

WDC  
**COMMUNITY  
EMERGENCY  
CONTAINER  
PROJECT**



WEST COAST  
EMERGENCY MANAGEMENT

GROUP

[www.westcoastemergency.govt.nz](http://www.westcoastemergency.govt.nz)

14 November 2021

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# 1. INTRODUCTION

## 1.1. Scope

This report has been developed to document the outcomes of the ‘Westland Emergency Container Project’ which introduced shipping containers for storage of emergency supplies across the Westland District.

### Purpose

The purpose of this report is to:

- Set out the specifications of the container assets introduced to Westland District; and
- Capture relevant learnings from the Westland District project; and
- Provide information for Councils, community groups including WCCDEM Community Response/Resilience Groups (CRGs) if they intend to replicate or design a similar project in the future at district or community level; and
- Act as project record for WDC and WCCDEM.

### Audience

The intended audience for this report includes:

- Westland District Council
- West Coast Civil Defence Emergency Management
- Community groups including WCCDEM Community Response/Resilience Groups (CRGs)
- Other interested parties e.g. other CDEM Groups




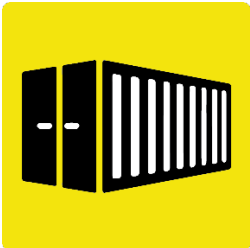
*Figure 1 - Views of one of the Westland Containers pre delivery*



## 1.2. Background

The ‘Westland Emergency Container Project’ was enabled by the Westland District Council (WDC) in partnership with West Coast Civil Defence Emergency Management (WCCDEM).

This brief timeline summary sets out the background to the project:

<p><b>2018</b></p> 	<p>Following ex-tropical cyclones Fehi and Gita in February 2018, discussions were held between WDC and WCCDEM around the concept of using shipping containers to store emergency food and other supplies in key locations across Westland.</p> <p>Tourist and visitor populations, including a significant number of foreign nationals, were identified as a target vulnerable group during a large-scale emergency event as they could become stranded in smaller service centres throughout the region with limited resources available to them.</p>
<p><b>2019</b></p> 	<p>Research began around what containerisation may ‘look like’ and to consider how this could be achieved and this planning continued in 2019.</p> <p>In 2019 the COVID-19 pandemic began and cases quickly spread across the globe. The pandemic eventually reached New Zealand which recorded its first cases in early 2020.</p> <p>Due to the devastating impacts of the COVID-19 pandemic on New Zealand’s tourism industry the target group was no longer visiting Westland in the same volumes from that point forward.</p>
<p><b>2020</b></p> 	<p>Despite this potentially long-term change to visitor flows WDC considered how the concept could still benefit Westland communities that may be disproportionately affected by disasters such as the Alpine Fault Rupture (AF8) event regardless of additional visitors.</p> <p>WDC decided to proceed with the roll-out of five 20 ft containers with significant funding approved in 2020 to support a one-off project, albeit in a slightly different form than originally intended.</p>
<p><b>2021</b></p> 	<p>In 2021 a project named the West Coast Resilience Action Plan commenced. This project was funded via the NEMA Resilience Fund. Following up on the Westland Container project was included as one of seven focus areas within the Resilience Action Plan project.</p> <p>Once the Resilience Action Plan project was well underway it was agreed that some of the focus areas including Improved Alternate Communications and Fuel storage evaluation &amp; action plan were of such a high priority that the scope of other workstreams was scaled back. This report forms the agreed deliverable for the “Container project” and is intended to document the WDC project so that this information may be used again in the future if required.</p>

### 1.3. Project Rationale

The Triple Benefits of Resilience (Tanner et al., 2015) identified 3 types of benefits (refer below) that investing in disaster management can deliver and these were considered when planning the Container project.

Triple Benefits	Considerations for Westland
1. The First Dividend of Resilience: saving lives and avoiding losses	A community emergency container will assist these communities to avoid loss by having supplies and alternative communication strategies stored in an earthquake proofed adapted container when disaster strikes.
2. The Second Dividend of Resilience: unlocking economic potential	A community emergency container encourages communities to build resilience assets and encourages economic activity as disaster risk is reduced and communities empowered.
3. The Third Dividend of Resilience: Co-benefits of DRM investments	A community emergency container delivers a disaster risk management (DRM) investment generating societal co - benefits including positive social, cultural and environmental growth.

The project was also designed to support the **West Coast Civil Defence Emergency Management Group Plan** goal of:

*“Community Readiness which focuses on the ability of communities families and individuals to be able to meet their own needs during and after an emergency”*

Source: West Coast Civil Defence Emergency Management Group Plan v2.1 2016, p.24

The project also supported two of the **National Disaster Resilience Strategy** objectives related to enabling, empowering, and supporting community resilience:

- 13. Enable and empower individuals, households, organisations, and businesses to build their resilience, *paying particular attention to those people and groups who may be disproportionately affected by disasters*
- 14. Cultivate an environment for *social connectedness which promotes a culture of mutual help; embed a collective impact approach to building community resilience*

Source: National Disaster Resilience Strategy NEMA, 2019, p.3

### 1.4. A Locally-led, Regionally-supported project

The WDC Container Project was very much a Community-led, Council/WCCDEM supported project. Council and community engagement and support is paramount to the success of any community resilience project. WDC maintains a Township Fund which funds towns \$12,000 per year which they can supplement with their own fundraising to purchase or make improvements to community assets. Each community in Westland is an Incorporated societies which makes applying for funding easy via the numerous government funds and other private or community sponsors.

WDC has also established “Safer Westland” based on Safe Communities principles. While the Westland Container Project was not a direct product of Safer Westland many of the concepts shared by Safer Westland lent themselves well to this project, and supported the uptake of the containers as part of community-led resilience which is a focus area for the group.

#### Safer Westland

- Its goal is to strengthen community networks and community resilience and to help promote Westland District as a safe and welcome community and so attract investment and new residents.
- The Coalition was formally granted accreditation with the Safe Communities Foundation of NZ<sup>1</sup> on 23 February 2017 at a Westland District Council meeting.

Source: <https://www.westlanddc.govt.nz/community-support-and-resources/community-groups/>

Currently there are 13 Westland community response groups (CRG) supported by WCCDEM and these groups have been encouraged to transition from Community *Response* Groups to Community *Resilience* Groups and work across the 4 R's instead of focusing on post-event response only. Some groups have really taken that on and developing their group with a wider resilience focus. This approach is fully supported in the National Disaster Resilience Strategy (NEMA, 2019) which sets out three priorities to improve our nation's resilience to disasters:

#### Three priorities to improve our nation's resilience






- Managing risks: what we can do to minimise the risks we face and limit the impacts to be managed if hazards occur;
- Effective response to and recovery from emergencies: building our capability and capacity to manage emergencies when they do happen; and
- Enabling, empowering, and supporting community resilience: building a culture of resilience in New Zealand so that everyone can participate in and contribute to communities' – and the nation's – resilience

The strategy “seeks to enable and empower communities everywhere to take action to look after themselves and others in times of crisis, while still ensuring strong local, regional, and national leadership and support when needed” (NEMA, 2019). The Westland Container Project supports these aspirations.

