

**FORTECH** CONSTRUCTION LIMITED

**CONSTRUCTION  
ENVIRONMENTAL  
MANAGEMENT  
PLAN**

**(GENERAL DESCRIPTION  
OF PROJECT)**

Environmental Management Plan

**(GENERAL DESCRIPTION OF PROJECT)**

Fortech Construction Limited Managing Director Authorisation	Distribution List
(Nominated Director)                      Date:	Client Project Director - NOMINEE Client Representative - NOMINEE Fortech Construction Director                      - NOMINEE Fortech Construction Project Manager - NOMINEE Fortech Construction Site Manager                      - NOMINEE
Fortech Construction Limited Originator Authorisation	
(Project Administrator)                      Date:	
Superintendent Authorisation	
(Client Rep)                                      Date:	

\*This Environmental Management Plan is to be reviewed for effectiveness every six months during the duration of the project

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## Appendices

### *Appendix One – Construction Programmes*

## **1.0 INTRODUCTION**

### **1.1 PREFACE**

We take this opportunity to update and familiarise you with a Company snapshot of our operations:

Fortech Construction Limited have been operating in the Fiji Islands for eleven years, entirely based in the housing industry and expanding into industrial/commercial work.

The Company has developed into a multi faceted Company, combining the skills to offer total construction support while operating from a lower cost base.

Our Managerial and Administration office is situated in the Industrial area of Vatuwaqa in the Bhindi Industrial subdivision, Suva. The Company is administered from Lot 2 Jai Ambamma Road, employing Eighty-five permanent employees and various local Contractors, with a projected annual turnover of approximately \$15 million.

Commercially we have constructed religious buildings, Schools, and other various commercial developments, Housing, Project Display Homes, Retirement Homes, Home units, Warehouse and factory units.

We are currently registered and licensed contractors with Suva City Council with Construction and Management Services in Suva and around the country.

Commercially, we have contracted work in many areas with major consultants and Architects around the country.

The Firm has grown with Suva & Fiji Islands to Contract many Commercial and residential Developments, and we are committed to improving the level of service being offered to them. Our clients concerns and comments are important to Fortech Construction Limited and endorsements for all our clients are maintained for projects completed over the last three years.

Residentially, our base workload, in this area is projected at \$8 million to which we have constructed many Exclusive Developments and Residences which forms the basis for many contractors to develop to our labour requirements.

Fortech Construction Limited as a Company have conducted expansion in the last 7 years in a balanced manner, we have not accumulated specific projects in excess of \$15 million, but due to our regional location instituted a Management Structure that can accommodate lateral expansion.

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### **1.2 PROJECT DESCRIPTION**

Describes the general description of the project.

Describe the location of the proposed project.

Refer to Scope of Works below. The project is scheduled for completion in (state time). Work Hours are covered in section 2.4.1 of this plan.

### 1.3 SCOPE OF WORKS

The scope of works for the entire project.

Fortech Construction Limited is responsible for environmental impact under their control during the course of the project.

### 1.4 APPLICATION STATEMENT (OBJECTIVES)

Fortech Construction Limited shall observe and comply with all environmental requirements that apply to the location in which the new Project is being constructed.

Project Objectives is that Fortech Construction Limited shall ensure that construction impacts (direct and indirect) on flora, fauna, wetlands, bush forever site and other environmentally significant places, surface water and the ground water, and the community, are minimised.

The key objectives, targets and KPI's are outlined in the table below.

<b><i>OBJECTIVES</i></b>	<b><i>TARGETS</i></b>	<b><i>KPI'S</i></b>
Flora	Minimise damage to flora	Nil
Fauna	All fauna to be relocated	Report all fauna to Ranger
Wetlands	No encroachment into Wetlands No stormwater run off from the construction site will reach adjacent wetlands	Construction area inspection checklists Integrity of Bunds Integrity of drainage basins
Bush Forever Sites	No areas of bush forever will be encroached into during construction	Pre-clearing checks Construction area inspection checklists
Surface Water and Ground Water	No contamination of ground water with foreign substance	Construction area inspection checklists
Community	No community impact	Distribution of pamphlets and newsletters at regular intervals
Other Environmentally Significant Areas	No impact on other environmentally significant areas	Construction area inspection checklists

### 1.6 REVISION AND AMENDMENT PROCEDURE

Should any amendments of the environmental management plan be necessary during the life of the project, only the revised pages(s) will be re-issued with the appropriate revision numbers and dates changed accordingly.

The superintendent will approve revisions and amendments by signature on the document register. The document register shall also detail the status of the amendment of each page of the document.

#### 1.6.1 DISTRIBUTION

This document is controlled and copies are issued to company personnel and others as applicable as shown on the distribution list.

The company Document Controller controls distribution of this Programme, or other Management authorised person.

Copies of this document issued upon request to **clients, subcontractors** and **assessment authorities** are to be clearly stamped as "**Uncontrolled Copy**", unless specific control methods are agreed upon between the parties.

Issue of controlled copies of the Environmental Management Plan and associated forms is formalised by the signature of personnel nominated and authorised by the Managing Director.

Upon Revision of this Document, the whole document is to be re-issued. Superseded copies shall be returned to the company Document Controller for disposal.

The Safety Representative shall maintain the master copy of the Health and Safety, and Environmental Management Plans on computer to enable controlled duplication and amendment.

All personnel indicated below shall be issued with 'Controlled Copies' of the document.

