Fiji Pharmaceutical and Biomedical Services Warehouse

Environmental and Social Impact Assessment

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LIST OF ACRONYMS

CAMS - Continuous Air Quality Monitoring Stations

ESMP - Environment and Social Management Plan

DOE - Department of Environment

EMA - Environment Management Act

ESCP - Environment and Social Commitment Plan.

ESF – Environmental Social Framework of the World Bank.

ESIA - Environment and Social Impact Assessment

ESMP - Environment and Social Management Plan

ESS - Environmental and Social Standards

FPBS – Fiji Pharmaceutical and Biomedical Services

GIIP - Good International Industry Practice

GM - Grievance management procedures

GoF – Government of Fiji

HSAWA - Health and Safety at Work Act

IDA – International Development Association

IPC - Infection Prevention Control

LMP - Labour Management Procedure

MOHMS – Ministry of Health and Medical Services

NFA – National Fire Authority

OHS – Occupational Health and Safety

POM - Project Operational Manual

PMU – Project Management Unit

SEP - Stakeholder Engagement Plan

SPRP- Strategic Preparedness and Response Program

WB – World Bank

WMP - Waste Management Plan

1. EXECUTIVE SUMMARY

1.1 Introduction

1.1.1 Background

To meet the existing storage demand for the COVID19 Emergency Response Project and the future demand-growth, the Government of Fiji (GoF) is planning to construct an additional medical storage facility at its central distribution centre at Fiji Pharmaceutical and Biomedical Services (FPBS) site at Jerusalem Road in Nabua Suva.

Currently the GoF is renting a facility in Lami for storage needs on COVID19 pharmaceutical equipment and consumables. Therefore, the construction of the proposed Warehouse will secure both the current and future storage demand of pharmaceutical equipment and products, and will also impact substantial savings on rental facilities. The present project is in line with GoF and Ministry of Health and Medical Services (MOHMS) "in-principle" approval to the project.

The construction of the proposed Warehouse will secure both the current and future storage demand of pharmaceutical equipment and products, and will also achieve substantial economic savings on rental facilities.

The land for this proposed Warehouse belongs to GoF and does not require any legal instruments to acquire or to undertake any site preparation as it has already been cleared and falls within the existing FPBS site.

Since the warehouse project is an additional building to the existing FPBS building mainly specializing in the storage of pharmaceutical products awaiting delivery to various health facilities, it has been determined through the ESIA process that the project will have no major adverse impacts on the physical and social environment.

1.1.2 Scope of the ESIA

The Environmental and Social Impact Assessment (ESIA) was conducted out to cover risks and impacts and assess how these could be mitigated within the project boundaries.

The ESIA process entailed a description of the project, the baseline information (environmental and socio-economic setting), identification of the potential positive and negative impacts, development of mitigation measures and an environmental and social management plan.

The objective of this Environmental and Social Impact Assessment (ESIA) is to:

i. Provide an appraisal and assessment of potential environmental and social impacts arising due to construction and operation of the medical supplies warehouse.

ii. Review key Project documents (eg., LMP, SEP H&S plans), to ascertain any specific management requirements.

iii. Identify avoidance/mitigation measures for any adverse environmental and social impacts.

iv. Develop a Management and Monitoring Plan to evaluate the effectiveness of the avoidance/mitigation measures.

The Warehouse project (ie., design, construction and operation), will comply with all requirements of the Environmental and Social Frameworks/Guidelines of the World Bank (WB), Good International Industry Practice (GIIP), and will abide with the laws and regulations of the GoF. The contracts will specify compliance with the ESMP and associated plans (eg., LMP, SEP, H&S and contractors developed and approved ERMP), and will be legally enforceable by having obligations contained in the contracts.

In respect to the assessments undertaken for this ESIA, WB requires that the depth and scale be proportionate to the potential risks and impacts, for this ESIA, the Warehouse project. Apart from assessing risks to the biotic/abiotic environments that could be impacted by the Warehouse construction and operation, a number of WB requirements (Listed in Annex 2), were reviewed to ascertain any specific management requirements.

With the Project LMP, obligations and risks have been identified and evaluated in regards to their applicability to this Warehouse ESIA (eg., within the LMP - GoF Employment and Working Conditions Legislation, OHS Legislation, Contractor's responsibility for Labour Management, Grievance Management etc). Mitigation measures have been included in Section 4.4 of this ESIA and will be included in contracts as enforceable conditions. Bidding documents will also include these responsibilities to enable tenderers to fully understand their obligations and ensure resourcing for effective implementation is included in budgets.

Compliance with the key project documents is detailed in the ESMF Table 7-11 and ESP ESS2 and will be adhered to as per Government of Fiji Laws. There is no need to redo a plan when the existing Laws adequately address the procedures. However, as indicated this will be mentioned in the bidding documents and contract agreements.

The mitigation and responsibility issues and frameworks defined in Section 4 refer to the development of a range of Plans and/or Procedures with detail of who is responsible for the development and implementation as well as reviewing and monitoring. These include (but not limited to); Grievance management procedures, Labour Management Procedure, Occupational Health and Safety Plan, Stakeholder Engagement Plan and Waste Management Plan.

Development of these documents will also need to ensure that the requirements in the Project's ESMP are adhered to as a minimum standard. For example, Grievance Procedures are specified and the tenderers will need to provide detail how these will be implemented, monitored and reported as a minimum.

1.1.3 ESIA Criteria.

The WB ESMF sets out the principles, policies and procedures for environmental and social protection that the GoF will employ in the context of the Project. For any project to be implemented, the pre-requisite for the WB is to prepare an ESIA and an Environmental and Social Management Plan (ESMP) and obtain a "No objection" from the WB in accordance with the Environment and Social Commitment Plan (ESCP). The project implementation will be fully guided by the ESF and guidelines as mentioned below.

The ESIA was conducted in accordance with the World Bank Environment and Social Safeguard Policies and the World Bank Group's Environment, Health and Safety, (EHS) Guidelines and in line with GoF Legislation.

The approach to conduct this ESIA involved:

i. The conduct of a desktop review of all relevant and available documents on the project activities and components.

ii. A review was also done on available and relevant legal and policy documents, standards and guidelines.

iii. The conduct of a site assessment of the site and local environment.

iv. Liaise with relevant stakeholders to obtain their concerns about the project.

The project will comply with standard requirements of the WB (ie., Environmental and Social Framework), and comply with the laws and relevant Policies of the GoF (a list of these is contained in Annex 2).

This ESIA is aligned with the COVID-19 ESMF in regards to the Environmental and Social Standards in regards to evaluation and development of mitigation strategies. The ESMF screened the WB ESS and for the warehouse project, the following apply (Table 1).

Table 1.0 Applicable WB ESS.

This table provides a summary as to whether each ESS is relevant or not and a justification for this conclusion.

Environmental & Social Standard	Required Measures and Actions
ESS1: Assessment and Management of Environmental and Social Risks and Impacts	The standard is relevant. Assessments have been conducted for the warehouse for environmental and social risks/impacts and the conclusions are contained within this ESIA. The assessments indicate that there are potential environmental and social risks and for that, management/mitigation measures have been included within Section 4.4 responsibilities The MOHMS has assessed the environmental and social risks and impacts of proposed Project activities, in accordance with the ESMF, to ensure that individuals or groups are not disadvantaged to access the development benefits resulting from the Project.
ESS2: Labour and Working Conditions	The standard is relevant as there is use of labour for the construction and operation of the Warehouse. The MHOMS has adopted the Labour Management Procedures (LMP) incorporating the relevant requirements of ESS2. The project's LMP incorporates issues for contracted workers such as working conditions and management of worker relationships, protecting the workforce and ensuring correct OHS procedures, and a grievance mechanism for project workers. The requirement for an LMP will be incorporated into the Warehouse project bidding documents with the contracts having enforceable conditions to ensure compliance with this LMP. This is in line with GoF legislation.
ESS3: Resource Efficiency and Pollution Prevention and Management	The standard is relevant as there are identified opportunities to minimise resource consumption, adopt circular economy principles and manage wastes that will be generated. The MHOMS has reviewed the IPC manual for Fiji and drafted a Waste Management Plan (IPC&WMP). The ESMF includes measures to manage wastes associated with proposed Project activities. Management strategies within this ESIA for managing any potential pollution as well as maximising resource efficiency have been described in Section 4.4. These strategies range from a preference in selecting construction materials that

Environmental & Social Standard	Required Measures and Actions
	have been recycled and/or purchased locally through to the development of waste management operating procedures for the construction and operational phases of the project (this includes providing infrastructure such as bins and training of staff).
ESS4: Community Health and Safety	The standard is relevant. A number of potential OHS issues have been identified for the community and project workers (eg., traffic, noise, injuries etc), OHS plans are to be developed by every contractor and approved by MOHMS. The requirements for this is specified in Section 4.4 of this ESIA. The requirement in Section 4.4 states that the OHS plans will be incorporated into the Warehouse project bidding documents with the contracts having enforceable conditions to ensure compliance with the developed OHS plan. Compliance will be undertaken by the PMU and MOHMS with the contractor(s) submitting monthly reports as per Section 4.4 of this ESIA. In addition to the required OHS plans, the Stakeholder Engagement Plan as per ESS10, will also be used to management any potential impacts to the wider community.
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	The standard is not relevant. The proposed land for the Warehouse is Government owned. MOHMS has secured agreement with the Government to utilise the land for the purpose of the Warehouse. No land acquisition is required. The project does not require any physical or economic displacement, resettlement or result in restrictions on land warehouse operations. The land is appropriately zoned and the site currently has a warehouse located adjacent to that for this proposed Warehouse. The lease documents are with AMU. This has been confirmed by AMU/MOHMS and Lands department.
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	The standard is not relevant. The evaluation for this ESIA has concluded that the site for the proposed Warehouse is disturbed land with no flora/fauna species at risk from development as well for the neighbouring creek. In addition, there will be no long-term impact on the water quality of the creek or receiving waters. The only potential impact is from dust during construction and this ESIA contains mitigation methods to manage this.
ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	This standard is not considered relevant as there are no minority indigenous communities that could be impacted.
ESS8: Cultural Heritage	The standard is not relevant. According to the Fiji Department of Heritage and Arts, there are no Cultural or Heritage locations around the proposed site (tangible), or any intangible aspects that could be impacted from this proposed Warehouse (during construction and/or operation).
ESS9: Financial Intermediaries	The standard is not relevant. There are no financial intermediaries for this Warehouse project.

