

REINVIGORATE Wahiawā Freshwater Park: Project Requirements

Course: Arch 415: Concentration Design Studio, Fall 2017

Professor: Judith Stilgenbauer

Project Scope: Wahiawā Freshwater State Recreation Area, Lake Wilson, the largest freshwater reservoir in Oahu.

The semester-long project sought to come up with innovative conceptual design ideas for the Wahiawā Fresh Water park as a whole, focusing on activating the site through increased access points, ecological design and place-making by creating recreational programming, and lodging. Furthermore, design elements not only focus on creating a more livable, usable, culturally-sensitive park for its users, but also seeks to increase biodiversity, improve water quality, and ultimately, elevate the quality of living through the ecosystem.

Client: The Department of Natural Land and Resources (DLNR of Oahu)

Project timeline: August 21-December 13, 2017

- Phase 1: Precedent Studies** – precedent research, analysis, and presentation
- Phase 2: Site Analysis** – watershed and site research and analysis, mapping
- Phase 3: Overall Park Design** – context response, concept and program, development over time/ phasing, park master plans/ framework plans, overall schematic site design
- Phase 4: Focus Area Design** – detailed concept and program development for selected focus area, detailed site/building design, model(s)
- Phase 5: Final Presentation and Deliverables Preparation** – refinement of design concepts and programs (overall park and focus area), drawings, and models; preparation of presentation materials for final review; portfolios/class booklet

Final Studio Project Deliverables:

1. Required digital presentation components:

- One 25-page PDF document, page size: 11" x 17"; 12-minute final verbal presentation containing:
 - Context map illustrating site's context response and/or site parti diagram within its context
 - Completed:** 3 parti/response diagrams
 - Diagram illustrating overall concept
 - Completed:** 1 (combined into illustrative master plan)
 - Brief written guiding vision and principles; may be combined with concept diagram(s)
 - Completed:** 2 design vision and guiding principles, combined into the 3 parti diagrams
 - Written program and diagrammatic spatial representation thereof (decomposition diagram(s) isolating program elements and list/legend)
 - Completed:** Phasing program, 4 design isolation diagrams

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-Rendered and labeled schematic design master plan for site including its immediate urban context-
Completed: 2 in total (x1 diagrammatic version, x1 illustrative/atmospheric version)

-As necessary, any additional: birds-eye, human eye-level perspective renderings of key design elements.

-Completed: 7 in total

-Detailed, illustrative site plans of focus area(s) that illustrate key design features and built structures (at appropriate scales)

-Completed: 3 in total

-At least two detailed section perspectives, or section elevation illustrating key design features

-Completed: 3 section perspective drawings in total (x2 at 1/8" = 1', x1 at 1/16"=1')

2. Physical Model

Physical presentation model of focus area specific to this project:

-Completed: One (1/8" = 1') transect model illustrating: the edge condition design and pavilion design.

3. Summary Presentation Poster

One 18" x 24" (portrait format) composed, plotted presentation board summarizing digital presentation containing:

- Project title, concept and guiding vision
- Schematic site design master plan for Freshwater Park site (printed at 1" = 200')
- Selected key design feature drawings (can be plans, sections, birds-eye views and/or perspectives)

4. Final Studio Portfolio

A multi-page document containing all progress specific to one's design project throughout the course of the semester containing:

-Precedent studies

-Site Analysis: Historical development, cultural significance, infrastructure, community feedback

-Wahiawā (Lake Wilson) watershed analysis:

- Physical and Biological attributes, Ahupuaa boundaries, Lake Wilson watershed boundaries, Hydrology and streams (mapping of streams/bodies of water before and after Wahiawā Reservoir was created), Topography (40-ft contour lines at watershed scale), 3D Rhino terrain model for watershed, Geology, Soils map, Climatic conditions (solar orientation/sun path, wind patterns by season, rainfall patterns by month, temperature, humidity, etc.), Forested areas (ecological communities/important habitats for wildlife, birds, insects, and plant life), Overall land use/ zoning

Final Design Project:

-Design vision, and written explanation of all design elements supplemented by all process developments, concept diagrams, drawings, renderings, and model photographs.