Assignment 1

February 7, 2005

Site Plan and Building Study

This assignment is due in lecture and MIT Server, Tuesday, February 14

Reference & Reading: **Small Space, The New Cottage Home & Cape Cod Houses**

P-town as it is called located at the farthest end of Cape Cod is known as a place for artist retreats and great summer night life. The town has a collection of summer cottage rentals for individuals with a maximum stay of one week. The location of these cottages is one mile from the nearest road on the west side of the cape. Anyone renting a cottage has to load and move materials from their car to the site with a small cart over many high dunes. Most amenities are permanent fixtures in the cottage.

Your job is to propose a new beach front cottage for the P-town dunes. Your proposal must come complete with built in furniture for one person to live for a week. The total cost of materials (Plywood, studs and concrete based) should be no more than $10,000. No McMansions here.

The cottage has to include small amenities for a person to eat, sleep and relax for a week. Your cottage design will serve as a platform for you to learn design, computation and digital fabrication. Use the literature on **Cape Cod Houses** to base your ideas for each weeks study. You will be graded on the quality of your design, quality of the representation and quality of constructability. You will loose points for poor design, sloppy computer representation and poor construction methods. The image below is building on the way to the cottages next to the road. The image to the left is a typical example of beach front foliage with the dunes in the background. The grey mat finish on the building below is an example of the oceans power on materials. Your cottage will take on this same grey finish in a few years.

figure 1 Cape Cod beach with a uninhabited house and local foliage on a cold spring morning.

PAGE ONE: PROJECT INTRODUCTION

Write one paragraph of design goals for the cottage. The writing should be thoughtful in design with comments based on spiritual, functional and architectural issues. Summarize your cottage functions; what you think is should do? What is its appearance? Describe the spirit of the place. Include a hand drawn sketch scanned (sketches get higher grades) and placed on the introduction page with your text *or* a photo that you have downloaded from the Assignments section. For photos download the pdf that includes all photos first, then pick the photo you need from the pdf.

Down Load – Photo Collection from the Assignments section (Assignment 1B)

To Do

1. Using MS Word Create a Document and save the document as Assignment _1.doc
2. Title Page must include your name, the class, the paragraph and image
3. Design the page so that it has some visual appeal remember, this cover sheet will ultimately serve as the introduction of your design proposal to the City of Provincetown. Create clear graphics for all assignments. Over done graphics will hurt your grade, be clear, bold and exciting.
4. Turn in this page as a pdf on MIT Server (not a doc file), printed on paper with the drawings to follow

PAGE TWO: SITE PLAN DRAWING

Use the site plan from the MIT Server as your guide. Your goal will be to communicate in diagrammatic form design ideas (problem setting) that enhance or take advantage of site and programmatic features. For example, you can include a porch that may want to face the beach. Include that and make sure to note the porch with text.

Down Load - AutoCAD Site Plan from MIT Server (AutoCAD Site Plan Drawing)

To Do

1) Analyze the site plan for natural elements then document for yourself three key features or inventions you can take from the site to be used to shape or order your building program. "Be Creative, bold ideas count"

    a. With large arrows define the **wind direction**

    b. With another type of arrow approximate **suns rays** at 9am, 12noon and 6pm

    c. With another type of arrow show the most **important view**(s)

2) Use **arrows**, a **north arrow** and **notes** to describe key features

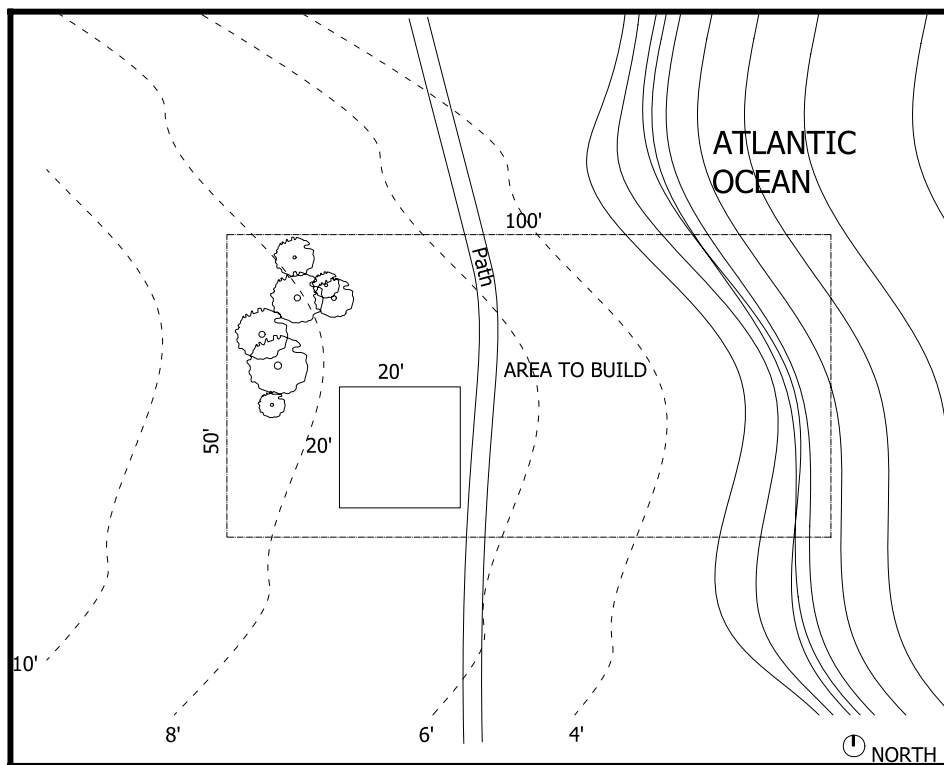3) Design a boarder and title in paper space – **your name, the class number, assignment #**

Figure 2 Site plan drawing showing bondaries.