<b>COPY NO</b>	<b>RECIPIENT</b>	<b>DATE ISSUED</b>
01	<b>Managing Director:</b>	<b>TBA</b>
02	<b>Project Manager:</b>	<b>TBA</b>
03	<b>Client Project Manager</b>	<b>TBA</b>
04	<b>Client Rep</b>	<b>TBA</b>
05	<b>Site Manager:</b>	<b>TBA</b>
06	<b>Subcontractors:</b> TBA.....	<b>TBA</b>

**Table 1: Distribution list**

## **2.0 ENVIRONMENTAL MANAGEMENT PLAN**

### **2.1 Fortech Construction Limited ENVIRONMENTAL HISTORY**

#### **2.1.1 ENVIRONMENTAL MANAGEMENT SYSTEM**

Even though there no specific requirements from the Ministry concerned, Fortech Construction Limited has always implemented the environmental issues very strongly in all the projects that have been carried out to date.

#### **2.1.2 ENVIRONMENTAL POLICY**

Fortech Construction Limited Environmental Policy can be found on the next page of this document. It is proposed that since this document will now be in use throughout the company it shall be instilled in all the actions and procedures of company employees and shall be made available for all interested members of the public upon request.

# **FORTECH CONSTRUCTION LIMITED**

## **ENVIRONMENTAL POLICY**

Fortech Construction Limited is committed to operating in a manner, which protects the environment and the health of our employees and subcontractors.

Commensurate with our policy and commitment, management will provide adequate resources to ensure environmental compliance. Responsibilities in regard to environmental management will be clearly defined.

To achieve our objective we will:

- Comply with all applicable environmental laws, regulations and permits.
- Anticipate environmental issues and take appropriate action to report issues of concern
- Work with clients, architects, subcontractors, suppliers and all employees to ensure that the awareness and protection of the environment is maintained.
- Appoint an Environmental Representative to ensure responsible and effective monitoring and reporting of environmental issues
- Ensure management, employees and subcontractors are aware of their responsibilities in regard to environmental management.

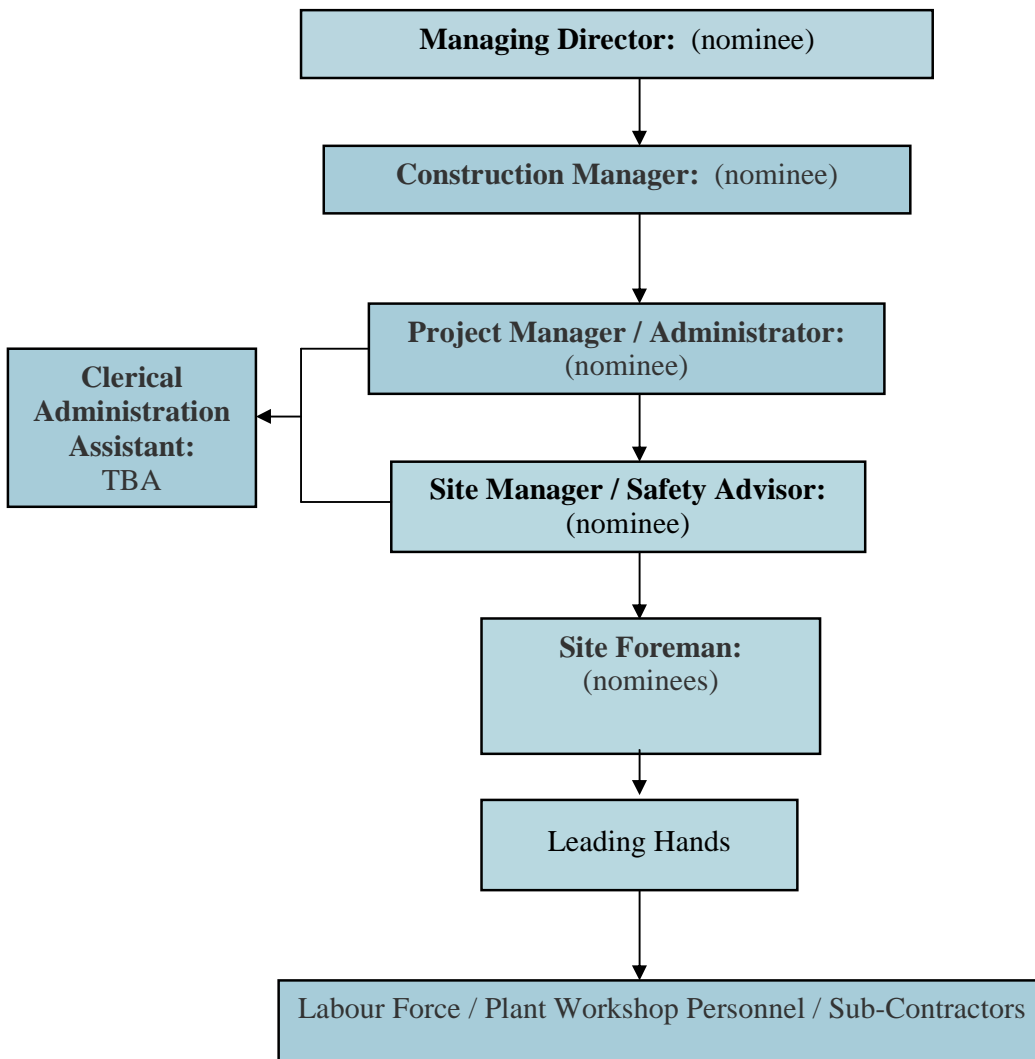
.....  
**(Project Director)**  
**Director**  
**(Current Date)**



## 2.3 STRUCTURE AND RESPONSIBILITY

### 2.3.1 ORGANISATION CHART

#### New Armouries Suva



### 2.3.2 PROJECT MANAGER

The Project Manager has overall responsibility for all environmental issues, in addition to ensuring completion of works. Specific responsibilities include:

- The overall environmental management for Fortech Construction Limited.
- Ensuring the environmental management system is developed and implemented.
- Monitoring the effectiveness of the environmental management system.

