

PROJECT #2

SITE DOCUMENTATION + ANALYSIS

DUE: Class 15

FORMAT: 11x17" Sheets

PROJECT OVERVIEW

Before embarking on architectural design of the River Street Refuge live-work-exhibit building, students will undertake site documentation and analysis exercises to learn about the project site, located at the east end of Factors Walk and River Street. Characterized by dramatic terraced topography, historic retaining walls and masonry, multi-level urban circulation, and views to the Savannah River, this unique site demands both rigorous physical documentation and perceptive environmental mapping.

Through a combination of hands-on field measurements, observations, and digital analysis, students will create an empirical foundation for their building design. The goal of Project #2 is to translate raw physical, environmental, and spatial observations, along with digital representation, into clearly communicated drawings and analytical diagrams that will inform the building design in Project #3.

PARAMETERS

Students will complete six (6) integrated exercises, divided between in-person site documentation, measured drawings, and analytical diagramming:

1. Field Surveys & Measured Drawings

Field Work: Perform on-site measurements using tape measures, laser distance tools, pacing, and hand sketching to document site boundaries, historic retaining walls, stair risers/treads, cobblestone paving, and other elements. Use hand-sketching to proportionately draw plan view and at least two section views of the site. Notate all important site dimensions in these drawings.

Measured Drawings: Translate field surveys into detailed measured drawings, by hand-drafting or appropriate drafting software (AutoCAD, Rhino, Sketch-up), of existing conditions in plan and section.

Focus: Survey and document vertical elevation changes connecting Emmet Park at the highest point, down to Factors Walk ramp and River Street levels, capturing structural edge conditions, terracing, hardscaping, and locations of major vegetation such as mature shade trees.

2. Context Base Mapping

Analysis: Utilize aerial imagery (Google Earth) and CAD/vector software to generate an urban context base map showing adjacent parcels, parks, and streetscapes.

Focus: Map immediate building footprints, primary street edges, property lines, and the Factors Walk ramp. Visualize site and adjacent context without extraneous urban clutter. Identify high-visibility public edges (ideal for gallery/storefront) and quiet secondary edges (ideal for residential/workspace access).

3. Photo-Documentation

Field Work: Capture eye-level perspectives, framed views toward the Savannah River, and straight-on elevations of adjacent historic retaining walls.

Focus: Capture and analyze views, material transitions, historical features, mature shade trees, and adjacent buildings.

4. Sensory & Haptic Mapping

Field Work: Conduct on-site sensory journaling across different times of day to capture non-visual environmental qualities. Create three (3) sensory maps based on your findings.

Focus: Observe acoustic conditions (contrast between bustling tourist traffic on River Street and relative quiet in Emmet Park and Factors Walk), tactile material palettes (ballast stone, brick, wrought iron), and thermal microclimates (shaded areas vs. sun-exposed surfaces).

5. Solar Analysis

Analysis: Visualize and understand basic solar relationships (using sun-path diagrams or digital tools) paired with direct field observations.

Focus: Show direct sun exposure at morning, noon, and afternoon, during two solar extremes (solstices), to identify exposed areas of the site and optimal orientations for natural daylighting.

6. Circulation Diagramming

Analysis: Observe pedestrian circulation, lingering patterns, tourist gathering spots, and service/delivery routes. Map these movements along and across multi-level streets and paths of the site and immediate context.

Focus: Identify physical access barriers, stair-only paths, and steep grade transitions. Diagram pedestrian routes and show location of stairs, steep slopes, and other physical barriers. Label River Street and the Factors Walk ramp.

REQUIRED DELIVERABLES

All work must be presented with the following format, graphic considerations, and information.

- Format: 11x17" sheets
- Use consistent typeface and margins
- Titles for each sheet
- Text captions where needed, to describe maps and diagrams

- Text explanations of design considerations and insights (describe how analysis will influence design) for parts 3 - 6.
- Include legends for maps / diagrams, where needed

1. Field Surveys & Measured Drawings

- Plan and Section Hand Sketches: show proportionately drawn plan view and two (2) section views of the site, from Emmet Park to River Street. Show notation of all important site dimensions.
- Plan and Section Measured Drawings: hand-drafted or digital. Translate field surveys into measured drawings (site plan and two sections).
 - Apply architectural drafting standards, using three or more line weights and poché
 - Show at architectural scale appropriate to 11x17" sheet; indicate scale below the drawing
 - Indicate section-cut line
 - Show human figures in section to suggest scale

2. Context Base Mapping

- Base map: use high-res aerial imagery (Google Earth) and vector overlays to show site extents, adjacent parcels, parks, and streetscapes.
 - Show at engineering scale appropriate to 11x17" format; indicate scale below the context map

3. Photo-Documentation

- Site Photographs: selection of at least ten (10) photographs of good quality and resolution, responding to parameters (above)
 - Include descriptive captions with each photo

4. Sensory & Haptic Mapping

- Sensory Maps / Diagrams: three (3) sensory maps based on your findings, responding to parameters (above).
 - Utilizing symbols, annotations, photos, and rubbings to communicate acoustic, tactile, and thermal site qualities

5. Solar Analysis

- Sun Path Diagram: overlay sun paths on site, in 2D or 3D.
 - Indicate sun paths at mid-morning, solar noon, and mid-afternoon, during two solar extremes (solstices)

6. Circulation Diagramming

- Circulation diagram: show circulation and paths, responding to parameters (above).
 - Use varied lines (color and/or dashes) to show movements along and across multi-level streets and paths of the site and immediate context
 - Label parks, streets and paths
 - Show barriers such as walls, steep slopes, and stairs

EVALUATION CRITERIA

Projects will be evaluated based on the following criteria:

Completeness: Submission and comprehensive representation across all required deliverables.

Empirical Detail: Accuracy, rigor, and detailed resolution in capturing physical measurements, site details and boundaries, and other information.

Depth of Analysis: Insightful documentation of non-visual qualities, light conditions, thermal conditions, and human movement.

Graphic Clarity & Representation: Rigor, legibility, craft, and attention to detail displayed across line-weights, diagrammatic overlays, maps, scales, and other graphic information. Consistent design language such as fonts, margins, and image size across presentation sheets.

Design Synthesis & Insights: Ability to translate analytical site findings into clear design constraints and opportunities that directly prepare the student for Project #3.

REFERENCES AND INSPIRATION

Books

Site Analysis: Diagramming Information for Architectural Design by Edward T. White, Architectural Media (1983).

Architecture: Form, Space, and Order (5th Edition) by Francis D. K. Ching, Wiley (2023).

Architectural Graphics by Francis D. K. Ching, Wiley (2023).

100 Site Analysis Essentials: An Architect's Guide by Peter Farrall and Iain Jackson, RIBA Publishing (2024).