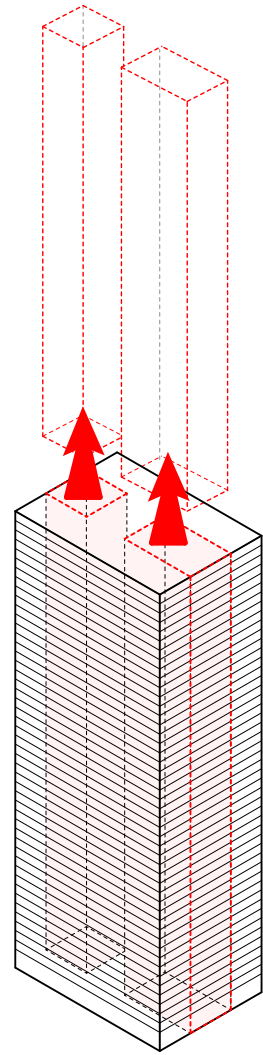


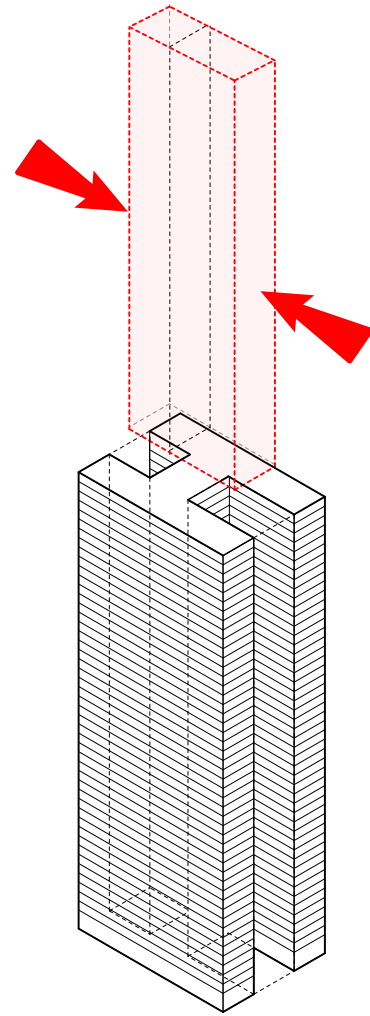
Double Up...





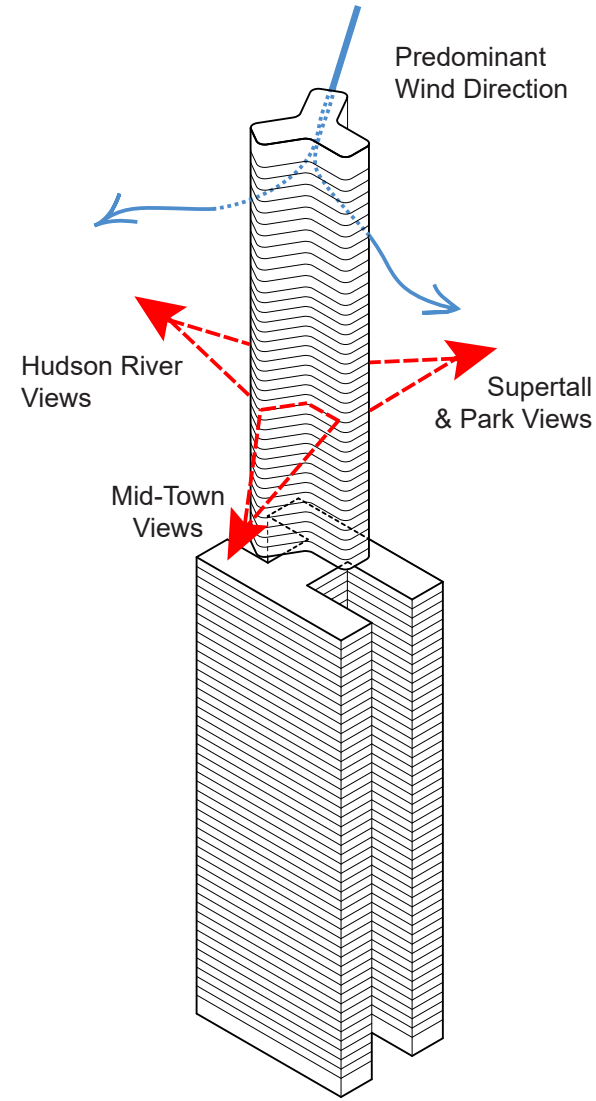
Extract

- Unusable floorplate area removed
- Forms "H" plan shape, ideal for residential use



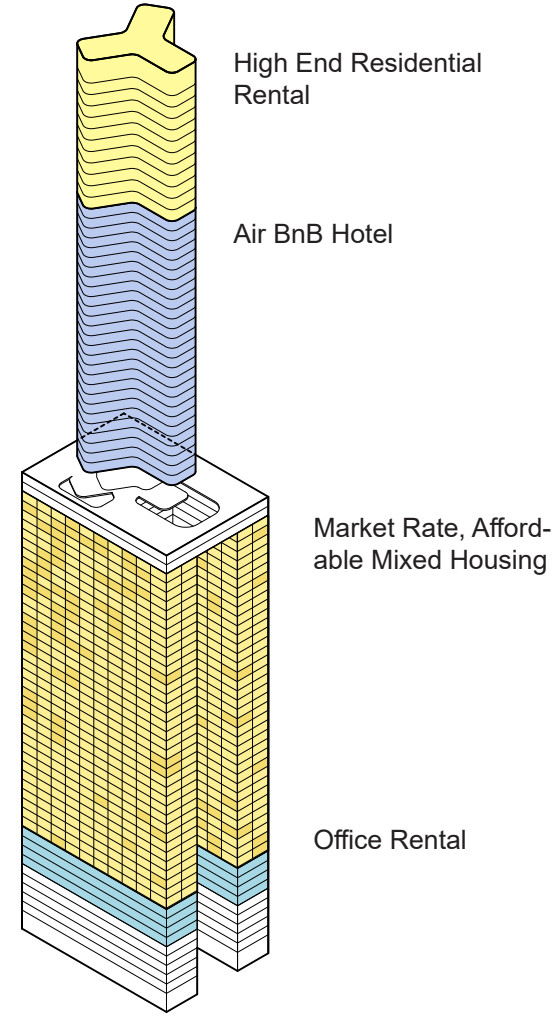
Combine

- Allowable Zoning area configured in tower from above existing building
- Smaller footprint of upper tower better for residential uses



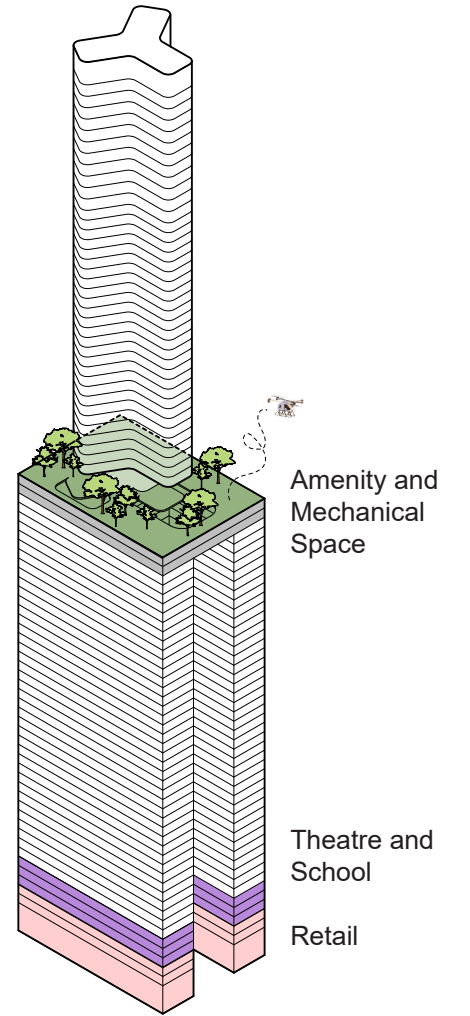
Optimize

- Upper tower trefoil shape optimized to shed predominant lateral wind loading
- Upper tower trefoil shape captures optimal views for residences



Populate

- Full spectrum of rental residential price offered
- "Air BnB" type hotel provided to address midtown office workers who work hybrid and need flexible housing options
- Elementary school provided in lower level due to population increase