- Promoting the commitment of Fortech Construction Limited to excellence in environmental management.
- Reviewing all investigations comprehensively to ensure their accurate completion.

Stakeholder consultation strategies shall be co-ordinated by the Project Manager in accordance with **the client's** requirements.

### **2.3.3 SITE MANAGER**

Responsible for:

- Implementing the environmental policy and management system.
- Ensuring compliance by all employees, contractors and visitors with regard to both the policy and system.
- Monitoring the effectiveness of the environmental management system.
- Ensuring the environmental policy and management system are included in the planning phase of any new project.

### **2.3.4 SITE SUPERVISORS & FOREMEN**

Reports to the Site Manager and is responsible for the implementation of the Project and Environmental Management Plan and ensures compliance of all employees and subcontractors whilst they are on site. Specific responsibilities include:

- To manage all areas of project environmental management.
- To delegate as appropriate the projects responsibilities.
- To implement and verify remedial action.
- To report on environmental matters.
- To communicate environmental policies to the workforce.
- To act in emergency situations.
- To evaluate subcontractors to ensure that they are capable of working according to Fortech Construction Limited procedures.
- To ensure all personal and potential environmental damage is investigated and reported.

### **2.3.5 SAFETY ADVISOR / ENVIRONMENTAL RESPONSIBILITIES**

The environmental officer is responsible for effectively managing the environmental programmes, and ensuring that inspections are conducted and completed to the required standards. Specific responsibilities include:

- Deals with the daily environmental issues.
- Conducts regular workplace inspections to ensure environmental compliance
- Ensuring that the environmental management records are established and maintained.
- Providing advice to the Site and Project manager on issues such as relevant legislation, codes of practice, the suitability of equipment, and incident reporting procedures.
- Investigating and reviewing serious or potentially serious incidents, to guarantee that reports are completed, and appropriate corrective action initiated to prevent re-occurrences.
- Co-ordinating environmental awareness training with the assistance of supervisors and foremen.
- Fulfilling all the above responsibilities, and to confer and consult with senior management.

### **2.3.6 EMPLOYEE & SUBCONTRACTOR RESPONSIBILITIES**

All Fortech Construction Limited employees, together with all subcontractors, have a responsibility to ensure they uphold and enforce the company environmental policy.

The following responsibilities covering environmental issues are mandatory for all Fortech Construction Limited employees and subcontractors:

- To understand and work in accordance with the environmental management system.
- To advise the supervisors immediately of hazardous conditions or activities in the work area.
- To work in a manner that will not endanger the environment.
- To assist new employees in recognising environmental hazards and following required procedures.
- Use the protective equipment provided when dealing with hazardous materials.
- Report all environmental breaches immediately to the Supervisor in charge.
- Ensure that if the job cannot be done without complying with company procedures, that it is not done.

All of the above responsibilities shall be communicated to all relevant personnel as soon as they start with Fortech Construction Limited. The Site Induction shall introduce all new personnel to the policies and procedures, which govern all site operations.

All Fortech Construction Limited specific environmental procedures and requirements and the legislation and reference documents from which they were developed shall be communicated to all employees and subcontractor through site toolbox meetings at the commencement of each contract. It shall be absolutely necessary for all personnel on Fortech Construction Limited to be conversant with these practices.

## **2.4 ENVIRONMENTAL MANAGEMENT ACTIONS**

Fortech Construction Limited shall observe and comply with all environmental requirements that apply to the construction of **Project** as to not to interfere with an operational area and maintains access at all times. Should a breach occur in any of the following specific areas, an investigation shall be carried out and control measures implemented to prevent a re-occurrence. The Project Manager shall be responsible to ensure that corrective actions are implemented and closed out.

### **2.4.1 NOISE CONTROL**

Fortech Construction Limited shall, at all times, take adequate measures to control noise on the site and comply with the following requirements.

The working hours and working days shall be stated below, and shall not be varied without the prior approval of the Superintendent except when:

- In the interest of safety of the work under the contract, or
- To protect life or property; or,
- The contractor finds it necessary to carry out work outside the working hours or on other than the working days stated below. In such cases the contractor shall promptly notify the superintendent in writing of the circumstances.

