ARCH5112 Design Studio 1 2023

SEMESTER 1

Project 1 ARCHITECTURE & CONTEXT

Week 2 MASS CONTENT

TASKS DESCRIPTION

1. Select a site for an architectural intervention on your island. Draw a location plan.

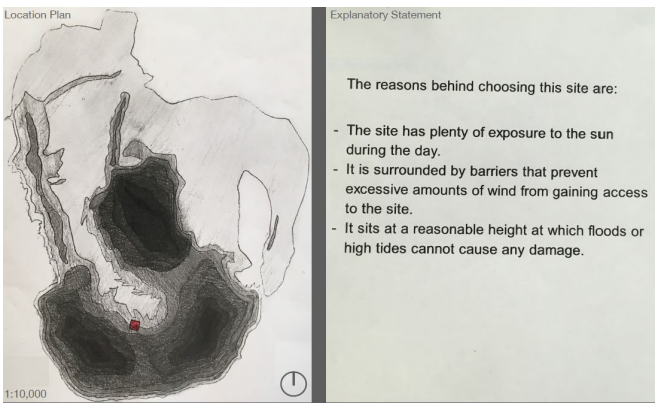
Study your 1:10,000 island model carefully, together with its contours, orientation - North Point.
Imagine the qualities of various sites for an architectural structure and select one position.

Make a tiny **RED** model cube of 1.5mmx1.5mmx1.5mm placing it on your selected site.
This represents a 15mx15mx15m cube at 1:10,000 on your 3D island model.

Draw the tiny cube in the position selected on the contour plan of your island.

This drawing is called **A LOCATION PLAN**: it shows the location of your building in the larger context.

On another 210mm x 210mm sheet of paper, describe in a few sentences, why you selected the site you have chosen.



Student Exemplar (1): LOCATION PLAN – site selection motivation description

2. Draw a site plan with contours – Scale 1:100

On your 1:10,000 Location Plan, draw a 4.2mm x 4.2mm square around your chosen site location.
This square represents a 42m x 42m square site for your intervention.

Taking the principal contour/s within that square, or with reference to one nearby, draw an enlarged plan of your chosen site and its contour context on a **420mm x 420mm sheet**.
This plan is at a scale of 1:100 and represents a site of 42 m by 42m.
Draw the north point on this drawing.

This drawing is called your **SITE PLAN**.

At this larger scale there will not be enough contours. Interpolate new intermediary contours between the contours you have already drawn; these will now be at 0.5m or 1m intervals rather than the 20m or 50m contours that are on your 1:10,000 location plan.

3. Make a horizontally-layered corrugated cardboard site model (420mm x 420mm) at 1:100.

Using the contours from you 1:100 **SITE PLAN**, cut and glue together horizontal cardboard layers to make a realistic model of the **SITE CONTEXT**.

Each contour which is made from 5mm corrugated cardboard, at 1:100, is equivalent to a contour of 0.5m.
The more contours you have, the more layers of cardboard you will cut and the steeper the terrain you describe on your site model will be.

Student Exemplar (2): 1:100 cardboard SITE MODEL 420mm x 420mm

4. Construct a solid cardboard cube

Construct a solid cube 150mm x 150mm x 150mm, made of sheets of corrugated cardboard.
Make sure it is very well glued together with PVA. USE ONLY PVA.
Use a jig – solid corner support – to get two faces of the cube completely flush and square.

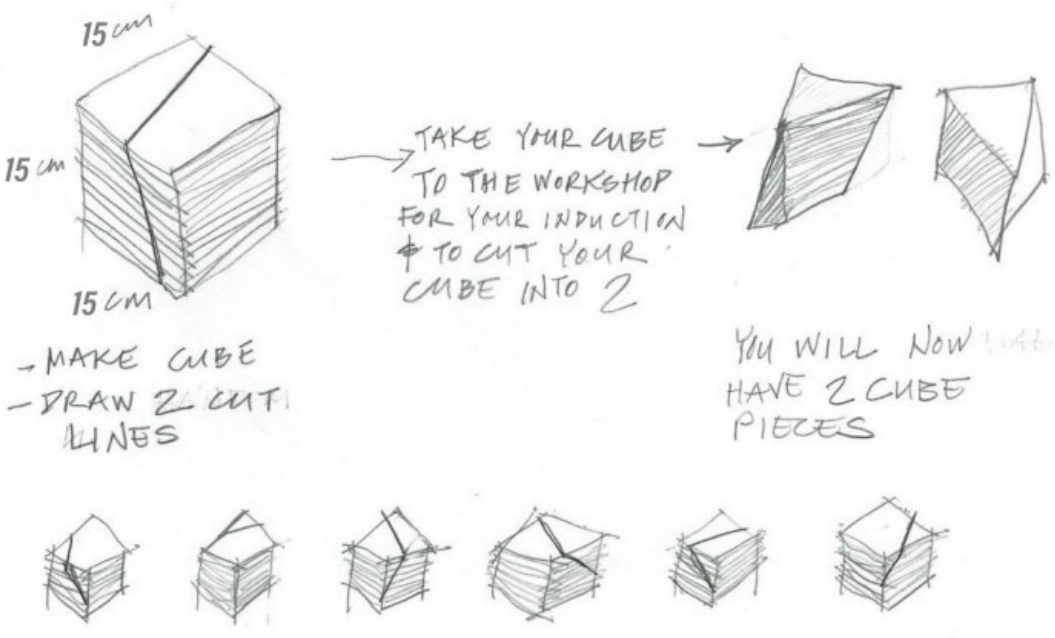
The scale of this cube is 1:100, representing a 15m x 15m x 15m cube.