Unify

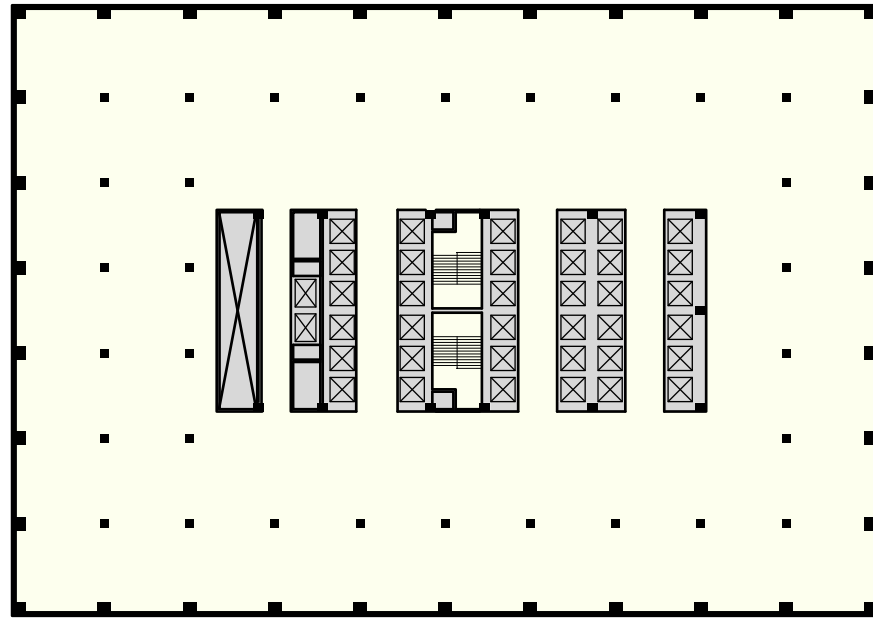
- Two large amenity floors provide at levels 47 and 48, accessible to all tenants
- Roof level 49 consists of wellness activities, play ground and garden, a park in the sky
- Roof level 49 contains a landing pad for evtol aircraft, an emerging mode of transit

Concept

The eminent need to convert office buildings to residential is far from a simple task. The technical and financial roadblocks that accompany this are a challenge to resolve. Addressing sustainability and the social good creates even more challenges. Mayor Adams has created the Office Adaptive Reuse Task Force to double down on this issue politically, in hopes of spurring a wave of office building conversions.

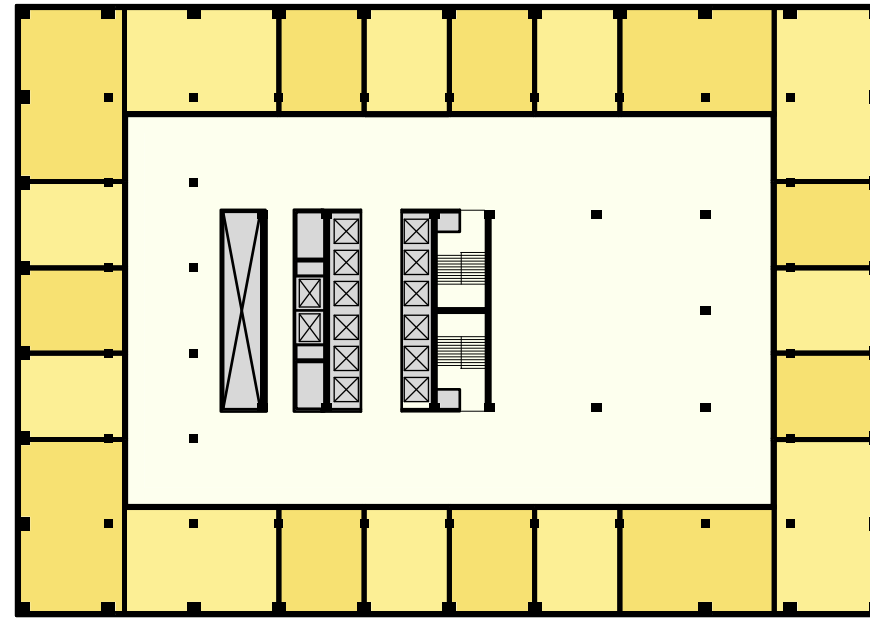
The temptation exists to approach these conversions with a conservative "light touch" approach. Studying this, we realized doing so would deliver only +/- 1,000 units, not pencil out financially and create further social segregation if it solely targeted market rate and affordable units. The full economic and social value of the site would not be realized.

Our approach proceeds from a growth mindset. By optimizing the base building and creating a mixed-use and mixed-income residential offering, we are able to deliver +/- **1,400 units** with the current area allowed by zoning and make a strong case for financial feasibility with positive **ROI being reached in 5 years**. The amenities and roof park foster positive social engagement across class lines. We didn't go small, we went big and it works. We didn't double down, we **doubled up**.



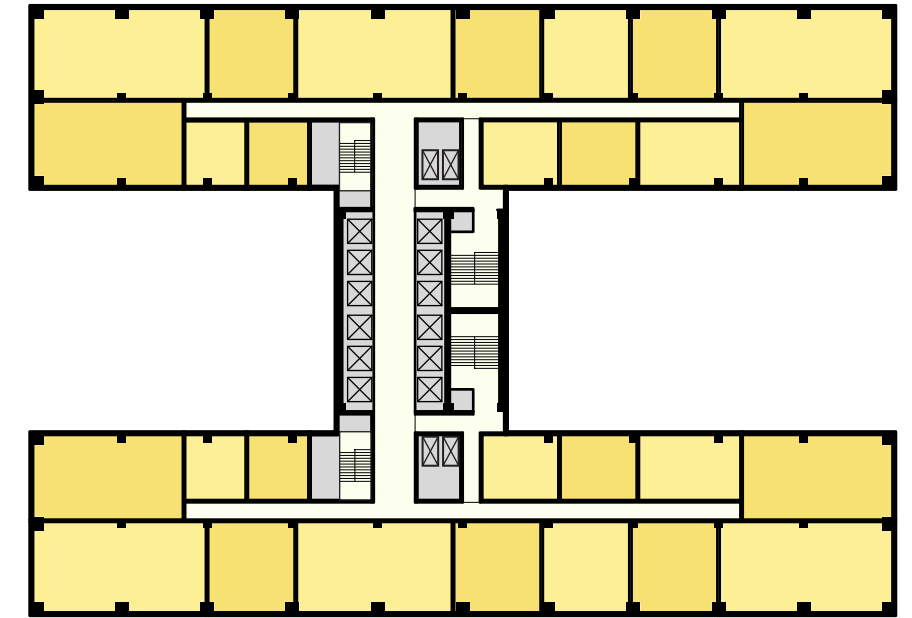
Existing Floor Plate

- 60 foot lease span typical from face of glass to core wall with internal columns
- Typical column bay spacing approx. 25' on center outside the core
- Existing building has multiple elevator zones totaling 36 passenger lifts, approximately 12 would be needed in a residential conversion



