

The Catholic University of America
School of Architecture & Planning

ARCH 402/503: Comprehensive Building Design Studio (CBDS)

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6 credits
M, W, F - 1:00pm - 6:00 pm

Comprehensive Building Design Studio (CBDS)

Exploring the Integration of Building Systems, Materials, and Construction Methods into a Cohesive Whole

ASSIGNMENT #2: SITE ANALYSIS AND WORKPLAN

PROJECT RESEARCH

Although this assignment will be concluded with the Pre-Design / Schematic Design review, each firm is expected to present new, developed work responding to the items below during each studio class.

Evaluation will be in the form of desk critiques, group discussions, and pin-ups with your colleagues and instructors.

demographic / neighborhood context

Research and collect data for the transit hub users in DC. Compile, analyze and synthesize information into concise, clear presentation. Document existing conditions of the site including (but not limited to) vehicular vs. pedestrian traffic patterns, sun, wind, usage flows, infrastructure, density, materials, scale, proportion, etc...)

Suggestions:

- a. Document in photos both sides of H Street corridor (for stitching into street elevations), then 3D perspectives and details photos.
- b. Research and document site info for H street corridor, aerial photos, city plan (w/ streets, parcels, building footprints, zoning overlays, historic overlays, etc.).
- c. Review and familiarize yourself with the other city docs listed under course website, such as Great Streets Initiative Guidelines, DOT docs, historical background for H Street NE, etc.
- d. Start and keep a small personal sketch pad for the course. Use it on the site visit, and as a running archive or your thoughts, ideas, concepts, details, and other info for this course. Show those at reviews, and for the final.

code / leed analysis

Collect, analyze and synthesize all relevant Code information relevant to the architecture building typology and the proposed site. Review the appropriate zoning codes from the District Office of Zoning.

Please refer to the following documents:

Building Codes (IBC 2000) – Presentation Board and Binder Chapter

LEED Certification (Course Website)– Materials Presentation Board and Binder Chapter

program / precedent analysis

Read the proposed program.

Begin to make relations, via diagrams, of the required / desired adjacencies. Research other light rail/ mass transit stations and begin to clarify your firm's "vision" for what the architecture of the transit hub should be in today's world. Does this align with the proposed program? How does your vision differ, support, or move beyond the proposed program. Document your thoughts by collecting supporting information, data, precedents, etc. Revise the proposed program accordingly.

drawings

Once a site has been chosen, redraw the existing conditions of the site from information gathered from the drawing provided, aerial photos, site surveys, and site visits. Locate infrastructure, landmarks, building use, etc.

Create a base site plan document which you can use as a template for future analysis and presentation drawings. Please illustrate an appropriate level of detail for various scales. For example, a site plan at 1/32" scale may not need the same amount of information as one drawing at 1/8" scale.

Incorporate a substantial amount of the adjacent site content. Extend the drawing to relevant landmarks in the area. For example, a drawing which includes the site context and a 2-3 block radius surrounding it may be appropriate. Start here, zoom in and out, and add appropriate information as you create subsequent scaled site plan templates.

WORKPLAN

Gather all the information you have researched. Decide how sufficient and list all missing information. List issues critical from the information and establish meanings and patterns in the information. Work backwards from the deadlines listed in the main course schedule, show start dates and intermediary benchmarks for your team to achieve the deliverables.

Make a list of tasks you will need to properly gather, assess and document the information (information needed, sources to obtain it such as books or agencies, time needed to obtain it, tasks needed to document the information and time needed for each task). Rank the tasks in order of most critical to least critical. Indicate the order for completing the tasks and who will be completing each task. Tally the amounts of time allotted for each kind of task and establish dates and times for completing them.

When done, put it all together in a memo. Put it all together in your Project Binder in reverse form starting with work plan and ending with the analysis and research.

Your workplan must be updated weekly. Critics will evaluate it periodically.

DUE: Friday, January 23

ITERATIVE STUDIES

site model

This site model is to be used for placement of future Schematic Design models. Using the site plan as a base document, construct a model with appropriate context. Buildings modelled should be abstracted slightly, but should, at a minimum, suggest the massing of adjacent structures. Existing organizing lines (i.e. predominant floor levels, elevational zones, etc.) should be suggested.

Model should be constructed at 1/16th scale. Although models will be used during presentations, the models are "study" models and will be modified as the process proceeds. In other words, please invest the appropriate amount of time necessary- don't waste you time on creating a flawless site model.

concept models

During this pre-design phase, document your firm's thoughts continuously through sketching and modeling. The Pre-Design phase is meant to "uncover" and "collect" as much relevant information about the internal (program, adjacency, code, etc) and external (site, regulatory concerns, demographics) influences as possible. The Schematic Design phase responds to this information through the iterative presentation of models and drawings (plans, sections, etc.).

Construct ten (6) scaled conceptual / schematic models which respond formally to the information gathered during your analysis. The process should be directed by a strong concept which emerges from the analysis of all relevant pre-design information.

DUE: Friday, January 30