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4.510 Digital Design Fabrication
Fall 2008

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Assignment 4

Formal Models
Prof. Larry Sass

The completed assignment is due in class and posted on Stellar, Monday, Nov 3 & Nov 10 @ 2pM

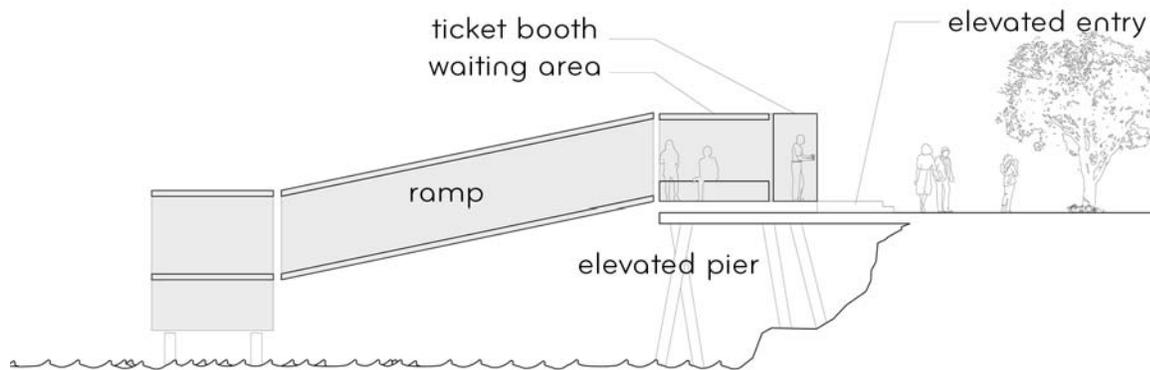
1.0 Form Making

The aim of this step is design and prototype of the building form and function in CAD and as a solid object. We will supply a simulated Dock model from which you can test models physically and visually. Your role will be to 3D Print a few iterations of the design in different positions illustrating its flexibility.

1.1 Program

There will be three major programmatic elements spread throughout the form.

- A ticket booth with space for two people
- Waiting area for 15 people
- Covered waiting area (standing) at the entry
- Covered waiting area (standing) at the boat entry



1.2 Site

The site for the first water taxi station is adjacent the ICA (Institute for Contemporary Art). The site extends from a dock near the Pier 4 Restaurant. This part of the study will be at a 1/100 in order to study form and general programming. Use the drawings below as a starting point for programming. There is a file on line to be used for 3D studies.

1.3 3D Printing

This part of the assignment is due in two parts, first is the STL file(s) due next by next Monday class. The second part is the 3D print, sign for a morning or evening print slot. The sheet is located on the door of 7-408.



Fig. 1, 3D printed forms as curved surfaces by Marcel Botha or twisted geometries by Onur Gun

2.0 Design Illustration

Present the design with a series of drawings as well as the 3D model. Required will be a plan drawing, elevation and section if possible in CAD. The drawing should be dimensioned and clearly illustrate that the design works.

- Plan Section 1" = 50'
- Section 1" = 50'
- Axonometric Projection (can be a rendering)

3.0 SUBMITTING PROCEDURE FOR STELLAR

- UPLOAD: PDF
Nov 3
- a. Name, Date, Assignment #
 - b. Axonometric Rendering or Line Drawing of the form
 - c. Plan Section
 - d. Elevation
 - e. 3D model as an STL

CLASS TURN IN: Printout PDF of Model

PLACE: Leave 3D print on shelf adjacent 3D print room