



**A SELECTION OF SUGGESTED PLANS  
FOR  
VARIOUS TYPES OF MAIMAIS  
AND  
LIST OF MATERIALS.**

Auckland/Waikato Fish & Game Council  
156 Brymer Rd  
RD 9  
Hamilton 3289

Phone: 07 849 1648  
Fax: 07 849 1666  
Email: [admin@awfg.org.nz](mailto:admin@awfg.org.nz)

## **SUGGESTED LIST OF MATERIALS FOR MAIMAIS**

For maimais constructed a maximum of 1m above ground the following guidelines are recommended.

**Piles:** 100 x 100 RS Square or round

**Bearers:** 100 x 75 RS or G4S

**Floor Joists:** 150 x 150 RS or G4S @ 600¢

Bearers to be connected to piles with galv pile connections.  
Floors joists to have wire dog connectors to bearers.

**Floor:** Optional, but to be treated material

**Frame:** 100 x 50 RS or G4S or 75 x 75 RS or G4S

Exterior cladding treated ply or galv. Iron or board and battens.

**Rafters:** 100 x 50 RS or G4S  
75 x 75 RS or G4S

**Purlins:** 75 x 50 RS or G4S

**Roof:** Any type profile iron.

Where a structure is going to be higher above ground than a metre such as “tidal areas” etc, piles to be a minimum of 125 x 125 square or round and to be braced with brace pile fixings.

## CONSTRUCTION OF A SIMPLE TWO MAN MAIMAI

Thanks to Brad Parkes (Gamebird Hunting in NZ Halcyon Press)

With the exception of the corrugated (demolition?) iron roof, all other materials are either tanalised timber or galvanised metal (wire, nails, bolts etc). Remember that you are building a structure out in the wilds that will involve some cost, so you want it to last a long time and not rotting into decay after one season.

Building a maimai out in the field can be a real hassle for by the time you have got all the material onsite you're getting tired and errors start creeping in, the saw jams in wet timber etc. If you accept that the only variable will be the height which you attach the bearers to posts if building a free standing maimai, and the length of the bearers and joists to compensate for having to move posts closer together or further apart to get a firm footing, everything else can first be built in your garage in kitset form. This gives access to circular saws, electric drills, other bit and pieces of building material etc, saving a lot of time and heartache. Assemble the maimai as best you can in the garage, tacking rather than driving nails etc and accurately mark what fits to which where. Then take it apart again.

A brief description of the attached diagrams follows. The tanalised posts are for the maimai that will be standing in water. Length will obviously depend on the depth of water the maimai is being built in plus how far you've got to go down to find a solid footing. You can allow for heavy rain and subsequent lift in water level, so aim to have the maimai bearers stand say 500mm above normal water level. The posts, or piles (half rounds work well) require a sharpened end to drive into the mud and this is easiest done with a chainsaw or circular saw before leaving home. When driving the posts a crowbar repeatedly slammed into the ground and worked around will form the hole into which the post goes. Crowbars don't splash much and will allow you to reach deeper if building in water. A heavy axe or sledge hammer – or another post (but what about the last one?) helps to seat the post.

Without cutting the posts to height attach the bearers by drilling for the attaching galvanised coach bolts, or use galvanised 200mm nails. *Everything* depends on this attachment. If you forgot the level use an empty drink can; when it stops rolling “she's close enough mate”.

The maimai going onto firm land still requires bearers to support the flooring joists. The shore base maimai can be completely pre-built at home.

Attach the joists to the bearers and nail on your floor. Thick marine ply works well but is expensive and is difficult to carry in sheets over any distance, particularly if there is anything like a wind blowing. Better 25mm tanalised fence boards. Now you're starting to get somewhere.

The reason for not cutting the free standing maimai piles to height is that they now become available to support your walls, depending on how accurately you were able to sink the piles in relation to your pre-cut flooring. The walls should be at your eye height, or fractionally lower while you are standing on the floor. The back wall needs to be of solid construction for when sitting you will need something to lean the ageing body against and protect your back from kidney chills etc, but give consideration to cutting a 100mm wide slit in the back wall so that when sitting on the seat you can keep an eye out for what may be coming in

behind you. The door also goes in here and needs to have something solid to swing and latch onto. Have the door swing out so that the interior space of the maimai is never compromised. The other three walls could be of solid construction to give near complete protection from the weather, but strands of galvanised #8 or lighter gauge wire, with say 300mm between each strand, tightly strung right around the maimai once the corner posts are up and braced to the floor (don't forget provision for the dog port out the front) and rails are in place, will allow raupo, reeds etc to be basket woven between the strands. Raupo and reeds, even when dead, still provide considerable protection from the weather. In effect you are doing some vertical thatching and the tighter packed it is the better. This thatching will require renewing each season.

The shooting platform is just that: the spot from which you will do most of your shooting. With the walls at around eye height you can move around and be well screened by the walls, but of course this narrows the options of shooting at birds to those passing nearly directly overhead. The shooting platform enhances your shooting opportunities and needs to be high enough so that when standing on it your elbows clear the walls. Ample cover still exists to crouch behind the walls to watch incoming ducks, but when the time comes to shoot most of your upper body will be clear of the walls allowing 360 degree shooting provided your roof is low enough.

A 100mm roof slant is allowed for, thus giving sufficient slant for water run off while maintaining the desired low, unobtrusive maimai profile. Strands of your wire stretched over this allow camouflaging vegetation to be affixed, covering the bright metal or colours of the corrugated iron.

A swinging door at the back is desirable for when dressed the same as the rest of that side of the maimai the camouflaging is complete. An open gap in the side of the maimai is somewhat obvious, and also lets in rain and wind.