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<sup>1</sup> For info about the Safe Communities Foundation of NZ see <https://www.safecommunities.org.nz/>.

### 1.5. Project partners & Contractors

Partner	Role
<p><b>WDC</b></p> 	<p>Funding of assets (5 x containers) in a one-off project, which included sufficient funding to ensure containers were able to be fitted-out, transported and positioned on sites within each identified community.</p>
<p><b>WCCDEM</b></p> 	<p>Planning and execution of the container rollout and supporting the CRGs within each proposed location to plan for and take possession of the containers.</p>
<p><b>CRGs</b></p> 	<p>Five communities supported by community response groups (CRG) were identified for locations for the emergency supply containers:</p> <ul style="list-style-type: none"> <li>■ Haast</li> <li>■ Hari Hari</li> <li>■ Franz Josef</li> <li>■ Fox Glacier</li> <li>■ Otira</li> </ul> <p>These communities were identified according to risk profile as determined by WCCDEM in consultation with WDC.</p>
<p><b>Container supplier</b></p> 	<p>Royal Wolf was selected as the container supplier and was engaged to complete fit out of the containers, manage transportation and associated site works for installation.</p>
<p><b>Transport</b></p> 	<p>Aratuna Freighters transported each container to site. Royal Wolf liaised with Aratuna Freighters directly and transportation costs were included in the quotations provided.</p>
<p><b>Local contractors</b></p>	<p>Local contractors may be involved for associated site works and/or assisting with installation. Royal Wolf organised any local contractors required.</p>

## 2. INVESTMENT

### 2.1. WDC investment

Detail regarding the one-off WDC investment into the 5 x container assets is summarised below from emails between WDC and WCCDEM (November 2020).

**Westland District Council resolved to procure premium containers for Civil Defence at a cost of \$159,800, allowing for five Emergency Community Containers to be pre-positioned across the Westland region to support communities in growing their resilience and readiness.**

The Emergency Community Containers will support the ongoing development of Community Response Groups, allowing for the storage of existing emergency resources and other essential supplies. **The Emergency Community Containers will be a community owned and resourced asset** and allow CRG to leverage resilience funding opportunities for ongoing development of the resource.

WDC 'Emergency Community Containers Approved' funding will assist with the purchase, fit out of the containers as described below, and the transport and associated site works for installation.

Premium Grade 20' container with:

- Shelving with safety wire included
- Steel work bench
- LED lights internally and externally
- Electrical plugs 2
- Generator cavity subject to size of generator
- Strapping for equipment as required
- Double entry front and single exit rear doors
- Recessive colours (as opposed to branded CD colour)

Indicative cost for an adapted container including fit-out (\$21,853), with transport to site (\$2,700) per community is currently being reconfirmed with the provider. Any balance of funds per community can be used by CRG for additional Emergency Community Container resources but must be within the Council resolution regarding the Civil Defence Emergency Containers. Amounts will vary between communities related to costs for site installation and final costs from the supplier.

A review of the placement options will be required, and this may link with the Halls and Memorials Refurbishment project if your community has this underway.

### Council Resolution

Made at Extraordinary Council Meeting on 16 June 2020:

#### 1. Civil Defence Emergency Containers

Apply for external funding for premium containers.

*Cr Hartshorne left the meeting at 11.55 am.*

Moved Deputy Mayor Carruthers, seconded Cr Martin and **Resolved** that Council procure premium containers for Civil Defence at a cost of \$159,800 approximately.



## 2.2. Haast Container “the prototype”

Quoted price as at February 2021 and is not current. Please see the notes that follow this table.

Please find attached your quote for the supply and modification of a premium grade 20’ container for the Haast community emergency management unit.

- **Premium grade 20ft container in RW Grey - \$4,800.00**
- **Dust coat internal walls – white - \$428.00**
- **1 x sliding window with external security bars - \$1,510.56**
  - 900mm x 1200mm window
- **Personnel door – fitted same side as window - \$1,550.34**
  - Made using container panel with lockbox and lever handle
- **Power & Lights with EWOFF & Distribution board including - \$5,859.13**
  - 2 x dble power points above the bench mounted on the wall
  - 2 x LED strip lights mounted to the roof internally
  - 2 x external LED lights in recessed cavity
  - Ability to connect both 230v mains power and generator power
- **4 tier shelving fitted with safety wire and shackles - \$1,820.49**
  - 1830mm x 1810mm x 540mm deep
  - (Suggest fitting on rear wall opposite main container doors for best utilisation of internal space)
- **Collapsible work benches - \$1,485.78**
  - 4 Folding work benches fitted side by side
  - Made from 20mm thick premium Rubberwood, the workbench offers a generous 940x600 mm workspace which can hold up to 100kg evenly distributed.
  - Fitted opposite personnel door
- **Vinyl Flooring - \$3,000.00**
- **A3 sized - External flat steel panel for attaching emergency signage too - \$96.00**
  - Fitted between personnel door and window
- **24m of various tagging plates installed for attaching fittings. - \$445.00**
- **6 x Ground screws for fixing container to the ground - \$4,251.43**
  - Includes installation of ground screws onsite in Haast ready to receive the container & load test

Total price including, Container, modifications plus supply & install of ground screws in Haast is \$25,246.30 +gst

Description	Deal	Price Each	Charge Type	Hire Period	Qty	Total Ex GST
20' Storage Container	Sale	\$4,800.00	One Off		1	\$4,800.00
<i>Grade: Premium</i>						
Modifications to container as per details provided (Resources)		\$20,446.30	One Off		1	\$20,446.30
Comments: Grey container 30% deposit required upon confirmation of proceeding						

Subtotal ex GST                    \$25,246.30  
 GST    \$3,786.95  
 Total inc GST                            \$29,033.25

### Important notes

- The pricing included within this report was current when the WDC containers were purchased but is not a quotation of any guide i.e. the supplier must be requested to provide current pricing by any organisation/group interested in purchasing containers.
- Pricing will be subject to variances related to fit-out requirements, transport, travel, contractor fees, equipment required etc and will vary for each community/container.
- A 30% deposit is required by the supplier when an order is placed and prior to commencement on any modifications. The deposit % may vary with other suppliers.
- Full payment is required before delivery.

### 3. IMPLEMENTATION

#### 3.1. Progress to date

The Haast Community Emergency Container (the prototype) was originally due to be delivered mid May 2021, with the Franz Josef Glacier, Fox Glacier, Hari Hari & Otira containers due for delivery by 1 July 2021. In July 2021 the Westport Flood Event drew all WCCDEM resourcing away from this project and the timeline needed to be extended. The floods were then followed by COVID-19 resurgence in August 2021, which prolonged work and delivery further.

The COVID-19 pandemic had an almost immediate impact on supply chains and restrictions on business operations across New Zealand to reduce spread of the virus affected the container supplier’s ability to carry out the work required to get the containers kitted out, transported and positioned, resulting in lengthy delays.

The following is a summary of current status (as at 7 November 2021) of the five containers that form the Westland Container Project.

