

# **MCDEM RESILIENCE FUND FINAL REPORT**

**Project name: Earthquake Simulator**

**Reporting authorities: Hurunui District Council / Canterbury Group**

**Report produced by: Allan Grigg, Emergency Management Officer, Hurunui District Council**

**Date of Report: 18 June 2014**

## **Executive Summary:**

The EQ Sim (Earthquake Simulator) has been built and is operational.

Early childhood centres and schools in Canterbury have had visits from the EQ Sim.

Feedback has been excellent, with children of all ages drawn to the EQ Sim by its bold, colourful design, providing those important educational factors of engagement and interest.

It is worth remembering that kindergarten and school entrance age children have no memory of the Canterbury earthquakes so the tactile experience of the Earthquake Simulator enables the children to better understand what sensations they are likely to experience in an earthquake.

## **Project milestones:**

October 2013 – Trailer concept design

January 2014 – House concept design

February 2014 – Trailer & mechanism build

March 2014 – Moving platform & “house” build

Late March 2014 – EQ Sim delivered

April – Modifications

May – EQ Sim operational & handed to Canterbury CDEM Group

## **Challenges and Issues:**

February 2014 – Project coordinator suffered ill health.

Bill Obers, Can Do Consulting, based in Invercargill was commissioned to manage the build of the EQ Sim as he had prior experience building two EQ Sims in his previous employment as an Emergency Management Officer in Invercargill.

Bill Obers became seriously unwell in the January to March 2014 period, causing a disconnect between the separate entities building components of the EQ Sim.

These were;

Engineer - Trailer & Platform Build

Electrician – Electrical Components

Canvas Manufacturer – House Build

Printer – House Signwriting & Pictures

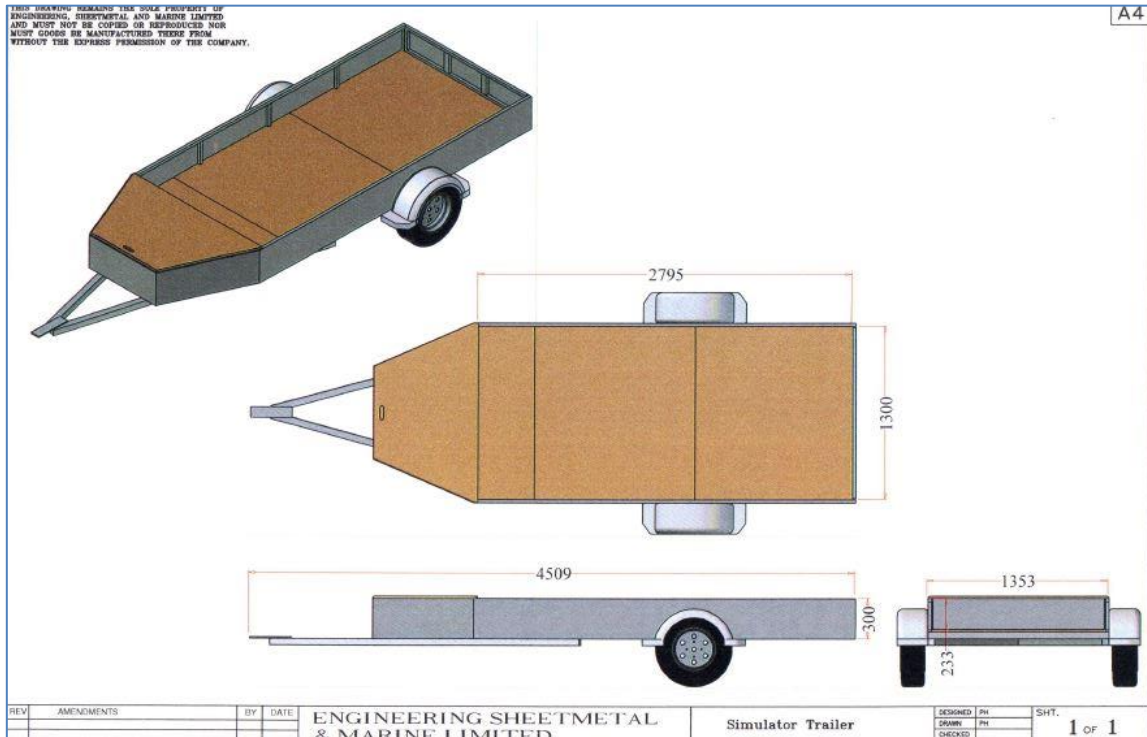
Bill Obers – Project Coordinator, Mechanical Components, Finishing