The seat is the last item to be built and you need to build this to suit your own particular build. Build it broad enough so that you can comfortably sit and lean against the back wall. On it you should still be able to have a good view out in front and to the sides, but because of the wall height this view will be compromised. However the seat will only be used during the lunch break or when the chances of shooting are not so good, around the middle of the day. Many of the maimais built on public water have very robust seats, which are more chests than anything as the top is hinged. Decoys etc can be stored under the top with a padlock securing the "chest" when you're away.

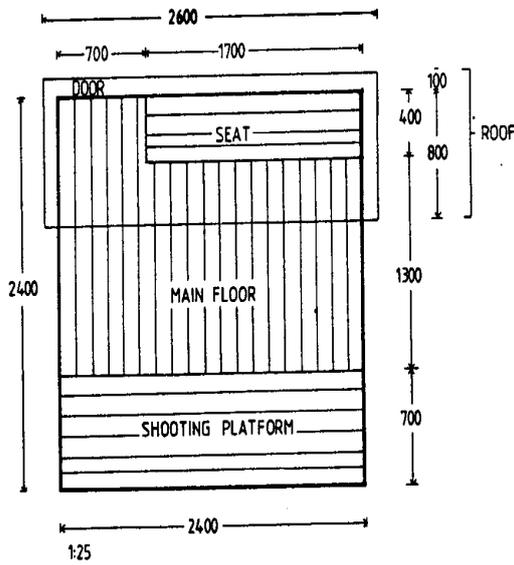
There was once a time when duck hunters weren't so security minded and decoys and boats were left for all to use as they required on the understanding that they would be cleaned, and untangled and put back after use. Pity that the low-life's have ruined that too.

Building a ramp with closely spaced slats across it down into the water from the dog port will help the dog get back into the maimai. Similarly you may need a ramp to help get you into the maimai at the door. As with the floor and shooting platform, consider stretching chicken wire over the lot as wet floors get slippery and the wire gives purchase and good footing.

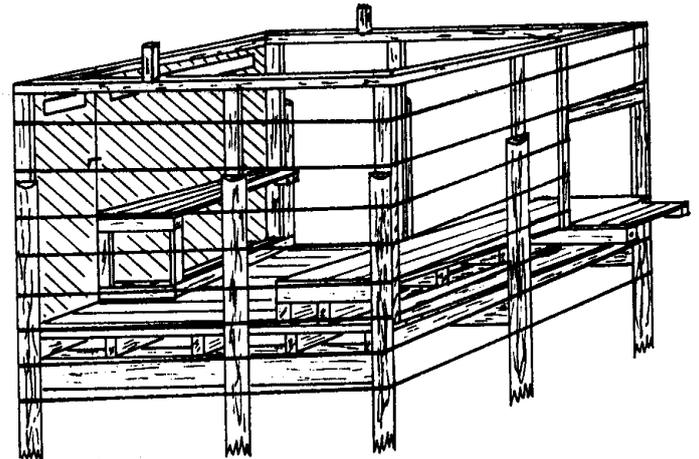
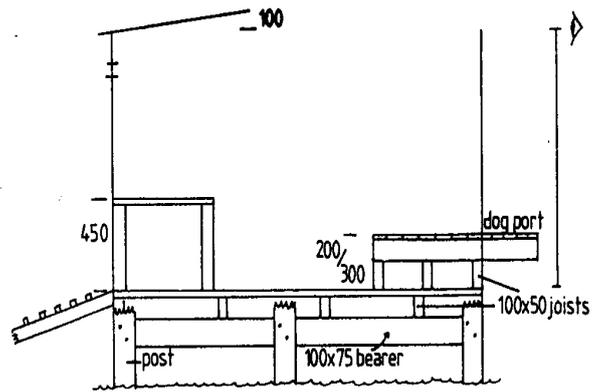
Right, now the mighty structure stands! Dress it with vegetation from the immediate surroundings but not so immediate that you're leaving a cleared swath around you maimai.

Painting the floor, shooting platform etc with Timbercryl dark green or brown covers the bare timbers and enhances the camouflage effect.

Inevitably during the season you will make little refinements, but this is all part and parcel of getting a maimai the way you want it. Adding shelves at the building stage might not be a bad idea. These are handy for putting the cup of coffee on, getting gear out of the way etc, plus a long shelf across the front of the maimai holds your gun, keeping it out of the way of restless dogs and humans alike.



