

SANDRA KALANYAN **CAPSTONE DEALBOOK** M.S. REAL ESTATE DEVELOPMENT **SPRING 2025** 

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### PROJECT PARTNERS







### WITH SUPPORT FROM











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# **EXECUTIVE SUMMARY**

The Verge is a redevelopment proposal that meets the moment. As the city of New York evaluates every possible option to ease the affordable housing crisis, one specific area of analysis has been on under-developed hospital sites in prime locations as potential candidates for adding housing supply.

Home to The Brooklyn Hospital Center, this 4-acre site is a prime example of an under-utilized site in a dense neighborhood. By leveraging public-private partnerships, we propose to not only provide additional housing, but also to stitch together the disconnected districts of high-density Downtown Brooklyn and the historic residential Fort Green neighborhoods.

With years of analysis and planning already conducted by both the city and The Brooklyn Hospital Center, this project is poised for success with the right Sponsor team to steward the process.

\$1.6B TOTAL DEVELOPMENT COST

\$507M **EQUITY INVESTMENT** 

23% **PROJECT-LEVEL RETURN** 

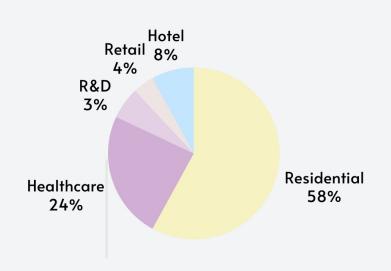
**11 YRS INVESTMENT PERIOD** 



Fig. 5.1. PROJECT RENDERING<sup>1</sup>

center

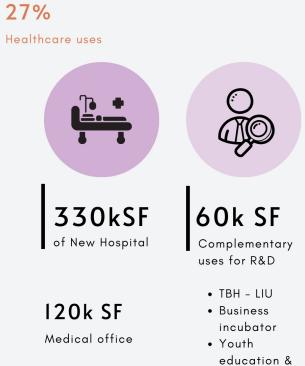
# **Program Breakdown**



Residential 1,717 1,9M SF Urban Redevep/ 58% 35% Residential Affordable Housing 15% Community connection uses 90k SF 170k SF Retail Hotel 25% 50% Including Small Conference business facilities

50k SF Community facilities including: • Recreational center • Sports

• Education



58%

technology

# WHY TBHC?





### **History of TBHC**

For 180 years, the 4-acre site of The Brooklyn Hospital Center has been dedicated to a singular mission—providing essential healthcare to the people of Brooklyn. Over the decades, it has stood as a pioneer in medical technology and education, establishing itself as a critical institution at the heart of one of New York City's most dynamic boroughs.

A cornerstone of the Fort Greene community, TBHC provides essential healthcare services to over 300,000 patients annually—including many residents from nearby NYCHA communities. As a 464-bed facility with a service area encompassing over one million people, TBHC is staffed by a dedicated team of 3,000 medical professionals. Yet, despite its rich history and lasting contributions, the hospital has faced increasing challenges in recent decades. Rising operational costs and aging infrastructure have strained its ability to fully meet the demands of the growing population it serves.



## Plans for Redevelopment

Prior to the pandemic, TBHC had initiated plans for a \$1.2 billion redevelopment in partnership with private developers. This vision included a new cancer center, ambulatory surgery facilities, expanded outpatient services, and enhanced maternity care. The hospital has already demonstrated its commitment to growth, completing a 22,000 square foot modernization of its Emergency Department in 2022, supported by over \$34 million in state and federal funding. Most recently, TBHC received an additional \$2 million in 2024 to refurbish critical infrastructure, such as its aging escalators.

Today, TBHC's leadership is determined to ensure the hospital not only survives but thrives in the 21st century. With a vision for revitalization, the hospital has outlined plans to modernize its facilities and continue its legacy of excellence in healthcare. To bring this ambitious vision to life, TBHC is actively seeking a strategic partner to help guide the hospital through this transformative phase, ensuring it remains at the forefront of medical care for generations to come.



# CITY PLANNING ALIGNMENT



CITY PLANNING REPORT (2023)

### 247,000 SF Unutilized FAR

New Condo Development



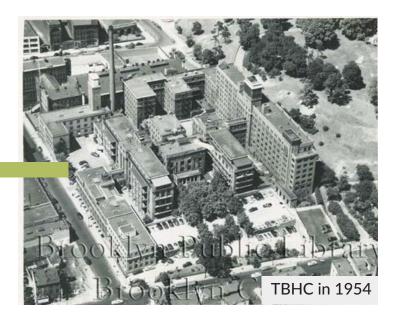
# WILLOUGHBY ST WILLOUGHBY ST Fort Greene Park Albée Sc DEKALB AVE

FLATBUSH AVENUE

FORT GREENE PARK

Enhanced mix activate and relate to Flatbush Ave

Institutional mix expand eds+meds uses, new housing and job space Park transition
edge condition
tailored to respond



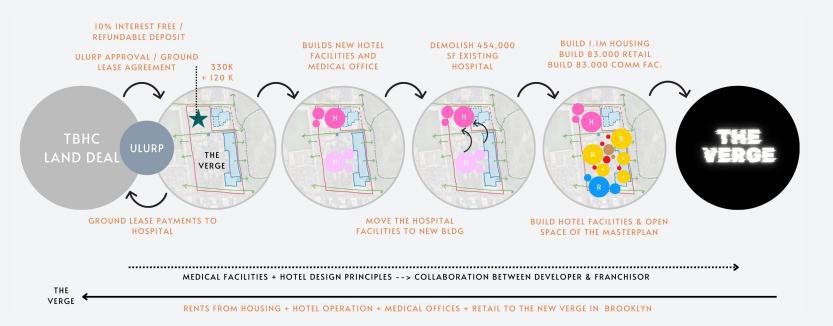
### **Status Today**

Recent attention from the City of New York and the NYU Furman Center underscores TBHC's strategic value in both healthcare and urban development objectives. In 2023, NYC Department of Planning published the Downtown Brooklyn and Fort Greene Eds and Meds Planning Framework, identifying this site as a key opportunity for re-zoning and redevelopment.

In addition, hospital-owned sites were the subject of a study conducted by the NYU Furman Center in 2024. This study highlighted that hospital-owned properties across the five boroughs make up 44 million square feet of land - the equivilant of approximately 7% of Manhattan's land mass. Across these properties, the analysis also showed that 25 million square feet of zoned FAR is not currently used.

In light of the hospital's vital role in the community, ongoing capital investments, and alignment with city planning initiatives, this development proposal invisions embarking on a transformative redevelopment project through a joint-venture agreement with TBHC—building on its legacy of care while advancing a shared vision for equitable and inclusive neighborhood development.

