

# SAFE CITIES FOR WOMEN AND GIRLS PROGRAMME

## **NCD GORDON'S MARKET REDEVELOPMENT PROJECT BRIEF *(rev 3.1)***

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## 1 Background Information

The **Port Moresby, A Safe City for Women and Girls Programme** (hereafter referred to as *the Programme*) started in 2011 is a collaboration between the National Capital District Commission (NCDC) and UN Women. *The Programme* is working to make the markets in the capital city of Papua New Guinea (PNG) safer for all who use them, especially women and girls. The first pilot site was Gerehu Market and work has now started in Gordons Market. The goal of *the Programme* is to reduce, and ultimately, prevent sexual harassment and violence against women and girls in urban public spaces. This will enable them to move freely and safely, exercising their rights to utilise and enjoy public spaces in the city. *The Programme* takes a holistic approach to increasing safety and access to public markets, including by:

- improving facilities and infrastructure;
- improving management systems;
- addressing corruption, extortion and abuse;
- mainstreaming gender in local bylaws and policies;
- providing financial literacy education to vendors; and
- empowering women through access to participation and decision making in local level government, market management and planning processes.

The sum of all these measures empowers women, strengthens their economic security and rights and increases active citizenship and leadership. The Programme is based on the premise that if markets and public spaces are safe for women and girls, they are safe for all and will bring wider economic benefits for the entire community. Approaching completion of its work in Gerehu Market, *the Programme* is applying lessons learned from this pilot to improve its interventions at Gordons Market.

### 1.1 Statement of need

The current Gordons market provides livelihood opportunities for **approximately 2,000 vendors** and several hundred wholesalers. However, the dilapidated market infrastructure, clogged stormwater drains and inadequate waste management result in an unsanitary environment in the market for both shoppers and vendors, especially in the wake of heavy rains. Moreover, due to insufficient space and facility to accommodate them, several hundred

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vendors are conducting their trade outside the market fences, operating illegally. These vendors do not have access to the basic facilities within the market, and are often harassed by thugs and police. Finally, crowding in the market vicinity due to siting of public buses and taxis exacerbate threats from criminal activities, such as theft, robbery and gender-based violence. As such, there is a need to redevelop Gordons Market to address these problems.

### **1.2 Design intent**

It is envisioned that the new Gordons Market will be a modern facility, with space for a wide variety of vendors and accessible to people with disabilities. The concept design of the entire development is to be guided by the principles of Universal Design. The complex utilises natural lighting and ventilation while providing shelter, shade and a safe and secure environment for users. It will be constructed from durable and robust materials such as steel and concrete, and will have an iconic design, reflecting the diverse culture of the PNG people. The materials and spaces will be easy to maintain and clean, and where practical, incorporate environmental considerations.

It is hoped that the new Gordons market can also provide an arena for social and cultural activities, while supporting economic empowerment of the people from throughout PNG. Through the design and construction process, stakeholder groups should be involved so as to foster a sense of ownership of the facility among all users.

### **1.3 Principles of Universal Design<sup>1</sup>**

The design of Gordons Market and all the secondary facilities within the complex shall be based on the principles of Universal Design, as much as possible, within the constraints of the budget. The spaces and facilities shall be accessible to people with diverse needs and abilities.

- **Equitable Use**

The design is useful and marketable to people with diverse abilities.

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<sup>1</sup> The Principles of Universal Design as outlined by the Center for Universal Design, North Carolina State University in 1997.

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- **Flexibility in Use**

The design accommodates a wide range of individual preferences and abilities.

- **Simple and Intuitive Use**

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

- **Perceptible Information**

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

- **Tolerance for Error**

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

- **Low Physical Effort**

The design can be used efficiently and comfortably and with a minimum of fatigue.

- **Size and Space for Approach and Use**

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

## **2 Site information**

### **2.1 Geography**

The redevelopment site sits primarily on lowland alluvial plains within the coastal hill zone which consists of chert, limestone, siltstone and tuff. Soil test reports indicate high content of fines (silt and clay) up to 3m below ground level. Soil analyses were terminated at 3m depth. To the north of the site is a hill, and Boroko Creek to the east which drains most of the water within the plain.

