POLICY REQUIREMENTS*

### **1.4.1** *National Requirements*

Article 5 of the 1985 Constitution of Liberia requires that government preserve, protect and promote positive Liberian culture, ensuring that traditional values, which are compatible with public policy and national progress, are adopted and developed as an integral part of the growing needs of the Liberian society. Despite this clause in the constitution, there is no specific regulation giving force to the requirements.

Although Liberia was an early signatory to UNESCO *Cultural Convention concerning the Protection of the World's Cultural and Natural Heritage*, the country has not ratified the treaty which has been localized since 1972. This international treaty was created to identify, protect, and preserve cultural and national heritage around the world.

In practice, the Liberia Environmental Protection Agency (EPA) is responsible for the monitoring, coordination and supervision of the sustainable management of Liberia's environment. It is mandated to oversee the implementation of environmental impact assessment for projects and activities that are likely to have significant adverse effects on the environment. EPA is further mandated to promote the preservation of important historic, cultural and spiritual values of natural resources heritage and, in consultation with traditional authorities, enhance indigenous methods for effective natural resource management.

### **1.4.2** *Other Requirements*

The development of the Project is being funded under the Liberia Renewable Energy Access Project (LIRENAP), a World Bank-sponsored programme. The Project is required to adhere to the World Bank's environmental and social policies. Consistent with the convention concerning the Protection of the World's Cultural and Natural Heritage, World Bank's Operational Policy BP 4.11 - Physical Cultural Resources is intended to ensure that cultural resources are protected in the course of development, supporting the preservation and promotion for equitable sharing of benefits from the use of cultural resources.

BP 4.11 - Physical Cultural Resources stipulates the need for a Chance Finds Procedure as one aspects of a larger suite of provisions aimed at preserving cultural resources. Specifically, the Operational Policy requires that a project prepare a plan for management of cultural resources that includes among other elements:

- Measures to avoid or mitigate any adverse impacts on physical cultural resources; and
- Provisions for managing chance finds.

This procedure is informed by an assessment of impacts and risks conducted as part of the Environmental and Social Impact Assessment (ESIA) for the Project which is summarised in the following section.

### 1.5.1 *Potential for Presence of Cultural Resources*

The cultural heritage baseline study suggest there is the potential for undiscovered cultural resources to be present within the proposed project area.

#### *Archaeological Resources*

No archaeological resources were identified in the Project footprint in the ESIA baseline surveys. A number of known archaeological resources have been discovered in western Lofa County which suggest there is a potential for undiscovered archaeological resources. For reference, those identified are as follows:

- ‘Old town’ sites including two near Masambolahum and three near Kpademai, identified as historic village locations in local oral traditions. ‘Old town’ sites were found throughout the Liberian countryside during the survey and typically consisted of stands of particular types of trees, remains of iron smelting furnaces, house depressions, and medicine rock piles. They were believed to be approximately 150 to 200 years old;
- Historic Bandi burial ground located beneath the ca. 1920 Holy Cross monastery at Bolahun; and
- Iron Age (ca. AD 450) rockshelter site located between Kolahun and Bolahun, known locally as Kokasu, found in an area of dense forest overlooking the steep valley near the Kaiha River. Excavations recovered plain, cordmarked, and linear incised potsherds, microlithic stone tools, charcoal, and oil-palm nut shells (Creighton et al 1974).

The presence of these types of archaeological resources across Lofa County and across the northern, forested portions of Liberia suggest there is the potential for similar resources within the footprint of the proposed Project. Undiscovered archaeological resources could be present within the footprint of the various Project components.

#### *Built Cultural Resources*

The cultural heritage baseline identified two principal types of built cultural resources: historic and modern Western Sudan style houses and historic Euro-American style buildings. The Holy Cross Episcopal Mission building in Bolahun was the only historic Euro-American style building identified that may be located within the Project Area of Influence. If additional built cultural resources are present they are most likely to occur along the access

road from Mbaloma town to Kolahun town and the proposed transmission lines running through existing towns and villages.