<b>Working Days</b>	<b>Working Times</b>
Monday to Saturday	Between 7.00am and 6.00pm <ul style="list-style-type: none"> <li>• Provided that the working hours shall be up to a maximum of 10 hours per day worked; and</li> </ul>
Sundays (only if required)	Between 8.00am and 6.00pm <ul style="list-style-type: none"> <li>• Permission to work on Sunday may be granted conditionally on an application to the Local Authority.</li> </ul>

Table 2: Working days and hours

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

**2.4.1.1 SOUND EMISSION CONSTRAINTS**

Decibel measurements shall be monitored throughout the duration of works, and must remain within the sound level parameters listed below:

<b>Working Days</b>	<b>Working Times</b>	<b>Sound level in decibels (A)</b>
Monday to Saturday	7.00 am to 6.00pm	90
Sunday (only if required)	8.00 am to 6.00pm	90

Table 3: Working hour constraints

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

**2.4.1.2 EQUIPMENT NOISE CONSTRAINTS**

The following are the maximum sound levels measured at any point seven (7) metres from the following operations:

<b>Group</b>	<b>Application</b>	<b>Maximum decibel level (A)</b>
Group 1	Air compressors up to 170 L/sec	70
Group 2	Internal combustion or electrically driven equipment up to 14kw, dumpers < 1m <sup>3</sup> capacity, fluid pumps, air compressors 170 L/Sec	75
Group 3	Vibratory compactors, concrete saw, earth moving equipment up to 100kw, concrete pumps, air or electric tools	80
Group 4	Air or electric impulsive tools, scabblers, impact wrenches,	

	explosive power tools, earth moving equipment 100kw – 200kw	85
Group 5	Sirens, pile drivers, earth moving equipment > 200kw	90

**Table 4: Equipment noise constraint**

#### **2.4.2 SITE CONTROL**

Fortech Construction Limited shall at all time comply and enforce all regulations and restrictions relating to site control. The Project Manager and Site Manager shall be responsible for managing environmental issues on site in conjunction with the Project Safety Advisor. The Project Manager shall liaise with the PTA on any environmental matters.

The following items from the Requirement of Ministerial Statement 637 are not relevant to construction –

- Protection of Threatened Ecological Communities
- Contamination contingency plan including measures for acid sulphate soils.
- Works in the vicinity of high-pressure gas pipelines.
- Dewatering near environmentally significant areas and water supply
- Licensing requirements and approvals

Corrective actions, monitoring and contingency actions by management personnel for the items outlined below shall be in accordance with Environmental Incident Procedures

All laydown areas will be inside the site fence and in a location that does not require further clearing of land.

The main environmental factors will be covered briefly in the site induction. All personnel entering the site to carry out work will be required to complete this site induction.

##### **2.4.2.1 TREE TAGGING**

No trees or shrubs shall be removed or destroyed without the written approval of the Superintendent.

Trees to be protected shall be tagged, and fenced prior to any work commencing. The Superintendent shall then be required to approve/confirm of correctly tagging trees, before commencing work.

Trees should be fenced off around the base of the tree canopy to protect roots retained are likely to be damaged by construction activities. Any branches likely to be damaged shall be lopped or pruned as instructed.

***Note:***

*A management representative will conduct regular workplace inspections to monitor compliance*

##### **2.4.2.2 STORAGE OF MATERIALS**

Hazardous substances shall be stored in accordance with the relevant statutes and to the approval of the Superintendent; however it is not expected that this will be a

significant issue during the construction phase. Construction materials will be stored in a designated safe secure area that will minimise impact on construction activities.

The following requirements shall be adhered to when dealing with hazardous materials:

- No substance shall be used unless it is clearly labelled, in its proper container and the MSDS has been examined first.
- The MSDS for all the dangerous goods and chemicals used in the past on Fortech Construction Limited sites shall be placed in a register and kept available and up to date in the head office.
- The MSDS for all the dangerous goods and chemicals proposed to be used on a Fortech Construction Limited site shall be placed in a site register and kept available to all personnel expected to come into contact with those chemicals. The MSDS for any new dangerous good or chemical shall be obtained before the product is used, this MSDS shall then be placed into the site chemical register and copied to the head office register.
- The MSDS for all the dangerous goods and chemicals proposed to be purchased for a Fortech Construction Limited site shall be examined before the purchase of the goods to ensure that all personnel expected to come into contact with the chemicals are adequately protected from it and have the ability to use it safely.
- As new staff or subcontractors arrive on site, the site supervisor must go through the site induction, explaining the use and importance of Material Safety Data Sheets (MSDS).

All Fortech Construction Limited staff working with or near dangerous goods and chemicals shall be issued with, and wear, the appropriate personal protection equipment eg hard hats, steel toecap boots, safety gloves and safety glasses.

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

#### **2.4.2.3 CONSTRUCTION TRAFFIC – ACCESS MANAGEMENT**

Written approval from the superintendent must be obtained before the formation of any temporary roads, the erection of temporary structures or any site clearing not specifically documented.

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

#### **2.4.2.4 EXISTING SERVICES AND FACILITIES**

Existing services will be clearly marked out on site before commencing work. Service information will be obtained via “Dial before you dig”.

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

**2.4.2.5 FAUNA**

If native fauna is located within the construction site, Fortech Construction Limited will notify the Superintendent and or Project Manager of the type of fauna located within the site and takes the necessary requested action.

If any injured fauna are encountered, Fortech Construction Limited will contact the person concerned.

If native fauna is encountered during construction, it should be allowed to make its own way from the works area, however, if this is not possible, a relevant specialist shall be organised to arrange its removal.

All issues to do with Fauna, will be co-ordinated by the Site Manager in conjunction with the Authorities concerned.

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

**2.4.2.6 FLORA**

No declared rare and priority flora will be potentially affected by the construction process.

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

**2.4.2.7 HYGIENE MEASURES TO MINIMISE THE SPREAD OF DISEASE AND WEEDS**

The Site Manager shall be responsible for monitoring this.

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

**2.4.2.8 WATER QUALITY, EROSION AND SEDIMENTATION CONTROL**

No wetlands within or adjacent to site. Requirements therefore relate to ensuring drainage is managed on site and that no erosion is occurring and no transport of sediment off site.