### **2.2 Location**

See Annex - Figure 3: Map of proposed site for the redevelopment of Gordons Market

### **2.3 Site Access**

See Annex - Figure 4: Proposed site access along Lapwing Drive during construction phase

Before site closure, there needs to be closer coordination with parties involved to manage the following:

- Traffic management and safety during transportation of construction equipment and materials.
- Road cleanliness
- Any access constraints.
- Impacts to neighbouring businesses

### **2.4 Legislative constraints**

Construction hours, noise levels, as well as other site operating conditions are to comply with the local regulations and requirements.

### **2.5 Planning consents**

In principle clearance have been obtained from Eda Ranu (water and sewerage lines) and PNG Power (electrical network). However, formal approvals will need to be obtained when design is finalised.

## **3 Spatial requirements**

### **3.1 Schedule of accommodation**

(refer to Annex – Table 1: Schedule of Accommodation)

#### **3.1.1 Wholesale area**

The wholesale area is to be designed with the understanding that long-term wholesale operations at Gordons would be significantly downsized. Part of the wholesale area will be converted to storage or other facilities when wholesale activities have been diverted to other centres.

A wholesale area should consist of numerous loading/unloading bays, such that trucks are not parked or stationed there for long periods of time. The movement of goods from (larger) rural PMVs to (smaller) local vehicles distributing the produce to markets in Port Moresby is illustrated in Figure 1. Figure 2 shows a possible way to move the heavy produce across the difference in elevation of vehicles. The height difference could also be managed by variation in ground level. The design of the market needs to consider the possibility of having wheelbarrows/trolleys moving between wholesale and vending spaces.

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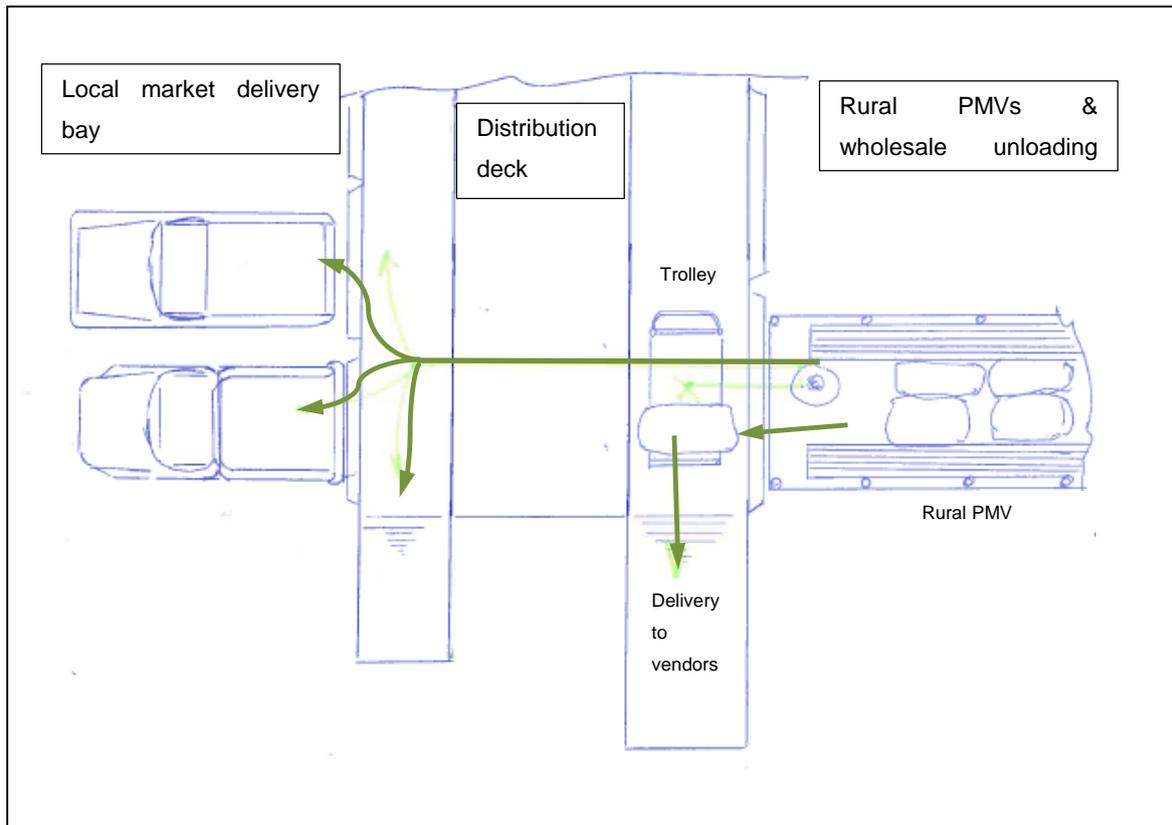