# **PROJECT VISION**



The Verge Development envisions the urban regeneration of a 247,000 sq.ft. underutilized site into an innovative, State-of-the-Art destination consisting of a well-balanced mixture of healthcare, residential, hospitality, commercial, retail, and recreational uses

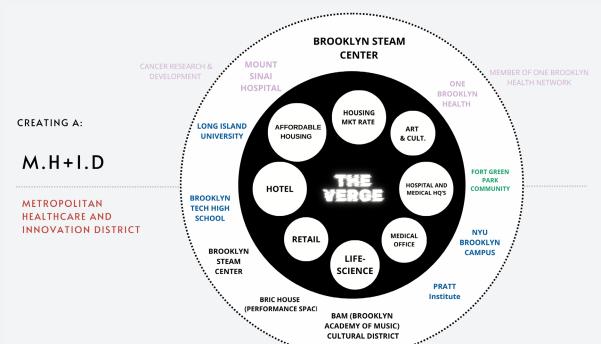
BROOKLYN TECH.

LONG I. UNIVERSITY

**NEW DEVELOPMENT** 

DT. BROOKLYN

At the convergence of multiple long-standing institutions, The Verge promises to become a nexus of activity, bringing together members of these multiple communities by combining youth-centered education, advanced research, and a small business incubator in one location.



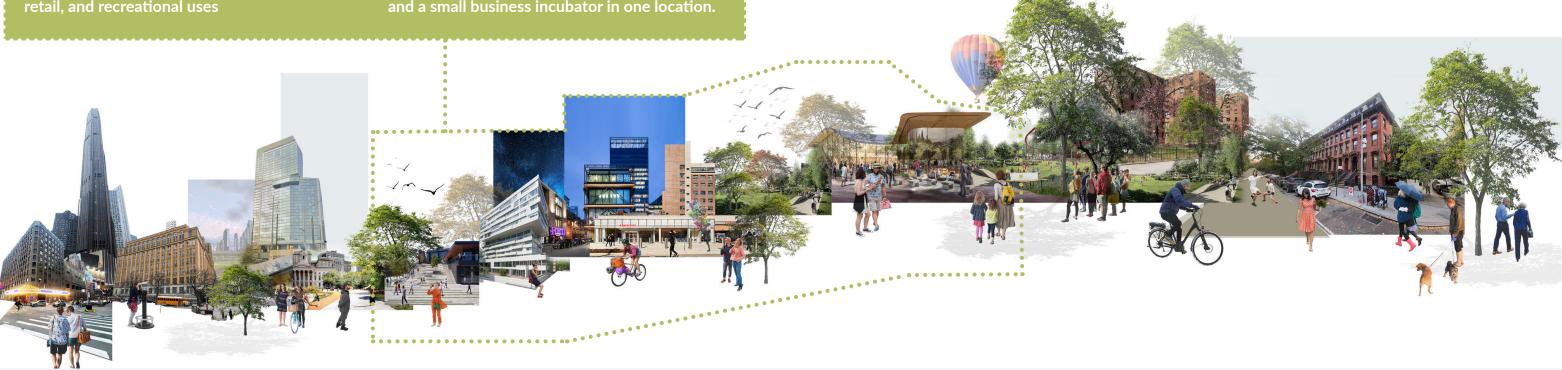
PARK PRESERV.

EXISTING SOCIAL HOUSING INCL.

The Verge aims towards the creation of

- ... an emerging "H&I District" within the context of a greater "Metropolitan Art District"
- ...Linked to the adjacent, existing venues of Mount Sinai Hospital, One Brooklyn Health and to educational + cultural facilities, such as LIU, NYU, Brooklyn tech, BAM,, and the Fort Greene Park..."

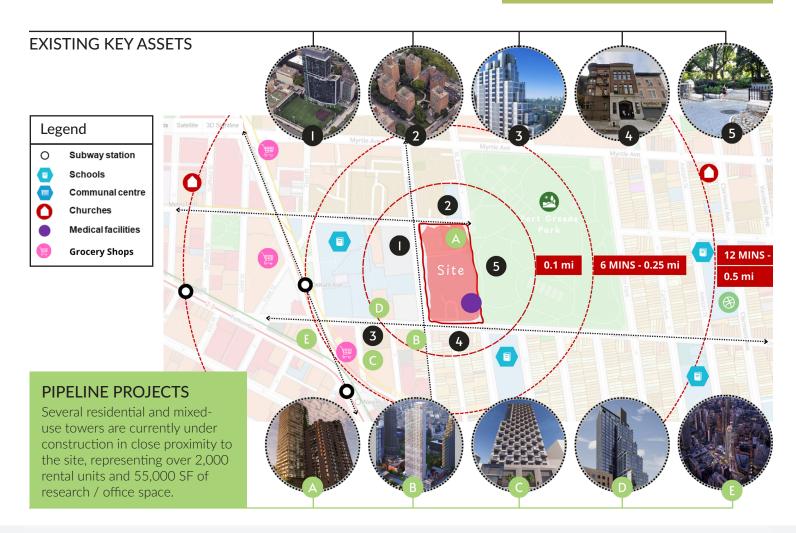
**BROWNSTONES CONNECTION** 



PARK EDGE RE-DESIGN COMMUNITY FACILITIES

B. HOSPITAL INTEGRATION

# **NEIGHBORHOOD CONTEXT**



### **DISTRICT LAND USE ANALYSIS**



The site is located in a medium-to-high-density residential area near Ashland Place and Dekalb Avenue, close to Willoughby Park and special purpose districts, with nearby active rezoning proposals.

### **BUILDING CLASS ANALYSIS**



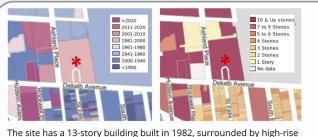
hospital, sanitarium, or mental institution (I1).

### **AVAILABLE AIR RIGHTS BY PARCEL**



higher redevelopment potential.

### **URBAN LANDSCAPE (BUILT YEAR / HEIGHTS)**



buildings (10+ stories) and older structures built before 2000.

**MARKET ANALYSIS** 

Downtown Brooklyn's real estate market reflects broader trends such as market resilience, a focus on high-value opportunities, and the growing appeal of development opportunities to meet market demand.

The borough remains a compelling destination for longterm urban investment strategies, driven by its stable multifamily assets, dynamic neighborhoods, opportunities for mixed-use developments, and sustained high demand from renters.

The population here has grown significantly as a surplus of retail, office, and multifamily development has helped transform the submarket into a desirable live/work/play destination.

Significant growth has occurred on and around the TBHC site, including the 300 unit Tower built at the northeast corner, and several others along the Dekalb Ave corridor reaching east from Flatbush Ave. Long Island University has been active in partnering with developers to build housing on their campus, and are now expanding their commercial space as well.

### 1,555 1,518 3.5% 2.2%

### **VACANCY & RENTS**

Downtown Brooklyn's vacancy rate is currently 3.5%, which is higher than the New York metro average of 2.8% with rents averaging \$4,690/month, well above the metro average of \$3,230/month.

### **SUPPLY & DEMAND**

1,600 units were delivered and 1,500 absorbed in 12 months; 3.400 units are under construction.

### INVESTMENT VOLUME

The submarket saw \$772 million in investment volume over the past year, surpassing the historical average of \$293 million.

