

RE:NEW DISTRICT

Meeting CRE Challenges with New Mixed-Use Strategies



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A JOINT VENTURE OF

I:OTELSTUDIO & ORTEGA DESIGN

ARCHITECTURE
INTERIOR DESIGN
WASHINGTON, D.C. DALLAS, TX.

PURPOSE

H4 Designworks is an architecture and interior design firm with studios in Washington DC and Dallas, Texas. We're focused on hospitality-driven design that enhances people's lives and become valuable investments for our clients.

Our team has been producing hotels for over forty years and multifamily residences for over twenty years, honing an approach centered on creating deeper connections between the resident or guest, and the residence, hotel, or resort. We firmly believe that these connections create more powerful memories and bonds between the resident, guest, and the property... And that those bonds have ineffable value.

In the late 1990s, the hospitality industry became more aware of what moved and inspired people about their home life, and sought to incorporate those emotions in hotels of all kinds. With the popularity of this approach increasing, a reversal also took place: Hotel design began to influence home design, and the reciprocity raised the level of design of many other enterprises including retail, workplace, transportation, healthcare, and food and beverage. The lessons that we and our clients have learned are valuable, durable, applicable and in many ways, critical to enterprise success.

In Washington, DC, we have a problem: The Covid-19 Pandemic, which changed almost every aspect of our lives, had a lingering effect in older areas of downtown that now appear tired, lifeless and in need of focused efforts to reinvigorate and recharge those communities. We see an opportunity to explore what is possible, and indeed necessary to compete with the new and vibrant areas of DC that have caused the center of gravity to move to the eastern and southern parts of the District, away from downtown. We would like to share some ideas about what is possible to meet these challenges, focused on a hospitality approach to mixed-use that creates a different take on destinations for work, sleep, play, raising a family, staying fit and enjoying life at any age.



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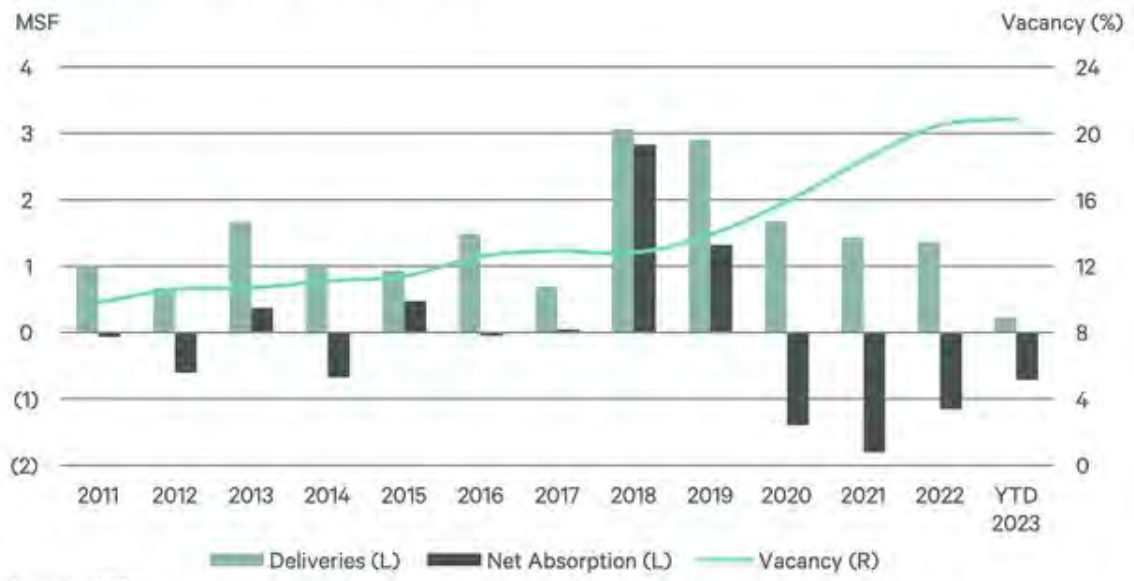
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THE REALITY



FIGURE 1: Historical Supply & Demand Dynamics

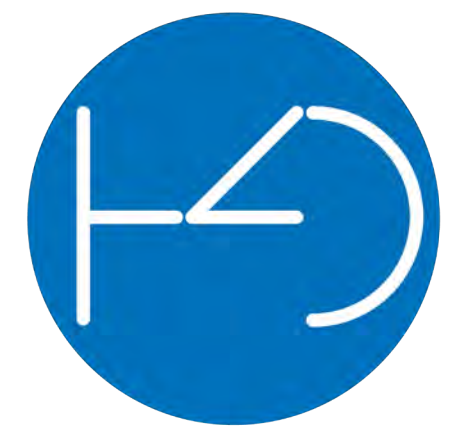


Source: CBRE

The DC Metro region has large volumes of buildings that are obsolete and empty due to their height, core depth, window relationships, and many do not necessarily take full advantage of their by-right floor area ratio (FAR).

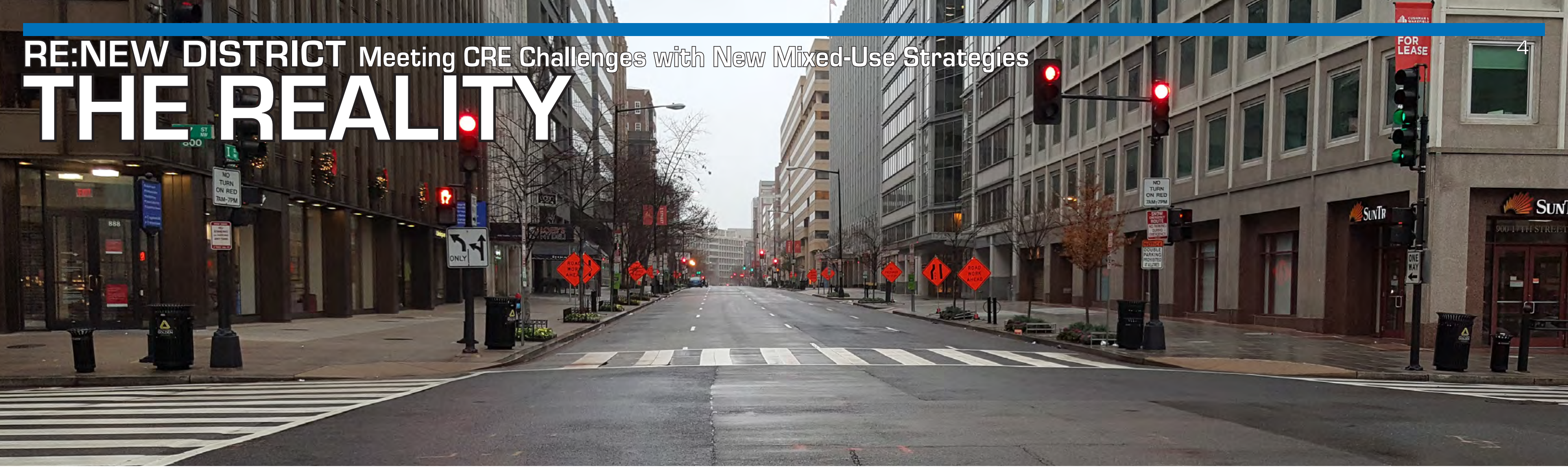
In a post-Covid period, employees are slow to return to work. Regionally, occupancy levels are historically low which has the effect of destroying Small businesses—cafes, repair shops, laundries, coffee shops and restaurants. Much of the pre-Covid connective tissue of the region is gone.

Obsolete buildings are emptying out as renewals slow and owners with little positive cash flow are unable to invest in them. As premium grade buildings are being given to the bank, either non-recourse or deed in lieu of foreclosure, the value of obsolete building may be entering a valuation that enables a re-imagining of what could occur in their frequently excellent locations.



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THE REALITY



These buildings also represent vast amounts of wasted embodied carbon if a building was fully demolished. The opportunity to creatively sculpt these buildings in ways that provide shade, enable greater natural light, provide opportunities for live planted walls and green space is one that offset the carbon waste that selective demolition would create.

We imagine that buildings can be re-purposed in ways that change the paradigm of single-purpose buildings.

By understanding their potential as mixed-use buildings that are not layered vertically, but blocked and stacked by various uses, we can create a vertical model of uses that efficiently deliver opportunities for **living, working, lodging, entertaining, fitness, childcare, urgent care and recreation within one building.**



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THE CHALLENGES

The culture of work:

The culture of work, including the valuable exchanges between staff and leadership were reduced to video conference calls, which in some cases compromised effective management and caused an interruption that has been characterized as deleterious to effective operations, personal growth, and professional development.

Federal workers remain absent:

Many large private corporations and organizations are tied to federal office attendance policy. Attracting staff back to the office has seen mixed results with large federal agencies in the DC Metro having lagged private employers in requiring return to the office.

Closing businesses and crime:

The lack of pre-pandemic levels of population of downtown Washington D.C. has hastened an increase in crime. With high vacancies, much of the downtown small businesses have closed due to lack of demand, creating a bleak environment competing with employers efforts to attract staff back to the office.

The boom in suburban and exurban development:

Close-in and medium-commute workers have adapted to growing suburban markets that have seen entertainment investment rise to meet new

expectations. The attraction to the suburbs is sticky and likely to become more so as the cost basis for these enterprises is monetized at lower competitive prices, further weakening urban downtown attractions.

Increased commute time and associated cost:

Commute times are longer on DC metro roads, a windfall for toll operators who are enjoying record revenue as many commuters are willing to pay for higher speeds. University of Maryland researchers found from cellphone data that average trip times between thousands of DC, MD and VA neighborhoods were up twenty percent from September 2019 to September 2022.