Environmental & Social Standard	Required Measures and Actions
ESS10 Stakeholder Engagement and Information Disclosure	The standard is relevant. The MHOMS will adopt and implement the Project's Stakeholder Engagement Plan (SEP) at the warehouse site. The SEP includes a Grievance Mechanism (GM) that will be advertised at the site.

1.2 Project Background

The GoF has secured US$7.35 million in project financing, of which US$6.4 million is International Development Association (IDA) credits allocated from the WB through the Fast Track COVID-19 Response Program for the Fiji COVID-19 Emergency Response Project (the Project). The Project reflects the emergency response under the COVID-19 Strategic Preparedness and Response Program (SPRP) and aims to prevent, detect and respond to the threat posed by COVID-19, strengthening national systems for public health in Fiji on improving emergency preparedness and response, strengthening health systems, and managing implementation, monitoring and evaluation.

This ESIA is supported by the ESMF, Infection Prevention Control and Waste Management Plan (IPC&WMP), Labour Management Procedure (LMP), Stakeholder Engagement Plan (SEP), Project Operational Manual (POM) and other specific plans that have been or will be prepared.

1.3 Warehouse Description

The warehouse is anticipated to be approximately 20m x 30m in size and aligned to the existing FPBS building height, enclosed with side elevations to accommodate office space, wash rooms, disability accessibility, vehicular access and turning points, container storages area and loading and unloading bay. It will be sited approximately 10 metres from the existing FPBS building.

The geographical landscape of the site is flat land surrounded by local shrubs and weeds. A small creek approximately 4 metres wide runs beside the facility approximately 20m away from the building line flows into an underground culvert under the existing Jerusalem Road before terminating into the Samabula River.

The creek terminates into the Samabula River which is used as a gateway for fisherman into the sea. Heavily grown mangroves on the banks act as receptors to heavy commercial and residential waste being discharged including a saw mill and its wood treatment plant.

The site currently has an existing five meter wide road access from both sides of the existing FPBS building which can allow for smooth vehicle access for container trucks to move in and out. The site has been adequately supplied with government treated water and power supply with back up in house water tanks and generators.

The designs and plans were drafted by the by the Ministry of Infrastructure and Transport architects and engineers (refer to site plan and preliminary drawings attached as Annex 1).

1.3.1 Location of the proposed Warehouse

The effective project area (ie., location of the Warehouse), is defined as the site behind the existing FPBS. This location is in an industrial zone with previously disturbed land and the project is not expected to pose a risk to biodiversity. The locations are illustrated in Figures 1 and 2.

Figure 1: Location of the proposed Warehouse – Regional Perspective

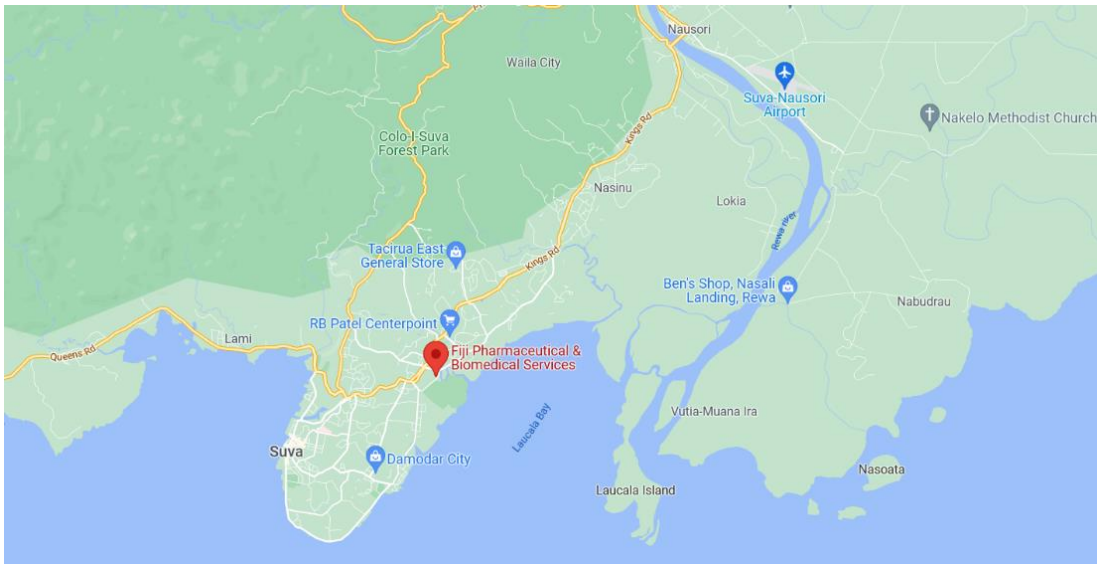


Figure 2: Aerial view of the proposed Warehouse location – Local Perspective

All Project activities will be conducted within existing government facilities/grounds and no new land will be acquired. No involuntary physical or economic displacement or restrictions are expected.

2. ESIA Assessment

A baseline assessment was carried out on the physical, biological and social environments relevant to this project. The following summarises the results.

2.1 Site Condition

The topography of the proposed site is gentle and flat land. Adequate landscaping had been carried out approximately 20 years ago when the current FPBS building was constructed. The surrounding area within the proposed site is consistent with the proposed warehouse building. The land within the vicinity is zoned as commercial "A", "B" and Industrial[1] as per Town Planning General Provisions which permits construction of the proposed warehouse.

Figures 3, 4, 5 and 6 illustrate the current state of the site.

Figure 3: Proposed rear site area of FPBS.

Figure 4: Site from side angle.

Figure 5: Creek beside the FPBS building[2].

[1] Commercial A&B: Means developments where goods or services are sold, exposed, stored or offered for sale including Pharmacies, surgeries etc. Industrial: Development for bulk storage, sale of new and used items etc.

[2] This photograph is taken from the junction of the Jerusalem Road and illustrates the creek during high tide and at night.

Figure 6 Vegetation at the proposed site.

2.2 Built Environment

Appraising the built environment, there is a secondary school at the far rear end of the site approximately 170m away and a residential development approximately 165m away from the site, with tertiary education campuses and 73m commercial premises the other main land uses in close proximity to the FPBS.

2.3 Biotic Environment

2.3.1 Ecology & Biodiversity

The proposed site is mostly barren, with an estimated 3 major floral species with all native grass[3] and none are classified as vulnerable or near threatened. The dominant vegetation are mainly the local species of weeds overgrown on the lot which was left vacant for a long period of time.

The number of fish species was not able to be ascertained due the absence of any study/report, however mud crabs and land crabs were recorded during the observational survey. There is no wildlife, natural forest and vegetation, or endangered species present in and around the proposed site as per Fiji's Biodiversity profile[4].

2.3.2 Water Environment

Samabula River which is close to the site (refer to Figure 2, with Figure 9 illustrating estimated distances to nearby sensitive receptors such as residences and schools), is the main surface water body. There is a creek running adjacent (approximately 20 m away) to the proposed site terminating into the Samabula River.

The development will not involve any major excavation or removal of soil since this is specifically designed and operated as a storage facility and all wastewater from sinks, hand basins and sewerage will flow into the

[3] Environmental Impact Assessment (EIA): Types of projects that need an EIA; 12 November 2019.

[4] Fiji - Main Details - Convention on Biological Diversity.

existing sewer lines terminating into the Government Kinoya Treatment Plant. Figure 7 illustrates the Creek running adjacent to the existing FPBS building and Figure 8 the point at which the creek flows into Samabula River.

Figure 7 – Creek crossing the Jerusalem Rd.

Figure 8: Creek terminating into the Samabula River opposite FPBS

There will be no contribution to a decline of the water quality of the river and creek from this project as there will be no increase in surface water run-off, no pollutants (eg., dust, oil), that will be able to access the river or creek during construction activities or operation of the warehouse.