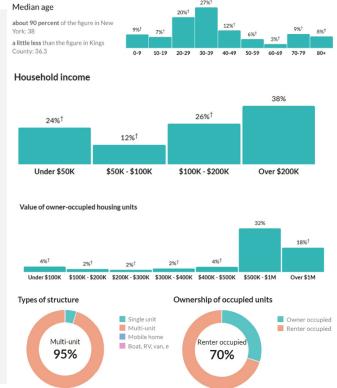
# **Demographic Summary** The primary area of analysis includes the census tract for

Community District – 2 (Downtown Brooklyn and Fort Greene).

The submarket is younger, wealthier and more diverse relative to the rest of New York city.

The young neighborhood has a median age of 35 and median household income of c. \$134.000. From 2021 present, asking rents (from \$3,230 - \$4,690) and home prices (from c.\$660k toc. \$1.15 M) have both increased significantly.

Over the same period, the population has contracted in the with a net migration of 16% out of the area.



10

35.1

# **VALUE PROPOSITION**

### **COMMUNITY PRIORITIES:** Affordable Housing **NEW YORK CITY PRIORITIES:** • Jobs - Fair compensation, local workforce Inclusive Planning · Quality of Life: safe, healthy Sustainability accessible, sustainable places to live Housing Access Public Amenity - open space. • Economic Opportunity • Informed Decision-Making **COMMON VALUES** QUALITY PUBLIC SPACE MODERN HEALTH + R&D **FACILITIES** AFFORDABLE HOUSING FOR LOCALS & PRIORITY WORKERS FCONOMIC GROWTH SUSTAINABILITY **HOSPITAL PRIORITIES: INVESTORS PRIORITIES:** Modern Facility Value Creation Ouality of care • Longterm Stability - Cashflow · Long-term growth & stability • Economic Growth • Sustainability (reduced cost) • Sustainbility (Reduced Opex)

# **RE-ZONING PROPOSAL**

# THE ISSUE

- 70% of development rights have been consumed
- 247k SF residential FAR remaining
- R6 district does not allow for commercia use

### THE OPPORTUNITY: C2-7 ZONING

- This site directly adjoins and activates the southwest corner of Fort Greene Park,
- Serving as a transition from the dense urban fabric of Downtown Brooklyn to the more residential character across the park.
- 4x Residential FAR
- Commercial uses to activate the ground-floor
- New housing construction with 35% Affordable
- Mixed use Research and innovation district, drawing visitors with hospitality
- 82k Public open space



### Zoning Gap:

Uniquely positioned between two distinct districts: Designated Downtown Brooklyn area and a historic district, separated by just two blocks.



### East - West connectivity:

Our site + LIU campus work as a "City unit", with specific goals for appropriate development that brings improved permeability + accessibility, connecting to park and surroundings



### Up-zoning precedents:

6 precedents have been granted up-zoning in the past 10 years. Majority of them were allowed to increase 3x in order to deliver affordable housing



### Income Restricted MIH

Only 12 projects are mapped as MIH designated sites, showing the area is underdelivering in this front.

## **Aligning Priorities**

The first step in bringing this ambitious vision to life is aligning the priorities of the key stakeholders—The Brooklyn Hospital Center, the City of New York, the local community, and our investment partners. Each brings a unique perspective, and true success lies in weaving these priorities into a shared path forward.

For the hospital, the foremost priority is to deliver high-quality healthcare. The redevelopment presents an opportunity to create state-of-the-art facilities that will allow TBHC to continues to serve Brooklyn's diverse and growing population for decades to come.

The City seeks to advance critical goals around housing access, sustainability, and the improvement of the urban environment. This project can become a model of smart, inclusive development—integrating healthcare, housing, and community-centered design in a way that reinforces the city's long-term vision.

The local community is primarily focused on assurances that redevelopment will benefit—not displace—existing residents. Priorities include deeply affordable housing, job creation, access to open spaces, and expanded community amenities, including healthcare and wellness services.

For investors, this project represents an opportunity to create long-term value through a carefully designed, mixed-use, live-work-play environment. While prioritizing strong cash flow and flexibility for either a long-term hold or a strategic exit, we also minimize risk through thoughtful planning and stakeholder alignment.

Through this multi-dimensional approach, we aim to create a project that is as resilient as it is visionary - anchored in the needs of today, and built for the possibilities of tomorrow.

### Benefits to Re-Zoning

A close study of the existing site reveals that its current R6 as-of-right zoning has limited development potential. With the existing two residential towers on Lot 25 having already consumed much of the allowable FAR, only an additional 247,000 square feet of residential space can be added. The zoning also prohibits the creation of commercial space—an a necessary element to activate this corridor with a vibrant, mixed-use environment.

The proposed up-zoning to C2-7 would enable the site to increase development potential while remaining sensi-

tive to the surrounding context. The increased residential density would unlock the ability to add nearly four times the residential FAR currently permitted. It would also allow for the development of a healthcare hub supported by complementary commercial uses such as medical office space, a hotel to accommodate patients' families, visitors, and conferences, and space for small businesses. With this designation, the site can serve as a transitional zone into the adjacent lower-density residential area, offering smaller-scale commercial uses that remain accessory to the site's residential and healthcare focus.

Fig 13.1 Maximum Developable ZFA As-of-Right								
Lot	Areas	s Residential		eas Residential Residential (UAP)		ntial (UAP)	Commu	nity Facility
		FAR	SF	FAR	SF	FAR	SF	
Lot 4	172,074	3.0	516,222.00	3.9	671,088.60	4.8	825,955.20	
Lot 30	44,904	3.0	134,712.00	3.9	175,125.60	-	-	
Lot 25	30,744	3.0	92,232.00	3.9	119,901.60	-	-	
Total	247,722		743,166.00		966,115.80		825,955.20	

**Total Max ZFA** | 1,120,982.40

# **EXISTING SITE CONDITIONS**

### **Site Assessment - Existing**

The site is currently zoned R6 and includes the existing hospital buildings along with a two-story parking garage. Under the current zoning, the site allows for a total of 1.12 million square feet of floor area ratio (FAR). However, with the existing development already in place, only 247,000 square feet of residential FAR remains available. Our proposal involves demolishing the existing hospital buildings, shown in red, which total approximately 445,000 square feet. This demolition would free up 790.000 square feet of as-of-right FAR for redevelopment. More significantly, under our proposed rezoning, the site would be able to yield substantially more ZFA, unlocking its full potential for a transformative mixed-use development.

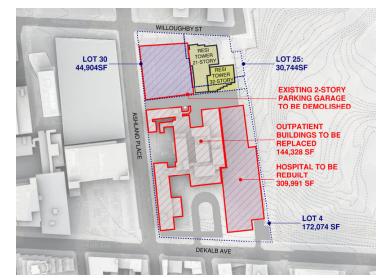


Fig 14.1 - EXISTING SITE PLAN

# **PROPOSED SITE PLAN & SECTIONS**

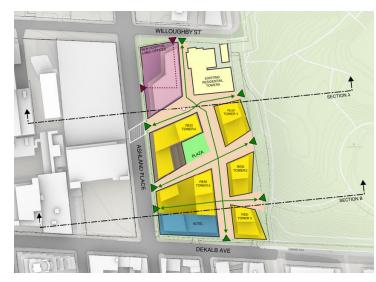
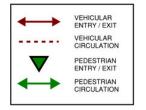


Fig 15.1 - PROPOSED SITE PLAN

### **Site Plan Proposal**

The proposed site plan takes into consideration many of the priorities outlined by the City Planning framework for this site, as illustrated in Figures 16.1 - 16.7.

