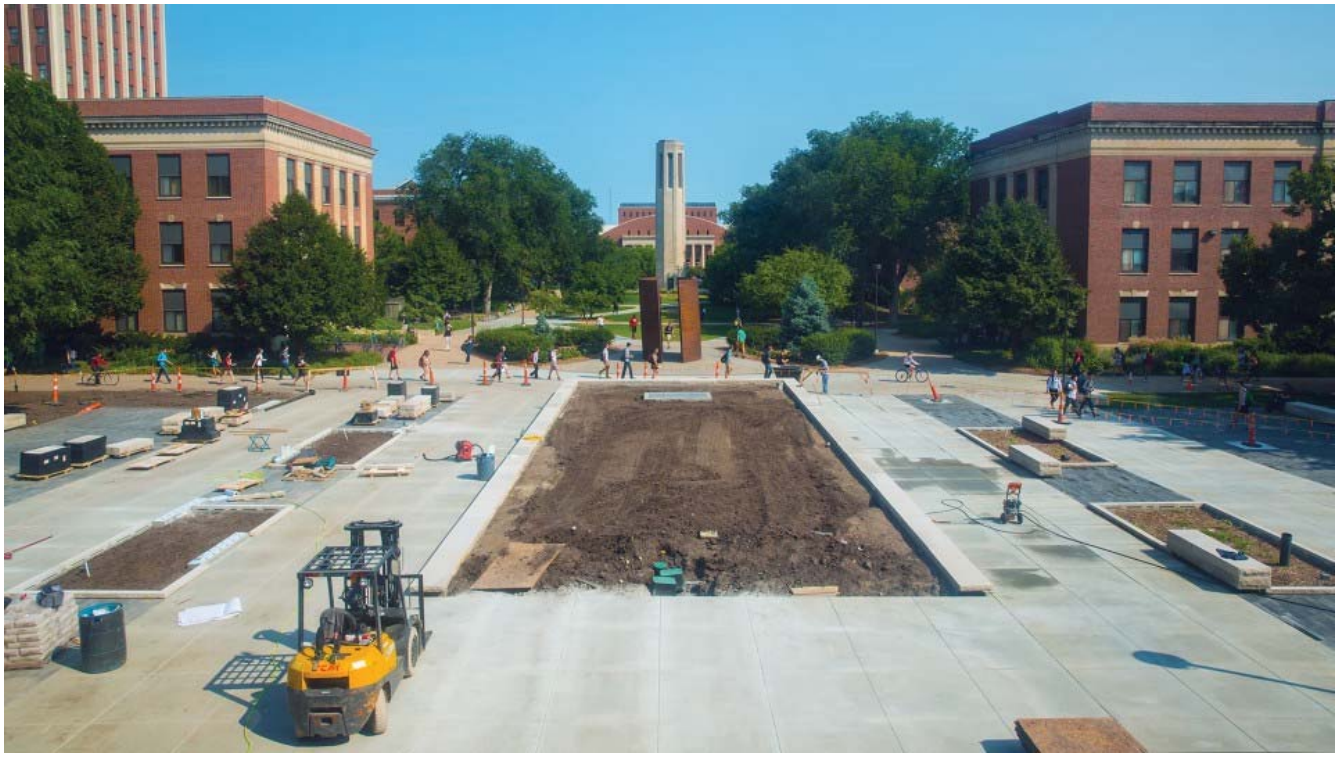

Love Library Learning Commons Plaza [under construction]: Aerial View; Clark Enersen
The plaza, which is on the north side of Love Library, includes three methods to help redirect rainfall into the ground and away from storm sewers. The project is part of UNL's new commitment to stormwater management. [from article "Love North Plaza highlights new focus on managing stormwater" by Troy Fedderson]

LARC 230: Site Systems I – Materiality in Landscape Architecture
Class: Tu / Th, 12:30 – 2:20, Architecture Hall 305, 3 Credits
Instructor: Catherine De Almeida, Assistant Professor
Contact: cdealmeida2@unl.edu; 2-4900
Semester: Fall 2017

