

RE-IMAGINING THE
INDUSTRIAL WATERFRONT:
UTICA'S HARBOR POINT

JOINT RED_ARCH STUDIO

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EXECUTIVE SUMMARY

When designing this project, we took into account numerous factors that would affect both Harbor Point and Utica in general. The project had to be both cost-effective due to Utica's sensitive residential market price and consistent with Harbor Point's waterfront nature. This project's success would lead to the future development of Harbor Point, so we focused on numerous aspects like unit mix, design, and uses of the buildings.

Focusing mainly on the affordable residential complexes, we tried to address the area's population problem and offer the residents cheap but modern living alternatives. We had to take into account the fact that Utica's residential market is itself on affordable housing, so we had to keep our development and rental costs in a limited amount. Throughout the planning stage, we focused on the following objectives :

- **To increase pedestrian foot traffic to Harbor Point**
- **Develop new affordable residential complexes with Utica prices**
- **Develop public spaces to attractive for local residents**
- **To start economic activity in Harbor Point**



DEVELOPMENT PROGRAM & OBJECTIVES

The development plan consists of a one-year construction period of 159,570 square feet of area, with 111,699 square feet of affordable residential space, 31,914 square feet of retail and 15,957 square foot of office space.

With new workplaces opening near Utica and new employees moving to the vicinity, we wanted to make Harbor Point attractive for those employees. With its modern look and affordable pricing, our residential complexes would attract more residents to Harbor Point and Utica in general. The office and retail part was another key point for attracting those new industries to Utica and keeping its population high. The Harbor Point project has to be a turning point for future developments in Harbor Point and Utica.



HARBOR POINT

Harbor Point is approximately 140 acres of land located between Utica Barge Canal Harbor and the Mohawk River. The area was developed for industrial purposes in the mid 1800's and has been the site of two manufactured gas plants (MGPs), a coal-fired steam plant, a petroleum storage-distribution facility (Mohawk Valley Oil) and a tar products plant (New York Tar Emulsions Products (NYTEP)). In the 1920s, the Harbor Point peninsula was the location of the largest energy-producing complex in North America. The site was heavily contaminated with coal tars and purifier waste (wood chip and iron filling used to remove sulfur from gas before distributing to public)

Numerous remediation projects took place to clean the canal site. 126,000 tons of contaminated soil was removed from the brownfield sites around the property. Excavated areas were subsequently backfilled with clean backfill material, and the site was restored to pre-remediation conditions, including wetland and other habitat restoration.



MARKET ANALYSIS

Its residents totaling 59,170, Utica has a young population with a median age of 34. Utica has a diverse population with 62.4% white, 15.2% African American, 11.5% Asian and 12.7% Hispanic or Latino.

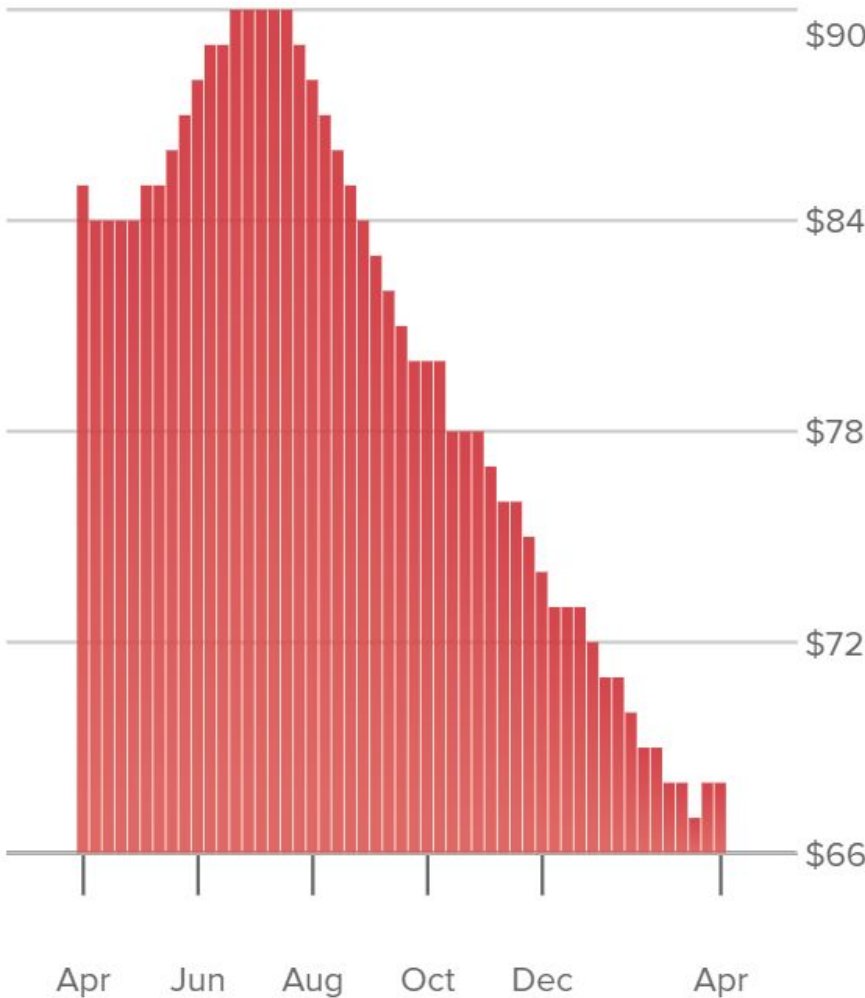
The city has a decreasing population problem which drew down the residential market prices. With a total of 28,008 residential units, the average sales price per square foot of residential space is \$72. The city has owner-occupied housing rate of 48%, which creates the perfect condition for a rental market.