By concentrating the hospital and medical offices on the northwest corner of the site (Lot 30), the remainder of the site becomes available for full re-development, activating both Ashland Place and Dekalb Ave and creating cross-connections to Fort Greene Park.



These new connections will facilitated a sense of place, with new public outdoor space to ease the burden on Fort Greene Park, and dedicated space for the community uses proposed for the site.

### Site Assessment - Grade Change

A significant element of the site is the change in grade from Ashland Place to the entry points into Fort Greene Park. Currently, the Hospital buildings are about 10' below the grade of the park along the edge of the property. This change in grade and the separation created by the Hospital itself makes the park very disconnected from LIU and the areas to the west. In a re-development of the site, it would be possible to take advantage of this change in grade and create a terracing scheme which will allow a more gradual transition from east to west along the site. This will also create opportunity for underground parking for both visitors and residents.

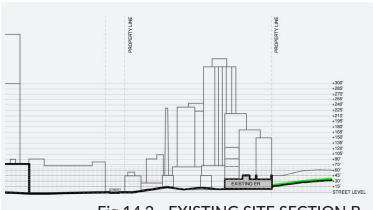


Fig 14.2 - EXISTING SITE SECTION B

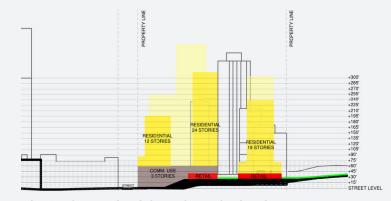


Fig 15.2 - PROPOSED SITE SECTION B

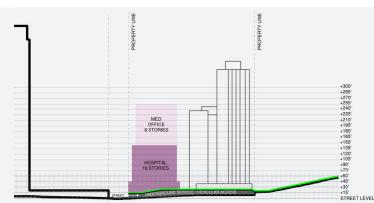


Fig 15.3 - PROPOSED SITE SECTION A

Fig 14.3			ACI	uai Buiit ZFA			
Lot	Areas	Reside	ential	Residenti	al (UAP)	Communit	y Facility
		Built	Remaining	Built	Remaining	Built	Remaining
Lot 4	172,074	0	516,222.00	0	671,088.60	454,319.00	371,636.20
Lot 30	44,904	0	134,712.00	0		-	-
Lot 25	30,744	227625.5	(135,393.48)	103,274.52	16,627.08	-	-
Total	247,722	227,625.48	515,540.52	103,274.52	687,715.68	454,319.00	371,636.20

A -4...- | D...: | 7...

Total Built ZFA	785,219.00
Hospital Area to be Demolished	454,319.00
Total Remaining ZFA After Demo	790,082.40

Fig 15.4 Proposed ZFA - Upzoned to C2-7 (R9)						
Total Lot Area	247,722.00	FAR	ZFA	Built	Proposed	Total
Residential		7.50	1,857,915	227,625	731,894	959,519
Residential (UAP)		9.00	2,229,498	103,275	394,097	497,371
Community Facility		10	2,477,220		388,186	388,186
Hospital					330,000	
Youth Education					18,186	
Sports Facilities					40,000	
Commercial		2	495,444		383,313	383,313
Medical Office					120,000	
Retail					92,336	
Hotel					170,977	
	Total Al	lowable ZFA	2,477,220	Total	Proposed ZFA	2,228,389

# **DESIGN GUIDELINES**

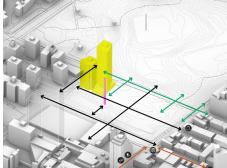


Fig 16.1 - CONNECTION



Fig 16.2 - SITE TERRACING

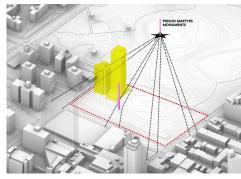


Fig 16.3 - VIEW CORRIDORS

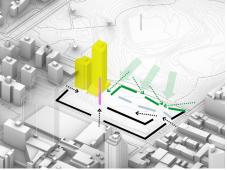


Fig 16.4 - ACTIVE FRONTAGE

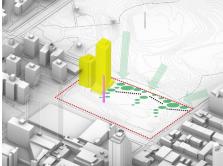


Fig 16.5 - PARK EXTENSION

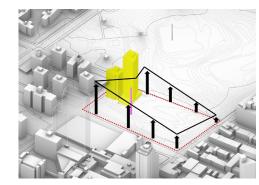


Fig 16.6 - SKY-EXPOSURE PLANE

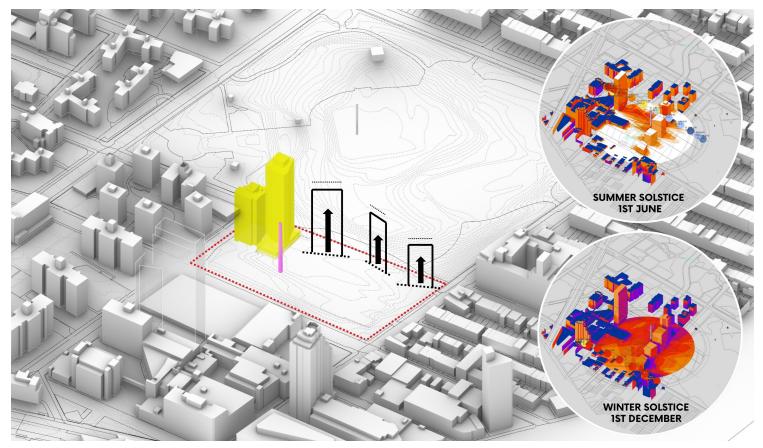


Fig 16.7 - MAXIMUM HEIGHT OVER PARK

# MASSING STRATEGY

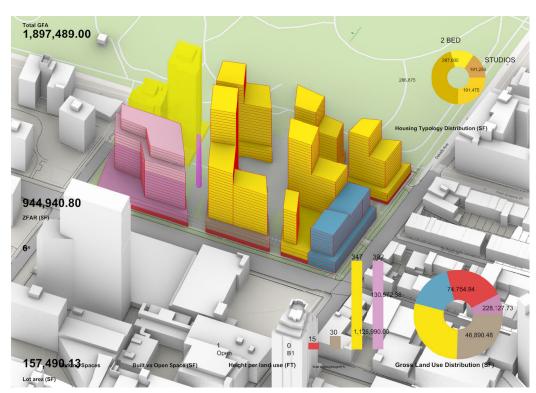


Fig 17.1 - Massing Model

Rentable SF by Use	e			Totals
Residential	-	1,125,990.00	-	1,125,990.00
Medical office	120,000.00	-	-	120,000.00
Hospital	330,000.00	-	-	330,000.00
Retail	29,000.00	29,093.00	34,243.00	92,336.00
Community facility	-	58,186.00	-	58,186.00
Hotel	-	-	170,977.00	170,977.00
Total	479,000.00	1,213,269.00	205,220.00	1,897,489.00

### **Key Considerations**

The massing strategy for the project is driven by several key factors, as illustrated on the opposing page. While the proposed site plan incorporates the cross-connection and site terracing approach, the Massing strategy illustrates proposed bulk and height for this site.