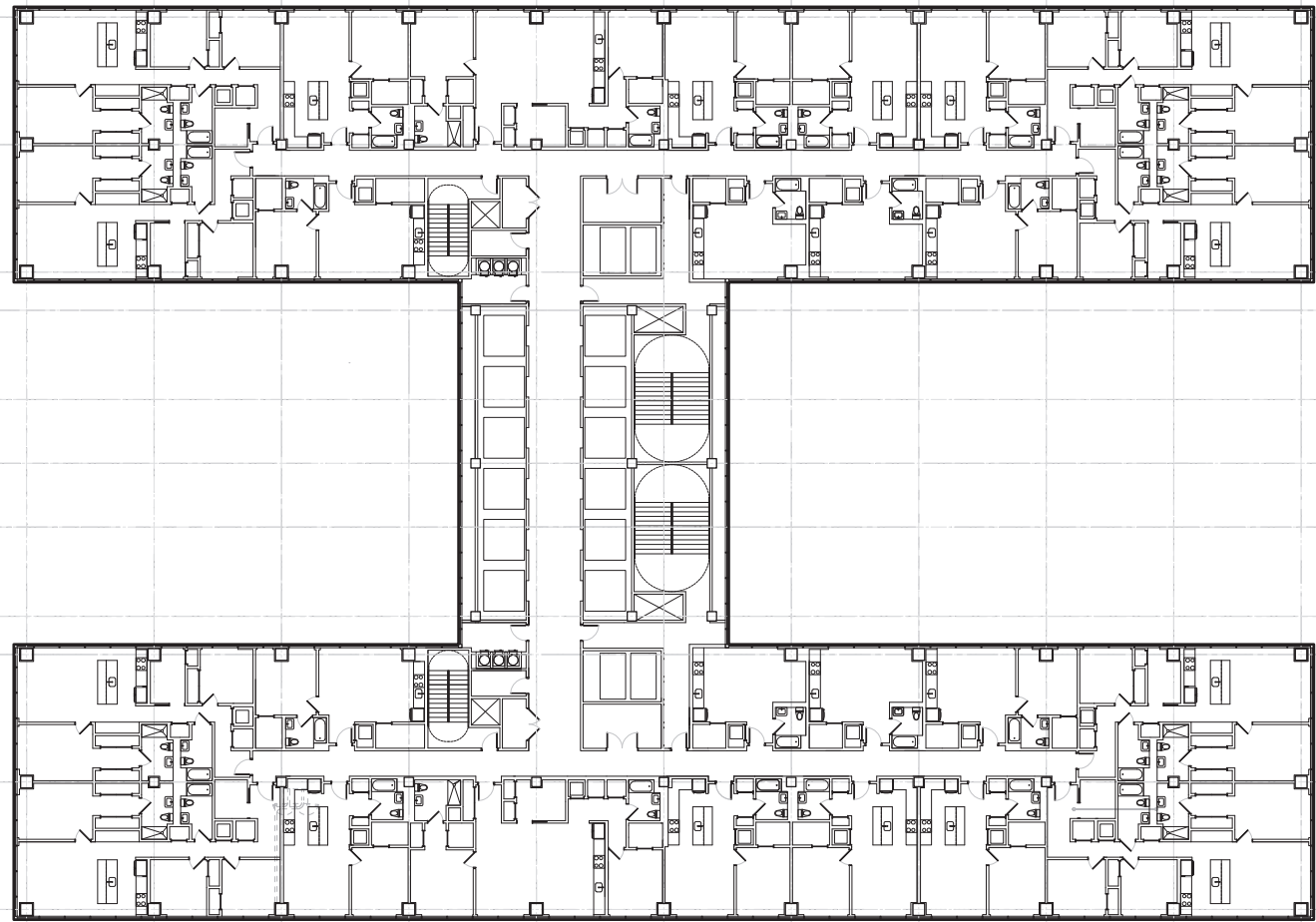
Potential Solution

- Perimeter lined with units
- Limited perimeter length produces only 22 units per floor
- Column bay spacing could work for residential units
- Perimeter units trap +/- 14,000 sf of area within the core and there are limited uses for this space due to absence of light and air. No residential project can use 30% of the gross area for amenities

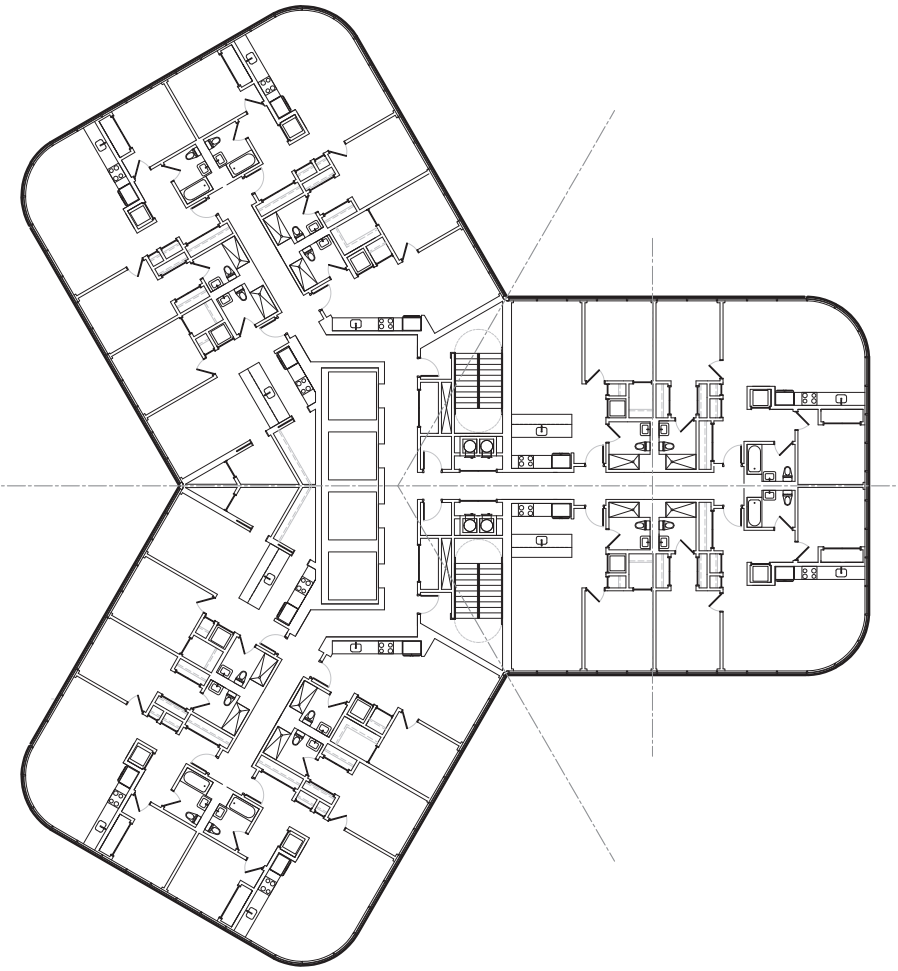


Proposed Solution

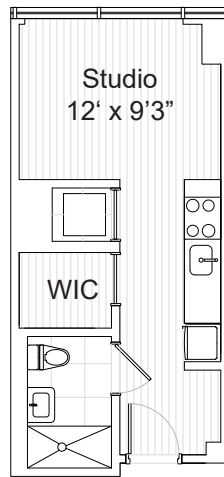
- Unworkable floorplate area removed to form "H" shaped plan which maximizes perimeter length
- Provides greatest access to daylight and view
- Minimizes circulation corridor
- Additional service lifts and code required egress stairs provided
- 28 units per floor created to maximize redevelopment proforma