PERMANENT MAIMAI



WIRE IN PLACE ON TWO SIDES  
AND READY FOR DRESSING, WITH  
THE ROOF TO BE FITTED

## **Plans for Terrestrial, Swamp and Floating Maimais**

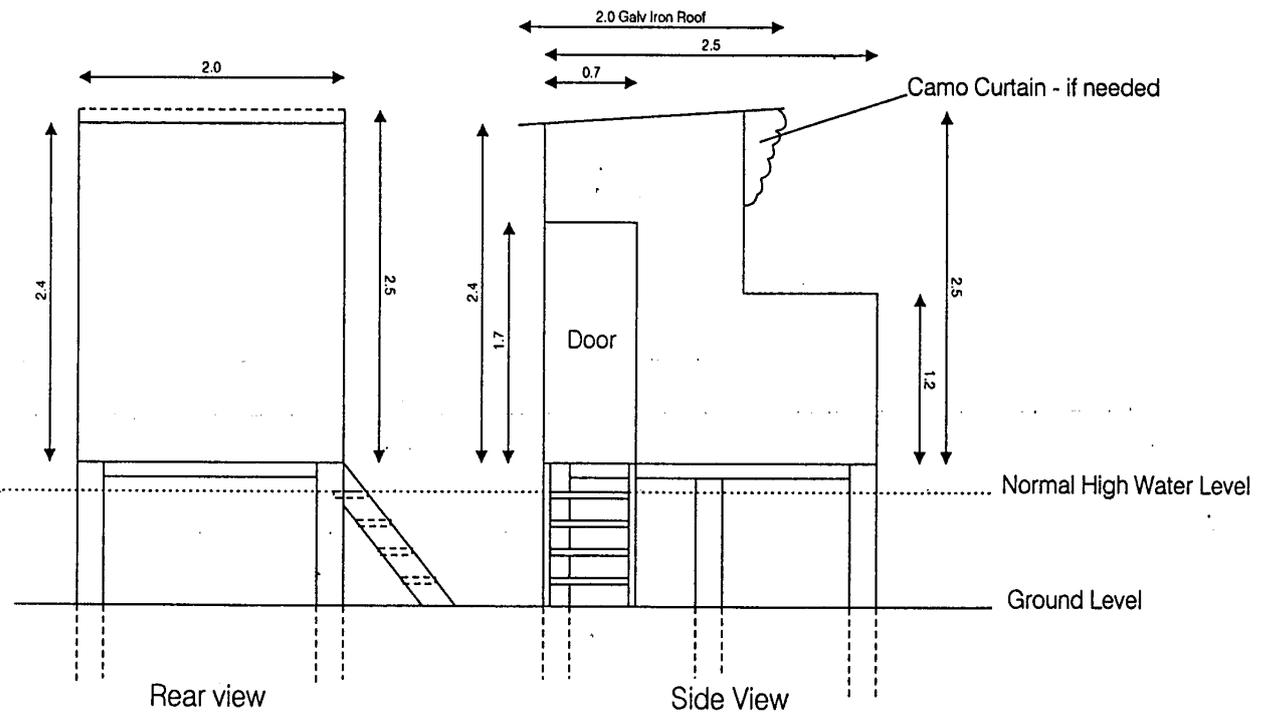
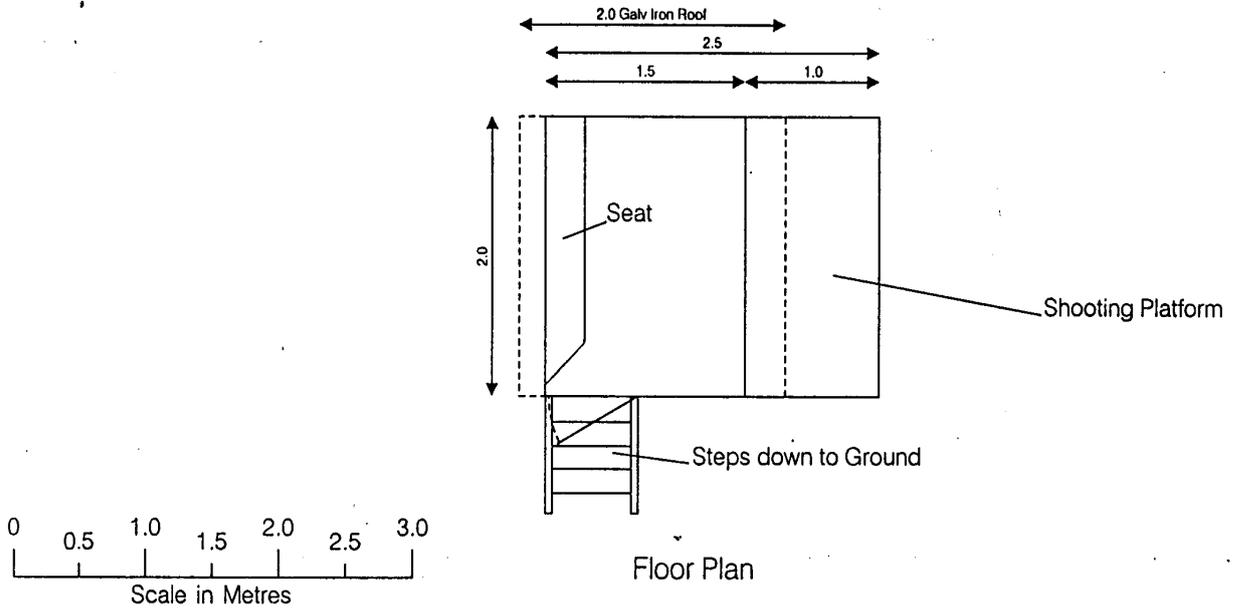
(Plans 1-5 attached)