*Table 1 - Current status of the new Westland Containers*

Community	Status	Notes
Haast	25 May 2021 - Container delivered and in place.	<ul style="list-style-type: none"> <li>Container is sited and ready for community to organise contents and utilisation.</li> </ul>
Franz Josef Glacier	19 October 2021 – Container delivered and in place	<ul style="list-style-type: none"> <li>Container is sited and ready for community to organise contents and utilisation.</li> </ul>
Fox Glacier	19 October 2021 – Container delivered and in place	<ul style="list-style-type: none"> <li>Container is sited and ready for community to organise contents and utilisation.</li> </ul>
Hari Hari	12 October 2021 - Container delivered and in place.	<ul style="list-style-type: none"> <li>Container is sited and ready for community to organise contents and utilisation which is now underway.</li> </ul>
Otira	Awaiting placement on site (currently in storage at Greymouth)	<ul style="list-style-type: none"> <li>WCCDEM working with Kiwi Rail regarding approval for the final location of the container and there are activities underway to undertake work on the Railway station platform.</li> </ul>

#### 3.2. Implementation continues

WCCDEM staff are working to support the implementation of the remaining containers to complete the roll-out of the Westland Container project.

## 4. MEDIA

### 4.1. Media Release and coverage

A Media Release was issued when the first container was delivered which was quite a milestone after a long lead-in period. The media release is included below.

*Figure 2 - Media Release from WCCDEM/WDC*

### **MEDIA RELEASE**

#### **Community Emergency Container delivered to Haast**

**26<sup>th</sup> May 2021**

Haast residents took delivery of a specially designed emergency container yesterday.

The 20-foot shipping container is one of five being prepositioned across the Westland district to assist communities who may be significantly impacted by a large disaster.

Leading shipping container supplier, Royal Wolf, has vast experience in disaster relief including playing a key role in the response and rebuild following the Christchurch and Kaikoura earthquakes.

Darren Whelan, Royal Wolf Branch Manager - Christchurch, says the company worked closely with the Westland Emergency Management Officer, Lauren Emanuel, to develop and modify the container to meet its specific requirements for an earthquake and disaster emergency container.

“Containers are an incredibly strong and solid structure, but they’re also very adaptable so there is no limit to what we can do with them. We modify containers to suit any customer requirement and the robust nature of these steel boxes make them an ideal solution for this sort of project.”

Funding for the containers was approved by the Westland District Council in 2019 and demonstrates a huge commitment by the Council to support resilience in local communities.

Westland Mayor Bruce Smith said “It is exciting to see this project come to fruition. When disaster strikes, these containers will provide communities with emergency supplies and alternate communications, and we look forward to the delivery of the other containers to Franz Josef, Fox Glacier, Hari Hari and Otira in the coming months”.

[Ends]

**Contact:**

Group Public Information Manager

West Coast Emergency Management Group

Following the media release coverage of the installation of the Haast container in June 2021 is included below.

### Hokitika Guardian

#### Civil Defence installs shipping container in Haast

by Janna Sherman

The Haast community has taken delivery of a Civil Defence container and emergency essentials to assist in the event of major earthquake or other natural disaster.

The 20-foot shipping container is one of five being pre-positioned across the Westland district to assist communities at risk of being isolated by a large disaster.

Westland emergency management officer Lauren Emanuel, said it would be stocked with resources including communications, food and water to support the communities in an emergency response.

The containers have been specifically fitted out with windows, shelving, flooring, and a power source for a generator.

Shipping container supplier, Royal Wolf, who played a key role in the response and rebuild following the Christchurch and Kaikoura earthquakes, worked closely with the council to develop and modify the container to specifically meet earthquake and disaster emergency requirements.

"Containers are an incredibly strong and solid structure, but they're also very adaptable so there is no limit to what we can do with them," Royal Wolf Christchurch manager Darren Whelan said.

"We modify containers to suit any customer requirement and the robust nature of these steel boxes make them an ideal solution for this sort of project."

Funding for the containers was approved by the council two years ago.

Westland Mayor Bruce Smith said Franz Josef, Fox Glacier, Hari Hari and Otira would receive containers in the coming months.

"When disaster strikes, these containers will provide communities with emergency supplies and alternate communications."

The council has continued a focus on resilience in its draft 10-year plan, now out for consultation.

It includes \$1.2 million tagged towards building a new emergency operations centre (EOC) at the Hokitika Airport.

Some small town community centres, including Haast, are also being upgraded to act as welfare centres post an Alpine Fault event with the help of a \$1m boost from the Government's provincial growth fund last year.

An update to be tabled at today's council meeting says while there was no committee for the Haast Hall, there was "broad agreement from the community" for it to be earthquake strengthened and made fit-for-purpose as a civil defence shelter. A seismic assessment had been completed and engineering design work would follow to bring it up to 36% of national building standards (NBS).

Water tanks and a generator are also proposed.

Planned renovation works include a re-roof, refurbishment of the bathrooms and showers, and upgrade of the kitchen.

### The Messenger

#### **A Civil Defence container that will be equipped with emergency essentials has been welcomed by the Haast community.**

Haast residents took delivery of a specially designed emergency container last week. The 20-foot shipping container is one of five being prepositioned across the Westland district to assist communities who may be significantly impacted by a large disaster.

Leading shipping container supplier, Royal Wolf, played a key role in the response and rebuild following the Christchurch and Kaikoura earthquakes.

Royal Wolf branch manager Darren Whelan, said containers were an incredibly strong and solid structure, but were also very adaptable. Funding for the containers was approved by the Westland District Council in 2019.

"It is exciting to see this project come to fruition. When disaster strikes, these containers will provide communities with emergency supplies and alternate communications, and we look forward to the delivery of the other containers to Franz Josef, Fox Glacier, Hari Hari and Otira in the coming months," Westland Mayor Bruce Smith.

The container has been specifically fitted out with windows, shelving, flooring, and a power source for a generator.

It will house resources to support the community including communications, food and water etc plus anything else the community may want in there.

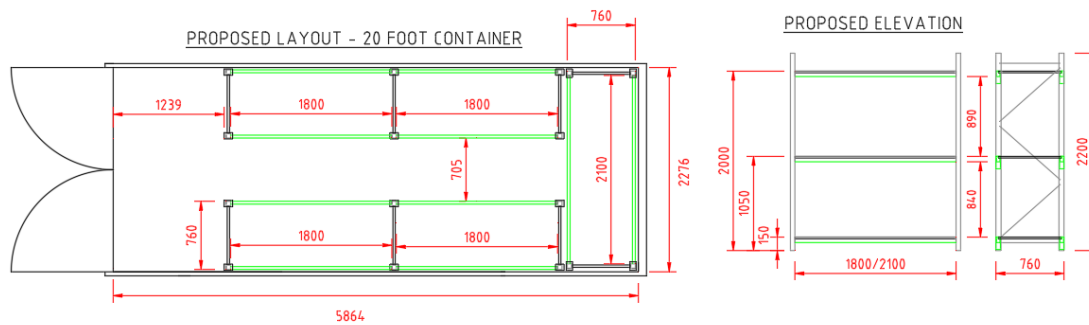
### Important notes

- These articles are not explicit about the agreement to supply stores within the containers and this could be misleading. Following the change of focus to a community-led project for AF8 resilience, and prior to Council funding it was agreed that Council would fund the asset and communities would lead and fund the supplies contained within.
- Communities have the ability to fund, source and store any supplies which would benefit their own community.