Typical 'H' Floor Plan

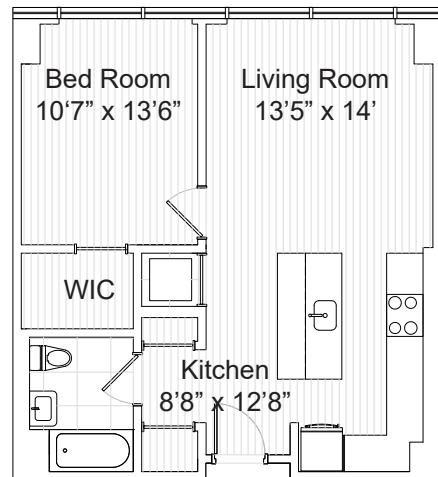


Typical Trefoil Floor Plan



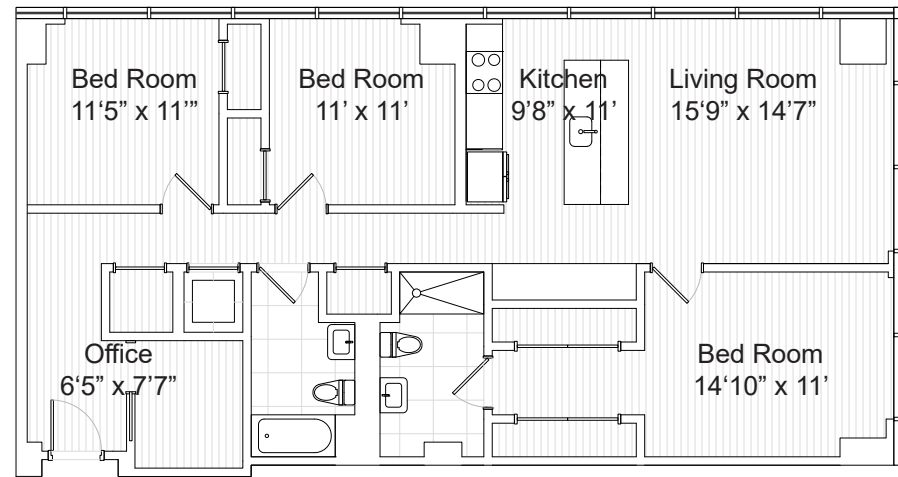
Studio

- 343 SF
- 12 per Floor
- Kitchenette
- Walk in Closet
- Washer/Dryer



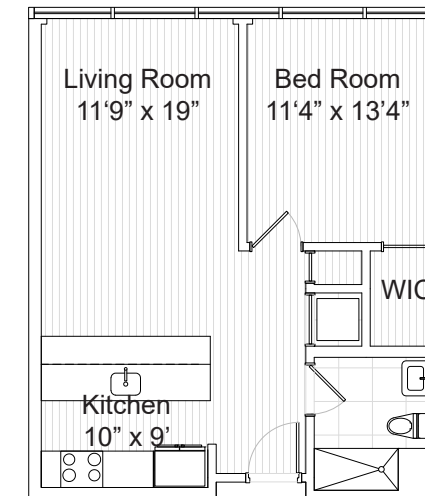
1 Bed Room

- 703 SF
- 12 per Floor
- Open Floor Plan
- Walk in Closet
- Washer/Dryer



3 Bed Room

- 1400 SF
- 4 per Floor
- Office
- 2 Bath
- Washer/Dryer



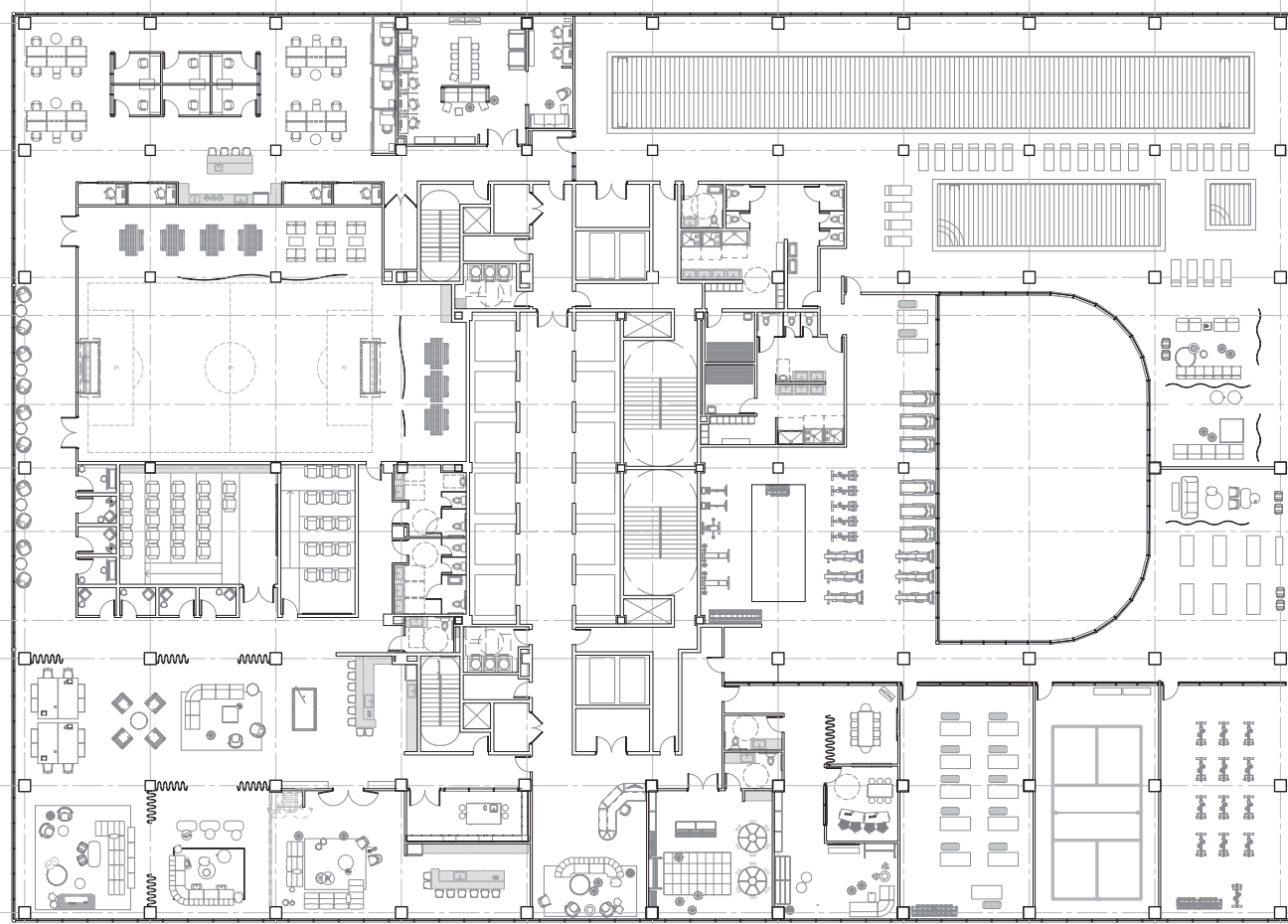
1 Bed Room

- 700 SF
- 6 per Floor
- Open Floor Plan
- Walk In Closet
- Washer/Dryer
- City View



2 Bed Room

- 1050 SF
- 6 per Floor
- Open Floor Plan
- Walk In Closet
- Washer/Dryer
- City View



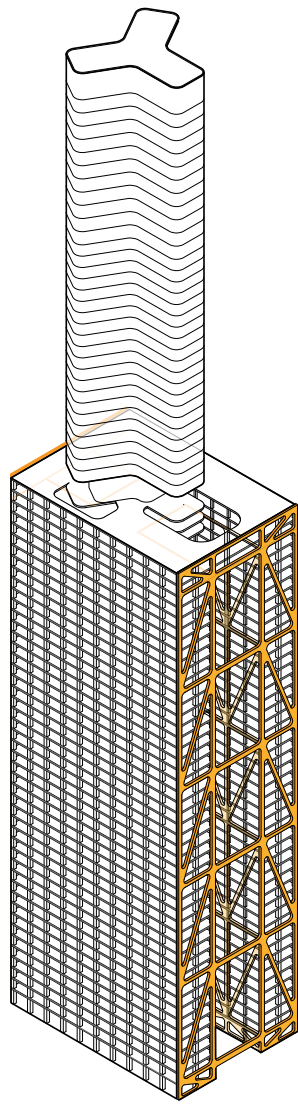
Amenity Space - Where Community is Made

In a building that can house at least 3,000 people, it is imperative to incorporate community engagement into the design. Floors 47, 48, and 49 include amenity spaces that serve to encourage connection and interaction between residents. By creating an abundance and variety of social activity rooms throughout the floor's design. The amenity spaces inspire a sense of community among the different demographics using these spaces. Whether guests are utilizing the coworking space, swimming in the indoor pool, or taking a workout class, they are sure to find a like-minded individual, or two, to share their experience.

Key Amenity Features will Include

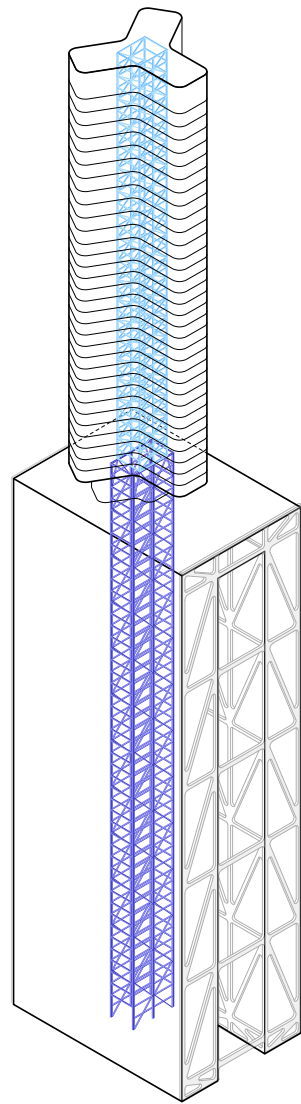
- 130' Lap Pool, Jacuzzi, and Leisure Pool
- Gym and Wellness Classrooms
- Showers, Locker Rooms, and Private Saunas
- Kids Play Rooms
- Teen Social and Study Rooms
- Event Areas
- Indoor Turf Fields
- Music Practice Rooms
- Coworking spaces
- Cafe and Wine Room
- Library
- Sky Park (Running track, Playground, Tree Grove)