### **Materials**

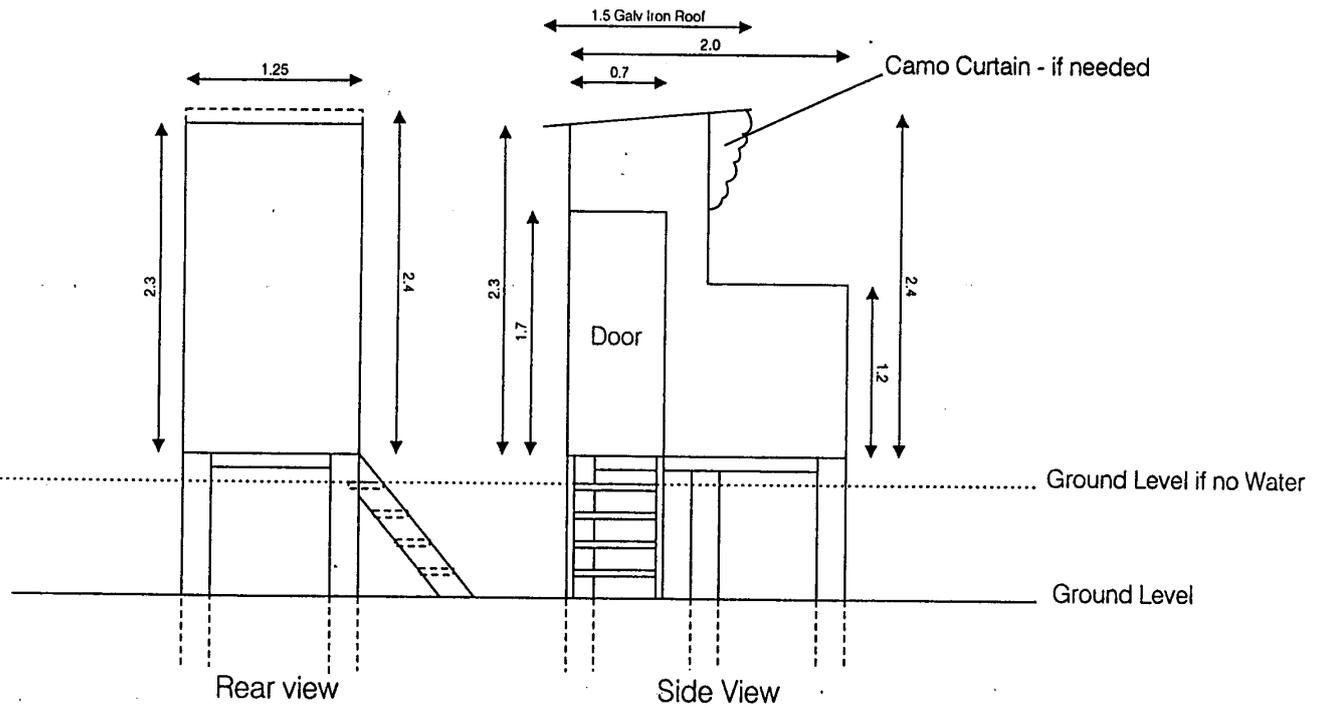
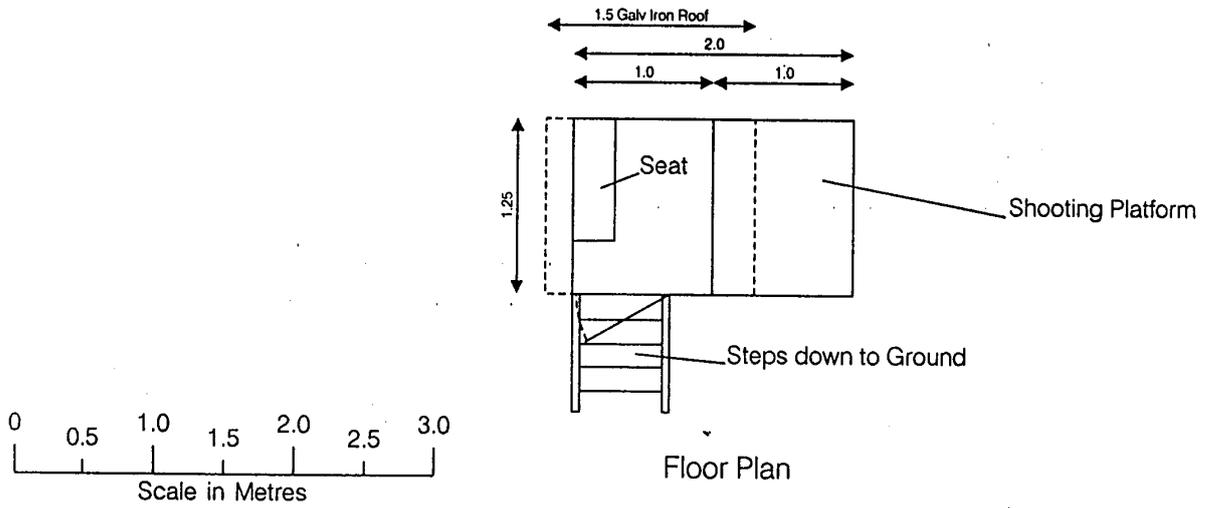
Designs arranged so that standard sheets of 2400 x 1200mm ply can be used easily.

1. All materials to be new treated timber, or if used, of good quality and treated to prevent early decay.
2. Below floor level the piles to be a minimum of No 1 round posts normally treated. If they are to be erected in swamps then the treatment should be of a higher standard. Alternatively, 100mm x 100mm H4 treated rough sawn timber can be used. The piles to be dug into the ground a minimum of 500mm.
3. All sub floor bearers to be a minimum of 100 x 50mm H4 treated material.
4. Bearers to be no more than one metre apart. Attachments to the bearers to be with galvanised “Z” nails or “nail plates” to ensure a secure attachment.
5. Stabilising rails on swamp maimais to be a minimum of 100 x 50mm treated H4 specifications at least. These need to be attached to the piles with 300mm galvanised nails and “Z” nails.
6. Floor to be a minimum of 12mm industrial plywood or equivalent treated to ensure it will last. It is recommended that a covering of chicken netting be placed over this flooring to give a non slip surface.
7. Framing to be a minimum of 75 x 50mm H3 treated radiata. If the size of the maimai is greater than one metre in any dimension then the spacing of framing materials is to be no greater than one metre centres.
8. Cladding to be industrial ply or galvanised iron attached firmly to the framing.

