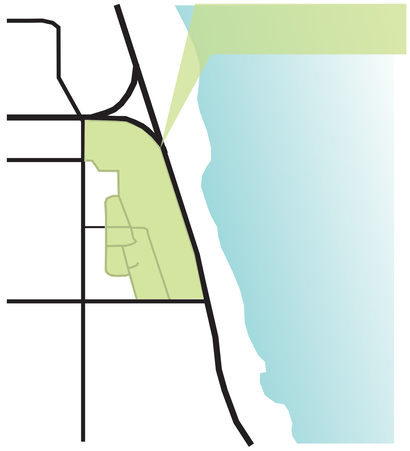
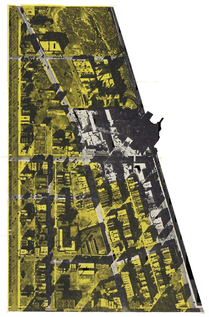


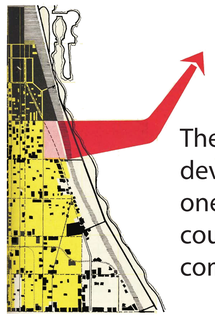
IPRO 359

Michael Reese Hospital Redevelopment

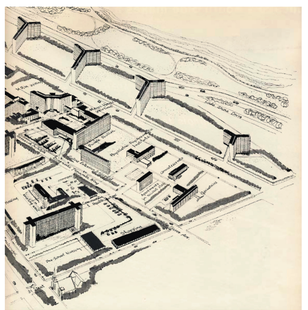
History of the Site

The Michael Reese site was designed in the mid 1940s by renowned 20th century modernist architect Walter Gropius





The original intent of the Reese development was to revitalize one of the worst slums in the country into something the community would be proud of.



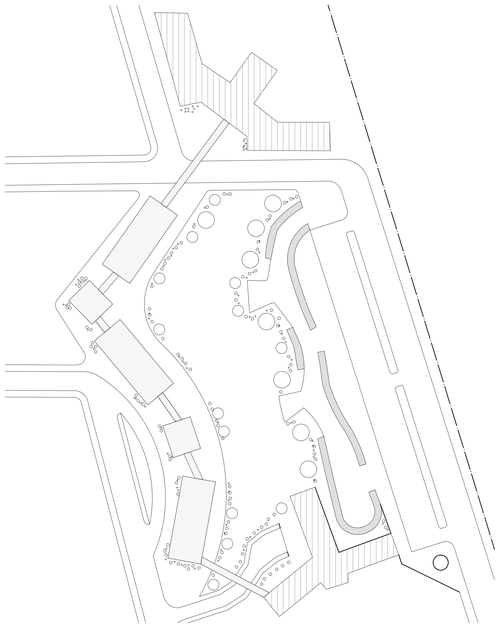
After the hospital closed, the site was purchased by the city in anticipation of the 2016 Olympics. After the city lost the Olympic bid, an alternative plan for the 37 acre site was needed.

After protests by preservationists, the city agreed to save one of the site's Gropius buildings. The historic main hospital building will also remain.
Our plan was designed to respect the historic nature of the site and its remaining buildings.

Gropius' 1950 Singer Pavilion
The only of his buildings to remain on the site

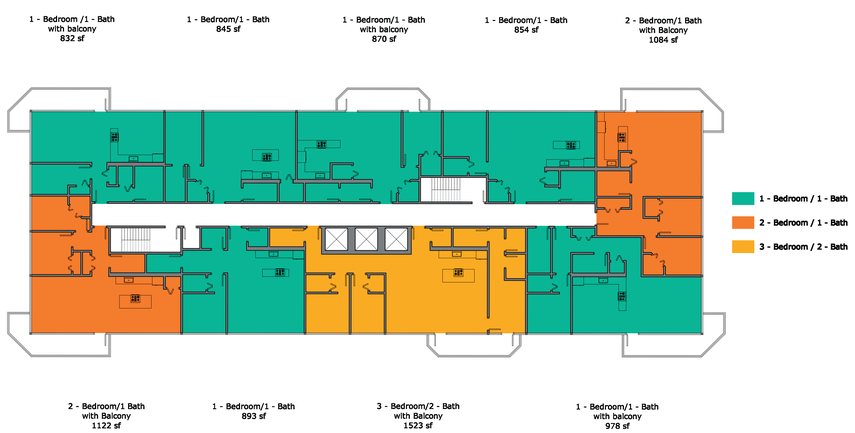
Site Plan

Proposed site plan showing continuing care retirement community as central anchor and use for surrounding land.



Detail of proposed continuing care community with pedestrian bridges connecting buildings.
Existing hospital buildings are shown hatched at top and bottom of plan.