Utica has a median household income of \$37,760 and a poverty rate of 29.4%, lower than other cities.

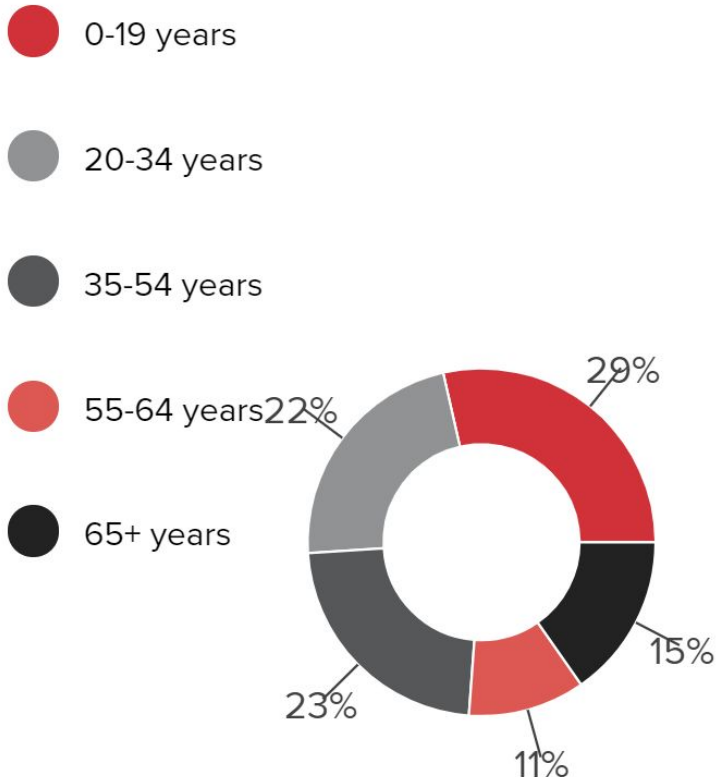
PRICE PER SQUARE FOOT

6M **1Y** 3Y

\$68 — APR 2, 2021



POPULATION OF UTICA



SITE ANALYSIS

Location

Utica is a city which is post-industry. In the history, it was once prosperous. Now the distinct character of it is the building with the symptom of that time era