#### *Living Cultural Resources*

The cultural heritage baseline suggests there is the potential for two principal types of living cultural resources:

- Religious buildings (churches, mosques, etc.) and cemeteries (individual and community); and
- Sites associated with Sande, Poro, or other local secret societies.

The religious buildings and large cemeteries are likely to be located within or near villages and towns. Small family cemeteries are likely to be found near existing or former house locations across the landscape. Due to the need for secrecy, the secret society compounds, enclosures, or clearings are likely to be located away from settlements and houses.

The cultural resources baseline suggests there is a high potential for Sande, Poro, or other secret society enclosures, compounds, clearings, or other sites within or near the project area.

### **1.5.2** *Sensitivity of Cultural Resources*

In the assessment the sensitivity of the various types of cultural resources identified during the baseline study were evaluated using definitions for replicable, non-replicable, and critical cultural resources as defined by World Bank Group as follows:

#### *Low Sensitivity*

- Built heritage or living heritage resources that can be relocated another location or replaced by a similar structure or natural features to which the cultural values can be transferred by appropriate measures.
- Archaeological or historical sites where the particular eras and cultural values they represent are well represented by other sites and/or structures in the region.

#### *Medium Sensitivity*

- Cultural heritage resources that are unique or relatively unique for the period or cultural values they represent or cultural heritage that is unique or relatively unique in linking several periods in the same site. Resources with significant cultural value to local indigenous communities.

#### *High Sensitivity*

- Internationally recognized heritage of communities who use, or have used within living memory the cultural heritage for long-standing cultural purposes or legally protected cultural heritage.

These criteria were applied to the types of cultural heritage resources identified during the baseline study that may be present within the Project area. The results of this analysis are summarized in the Table 1.

**Table 1**      *Sensitivity of Cultural Heritage Resources*

Resource Type	Site Types	Classification	Sensitivity
Archaeological Sites	Late Stone Age and Iron Age small artefact scatters, isolated artefact finds, temporary camp or resource procurement or iron smelting sites.	Replicable	Low
	Middle Stone Age open air or rock shelter sites, Late Stone Age and Iron Age settlement sites, “Old Town” historic village sites.	Non-Replicable	Medium
Built Heritage	Modern Western Sudan style structures; middle to late 20 <sup>th</sup> century Euro-American style buildings.	Replicable	Low
	Late 19 <sup>th</sup> -early 20 <sup>th</sup> century Euro-American style buildings and Western Sudan style structures. Historic Mosques and cemeteries.	Non-replicable	Medium
Living Heritage	Small shrines and monuments. Individual family cemeteries.	Replicable	Low
	Modern and historic churches, mosques, community cemeteries. Poro, Sande, and other secret society ritual locations (enclosures, compounds, forest clearings)	Non-replicable	Medium

## 1.6

### *LIMITATIONS*

The intended use of the Chance Finds Procedure is to address ‘back-end’ risk associated with encountering cultural resources during construction. However, a chance find of cultural resources has the potential for creating project delays. The back-end risk can be greatly reduced with a field survey conducted by a trained cultural resource specialist in advance of construction activities which will allow the Project to pro-actively address any presence of cultural resources and act reduce the likelihood of chance finds.

## 2.1 DEFINITIONS

Terms used in this document are defined in Table 2.

