Brooklyn Navy Yard Development

### Executive Summary

BLDG 127A proposes the development of a landmark industrial building at site 127, located within the Brooklyn Navy Yard, through a ground lease agreement with New York City. The project involves replacing a historic building with a sustainable, cutting-edge industrial facility, covering 90,000 square feet. The goal is to secure 100% net leases for each floor of this state-of-the-art building. Market analysis highlights strong supply-demand dynamics in the borough, despite subdued net absorption in the Navy Yard. Supported by the area's demographic density and attractive local tax incentives, this venture presents a unique opportunity for substantial returns in one of America's most sought-after industrial markets.

### Demographic Overview

The median household income in these areas in 2021 was $107,630, about 49% more than the citywide median household income of $72,150 (Furman). The serious crime rate was 14.1 per 1,000 residents compared to 14.2 per 1,000 residents citywide (Furman). Additionally, the mean travel time to work (in minutes) was 34.6, and the car-free compute (% of commuters) was 75% in 2021.[[1]](#footnote-0) Lastly, the unemployment rate in 2021 in the area was 10.95% (Furman).

The Brooklyn Navy Yard’s median age is 30, and 90.86% of the population is White Collar workers. Of the total workers, 12.7% are self-employed, 67.14% work for private companies, 8.05% are government workers, and 12.1% are not-for-profit employees.[[2]](#footnote-1) Population density has also risen steadily from 2006 to the present.

### Market Analysis

In this market analysis, we focus on the industrial space in New York City, with a particular emphasis on Brooklyn. As one of the most vibrant and economically diverse areas in New York City, the industrial sector offers a unique window into broader economic trends and property market dynamics. By dissecting data from the previous quarters and juxtaposing them with year-over-year trends, we aim to provide a clear picture of the current state and future prospects of industrial spaces in New York City, with Brooklyn as our focal point.

All asset types saw an increase in average asking rents over the previous quarter. Class A industrial properties remained constant with an average asking price of $28.90[[3]](#footnote-2). In Brooklyn, industrial asking rents increased 16.8% from the previous quarter and 14% from the previous year. Average asking rents across all classes are now sitting around $27.58. Unfortunately, we could not obtain data regarding class A trophy industrial properties in Brooklyn specifically - but the growth is a strong indicator that the market is primed for demand.

Currently, in New York City, there are 13 properties under construction, encompassing 5.6 million sq. ft., with a pre-lease rate of 48.3%. Additionally, 17 properties, totaling 4.8 million sq. ft., are planned or proposed. Of this total five properties under construction are in Brooklyn and account for 2.4 million sq. ft., representing 42.9% of the city's ongoing industrial construction. Brooklyn has four planned or proposed properties covering 1.9 million sq. ft., making up 39.6% of the city's future development pipeline in terms of square footage. These statistics depict a growing supply to match the increasing demand.

Industrial leasing saw a significant downturn, with new leases decreasing down to 525,000 sq. ft across New York City. This marks a 47.2% decrease from the previous quarter and a 29.4% year-over-year drop. On the surface, these numbers are not good and contradict what we just analyzed but when examined closer we can see that the majority of this downturn was due to Queens. The Borough of Queens lost 77% of total leasing compared to its previous quarter. Brooklyn, on the contrary, is recording the highest leasing velocity of any borough with nearly 320,000 sq ft leased, which makes up 61% of total leased industrial space this quarter across New York City. Brooklyn also had the largest lease transaction at 70,000 sq ft to retailer Net Zero along with 68,000 sq ft to Interstate Waste and Recycling and 35,000 sq ft to the New York City Fire Department. Again these figures prove the demand is there for Brooklyn industrial space.

Much like leasing, net absorption fell 20 basis points quarter over quarter with class a vacancy rate falling 260 basis points to 3.6%. Again this on the surface doesn’t support our analysis but looking deeper we can see that a large portion of this vacancy was due to the Bronx falling 150 bps quarter over quarter. Examining Brooklyn’s vacancy rates, we can see that they have stayed constant year over year, and fell only 10 basis points quarter over quarter. The positive net absorption occurred in Sunset Park/Greenwood and Williamsburg/Greenpoint while the Navy Yard saw negative 124,000 sq ft of net absorption.

The negative net absorption in the Navy Yard can be viewed positively as a strategic recalibration in the market. The overall Class A vacancy rate in NYC has decreased significantly to 3.6%, indicating strong demand and market health. The constant vacancy rates in Brooklyn year-over-year, with only a minimal decrease this quarter, suggest a stable market. Furthermore, the negative absorption in the Navy Yard may represent a unique opportunity for new tenants seeking prime locations, or for existing spaces to be upgraded or repurposed, aligning with evolving market needs and trends.

