

ARCHITECTURAL DESIGN STUDIO V

PHASE III: SCHEMATIC DESIGN

The purpose of **schematic design** is to develop an approach, an idea, a *parti* that synthesizes all the information about the client and the site into an arrangement of spaces that responds to all the issues, meets all the requirements, and can be refined into a wonderful building.

The design at this embryonic stage shows the scale and relationship of the project components - the plan for the building relative to the site, its solar orientation, and views; it presages what the building will be like spatially and architecturally.

Paul Segal

*Professional Practice: A Guide to
Turning Designs into Buildings*

In the schematic design phase, you will continue to develop the initial thoughts you proposed in your conceptual design presentation. In this phase, you should be fully examining the formal plan, section, and elevation qualities of the building, defining the principles upon which the building will be founded/configured/organized, and completing the layout and disbursement of the entire program. You should also take the time to carefully study the relationship of the person in space, the tectonics of the building, and the relationship of the project to its context(s). Schematic design should conclude with a comprehensive understanding of the spatial and formal qualities of the project.

For the most part, what you produce in this phase should be comparable to what you pinned up at a typical final review in the third year. In your drawings, models, and texts (both verbal and written), you should present your work in a professional manner. You should make a point of ensuring that your ideas are present in all aspects of your work. As such, take the time to include blocks of text and diagrams throughout the presentation that illuminate the quality and complexity of your architectural thinking.

WORKFLOW

At this point in time, you need to start to make some conscious decisions about how you are going to work digitally for the rest of the semester. You have a number of software packages available to you, which all have different strengths and weaknesses. Be very aware of which tools are best for which situations and how they can coordinate when necessary. Revit, Rhino, Illustrator, and InDesign (along with maybe a bit of Photoshop and Acrobat) will likely be the best candidates for the semester, but how they are used could vary considerably from user to user.

REQUIREMENTS

- 1: **Statement of Intent** | maximum of one 8.5x11 page of typed text

This statement should describe your formal, material, tectonic, contextual, and/or spatial intent for the project. It should be meticulously written, allowing the reader to clearly understand your formative ideas. The text should be suitable for reading aloud at the presentation and for inclusion in a published, public format.

- 2: **Site Plan** | 1" = 20'-0" or other approved scale

The site plan should include pertinent context in all directions (probably upward of an area of 600' x 400' for our project). It should also include parking, drives, landscaping, sidewalks, ramps, paved areas, drop off locations, dumpster locations, and other site elements and conditions. All of these elements are expected to be designed, not just dropped on to the site at the last minute. The design of the project does not stop at the perimeter of the building; it includes every square inch of the site and, in some cases, out into the surrounding environment. The building can either be shown as a roof plan or as a simplified version of the first floor plan.

Your drawing will include a title block, a north arrow, a written and a graphic scale, and labels for adjacent streets. It should also clearly demonstrate an understanding of the zoning research done earlier in the semester through incorporation of property lines, setbacks, etc,

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which can be included graphically as well as through blocks of text indicating specific concepts or requirements.

In addition to the site plan, you should plan on using context maps or other devices to situate our site in the larger community context. Please use material from the context research for this task.

3: **Floor Plans** | 1/8" = 1'-0" or other approved scale | all floors must have plans

The first floor plan should include pertinent context in all directions, clearly linking it to the surrounding site conditions. The upper floor(s) do not require context, but can utilize it if appropriate. Spaces should include furnishings, fixtures, built-ins and other information to graphically convey use and scale. The preliminary structural grid should be evident. Drawings should be clean, clear, and easy to read.

The drawings will include title blocks, north arrows, and written and graphic scales as well as room tags, structural gridlines, and tags as necessary to reference other drawings in the set. The drawings should also use notes, blocks of text, and callouts to indicate compliance with (and that you were thinking about) building code issues, especially those related to occupancy and egress. Please also use annotation to designate specific material choices.

4: **Building Section(s)** | 1/8" = 1'-0" or other approved scale | must have at least one

Building section(s) should be carefully located to best demonstrate the principles, qualities, and character of your project. The section(s) should include pertinent context, linking them to the surrounding site conditions. They should have a clearly indicated cut as well as graphic portrayal of the space behind the cut (interior elevations). As appropriate, spaces should include figures, fixtures, built-ins and other information to graphically convey use and scale. Adequate clearances for structure and mechanical systems should be evident. Drawings should be clean, clear, and easy to read.