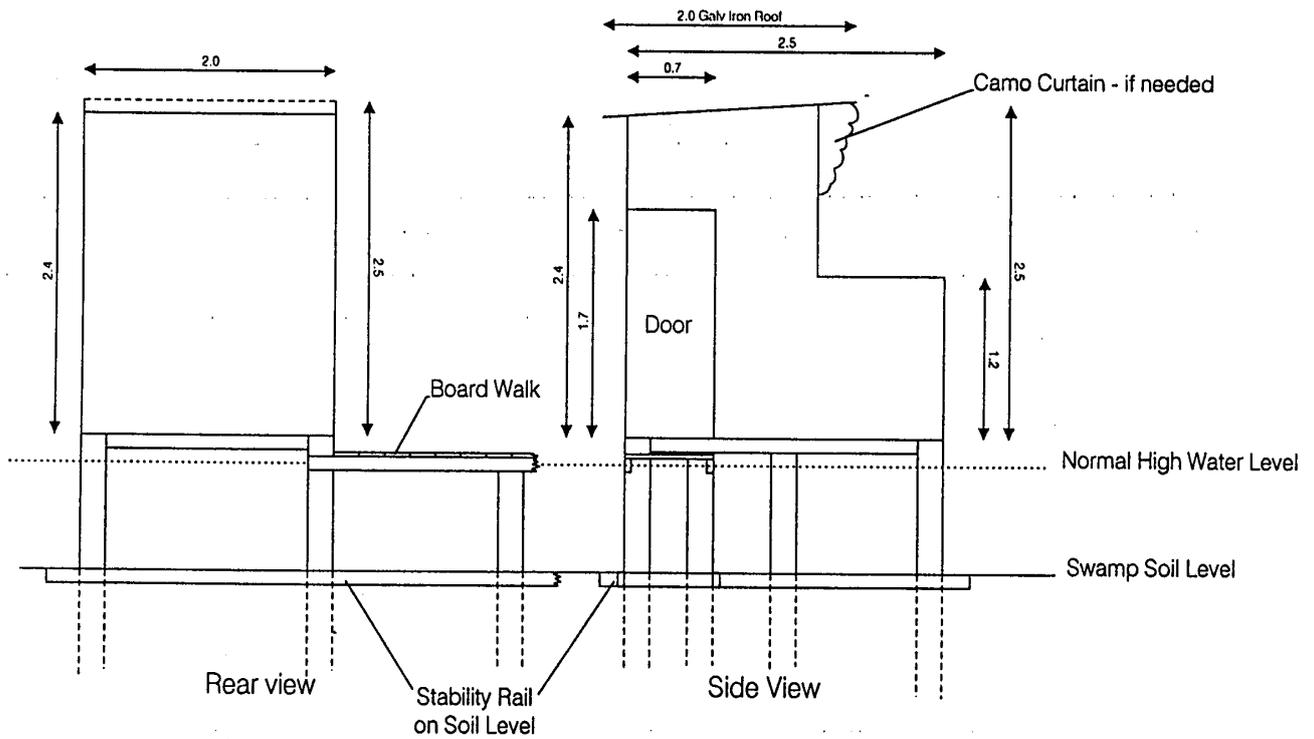
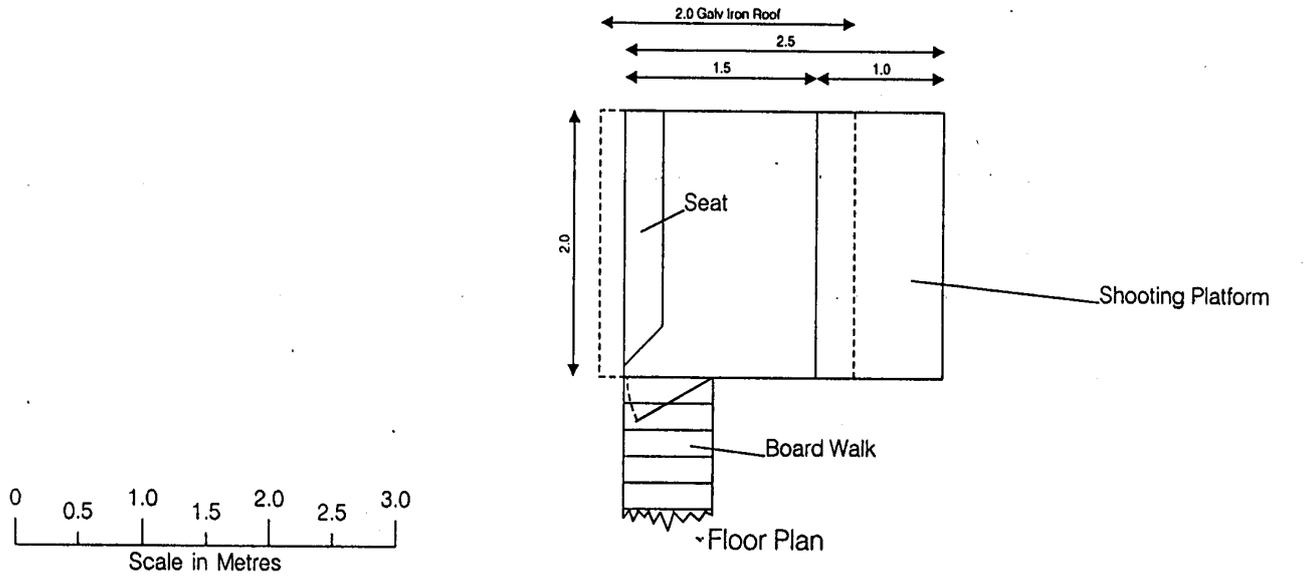
# Plan 1 Terrestrial Maimai 2 Person