Allan Grigg – Project Oversight

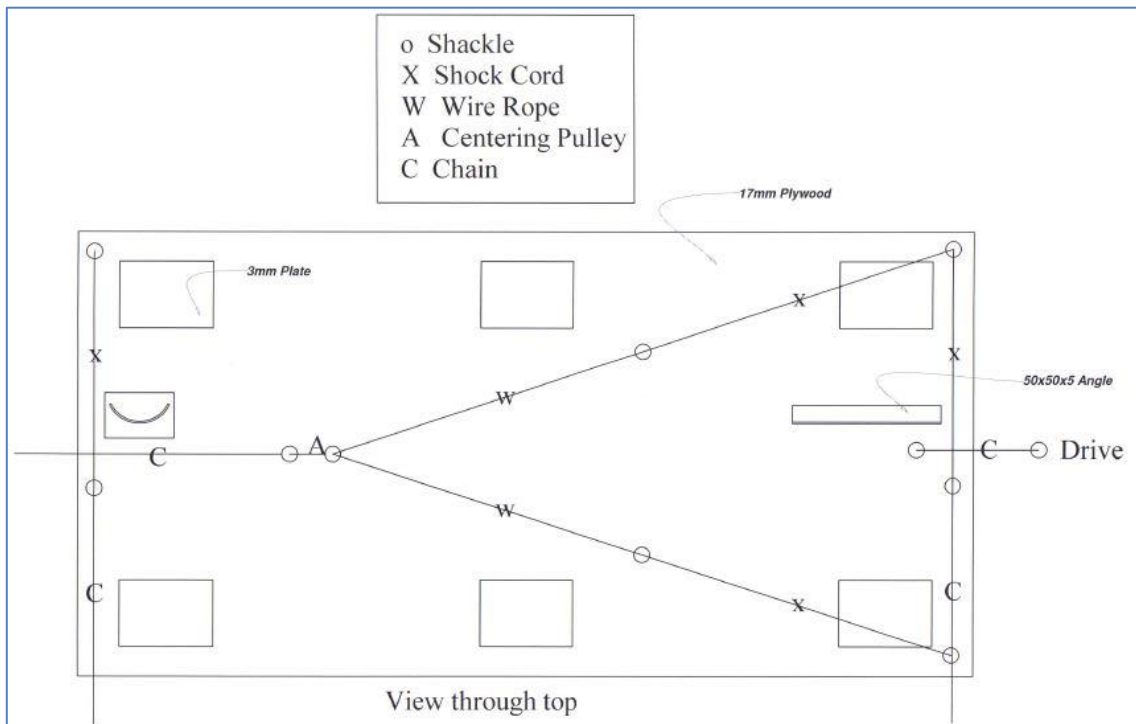
Due to this disconnect the various entities did the best they could without coordination resulting in the EQ Sim delivered to the Hurunui District Council over budget and requiring floor covering & vinyl work that was finished in Amberley before being handed over to the Canterbury CDEM Group Office. The project is approximately \$4,000.00 over budget. This cost overrun is currently covered by the Hurunui District Council.

It is requested that MCDEM, if possible reimburse the Hurunui District Council the full cost of this Resilience Fund project, over and above the \$15,000.00 approved subsidy.

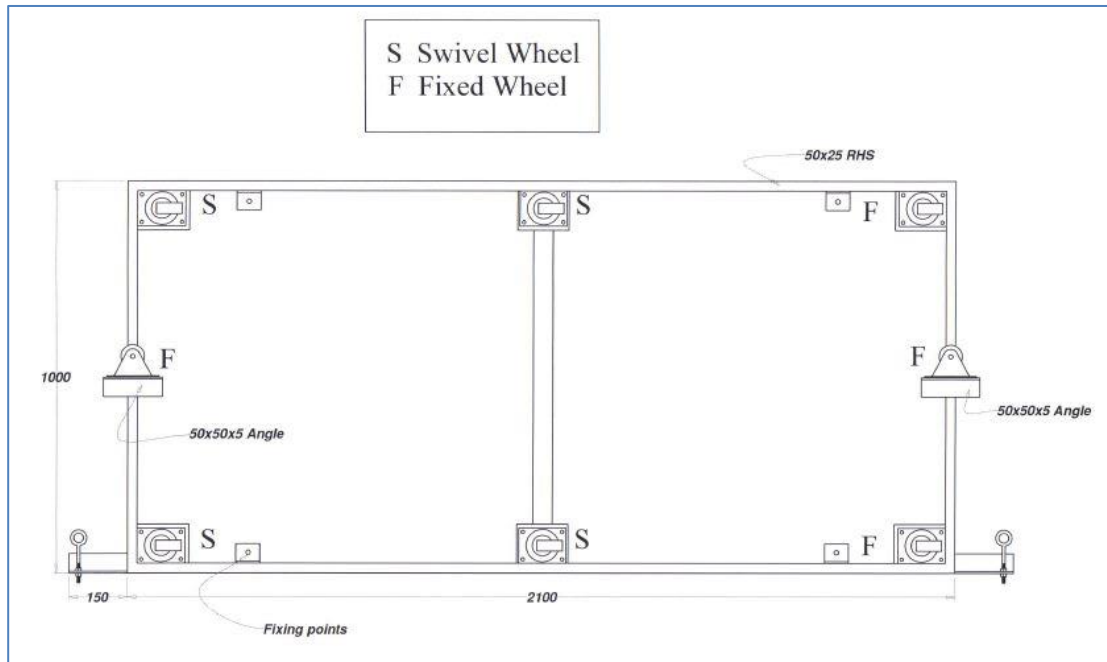
## Earthquake Simulator - Trailer design