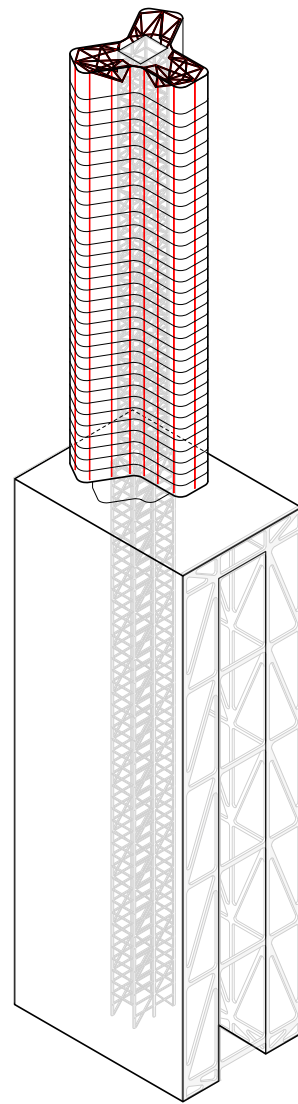
Stiffen

- Mitigate potential for increased overturning and shear on existing core due to expansion
- Reinforce columns with welded plates between floors, welded bars at existing beam to column connections, and replace existing splices with new welded splices
- Reinforce bracing by removing and replacing WF members where more economical than reinforcing, reinforce with plates where economical
- Process to occur from top down
- Add exoskeleton braced frames by lowering the building aspect ratio, reduce overturning forces
- Requires transfer slab/diaphragm at the current roof level. Can be accomplished with new concrete slab bonded to existing or added diaphragm steel



Extend

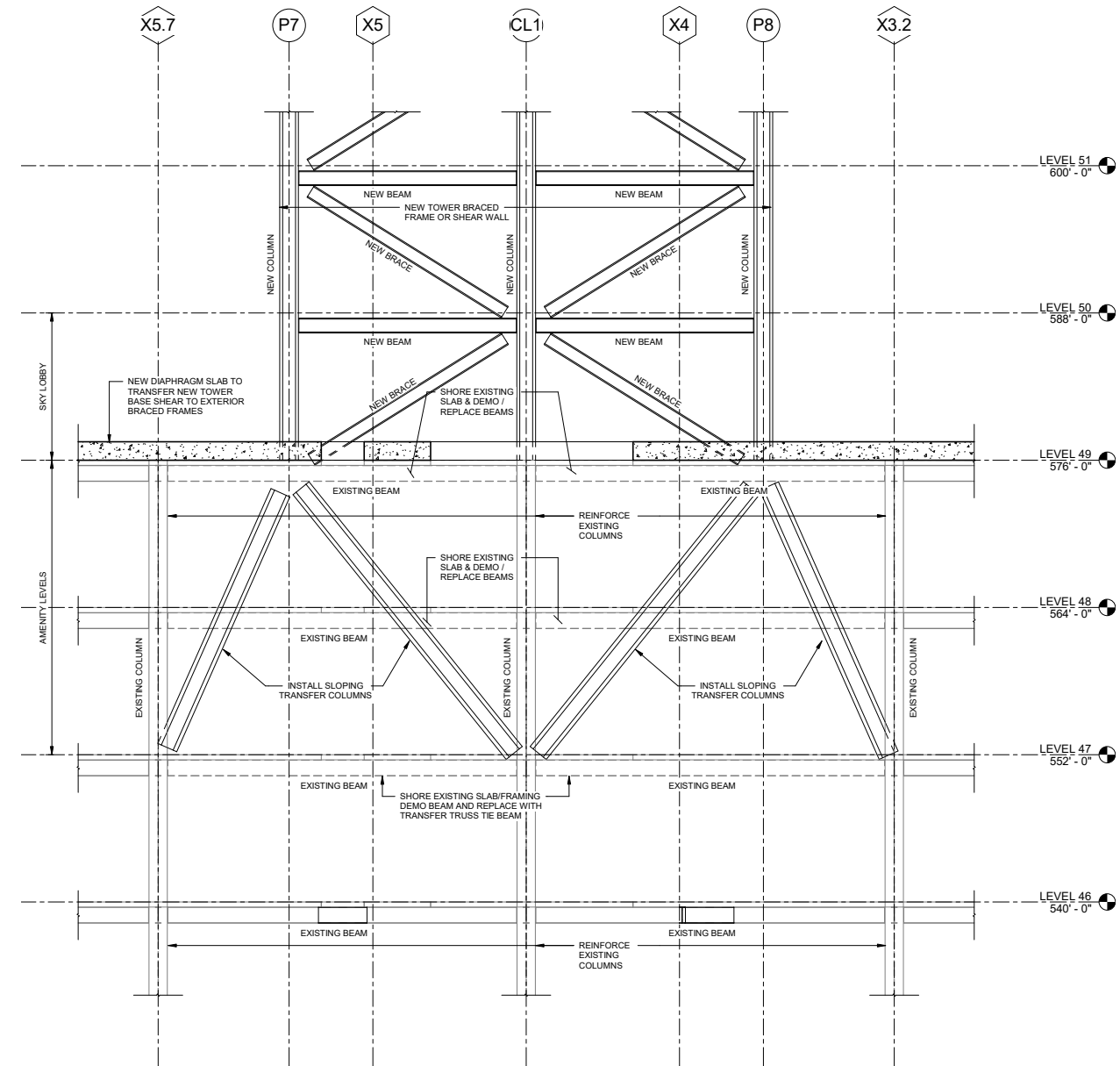
- New core above is required for new tower extensions. Using shear walls are optimal due to flexibility in the core and braced frames could also be used
- Create transfer from new core to existing core columns at the amenity floor levels by sloping new core columns/walls to existing core column below