**Table 2** *Definition of Terms*

Term	Definition
Chance Find	In the context of this procedure refers to site or material of cultural significance encountered by chance during the course of construction works (as opposed to a find made in the course of intentional investigation). Chance Finds could include but are not limited to: artefacts, archaeological deposits, ruins, monuments, shrines, sacred places, and graves of human remains.
Contractor	Any third party organisation which is engaged or commissioned by the Project to undertake work or provide services.
Contractor Employee	An employee of a contracted company engaged or commissioned by the Project to undertake work or provide services, but who are not directly employed by the Project. For example, contractor employees working on Project construction or operations, persons working for the Project through employment agencies, contracted cleaners.
Cultural Resource	Defined as anything tangible or intangible which is the product of creativity and labour of man, in either pre-historic or historic times, that describes and witnesses to the evolution of nature and which has a major value in its scientific, historical, cultural, artistic and handicraft contents.
Employee	An individual who is engaged to work directly for the Project on either a part-time (including hourly paid) or full-time basis and for a fixed period or on permanent basis and is salaried. By virtue of the individual's contract of employment, the employee is obliged to adhere to the Project's terms and conditions of employment and is protected by national and international laws concerning labour and working conditions.
IFC (International Finance Corporation)	Member of the World Bank that finances and provides advice to private sector ventures and projects in developing countries.
Intangible Cultural Resources	Defined as different kinds of performances and show, folklore, religious, belief, wedding and mourning ceremonies, music, drama, literature, taboo and similar other cultural values, traditions and customs of nations, nationalities and peoples.
Competent Authority	<p>A competent authority is the organization that has the legally delegated or invested authority, capacity, or power to perform a designated function.</p> <p>The Liberia Environmental Protection Agency (EPA) is mandated to promote the preservation of important historic, cultural and spiritual values of natural resources heritage and, in consultation with traditional authorities, enhance indigenous methods for effective natural resource management.</p>

	There are aspects of cultural resource management in which the Directorate for Cultural Affairs at the Ministry of Information, Cultural Affairs and Tourism have interest
Project Activities	A location or activity that is undertaken by the Project or the Project's Contractors. Locations would include the sites of the hydropower plant, diesel-fuelled power plant, transmission lines, offices including corporate head offices, and research and development facilities. Activities would include those done as part of construction and of operations.
Project	<p>The Project involves the construction and operation of a new hydropower plant, back-up diesel-fuelled power plant, and transmission grid.</p> <ul style="list-style-type: none"> <li>• The hydropower plant will be located on the Kaiha River, approximately 45 km south of Kolahun Town (Kolba City) in Lofa County, in the northern part of Liberia.</li> <li>• The diesel-fuelled power plant will be necessary to provide power as back-up (alternative) to the hydropower plant during the dry season when river flow is not enough for hydropower generation. This plant will be located in Balawatta Town, about 3 km from the town of Voinjama on the road to Kolahun City.</li> <li>• The transmission mini-grid (approximately 115 km in length) will extend into Kolahun District (including the proposed new Wanhasse District) and further to Foya District and Voinjama District.</li> </ul>
Tangible Cultural Resources	Defined as cultural resources that can be seen and felt and includes immovable or moveable historical and manmade cultural heritage.

### 2.1.1 *Acronyms and Abbreviations*

Acronyms and abbreviations used in this document are defined in Table 3.

**Table 3** *Definition of Acronyms and Abbreviations*

Acronym or Abbreviation	Definition
CFP	Chance Finds Procedure
EPC	Engineering, Procurement and Construction
IFC	International Finance Corporation

## 3 *RESPONSIBILITIES*

With respect to this Chance Finds Procedure, the Project proponents has the responsibility to structure and coordinate Chance Finds procedures for the proposed construction phase of the Project.

Furthermore, the Project has the responsibility for ensuring that specific Chance Finds responsibilities are organised and implemented. The Project has the responsibility to ensure that employees and Contractors are trained and

aware of all required Chance Finds procedures. The roles and responsibilities for the implementation of the Chance Finds Procedure are described in Table 4.