Nominal flash flooding is anticipated during major cyclones and heavy rainfalls during the wet season from November to April. In depth interviews with long time workers and managers at FPBS revealed that the maximum flood level that they experienced during Tropical Cyclone Winston in 2016 was of approximately 0.6 metres height. The floods usually recede within a few hours. There is also occasional flash flooding encountered during rainy seasons especially in front of the entry at Jerusalem road which is the lowest point for that section of the road. However, the water is seen to rescind within hours as tides go low. There was no reported experience of a major flooding that damaged any building structure, pharmaceutical goods or caused any major disruptions to services delivery at the site.

2.4 Abiotic Environment

2.4.1 Climate

Information and climatic data relating directly to the FPBS site area was available from the Fijian Meteorological Department. Field measurements, specifically wind speed, were used in conjunction with secondary data for Suva area to represent conditions within the project area.

2.4.2 Ambient Air Quality

In accordance with the World Health Organization's guidelines, the air quality in Fiji is considered moderately unsafe. Location specific air quality data is not available for this location. The most recent available data indicates the country's annual mean concentration of PM2.5 is 11 µg/m3 which exceeds the recommended maximum of 10 µg/m3[5]. Data from the Department of Environment (DOE) for continuous air quality monitoring stations (CAMS) is not available near the project area. The baseline levels for criteria pollutants (eg., PM2.5, PM10) are also not available.

However as per the DoE standard, gaseous pollutants are envisaged to be within the national and international limits due to absences of air pollutant emitting industries within the vicinity[6].

It is also expected that the increase in vehicle movements to the FPBS will provide an insignificant discharge of air pollutants (noting that there is only expected to be a maximum of 20 additional vehicle movements into the site once the warehouse is operational – this includes staff cars and delivery trucks).

2.4.3 Noise

Noise will be generated though construction activities such as with power tools, building processes and traffic movement. During operation of the warehouse, noise will be generated though vehicle movement (trucks and fork lifts) and use of equipment such as air conditioners and refrigeration compressors. Noise in excess of ambient levels has the potential to disrupt health of neighbours (including workers at nearby sites) as well as school and other education facilities.

The following mitigation measures will be applied: Construction activities will be limited to designated times of the day (these will be specified in building approvals or permits), and no such activities at night or weekends unless specifically approved. This includes the delivery of materials for the construction of the warehouse. As part of a site induction program all contractors will be instructed on noise avoidance and abatement requirements. Keeping noisy machinery and processes away from quieter areas and all construction equipment will be required to adhere to noise levels as specified by GoF.

Of these, the main noise source from the warehouse once operational will be noise emanating from traffic noise from the movement of vehicles delivering and transporting supplies. This though will be during normal work hours and so will not lead to impacts such as sleep deprivation.

Operational noise such as from air-conditioning units will be of a low dB level and the buffer distance from the FPBS is sufficient to reduce the noise to acceptable levels for the community and during working hours (or attendance at the schools and tertiary institutes). The noise from construction activities will be restricted

[5] Fiji Meteorological Services. weather-and-climate.com › average-monthly-precipitation.

[6] Defra, 2012 RoTAP: Review of Trans boundary Air Pollution: Acidification, Eutrophication, Ground Level Ozone and Heavy Metals in the UK.

so as to only occur during designated work hours. Again, the buffer distance will also be sufficient to reduce the potential impact from the noise.

2.4.4 Traffic Impact

Construction activities may result in a significant increase in movement of heavy vehicles for the transport of construction materials and equipment slightly increasing the risk of traffic-related accidents and injuries to workers and local communities (ie., pedestrians), traffic congestion from the entry and exiting of vehicles from the site.

2.4.5 Waste/Litter

A range of construction wastes will be generated during construction. In the operational phase the types and volumes of wastes will be consistent with minimal hazardous wastes.

2.4.6 Dust

There will be minimal generation of dust as there will be no major excavation or backfill undertaken that involves significant quantities of soil or sand being generated. There is potential for dust from construction from site preparation and vehicle movement. There will not be any dust generated from the operation of the site.

Dust problems will be mitigated by the following types of actions: scheduling to avoid heavy rainfall periods (ie., during the dry season) to the extent practical; Hydrocarbons shall not be used as a method of dust control, re-vegetating areas promptly; use of dust suppression techniques such as water carts to spray roads if they are dirt and other areas; reduced or ceasing activities that could generate dust in windy conditions and use of stockpiles for soil will be avoided and if needed they will be covered overnight and non-construction days.

2.5 Socio-economic

2.5.1 Overview

Assessment of the baseline (of the proposed site), has determined that there are no impacts on any disadvantaged communities/individuals. In addition, instruments such as the Labour Management Procedures and Grievance Management Procedures will be utilised to ensure that any impacts if raised are appropriately managed.

The Warehouse project is categorised as low risk on social-economic aspects. There is no land acquisition and no identified implications for any disadvantaged or vulnerable groups such as people with disabilities or women in the workplace. Aspects such as OHS, community health and safety risks will be managed via the development of specific management plans as well as with Stakeholder Engagement and Grievance Mechanisms. These will all be overseen by the PMU and MOHMS.

The socioeconomic status of residents and investors (who have invested into the nearby prime commercial and residential properties), would be classified as medium to high. There are other multiple story commercial developments under construction around the area which predicts high volume of commercial and industrial developments within the close proximity of the proposed site. Opposite the FPBS and further 400m towards Suva end of the Jerusalem Road, is the Fiji golf course, the Rifle Range and Vatuwaqa residential, commercial and industrial subdivisions.

The main transportation mode around the site is bus, taxis and private vehicles owned by public in the area. The route for traffic is the Jerusalem road which has 2 links from both ways. Other roads used by traffics are Nokonoko Road and Kings Road. Traffic congestions are in this portion of the road is evident during peak hours of morning mostly 7am-830am and evening 430pm -6pm.

In regards to surrounding land uses, there is a secondary school at the far rear end of the site approximately 170m away and a residential development approximately 165m away from the site, with tertiary education campuses and 73m commercial premises the other main land uses in close proximity to the FPBS.

The geographical location of the area is such that it provides sufficient ample buffer (or noise and dust during construction, and noise during the operational phase of the warehouse), to other existing land uses within the vicinity – noting that the main impact will be from vehicle movement into and existing the site once operational.

Figure 9 provides distances to the neighbouring land uses.

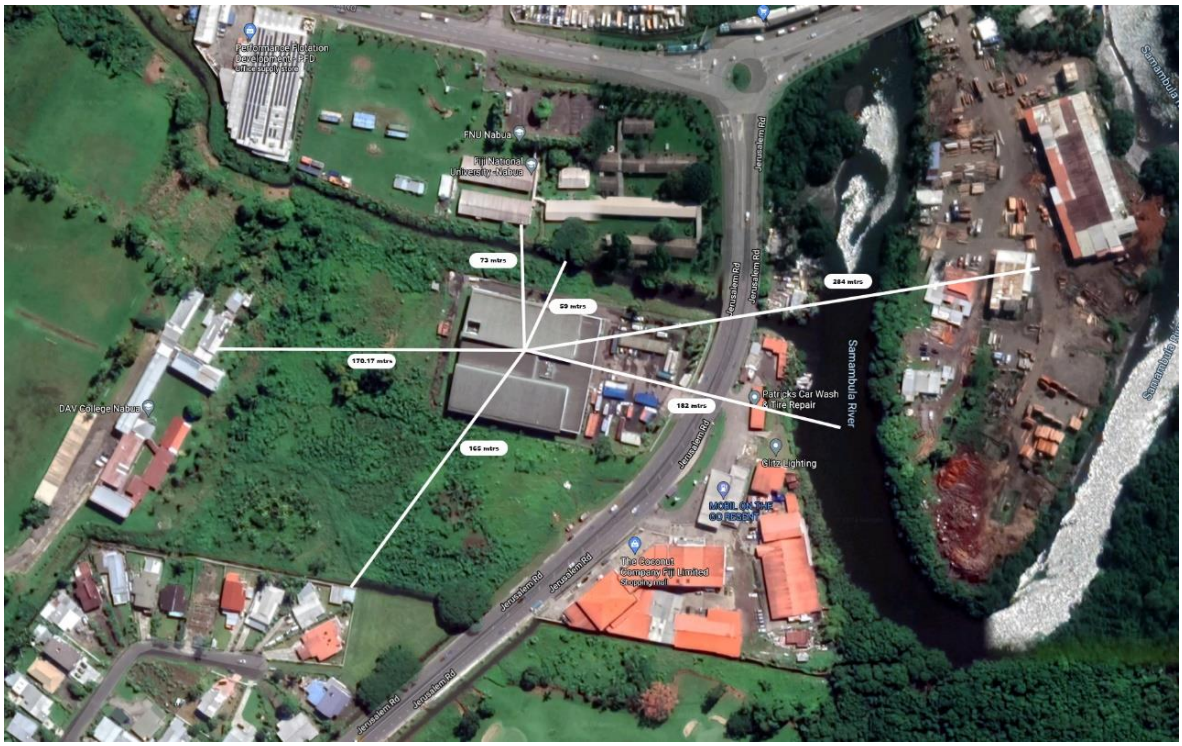


Figure 9: Proposed Warehouse site and neighbouring land uses

According to the Fiji Department of Heritage and Arts, there are no Cultural or Heritage locations around the proposed site.