### 2.4.3 STABILISATION AND DUST CONTROL

All excavations, cleared land, fill areas, stockpiles and haul routes will be stabilised in such a manner, (eg compaction or watering) as to prevent the movement of sand, dust or soil from within the site of works.

STABILISATION METHOD	COMPACTION	WATERING
FREQUENCY	Daily, or as required	Daily, or as required

**Table 5: Watering frequency to maximise dust stabilisation**

Existing vegetation and topsoil shall be preserved in all areas except those areas in which:

- Fill is to be placed on, or
- Which excavation is to take place, or
- An area is specifically set aside for occupation or access.

If sand or dust originating from the site, is causing a public nuisance on public roads and land, Fortech Construction Limited will remove and clean up the lost sand or dust within 48 hours.

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

### 2.4.4 DUST, DIRT, WATER AND FUMES

All efforts will be made to prevent any nuisance occurring through the discharge of dust, dirt, water, fumes and the like, onto persons or property by:

- Dust & Dirt Nuisance Control
  - Daily compaction & watering of excavated areas at least once per day, or, as often as required;
  - Regular dust monitoring;
  - Monitoring weather reports:
  - Wind conditions;
  - Wet weather.
- Water & Fume Nuisance Control
  - Fortech Construction Limited shall provide any temporary support required for existing services such as water, gas and sewer.
  - Fortech Construction Limited shall do all the work necessary to divert site water into existing storm water drains.

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

### 2.4.5 VEHICLES

All debris, spoil, rubbish or materials shall be suitably contained and covered with a tarpaulin during transportation to or from the site to prevent spillage or contamination of adjoining and other areas or property.

Vehicles wheels and tracks are to be kept in a suitable clean condition to prevent transfer of mud onto adjacent streets or other areas.



Refuelling of company vehicles and machinery will be predominantly conducted off site. Should a vehicle or machine require refuelling on site, correct refuelling process will be followed.

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

#### **2.4.6 NUISANCE**

Fortech Construction Limited shall take all reasonable measures to limit nuisance to the public arising from all operations pertaining to the construction works so as to not to interfere with the daily operation of the (business name):

- Noise;
- Construction traffic;
- Dust;
- Sand;
- Smoke;
- Vibration, or
- Light spill

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

##### **2.4.6.1 GROUND VIBRATION**

If damage is sustained to any home, compensation will be issued to finance repairs.

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

##### **2.4.6.2 MINIMISATION OF GROUND VIBRATION**

Fortech Construction Limited shall avoid excessive use of vibratory compaction equipment, as outlined in the following procedures:

- Vibrators shall not be started or stopped near a building;
- The type of vibratory equipment and the wave velocity generated shall be selected to minimise ground vibrations beyond the site;
- The wave velocity at buildings and structures shall not exceed maximum velocity of 5mm/s at the foundations.

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

#### **2.4.7 REFUSE DISPOSAL**

Fortech Construction Limited will make all necessary arrangements with the Suva City Council for the disposal of all surplus material, garbage, refuse and waste fuel, bitumen and lubricants.

No burying or burning of materials will be permitted, and wastewater from machinery should be contained and disposed of off-site in an approved manner.

All waste material shall be disposed of to the nearest Waste Transfer Station. A register of all material removed from site will be maintained on a site register. The Site Manager will be responsible for ensuring these records are maintained.

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

#### **2.4.8 SMOKING ON CONSTRUCTION SITES**

At all times, Fortech Construction Limited will ensure that all workmen and visitors on the construction site comply with the following policy on smoking. In respect of construction sites, smoking is prohibited:

- In site offices, chemical storage areas or enclosed toilet facilities.
- Inside existing premises that are designated as “no smoking” areas.

Due to the nature of the construction site being free from dry grass and small plants within the site fence, the chance of a fire occurring is minimal. In order to prevent the risk of fire, high risk construction activities such as hot work will be carried out in a designated safe area away from site perimeter fencing (as it will be near dry grass and small trees). Signage will be erected on site fence.

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

#### **2.4.9 ENVIRONMENTAL RISK CONTAINMENT AND MANAGEMENT**

During the construction stage, any spills will be cleaned up

**Note:**

*A management representative will conduct regular workplace inspections to monitor compliance*

#### **2.4.10 INDIGENOUS OR HERITAGE ARTIFACTS FOUND ON SITE DURING THE COURSE OF DEVELOPMENT**

No heritage sites of Aboriginal or European significance have been identified in the Armouries site

While every effort should be made to identify archaeological materials or sites prior to the commencement of development, this is not always possible.

Should any person (staff, contractor, sub-contractor) have reason to suspect the presence of a previously unreported archaeological site, this should be immediately reported to the site manager, works cease immediately and the following course of action followed:

- Contact the Department of Indigenous Affairs (Heritage, Culture and Policy Advice at Head Office or the appropriate Regional Office) or specialist consultant if one has already been appointed to the project.
- Arrange a site inspection and evaluation by a suitably qualified archaeologist in consultation with the relevant Indigenous community(s). A report outlining the findings of the site evaluation should be prepared in good order and submitted to the required authority
- Depending upon the findings of the archaeological evaluation, the proponent will need to apply for permission to use the land upon which the site is located.
- A suitable qualified archaeologist issued with the appropriate permit should undertake any archaeological mitigation deemed necessary as a result of the archaeological evaluation.

