

Architecture Studio: 2nd Year, F'11

Fall 2010, CMU, Arch #48-200, M/W/F 1:30-4:20

Class Website: www.andrew.cmu.edu/course/48-200

Coordinator: Kai Gutschow

Email: gutschow@andrew.cmu.edu

Off. Hr: M/W 12:30-1:30pm & by appt. in MM302

(11/5/11)

Project 4: PUBLIC LIBRARY- Site

For the studio overall, there are two possible sites for the library, both are infill sites on lower Lawrenceville's Butler St. corridor. Your studio instructor will determine which site you will have. Your library should help energize street life, and create a vibrant library experience for the entire neighborhood.

SITE #1: is at 3621 Butler (City lot # 49-J-108), near the corner of 37th St. (in red on map at right). It is in the "heart" of lower Lawrenceville, part of a thriving and busy neighborhood commercial district that features many galleries, cafes, and other stores. The Butler St. entry facade of this site has only a 20ft street frontage. But a special arrangement with the popular "Café a Mano" next door will allow the library to construct space ON TOP of, and behind, the existing café. The café structure, space, and business must remain intact, though it can be "subsumed" in the larger, double-lot, library volume. You may replace the café facade, and you may cut limited new doors and views into the café from your library. The site slopes approx. 6ft from front to back.

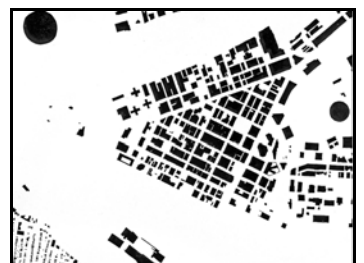
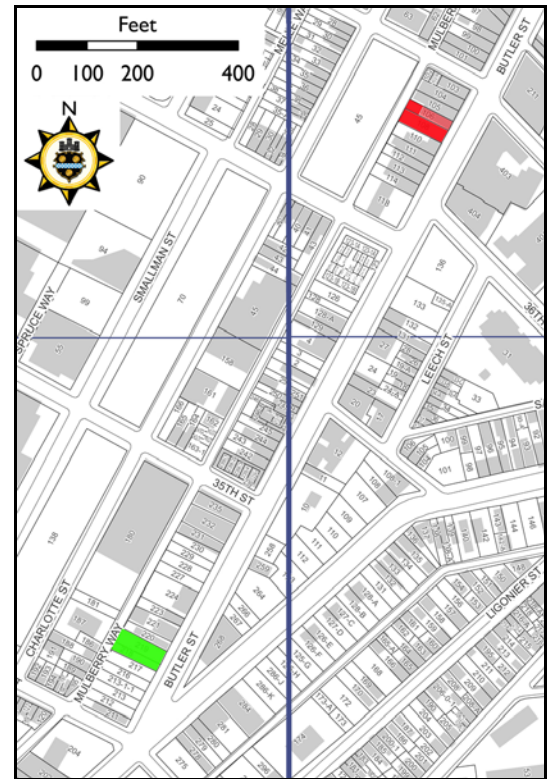
SITE #2: is at 3415 Butler (City lot # 48-S-219), near the corner of 35th St., on Doughboy Square (in green on map). It is at the very outside "edge" of Lawrenceville, part of a prominent "gateway" that defines the entry to the neighborhood from the City. There are fewer stores nearby, so it is likely to feel less "connected" to the neighborhood, but there are several prominent institutions and offices. The street frontage of this site is wider than #1. It would be an important project in "closing" the facade of the square. The site slopes approx. 10ft front-to-back.

SLOPING SITES: Both sites include a slope down to the narrow service alley of Mullberry Way. This allows for a one-story basement or lower floor to be accessible from the alley that is not visible from Butler street. Consider carefully how your site slope can animate the spatial experience, access to your library, and exposure to sunlight and views, including the difference between the "front door" on Butler St., and the "back door" and loading dock on Mullberry Way.

INFILL SITES: Both site are "infill sites," with neighboring buildings on Butler St. that can (but don't have to) connect right up against your building. Near the back of the site, these buildings tend to reduce their width, leaving a side and rear-yard condition. Your library MUST stay within the "property line" defined by the facade, and cannot encroach upon the neighbor's open space. You may, however, connect open space on your site to the neighboring open spaces.