## 5. CONTAINER SPECIFICATION

### 5.1. Container layout

Figure 3 – Original proposed container layout



### 5.2. Actual configuration of prototype (Haast container)

Figure 4 – Front of container showing window and door



A single personnel door opens on the front side for the Haast prototype to suit the site placement, but additionally this allows for uninterrupted storage along the back wall of the container and two points of contact for public if required (sliding window and personnel door). The window has security bars fitted.

#### Learnings

- This configuration (window and personnel door, as well as standard container double doors on one-end) makes the containers able to be utilized for a number of community events – not just emergency response e.g. ticket sales, catering, office as required.

Figure 5 - Rear of container showing power fitting



Figure 7 - Side of container showing side doors (usual container configuration)



Figure 6 - Other end (also shows Front door on side)





Figure 9 – Side Door open showing inside view of containers showing flooring (and fittings)



Figure 8 – Front Door (from inside container)



Figure 11 - Front door (from outside)



Figure 10 - Window (from inside container)



Each container may have slightly different configuration and customisation as selected by the community groups. For more information on configuration see the Appendices.

### 5.3. Compliance & Consents

- Before procuring containers it is very important to check with your local Council about any compliance or consent requirements.
- If containers are solely for storage of goods, then a consent is not necessarily required, but consideration should be given of fixing of containers for earthquake requirements as they contain emergency management supplies and equipment.
- It is important to check with Council Planning department also, as they may have minimum set back distances to/from boundaries.

#### Important notes

- All buildings to be used for civil defence purposes (emergency responses) need to have an NBS percentage of 67% to be able to be used.
- All premises to be used for civil defence or after emergency use need to be identified to Council so they can ensure they meet the 67% as required by law.

## 6. CONTAINER FITTINGS

### 6.1. Racking

Racking fitted in containers (if requested) is like the unit shown below. Other variations on this may be available.

*Figure 12 - Racking*

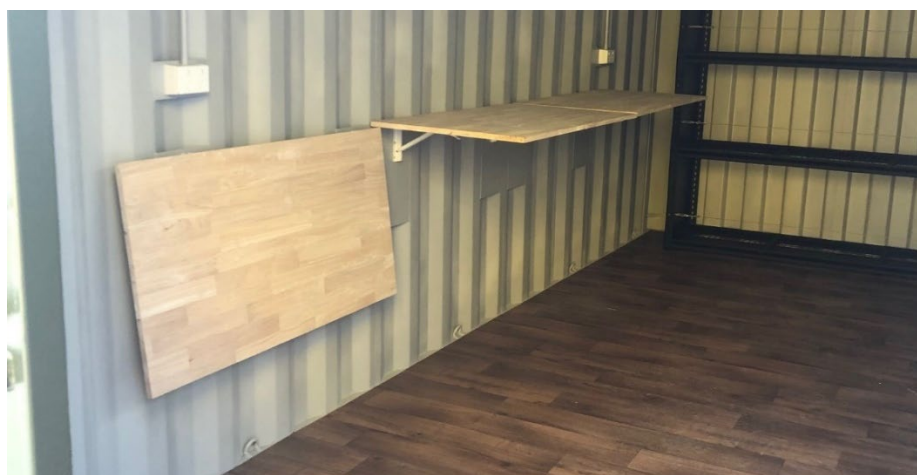


### 6.2. Benches

The Haast Container (prototype) included 4 x folding workbenches with the following specifications:

- Measurements 940mm x 600mm x 20mm (940mm x600mm workspace)
- Made from 20mm thick premium Rubberwood
- Each bench can hold up to 100kg evenly distributed
- Foldable - which enables the users to be able to fold as many as they require up or down for use or additional storage space, making the space more flexible.

*Figure 13 - Benches fitted inside container*



### Learnings

- The original hinges on the benches were not sufficiently strong and it is difficult to evenly distribute weight across the benches. Heavier duty hinges were required and this was addressed with the supplier.
- This should be noted for future container fit-outs.

## 6.3. Signage & Identification

### Branding

There is purposefully no external branding that identifies the container when not in use. This is to help prevent targeting by thieves and to ensure the containers are as inobtrusive as possible.

### Colour

The containers are grey to be inobtrusive with the exception of the Otira container which will be painted yellow for visibility during winter snow.

### A3 sign display

The containers are fitted with Manhattan Snap Lock Poster frames.

- Aluminium frames easily open on each side and snap closed.
  - Come with PET plastic cover to keep posters looking crisp and clear and can be changed and removed easily.
  - A3 in size and for 420x297mm poster
  - Dimensions of the frame are 465x340x12mm (wxhxd)
- The signage option shown below was selected so that community groups can use the frame to any signage appropriate to the purpose that the container is being utilised for e.g. ticket sales, office, catering event etc.



Figure 14 - External poster display A3

Each community group was also supplied with an A3 Perspex Civil Defence sign for use in response to events.

### Learnings

- The containers may have many uses for community events – not just response to emergencies. Every aspect of the design should support this so that the asset can be fully utilised by the community.

## 7. TRANSPORT, INSTALLATION & PLACEMENT

The containers have been transported to sites by Aratuna Freighters a local carrier. The container supplier liaised with the carrier and transportation costs were included in the quotation for container purchase. The carrier used a truck-mounted crane to lift the container into place on the lugs and ground-screws.



Picture 1 - Hari Hari container arriving by truck



Picture 2 – Preparing container for lift



Picture 3 - Container being lifted off truck



Picture 4 - Container being positioned on lugs

## 7.1. Ground screws

Ground screws have been used in installations to replace the need for concrete blocks or pads and allow the units to drain underneath while sacrificing stability. This approach was recommend by the supplier. Each container is supplied with 6 ground screws.

For more information visit:

[https://stopdigging.co.nz/?gclid=Cj0KCQjwLOmLBhCHARIsAGiJg7m7YNPSGW0WODSJhoumPcwGLnAKQJ3Mt2YZuLPQToauR9eDdyPdO1IaArnJEALw\\_wcB](https://stopdigging.co.nz/?gclid=Cj0KCQjwLOmLBhCHARIsAGiJg7m7YNPSGW0WODSJhoumPcwGLnAKQJ3Mt2YZuLPQToauR9eDdyPdO1IaArnJEALw_wcB)

Figure 15 - Ground screws used for securing containers to ground



### Learnings

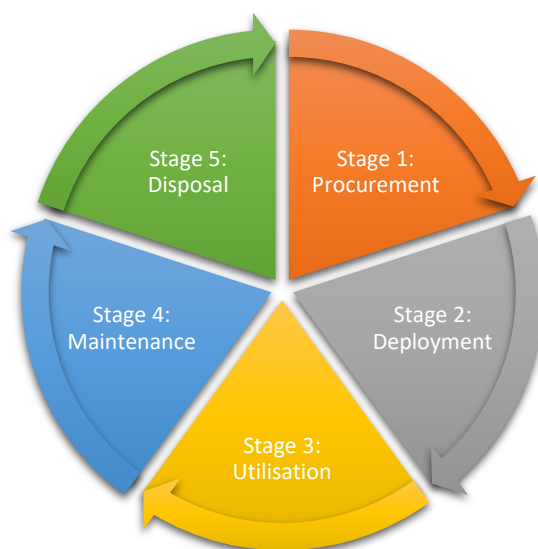
- The fitting of the ground screws requires significant effort, specific tools and contractor preparation and capability. Lugs also need to be fitted to the ground screws so that the container can be positioned correctly and secured. Alignment and position of ground screws and lugs is very important and care must be taken to get this right or the container cannot be fitted.
- Contractors must understand the task and have the right equipment (and resourcing) for the task. The container area must be level and of sound material to enable ground screws to be installed correctly so that all ground screws bear the weight of the container evenly.
- Selection of contractor and briefing them on the task is very important and this should be considered for future container placements.