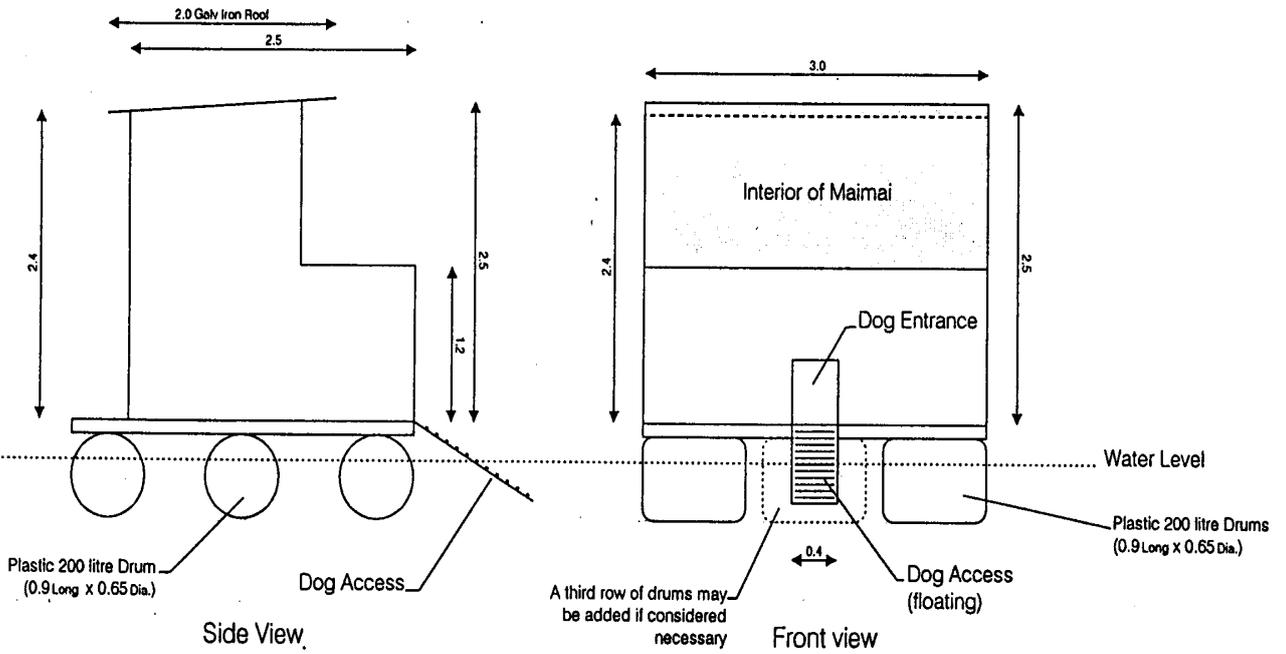
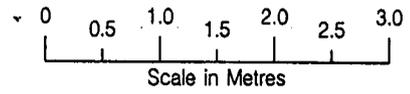
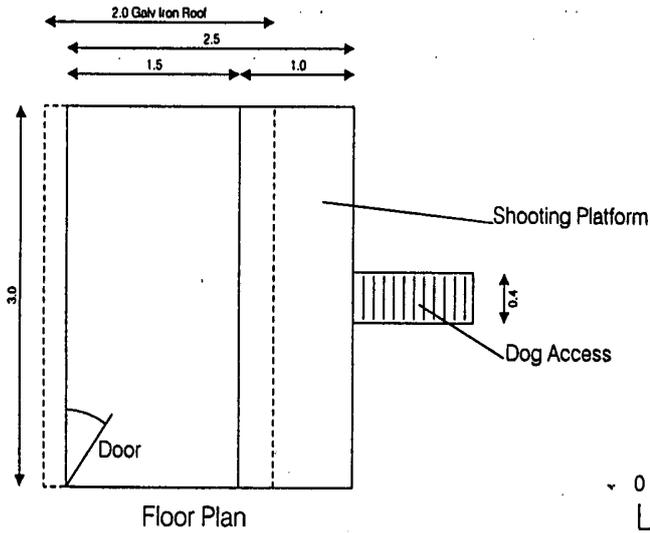
## Plan 2 Terrestrial Maimai 1 Person