## Earthquake Simulator – Moving Platform Design 1



## Earthquake Simulator – Moving Platform Design 2



## Earthquake Simulator – House Original Concept Design

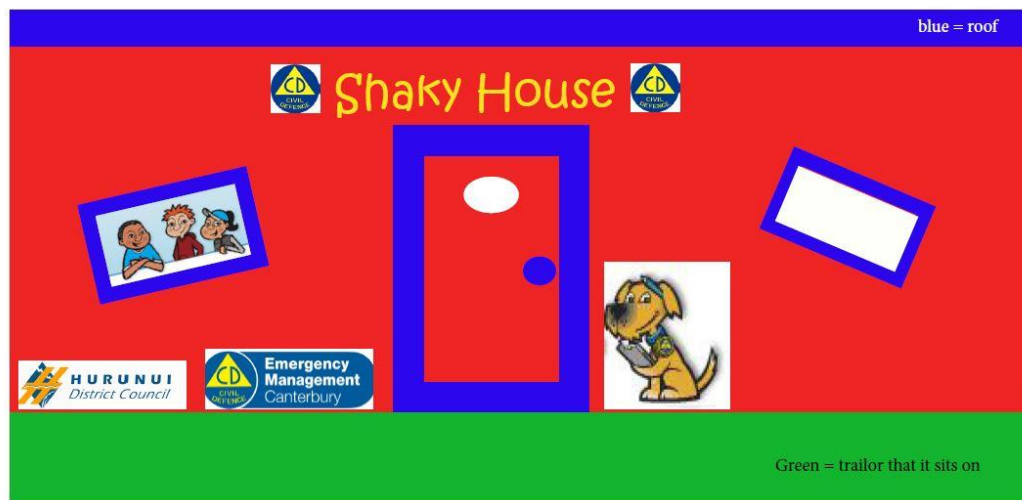


design concept we like

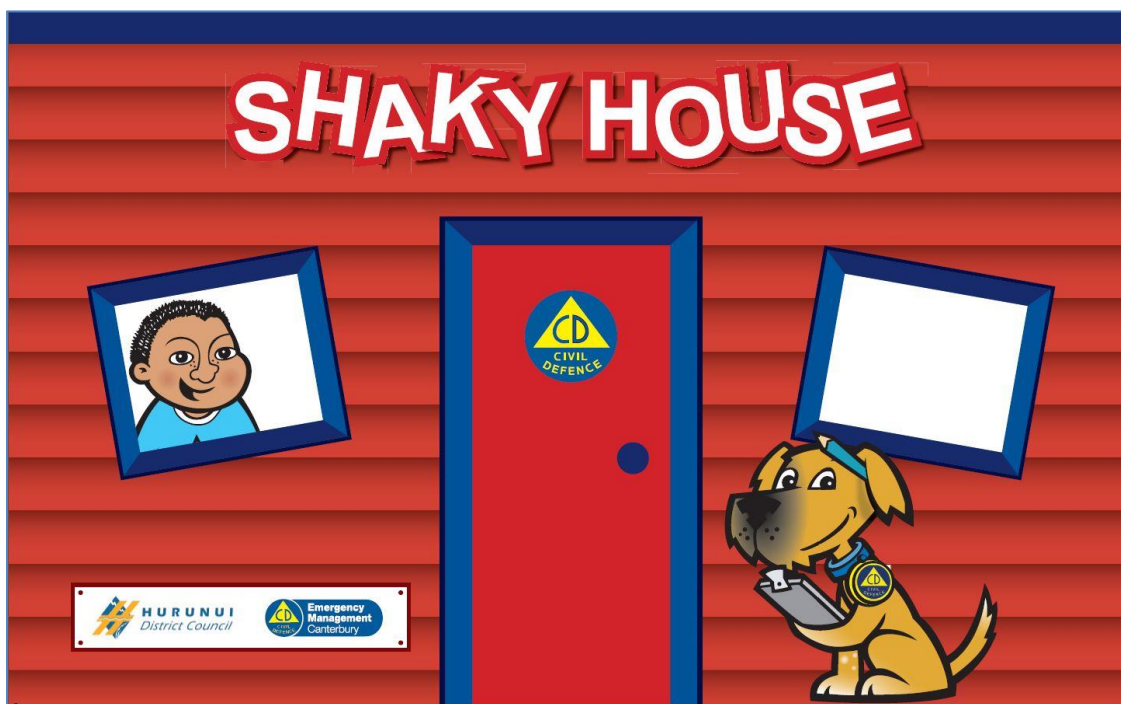
very early model of simulator



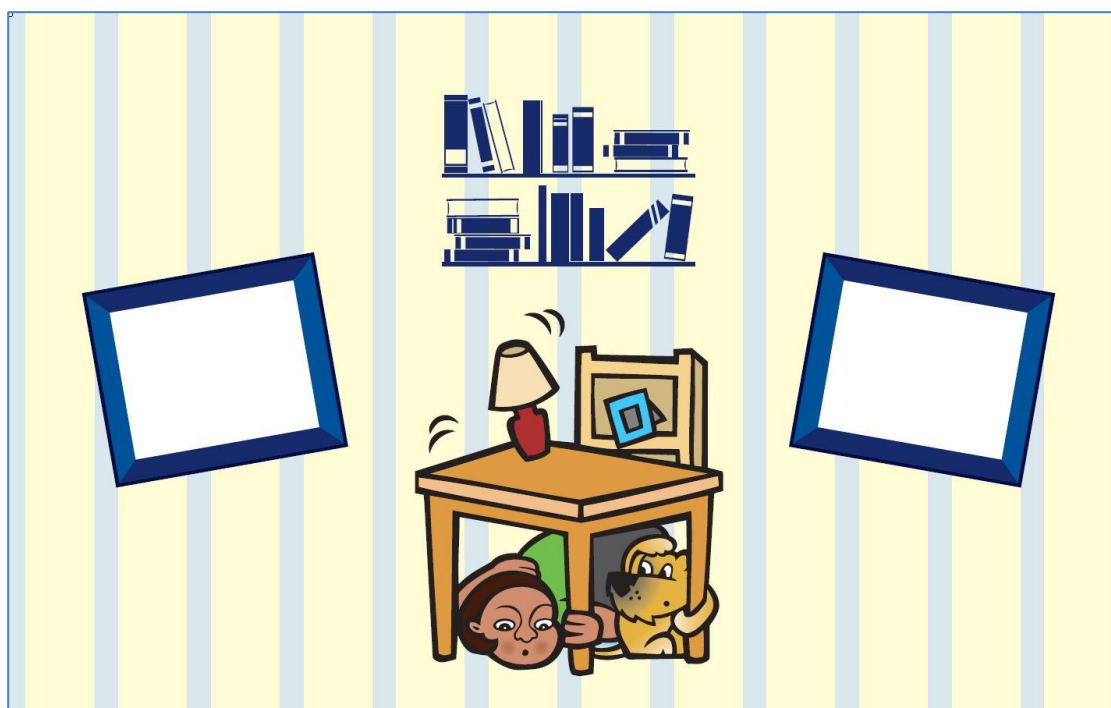
outside walls 2400mm by 1500mm



Earthquake Simulator – House Final Concept Design - Outside



Earthquake Simulator – House Final Concept Design - Outside



**Earthquake Simulator – Packed down for travel**



**Earthquake Simulator – Road cover removed**



## Earthquake Simulator – Erected



## Earthquake Simulator – Erected - inside



## Earthquake Simulator – Rutland Street Kindergarten



## Earthquake Simulator – Rutland Street Kindergarten



**Earthquake Simulator – Rutland Street Kindergarten**





## Earthquake Simulator – Burnham School



## Earthquake Simulator – Burnham School