NEW YORK



UTICA



HARBOR POINT

Concept

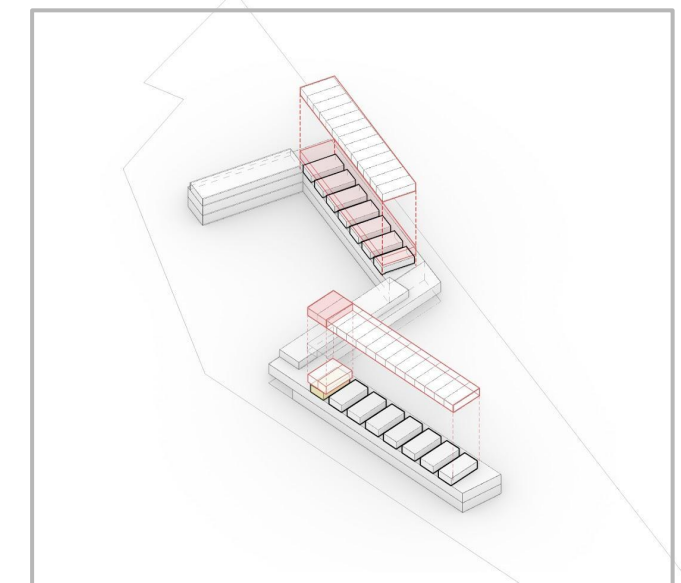
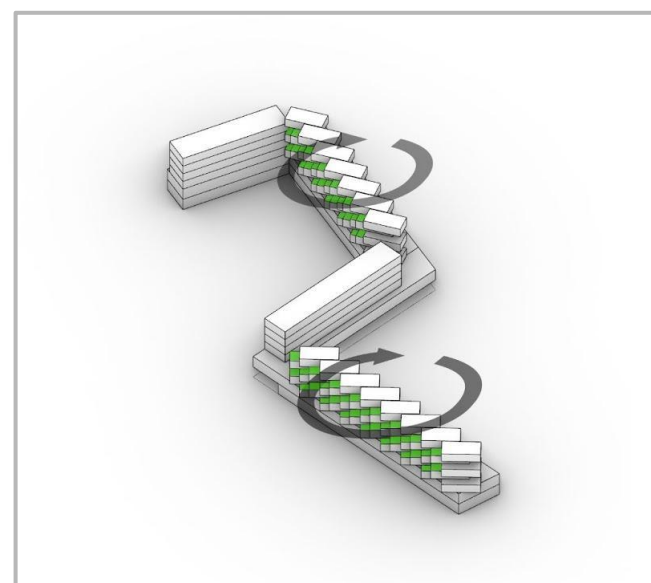
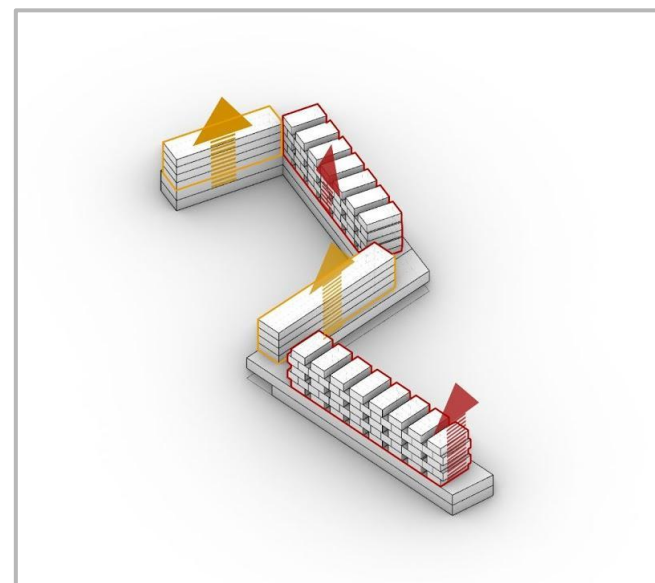
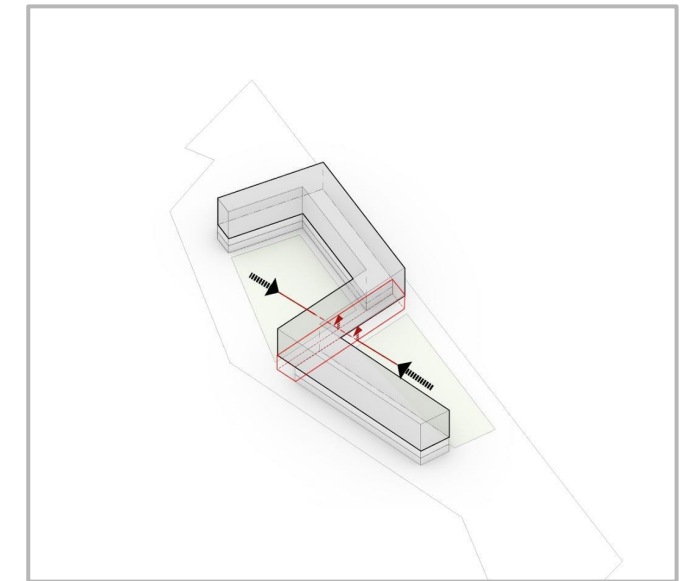
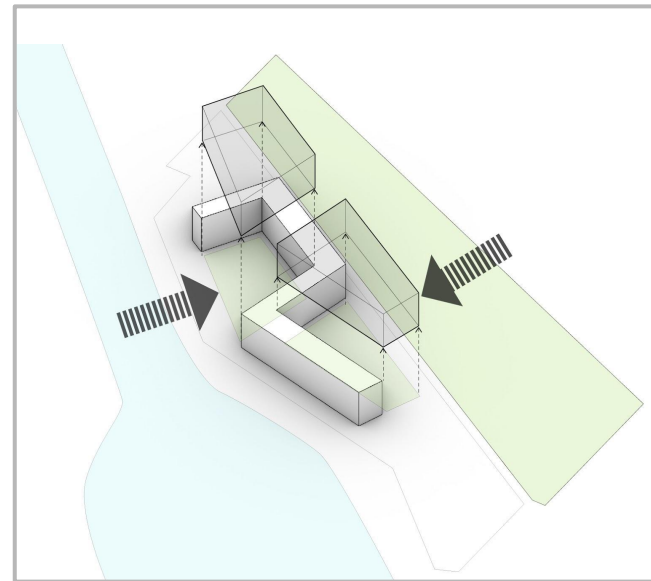
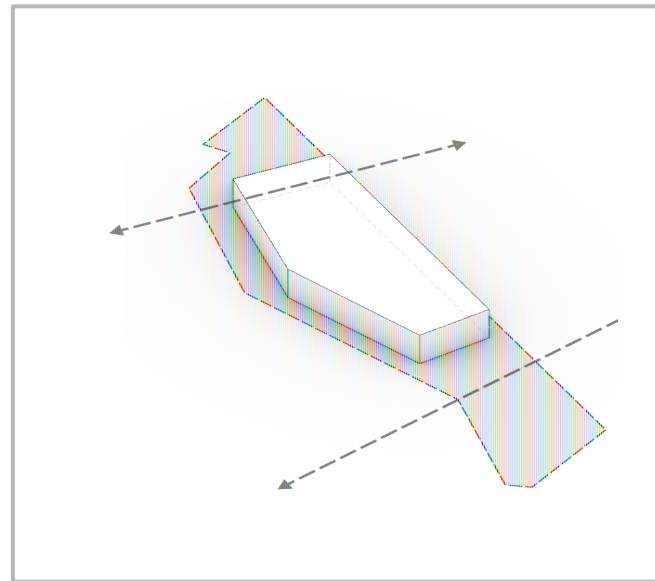
Utica is a post-industry city. But for our site, it is a very nature place surrounding by lots of plants and park. So we try to bring to the city some different landscape: artificial landscape of building.