## 8. CONTAINER LIFECYCLE

### 8.1. Fixed asset lifecycle

All fixed assets have a lifecycle. There are various models but the model below covers the five key stages which have been considered for the Westland Container Project assets.

Figure 16 - The Fixed Asset Lifecycle



### 8.2. Roles and responsibilities

Each stage of the asset lifestyle requires defined roles and responsibilities to ensure that the assets are managed effectively.

These roles and responsibilities will form the basis of an MOU with each CRG that has received a container (to date) and in any future extension of the project – refer to the Action Plan.

Table 2 - Roles and responsibilities across the container asset lifecycle

Stage	Responsible	Role/s
Stage 1: Procurement	WDC	Funded and owns the ‘asset’ (the physical container). WCCDEM supported the purchase process by liaising with the supplier.  Note: In any proposed extension of this project funding of the asset is likely to be required via alternate sources.
Stage 2: Deployment	WCCDEM	WCCDEM liaises with the supplier and CRG’s to enable deployment of the assets to their proposed locations.

Stage	Responsible	Role/s
Stage 3: Utilisation	CRGs	<p>The CRGs receiving the container asset utilize the asset by using the asset to store supplies that they identify and source. The supplies remain the property of the CRG.</p> <p>Other parties may assist CRGs with funding applications to stock the containers or provide advice around suitable supplies e.g. Council community development support.</p>
Stage 4: Maintenance (asset)	<p>WDC</p> <p>CRGs</p> <p>CRGs</p>	<p>Annual maintenance check on asset.</p> <p>Care and protection of the asset, and any items within that are the property of either WDC or WCCDEM.</p> <p>Maintenance, renewal or replacement of any items within the container that are owned by the community.</p>
Stage 5: Disposal	<p>WDC</p> <p>CRGs</p>	<p>Decision on when to retire and dispose of fixed asset (Container).</p> <p>To consider further community-procurement of similar or different asset once container retired by WDC.</p>

### Learnings

- It is important that roles and responsibilities across the asset lifecycle are well understood, documented and communicated so that there are no misunderstandings about each parties obligations.
- In the community-led model utilisation of the asset is fully the domain of the community groups, however WCCDEM many support provision of some communications equipment which may be housed in the containers (or elsewhere according to the local arrangement of response facilities).
- Maintenance of the container is a shared obligation with the Council completing an annual check of the container asset and the community group taking responsibility for ongoing care and protection of the asset (the container) and full responsibility for its contents e.g. emergency supplies.



## 9. EMERGENCY SUPPLIES

### Community determined supplies

At the time of funding the containers WDC stipulated that “The over-riding requirement was that communities have a say on what contents were required, in that some may already have equipment in hand as listed above, such as generators, and equipment requirements could be modified accordingly.”

Examples of emergency supply lists are provided in this section. These are not mandatory items and these lists are included for consideration and ideas only.

Communities need to decide, in consultation with other e.g. WCCDEM, what are suitable supplies for their particular needs and location. It is expected that communities will seek their own funding for supplies that they wish to hold in their community’s container.

### 9.1. Supply lists – Examples only

Table 3 - Supply list 1 (example only)

(Source: Camp Pack Up Coordinator, New Zealand Defence Force | Te Ope Kātua o Aotearo)

Quantity	Item	Description	Comment
55	22 x 11	Tent Accommodation	Sleeping
10	30 x 20	Tent General Purpose	Mess/Recreation
2	40/50 x 20	Tent General Purpose	2 of Each
50	Groundsheets	11 x 11 ft.	
140	Cots NATO	Sleeping	
200	Chairs Folding	Various Styles	
56	Tables Folding	Lengths 4ft-8ft	
5	OHTA Heater	4 Large 1 Small	
800	Blankets		
16	Porta Potti	Toilet	-1- Screen tent
16	Shower Buckets	Showering	Use with 30 x20 Tent
40	20ltr Jerry Can	Water carrying	
100	2 Man Bivouac	“A” Tent	
160	Safari Stretchers	Sleeping	
3	Kitchen Boxes	Cooking	Pots/Pans/etc
3	Cooks Boxes	Cooking	General Cooks tools

Quantity	Item	Description	Comment
9	34ltr Hot Boxes	Food Storage /Transport	Hot/Cold Food
9	Chilly Bins	3 Sizes	70-250 ltr
7	Electric urns	Heating Water	
12	Tea Urns	Hot/Cold Liquid	
	Hand Tools	Shovels/Picks /Grubbers Etc.	
7	M 59 Cooker/ Burners	Cooking	Plus 2, 2 Ring Cookers

NZDF also recommended consideration of:

- Inflatable shelters, similar to the ones used by military, which are easy to put up and provide an excellent environment for HQ type work.
- The Lifesaver Jerrycan Water Treatment System which filters water to a potable standard utilising a 20ltr Jerry can, works well and is easy to use in an emergency.

Table 4 - Supply list 2 (example only)

Item	Description
Storage boxes	MC1200 for ration packs and water
Shelving	Metal framing with ply shelves. Big enough to store items and ensure items are seismically restrained.
Food	24 hr ration pack. 1 per person per day. 3 days' supply.
Water	24 pack 600ml water bottles. 4 per person per 24hrs. 3 days supply.
First Aid Kit	St John No.3 Metal Workplace First Aid Kit
Lighting	LED Worklight on Tripod 2 x 20 Watt
Generator	Honda EU22i
Fuel	Fuel cans x 4
Headlights	The Warehouse LED headlights
Batteries	AAA pack 12
Emergency Poncho	
Thermal blanker	
Foam sleeping mat	
Tarpaulin	Heavy duty 4.9x6.1
Rope	For tarpaulins and general use
Water purification tablets	Pack of 10. Does 25 litres

Item	Description
Rubbish bags	50 pack
Hand sanitiser	500ml
Rubber surgical gloves	Pack of 100
40l plastic bins	For hand sanitiser, rubbish bags etc
Disposable spoons	20 pack. For ration packs
5000 l water tank	Filled from roof + plumbing up
10 litre water containers	For non potable water

## 9.2. Securing contents of containers

The supplier recommended the following padlocks. Price \$52.17 + GST + freight per padlock (as at June 2021).