Figure 1 Plan view of movement of produce in wholesale area

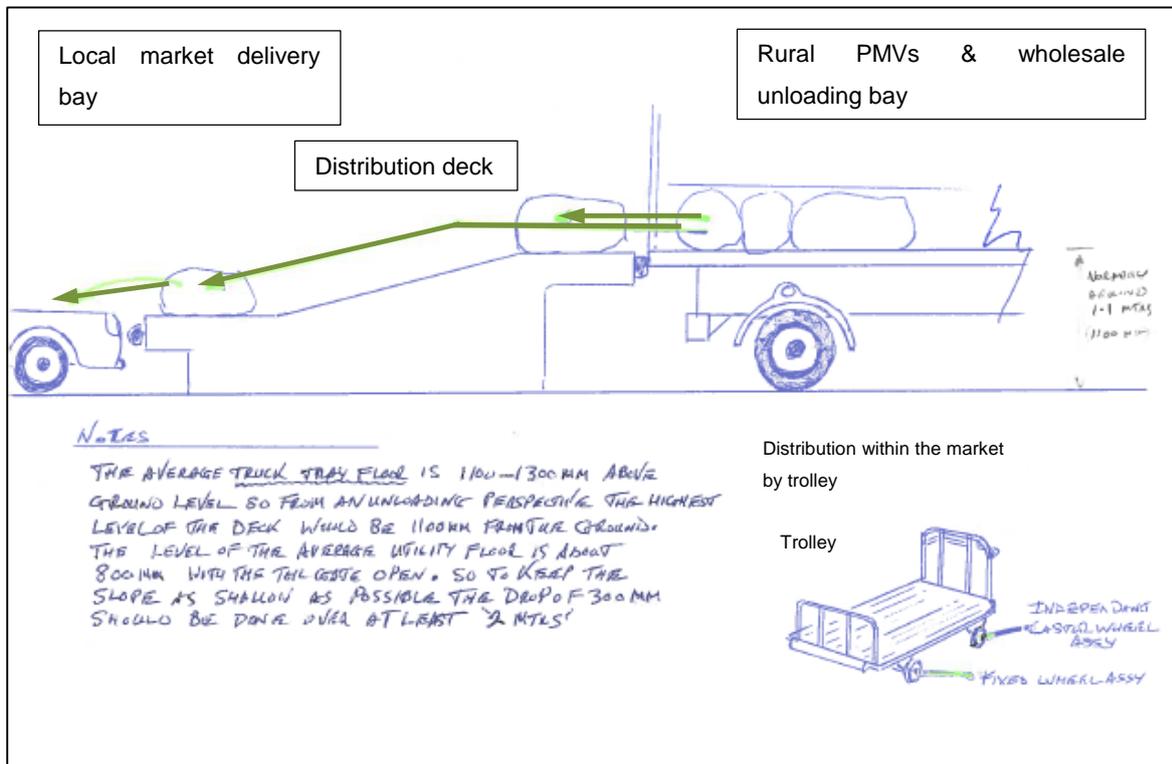


Figure 2 Cross section view of movement of produce in wholesale area

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### **3.1.2 General auxiliary building**

This building be designed in a way that the spaces can be converted in future for other possible uses, if the market expands and some of the immediate functions are relocated. For the immediate term, this building will house the market administration office and the security office.