On the top face of your cube draw an arbitrary line across the cube.
Draw a second line on a conjoining side of the cube from the end point of the first line.
These two lines will determine where your cube will be cut.

Take your cube to the workshop for cutting.
NB you must wear your PPE.
(see Workshop Map location under general information on the 5112 Moodle page).

Work with the technician to cut the cube into two pieces along your cut line.

You will now have two solids that form your cube representing a 15m x 15m x 15m solid cube of material at the scale of 1:100.



Instructions: making the cube, drawing the cut line – cutting the cube. Pip Newman.

5. Make a Composition of ALL 3 elements

Position the 2 pieces of your cut cube, 1:100 architectural model, on the 1:100 site model.

Experiment with these 3 elements to discover a pleasing compositional relationship.
Place them close together, far apart, turn them over, upside down, penetrating one or the other.
Try everything compositionally to find a pleasing form.

You are designing a shape which is not just about the solid pieces but also about the space around them, created by their inter-relationship and physical "conversation".

Adjust your composition to have a clear relationship to the site.

This may involve cutting into your site model if it doesn't fit in well.
Cut some of the contour model away until the architecture relates to the contour model with a convincing and clearly conceived intention.

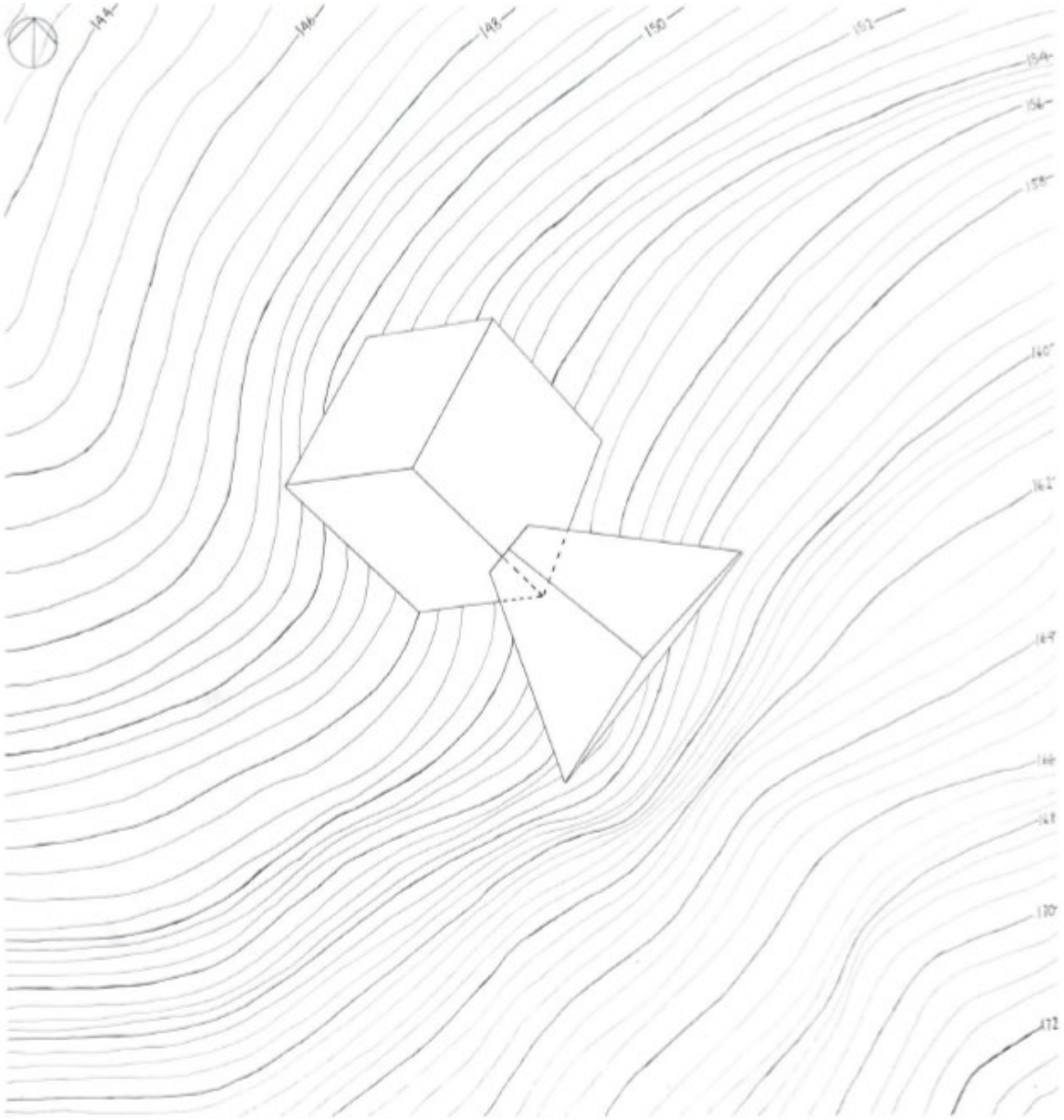
Student Exemplar (3): MASS in CONTEXT Model – composition exercise