There is a river near the site. The most common thing we would think about when talks about the river is mountain. So we think we can bring a valley to the site. By building an architecture resembles the mountain.



Concept Developing

The building is divided into three parts, residential, office and retail, we respond to the river and the park in two sides of the building. But we want to bring unique views to every resident so the building units are rotated 45 degree, and intersect with each other.





Master Plan

From the master plan, we can see the shape of building creates two courtyards facing two direction.

It is the responding to the river and park. Outside the site, is another park, which people can see the things.

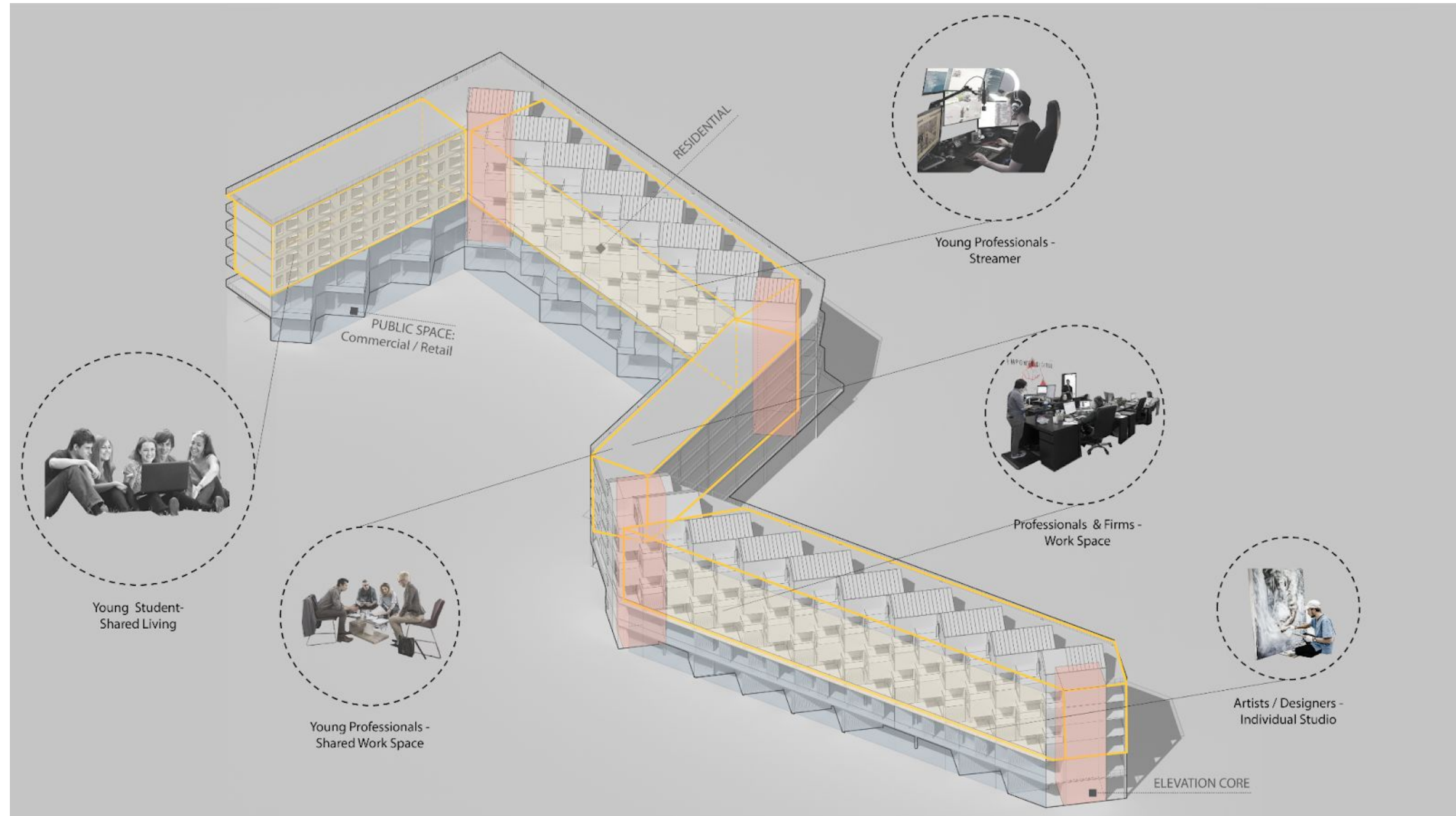


Target residents

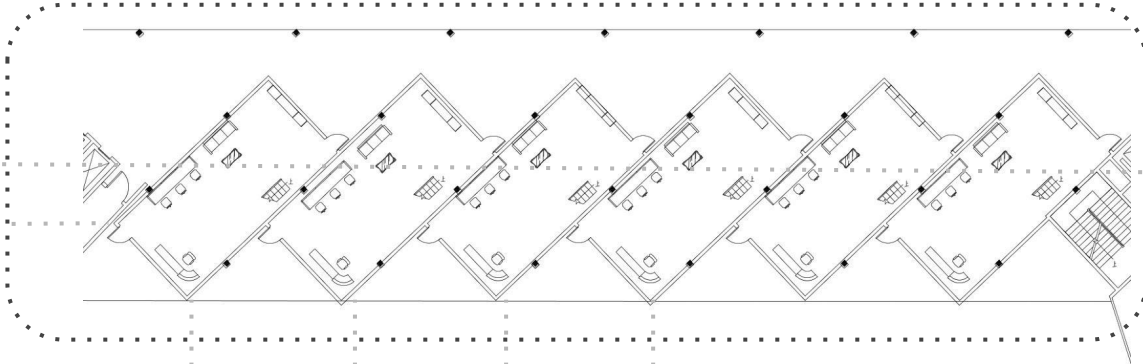
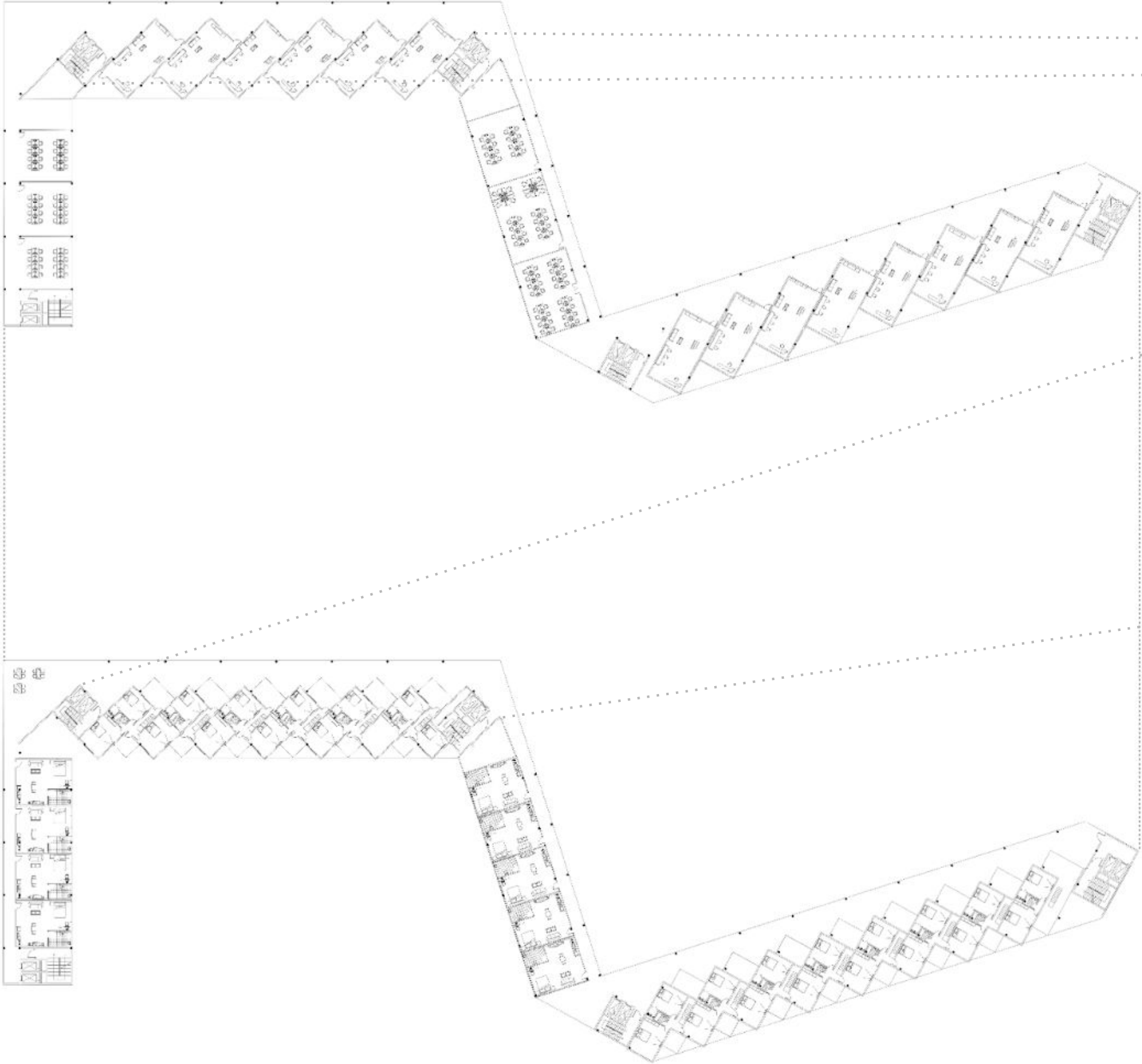
Program

There are four staircases with elevator to ensure the circulation of the building is safe enough
Our target residents are:
students, artists, self-employer, small company owner, and streamers who are all very young and active to reactivate the strict

The first two floors are for retail,
the third floor are for office. The rest are for residential



Project Layout



The living unit is rotated 45 degrees and up side the work unit is the living unit which people can easy go up and down, changing their life status.