Key considerations: **context-specific transition** from the medium-density historic district to the high-density downtown district; **minimizing impact of shadows** for the Fort Green park constituents.

To achieve these objectives, the massing strategy:

- Maintains a 45' minimum street wall, with breaks to create site connectivity
- Creates view corridors to enhance connections and transparency through the site
- Steps up the sky exposure plane from Dekalb Ave northwest towards the existing towers and LIU buildings on Willoughby
- Ensures that new towers along the park are sensitive to casting shadows

# **TYPICAL FLOORPLANS**

# Dekalb Ave. | Dekalb Ave. | Propriet | Prop

Fig. 18.1. GROUND FLOOR SITE CONTEXT

# **Programming & Planning**

The programming for the site, especially along the ground floor, is critical to the intended activation of the site as a **live-work-play environment**. One key strategy is to draw pedestrians into the site from all directions by creating **Retail corridors** along the new pedestrian corridors. There is also strategically located Retail along Dekalb Ave and Ashland Ave. Another important feature is the central location of the **Community Recreation center and the Eds and Meds Incubator**. These are intended to be active throughout the day and in the evening, creating light and energy along these corridors.



Fig. 18.2. TYPICAL TOWER FLOOR PLAN



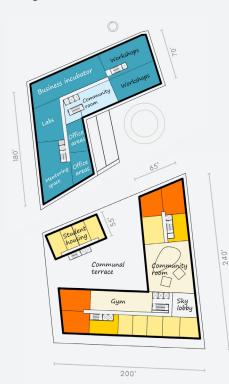
**Residential entry points** are another important aspect of the planning process. Pedestrian entrances are provided along the new pedestrian pathways, creating a sense of community withing the development. **Vehicular access** is envisioned as occurring through an underground parking and loading strategy, where logistical activities would be kept out of sight.

# **DETAILED FLOOR PLANS**



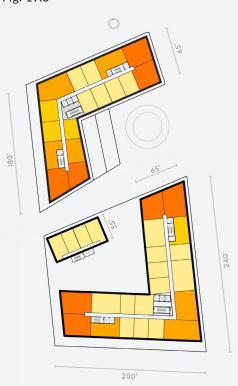


TOWER BASE FLOOR PLAN Fig. 19.2





TYPICAL TOWER FLOOR PLAN Fig. 19.3

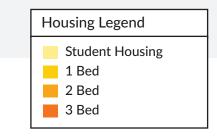


# BUILDINGS 2 AND 3 DETAILED FLOOR PLANS

# **Buildings 2 and 3 Floorplans**

Zooming into the two mixed-use buildings of the development, the detailed floorplans demonstrate the potential to utilize these buildings in various ways, especially on the ground floor. In Fig 19.1, more Retail opportunities are shown than are in the Site Context plan. There is also an additional Residential lobby to serve the Hotel units that have the flexibility of becoming residences.

In Fig 19.2, The Tower Base plan shows the potential to utilize the community facility space in Building 2 as flexible office space, including a small business incubator, researchs Labs, and workshop spaces.



The upper floors show the detailed breakdown of unit types with **efficient double-loaded floorplates**. At the Tower base level, Building 3 includes a Fitness Center and a Community Room which open out to the **rooftop terrace**. On the upper levels, there is a diverse unit mix, with 2 and 3 bedroom units designed for families in mind. These units will be made available with priority given to **healthcare workers** as a part of the MIH program.

# **SUSTAINABILITY STRATEGIES**



Fig. 20.1. ROOF PLAN<sup>1</sup>

20

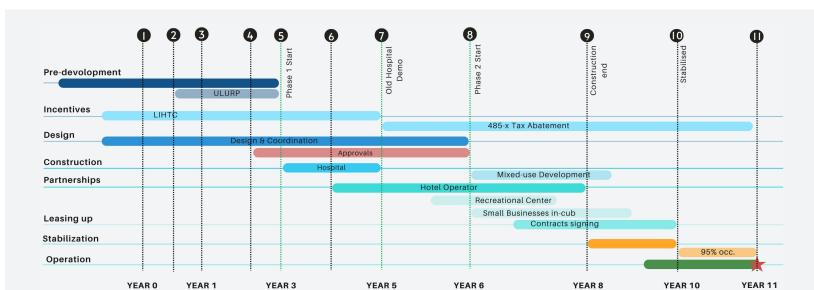
Sustainable design, construction, and operational strategies are essential to the success and long-term value of this development. As more regulation around CO2 emissions has passed in recent years, building to these standards is becoming the baseline.

This project aims to exceed these standards and be at the forefront of innovation by:

- 1. Reducing operational carbon emissions designing the building envelope to passive house standards
- 2. Reducing emissions during construction sourcing materials from more local sources
- 3. Implementing low energy, electric-powered building systems for heating and cooling

Archivinci (2025). Masterplan AI [Rendering Tool]

# **PROJECT TIMELINE**



# **HEALTH AND WELLBEING**

### of occupants:

- Balconies, Terraces and Courtyard provide opportunities for biophilic design
- · Natural light for all: Residential, Commercial space, and Healthcare facility
- Continuous fresh-air intake through ERV system





# Reduce OPERATIONAL ENERGY use with efficient building systems:

- All electric equipment and appliances
- Air Source Heat Pumps for HVAC
- Energy Recovery Ventilation (ERV) System
- Solar Panels on the roof
- Site-wide Geothermal Grid
- Efficient Healthcare Facility design







## Longer life and lower embodied carbon MATERIALS:

- Concrete structure using precast slabs & alternative cementitious materials
- High-performance curtainwall system + locally sourced brick facade
- Sustainable interior finishes: wood, cork, & ceramic tiles

## **Phasing Strategy**

The two most important factors when considering the timeline for this development proposal are the Re-Zoning process and the Phasing strategy. Given the need to up-zoning approval, we propose to partner with TBHC from the outset and initate the ULURP process together. During this 2-3 year process, The Verge's design development efforts will commence.

Following ULURP approval—anticipated by Q1 2028— The Verge will execute the ground lease and secure

financing, launching construction of the new hospital center. This phase spans 18 months, culminating in Q3 2029, when hospital operations transition to the new facility. Over the next six months, the old campus will be demolished. TBHC will begin leasing space in the new development, while The Verge proceeds with Phase 2.