Figure 17 - Padlocks for containers to prevent theft



### Advice from supplier

- Any strong padlock can be used not just those shown above.
- Whichever padlock is chosen will need to regularly lubricated to stop it seizing up because of exposure to the elements.

## 10. COMMUNITY WATER ‘RESILIENCE TANKS’

Some communities also raised or secured funds for a community resilience tank (drinking water). Some towns took the opportunity to add funds to their Provincial Growth Fund projects that were underway to upgrade community assets such as halls.

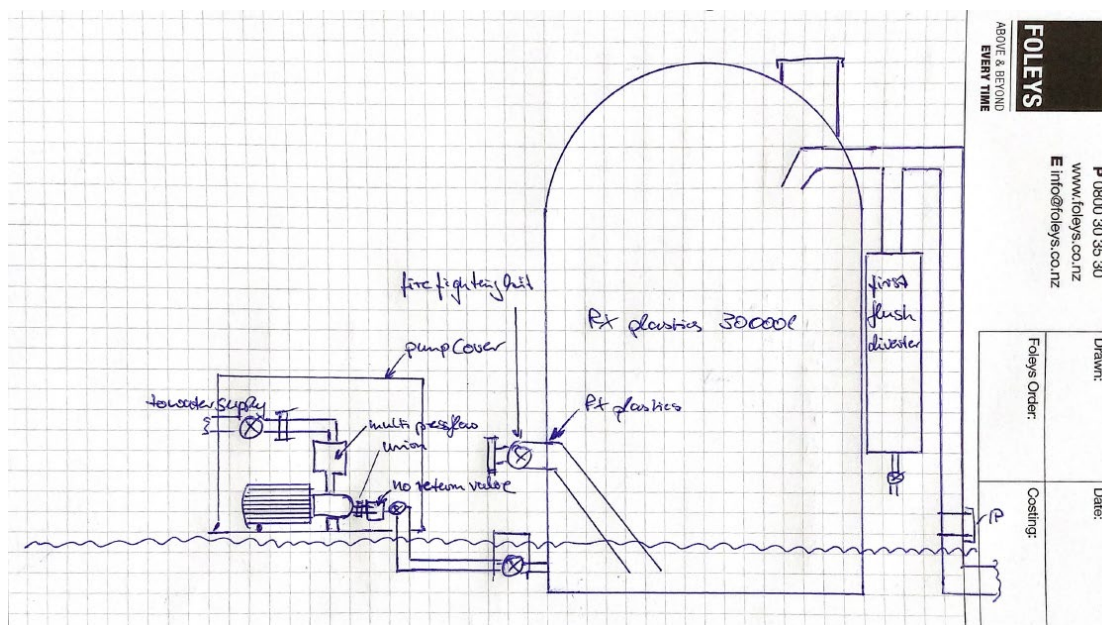
### 10.1. Resilience Tank specifications and layout

Specifications for the ‘resilience tank’ are as follows:

- 30000 l RX plastic water tank
- Lowara LWHM3HMP05M- PFMU water pump
- pump cover
- first flush diverter
- fire fighting kit
- 100mm pipe and fittings (25 m)
- pump fittings and 32mm water pipe (25 m)
- and approx. 20 hours labour

One supplier quoted \$11435:07 including GST for the supply and installation of the tank and fittings.

Table 5 - Resilience tank layout and components drawing



#### Important notes

- The pricing included within this report was current when the communities were first quoted but is not a quotation of any kind and is a guide only i.e. suppliers must be requested to provide current pricing by any organisation/group interested in purchasing resilience tanks.
- Pricing will be subject to variances related to community requirements, transport, travel, contractor fees, equipment required etc and will vary for each project.

## 11. SUMMARY & ACTION PLAN

This community-led project, with strong support from WDC and WCCDEM, allows remote Westland communities to own and manage their own emergency supplies.

This community-led focus encourages community resilience and resource development in Westland that is strongly associated with the Community Response Plan generated by each CRG, and supported by the goals and objectives of WCCDEM (WCCDEM, 2016) and NEMA (NEMA, 2019).

- Communities should be encouraged to visit each other’s CRGs and share knowledge at every opportunity.
- These community assets provide an opportunity to enhance community connection throughout the Westland region in a community development model to share learnings as this roll-out continues and as the community groups and their resources develop.
- This will reinforce a community ownership of the project and share skills, knowledge and build networks between CRGs.

Congratulations to WDC, WCCDEM and the Westland District CRGs on the considerable work that has gone into this project to support this fantastic initiative to date. It is also important to specifically acknowledge the considerable effort put into this project by Lauren Emanuel (former Westland EMO) who brought this project to life.

Some further actions (recommendations only) are listed below to support this project in the future.

### 11.1. Action Plan

The Action Plan set out below is based on current status (as at 14 November 2021).

Category	Action description	Responsibility	Timing
Develop MOU	Develop MOU between WDC and each CRG x 5. MOU to be based around roles and responsibilities over the full lifecycle of the container (refer to section 8).	WDC (TA Cook)	Feb 2022
Execute MOU	Execute MOU for each container.	WDC (TA Cook)	Feb 2022
Development	EMO’s to support CRGs to make best use of their containers.	WCCDEM	Ongoing
Extension	Council/Community Groups to consider application in their own District and to develop plans for any further extension of this project.	Councils/CRGs Supported by WCCDEM.	As required
Case Studies	WCCDEM to consider adding ‘case studies’ to this document once a community is fully utilising their container to provide a ‘community voice’ and their learnings.	WCCDEM	TBC