For the corner of the corridor, it will not be wasted because it provides places for the parking of bicycles and other transportation tools. Also the place could also be used to put chairs for dining or talking.



Detail views



The balcony of the unit provides residents with equal views to the river and parks

Residents can have the opportunity to communicate with each other. That is what we assume to happen in the building. Their pets could also interact with each other while the communication chance is not only for residents.

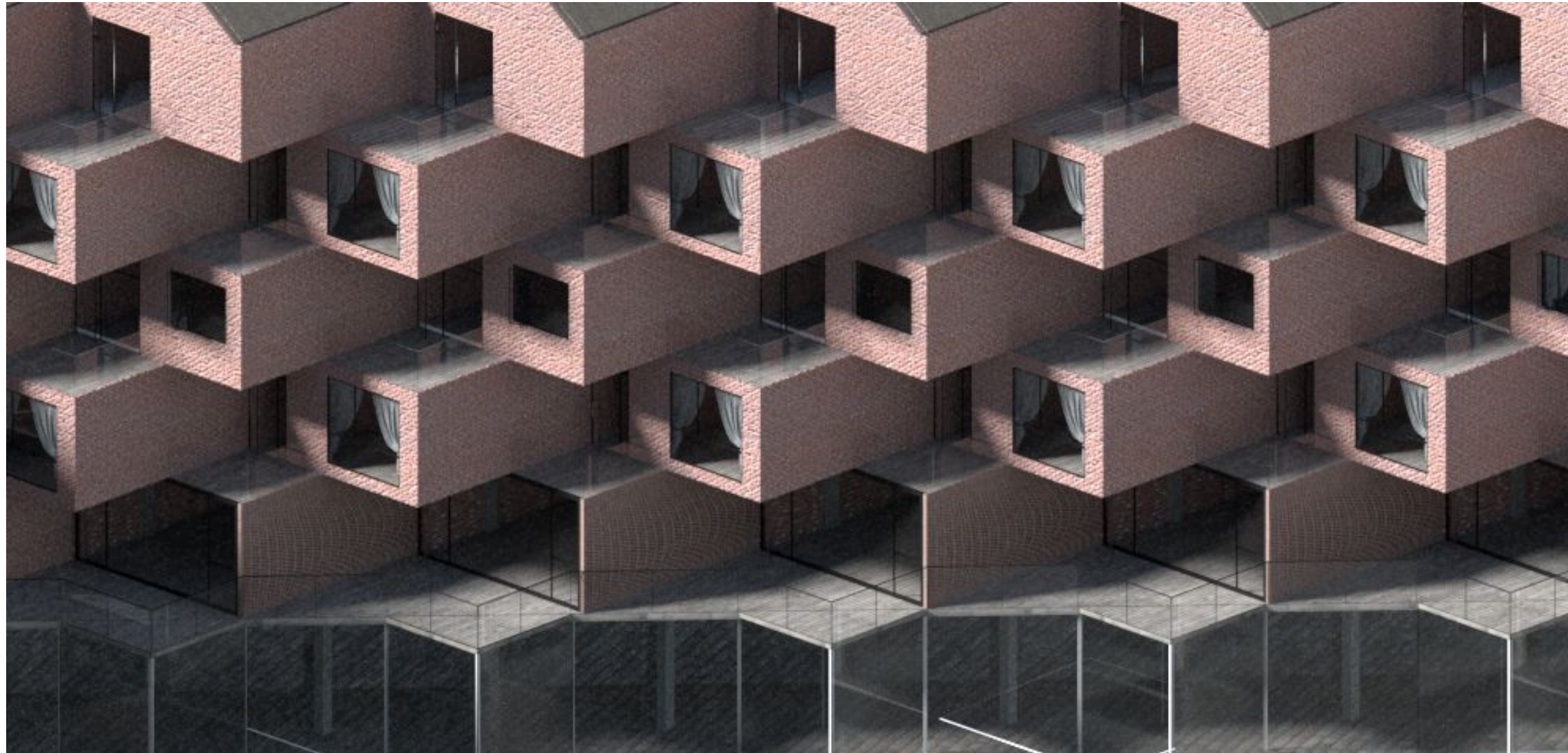
Detail views



The other direction of the building also have the balcony. People walk in the corridor can talk to people in the balcony. The space created by the living unit can also be used to put the bicycle

For the next door residents, to some extent, their space are private, because the balcony would be sheltered by the wall, which makes neighbors hard to see what others are doing.

