

Course Number and Title: ARCH 151 / Architectural Drawing I / 3.0 Credits

Instructor: Lauren Karwoski Magee

Contact: LKM@drexel.edu

Website: www.thedraftedline.com/teaching

PROJECT 3: Survey, Scale and Drafting

Many projects that architects work on involve existing buildings. To begin design, we must make accurate drawings of existing conditions, called *survey drawings*. The survey is an important first step because later design work will be based upon these drawings. Surveys are typically completed with at least one other person, but in this case you will work in teams to measure and record your findings.

Part 1 – begin in class: Divide into 4 groups of 3-4 students per group.

Each group will be assigned a section of the 3201 Arch Street corridor to survey. All students must draw, freehand, a plan view and the north interior elevation of the corridor. These drawings must be located in the large sketchbook and should be proportionally correct but *not drawn to scale*. Take approximately 20 minutes to complete this.

Part 2 – begin in class: Survey

Assign roles in your group – one or two people should record measurements in their sketchbooks, the other two should use the tape measure to measure existing conditions to the nearest ½".

Part 3 – Drafting

Make photocopies of the survey information for each member of the group and exchange this information with your partner group. Using the survey information, each student must draft at ½"=1'-0" scale a plan and elevation of the corridor. Use vellum and your lead holder with appropriate line weights. Hand- letter your name, the date, the scale and the drawing names (plan, elevation) on the page.

Primary: important structure or perimeter lines; foreground objects; ground line, floor plane, ceiling plane

Secondary: change of planes such as door and window frames, stairs

Tertiary: surface textures, closely-spaced lines such as the thickness of glass

Construction: all layout lines to be extended from page edge to page edge; lettering layout lines

Dashed: important overhead lines such as columns caps; important information that is hidden from view

Be sure to include wall thickness; change of plane at doors, windows and jambs; locations of knobs in elevation; locations of ductwork in elevation and plan; lines of columns in plan and elevation.

Grades for this assignment will be based upon your ability to meet the following assignment objectives:

- Draw existing conditions freehand in true plan and elevation views (all must complete this!)
- Accurately survey and document existing conditions
- Work with a group to collect and share survey information
- Draft information to scale, demonstrating an understanding of plan and elevation drawings
- Lay out drawings properly on page accordingly to the conventions of orthographic projection
- Utilize line weights and line types appropriately
- Incorporate text into the page layout
- Demonstrate fine craft and drafting technique

Teams A & B: Plan Survey

Teams C & D: Elevation Survey

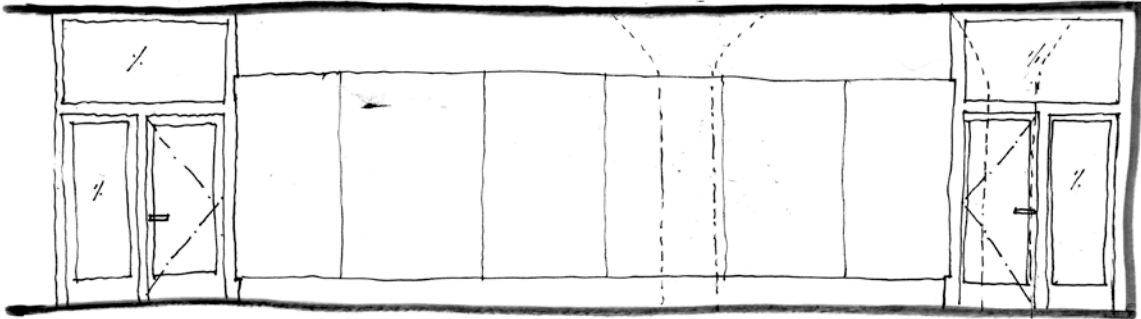
All teams: freehand drawings of plan and north elevation in sketchbook

All teams: drafted plan and elevation on vellum at $\frac{1}{2}'' = 1'-0''$ scale.

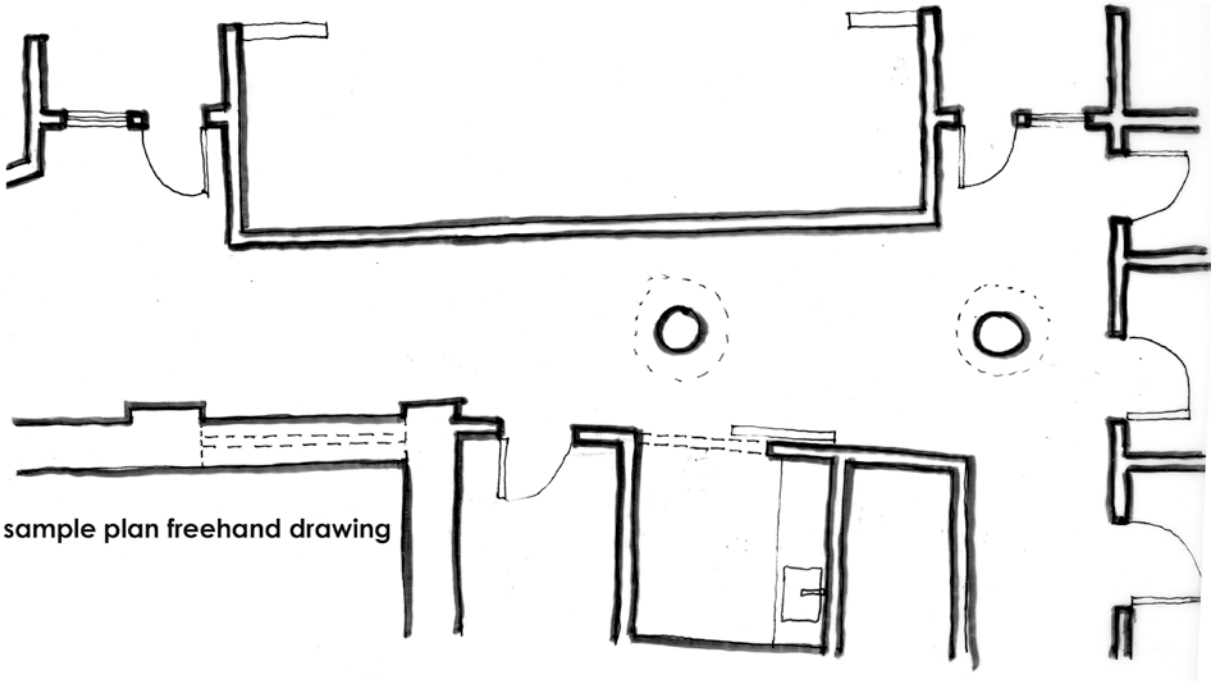
Review Design Drawing, 1998 edition:

Floor Plans: The Plan Cut, p. 136; *Doors and Windows, Drawing Scale*, p. 140-141

Building Sections: Interior Elevations, p. 157



sample elevation freehand drawing



sample plan freehand drawing

Assignment Due: 2pm, Tuesday Nov 10 (Section 1) or Thursday Nov 12 (Section 2)