Proposed floor plan of residential building



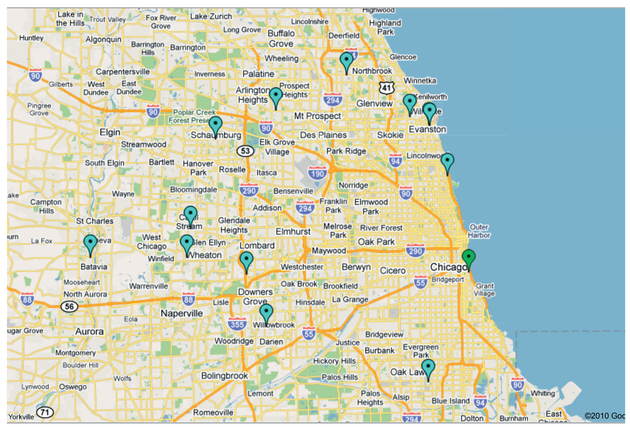
Community Needs

Given the current economic conditions combined with the presently oversaturated housing market, our team decided that the more economically-viable solution for the site's redevelopment would be a continuing care retirement community.

There are over 400,000 retired residents in the city of Chicago and over 700,000 in Cook County.

The above map shows that there are very few of these facilities within the city limits, and our research has shown that there is a growing interest among the ageing population to remain in the city.

Our location provides easy access to downtown and the lake, and the large area available on the site will allow the design of a community that can provide many amenities to its residents.



Existing Chicago-Area Continuing Care Retirement Communities

Faculty Advisors
Anatol Longinow ◆ Mark Snyder ◆ Steve Beck

Erin Beardsley | Austin Champlin | Amy Chun | Heather Grace | Wesley Klockowski | Robert Knapczyk | Rodolfh Masangkay | Max Morgenthaler | Nam Nguyen | Patrick O'Brien | Joshua Salisbury | Bryan Slonski | Cody Snyder | Justin Van Eaton | Nathan Waisath | Ruoxi Wang | Kathryn Weissman

Green Construction

Only two of the existing buildings will remain on the Michael Reese site. All other buildings, roads and utilities will be removed.
This will allow a new development to fully integrate green construction materials and methods into the site.

As our project focussed on the planning and layout of the site as opposed to the details of individual buildings, our green ideas focus on solutions that are applied to the site as a whole.

Site Solutions

- Create a storm water management plan for the entire site. Prevent storm water from entering the sewage system. Instead, allow it to be collected and resued on the site.
- Plan and install as much native landscaping as possible. Native plants are adapted to live in the site's conditions and require little additional water and fertilizer.
- Develop a pedestrian friendly site with access to public transportation that allows residents to reduce their dependence on cars.

Building Solutions

- Extend site solutions to the buildings. Install green roofs to further reduce storm water runoff.
- Design buildings to take advantage of natural heating in the winter. Shades on windows will reduce heat gain in the summer, a design that Walter Gropius used on the site's original buildings.

Economic Analysis

Our business team worked with the design team to develop the most economically viable redevelopment solution for the site.
Several solutions were investigated using a Pro Forma template to break down and analyze the expenses and profits from various aspects of the development.

The breakdowns below show the three main sources of income that we expect from our development. Since our project only addresses a portion of the available land on the site, there will be potential future income from land sales or more development on the site.

Results

Continuing Care Facility

- Square Feet → 842,824
- Percent Livable → 80%
- Cost For Buy-In → $300,000
- Average Monthly Cost → $750
- Interest Rate → 6%
- **Yearly Earning → $24.3M**
- **Yearly Expense → $3M**

Retail

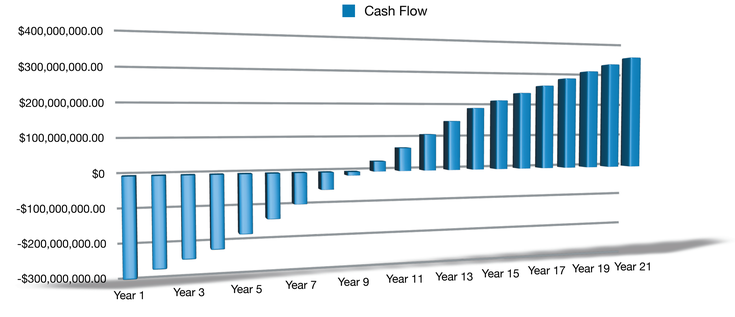
- Square Feet → 65,176
- Percent Rentable → 80%
- Cost Per SF Per Year → $48
- Percent Occupied → 90%
- Interest Rate → 6%
- **Yearly Earning → $2.3M**
- **Yearly Expense → $0.4M**

Parking

- Square Feet → 64,000
- Percent Usable → 80%
- Cost Per Spot Per Year → $6000
- Number of Spots → 649
- Interest Rate → 6%
- **Yearly Earning → $2.8M**
- **Yearly Expense → $0.2M**

Cash flow graph shows the break-even point for the project

Year 0	-$275,358,254.20
Year 1	-$252,198,552.50
Year 2	-$229,038,850.70
Year 3	-$205,879,149.00
Year 4	-$166,719,447.20
Year 5	-$127,559,745.40
Year 6	-$88,400,043.68
Year 7	-$49,240,341.92
Year 8	-$10,080,640.16
Year 9	$29,079,061.60
Year 10	$68,238,763.36
Year 11	$107,398,465.10
Year 12	$146,558,166.90
Year 13	$185,717,868.60
Year 14	$208,877,570.40
Year 15	$232,037,272.20
Year 16	$255,196,973.90
Year 17	$278,356,675.70
Year 18	$301,516,377.40
Year 19	$324,676,079.20
Year 20	$347,835,781.00



Our calculations show the development will be profitable after year 9