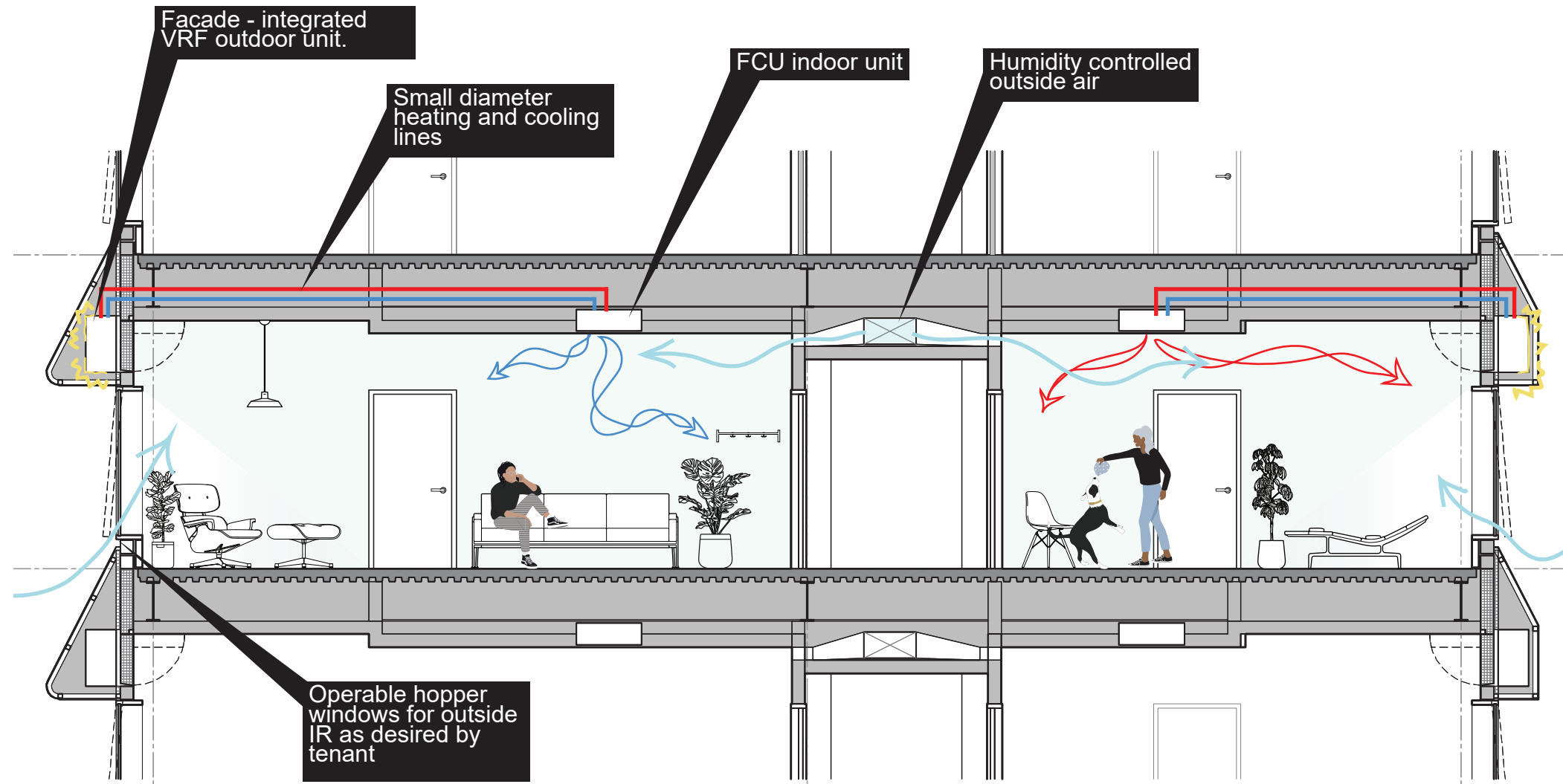
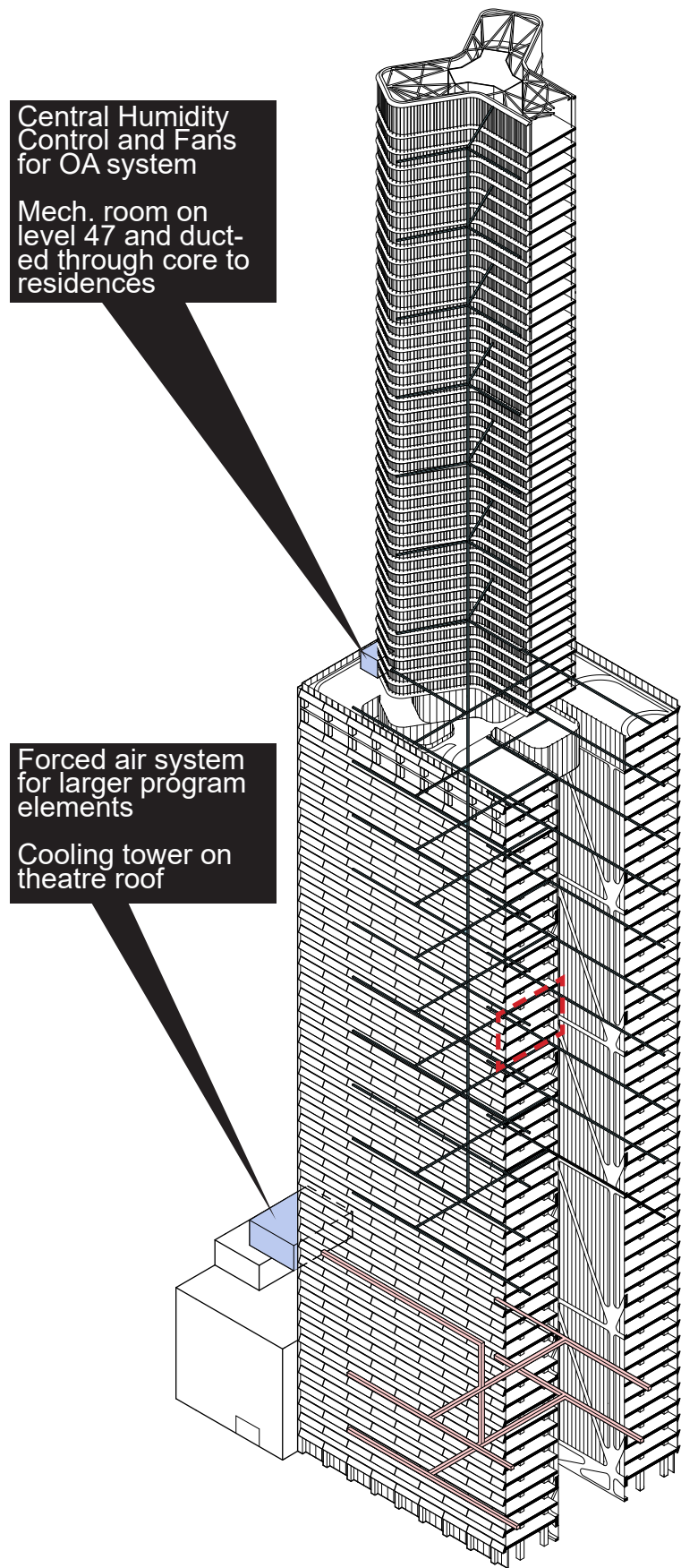


Suspend

- Create cantilever trusses 2 stories deep from the mechanical penthouse levels
- Create compression/tension rings at the top and bottom of the cantilevers that tie all 3 cantilevers together
- Suspend the residential levels using tension columns to minimize size and maximize open views