6. Draw a new Site Plan of your integrated architecture

Draw **a clear and articulate plan** of your composition, together with the contours of the landform, at scale 1:200, on a sheet of 420mm x 420mm paper.

As when you converted your 1:10,000 plan to 1:100, changing the scale to 1:200 will change the area of site you are recording.

You will need to describe more contours and may add features to articulate your landscape e.g. water elements, changes in slope etc



Site Plan Scale 1:200

Student Exemplar (4): SITE PLAN of MASS in CONTEXT with interpolated, detailed contours
Scale 1:200 (420mm x 420mm) – clear title and NORTH POINT up the page

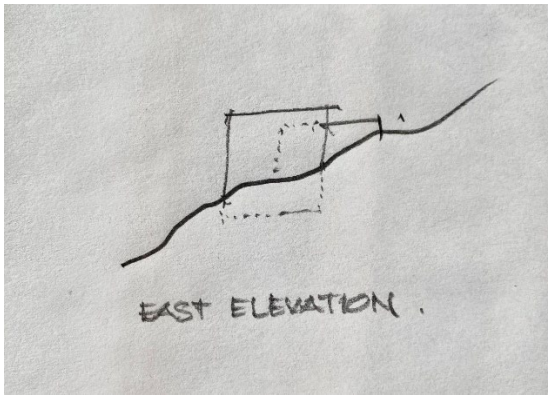
7. Draw 4 elevations of your integrated architecture

On a single A2 sheet of cartridge paper draw the **4 elevations** of the integrated architecture at scale 1:200.

After you have drawn the elevations of your structure clearly draw the ground line which describes the contour lines on the plan. This will be a single solid line which describes how the architecture sits as you intend in/on the land.

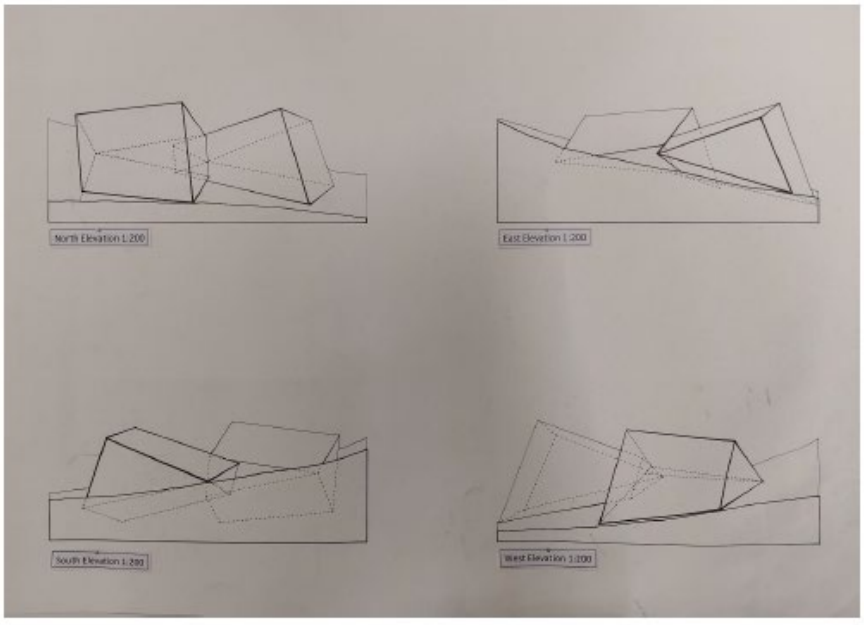
Work between your model and the plan to represent the ground line correctly relative to the structure.