Rail lags as a regional option:

- Nearly half of Metro riders were lost to telework during the Pandemic.
- The highest daily ridership of the pandemic era, 65% of the average number of weekday rides in September of 2019, occurred in September 2023.
- MARC train use, primarily from suburban MD to downtown DC, is 40% of pre-pandemic levels.
- VRE remains at about 33% of pre-pandemic levels
- Most riders of MARC and VRE are federal workers



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THE SOLUTION



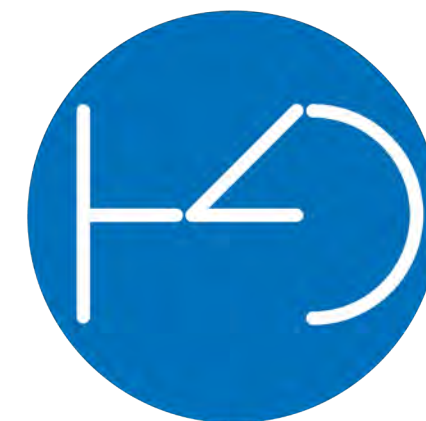
COMPLETE BUILDING DEMOLITION CREATES A MASSIVE WASTE OF RESOURCES



LIGHT AND SHADING STRATEGIES TAKE ADVANTAGE OF BUILDING LOCATION AND ORIENTATION

- Create mixed-use buildings that combine blocking and stacking of multiple uses. By combining live, work and play space, generate synergies not currently found in single use buildings.
- Conserve energy by reusing as much structure, materials and systems as possible from existing buildings.
- Sculpt the building to increase window line, provide shading and create light-filled courts, including much needed green space at multiple floors.
- Maximize the relationship of solar exposures and view corridors increasing passive energy use and increased comfort.

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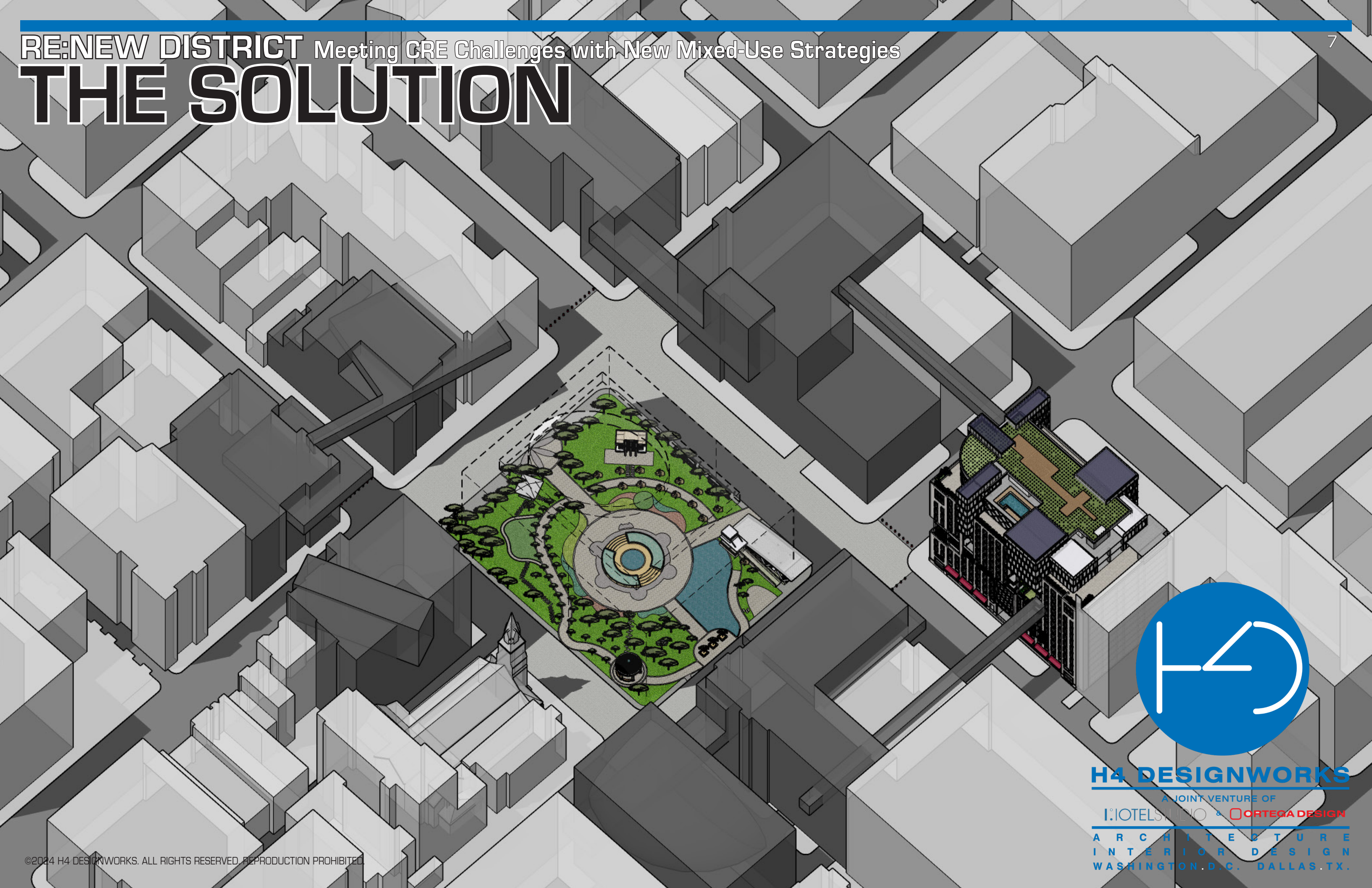
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New Connections between buildings using air rights and unused FAR.

Case Study Building

Buildings shown in dark gray are part of the connected superblock

11th Street

10th Street

G Street

F Street

New Public Park with Transit Options and Dedicated Pedestrian Zones.

Dashed lines indicate location of demolished building.

New Public Park with Transit Options and Dedicated Pedestrian Zones.

New Pedestrian Zones on dedicated days and times, or for special events.



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THE SOLUTION



The “flat-top” of downtown Washington DC is apparent in many rooftop views.

[Continued from Previous Page]

- Use of new elevator technologies to create addressable floors, two-way entry and exit, and express elevators to upper levels and rooftop amenities.
- Avoid the flat-top: Create new skyline opportunities with richer architectural expressions and uses at the top of buildings.



16-floor Residential and Public project by Link Arkitektur in collaboration with 3hus



Project in Santiago, Chile by Gonzalo Mardones and b720 Fermin Vázquez Arquitectos