PAGE THREE: FLOOR PLAN DESIGN

In AutoCAD you will have to create a floor plan drawing of your space, this includes a living space and bathroom. Identifying walls, windows a door, steps to get into the room if necessary and furniture. Use arrows and text where need be to describe special features or interesting points on the floor plan. Name spaces and scale spaces to their appropriate size, in other words a bathroom should be scaled on your drawing to 5' x 6'. Prepare one solution per page with text rules describing your decisions.

Building Program – 400sf. Maximum (20' x20')

     a. Sleeping space – could be a small bench or sofa bed

     b. Reading space

     c. Painting space

     d. Toilet, Sink

     e. Entry

Down Load – AutoCAD Symbols from MIT Server (Symbols)

To Do

1. DESIGN FURNITURE: Design furniture layout. Place the furniture in key locations around the space orientated to take advantage of site elements, such as a desk with a view of the site.

2. LINE WEIGHT: Draft lines in hierarchies, cuts through the wall and windows should be thickest, furniture should be lighter.

3. LAYERS: Place furniture and walls on different layers, label layers clearly

4. MAXIMUM SIZE OF COTTAGE: The main cottage space can not exceed 10' wide by 10' long, spaces should use space efficiently

5. DESIGN SPACE: Design your own floor plan do not copy the floor plan below. You will loose points if you copy this one.

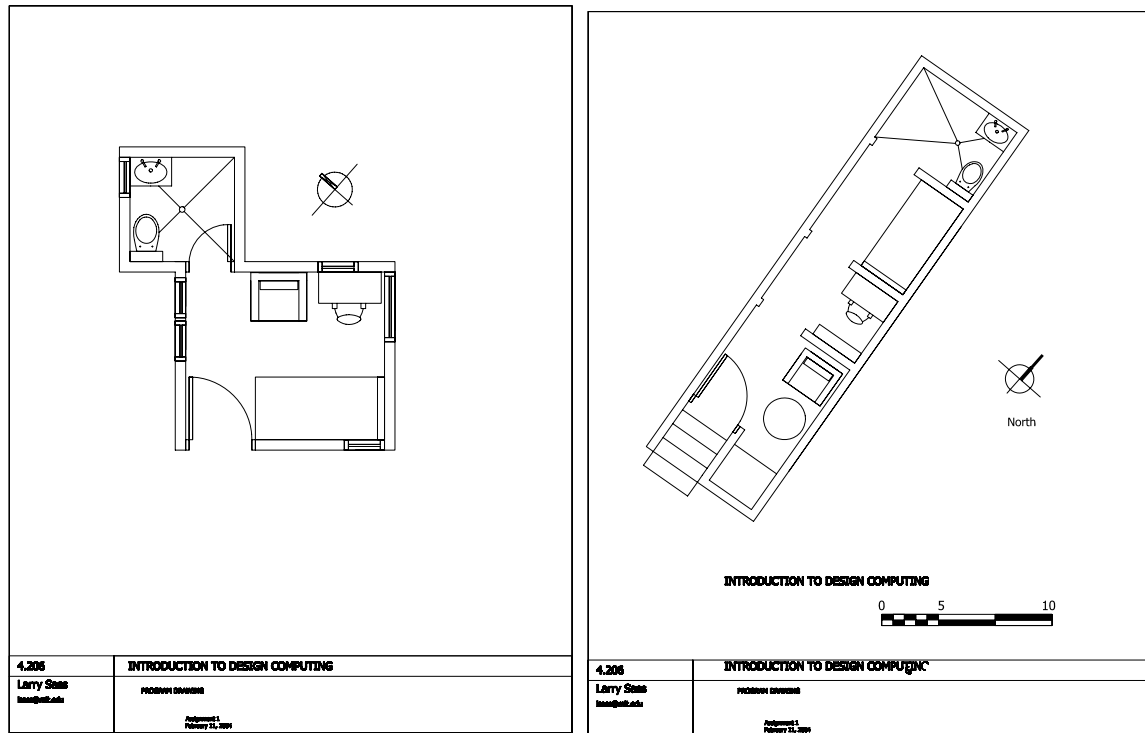6. SYMBOLS: Your plan must include all of the elements of this floor plan: North arrow, toilets, scale, etc.

figure 3 two floor plan examples the box and the bar floor plan

TURNIN

Turn in your work as a report in two separate submissions:

1. The three pages printed on paper to be turned at lecture – "Please staple the pages together"

2. MS Word doc as a pdf and two AutoCAD drawings to be turned in online (3 files uploaded to MIT Server)

Labeling of files for MIT Server: User_Name_Assignment#_Page#.XXX

> *Examples*
> lsass_01_01.pdf
> lsass_01_02.dwg
> lsass_01_03.dwg