Pay careful attention to line weight and line quality so that these simple drawings can be read clearly from several metres away.
The ground line where you cut through the earth should be solid and convincing.



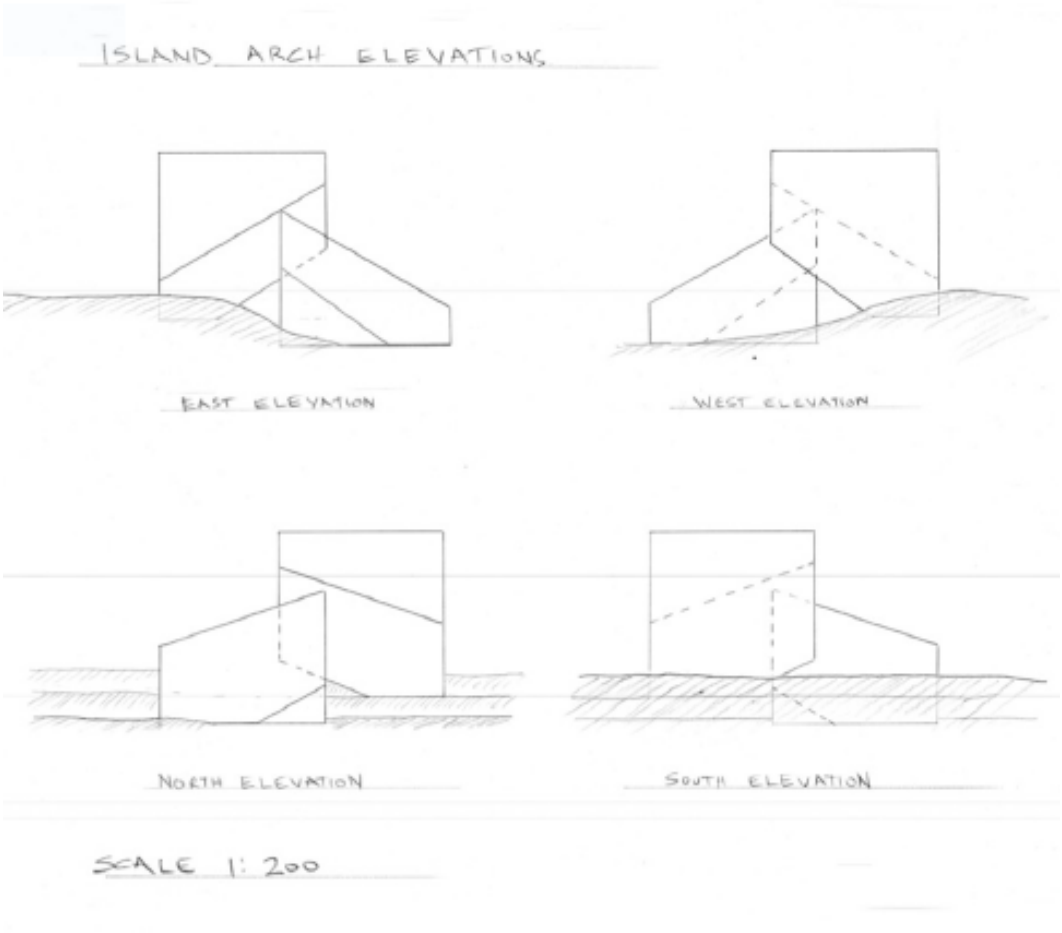
Indicative sketch of ground line and elevation conventions. Hamish Foote.

