

### **Exercise 1: Technology/ Landscape Infrastructure Study (Group B)**

*Exercise 1 is a knowledge sharing exercise. Half the class will research and present a precedent case study site, and the half the class will research a relevant technology. This brief describes the assignment for Group B – Technology Study.*

In this first exercise you will research an assigned technology. Use books, magazines and reputable websites to find information on all aspects of the technology:

- technical (plan, section, axonometric, diagram) drawings will show how the technology is constructed, what materials are used and how it works.
- photos will show how the technology looks, and show it in context in a site.
- written descriptions will describe how it works, what can be achieved, what metrics apply to assess efficiency and other relevant information.

After gathering your research, proceed to analyze and describe the technology through diagrams and drawings. The goal of the exercise is for you a) to understand and describe how your technology is used, built and works; b) describe how it works in one site-specific instance c) understand and describe the relevant metrics (eg peak flow reduction); d) understand and describe the ecological and/or biological principles behind the technology and e) make an evaluation of the technology as related to an productive urban landscape.

#### Schedule:

Monday, January 12 – Research

Wednesday, January 14 – Desk Crits. Be prepared to show process drawings for items 1-3 below to instructor during studio time.

**Friday, January 16 – Pin Up**

#### REQUIREMENTS AND PRESENTATION

Utilizing verbal presentation skills, layout, and sequencing, students will present an analysis of their assigned technology. Your presentation should focus on sharing with your studio colleagues what the technology is, how it works and how it is constructed, its materiality and any life cycle issues, and to demonstrate its use in one specific application relevant to the studio. Be prepared to present evidence of your conclusions through your drawings.

At a minimum each student must present the following, formatted on a 24 x 36 poster (**all original drawings – not cut and paste from internet**):

1. Diagrams: Draw a series of diagrams illustrating what issues the technology address and how it works. Be clear about goals, methods, operations and assessment metrics.

2. Detail: Draw a detail (plan, section and/or axonometric) of the construction and materiality of the technology.
3. Case Study: Use photographs and (original) diagrams to describe and analyze how this technology was used in a specific case. Include goals, methods and metrics. Be creative! Do not use only cut and paste diagrams from the internet.
4. Bibliography: An annotated bibliography of all sources (books, magazines, journals, websites, other) that were key to your research. (This can be handed in separately from you boards)

Case Study Assignments:

<b>Technology</b>	<b>Student</b>
Green Roof	Patrick McQuown
Rain Barrel	Wayne Nemece
Rain Garden/Bioswale	Rudy Perez
Permeable Paving	Chad Thompson
Cistern (Rehbein Environmental Solutions or similar)	Claire Thompson
Greywater Systems	Camille Cherry

Recommended General Texts:

Charles Waldheim, *Landscape Infrastructure: Case Studies by SWA*, Birkhauser, 2011 (available electronically via library website)

Liat Margolis and Alexander Robinson, *Living Systems*, Birkhauser, 2007 (library reserves)