Should any human skeletal material be encountered during the course of site works, all works must cease immediately and additional care be taken at the first-spot, by law; the area becomes a crime scene. The find should be reported to the site manager, who should then:

- Contact the (Heritage, Culture and Policy Advice at Head Office or the appropriate Regional Office) or specialist consultant if one has already been appointed to the project if there is any indication that the find may be an Aboriginal burial.

It is generally preferable to treat finds of skeletal material as Indigenous burials unless there is clear evidence that it is not. This will ensure that the material is dealt with appropriately and that if it proves to be an Indigenous burial, community sensitivities have been respected from the outset.

- The following authorities must also be contacted:
  - Police department (if the find does not appear to be Indigenous in origin the police should be the first point of contact); and,
  - Department of Indigenous Affairs Head Office (if they have not already been contacted).

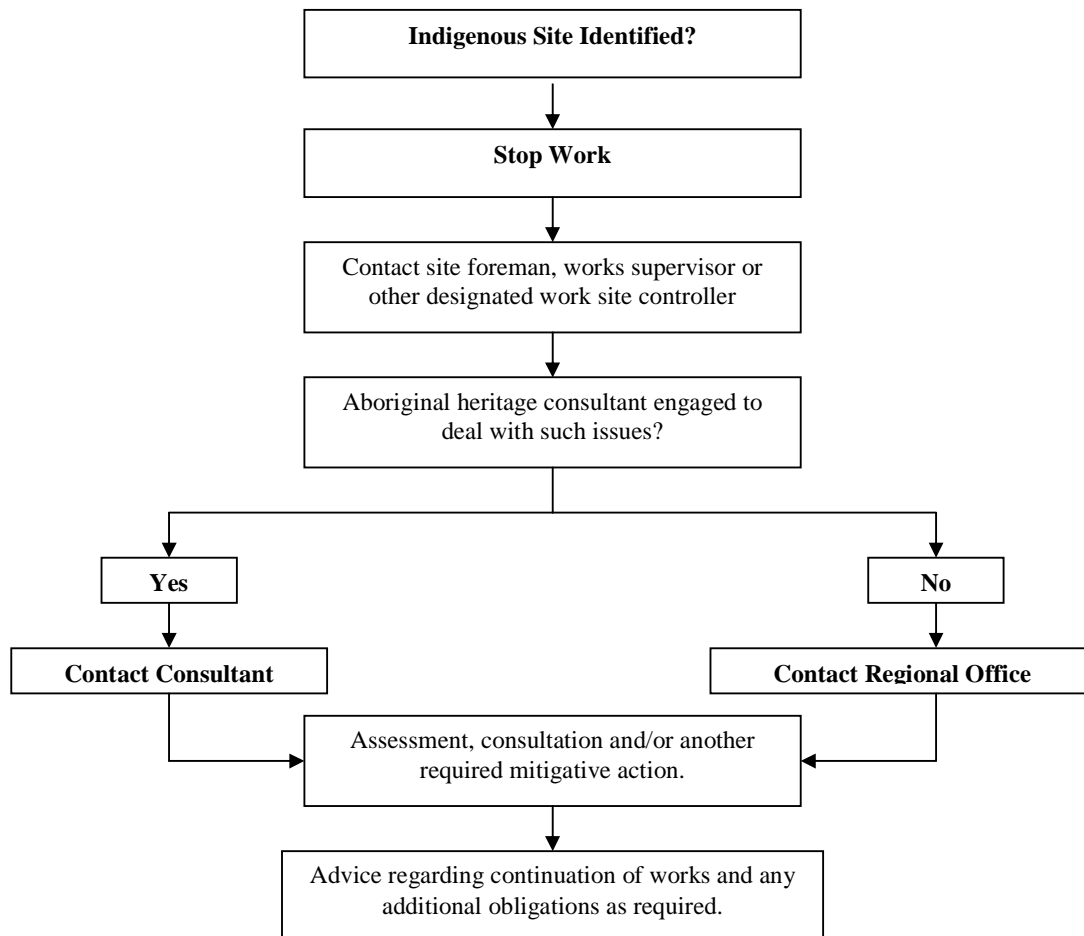
The concerned officer or specialist consultant will normally coordinate this.

- Depending upon the nature and condition of the human skeletal remains, archaeological and /or forensic excavation may need to be undertaken to establish the origin of the skeletal material. Consultation with the Indigenous community must also occur to alert them of the find and its potential cultural association and determine the community's wishes. Given the highly significant nature of Aboriginal skeletal material, further action will largely be determined by the wishes of the Aboriginal community. When it is confirmed that the remains are Indigenous, the Federal Minister for Indigenous Affairs must be contacted. The Government officer responsible normally coordinates this, once reburial (which is generally the Indigenous community's wish) is complete.

***Note:***

*A management representative will conduct regular workplace inspections to monitor compliance*

Figure 2: A summary of procedures to deal with the discovery of Aboriginal sites during development.



## 2.5 ENVIRONMENTAL PLANNING

### 2.5.1 ENVIRONMENTAL ASPECTS

An environmental issue is any element of Fortech Construction Limited activities that can interact with the environment. For every new project, the Project Manager and/or Safety Advisor have the responsibility to review the contract requirements, the site and other pertinent information to determine whether there are any environmental issues that can be controlled or are influenced by our operations. These may include issues such as:

- Land eg. Soil erosion (water or airborne), soil pollution;
- Water eg. Water pollution;
- Air eg. noise pollution;
- Native flora & fauna;
- Archaeological;
- Waste and energy management.