2.5.2 OHS issues

Injuries resulting from on-site construction activities could occur. These can range from injuries requiring on-site first-aid (e.g. minor cuts and bruising), to fatal injuries as a result of activities such as falls from height and impacts with motor vehicles.

Apart from the identified traffic issues, there are no other identified OHS issues for the local community (eg., residents and other personnel such as from the education facilities and businesses).

2.5.3 Traffic impact & Access

Construction activities may result in a significant increase in movement of heavy vehicles for the transport of construction materials and equipment increasing the risk of traffic-related accidents and injuries to workers and local communities. Road accidents involving project vehicles during construction and traffic congestion from the entry and exiting of vehicles from the site including Pedestrians could be impacted.

The increase traffic movements during construction and operation of the Warehouse is not expected to impact on the primary school, local residents or University as all of these have entries into their locations from different roads than Jerusalem Road. In addition, there are alternate routes that those wishing to access entry roads to these locations can utilise.

To minimise this one-way entry and one way exit to the site for proper traffic accessibility with traffic signs for entry and exit to be properly displayed inside the premises. Adequate signs to be placed in front of the entry from Jerusalem road indicating “Construction in progress” and “Beware of heavy vehicles” etc.

This action as well as other traffic management actions will be detailed in a traffic management plan that is to be submitted by all contractors prior to commencing works on the site.

2.6 ESIA Baseline Study Conclusions

After the conduct and evaluation of ESIA for the proposed Warehouse building it is evident that the project is unlikely to have any significant adverse environmental and social impacts.

Given that the site is currently utilised for a warehouse, there are no projected additional socio-economic impacts to any residents or commercial operations located near the site from operations apart from increased traffic movements (low risk), OHS impacts from noise/dust and other construction activities (low risk). There is no land acquisition so therefore no risks from that potential activity. Alternative locations with similar land, water and air environments are not easily found in an industrial area like the proposed site at Jerusalem road Vatuwaqa.

The proposed site is an empty government owned land and no land acquisition is required. As there is no relocation needed, no alternative is required for the proposed project site.

Perhaps the most critical aspect of the project is the potential conflict from issues related to labour, vehicular traffic and safety risk. The selection of the project site has been judiciously done to avoid the need for community relocation. The project will have positive impacts in the area of job creation, improving the quality of life of locals. There is no need for land acquisition for the proposed warehouse location. In addition, the Stakeholder Engagement Plan enables socio-economic issues to be identified and managed.

There are no potential major impacts relating to water quality, biodiversity, soil erosion, flash flood risk, noise, and dust & soil pollution due to the construction of the warehouse. Mitigation measures to limit the extent of impacts have been highlighted and will be implemented via the ESMF.

The potential noise emission from the project will not create any harm to the neighbouring community including the school and residences due to both the distance they are from the warehouse and that construction and operational activities will be conducted only during daylight hours including the mitigation measures stipulated in Section 4.4.

The proposed development on the site will not have any direct impact on the Fijis natural fauna and flora[7,8]. There will be minimal loss of floral and faunal species during land clearing and preparation. Mitigation measures have been presented to ensure that minimal clearing is carried out to limit the extent of biodiversity loss.

In summary, the potential environmental and social impacts from this project are as listed below (these are described in more detail in Section 4 with management strategies). Based on the evaluations undertaken for this ESIA, none of these impacts are considered significant due to them either not being classified as such, and/or the mitigation actions.

i. Design:

- Inadequate integration of safety controls such as for fire safety and mobile plant movement's leads to worker injuries.
- Inadequate integration of environmental controls such as waste water/sewage management or waste management infrastructure leads to environmental impacts.

ii. Construction

- Dust and spoil erosion from excavation works
- Water quality impacts from run-off as a result of construction activities
- Noise from construction activities such as machinery, vehicles and tools
- Social issues such as non-use of child labour and grievance procedures
- Health and safety impacts from construction activities
- Flooding of the site
- Waste generation and management

iii. Operational

- Noise from delivery vehicles
- Noise from warehouse equipment such as forklifts and air-conditioners
- Social issues such as non-use of child labour and grievance procedures
- Health and safety from operational activities
- Waste generation and management including for pharmaceutical waste
- Ongoing management of sewage and waste water

[7] Fiji - Main Details - Convention on Biological Diversity.

[8] https://www.cbd.int › countries › profile. Fiji's biodiversity.

Therefore, the site has been considered suitable for the project.

3. Summary of Mitigation Measures

The following summarises the conclusions resulting from an analysis of identified and potential environmental and social risks from the warehouse project, and key actions designed to avoid and/or mitigate the identified potential impacts resulting from the design, construction and operation of the warehouse.

3.1 Design Considerations

i. "Green building", concepts are to be incorporated into the design as much as possible (eg., use of recycled building materials, natural ventilation, energy/water efficiency, locally purchased materials etc.).

ii. A communication strategy will be developed prior to the commencement of construction activities as a component of the ESMP and delivered to advise all members of the community (i.e. residents, workers, and students), of the development, stages (building and operational), proposed timeframes, and process for grievance mechanisms for this warehouse project.

iii. Disability access will be provided – including parking and access to all areas of the warehouse.

iv. Effective waste, water and sewage management disposal systems will be developed and implemented. This includes implementation of recycling systems.

v. Landscaping to be compatible with the surrounding environment and also as a management tool to prevent egress of any materials into the creek.

vi. Increase floor height at least to 3ft to avoid the potential for building or pharmaceutical damage from floodwaters.

vii. OHS, NFA, GIIP, Building Code and Building Act requirements determined and implemented to meet the requirements of the approving authorities.

viii. The warehouse will comply with category 5 cyclone standards.

ix. Access, turning points, loading and unloading bay to be installed to assist efficient traffic movement.

3.2 Construction Phase

i. Noise management so as to minimize noise especially with heavy machines. Strategies will include; use of absorptive materials within the building to reduce reflected sound (e.g. open cell foam or mineral wool), ensuing noisy machinery and processes are minimised and only used during normal work hours, design of the workflow to keep noisy machinery out of areas where people spend most of their time. No construction will take place after hours.

ii. Dust mitigation and suppression methods to be utilised include:

- Scheduling to avoid heavy rainfall periods (i.e., during the dry season) to the extent practical.
- Reduced or ceasing activities that could generate dust in windy conditions.

- Use of dust suppression techniques such as water carts to spray roads if they are dirt and other areas.
- Stockpiles for soil will be avoided and if needed they will be covered overnight and non-construction days including all other measures highlighted in Section 4.4.
- Hydrocarbons shall not be used as a method of dust control.
- Re-vegetating areas promptly.
- Dust generation will be avoided by mandating the procedures for cartage and storage of soil, sand.

iii. OHS compliance including awareness on labour rights, no abuse, no discrimination, no harassment or gender inequality and grievance handling procedures to be in place.

- The warehouse will be provided with fire detection and alarms, means of egress, fire control and suppression, smoke control and all other requirements.
- To mitigate the potential for any OHS adverse incidents as well as to ensure management of all OHS aspects, every contractor will be required to develop, have approved and implement a Contractor Health and Safety (H&S) management plan This plan to include risk assessments of activities, induction briefings to explain all potential risks and impacts for this project, correct management processes as well as responsibilities of all personnel working on this project.
- Note that the Health & Safety, SEP and Labour Management and Stakeholder Engagement Plans will be completed and approved once tenders for the construction of the warehouse have been awarded (estimated to be March 2022).

iv. Use of traffic control and proper guidance (eg., signage), education and awareness-raising, and the adoption of procedures which includes the development, approval and implementation of traffic management plans by all contractors.

v. Implementation of appropriate controls (eg., managing spills of fuel or other materials, managing soil runoff, litter etc) this development is not likely to pose a significant risk to the water quality of the Samabula River at the construction phase nor at the operational level.

vi. Regular and random stage /progress inspections by approving authority and designated engineers to ensure compliance with all contractual obligations.

vii. All contractors undertaking works shall develop and implement a site-specific Waste Management Plan to reduce disposal of materials to landfill (eg., training of staff, separation of waste streams, storage, provision of bins, site clean-up, bin clean-out schedule, etc) before commencement of any works including all other measures as stated in Section 4.4.

viii. Litter fences installed.

ix. Bunding and other measures to prevent runoff of soil to the creek installed.

x. To mitigate OHS issues a Health and Safety (H&S) management plan(s) will be developed prior to the commencement of construction works by the contractor, and construction works completed accordingly. Induction briefing will be conducted to explain all potential risks and impacts for this

project as well as the correct management processes as well as responsibilities of all personnel working on this project with clear communication of risks and prevention measures will be included in training activities. Obligations under the WB EHS Guidelines, relevant Good International Industry Practice (GIIP), and Health and Safety at Work Act (HSAWA) 1996 will be included in the ESMPs and fully enforced including all other mitigation measures highlighted in Section 4.4.