## 12. APPENDICES

### 12.1. Container locations

#### Haast Container (“the prototype”)

Figure 18 - Proposed location for Haast Container



### Fox Glacier Container

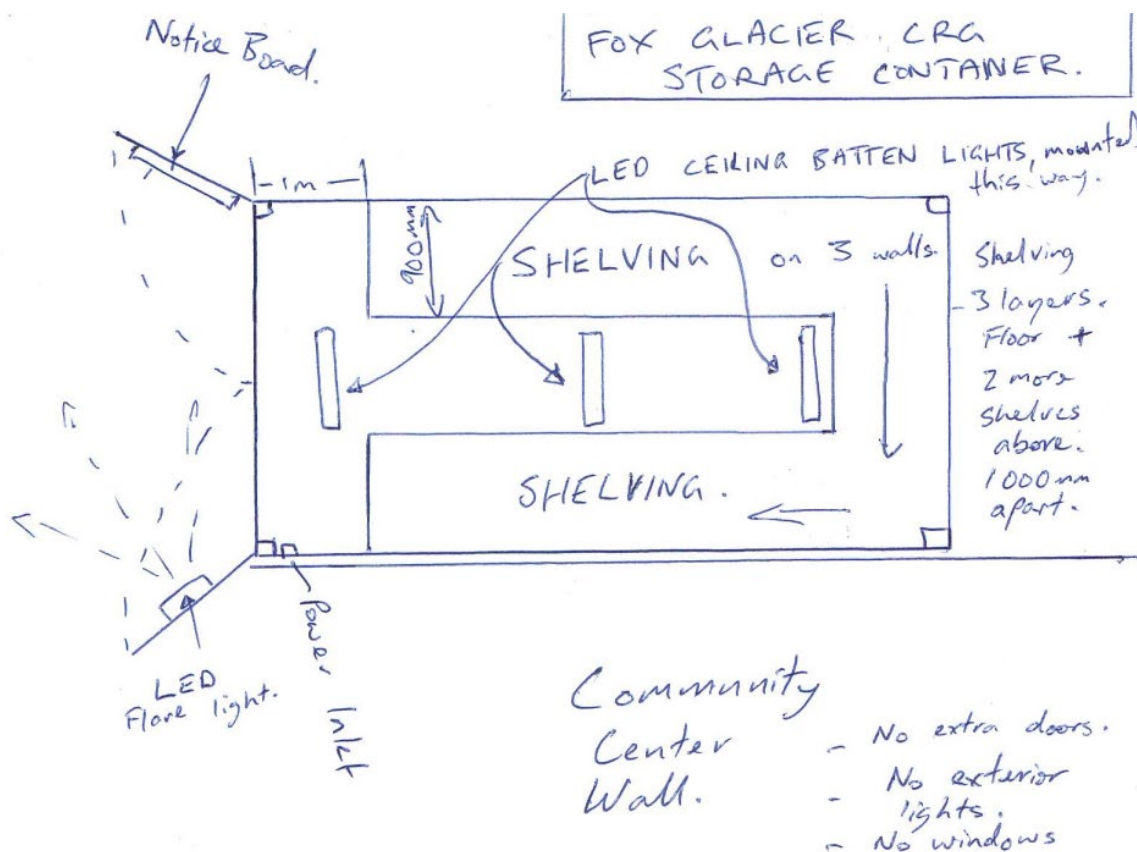
Figure 19 - Proposed location for Fox Glacier Container



**Customisation**

- The location and purpose for the container in Fox is to provide a secure, weatherproof storage facility to hold supplies and equipment for the Fox Glacier Community Centre, for when it needs to function as an emergency community welfare centre.
- The layout plan chosen by Fox Glacier CRG has the following changes (from the design of the Haast prototype):
  - Specifically it has removed the foldable bench, personnel door, sliding window and security bars and external recessed LED lights.
  - We have chosen to relocate the sign (notice) board to the inside of the left door and power inlet to be on the same side as the community centre wall and internal LED lighting battens. Internal power plug sockets could be located on the inside lower right wall opposite the power inlet.
  - To maximize storage, we have changed the shelving to 3 tiers, 1m vertical spacing around the 3 walls, starting 1m from the double door entrance.

Table 6 - Proposed customisations – Fox Glacier





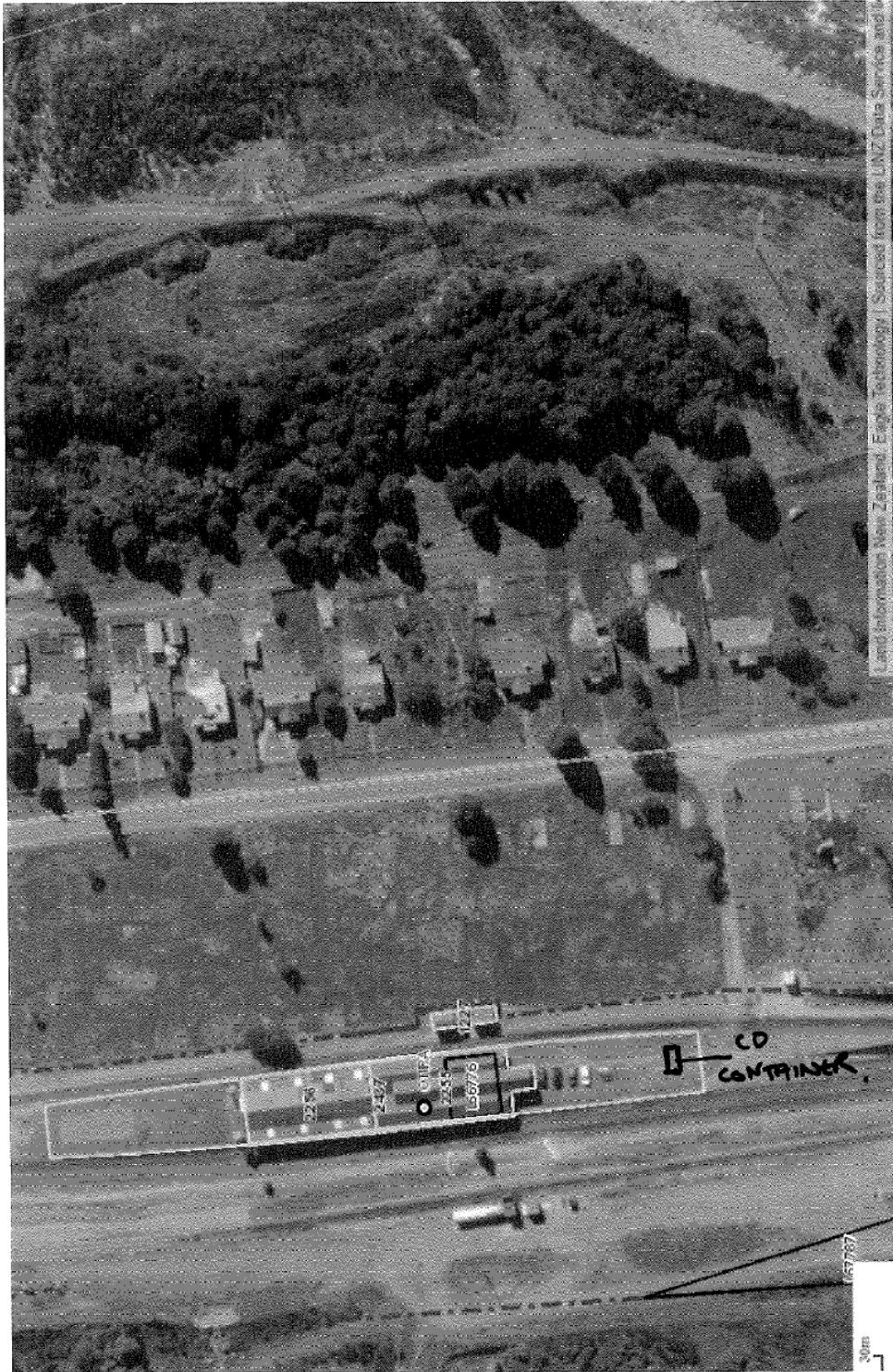
**Hari Hari Container**

*Figure 20 - Proposed location for Hari Hari Container*



**Otira Container**

Figure 21 - Proposed location for Otira Container



**Important notes**

- There is no public land in Otira, the town is privately owned.
- KiwiRail approved a grant to locate the container on the rail corridor and generously waived the application fees for this grant.
- Specific acknowledgements from the Westland EMO:
  - The Otira community has really stepped up and it's been amazing to connect with a Westland community with such complex challenges but some incredible ingenuity.
  - I want to acknowledge the input of Jo Paterson, using both her Natural Hazard Analyst and Lifeline Manager portfolios, in the crucial meeting with KiwiRail in April 2021.
  - I also have received support from Sarah Brown around the formation of the Otira CRG and guidance around the appropriate structure to allow application for funding streams.
  - Additionally KiwiRail General Manager Southern Property Portfolio Simone Hadely has waived the \$4250 grant application and document fees and the annual grant fee for the Otira Community Emergency Container.