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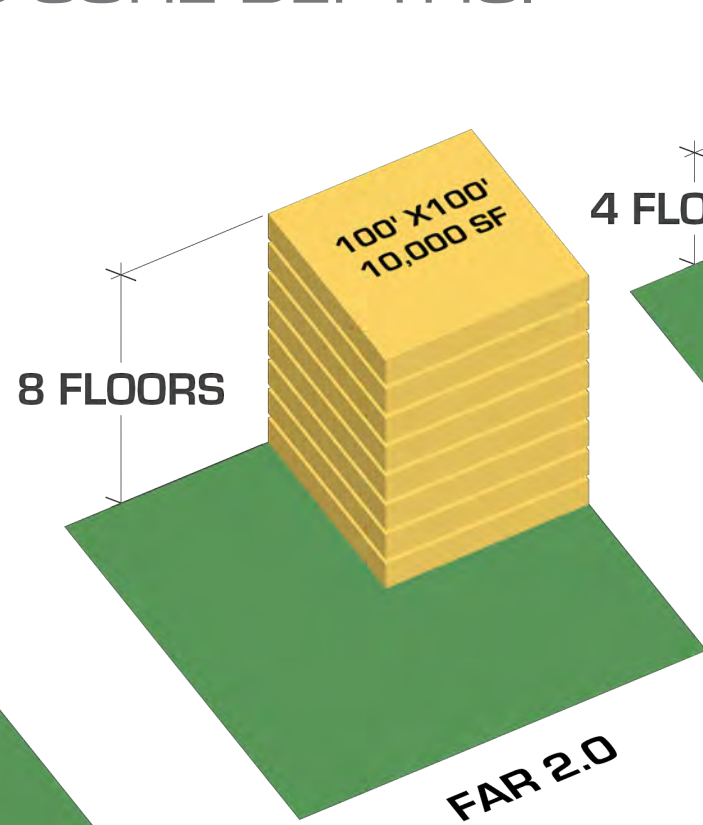
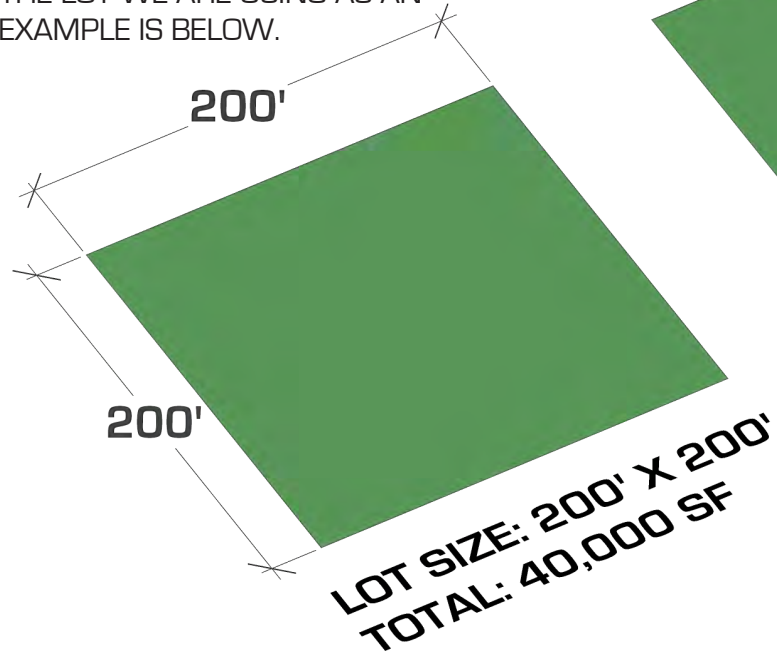
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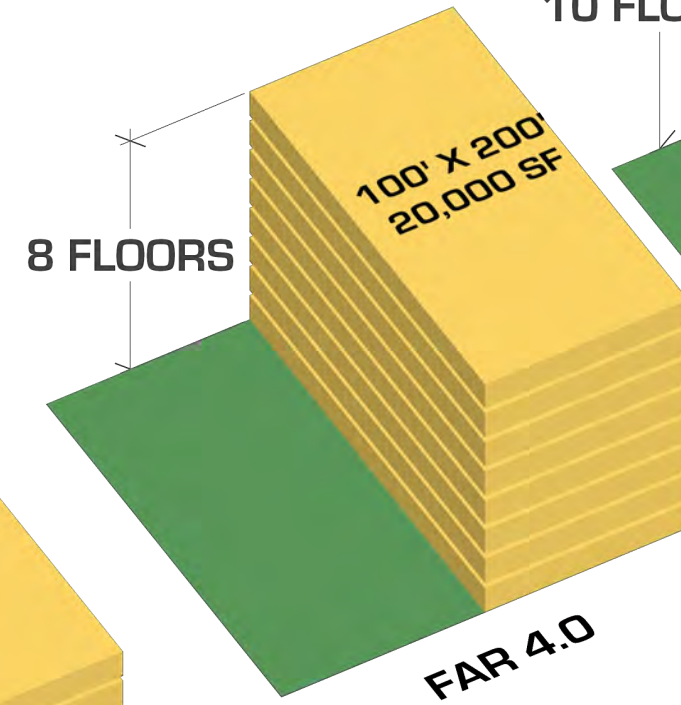
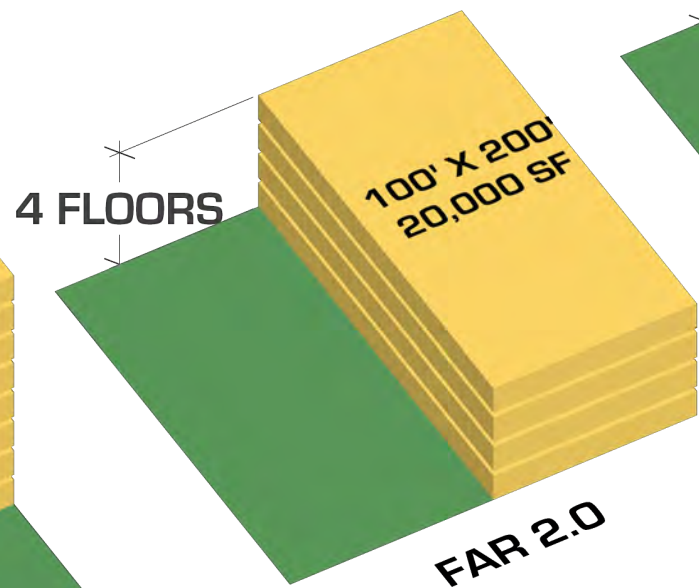
THE SOLUTION

MANY AVAILABLE BUILDINGS HAVE NOT TAKEN FULL ADVANTAGE OF FLOOR AREA RATIO (FAR) AS PRESCRIBED IN THE DC ZONING HANDBOOK AND MAP. PRIME CANDIDATE BUILDINGS MAY BE OLDER AND HAVE LARGER FLOOR PLATES WITH DEEP WINDOW-TO-CORE DEPTHS.

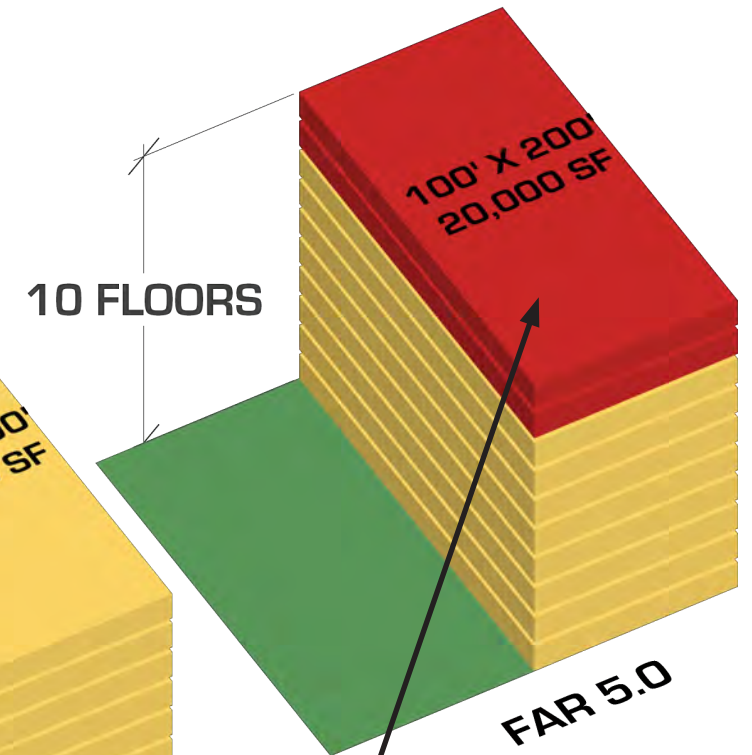
THE LOT WE ARE USING AS AN EXAMPLE IS BELOW.



AT FAR 2.0, THE ALLOWABLE SQUARE FOOTAGE CAN BE UP TO 80,000 GROSS SQUARE FEET. THESE TWO EXAMPLES OF FAR 2.0 ARE BASED ON THE PERCENTAGE OF SITE COVERAGE. AT 25% SITE COVERAGE, 8 FLOORS CAN BE ACHIEVED, ASSUMING THE HEIGHT IS PERMITTED. AT 50% LOT COVERAGE, 4 FLOORS ARE ACHIEVABLE.



AT FAR 4.0, THE ALLOWABLE SQUARE FOOTAGE CAN BE UP TO 160,000 GROSS SQUARE FEET.



AT FAR 5.0, THE ALLOWABLE SQUARE FOOTAGE CAN BE UP TO 200,000 GROSS SQUARE FEET. IF THE EXISTING SQUARE FOOTAGE IS 160,000, A TOTAL OF 40,000 MORE SQUARE FEET CAN BE ADDED TO THE BUILDING.



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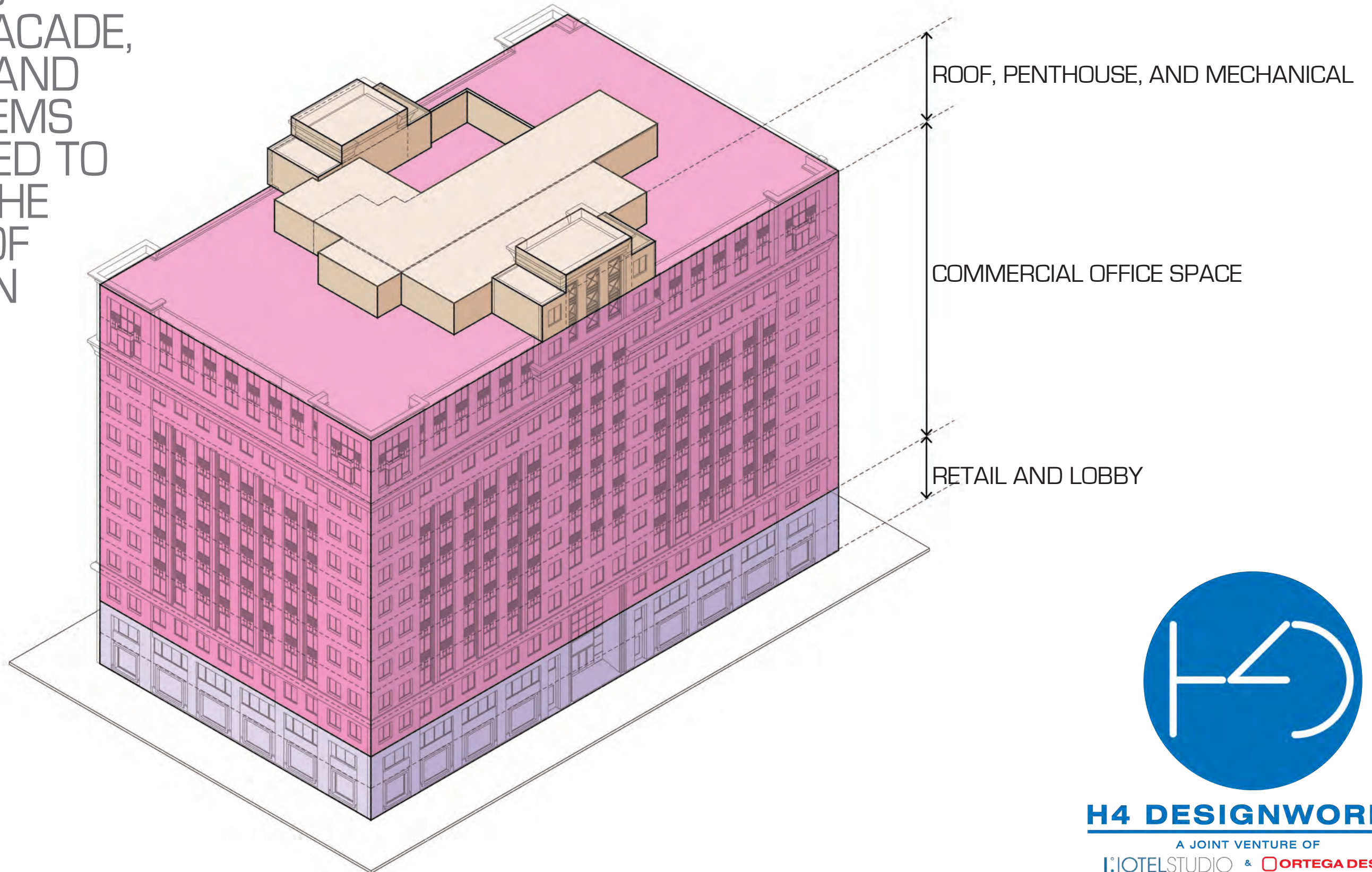
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* ZONING RULES ARE VERY COMPLICATED, AND REQUIRE A STUDIOUS AND COLLABORATIVE APPROACH WITH THE ZONING OFFICE. THIS EXAMPLE DOES NOT TAKE INTO ACCOUNT FACTORS THAT INFLUENCE BUILDING MASSING, INCLUDING AIR RIGHTS, SETBACKS, ALLOWABLE HEIGHT, BASED ON THE ZONE WITHIN WHICH THE LOT SITS.