#### **a. Market administration office**

The Administration Office provides an office space for market administration staff. It will consist of the following:

- Front Counter for public enquiries, shaded/indoors
- Open plan office spaces (6 spaces)
  - Hot desking for approximately 16 market controllers
- Meeting and training room
- Installation of PA system, from which announcements can be made around the market for emergency evacuations, rules' enforcements etc.
- Notice board by the administration office

#### **b. Security office**

Security personnel will operate out of this base, which consists of:

- Office space with 4 desks
- 1 OIC office
- Radio/ Communication's alcove
- Lockers/ storage

#### **c. Common staff facilities**

The following shared facilities to be included in the design, no public access to these areas will be allowed.

- Separate toilets and showers for female and male staff
- Kitchenette

### **3.1.3 Security Post**

The Security Post at the market will be situated such that security guards are able to continue operations during both day and night conditions at the market. Inside the Security Office, there are:

- Office space with 2 desks

## Design Brief: Gordons Market Redevelopment

- Separate toilets for females and males (possible shared access with public)
- Enquiry/duty counter

### 3.1.4 Car parks

The carpark should accommodate approximately 60 vehicles, with designated spaces reserved for market staff. *Further coordination on this must be conducted with the NCDC Roads Engineers.*

## 3.2 Spatial policies

The spaces provided for the purposes within this brief must comply with the requirements in, but not limited to, the following:

NCD Informal Sector Development and Control Law

NCDC Waste Management Policy 2015

Accessibility Design Guide: Universal design principles for Australia's aid program

## 3.3 Circulation guidelines and major flows

The new perimeter fencing around Gordons Market is to contain **two** main vehicular Entry/Exit points on opposite ends of the development, with numerous pedestrian access gates. In addition, there should be **two** other side gates for emergency access (in or out). These side gates would be locked under normal operating conditions. It could also be possible to install gates with multiple modes – normal operations and emergency access.

Carpark(s) should be located close the main gates; ***vehicular traffic within the market development should be kept to a minimum.*** (Barring fire engine access and perhaps waste removal trucks.)

Key flows of people and goods would be:

- From wholesale area to vending area – mornings
- From main gates to vending area – evenings, weekends
- From one vendor type to another – weekends

## **4 Technical requirements**

### **4.1 User comfort and safety**

#### **4.1.1 General**

- The market interior should be bright and airy; maximising natural light and ventilation.
- Space management should encourage passive surveillance and avoid entrapment areas (where people can hide).
- Areas that are recessed from the street should have clear two way view of the route, or surrounding area.
- Lighting to a level that reduces the opportunities for crime to occur and increases the perception of personal safety of an area.
- local fire and building codes.
- All buildings to be fitted with rain gutters.

#### **4.1.2 Toilets at Gordons Market**

- Men and female toilets in separate blocks, located near pedestrian path.
- Simple design, with easily replaceable parts.
- Easily cleaned and maintained.
- Toilet usage rule and regulations must be placed in eye catching areas in the buildings either illustrated by drawing or Tok Pisin and Hiri Motu.

### **4.2 Potential threats**

These threats may be the result of natural events, accidents, or intentional acts to cause harm.

#### **4.2.1 Flooding**

Flooding after heavy rainfall events are a frequent occurrence at the current Gordons market. This can result in damage to property, and also encourage the breeding of vectors and pests, which are health hazards. To prevent this in the new market, close coordination with NCDC Engineering Department in the upgrading and maintenance of stormwater drainage is required. Drainage channels and sump holes should be designed such that rubbish does not easily end up in them. (See Section 4.4 for more information.)

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### 4.2.2 Crime and violence

Crime in the markets is generally opportunistic but can be sudden and violent. Market vendors often bring knives or other weapons into the markets, and armed robberies and carjacking's have occurred in marketplaces. During 2014 there was a murder of a police officer outside the market, an attempted murder within the market as well as 30 sexual assaults reported to police. As such the design needs to consider identified crowd control considerations.

- *Require a number of designated boundary entry & exit points to ensure control of persons and goods entering and exiting markets, wide gates at access and exit points to enable large crowd movement.*
- Clear signage for exits and emergency evacuation points.

### 4.2.3 Pests & Vectors

Unsanitary conditions in the market compound can lead to breeding and infestations of pests and vectors, causing serious health hazards to vendors and shoppers. To prevent this in the new market building, strategies to manage variety of pests present (fleas, cockroaches, rats, mice, etc.) include habitat denial, rat-proofing and sanitation techniques including waste management and limiting access to water.