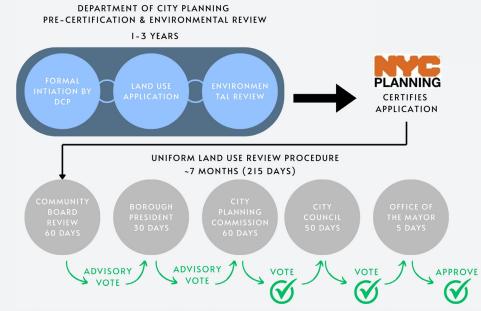


Fig 21.1 - ULURP Process

### **Timeline Steps**

- 1. Acquisition
- 2. ULURP Prep

**Community Input Environmental Assessment** 

- 3. ULURP Start
- 4. Permitting
  - **Hospital Permit** Site Demo Permit Site Work & Foundations Phase 2 Building Permits
- 5. Phase 1 Construction Start **Logistics & Protection Existing Garage Demo**
- 6. Begin Partnership Search **Hotel Operator Recreational Center Small Business Incubator**
- 7. Phase 1 Construction Complete Begin Old Hospital Demo
- Phase 2 Construction Start
- 9. Stabilization starts
- 10. Operation
- 11. Sell

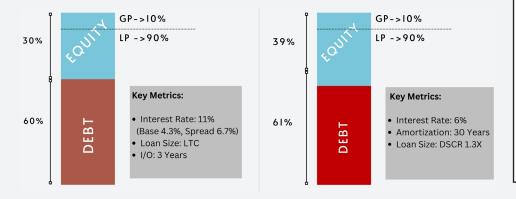
# **FINANCIAL ANALYSIS**

	Hospital	Medical office	Market Rate Housing	MIH Housing	Community facility	Retail	Hotel	Total
	Phase 1	Phase 1	Phase 2	Phase 2	Phase 2	Phase 2	Phase 2	
RSF	330,000	102,000	669,964	287,127	52,367	87,719	136,782	1,665,960
Revenue Rates	\$60 (psf annual)	\$90 (psf annual)	\$5,218 (avg per unit)	\$2,508 (avg per unit)	\$60 (psf annual)	\$78 (psf annual)	\$275 (ADR)	
Stabilized Occupancy	100%	85%	95%	95%	100%	90%	75%	90%
OPEX Ratio	0%	20%	25%	25%	0%	0%	65%	37%
Total Cost psf (incl. soft costs)	\$1,000	\$488	\$706	\$706	\$438	\$488	\$813	\$734
NOI - Year 1	\$19.8 M	\$6.2 M	\$49.7 M	\$12.9 M	\$3.1 M	\$6.2 M	\$12.0 M	\$98.0 M

Fig. 22.1. Key Metrics Summary By Program

	Unit type	No.	RSF	Average area	Rent (Monthly)	Rent psf
	Studio	179	67,125	375	2,174	\$ 5.80
	1 Bedroom	201	100,500	500	2,330	\$ 4.66
MIH	2 Bedroom	149	100,575	675	2,796	\$ 4.14
	3 Bedroom	73	67,525	925	3,230	\$ 3.49
	Total	602	335,725	2475	2,508	\$ 4.52
	Studio	331	124,293	375	3,495	\$ 9.32
	1 Bedroom	373	186,628	500	4,200	\$ 8.40
MKT	2 Bedroom	276	186,552	675	6,900	\$ 10.22
	3 Bedroom	134	123,894	925	8,850	\$ 9.57
	Total	1115	621,367	2475	5,218	\$ 9.38

Fig. 22.2. Multifamily Unit Mix & Rental Rates



Sources		RSF	ZFA
Equity	\$619,836,580	\$372	\$327
Debt	\$974,589,838	\$585	\$514
Total sources	\$1,594,426,418	\$957	\$840
Uses		RSF	ZFA
Deposit + Land Lease	\$64,852,013	\$39	\$34
Acquisition cost	\$1,700,000	\$1	\$1
Development Cost	\$1,358,846,673	\$816	\$716
Interest	\$159,281,835	\$96	\$84
Loan Fees	\$9,745,898	\$6	\$5
Total Uses	\$1,594,426,418	\$957	\$840

Fig. 22.3. Sources And Uses Table

	MIH (Avg 80% AMI)	Market-Rate Housing	Total
Floor Area (%)	394,096 SF (35%)	731,894 SF (65%)	I,125,990 SF (100%)
# of Unit	602	1,115	1,717

MIH Units Breakdown

Monthly Rent	40% AMI	80% AMI	120% AMI
Studio	\$1,087	\$2,174	\$3,261
IB	\$1,087	\$2,330	\$3,495
2В	\$1,398	\$2,796	\$4,194
3B	\$1,615	\$3,230	\$4,845

MIH Unit Rental Rates

Key elements of the financial analysis and returns:

- Ground Lease structure with the Hospital, including initial deposit and annual payments
- Market rate & MIH Unit Mix (65% / 35%)
- Hotel ADR and franchising agreement
- Retail and Community Facility rental & vacancy assumptions
- 90% / 10% Equity split between LP and GP
- 60% LTC Construction Loan
- 1.3 DSCR Permanent Loan
- Construction costs associated with demolition included in Hard Costs

Building	А	В	С
Uses	Hospital, Medical Office	Housing, Retail &Community Facility	Hotel & Retail
RSF	459,550	1,037,097	169,312
Stabilized NOI	\$30,280,672	\$93,050,993	\$17,876,553
psf	\$65.89	\$89.72	\$105.58
Stabilized YOC (exlc land)	6.8%	10.2%	10.0%
Exit Cap Rate	6.5%	5.3%	8.1%
Exit Price	\$2,397,810,995		

Fig. 22.4. Project Returns By Building

# **Financial Return Summary**

While several partnership structures and sources of capital were explored for this development, this proposal assumes a primary partnership with TBHC, along with several other operational and community partners. By facilitating the construction of a brand new facility for them, we gain access to a prime development site and attractive **project-level returns in the range of 21 - 25%** over an 11 year investment period. With the initial deposit and subsequent ground lease payments structured to provide substantial revenue to TBHC, and the relatively low PSF rental rates for the new facility once in operation, we believe this partnership will lay the foundation for this project's long-term success.

In terms of Development partners, the project Equity will come from a traditional LP / GP structure with a 90% / 10% split. As outlined in Figure 23.3, the **preferred return is 8% and the second Hurdle is 12%**. The first tier promote will be 20% and the second tier promote will be 30%.

Returns Summary	
Stabilized NOI	\$144
psf	\$86
Sale price	\$2,398
psf	\$1,439
CAPEX	\$1,359
psf	\$816
Land price (excl hospital)	\$87
psf	\$52
Profit	\$1,109
psf	\$666
Project IRR	23%
Project EM	3.04
LP IRR	21%
LP EM	2.64
GP IRR	42%
GP EM	7.26