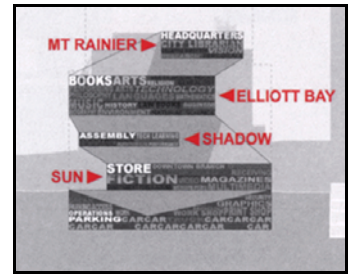
ZONING REG'S: Both sites are subject to the same "Local Neighborhood Commercial" (LCN) district zoning laws that regulate the size and extent of all buildings (see attached plans & details). Zoning limits include:

- 1) maximum building height is 45ft, and 3 stories max. (the building will need to step down to meet this requirement on the alley).
- 2) maximum lot coverage is 90% (so 10% of the ground must be left unbuilt and open to the sky)



cont'd.

- 3) a maximum 2:1 FAR (floor area ratio) requirement. This means the overall floor area of your building can be no more than 2x the entire area of your site (a two-story building, if you fill the entire site). Courtyards, sideyards, setbacks as you go up, or double-height spaces inside all reduce FAR.
- 4) there are NO setback requirements; though windows facing towards a side neighbor must be 5ft from the side property line.



SITE DOCUMENTATION (Mon. Nov. 7, 1:30)

For each site, the class needs to collaborate to create the following cross-referenced site documentation, with common agreement for all measurements:

- Site Plan, for both sites, with adjacent lots, 1/4"=1'-1'-0"
- Long Site Section, for both sites, showing slope & both streets, 1/4"=1'-1'-0"
- Contextual Street Facade Elevations, Butler St. & Mullberry Way, 1/4"=1'-1'-0"
- Rhino Site Model, for both sites

SITE ANALYSIS (Mon. Nov. 7, 1:30)

Students within each studio should collaborate to analyze the site(s) being used in that studio, and bring back to studio a richer understanding of the forces that affect the building, and should influence the design process. Study the context and site with all your 7 senses (see Pallasmaa), including:

- 1) Natural physical phenomena: light, shadow, sound, temperature, air flow, leaves, animals, pools of artificial light, weather, etc.;
- 2) Human Activity: languages heard, sweatshirts logos, store brands, race gender or age issues, demographics, smoking & butts, trash location, etc
- 3) Motion & Location Studies: Walking paths, wear patterns, standing locations and durations, locations of change in direction, bus routes, car traffic, train sounds, parking, Butler vs. Mulberry; 35th vs. 37th St., etc.;
- 4) Sensual Phenomenon: joints between things; color or other visual patterns; issues of scale, texture, solidity, or porosity; the influence of commercial vs. cultural institutions, etc.;
- 5) Ephemeral: emotional states, health concerns, seasonal feelings, personality and character types, library geeks, film fanatics, artsy types, crazy people, etc.

Divide the work, and share results. Deliverables include both objective, factual data and information, AND subjective readings and recordings, such as:

- maps and drawings recording any of the observations from the 7 senses
- historical information about the site and neighborhood, including old photos, old maps, memories of the old neighborhood, etc. Use especially U.Pitt's "Historic Pittsburgh" digital archive (<http://digital.library.pitt.edu/pittsburgh/>)
- performance analysis of the sun and wind using Ecotect. Every student will be expected to show how light enters and moves through your building; you should expect to model your design in Ecotect, as learned in 1st year! Doing this as part of the design process, rather than just as a visualization tool, WILL help stronger and more believable results!
- photos of the site and context, both overviews, and details
- data sets, survey, GIS data or graphs on things like traffic

RECORD & UPLOAD YOUR WORK (ongoing)

Upload your work to the archpcserver and Flickr site to share as follows:

- All students should create a new individual "Set" for Proj.4 Library on Flickr to document ALL your own process and design work on the library so far, and through the end of the project, including any contributions to group work such as the interviews of clients, the analysis...
- Upload assignments and other deliverables to the server, including:
 - 1) a folder for all ca.100 interviews of Lawrenceville people;
 - 2) a folder of all research and data collected about the site / neighborhood;
 - 3) a folder of all more subjective, creative, or managed "analysis" work such as creative mapping of phenomenon, etc.