3.3 Operational Phase

i. Engineering certificate to be obtained prior to occupation.

ii. Completion certificate to be obtained from approving authorities prior to occupation.

iii. All waste to be disposed at the Naboro landfill, with a focus on strategies to recycle materials. No onsite burn and bury method.

iv. All waste water and sewer to be connected to the Government sewer lines for treatment at the Government's facility.

v. One-way entry and exit for vehicular access to be mandated.

vi. Communication with nearby land users (e.g. residents and schools), to occur to determine if there are any grievance issues.

4. Warehouse Environmental and Social Management Plan (ESMP)

4.1 Preamble

This section outlines the proposed mitigation methods for the potential risks and impacts identified in the ESIA as a result of the design, construction and subsequent operation of the warehouse along with appropriate management frameworks detailed in Section 4.4.

The warehouse will be a simple structure (refer Figure 4), with all environmental (e.g. dust, noise, water quality, air emissions, soil erosion and sediment control etc.), social impacts and occupational health and safety risks managed through this ESMP.

Importantly, all activities from design through to construction and operation of the warehouse will be conducted in conjunction with requirements as specified in the Fiji COVID-19 Emergency Response Project, Environmental and Social Management Framework (i.e. Environmental and Social Risks, Labour and Working Conditions, Community Health and Safety, Stakeholder Engagement and Information Disclosure).

All contractors will be required to adhere to this ESMP and will develop one specific to their role in the construction of the warehouse (a ESMP). The ESMP is to identify environmental and social risks related to the task the contractor has been employed for and specify the mitigation measures, monitoring and reporting etc. Importantly, as a condition of engagement for this warehouse project, all contractors will ensure that there are clear statements as to compliance with all aspects of WB requirements (e.g. Labour management procedures, grievance mechanisms etc).

Key requirements will include:

i. Identification of potential impacts and development and implementation of strategies to avoid them being realised or mitigated

ii. Incident monitoring, review and reporting

iii. Development of an emergency response plan to manage incidents

iv. Regular reporting through MOHMS to WB on any incidents.

4.2 Risk Assessment

For this ESIA, the following defines the levels of risk:

i. High risk

ii. Substantial risk

iii. Moderate risk

iv. Low risk

The Fiji COVID-19 Emergency Response Project has been classified as having a "substantial" classification in regards to risk. However, this stand-alone sub-project (Warehouse construction), has a "moderate" rating in regards to risk. As such, the identified potential impacts and mitigation methods reflect this rating.

To determine the significance of the Warehouse project, the following ratings were used:

- Consequence – Local rating (score of 1)
- Intensity – Low rating (score of 1)
- Duration – Long-Term rating (score of 3)

Based on the above there is a combined score of 5, that results in a Moderate rating.

4.3 Risk Management and Responsibilities

The preferred approach for risk management is avoidance. This is not feasible in all aspects of the identified potential risks, so mitigation methods must be developed and implemented. This then requires monitoring of the potential impact and management of it to ensure that what has been mandated as the management strategy is being undertaken and is actually achieving its goal(s). A key part of the implementation is ensuring there is responsibility for implementation and that all management strategies are monitored, with corrective actions implemented as required. Reporting of the risk management strategies and monitoring actions is also a key aspect as this ensures that those stakeholders ultimately responsible receive the necessary feedback on the mitigation methods and allows them to adjust these strategies as necessary.

It is also important to note that the reporting framework includes ensuring stakeholders (e.g. local communities), are aware of what is happening and that agreed strategies are being implemented and meeting stated objectives. A reporting framework also allows these stakeholders to communicate any issues as they arise (i.e. though a grievance mechanism).

As a means of ensuring that the requirement for contractors to develop and provide for approval an ESMP, all tender bidding documents will clearly specify what is to be included as well as links to appropriate reference documents.

Appointed contractors will be required to provide reports to MOHMS as to any identified issues in relation to environmental and social responsibilities and specifically any incidents or grievances. Reports that do not require reporting of incidents to be provided to MOHMS monthly with reporting of any incidents or grievances to be provided to MOHMS within 24 hours. MOHMS will provide reports to WB on a similar timeframe.

The MOHMS will be responsible for the preparation of an emergency response manual that will contain the requirements as specified in the WB's ESF. This manual is to be prepared prior to the commencement of any constructions works (including site preparation). This manual will detail all aspects of emergency prevention and preparedness and response arrangements to emergency situations. The manual will also detail reporting to WB and other relevant stakeholders as to compliance and/or any issues that have occurred (regardless of perceived level of the incident). MOHMS will also ensure that all appointed contractors prepare and submit for approval a similar document to address the scope of works that the contractor has been engaged for prior to the commencement of any works.

4.4 Design, Construction and Operation Management and Implementation Arrangements

The proposed mitigation measures detailed in Section 4.4 have outlined the development of plans/procedures such as Waste Management Plan, H&S Management Plan, Traffic Management Plan, Grievance Procedures, Communication Plan etc. It will be the responsibility of the Project Management Unit (PMU) to provide appropriate guidance and where necessary training to those indicated as responsible for preparation and implementation these Plans/Procedures to ensure that they are relevant, effective and compliance monitored. It has been identified that training will be provided for the Grievance and Labour Management Plans along with COVID-19 Protocols.

These documents have in themselves specific management requirements that need to be adhered to by those contracted for the design and construction and then operation of the Warehouse. These requirements will be incorporated into the contracts so that they are legally binding. To facilitate compliance, then the bidding documents will provide either the detail or the actual document so as to allow bidders to determine how they will comply and communicate that in their submissions. This will also allow them to accurately budget for compliance actions/resources.

Responses by prospective contractors will be a component of the evaluation process to ensure that there is a clear understanding and capacity to implement relevant mitigation measures. The ESMP requirements will then be included in all legally enforceable contracts. Failure to abide by this will be potentially considered a breach of the contract.

It shall be the primary role of the MOHMS to monitor and measure the progress of implementation of the social and environmental safeguards as indicated Section 4.4. During project implementation, it shall undertake inspections to verify compliance to all contractual conditions/requirements and the Project Environment and Social Safeguards captured in the ESMP and measure progress toward the expected outcomes.

Any GoF regulatory requirements will be built into all contracts.

One risk that has been identified is what is termed a "capacity risk". What happens if any of the tenderers/contractors don't have the capacity to fulfill their obligations. This has been calculated as low risk. To mitigate, the PMU and MOHMS will be applying guidance, training and oversight.

Contract/tender documents will specify either details of how the tenderer will comply with Project plans/procedures or for others the development of the required Plans/Procedures along with details of implementation. It will also be a requirement that such implementation processes and/or Plans/Procedures be submitted to the PMU and MOHMs for approval (or advice on requirements for amending if required)

In addition, the PMU in conjunction with the MOHMS will review each submitted Plans/Procedure to ensure that the required detail has been included as well as monitoring each for correct implementation.

PMU will also undertake monitoring of compliance. To assist with this monitoring, all contractors as part of the enforceable contract will be required to provide the PMU monthly reports on compliance and/or any incidents with adverse impacts, grievance log etc and actions undertaken throughout the project period. MOHMS will also review any interim and progress reports to ensure that environmental and social mitigation measures are in place and functioning correctly.

Timeframe for implementation of the mitigation methods will depend on the process for awarding tenders. Generally, it would be expected that the contractors will submit their plans/procedures within one month of being awarded the tender. Indicative timeframes are:

- Tender: 31/1/21
- Agreement: 28/2/21
- Construction: 15/3/21

- Completion: 12 weeks (3 months estimated) 15/6/21
- Commencement: July/August 2021
- Contingencies: Add 6 weeks (Materials. Pandemic, weather or dispute etc)

Budget estimates for the project are FJD1.8m for construction and FJD200, 000 for administration/supervision works. Actual estimates for development and implementation of the mitigation measures will be determined when tenders are responded to. Staffing will entail: one Local ESHS specialist; one International ESHS specialist and one Site Engineer. Staff from DGBA, SCC, OHS, NFA, Labour Department will also be involved.

No	Potential Impacts	Level of Risk	Proposed Mitigation Measures	Timeframe /Responsibility
1. DESIGN PHASE				
1.1	Resource efficiency issues, including materials supply	**Low**	Design and bidding documents shall specify the preferred use of locally purchased and recycled materials. The contractor(s) undertaking works shall at a minimum: • Source raw materials locally from licensed/permitted facilities only; and • Use recycled or renewable building materials (e.g. timber) where possible. Tenders will be required to state what materials will be locally purchased and are recycled. Alternative purchasing options shall also be stated in submitted tenders.	MOHMS to review contractors purchasing options detailed in tender submissions to determine compliance.
1.2	Inadequate integration of safety	**Low**	The warehouse will be provided with fire detection and alarms, means of egress, fire	MOHMS will ensure Warehouse design ensures compliance as well as inspecting

No	Potential Impacts	Level of Risk	Proposed Mitigation Measures	Timeframe /Responsibility
	controls such as for fire safety. Inadequate integration of environmental controls such as waste water/sewage management.		control and suppression, smoke control and all other requirements. The design of the Warehouse to include these aspects.	building works to ensure these elements are installed/provided. PMU will also undertake monitoring of compliance.
2. CONSTRUCTION PHASE				
2.1	Failures in procurement process e.g. equipment that is inappropriate and could lead to health & safety risks to workers, and/or causes adverse environmental harm.	**Low**	Alternative sources of building materials will ensure that the design of the warehouse is as required, but the ecological footprint of construction is not as great as per the stated mitigation method. Tenders will be required to specify the type and source of all materials along with alternate materials if there are supply issues.	MOHMS to review contractors purchasing options to determine compliance. PMU will also undertake monitoring of compliance.
2.2	Injures resulting from on-site construction activities.	**Substantial**	Contractor Health and Safety (H&S) management plan(s) to be developed and submitted for approval prior to the commencement of	Appointed contractor(s) to develop Health & Safety Management Plan and submit to the MOHMS for approval prior to commencing site activities.