This list may be prepared over the project duration and can be added to as matters are identified. eg, changing conditions - weather, legislation may give rise to new aspects being identified.

The Project Manager and/or Safety Advisor are to review these issues to determine which may have significant impact on the environment. These are prioritised in terms of probability of the event occurring and the severity of the impact.

In analysing the environmental impacts and their significance, consideration is given to the following as necessary:

- Legislative requirements (government or authority);
- Regulations (national, state and local);
- Technological options available;
- Financial aspects (including contractual requirements)
- The capability and resources of our business;
- Other interested parties, reports and the like that may be applicable;
- Previous project works with similar environmental aspects and impacts.

Consideration should also be given to obtaining advice from **expert consultants** or having tests performed if the situation requires.

From the analysis of the environmental impacts Project Manager and/or Safety Advisor should determine those aspects, which require action, the scope of action and the timing for the action. The priority of these is based on the significance of the environmental impact.

Once the impacts and actions are determined a Project Risk Analysis for potential environmental hazards is carried out.

### 2.5.2 LEGAL AND REGULATORY REQUIREMENTS

- When creating the company procedures Fortech Construction Limited identified the relevant environmental legislation, regulations and codes of practice applicable and included their requirements into the Environmental Management System.

## **2.6 IMPLEMENTATION & OPERATION**

### **2.6.1 OPERATIONAL CONTROL**

A Job Safety Analysis shall be written up prior to commencement on site and be reviewed periodically.

Job Safety Analysis shall be written in accordance with relevant procedures and management plans. It is the Project Manager's responsibility to ensure that the procedures are followed. The Project Manager should delegate responsibility as per the Project Management Plan and provide adequate resources in terms of time, cost and personnel to ensure effective and timely implementation.

The Project Manager is responsible for ensuring that the JSA as documented in the Project Management Plan is monitored as prescribed.

The personnel responsible for monitoring the implementation of the JSA shall report actual or potential breaches of the JSA using the Company Incident Report Form. Action is taken commensurate to the significance of the breach, especially for accidents and emergencies; serious environmental aspects should be recorded on a Site Incident Register. The Incident Report includes the details of the breach as and when available. Client, personnel, subcontractors, authorities, public and others are advised and informed as necessary.

Action is determined to mitigate the impact of the breach, and this action taken as and when required. Statutory reporting of the breach is undertaken if required. All breaches are reviewed to assess the probability of recurrence. Action is taken in accordance with the Continuous Improvement procedure to amend procedures and JSA's.

Defects, rework, environmental breaches, incident/ hazard reports, past mistakes, complaints and non-conformances may be referred to as an opportunity for improvement and follow up action under this procedure.

### **2.6.2 COMMUNICATION & REPORTING**

All of the reported procedures and actions taken by Fortech Construction Limited during the course of the contract shall be recorded in the Project Management Plan. In addition regular site meetings will take place in accordance with the contract documents. These 'toolbox' meetings will be attended by the client's representative, the site supervisor, all subcontractors, employee representatives and other nominated persons.

The content of these meetings will be performance, progress, RFI, variations, environmental, quality and health and safety documents, also the meetings give the client the opportunity to raise employee and subcontractor awareness regarding their concerns. These meetings will be recorded and actions proposed with completion dates and personnel responsible, all such meetings shall be recorded in the Project Folder.

External concerns such as those of neighbouring residents, businesses and other interested parties such as EPA, Municipalities, water catchment bodies, community groups etc. shall have their issues aired either directly or through other nominated parties during the toolbox meetings. As with internal site issues these concerns will be recorded and actions proposed with completion dates and personnel responsible, all such concerns shall be recorded in the Project Folder.

A letter or brochure will be issued to nearby residents notifying them of the commencement of work along with a contact name if they want more information or have a complaint to lodge. Noise and dust management will of primary importance during the contract to minimise impact on adjacent residents.

The Project Manager in accordance with Fortech Construction Limited Communication Plan in conjunction with New Armouries EM Plan will handle all complaints or feedback from the local residents.

Environmental Management Reporting will be communicated to the New Armouries superintendent via our Project Manager. A monthly statistical summary will be provided including a section specifically for Environmental Issues.

Fortech Construction Limited environmental management plan will be subject to auditing by a New Armouries representative.

### **2.6.3 EMERGENCY PREPAREDNESS & RESPONSE**

For each project Environmental Management Emergency requirements are determined from the specific environmental Job Safety Analysis carried out by the Project Manager and Safety Advisor at the start of each project. The procedures are referenced in the Project Management Plan and if necessary accompanied by Work Instructions specifying the necessary corrective actions.

Fortech Construction Limited is firm in its belief that the Health and Safety of its employees and the protection of the environment is of primary importance in the successful pursuit of its business activities. The company therefore has a commitment to conduct its operations in a manner that will not cause people to be hurt, nor their health put at risk and the environment damaged. To achieve this Fortech Construction Limited undertakes to do the following:

- Safety training programmes will be promoted, with the objective being the achievement of a high standard of personal awareness of all potential risks and hazards, together with a thorough knowledge of personnel responsibilities.
- Training shall be provided through a combination of formal and informal processes on a continuing basis throughout the course of the contract. Training shall be carried out utilising any combination of supervisory staff and independent specialists trainers. Staff shall inform their supervisor as to their own training needs and the supervisor will always be vigilant as to the shortfalls in staff training, this information will then go to make up a comprehensive staff-training programme.
- This begins with the Site Induction. Each person who is scheduled to carry out work on this site will be required to complete a site induction. Emergency Management procedure guidelines will be included in the site induction. The site supervisor shall be responsible for inducting all site personnel.
- Any staff required to use any specialist piece of equipment must be properly trained and if not then they should first undergo proper training so as to ensure their own safety and that of others. In any case where licences, certificates or permits are issued after training then copies of these must be kept in the employees personnel file.