**Container layout and customisation**

Figure 22 - Plan view

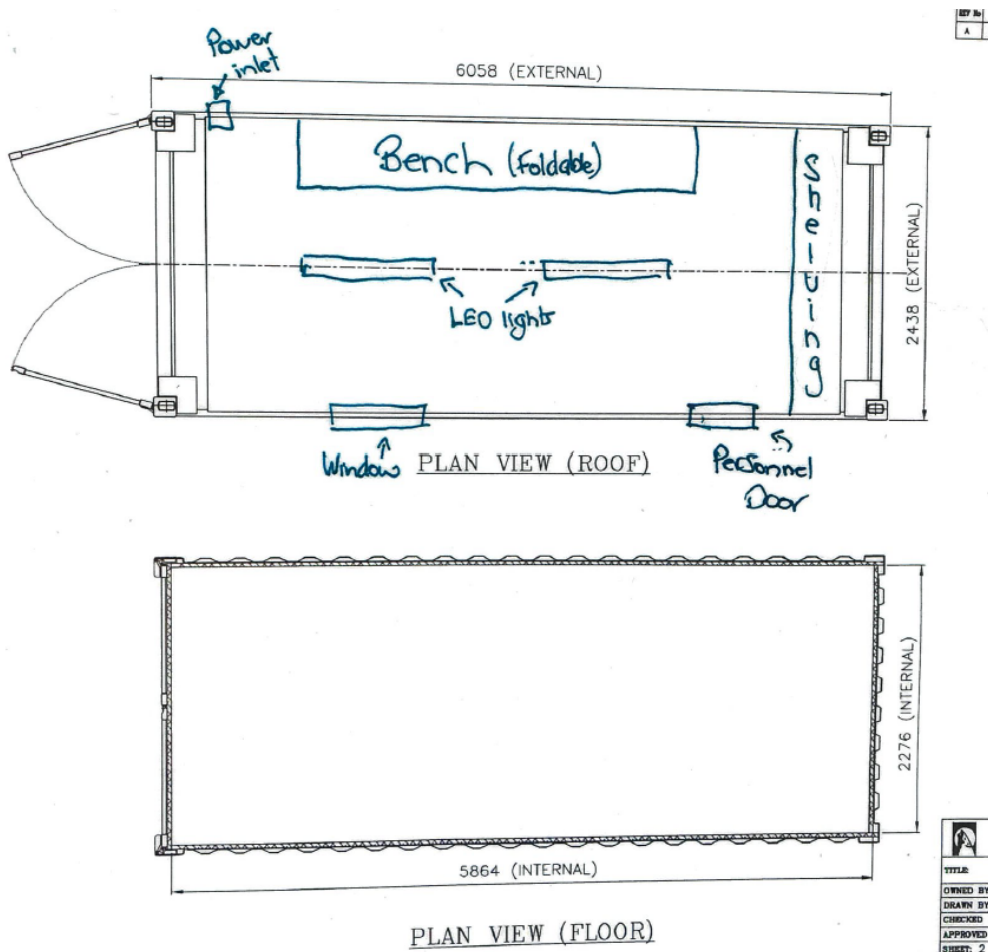


Figure 23 - Side elevations

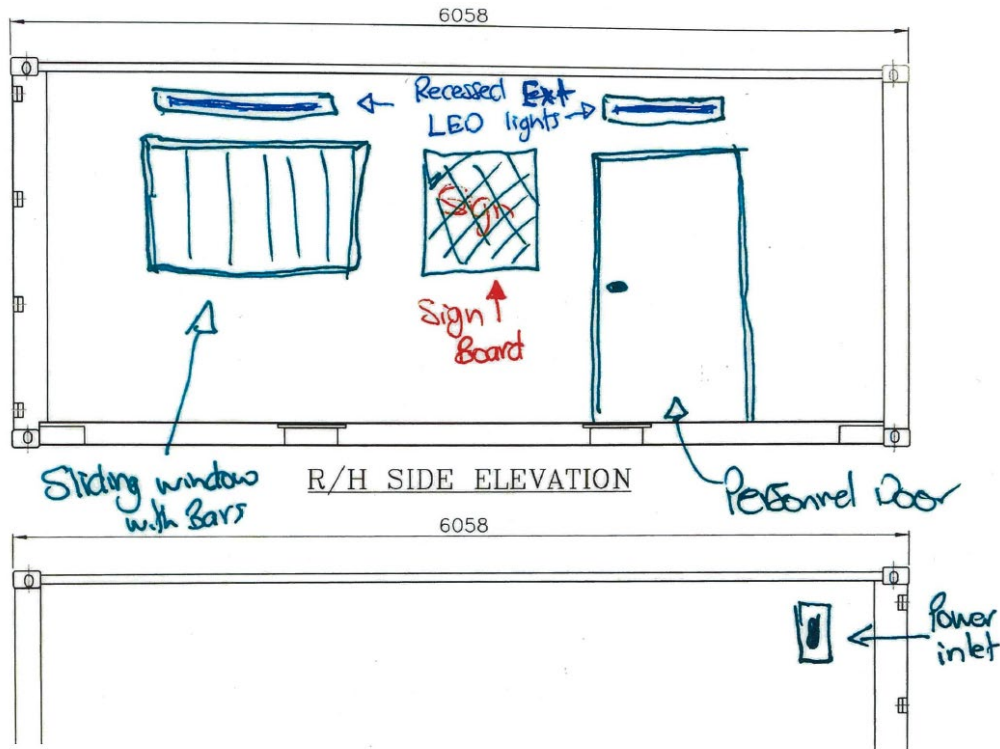


Figure 24 - Container features

ITEM	QTY	DESCRIPTION	COMMENTS
1	1	Sliding Window	900x1200mm
2	1	Security bars over Window	
3	1	Personnel door	
4	1	Steel Sign board	(Size to be confirmed)
5	1	Bench - foldable	700x880x900
6	2	LED lights	
7	1	4 Tier shelving built with safety wire & shackles.	
8			
9	1	Vinyl Flooring	
10	1	Electrical connections for 230v & Generator	
11		2x 20A Power Plugs near bench	
12	1	Premium External Paint (Grey)	
13	1	Dust Coat interior	
14			
15			
16			
17			
18			
19			
20		Bench to have Galvanised top	
21			
22			

### Franz Josef Container

Figure 25 - Proposed location for Franz Josef Container



Note: No marked-up document was available at time of writing this report. This photo was provided to the CRG to indicate the exact location for placement of the container but no marked-up version was available on file. This may have been completed however a file copy was not retrievable.

## 13. BIBLIOGRAPHY

The following external documents were referred to in this report:

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