**Table 4**      ***Roles and Responsibilities***

<b>Responsible Parties</b>	<b>Roles and Responsibilities</b>
Project Manager	Responsible for assuring that the Project has the resources, information, and authority to implement the management measures described in this Chance Finds Procedure.
Environmental Compliance Office (ECO)	Responsible for enforcing the management measures described in this Chance Finds Procedure.  Responsible for the provision of cultural resource protection training to Project staff and sub-contractors.  As needed, will develop and propose staff plans and contractual terms to ensure that these measures are implemented by Project staff, cultural resources specialists and Contractors throughout the construction phase of the Project.
Construction Contractor Project Manager	Responsible for assuring that the Contractor implements the management measures described in this Chance Finds Procedure.
Project Staff and Contractor Workers	Responsible for following the procedures and requirements indicated in the Chance Finds Procedure, including the monitoring and identification of Chance Finds in the field in areas deemed to have low to medium potential.  Also responsible for cessation of work activities in the vicinity of a Chance Find until the required treatment measures are complete.
Cultural Resources Specialist	There will be one locally-based cultural resource specialist on-call to respond to Chance Finds. The local specialist will also be capable to conduct field surveys or monitoring if required. The specific roles of the specialist are described in this Chance Finds Procedure. The specialist will determine the sensitivity rating of a newly discovered resource.
Community Liaison Office (CLO)	Acts as the interface with affected and indirectly affected communities. Supports the implementation of the Chance Finds Procedure and of any action carried out should Chance Find be encountered.

## **4**      ***PROCEDURE***

### **4.1**      ***PLANNING***

A locally-based cultural resources specialist is to be engaged to be on-call during all construction activities where encounter of Chance Finds is possible.

It is recommended that the Project proponents also engage an international specialist that could be consulted if needed to support the local specialist.



## 4.2

### *MONITORING DURING CONSTRUCTION*

Ground works involving removal of organic material (eg. vegetation clearing, stump removal) and intrusive soil activities (eg, excavation of soil, grading) will be monitored for Chance Finds during initial ground disturbance by at least one member of the Project that has received training on the identification of cultural resources. The responsible person can be Project or Contractor staff.

Note that a Chance Find can be reported by any member of the Project's or Contractor's staff. Accordingly, it is necessary to provide training (as part of general training) to all Project and Contractor staff.

## 4.3

### *IF CHANCE FIND IS ENCOUNTERED*

If a Chance Find is encountered, take the following steps:

1. Stop all work activities in the vicinity of the Chance Find.
2. Inform the Construction Project Manager and the Project Manager.
3. Install temporary site protection measures (warning tape and stakes, avoidance signs).
4. Document find through photography, notes, coordinates, and maps (collect spatial data) as appropriate.
5. Inform all personnel of the Chance Find if access to any part of the work area is restricted.
6. Establish a localized no-go area needed to protect the Chance Find.
7. Consult with local cultural resource specialist who will determine whether the Chance Find is cultural heritage, the nature of the Chance Find and what actions to take (eg. isolate a larger area).

#### *If the Chance Find is determined to be a significant Cultural Resource*

- If the specialist confirms that the Chance Find is a significant cultural resource, they will inform the Competent Authority and initiate discussions about the necessary next course of action or treatment.
- If mitigation is required, then expedient rescue excavations will be undertaken by the local specialist, except in the case that the chance find is of international importance. If an archaeological site of international importance is encountered special care will be taken and archaeologists with the appropriate expertise in addressing the find will be appointed.

- For archaeological resources, any artefacts are to be left in place where possible. If materials are collected they are to be placed in bags and labelled by an archaeology specialist in consultation with the Competent Authority. No one may remove or keep artefacts.
- The specialist will develop and implement a treatment plan for confirmed Chance Finds using the services of qualified cultural heritage experts.
- Once actions are completed the Project is to prepare a report of the actions.
- While investigation is ongoing, co-ordinate with on-site personnel keeping them informed as to status and schedule of investigations, and informing them when the construction may resume.

*If the Chance Find is determined to not be a significant Cultural Resources*

- If the Chance Find proves to be an isolated find or not cultural heritage, the specialist may authorize the removal of site protection measures and activities in the vicinity of the site can resume.
8. In either case, prepare and retain archaeological monitoring records including all initial reports whether they are later confirmed or not. The record will include coordinates of all observations to be retained by the Project.