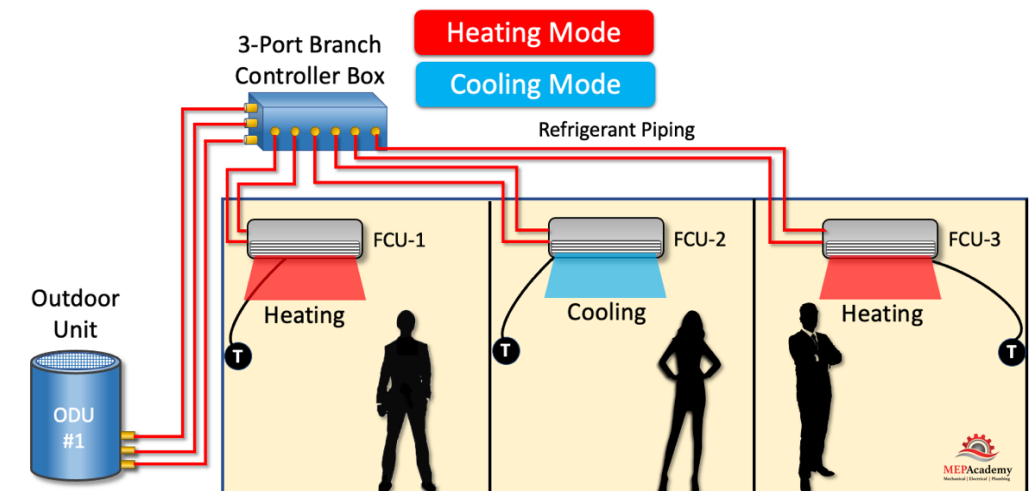
Shear Wall Transfer Study

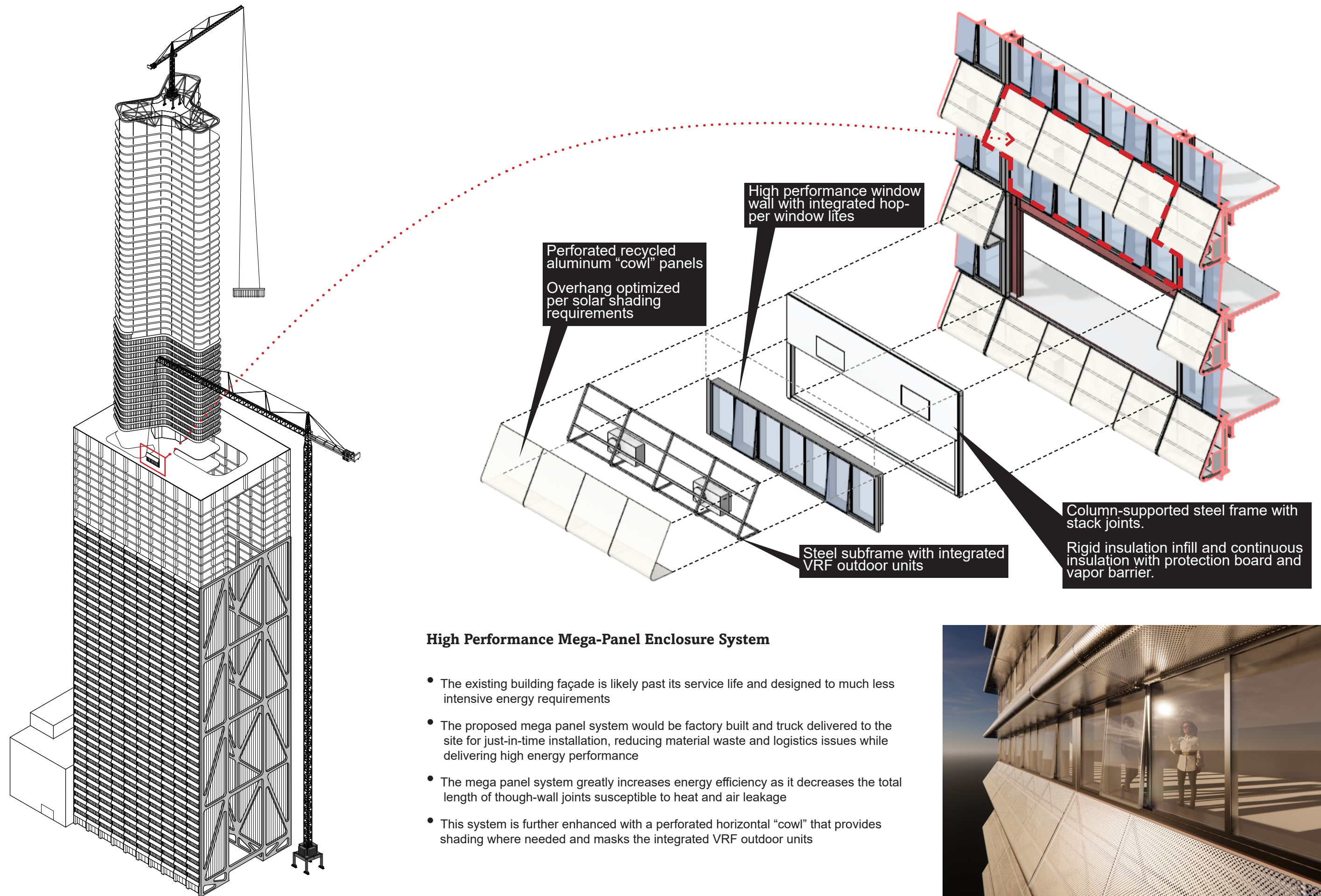




High Efficiency - Occupant Controlled Mechanical Systems

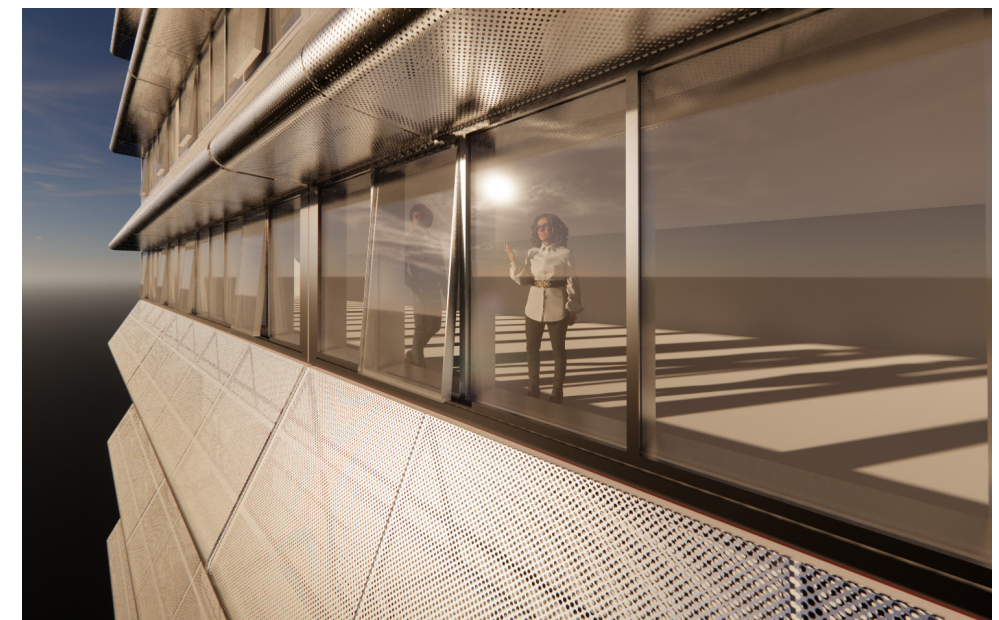
- Forced air system with chillers for lower tower uses, commercial, school, and theatres. Cooling tower placed on roof of theater
- Residential units are thermally controlled unit by unit with split VRF systems for optimal heat recovery and energy efficiency (40-50% greater efficiency than baseline ASHRAE 90.1 requirements)
- VRF outdoor unit pre-assembled in façade mega panel.
- Residential outside air dehumidification and supply provided by a mechanical room on level 48, small outside air ducts route to units.
- Residential units also have operable windows to admit fresh air directly as tenants desire

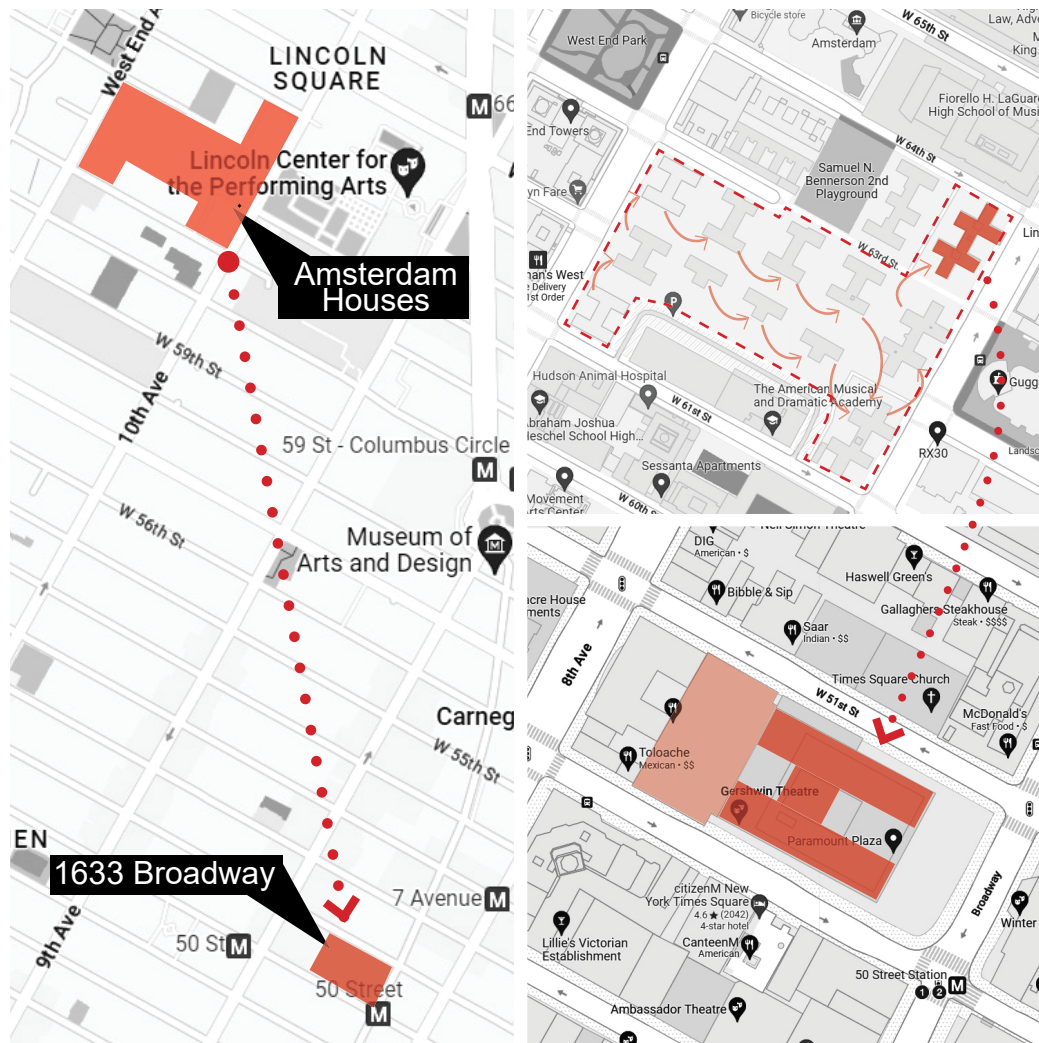




High Performance Mega-Panel Enclosure System

- The existing building façade is likely past its service life and designed to much less intensive energy requirements
- The proposed mega panel system would be factory built and truck delivered to the site for just-in-time installation, reducing material waste and logistics issues while delivering high energy performance
- The mega panel system greatly increases energy efficiency as it decreases the total length of through-wall joints susceptible to heat and air leakage
- This system is further enhanced with a perforated horizontal "cowl" that provides shading where needed and masks the integrated VRF outdoor units