No	Potential Impacts	Level of Risk	Proposed Mitigation Measures	Timeframe /Responsibility
	These can range from injuries requiring on-site first-aid (eg. minor cuts and bruising), to and fatal injuries as a result of activities such as falls from height and impacts with motor vehicles.		construction works by the contractor, and construction works completed accordingly. Induction briefing will be conducted to explain all potential risks and impacts for this project as well as the correct management processes as well as responsibilities of all personnel working on this project. Clear communication of risks and prevention measures will be included in training activities. Obligations under the WB EHS Guidelines, relevant Good International Industry Practice (GIIP), and Health and Safety at Work Act (HSAWA) 1996 will be included in the ESMPs and fully enforced by including obligations in the contract. Establishment of grievance management procedures. These will be included in training as well as signage posted around construction areas advising as to the procedures. Provision of proper PPE for workers Provision of first aid and trained first aid officers Signage advising as to what PPE is required and other safety related instructions (eg., hazardous areas, electric cord placement, trenches, fall from height risks) placed in relevant areas around the site (eg., lunch rooms) Frequent site inspections to ascertain compliance with EHS requirements	Construction supervisors to ensure implementation at all times. MOHMS to supervise and monitor to ensure compliance. PMU to provide guidance to contractors and MOHMS on management plans (eg., training and advice). PMU will also undertake monitoring of compliance.

No	Potential Impacts	Level of Risk	Proposed Mitigation Measures	Timeframe /Responsibility
			Bidding and Contractual documents will be incorporate above and will be legally binding Contractors will be required to prepare and submit for approval prior to commencing any activities a Safety Management Plan Training of workers in lifting and materials handling techniques in construction and decommissioning projects, including the placement of weight limits above which mechanical assists or two-person lifts are necessary Planning work site layout to minimize the need for manual transfer of heavy loads Selecting tools and designing work stations that reduce force requirements and holding times, and which promote improved postures, including, where applicable, user adjustable work stations Implementing administrative controls into work processes, such as job rotations and rest or stretch breaks Implementing good house-keeping practices, such as the sorting and placing loose construction materials or demolition debris in established areas away from foot paths Cleaning up excessive waste debris and liquid spills regularly Locating electrical cords and ropes in common areas and marked corridors	

No	Potential Impacts	Level of Risk	Proposed Mitigation Measures	Timeframe /Responsibility
			Provision of and training in fall prevention and arrest systems Ensuring the visibility of personnel through their use of high visibility vests when working in or walking through heavy equipment operating areas, and training of workers to verify eye contact with equipment operators before approaching the operating vehicle Ensuring moving equipment is outfitted with audible back-up alarms Using inspected and well-maintained lifting devices that are appropriate for the load, such as cranes, and securing loads when lifting them to higher job-site elevations. Traffic management plans will be required to be prepared and submitted for approval by all contractors (or a joint plan). Consideration of any impact to the neighbouring school and residential areas are to be included within this Plan. Traffic management personnel to be employed. First Aid area will be properly demarcated. OHS Officers will be trained and their activities will be monitored to ensure compliance with all OHS requirements.	
2.3	There is potential for dust from construction from site	**Low**	Dust mitigation and suppression methods to be utilised are:	Construction supervisor to ensure compliance with methods.

No	Potential Impacts	Level of Risk	Proposed Mitigation Measures	Timeframe /Responsibility
	preparation and vehicle movement.		• Use of dust suppression techniques such as water carts to spray roads if they are dirt and other areas • Reduced or ceasing activities that could generate dust in windy conditions • Dust screens located around construction areas • Housekeeping procedures to ensure that dust/soil is swept up in appropriate areas • No use of dust blowing equipment (this also relates to noise management) • Ensuring vehicles travel at specified speeds to reduce dust • Any transport of soil will be undertaken with all vehicles covering loads with canopies prior to moving from or around the site • Roads will be sealed as soon as practicable • Use of stockpiles for soil will be avoided and if needed they will be covered overnight and non-construction days. • Re-vegetating areas promptly • Hydrocarbons shall not be used as a method of dust control	MOHMS to supervise and monitor to ensure compliance. PMU to provide guidance to contractors and MOHMS on management plans (eg., training and advice). PMU will also undertake monitoring of compliance.
2.4	Noise will be generated though	**Low**	Planning activities in consultation with local communities so that activities with the greatest potential to generate noise are planned during	Construction supervisor to ensure compliance.

No	Potential Impacts	Level of Risk	Proposed Mitigation Measures	Timeframe /Responsibility
	construction activities such as with power tools, building processes and traffic movement. Noise in excess of ambient levels has the potential to disrupt health of neighbours (including workers at nearby sites) as well as school and other education facilities.		periods of the day that will result in least disturbance Avoiding or minimizing project transportation through community areas Construction activities will be limited to designated times of the day (these will be specified in building approvals or permits), and no such activities at night or weekends unless specifically approved. This includes the delivery of materials for the construction of the warehouse. As part of a site induction program all contractors will be instructed on noise avoidance and abatement requirements. Keep noisy machinery and processes away from quieter areas. All construction equipment will be required to adhere to noise levels as specified by GoF. Design workflow to keep noisy machinery out of areas where people spend most of their time. A communication strategy will be developed and implemented to advise affected people or organisations of stages of construction and timeframes as well as dates/times of activities that have the potential to impacts on them. The communication strategy (including aspects of the grievance process as below), will be provided in all appropriate languages and delivered via such means as flyers. Details of grievance	MOHMS to supervise and monitor to ensure compliance. PMU to provide guidance to contractors and MOHMS on management plans (eg., training and advice). PMU will also undertake monitoring of compliance.

No	Potential Impacts	Level of Risk	Proposed Mitigation Measures	Timeframe /Responsibility
			process will also form part of the communication strategies. A grievance process will be established to enable members of the community (including all neighbouring facilities), impacted by noise to communicate their complaints. The grievance process will also allow for sectors of the community to request periods when noise will be limited due to various activities such as exams.	
2.5	Construction activities will result in an increase in movement of heavy vehicles for the transport of construction materials and equipment increasing the risk of traffic-related accidents and injuries to workers and local communities. Traffic congestion from the entry	**Moderate**	One-way entry and one way exit to the site for proper traffic accessibility. Traffic signs for entry and exit to be properly displayed inside the premises Adequate signs to be place in front of the entry from Jerusalem road indicating “Construction in progress” and “Be wear of heavy vehicles” etc. Avoid heavy vehicles during peak hours. If required a traffic manager to ensure all traffic along the road is stopped as required and vehicles entering/exiting the site is undertaken safely. Planning and segregating the location of vehicle traffic, machine operation, and walking areas, and controlling vehicle traffic through the use of one-way traffic routes, establishment of speed limits, and on-site trained flag-people wearing	Construction supervisor to ensure compliance. MOHMS to supervise and monitor to ensure compliance. PMU to provide guidance to contractors and MOHMS on management plans (eg., training and advice). PMU will also undertake monitoring of compliance.

No	Potential Impacts	Level of Risk	Proposed Mitigation Measures	Timeframe /Responsibility
	and exiting of vehicles from the site.		high-visibility vests or outer clothing covering to direct traffic.	
	A range of construction waste materials will be generated during construction	**Low**	The contractor(s) undertaking works shall implement the following at a minimum: • Develop and follow a brief site-specific Waste Management Plan (separation of waste streams, storage, provision of bins, site clean-up, bin clean-out schedule, etc.) before commencement of any works; • Use litter bins, containers and waste collection facilities at all places during works; • Store solid waste temporarily on site in a designated place prior to off-site transportation and disposal through a licensed waste collector; • On-site and off-site transportation of waste should be conducted to prevent or minimize spills, releases, and exposures to employees and the public; • Dispose of waste only at designated place identified and approved by local authority. Open burning or burial of solid waste shall not be allowed. It is prohibited for the contractor(s) to dispose of any debris or construction material/paint in environmentally sensitive areas (including watercourses); • Recyclable materials such as packaging material etc., shall be segregated and	Appointed contractor(s) to develop Waste Management Plan and submit to the MOHMS for approval prior to commencing site activities. Construction supervisor to ensure compliance. MOHMS to supervise and monitor to ensure compliance. PMU to provide guidance to contractors and MOHMS on management plans (eg., training and advice). PMU will also undertake monitoring of compliance.