THE EXISTING PROGRAM, FACADE, STRUCTURE AND OTHER SYSTEMS ARE ANALYZED TO ASCERTAIN THE FEASIBILITY OF MODIFICATION AND/OR REMOVAL



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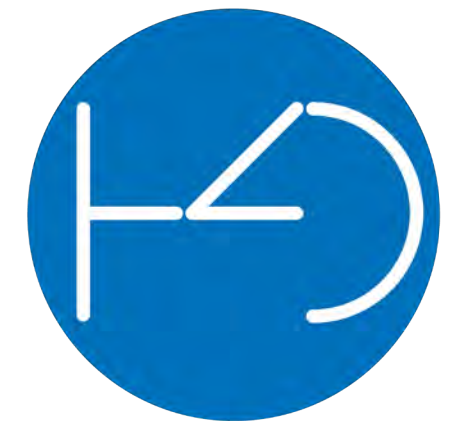
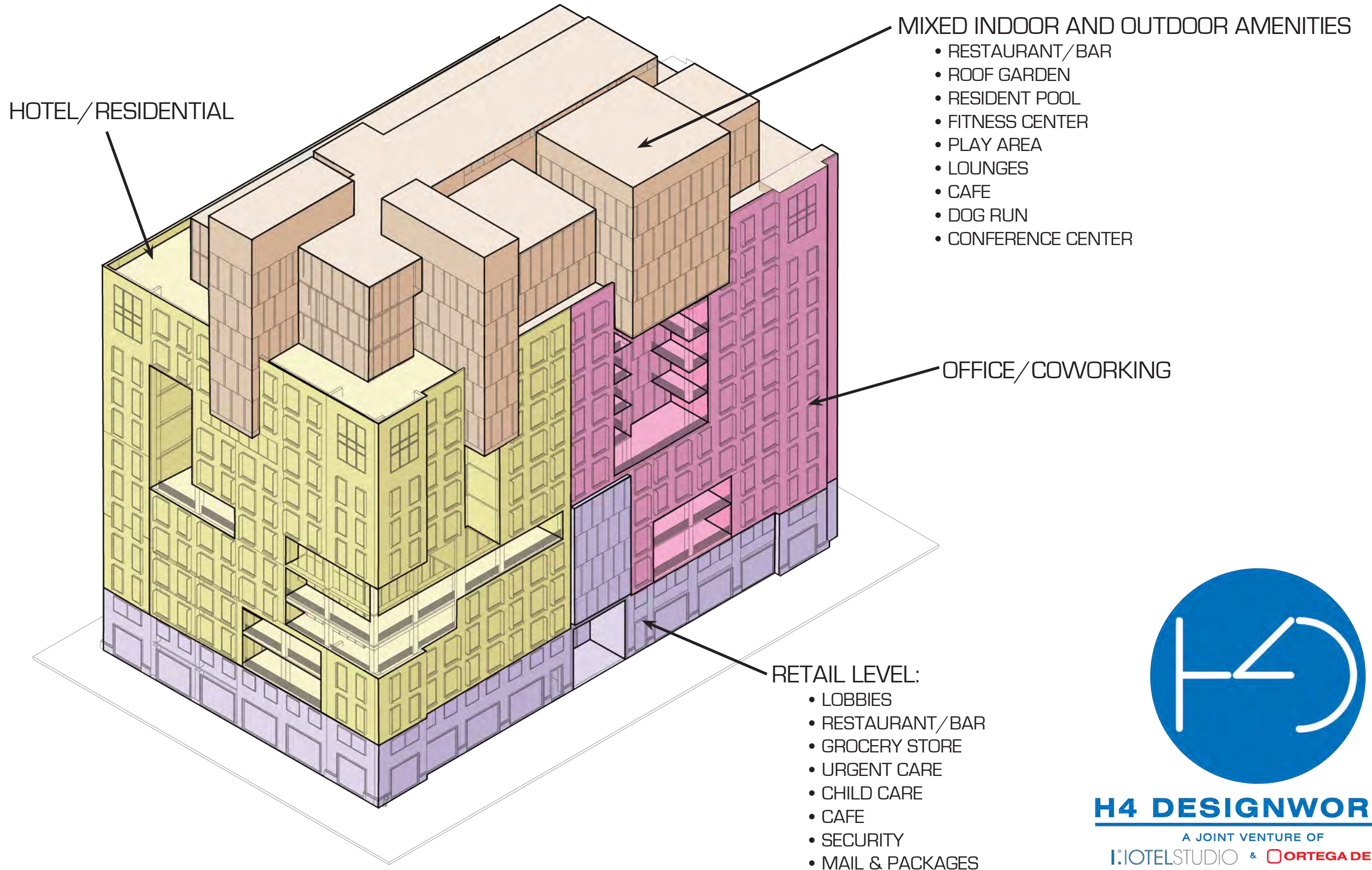
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Strategies

- 1. Balance the rent rolls** by planning for highly varied uses that are layered from most public-facing at lower levels to most private at mid levels and secure public venues at, or near the top.
- 2. Neutralize core depth:** Window wall disadvantages by carving out large blocks of building volume to provide air, space and light to interior spaces.
- 3. Increase window wall** by glazing the excised area creating dramatically higher windowed and shaded areas.
- 4. Relocated Volumes:** The excised volumes constitute by-right FAR that can be relocated to the sides and tops of buildings to change the flat skyline of Washington D.C.