The drawings will include title blocks and written and graphic scales as well as room tags, structural gridlines, elevation callouts, and tags as necessary to reference other drawings in the set. The drawings should also use notes, blocks of text, callouts, and graphic tools to indicate primary systems, structural components, mechanical spaces, and other special conditions.

5: **Perspective or Axonometric Section** | scale will vary | include one

As we progress through the semester, the perspective or axonometric section will become the centerpoint of your investigation. In this initial submission of the drawing, you will need to select a specific section/corner/area of your project that will best convey the conceptual ideas and the technical sophistication of your design scheme. The area of the project depicted should include a variety of conditions, relationships, and construction techniques as well as the most interesting enclosure and detail conditions. At this point, you will be making some educated guesses based on your ideas for future development.

This drawing should contain as much detail as possible at this point. It should also include annotation describing all unique conditions and construction systems as well as conceptual ideas that can be seen within the drawing. The drawing will include a title block and scales as appropriate. You should also include a key plan, which locates the section in the larger building.

6: **Building Elevations** | 1/8" = 1'-0" or other approved scale | must have at least two

The elevations, of two prominent facades, should include pertinent context, clearly linking them to the surrounding site conditions. It would not be unusual in some situations for an elevation to include the elevations of adjacent buildings in order to discuss relationships such as scale and materiality. The elevations should include a graphic representation of all materials selected for the enclosure as well as all openings. As appropriate, spaces should include figures, landscape, and other information to graphically convey scale. Drawings should be clean, clear, and easy to read.

PRIORITIZATION

The studio prioritizes the production of a drawing set documenting the proposed design, with an emphasis on projects featuring realizable constructions drawn to rigorous, professional standards. Other artifacts which might be produced in the studio—e.g., presentation and study models, presentation drawings, renderings and the like—ought to supplement the aim of producing the drawings, not supplant it.

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The drawings will include title blocks and written and graphic scales as well as structural gridlines, elevation callouts, and tags as necessary to reference other drawings in the set. The drawings should also use notes, blocks of text, callouts, and graphic tools to indicate materials and other special conditions.

7: **Additional Drawing Components** | scale, quantity, and components will vary

In addition to the drawings outlined above, the presentation of your architectural ideas will require additional tools. The tools you have available to you, at least some of which are required to be in your presentation, are:

- **Renderings or other Perspective Drawings**, which are used to convey the experience of being in a space, material qualities, sense of scale, and means of inhabitation. Except in specific circumstances, these drawings are best situated at the eye level of the viewer to best convey what it is like to be in the space.
- **Diagrams**, which are used to graphically convey how a project works. Please refer to the Studio Notes document for thoughts on how best to use diagrams.
- **Process sketches, drawings, models, or other previous work**, which are used to demonstrate how your project has evolved.

You will coordinate with your instructor as to which of these devices are most appropriate for use in the presentation of your specific project.

8: **Model** | 1" = 20'-0" or other approved scale

Model requirements will vary per project, but the model should clearly demonstrate the three-dimensional qualities of the project and the relationship of the building to the site and the project to the context. Models should include critical context around the project, especially in relationship to design decisions. Please indicate north on the model as well as the scale.

9: **Program Document** | 8.5 x 11 formatted document

Please have a copy of your program document, previously created, available at the review.

SUBMISSION REQUIREMENTS

The review of the Schematic Design phase is a working review. As such, you are not expected to have a hyper-refined presentation. Each drawing (or model) should be carefully constructed using appropriate lineweights and other drawing/modeling standards. Your work should be clear and legible, to scale (when appropriate), and clean. However, it does not have to be formatted in a sophisticated graphic presentation on a specific type of paper. Put your time and effort into the design process and into the individual components in order to get as much feedback as possible.

All materials will be built or printed and will be used to create an analog presentation of the work. There will be no digital presentations in this Phase of the project.

Your work must be pinned up or handed in prior to the assigned time and at the assigned location or it will be considered late.