Phase 1: Introduction to Landscape Performance through Material Assemblies; Technical Representation + Detailing

Project Description:

In this first phase, students will analyze innovative details that perform as green infrastructure. Students will select an assembly on or around UNL campus, such as Love Library Learning Commons Plaza or P Street. On-site observations will guide students to select a performative landscape strategy (i.e. stormwater filtration, native plantings, placemaking, etc.) that will be explored throughout the exercise. Detailed material assemblages will be drawn using scaled plans and sections, with diagrams that convey and evaluate the quantitative and qualitative benefits of the material assembly, combining ecological and technological performance.

The main objective of this phase is to begin understanding ways of graphically representing technical details, their material components and assemblages, and their performative qualities. The purpose of this mode of analysis is to develop methods of seeing and representing the landscape at the material scale. Throughout the semester, we will continue to explore materials used in landscape and how they are assembled. Students will develop methods for translating observation and research into technical forms of representation through interpreting and graphically synthesizing complex layers of site design. The components developed in this Phase will be the first sheet for individual material and detail libraries further developed in Phase 2.

Project Format and Structure: Phase 1 is divided into 2 parts:

Phase 1A: Material Assemblies as Performative Systems

After the first LAF Landscape Performance Webinar, and a lecture from the campus landscape architect, Emily Casper, students will select a site on or around UNL campus that uses green infrastructure components. Students will select a performative landscape strategy, and document green infrastructure components found on-site by presenting 3 photographs of individual materials details accompanied by a measured plan and section drawn to scale of their preferred / most interesting detail. Material connections will be examined between at least 3 different materials as a condition in the landscape. To understand the wide gradient of materials present, students must select hybrid conditions (both hardscape and softscape) for analysis.

Students must reference texts such as *Landscape Architectural Graphic Standards* for their assemblages to insure accuracy in the material conditions hidden beyond the surface. In addition to drawing the physical conditions of their material assemblies, students must produce diagrams that convey and evaluate the quantitative and qualitative performance benefits of the assembly, combining ecological and technological performance.

Technical drawings in plan and section with dimensions (students will measure existing conditions on-site) and labels must be used to illustrate these conditions. Drawings should highlight how your performative landscape strategy operates within your selected condition. Initial drawings will be drawn by hand using pencil (2B and HB), straight edges (parallel rulers, T-squares, and adjustable triangles), at 1/2”=1’-0” scale on 11”x17” vellum, landscape format.

Drawings are to be technically accurate, and each element carefully articulated with the use of line weights, textures, and construction lines. Initial drawings and photographs are due Tuesday, August 29, and must be pinned up in Room 305 by 12:25pm for an in-class pin up.

Phase 1B: AutoCAD

Students will be introduced to AutoCAD, and learn basic commands and a workflow for digital drafting. An AutoCAD tutorial will be provided, which will cover a variety of drafting tools and commands, and help students establish a workflow for creating a .ctb file for lineweights, using paper space to create a title block, scale and lay out drawings from model space in paper space, and add images and diagrams to sheets using InDesign.

Students will take their drawings from Phase 1A and draft them in AutoCAD as they may have been drafted before installation. Details will be revised per comments from Phase 1A pin-up. Students will create 18"x24" sheets and pin up their plotted sheets with their Phase 1A drawings for discussion.

This AutoCAD file will become each student's foundational file for the remainder of the course. By the end of Phase 2, students will have built a library and palette of material assemblages in the landscape within a single file.