Waste management in the marketplace will include sensitising vendors and shoppers through signs, notices and workshops. In addition, waste disposal points will be located at strategic points throughout the market to prevent littering. Ponding of water within the market premises (indoors and outdoors) must be minimised through appropriate design and maintenance.

### 4.2.4 Crowd Control

The future Gordons market will see many thousands of people move through the market daily. Movement of large crowds during both normal and emergency situations needs to be considered in the design as follows:

- Consider how people going to move freely through the market, map out movement of people flow directions pinch points bottle necks, pathways queuing access and egress points.
- Consider crowd circulation both in a normal and in an emergency situation
- Consider those with disability or mobility difficulties such as wheel chairs or prams.

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- Identify the maximum capacity number for each area and how will the numbers and density be monitored and controlled.
- Location of welfare facilities such as Toilets, Lost child / First aid points
- Clearly marked exit points, no narrow stairwells. crowd control and emergency arrangements considered, and written instructions, Site Plan and Checklists

### **4.3 Stormwater management**

The lower elevation of the current Gordons Market, relative to the surrounding roads results in large amounts of surface runoff gathering in the market grounds during rainfall events. The accumulation of debris and detritus in existing stormwater pipes further prevent the effective drainage of this water from the site. Recent studies conducted by Rumbam Engineers concluded that Boroko Creek, the main waterway draining the catchment area within which Gordons market sits, is inadequate to service the design catchment during heavy rainfall events.

The National Capital District Commission has plans to install new culverts linking Gordons Market directly to Boroko Creek. An effective drainage network should be designed around the low-lying areas of the market to prevent surface run-off from the surrounding draining into the low-levels. Within the market compound, a network of surface U-drains should be utilised to channel catchment run-off to the culvert inlets. The overall site design may also include sub-surface drainage mats or other stormwater containment methods.

*Coordination with the NCDC stormwater management team during design phase is essential.*

### **4.4 Waste and water management**

The system for waste collection and removal for the market consists of 2 parts: internal collection and removal from site. Waste collection within the market will be the responsibility of individual vendors and public. There will be wheelie bins placed throughout the market, or vendors can bring the waste directly to the main market waste collection (skip) bins. After operating hours, market cleaners will further remove any remaining waste in the market. Market waste will be aggregated at the main market collection area, where hook trucks can access the collection bins. Organic waste is to be segregated from general waste, according to markings on the bins.

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Rainwater runoff is to be channelled to Boroko Creek, across Gaeuta Drive, while all other grey and black water are to be channelled into the sewage network. This includes the toilets, and any washing bays for meat and fish.

#### **4.5 Flexibility for future expansion**

The design should incorporate the flexibility to accommodate future expansion of the market grounds. Should the market expand in future, the following facilities should be added:

#### **4.6 Other performance requirements**

The design of spaces and choice of materials should prioritise the ease of access and maintenance. In addition, the market development is to be surrounded by a robust perimeter fence, enabling the compounds to serve as a safe space in the event of violent outbreaks outside the markets, as well as keeping the market and vendor assets safe overnight.

Market cleaning is through the use of high pressure water taps. These must be placed at locations that ease the washing of vending areas.

## **5 Other issues**

### **5.1 Market Operations**

#### **5.1.1 Operating hours**

The market operates 7 days a week.

Wholesale areas: 5am – 5pm

Current Market hours: 6am – 6pm

#### **5.1.2 Fee collection & banking services**

provision should be made in the layout for the inclusion of banking kiosks/ATMs. (To be provided by others – requirements to be advised.)

### **5.2 Evacuation plan**

In the event of fire or other emergencies, evacuation of the market premises is necessary. The assembly point will be clearly indicated on signs within the market. The mode of communication will be through loud speakers, loud hailers, with the possibility of installing a Public Announcement system. Clear signages shall be visible throughout the market development, directing people to the designated Assembly Ground.