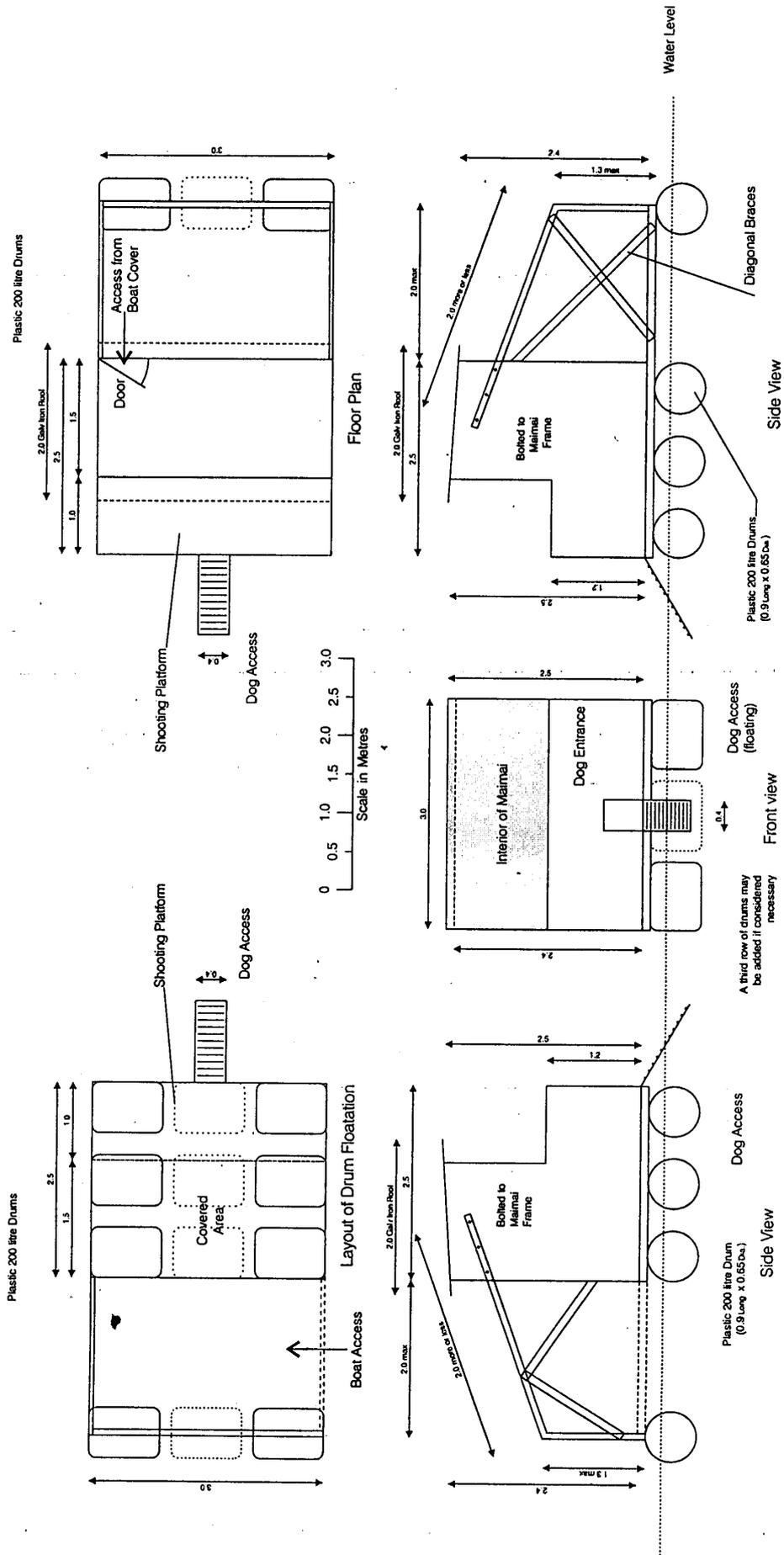
Plan 3  
Swamp Maimai  
2 Person



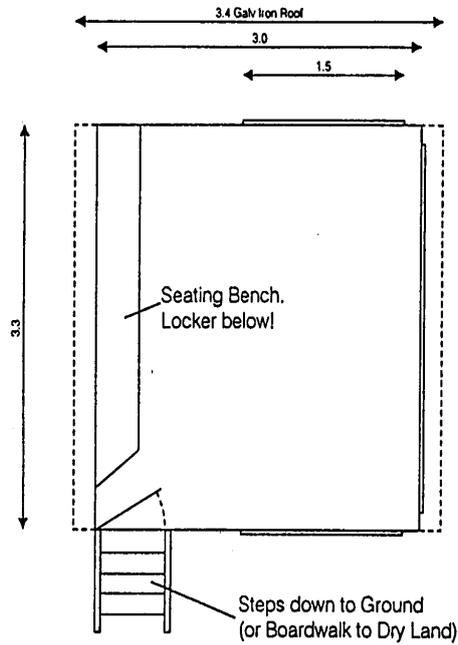
Plan 4(A)  
 Floating Maimai  
 3 Person



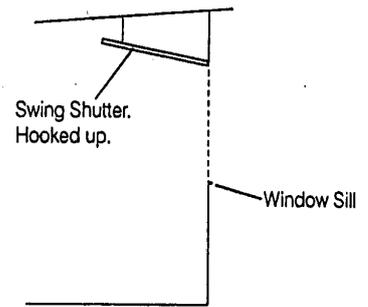
**Plan 4(B)**  
**Floating Maimai with Boat Cover Area**  
**3 Person**