Project Schedule:

8/22	Course Description, Format, Schedule, Phase 1 Project Description, Technical Detailing and Drawing Lecture
8/24	Phase 1A: Required Reading with Quotes and Discussion, LAF Landscape Performance Webinar #1, Emily Casper (Campus Landscape Architect) Lecture and Tour of Love Library Learning Commons North Plaza
8/29	Phase 1A: Final Drawings and Presentations – 8.5x11 photos, definition of landscape performance strategy, and 11x17 drawings pinned up in Room 305.
8/29	Phase 1B: Required Reading with Quotes and Discussion; Intro to AutoCAD Tutorial + Handout
8/31	Phase 1B: Group Pin-up of hand drawings translated into AutoCAD; selected benefits for evaluation; precedent images for diagramming
9/5	Phase 1: Group Pin-up of final draft board with plan + section details; diagrams; landscape performance evaluation
9/14	Phase 1: Final Drawings and Presentations – 18x24 drawings + plots pinned up in Room 305. Phase 2A Readings

Final Requirements:

Phase 1A

Boards:	Photos of green infrastructure material assemblies; one 11x17 vellum panel, Landscape format, technical hand drawings with construction lines, pinned up in Room 305 by 12:25pm on 8/29
Scale:	Plans and Sections at 1/2"=1'-0" scale
Description:	Landscape Performance Strategy with definition
Presentation:	Each project has 6 minutes total; ~3 minutes for presentation, and ~3 minutes for discussion.

Phase 1B

Boards:	One 18”x24” panel, Landscape format, technical AutoCAD drawings and Landscape Performance Evaluation, pinned up in Room 305 by 12:25pm on 9/7
Scale:	Plans and Sections at 1/2"=1’-0” scale
Description:	Landscape Performance Strategy and Evaluation
Presentation:	Each project has 10 minutes total; ~6 minutes for presentation, and ~4 minutes for discussion.

Project Evaluation:

Phase 1 is worth 15% of your overall grade for the course (1A=10% and 1B=5%). Grading will place emphasis on graphic craft, development, and clarity, research synthesis and precision, quality of visual description, and final presentation.

Phase 1 Readings:

Week	References
1	Required (Phase 1A) Loidl-Reisch, Cordula, “Constructing Landscape” in *Constructing Landscape: Materials, Techniques, Structural Components*, 3rd Edition (Basel: Birkhauser, 2015): 9-11. Kirkwood, Niall, “Introduction” in *The Art of Landscape Detail: Fundamentals, Practices, and Case Studies*, (New York: John Wiley & Sons, 1999): 1-9. Yglesias, Caren, “Preface,” “Conclusion,” and “Afterword,” in *The Innovative Use of Materials in Architecture and Landscape Architecture: History, Theory, and Performance* (McFarland & Company, 2015): 1-4, 179-184. Supplemental Zimmermann, Astrid (ed.), *Constructing Landscape: Materials, Techniques, Structural Components*, 3rd Edition (Basel: Birkhauser, 2015). Hopper, Leonard J., *Landscape Architectural Graphic Standards*, Student Edition, (Hoboken: John Wiley & Sons, 2007). Harris, Charles W. and Dines, Nicholas T., *Time-Saver Standards for Landscape Architecture: Design and Construction Data*, (New York: McGraw-Hill, 1988).
2	Required (Phase 1B) Kirkwood, Niall, “Fundamentals: Landscape and Detail” in *The Art of Landscape Detail: Fundamentals, Practices, and Case Studies*, (New York: John Wiley & Sons, 1999): 11-44.

Supplemental

Zimmermann, Astrid (ed.), *Constructing Landscape: Materials, Techniques, Structural Components*, 3rd Edition (Basel: Birkhauser, 2015).

Hopper, Leonard J., *Landscape Architectural Graphic Standards*, Student Edition, (Hoboken: John Wiley & Sons, 2007).

Online Resources

Landscape Architecture Foundation: Landscape Performance Series
https://landscapeperformance.org/

Landscape Architecture Foundation: Benefits Toolkit
https://landscapeperformance.org/benefits-toolkit

Landscape Architecture Foundation: Case Study Briefs
https://landscapeperformance.org/case-study-briefs