Perspective

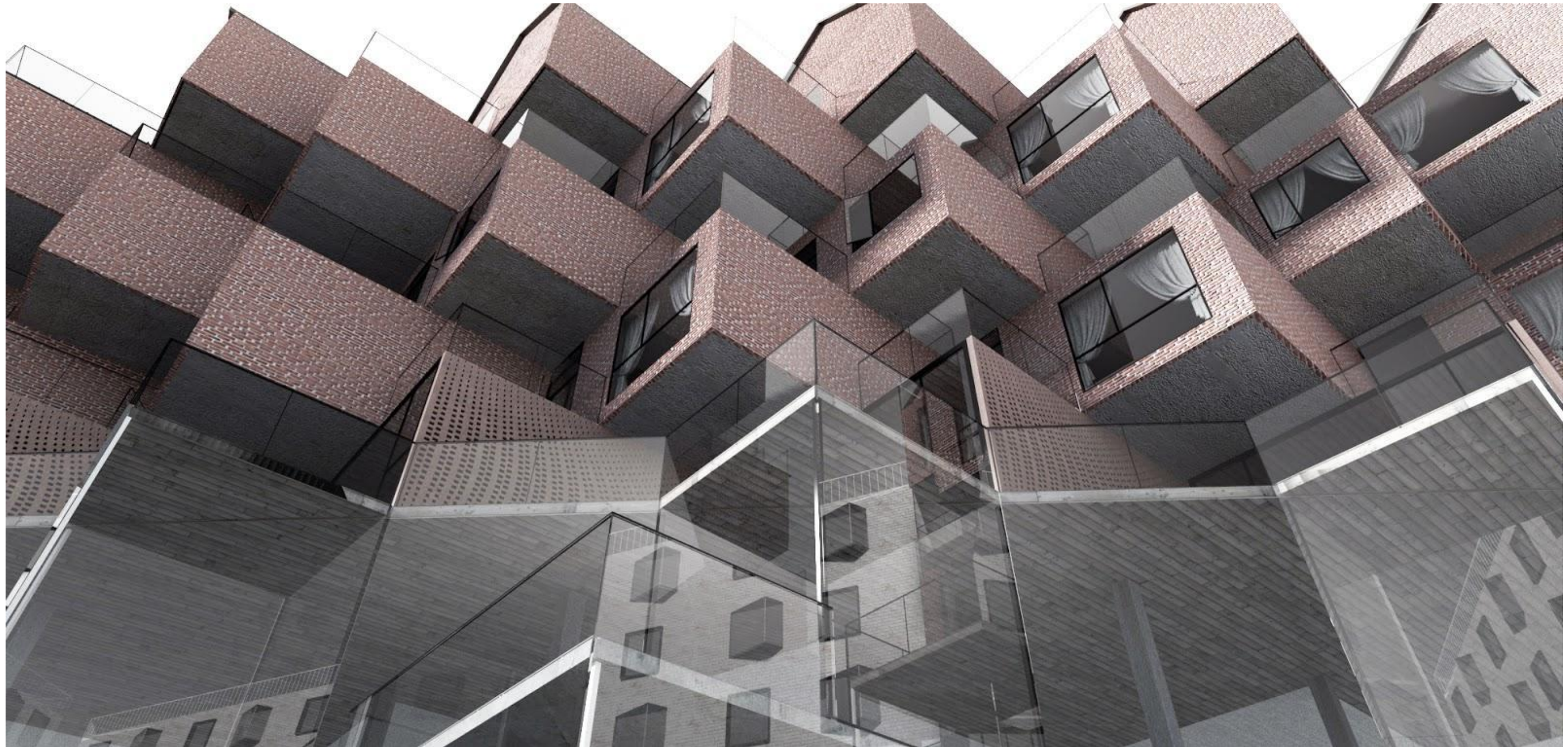


Since our concept is about building a valley-like landscape. The intersection and rotation method create facade which is like a climbing mountain

People inside the building and the stuff or plants they put in the balcony are displayed in the facade view, which make the 'mountain' lively.

The balcony also creates equal views for every residents. Everyone can have really easy access to the beautiful views for the scenery. Their views are enlarged because compared to traditional balcony, the new building make the angle of the view much bigger facing the river.