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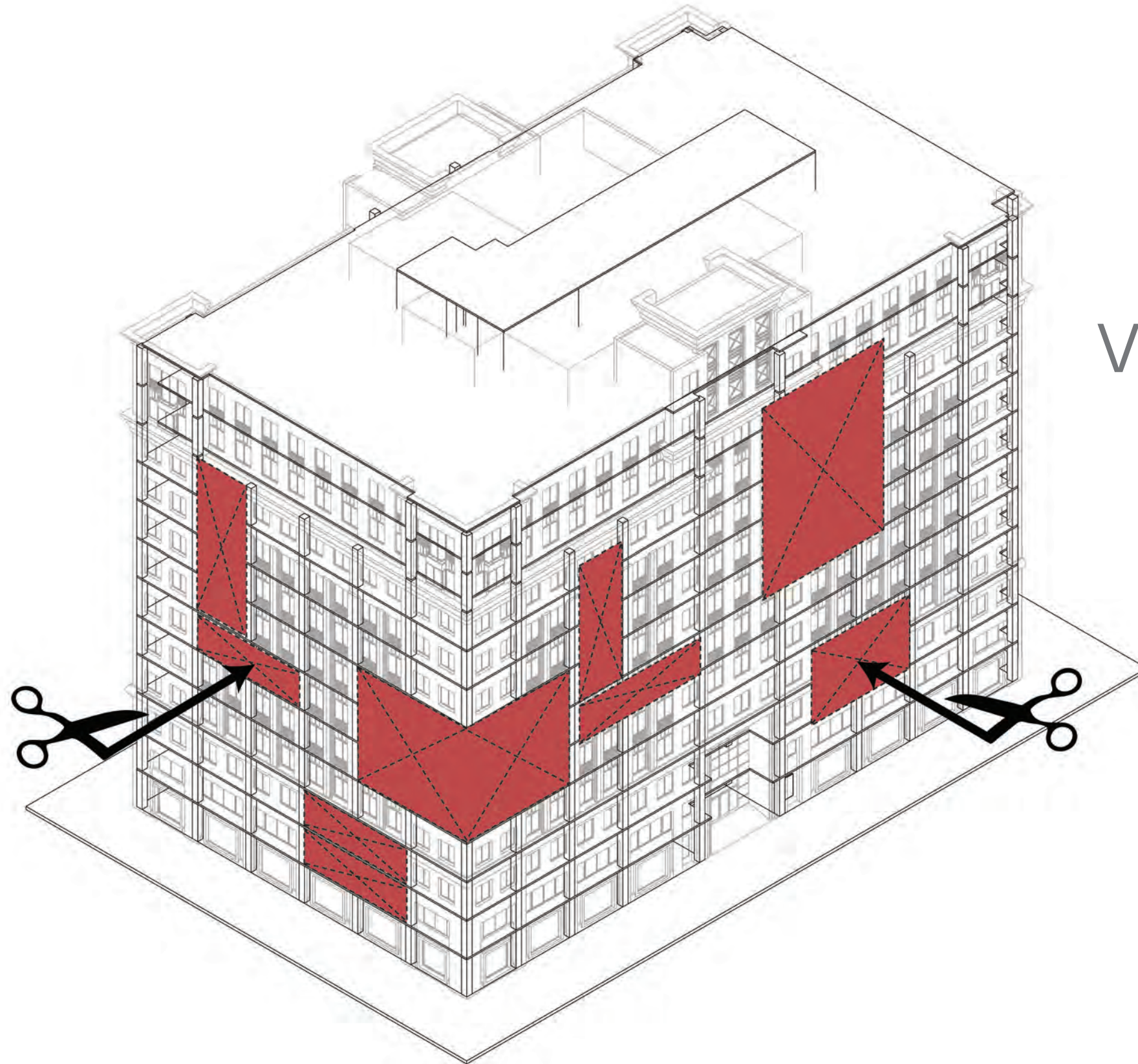
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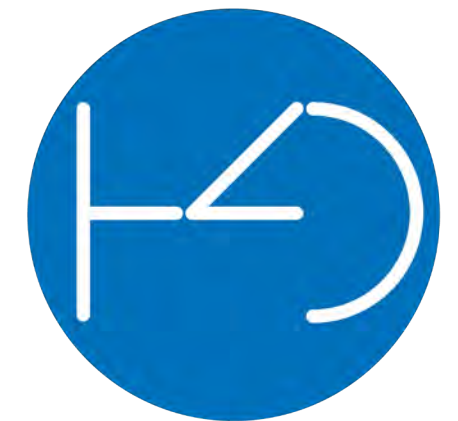
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THE EXISTING
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CREATING
VOIDS IN THE
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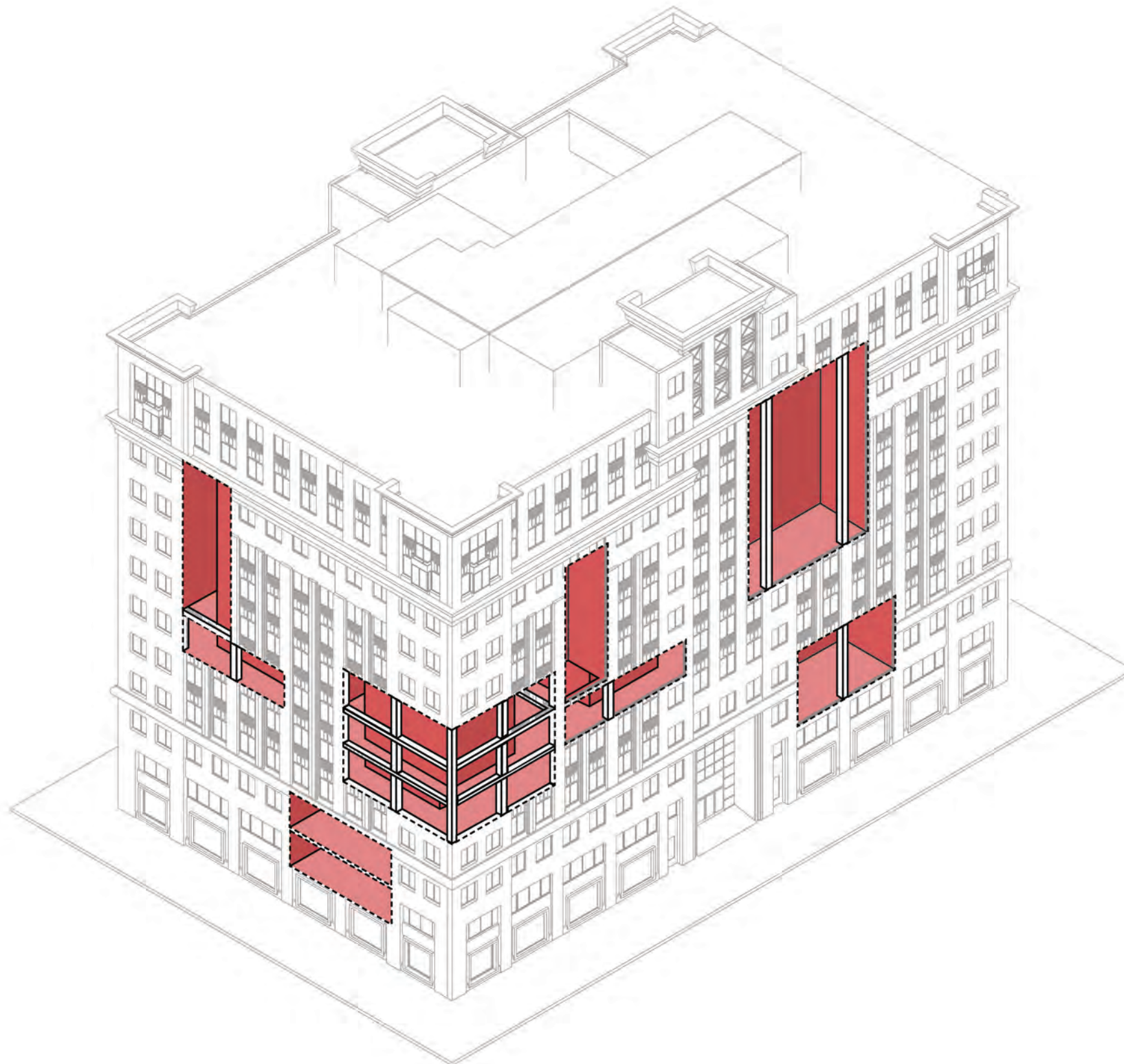
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THE STRUCTURE IS ADAPTED TO THE NEW VOIDS LEFT BY THE REMOVAL OF BUILDING VOLUMES, ALLOWING FOR NEW GLAZING AND BALCONIES.



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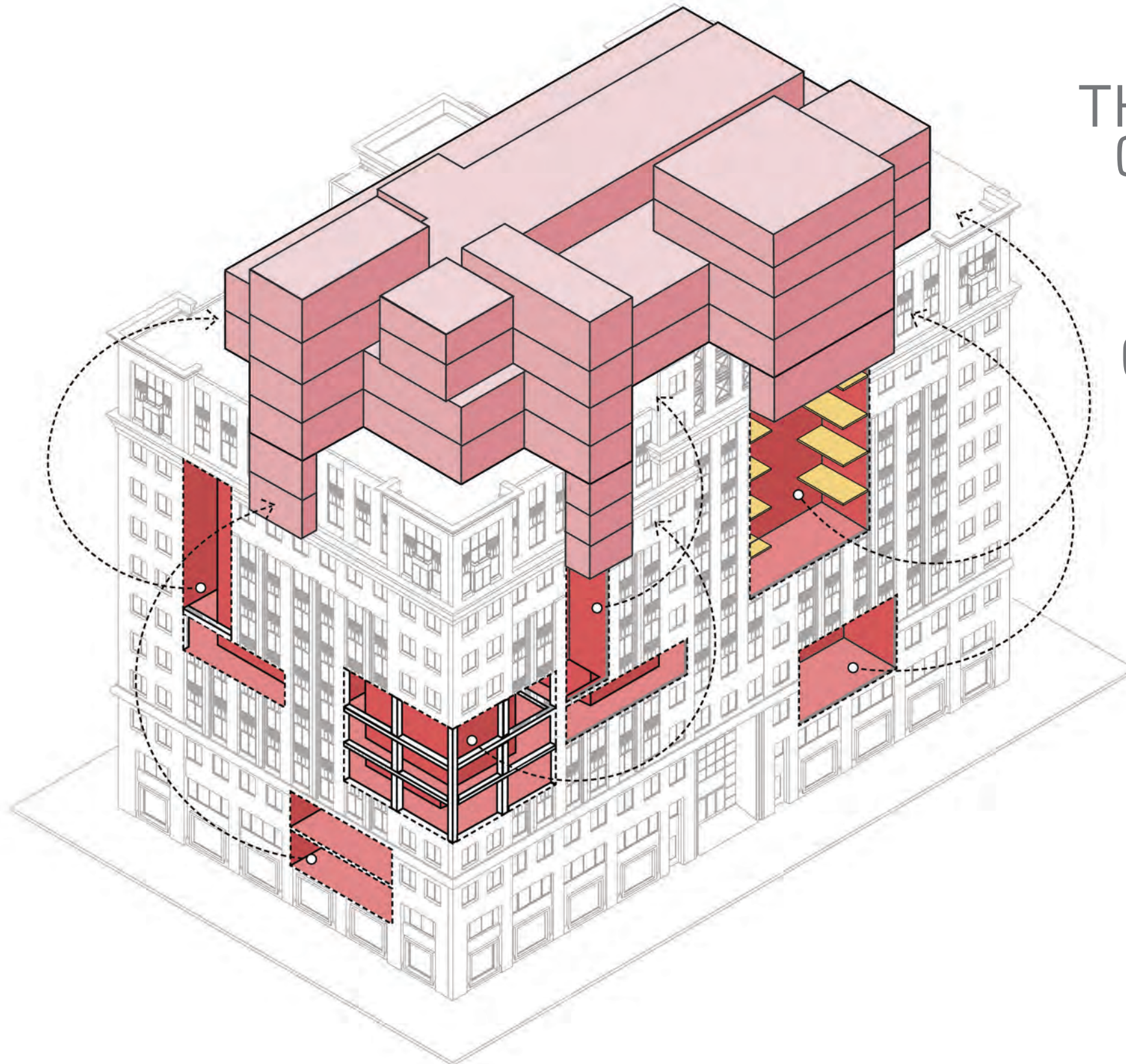
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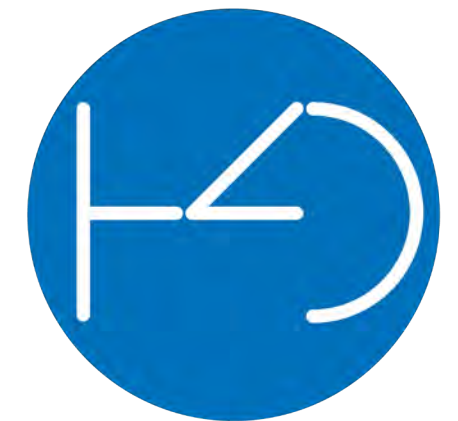
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THE AGGREGATED FLOOR AREA IS RELOCATED TO THE TOP OR SIDES OF THE BUILDING AND ASSIGNED NEW USES ALLOWING FOR OUTDOOR SPACE AND EXPANDED VIEWS OF THE CITY