Fig. 23.1. Return Summary

Phase 1	De	eal Closes			JRP		Developme	nt I	Developmen	t De	velopment										Exit		
Phase 2	De	eal Closes		OLI	JKP							De	evelopment	Dev	/elopment	Dev	elopment				Exit		
Year		0		1		2	3		4		5		6		7		8		9	10	11		12
Potential Gross Rev	\$	-	- \$	173,172,008	\$	177,561,403	\$ 182,06	7,723	\$ 186,694,	178 \$	191,444,074	\$	196,320,804	\$	201,395,722	\$	206,606,593	\$	211,957,171	\$ 217,451,313 \$	223,092,988	\$	228,886,276
Occupancy		0%		0%		0%	0%		0%		0%		15%		17%		17%		71%	90%	90%		90%
Operating Expenses	\$	-	- \$	-	\$	-	\$	-	\$	- \$	-	\$	5,843,534	\$	6,742,416	\$	6,900,092	\$	45,632,996	\$ 61,639,635 \$	63,169,883	\$	64,739,659
Net Operating Income	\$	-	- \$	-	\$	-	\$	-	\$	- \$	-	\$	23,374,134	\$	26,969,664	\$	27,600,370	\$	104,853,648	\$ 133,917,466 \$	137,513,125	\$	141,208,218
Total Development Cost	\$	-	- \$	5,639,482	\$	5,639,482	\$ 109,94	5,500	\$ 165,967,	200 \$	113,985,900	\$	270,048,184	\$	407,648,708	\$	279,972,216	\$	-	\$ - \$	-	\$	
Equity Draw	\$	-	- \$	(5,639,482)	\$	(5,639,482)	\$ (109,94	5,500)	\$ (44,055,9	900) \$	-	\$	(270,048,184)	\$	(108,210,120)	\$	-	\$	-	\$ - \$	-	\$	
Construction Loan																							
Loan Draw	\$	-	\$	-	\$	-	\$	-	\$ 136,978,9	989 \$	145,004,032	\$	-	\$	336,447,851	\$	356,158,966	\$	-	\$ - \$	-	\$	
Capitalized Interest	\$	-	- \$	-	\$	-	\$	-	\$ (15,067,6	589) \$	(31,018,132)	\$	-	\$	(37,009,264)	\$	(76,186,750)	\$	-	\$ - \$	-	\$	-
Loan Paydown	\$	-	- \$	-	\$	-	\$	-	\$	- \$	(281,983,021)	\$	-	\$	=	\$	(692,606,817)	\$	-	\$ - \$	-	\$	-
Refinancing																							
Loan Draw	\$	-	- \$	-	\$	-	\$	-	\$	- \$	288,353,448	\$	-	\$	-	\$	922,336,060	\$	-	\$ - \$	-	\$	-
Payment	\$	-	- \$	-	\$	-	\$	-	\$	- \$	-	\$	(20,745,895)	\$	(20,745,895)	\$	(20,745,895)	\$	(87,104,344)	\$ (87,104,344) \$	(87,104,344)	\$	-
Loan Paydown	\$	-	- \$	-	\$	-	\$	-	\$	- \$	-	\$	-	\$	=	\$	-	\$	-	\$ - \$	-	\$	-
Land Payments	\$	(8,670,000	) \$	-	\$	-	\$ (9,36	3,669)	\$ (9,363,6	669) \$	(9,363,669)	\$	(9,363,669)	\$	(9,363,669)	\$	(9,363,669)	\$	(9,363,669)	\$ (9,363,669) \$	(9,363,669)	\$	
Net Exit	\$	-	- \$	-	\$	-	\$	-	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$ - \$	2,397,810,995	\$	
Net Cash Flow	Ś	(8,670,000	) \$	(5,639,482)	\$	(5,639,482)	\$ (119,30	9,169)	\$ (41.171.	710) \$	25.141.356	Ś	(277,358,414)	Ś	(81,841,625)	Ś	293,608,638	Ś	4,406,462	\$ 33.470.280 \$	1,283,293,036	Ś	

Fig. 23.2. Operating Proforma

Year	0	1	2	3	4	5	6	7	8	9	10	11	12
Deal Cash Flow IRR EM	(\$8,670,000) 23% 3.04	(\$5,639,482)	(\$5,639,482)	(\$119,309,169)	(\$41,171,710)	\$25,141,356	(\$277,358,414)	(\$81,841,625)	\$293,608,638	\$4,406,462	\$33,470,280	\$1,283,293,036	\$
Structure		LP Hurdles	GP	LP	GP Promote	Promote %							
Tier I (up to Hurdle I)		8%	10%	90%	0%	0%							
Tier II (from Hurdle I up to Hurdle 2)		12%	10%	72%	18%	20%							
Tier III (Above Hurdle 2)			10%	63%	27%	30%							
LP Cash Flow	(\$7,948,917)	(\$5,081,474)	(\$5,081,474)	(\$107,384,192)	(\$37,060,479)	\$22,621,281	(\$249,628,513)	(\$73,663,403)	\$264,241,834	\$3,959,875	\$30,117,312	\$964,081,486	\$0
LP IRR	21%												
LP EM	2.64												
GP Cash Flow	\$89,567	(\$558,008)	(\$558,008)	(\$11,924,977)	(\$4,111,231)	\$2,520,076	(\$27,729,901)	(\$8,178,223)	\$29,366,804	\$446,586	\$3,352,968	\$349,184,188	\$0
GP IRR	42%												
GP EM	7.26												

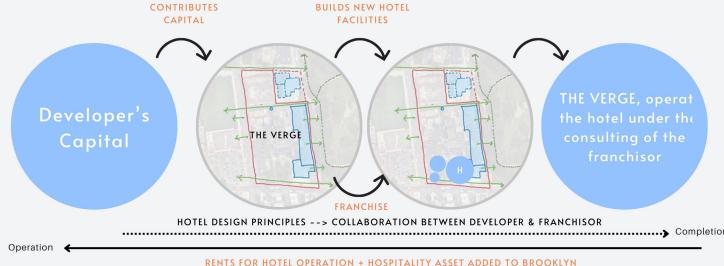
Fig. 23.3. Waterfall Structure

# **PARTNERSHIP STRUCTURES**

### **Hospital Partnership** CONTRIBUTES LAND BUILDS NEW FACILITIES FOR BHC Brooklyn THE VERGE: New Hospital PHASED THE hospital facility Center VERGE RELOCATION COMMERCIAL \$ DASNY \$\$ mortgage / Finance BACK TO HOSPITAL FOR OPERATION \$\$

HOSPITAL PAYS RENT ON THE ADDITIONAL VALUE OF INVESTMENT

### **Hotel Partnership**



RENTS FOR HOTEL OPERATION + HOSPITALITY ASSET ADDED TO BROOKLYT

# INTEGRATION FEE

HOTEL FRANCHISE FEES

- integration fee an amount of \$450 per room (Excluding Taxes)
- Payable 50% upon signing the Hotel Franchise Agreement and 50% upon opening

### TRADEMARK FEE

- In consideration of the right to use the Brand and to benefit from the Know-How the Franchisee would pay the Franchisor a Trademark fee equal to:
- - 3.0% of Room Revenue of the hotel for year I
- - 3,5% of Room Revenue of the hotel for year 2
- - 4,0% of Room Revenue of the hotel for year 3
- - 4,5% of Room Revenue of the hotel from year 4

### SALES & MARKETING FEE

INITIAL TERM : 20 YEARS

- In consideration of the benefit of all national and international marketing actions.
- The Franchisee shall pay to The Franchisor a Sales & Marketing fee equal to 2% of the Total Room Revenue of the Hotel.

# **RISK ASSESSMENT**

There are many risks associated with undertaking a project of this scale. Primary among them are changes to the schedule due to regulatory delays or partnership issues, escalation of construction costs, and even the overall scope when considering how much can change over an 8 year development period.