Street Perspective



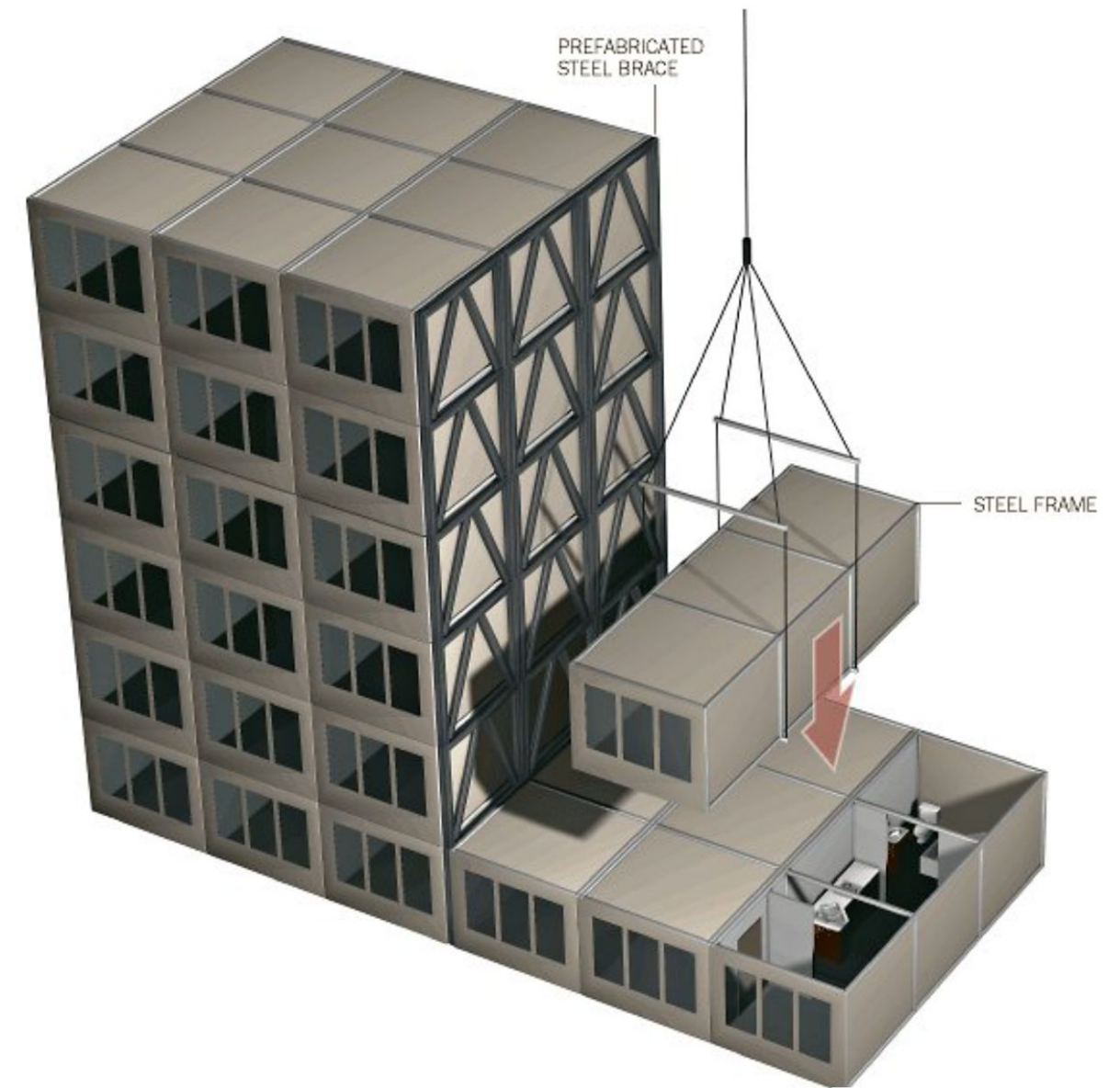
General view



CONSTRUCTION

The construction technology that we have planned to use in our development is prefabricated modular construction technology. While this technology is cheap, it also gives us a considerable advantage in speed, high cost due to delays and construction mistakes. The modules are pre-made in the factories and brought to the site with trucks. Each unit comes with pre-installed electric and mechanic systems. Units are considered turnkey.

After the delivery, each module is placed in its place by a crane. Each module has a steel frame, providing its structural integrity. For prefabricated modular construction development, the cost per square foot ranges between \$180 and \$240.



SOURCES & USES

Total construction cost of our development is \$38,446,800 of which our LIHTC eligible basis is \$26,807,760. For the residential portion of our development we receive \$23,644,444 of LIHTC credit. The sources of our development is \$4,892,441 developer equity, \$23,644,444 LIHTC credit and \$12,588,498 loan. We distributed these sources to \$150,000 for our land acquisition, \$31,914,000 for our hard cost, \$6,382,800 for our soft cost and \$2,678,584 for our loan interest portion.

We have calculated the construction portion of our development to be \$240. We managed to keep the costs low due to the modular construction method that we use in our development. With a loan to cost of 26%, we have a total loan amount of \$9,909,914 and its interest portion of \$2,678,584.

| LIHTC CALCULATION | |
|-------------------------------|------------------|
| Construction Budget | \$ 38,446,800.00 |
| Ineligible Basis | \$ 11,639,040.00 |
| Eligible Basis | \$ 26,807,760.00 |
| High-cost adjustment | 100% |
| Adjusted Eligible Basis | \$ 26,807,760.00 |
| Applicable Fraction | 100% |
| Qualified Basis | \$ 26,807,760.00 |
| Current 9% rate | 9.00% |
| Credit Amount Per year | \$ 2,364,444.43 |
| Over 10 years | \$ 23,644,444.32 |
| Cost per dollar of tax credit | 0.98 |

| Sources | |
|-----------|------------------|
| Equity | \$ 4,892,441 |
| LIHTC | \$ 23,644,444.32 |
| Loan | \$ 12,588,498 |
| Total | \$ 41,125,384 |
| Uses | |
| Land | \$ 150,000 |
| Hard Cost | \$ 31,914,000 |
| Soft Cost | \$ 6,382,800 |
| Interest | \$ 2,678,584 |
| Total | \$ 41,125,384 |

| | Area/SF | Cost | Percentage |
|------------------------|----------|------------------|------------|
| Total Area | 159,570 | \$ 38,296,800.00 | 100% |
| Affordable Residential | 111,699 | \$ 26,807,760.00 | |
| Market Residential A | - | \$ - | 0% |
| Total Residential Area | 111,699 | \$ 26,807,760.00 | 70% |
| Commercial Area | 31,914 | \$ 7,659,360.00 | 20% |
| Office | 15,957 | \$ 3,829,680.00 | 10% |
| Construction Cost/SF | \$240.00 | | |
| Hard Cost | \$200.00 | | |
| Soft Cost | \$40.00 | | |