No	Potential Impacts	Level of Risk	Proposed Mitigation Measures	Timeframe /Responsibility
			collected on-site from other waste sources for reuse or recycle (sale); • Minimize hazardous waste generation by ensuring hazardous waste is not co-mingled with non-hazardous waste. • Collect, transport and disposal of hazardous waste to licensed/permitted hazardous waste sites only following good international industry practice for the waste being handled. • Design and implement training for staff in the management of wastes.	
	Impact on water quality .	**Low**	There will be no permitted discharge of solid and liquid waste into the waterway. The contractor(s) undertaking works shall implement the following at a minimum: Using impervious surfaces for refuelling areas and other fluid transfer areas; Ensure that refuelling and maintenance facilities are not located, or that activities do not take place, within 30 m of a watercourse, or in ecologically sensitive areas. If a 30 m limit is impracticable then a lesser limit may be adopted provided approval is obtained. On no account shall the limit be less than 10 m; Ensure that vehicles and plant are not stored within 30 m of a watercourse, or in ecologically sensitive areas, overnight or when not in use; Regular checks for leaking oil or fuel from machinery undertaken. Any leaks are promptly	Construction supervisor to ensure compliance. MOHMS to supervise and monitor to ensure compliance. PMU to provide guidance to contractors and MOHMS on management plans (eg., training and advice). PMU will also undertake monitoring of compliance.

No	Potential Impacts	Level of Risk	Proposed Mitigation Measures	Timeframe /Responsibility
			repaired and/or parts replaced within two days as part of maintenance of vehicles and equipment; Training workers on the correct transfer and handling of fuels and chemicals and the response to spills; and Spill kit, appropriate to the hazardous materials being used, to be kept on-site and workers to be trained in its deployment.	
	Adverse impacts on plant or animal species	**Low**	Buffer zones with re-vegetation of trees and flower gardens to beautify the area.	Construction supervisor to ensure compliance. MOHMS to supervise and monitor to ensure compliance. PMU to provide guidance to contractors and MOHMS on management plans (eg., training and advice).
	Flash flooding can cause damage to goods. Flood events can also have potential environment and/or social impacts.	**Moderate**	The floor height of the Warehouse has been increased in the architectural design. The Ministry of Water Ways to dredge the creek as required to alleviate flood risk.	Construction supervisor to ensure compliance. MOHMS to supervise and monitor to ensure compliance. PMU to provide guidance to contractors and MOHMS on management plans (eg., training and advice). PMU will also undertake monitoring of compliance. Ministry of Water Ways to monitor creek water levels.

No	Potential Impacts	Level of Risk	Proposed Mitigation Measures	Timeframe /Responsibility
	Employment and economic generation for workers	**Low**	The Project Labour Management Procedure (LMP) will be implemented to protect project direct workers and contracted staff	Construction supervisor to ensure compliance. MOHMS to supervise and monitor to ensure compliance. PMU to provide guidance to contractors and MOHMS on management plans (eg., training and advice). PMU will also undertake monitoring of compliance.
	Sexual exploitation and abuse (SEA) and sexual harassment (SH)	**Low**	MOHMS, has adopted Fijis-2017 Sexual Harassment at Work Place Policy	Construction supervisor to ensure compliance. MOHMS to supervise and monitor to ensure compliance. PMU to provide guidance to contractors and MOHMS on management plans (eg., training and advice). PMU will also undertake monitoring of compliance.
3. OPERATIONAL PHASE				
3.1	A range of waste materials will be generated during Warehouse Operations	**Low**	A Site waste management plan will be developed and implemented. Develop and implement a staff waste management training program. Conduct regular waste audits to ensure compliance with the waste management plan. Store solid waste temporarily on site in a designated place prior to off-site transportation and disposal through a licensed waste collector;	Warehouse manager to develop and submit to the MOHMS for approval prior to commencing operational activities. Warehouse manager to ensure compliance. MOHMS to supervise and monitor to ensure compliance. PMU to provide guidance to contractors and MOHMS on management plans (eg., training

No	Potential Impacts	Level of Risk	Proposed Mitigation Measures	Timeframe /Responsibility
			On-site and off-site transportation of waste should be conducted to prevent or minimize spills, releases, and exposures to employees and the public; Dispose of waste only at designated place identified and approved by local authority. Open burning or burial of solid waste shall not be allowed. Recyclable materials such as packaging material etc., shall be segregated and collected on-site from other waste sources for reuse or recycle (sale); Minimize hazardous waste generation by ensuring hazardous waste is not co-mingled with non-hazardous waste. Collect, transport and disposal of hazardous waste to licensed/permitted hazardous waste sites only following good international industry practice for the waste being handled; and	and advice). PMU will also undertake monitoring of compliance.
3.2	During operation of the warehouse, noise will be generated though vehicle movement (trucks and fork lifts) and use of equipment such as air conditioners and	**Low**	A grievance process will be established to enable members of the community (including all neighbouring facilities), impacted by noise to communicate their complaints. The grievance process will also allow for sectors of the community to request periods when noise will be limited due to various activities such as exams. Equipment that will be used during the operation of the warehouse will be selected with noise levels and/or controls as part of the decision making process.	Warehouse manager to develop and submit to the MOHMS for approval prior to commencing operational activities. Warehouse manager to ensure compliance. MOHMS to supervise and monitor to ensure compliance. PMU to provide guidance to contractors and MOHMS on management plans (eg., training and advice). PMU will also undertake monitoring of compliance.

No	Potential Impacts	Level of Risk	Proposed Mitigation Measures	Timeframe /Responsibility
	refrigeration compressors		During operation of the warehouse, when noise emitting equipment such as forklifts are used, doors will be shut when safe to do so to reduce offsite noise impacts. Operational procedures for the warehouse will incorporate noise abatement measures for staff to adhere to. Design workflow to keep noisy machinery out of areas where people spend most of their time.	
3.3	Impacts to nearby stakeholders (eg., residents and schools), such as from excessive noise and increased traffic	**Moderate**	Project Grievance Mechanism (GM) available to enable communities to raise project related concerns and grievances. Clear communication of risks and prevention measures will be detailed in the Stakeholder Engagement Plan and will be included in all stakeholder engagement activities.	Warehouse manager to develop and submit to the MOHMS for approval prior to commencing operational activities. Warehouse manager to ensure compliance. MOHMS to supervise and monitor to ensure compliance. PMU to provide guidance to contractors and MOHMS on management plans (eg., training and advice). PMU will also undertake monitoring of compliance.

No	Potential Impacts	Level of Risk	Proposed Mitigation Measures	Timeframe /Responsibility
3.4	Employment and economic generation for workers	**Low**	The Project Labour Management Procedure (LMP) will be implemented to protect project direct workers and contracted staff.	Warehouse manager to develop and submit to the MOHMS for approval prior to commencing operational activities. Warehouse manager to ensure compliance. MOHMS to supervise and monitor to ensure compliance. PMU to provide guidance to contractors and MOHMS on management plans (eg., training and advice). PMU will also undertake monitoring of compliance.
3.5	Sexual exploitation and abuse (SEA) and sexual harassment (SH)	**Low**	MOHMS, has adopted Fijis-2017 Sexual Harassment at Work Place Policy	Warehouse manager to develop and submit to the MOHMS for approval prior to commencing operational activities. Warehouse manager to ensure compliance. MOHMS to supervise and monitor to ensure compliance. PMU to provide guidance to contractors and MOHMS on management plans (eg., training and advice). PMU will also undertake monitoring of compliance.
3.6	Grievances	**Low**	As indicated in this Section, there is potential for grievances to occur from such impacts as noise or traffic. Contractors as stated will be required to develop grievance management procedures. There is also the need for such management procedures for when the Warehouse is operational.	

No	Potential Impacts	Level of Risk	Proposed Mitigation Measures	Timeframe /Responsibility
			Apart from individual contractors developing for approval appropriate grievance management strategies, the Warehouse management will also be required to do likewise. Guidance on the development is contained in the COVID-19 Project ESMP and these guidance/requirements be	