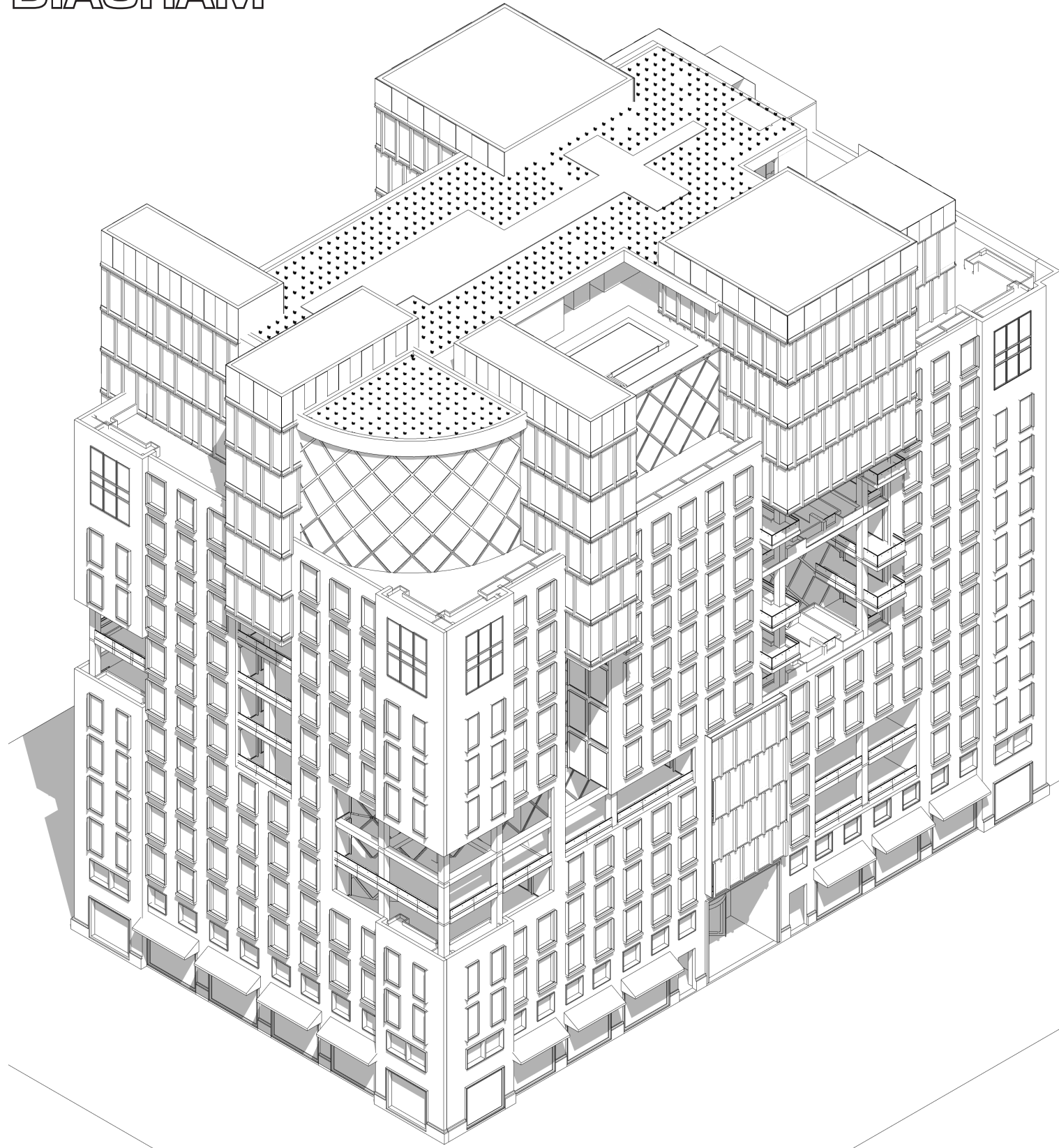
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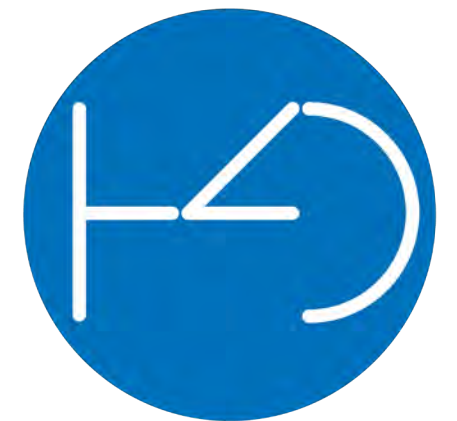
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RE:NEW DISTRICT Meeting CRE Challenges with New Mixed-Use Strategies FINAL DESIGN DIAGRAM



THE FINAL DESIGN
INTEGRATES
FACADE ELEMENTS
CAPITALIZING UPON
SOLAR ORIENTATION.

THE MASSING AND
FACADE, SCULPTED
TO ENHANCE
PERFORMANCE, MIX
SUSTAINABILITY
AND WELLNESS
INCORPORATING
NATURAL LIGHT,
GREEN SPACE, AND
VARIETY OF USES



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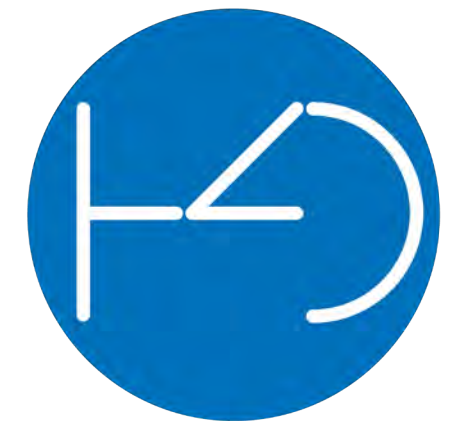
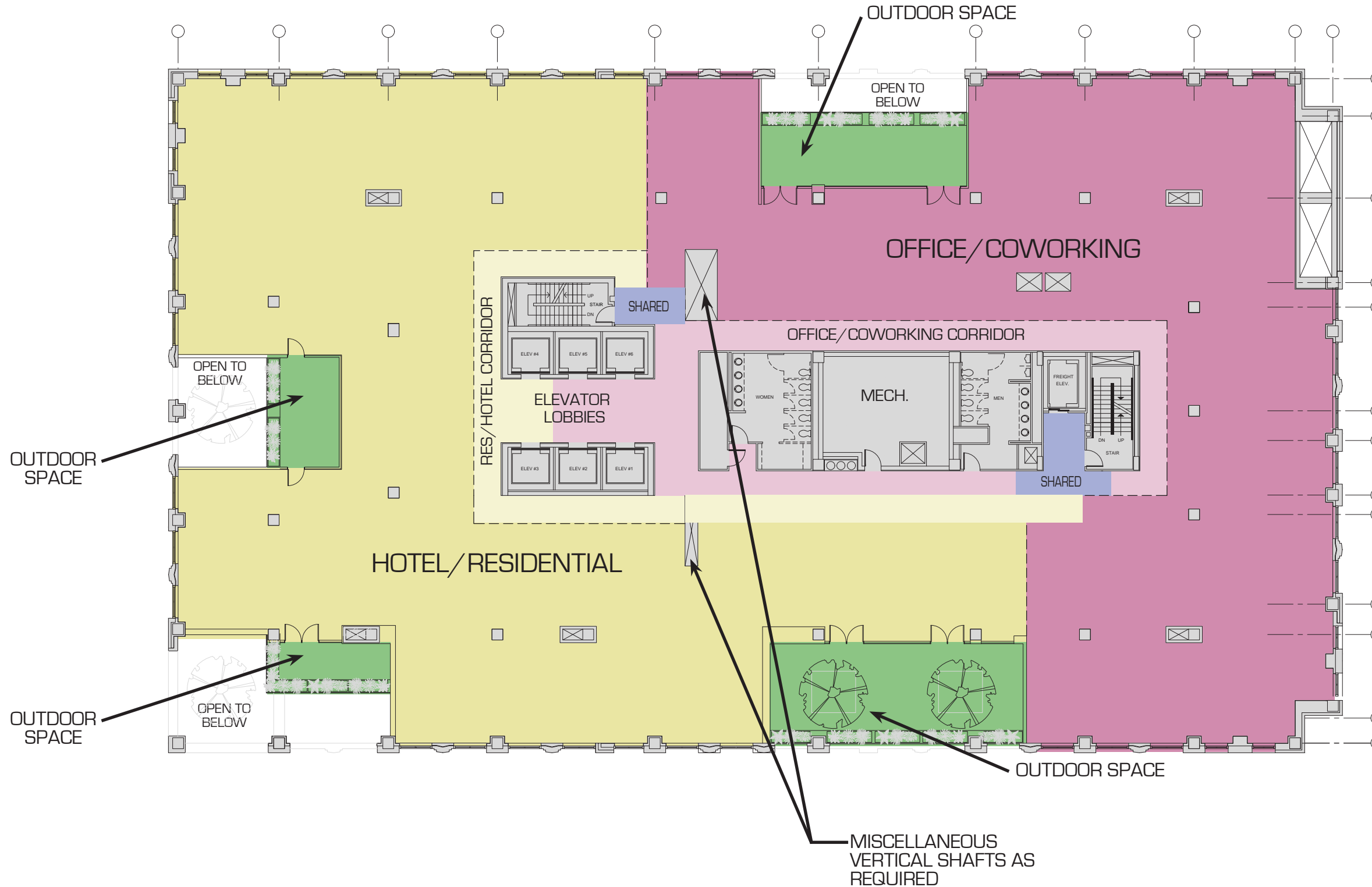
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SAMPLE FLOOR PLAN DIAGRAM