## 6 Annex

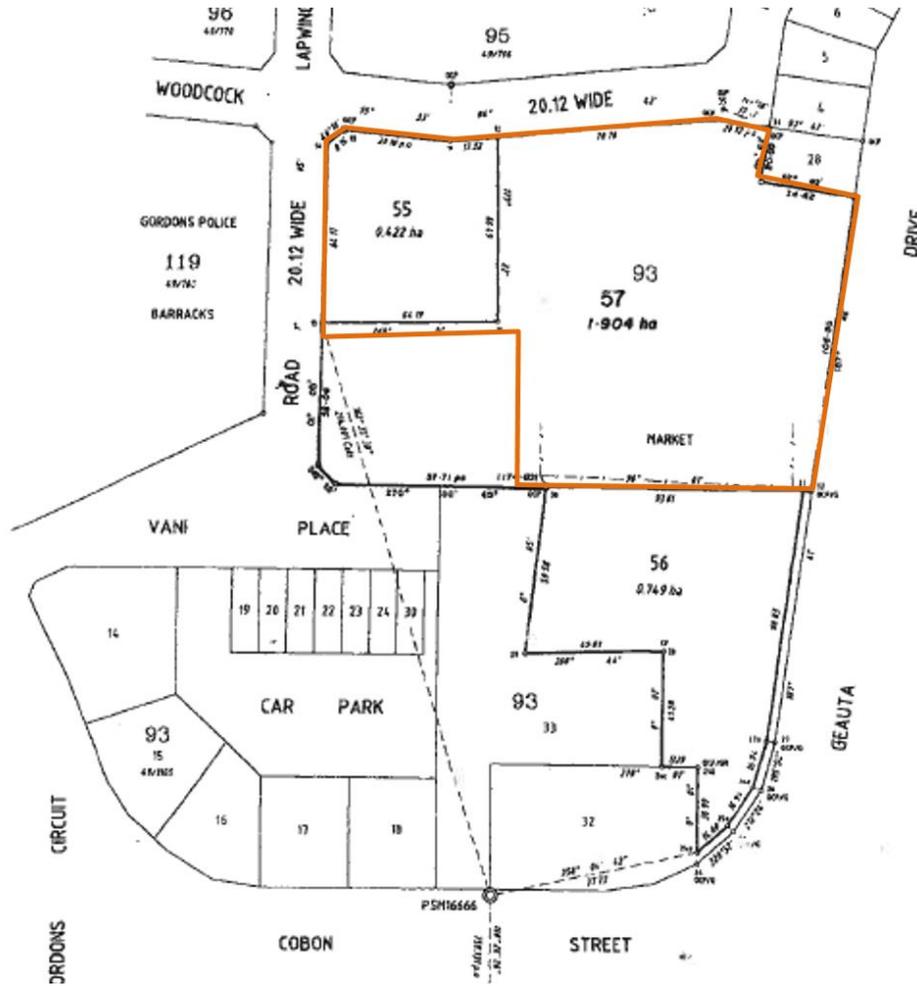


Figure 3: Map of proposed site for the redevelopment of Gordons Market (site boundary in orange)

**Design Brief: Gordons Market Redevelopment**



Figure 4: Proposed site access along Lapwing Drive during construction phase

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**Table 1: Schedule of Accomodation**

Space	Quantity	Dimensions	Requirements	Relations	Others
Vending space (A) – fresh agricultural produce <i>(includes seasonal vendors)</i>	1, 200	1.5m x 1.9m	Waste disposal facility within 100m Table, seat, produce storage space, shelter	With direct and easy access to wholesale area.	
Vending space (B) – meat, seafood (maybe live chickens)	20	2m x 2m	Waste disposal facility within 100m, sink and tap. Lockable kiosk with power points.		Vendor to provide refrigeration to ensure produce is kept fresh.
Vending space (C) – cooked food	20	1.5m x 1.9m or lockable kiosk	Electric stove, food storage, sink (shared between 4 vendors)	<del>Near to sitting/eating space.</del> Far from Vendor (B).	
Vending space (D) – Meri blaus, clothes & shoes	20	2m x 1. 5m	Shelter, seat, place to hang clothes		
Vending space (E) – arts & crafts	0	2m x 2m			
Vending kiosk (G) – Mini goods	0	3m x 2m	Power point, table, seat		