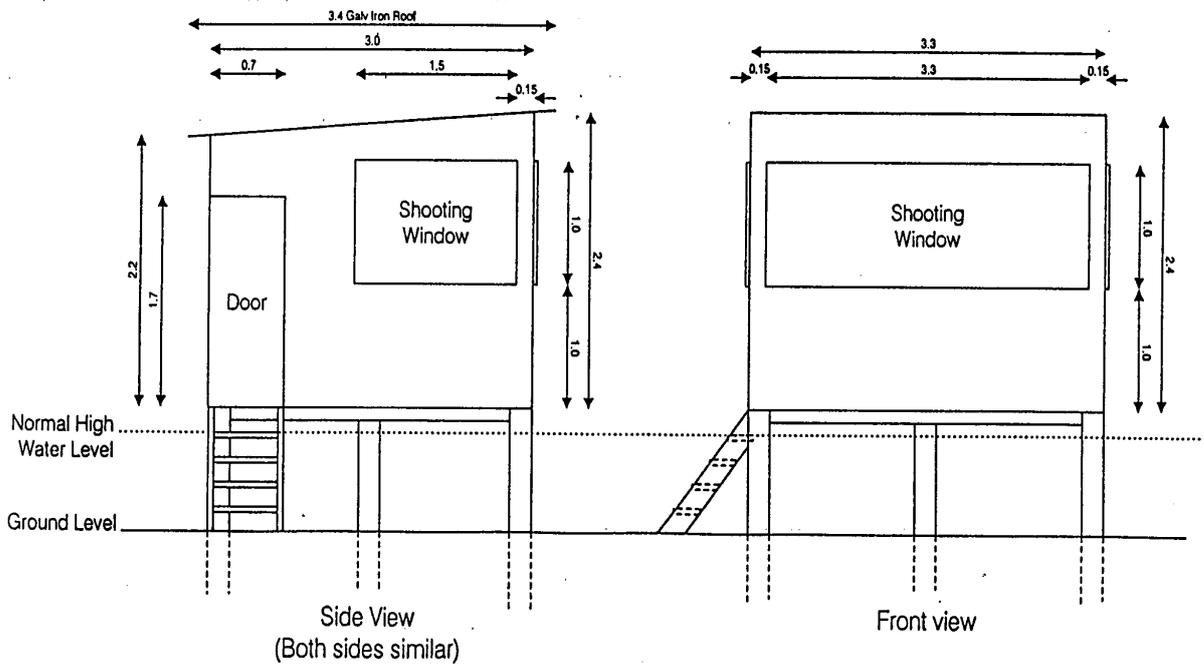
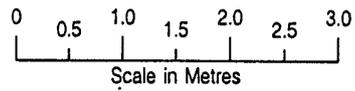
Plan 5  
 Option 2 Maimai  
 9.9m<sup>2</sup> Box Maimai



Floor Plan



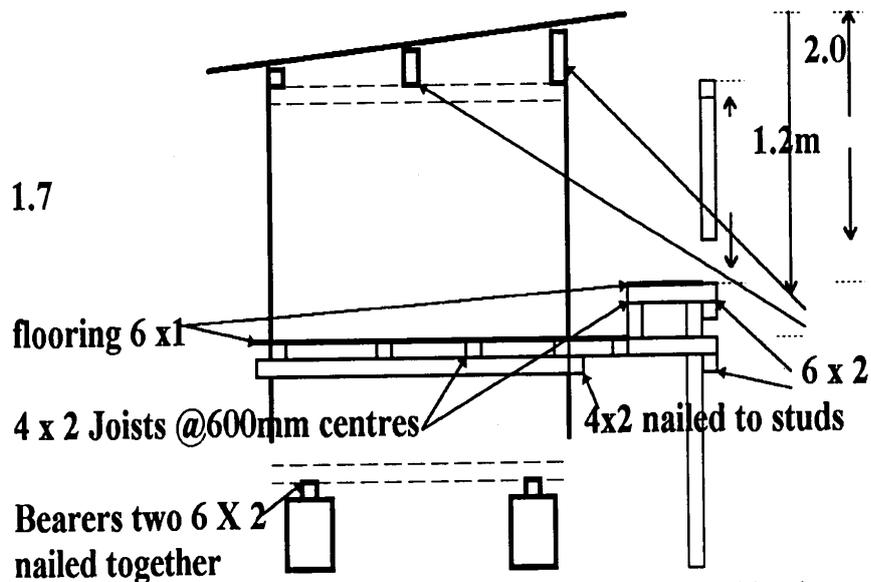
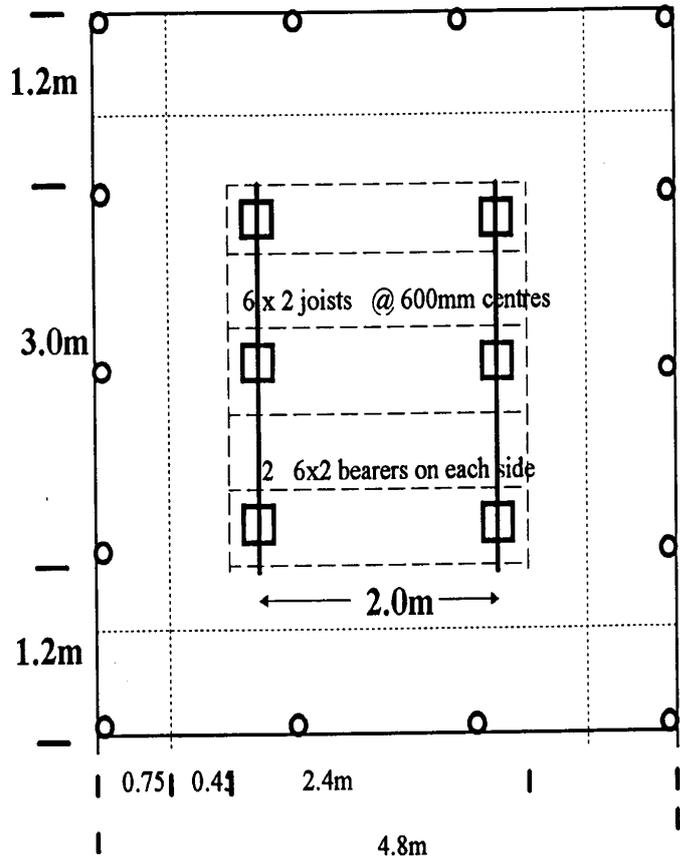
Shooting Window Detail



Side View  
 (Both sides similar)

Front view

## Pokeno Palace Mai Mai Design



All material to be H3 treated. Poles and foundations to be H4. Galvanised nails to be used through out. Slope of roof 100mm will require 6 x 2 in the centre to be let 50mm and lower end to have a 4x2 place on its side. Exterior cladding to be 6mm H3 construction ply. Colour steel roof. 3m x 3m Mai Mai will require another set of bearers.

Complies with building codes.