To account for some of these variables, a series of sensitivity studies demonstrate the possible variations in IRR, broken down by each set of Buildings / programs. In some cases, we can see where certain factors can be a deal-breaker while other factors are great areas for negotiation.

### **Hospital & Medical Office**

### Sensitivity Table 1: Cap Rate & Hold Period

	IRR	Hold period					
	6.95%	9.00	10.00	11.00	12.00	13.00	
rate	5.97%	8.91%	9.06%	9.15%	9.34%	9.47%	
	6.22%	7.26%	7.72%	8.05%	8.43%	8.70%	
cab	6.47%	5.60%	6.38%	6.95%	7.52%	7.95%	
Ĕ	6.72%	3.93%	5.05%	5.86%	6.62%	7.20%	
ω	6.97%	2.24%	3.70%	4.76%	5.73%	6.45%	

### Sensitivity Table 2: Purchase Price and Hospital Rent PSF

	IRR	Hospital Rent PSF								
	6.95%	\$4.50	\$4.75	\$5.00	\$5.25	\$5.50				
	\$15,000,000	4.26%	5.60%	6.95%	8.32%	9.70%				
hase ce	\$25,000,000	3.89%	5.22%	6.55%	7.90%	9.26%				
rcha price	\$35,000,000	3.53%	4.84%	6.16%	7.49%	8.83%				
- E	\$45,000,000	3.17%	4.47%	5.77%	7.09%	8.42%				
	\$55,000,000	2.82%	4.10%	5.40%	6.70%	8.01%				

### Sensitivity Table 3: Construction Cost & Interest Rate (Perm

	IRR		Con	struction Cost		
	6.95%	\$649	\$674	\$699	\$724	\$749
ate	4%	11.37%	9.26%	7.33%	5.58%	3.98%
z a	5%	8.62%	6.93%	5.39%	3.96%	2.65%
err	6%	6.94%	5.52%	4.20%	2.99%	1.86%
<u> </u>	7%	5.85%	4.60%	3.44%	2.36%	1.35%
Ξ	8%	5.11%	3.98%	2.93%	1.94%	1.02%

Looking at the variables that are points of negotiation with TBHC, the Purchase Price (Ground-Lease) and the Rent PSF are important to understand. This analysis shows that the Purchase Price is less impactful than the Rent PSF, and can be an important tool if TBHC is interested in a higher payment upfront vs. a high rent PSF.

Escalations in construction costs are a huge concern in today's political climate. As demonstrated here, just an escalation of \$50 PSF can reduce IRR by 140 bps. To mitigate this risk, it will be critical to ensure the design is fully developed and a GMP is secured before executing the ground-lease.

## Mixed-Use - Residential, Retail, Community Facility

### Sensitivity Table 1: Cap Rate & Hold Period Hold period 13.00 35.13% 9.00 10.00 12.00 43.22% 38.00% 34.25% 5.01% 33.06% 30.47% 48 36% 41 37% 36 53% 5.26% 46.04% 39.57% 35.11% 31.91% 29.53% 5.51% 43.75% 37.81% 33.72% 30.80% 28.62%

### Sensitivity Table 2: Retail Growth & Vacancy

	IRR		R	etail Vacancy		
	35.13%	5.00%	7.50%	10.00%	12.50%	15.00%
£	1.0%	35.06%	35.04%	35.02%	35.00%	34.98%
ě	1.5%	35.12%	35.10%	35.07%	35.05%	35.03%
<u> </u>	2.0%	35.18%	35.16%	35.13%	35.11%	35.08%
Retail	2.5%	35.24%	35.22%	35.19%	35.17%	35.14%
æ	3.0%	35.31%	35.28%	35.25%	35.23%	35.20%

### Sensitivity Table 3: Construction Cost & Interest Rate (Perm)

	IRR	Construction Cost									
	35.13%	\$526	\$551	\$576	\$601	\$626					
ate	4%	40.39%	38.12%	35.89%	33.72%	31.61%					
₽ C	5%	37.48%	35.29%	33.16%	31.10%	29.09%					
est 'err	6%	35.16%	33.05%	31.02%	29.05%	27.15%					
Interes (Pel	7%	33.30%	31.27%	29.32%	27.44%	25.63%					
≟	8%	31.80%	29.85%	27.97%	26.17%	24.43%					

Given the concerns around retail vacancy rates in Downtown Brooklyn, it was important to understand the relative impact of the Retail program in this development. Looking at Vacancy and Growth rates, the analysis shows that Retail has a minimal impact on the project IRR at only 33 bps with 15% Vacancy and 1% Growth.

In contrast, the Construction cost and Perm loan interest rate do have a significant impact on IRR, as well as the Hold period and the exit cap rate. Since 90% of this program is residential, the risk of exit cap expansion should be minimized. The construction cost remains a concern and would be mitigated in the same way as the Hospital program.

# CONCLUSION

### **Alternative Exit**

While the currently projected 11 year investment period offers a 3 year stabilization window, it is possible that an alternative exit strategy could be necessary depending on the economic conditions at that time. In this case, I would propose extending the hold period to 15 years, which would ultimately yield a 12.5% IRR. This would still be over the preferred return of 8%, and just slightly over the second hurdle of 12%.

Another idea to consider would be the possibility of selling portions of the portfolio at year 11, while keeping other portions to optimize the operational strategy. For example, structuring a deal with the Hospital to buy back the facility and the medical offices could be a viable option if the Hospital became stable and wanted to re-gain ownership of their facilities. It could also be possible to condo out one of the residential towers instead of maintaining them all as rental housing. The Hotel would offer another area of flexibility, with the option to fully sell to an Operator, or to convert to serviced apartments.

### **Key Takeaways**

At 4 acres, this development site represents one of the largest and most central sites available for re-zoning in Downtown Brooklyn today. With the capacity to add 1.9 Million square feet of new space, this project can reshape this institutional node which currently represents separation between neighborhoods rather than connec-

For the right investor, this project presents an opportunity to invest for the long-term in this community through the redevelopment of neglected healthcare facilities, the addition of 602 new Affordable housing units, and the introduction of a hospitality brand geared towards a young and mobile demographic.

Key to the success of this development is the value proposition offered to the long-standing institutions and community members. With a participatory design process and sensitivity to community needs, this project is certain to win the support of all key stakeholders.



### Community Driven

- Community focused asset strategy and
- Ensure successful ULURP process
   Leverage captive demand from institutions



### Multi - Asset

- Mixed-use development is focused on "place-making"
   Provides a suitable bridge between the special purpose Downtown Brooklyn and Historical Fort Greene.
- Mix of market-rate rentals & student housing
  Hospitality & Retail create 24/7 district



### Risk Distribution

- Partnership with TBHC allows for parallel-path
- development strategy
- Full execution of the agreement contingent on re-zoning

# THE VERGE

**FORT GREENE - BROOKLYN** 

SANDRA KALANYAN CAPSTONE DEALBOOK M.S. REAL ESTATE DEVELOPMENT **SPRING 2025** 