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Space	Quantity	Dimensions	Requirements	Relations	Others
Vending space (A2) – fresh agricultural produce	150	2m x 1.5m	Flexible space to be convertible for alternative uses when vendors are not selling.		
Wholesale – unloading bay	6 vehicles	See Figures 1 and 2.	Shelters, with space for 2 waiting trucks.	Away from pedestrian traffic.	Design area with flexibility to convert to alternative use. Arrive early morning (before market operations)
Wholesale – loading bay	8 - 10	See Figures 1 and 2.	Shelter, with space for 2 waiting trucks.		Design area with flexibility to convert to alternative use. Smaller trucks to deliver produce to other markets.
Public eating area	2-3	Approx.. 250m <sup>2</sup> in total	Tables, chairs with consideration for handicapped access.	Close to food vending areas.	
Food outlets	10	3.0m x 3.0m	Wash basins, electric stoves, tables, waste disposal, electricity		

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Space	Quantity	Dimensions	Requirements	Relations	Others
Distributed food storage (no refrigeration)	100	Cubicles for 5 wholesale sacks			Can be leased out for a fee.
Community centre <ul style="list-style-type: none"> <li>• Training rooms</li> <li>• Day care centre</li> <li>• Playground</li> <li>• Children's library</li> </ul>	1		Playground to be fenced and sheltered.	Located close to sitting/eating area.	NCDC to confirm Day Care Centre Operator.
Safe room/ First aid room <ul style="list-style-type: none"> <li>• Day bed</li> <li>• Interview desk</li> <li>• Storage cupboard</li> </ul>	1			Located in a central area of the market (accessible to all).	Clear signs throughout market indicating location.
Toilets	As per Building Code		Male and Female separate blocks, disabled/family friendly.		
Market administration office	1		Universal access. See 3.1.2		
Security post	1		See 3.1.2	Located at opposite side of market from Administration Building.	

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Space	Quantity	Dimensions	Requirements	Relations	Others
Sitting/eating area			Tables, seats, shelter	Proximity to: Vending space (C) Playground Toilets	Need to create a pleasant and clean environment.
Ticket booth		2.0m x 1.0m		Proximity to: Each pedestrian entry point.	Secondary building
Carpark	50-60 parking spaces		Space marking Pedestrian walkway to main marketplace. Disability access to be included.		In one or two locations, corresponding to main gates.
Community Clinic	1		(See plan in Figure 1)		
Amphitheatre	1		To seat an audience of 300 pax.	Away from main market area, close to police or security post.	

Note: Shaded cells are guidance for long term goals.

**IN WITNESS WHEREOF**, the undersigned, being duly authorised by their respective Parties, have signed to endorse the Gordons Market Redevelopment Project Brief on the dates and at the places indicated below.

Dated this    day of October 2016 at City Hall, National Capital District Commission, Port Moresby, National Capital District, Papua New Guinea.

Signed for and on behalf of the  
**NATIONAL CAPITAL DISTRICT COMMISSION  
COMMUNITY AND SOCIAL SERVICES  
DEPARTMENT, NATIONAL CAPITAL DISTRICT  
COMMISSION, PAPUA NEW GUINEA**

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**MR. T. LULU  
DEPUTY CITY MANAGER (ACTING)**

Signed for and on behalf of the  
**NATIONAL CAPITAL DISTRICT COMMISSION  
FINANCIAL ADVISER, NATIONAL CAPITAL  
DISTRICT COMMISSION, PAPUA NEW GUINEA**

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**MR. A. RAVI  
FINANCIAL ADVISER**

Signed for and on behalf of the  
**NATIONAL CAPITAL DISTRICT COMMISSION  
MARKETS DIVISION, NATIONAL CAPITAL  
DISTRICT COMMISSION, PAPUA NEW GUINEA**

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**MR. C. PENGI  
MANAGER, MARKETS DIVISION**

Signed for and on behalf of the  
**NEW ZEALAND MINISTRY OF FOREIGN AFFAIRS  
AND TRADE**

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**MR. W. CHISHOLM  
FIRST SECRETARY**

Signed for and on behalf of the  
**UNITED NATIONS ENTITY FOR GENDER  
EQUALITY AND THE EMPOWERMENT OF  
WOMEN**

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**MS. C. CHEONG  
SAFE CITIES PROGRAMME MANAGER**