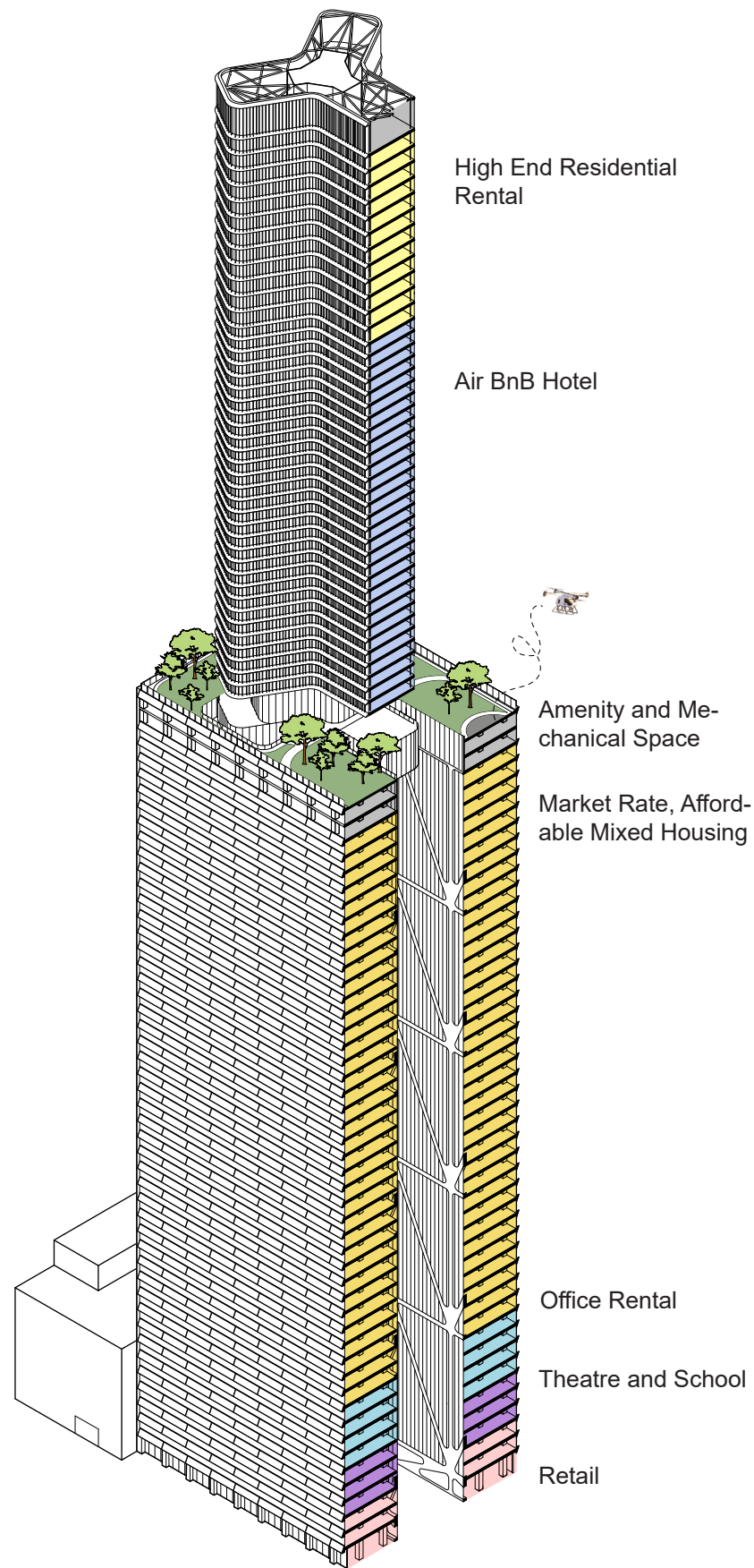




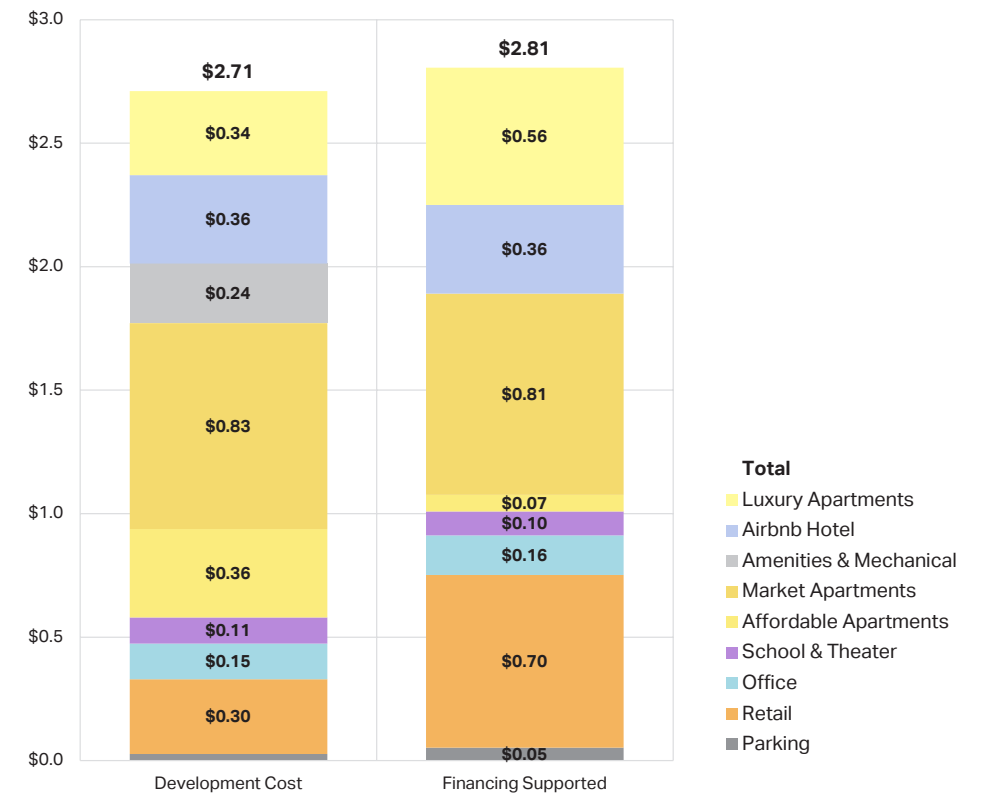
NYCHA Housing Inclusion - Pathway to Modernization for those who need it

A related issue facing New York City is the need to get NYCHA housing modernized and in a state of good repair. A major stumbling block in this effort is that renovations can only occur piecemeal phasing due to limited housing supply for temporary tenant relocation. In this proposal, an entire building of tenants in the nearby Amsterdam Houses could be relocated to the new building if slated for renovation. This would unlock an entire building in the complex to be renovated rapidly and tenants from another building in the complex could then relocate to an entirely renovated new building. In a matter of a couple years, entire complexes of NYCHA complexes could be renovated with this strategy.

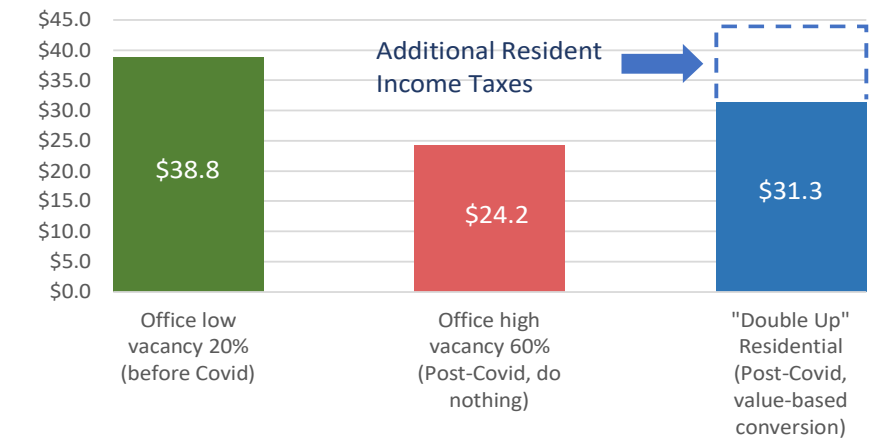
Financially, this strategy is only possible with the inclusion of high-end residential units in the program mix to offset CapEx expenditures for needed upgrades, capital improvements, and long term revenue balancing for the property.



Development Costs and Financing Supported by Program Type (in Billions of USD)



Projected Annual Property Tax Revenue for NYC (in Millions of USD)



Making the Numbers Work (for the both the city and building owners)

Financially, this approach is projected to be cash positive within 5 years of construction start. By that time the project will exceed its feasibility threshold by 3.7% and thereafter be cash positive. This is achieved by providing a nuanced, mixed use and mixed income program. It works because of the diversity of uses and income streams.

A great concern for the city is the erosion of tax revenue due to the decrease in property tax value. Compared to pre-Covid office occupancy, we can expect to see a post-Covid office occupancy tax base erosion of approximately 37%. With a value-based office to residential conversion, that erosion could be reduced to 19% providing \$7M more revenue to the city annually as opposed to a "do nothing" approach for this property. Factoring in the additional income taxes of new residents, that gap would be closed even further.



... **For an Equitable Future**