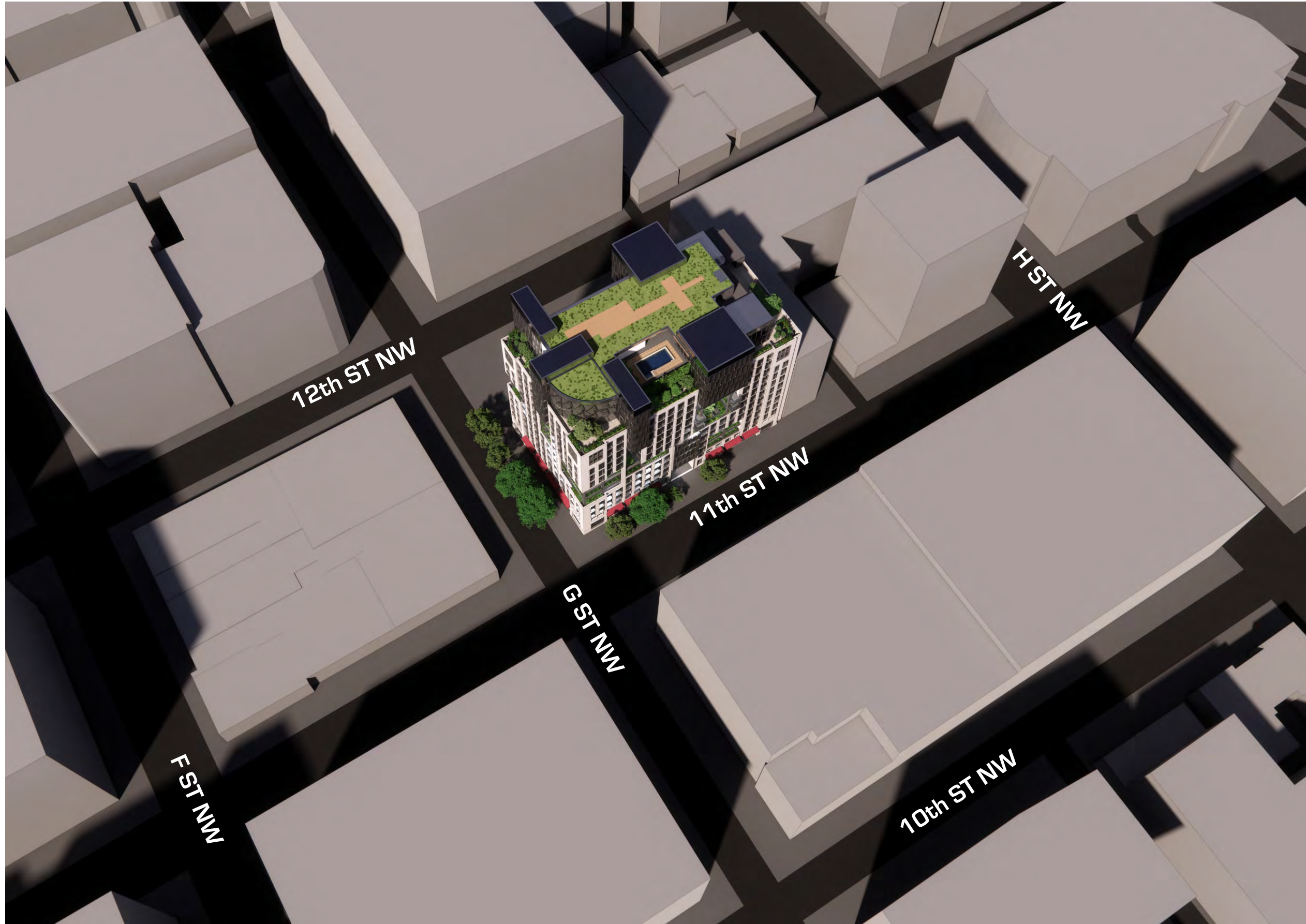


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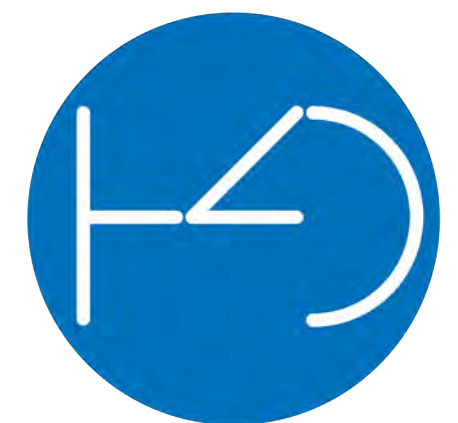