Annex 1: Site plan and Design Drawings

Site Plan

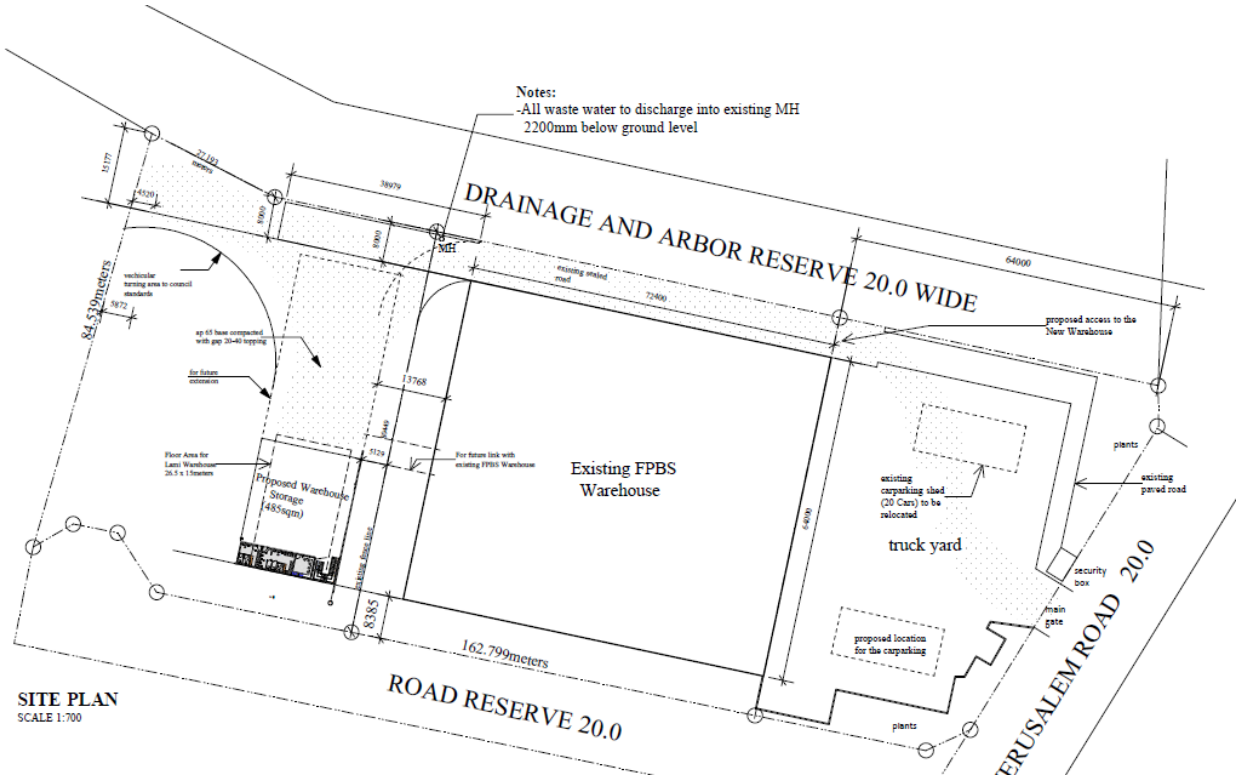
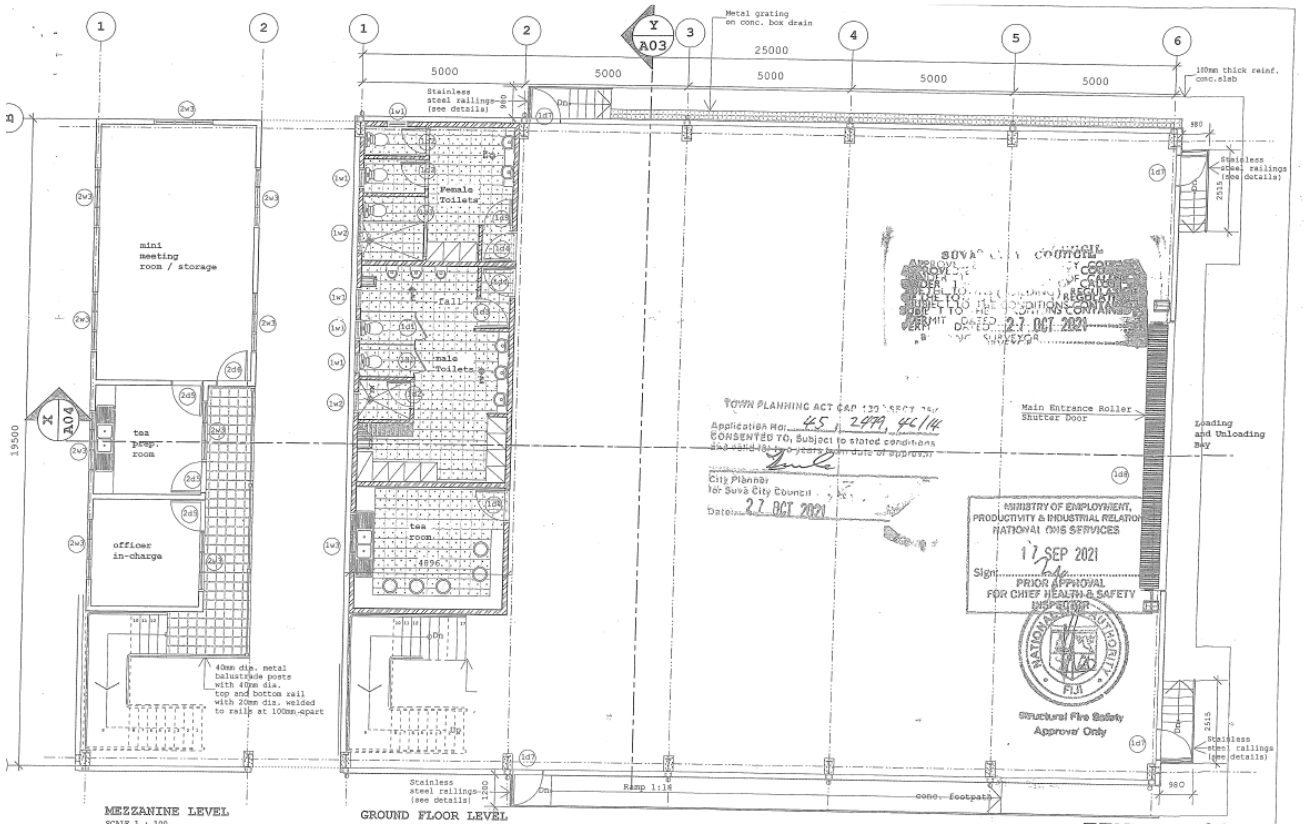


Figure 10: Site layout illustrating current and proposed structures

Design Drawings (Floor Plan)



Annex 2: Legal and Policy Context

The following are the relevant policies and legislative framework that have been reviewed for the development of this ESIA:

GoF Legislation

- Environment Management Act
- Public Health Act
- Town and Country Planning Act
- National Fire Authority Act
- Employment Relations Act
- Health and safety Act
- Local Government Act
- Suva City Council by Laws.

GoF Policies:

- Infection Prevention Control and Waste Management Plan (IPC & WMP)

World Bank Requirements

- Environment and Social Management Framework (ESMF)
- Environmental and Social Commitment Plan (ESCP)
- Environmental and Social Framework (ESF)
- Environmental and Social Standards (ESS)
- Labour Management Procedure (LMP)
- Stakeholder Engagement Plan (SEP)
- Grievance Mechanism (GM)
- Project Operational Manual (POM) Appraisal Environmental and Social Review Summary

Annex 3: Stakeholder Meeting Reports

The following are the stakeholder meetings (dates and objectives), that have occurred in relation to this Warehouse project:

- 29/10/20 1st meeting with WB team. Resolutions: Need architectural drawings, Possibility of WB and JICA joint funding. Mr Jeremaia presented a brief update and the progress so far by MOIMS. A preliminary drawings were table for PMU/WB consideration. Needs assessment for the FPBS were to be provided by FPBS and team also to look into the drainage issues at the rear end siting flush flooding

- 1/12/20: Meeting with HFPBS on amendments to original plans and space requirements including function plan. Issues were raised to MOIMS team on the size, design and cost. Request was to amend as per the MOHMS needs.

- 3/12/20: Meeting with HFPBS, Director Building and Government Architect (DBGA, Joel), for design of Warehouse. Relook into the current designs and input WB suggestions and mindful of the budget. Revised drawings were presented with cost. Team made more amendments to remove access cost which already exists and to top up the cost by increasing the size. MOIMS to amend.

- 9/12/20; Meeting with Waterways for possible dredging of creek beside proposed FPBS warehouse. Concerns were raised to Department of Waterways to assist in drainage clearness. The Waterways engineers required plans and inspections were could be done later.

- 10/12/20; Meeting with Ministry of Infrastructure and Metrological Services (MIMS) and DBGA on revised drawings for the ware house. Revised drawings were presented which was supposed to be circulated to MOHMS hierarchy and the WB team for their consideration.

- 6/1/21 Review of Ware house plan with MIMS/DBGA

- 8/1/21 Site visit to FPBS warehouse with WB, AMU team. Site inspection done and nearby environment

- 12/1/21: Walk about survey at FPBS for ESIA for Warehouse. Spoke to HFPBS, Head of Purchasing, and workers on flooding etc.

- 25/1/21: Site visit with Dept. Envt. to FPBS ware house site for any requirement of a EIA. DoE suggested not required and to follow approval channels.

- 17/2/21: Meeting with DBGA on finalization of warehouse

- 5/3/21 Ware house Site visit, AMU,PMU WB Team. Site visit to CWMH incinerator site and FPBS warehouse site with WB, AMU and PMU was made. WB team refused the incinerator site at CWM. However, were happy with the Warehouse site at FPBS. It was decided that Ware house project to continue while further discussions needs to be done and agreed upon an appropriate site.

- 20/1, 12/2 &10/3/21 ESIA Survey, FPBS staffs, Face to face discussions were held with HFPBS, CP, Manager Warehouse, Manager Procurement, senior store man a driver and security. Issues discussed were flooding, Traffic issues and access, and if there were any complaints ever raised by communities regarding warehouse operations.

- April to December, Ware house PMU/MOIMS, WB, several discussions were held on amendments architectural drawings, clearness of architectural drawings by WB, approvals and tender documents.