Label all the drawings with a title and scale

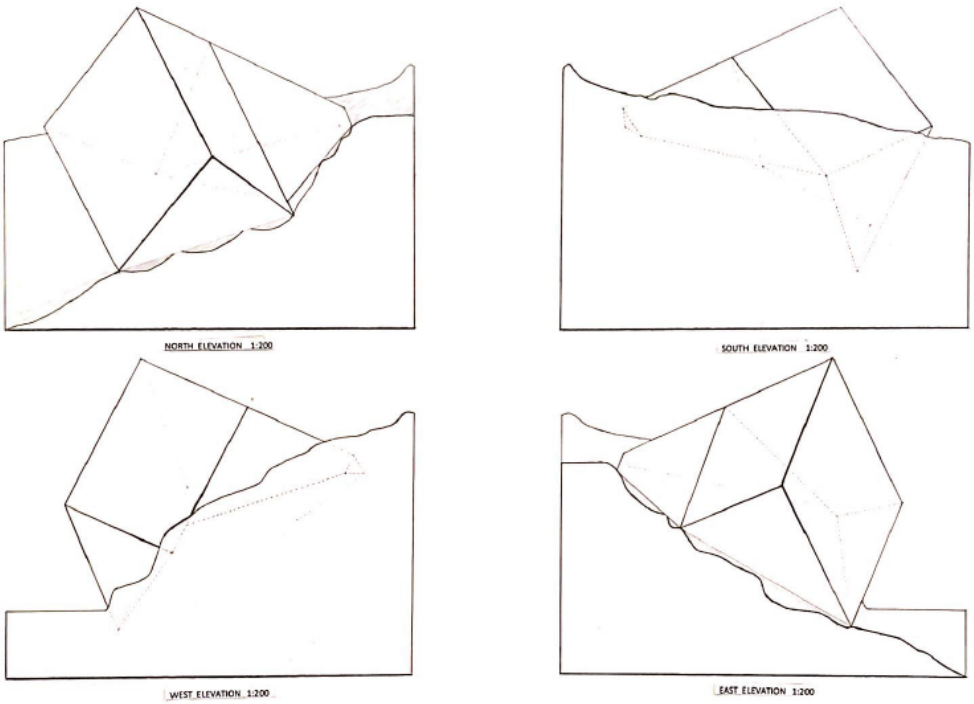


Site Elevations

Student Exemplars (6): Four Elevations of MASS composition in CONTEXT – Scale 1:200



Student Exemplars (7): Four Elevations of MASS composition in CONTEXT – Scale 1:200



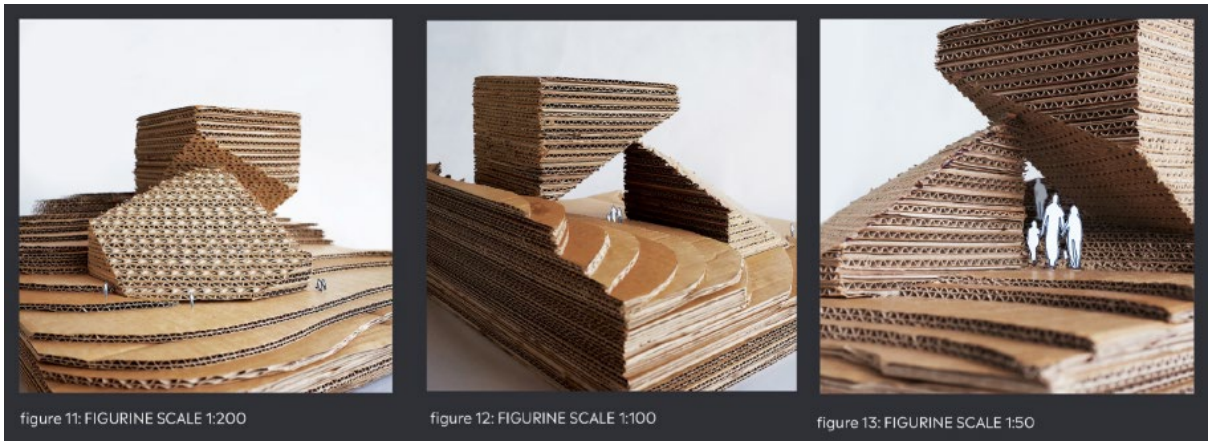
Student Exemplars (8): Four Elevations of MASS composition in CONTEXT – Scale 1:200

Your model and drawings represent clearly your Architecture in Context.

8. Photograph the model three times, with different scale figures

Photograph 1: Place an in-scale model figure = 1:100
Photograph 2: Place a figure which is twice the size = 1:50
Photograph 3: Place a figure which is half the size = 1:200

Produce three 210mm x 210mm prints of these photographs.
Neatly write or type a few sentences on a 210mm x 210mm piece of paper that explain the effect of changing the scale of the people in each photograph.



Student Exemplars (9): Photographs of scale studies of MASS Composition in Context

Student Exemplars (10): Photographs of scale studies of MASS Composition in Context