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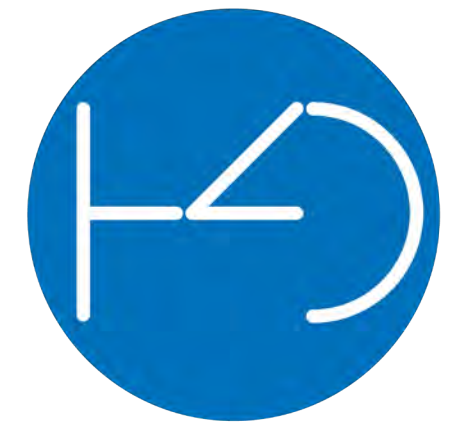
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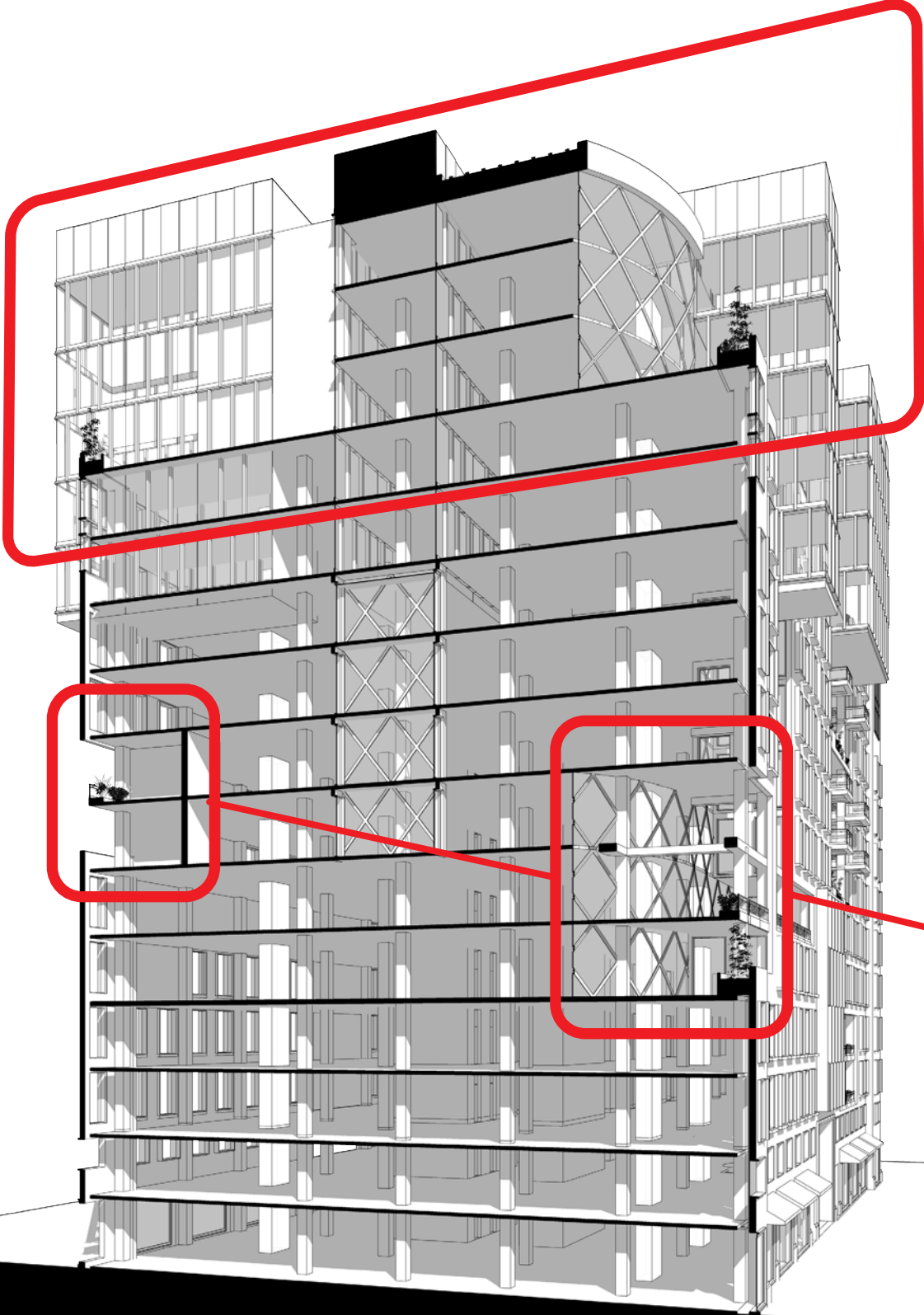
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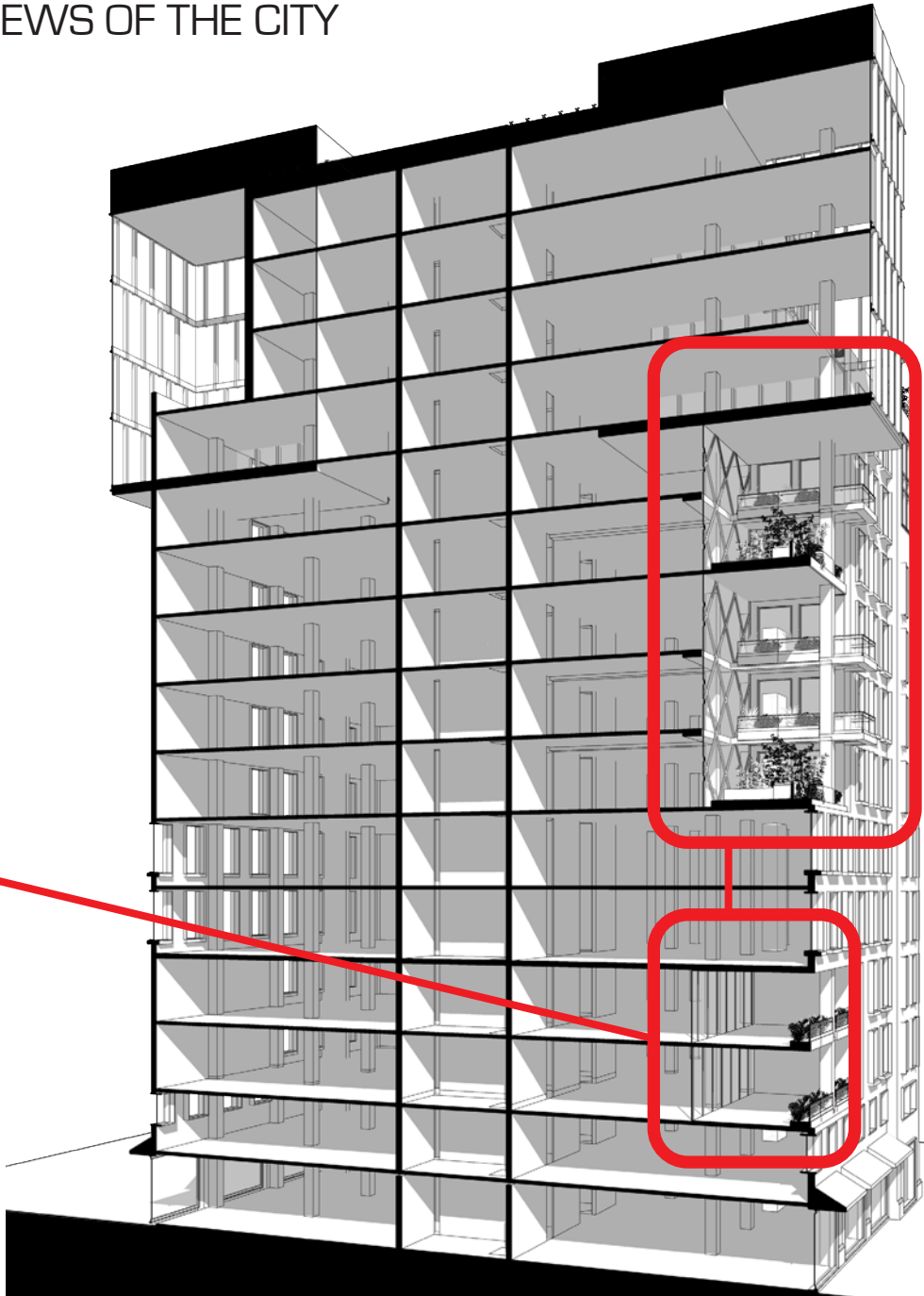
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RE:NEW DISTRICT Meeting CRE Challenges with New Mixed-Use Strategies BUILDING SECTION DIAGRAMS



ROOFTOP GARDENS AND OPEN SPACES CAN BE INCORPORATED WITH AMAZING VIEWS OF THE CITY



VOIDS INTRODUCE AIR AND LIGHT DEEPER INTO THE BUILDING AND ALLOW FOR SPACES TO BE PLANNED MORE EFFICIENTLY AND BASED ON USAGE



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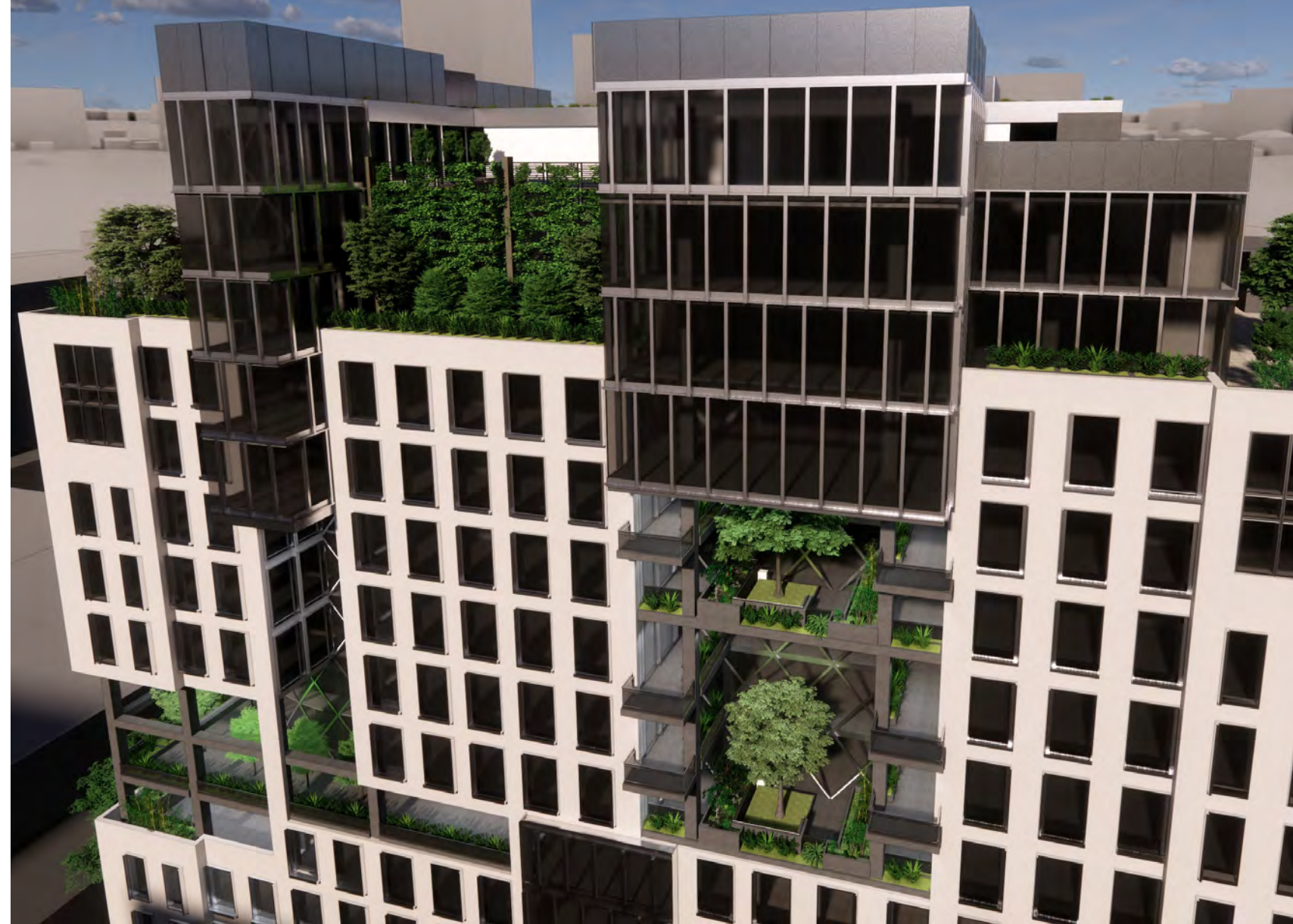


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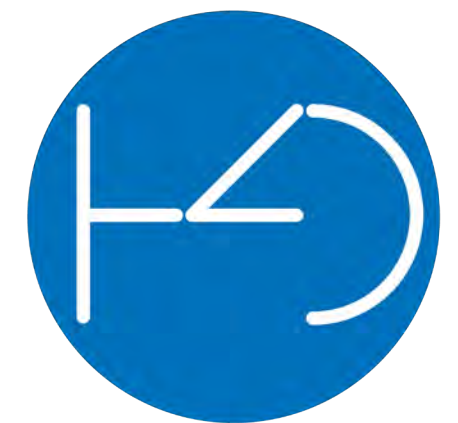


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