- Training in emergency procedures which employees receive shall be appropriate to their allocated emergency response responsibilities and the degree of risk and shall also allow them to perform their tasks without risk to health and safety. Examples of recent training packages include:

Chemical exposure

Training explains the actions which are required should staff be exposed to chemicals.

Spills awareness

Training explains the actions which are required should staff become aware of a chemical spillage.

Chemical handling

Training explains the actions which are required should staff need to handle chemicals.

#### **2.6.4 MANAGEMENT REVIEW**

It is the Project Manager's responsibility to monitor the implementation of the Environmental Management Plan and to ensure that the procedures are consistent with the overall goals for environmental performance as identified in the environmental policy. The Environmental Management Plan shall be reviewed periodically during the contract.

#### **2.6.5 PROJECT ENVIRONMENTAL MANAGEMENT PLAN**

This Environmental Management Plan will provide the Site Management with a tool to carry out environmental control on the job. All environmental requirements to be carried out during the contract and all documents expected at the completion will be detailed within.

Once the PMP has been completed a copy is handed over to the client for approval prior to commencement. It will be the site supervisor's responsibility to update the PMP as the contract proceeds. During the contract the construction manager will review the document to ensure that it is kept up to date. Should any changes in key staff occur during the course of the project, the Client shall be advised accordingly.

#### **2.6.6 SURVEILLANCE & AUDITING**

Fortech Construction Limited ensures that the environmental system is implemented, the outcomes are being achieved and the environmental system is effective in controlling our business. Regular internal reviews are carried out on all our procedures. Reviews are also carried out on subcontractors / suppliers / consultants on a project basis as necessary considering the complexity of work and risks encountered.

Reviews are also scheduled for Subcontractors, Suppliers and Consultants on a project basis considering the size of the contracts, complexity of the works, experience and the track record of the subcontractor in meeting the contract, statutory and specification requirements.



When required under the subcontract conditions, the subcontract Environmental Management Plan is reviewed and accepted prior to their commencement on site. A copy of the review is returned to the subcontractor with comments/ acceptance/ rejection/ resubmit status identified. The majority of sub-contractors do not have adequate resources to provide an EMP and therefore operate under Fortech Construction Limited Environmental Management Plan.

#### **2.6.7 MONITORING FRAMEWORK**

Regular environmental monitoring will be the responsibility of the Project Manager, Site Manager and Safety Advisor. This monitoring will be recorded on a formal weekly site inspection sheet and actioned appropriately. Where required a third party external consultant or specialist will be engaged to conduct further monitoring for noise and dust etc in the event that the desired outcomes are not being achieved.

**1. SCHEDULE OF PERSONNEL ENTERING THE SITE**

NAMES		NAMES	
1	Umendra Kumar	25	Pita Dominu
2	Parveen Prakash	26	Pramil Goundar
3	Arvind Kumar	27	Parmen Kumar
4	Ravinesh Kumar	28	Sachin Narayan
5	Ashween Kumar	29	Roneel Prasad
6	Anand Kumar	30	Nasoni Naciga
7	Ajit Singh	31	Vimal Singh
8	Amrish Pratap	32	Amit Narayan
9	Aneel Kishore	33	Ramesh Prasad
10	Ajay Prakash	34	Ronal Prasad
11	Bhan Pratap	35	Shiu Chand
12	Birendra Kumar	36	Amit Singh
13	Dharmen Swamy	37	Jone Saumi
14	Faiyaz Ali	38	Ilaisa Buli
15	Harmeet Singh	39	Manoj K. C.
16	Hemant Kumar	40	Semi D.
17	Jitendra C. S.	41	Mikaele Ira
18	Kuldeep Chand	42	Niumaia Roko
19	Kakiaman R.	43	Irivi T.
20	Mani Ram	44	Anasa Koro
21	Niranjan Singh	45	Eseroma Bati
22	Vereniki K.	46	Emosi Radio
23	Tanasio	47	Sunjay Kumar
24	Mikaele K.	48	Kavaia Benidito

**2. SCHEDULE OF VEHICLES ENTERING THE SITE**

VEHICLE NO:	TYPE
FH.337	Ford Ranger 4x4 - Blue
EY.282	Nissan 4x2 Pick-up - White
ES.177	Toyota Land Cruiser - Maroon
ES.178	Toyota Land Cruiser - White
EE.063	Ford Ranger 4x4 - Grey
EC.898	Toyota Hilux 4x4 - Green
EB.146	Toyota Hilux 4x2 - White
EN.304	Isuzu 3 Ton Truck - White
EN.305	Isuzu 4x2 Pick-up - White
DW.092	Mazda 3 Ton Truck - White
DZ.348	Nissan 5 Ton Hiab Truck - White
DN.891	Hino 6 Ton Dumper Truck - White
EU.062	Nissan Sunny - Silver

**Appendix One**

**CONSTRUCTION PROGRAMMES**

***TO BE ATTACHED ONCE NOMINATED FOR THE PROJECT***