### Site Overview

The Brooklyn Navy Yard is an industrial complex with historical significance. Founded in 1801, the Brooklyn Navy Yard stood as the foremost shipbuilding center for the U.S. Navy for 165 years. It was the birthplace of some of America's most formidable warships, including the USS Monitor, USS Arizona, and USS Missouri. The Yard hit its zenith during World War II, employing around 70,000 individuals.[[4]](#footnote-3) It operated continuously until its decommissioning in 1966, after which it was acquired by New York City.

The yard is located along Brooklyn’s waterfront just outside Manhattan. Located Southeast of Manhattan, The Brooklyn Navy Yard is in close proximity to the Ferry system, Subway routes as well as bus routes. These routes make it a hot commodity in the area as it has accessible and efficient ways to and from the city. The Brooklyn Navy Yard is located Southwest of Williamsburg and Greenpoint Brooklyn. The yard covers “300 acres, a one-of-a-kind ecosystem housing 500+ businesses, employing more than 11,000 people, and generating over $2.5 billion per year.”[[5]](#footnote-4) The demand for industrial lofts and flexible office spaces has grown in recent years and many companies and businesses are looking into the yard and joining the community.

### Recent Development in the Yard

The recent completion of two state-of-the-art buildings in the Navy Yard marks a significant milestone in the area's development. Building 212, a modern marvel, offers 96,000 square feet of light industrial space alongside 34,000 square feet for offices. This building has already attracted a major tenant, Wegmans, establishing it as a cornerstone of the Navy Yard. Nearby, Building 303 stands tall with its impressive 160,000 square feet of industrial space and 50,000 square feet designated for office use.[[6]](#footnote-5) Spanning five floors, it provides breathtaking views of Manhattan and Brooklyn, a feature that has undoubtedly contributed to its appeal. These buildings signify a new era for the Navy Yard, reflecting a blend of architectural innovation and practical design. Their completion has already spurred interest from a diverse range of companies and industries, signaling a promising future for the area. The government's tax incentives for cleaning up the yard have further fueled this development, making these buildings not just structures, but beacons of growth and opportunity in the Navy Yard.

### Incentives

Businesses located in the Brooklyn Navy Yard are positioned to benefit from several attractive economic development incentives, enhancing their investment and operational prospects. A key incentive is the designation of the area as a Qualified Opportunity Zone, following recent tax code amendments.[[7]](#footnote-6) This status allows investors to defer tax on almost all capital gains from specific investments made between December 31, 2017, and December 31, 2026, offering significant advantages, especially in capital improvements. Additionally, as the Brooklyn Navy Yard is city-owned, tenants are exempt from paying real estate taxes, providing substantial financial relief compared to other New York City locations.

Furthermore, the Brooklyn Navy Yard businesses can avail themselves of the Relocation and Employment Assistance Program (REAP), which grants income tax credits to businesses relocating jobs to the area from outside New York City or from below 96th Street in Manhattan. Eligibility for REAP requires that a business has been operational in the prior location for at least 24 consecutive months before the move. Another incentive is the Energy Cost Savings Program (ECSP), which offers reductions of up to 45 percent on regulated energy costs and up to 35 percent on regulated natural gas costs for eligible businesses, with these benefits extending over twelve years. Both REAP and ECSP are designed to encourage business growth and sustainability in the Brooklyn Navy Yard, aligning with the city's broader economic development goals. These incentives are crucial to the success of our project as they allow our tenants to have their operating costs go from $8.59 per square foot to $1.87 per square foot.

### Zoning

The current zoning of the property is M3-1, intended for heavy industries known for creating noise, traffic, or pollution.[[8]](#footnote-7) These M3 zones are usually situated near waterfronts and are separated from residential neighborhoods. The property has a floor area ratio of 2.0 and can have a building up to 60 feet tall. There is a parking requirement under M3-1 zoning, but efforts are underway to collaborate with the city council to change the zoning to M2-1, aligning it with the zoning of adjacent buildings in the Brooklyn Navy Yard.

### Design

We propose a redevelopment of building 127 at the Brooklyn Navy Yard, located at 63 Flushing Avenue in Brooklyn. Industrial use, environmental sustainability, and social practicality in design is the objective of this project to ensure the building will be able to withstand the test of time.

The building will be built out to 95,000 square feet and 4 floors at a 12% loss factor, housing about six tenants in total. In consideration of the building’s proximity to the Hudson River, the building will be built at an elevation above the ground level. The walls will be encapsulated with glass to let in natural light, while its structure is reinforced by steel panels that can withstand strong winds and heavy rainfall. Solar panels will be installed on the roof for renewable energy and reduction of the carbon footprint. Windows will be protected by fixed, ventilated solar screens to regulate the internal temperature of the building. The screens are mounted above the windows and can cover the entire wall from the ceiling to the floor. In doing so, the solar screens will reduce the need for air conditioning units and conserve energy.

This is a mixed-use building for both retail and industrial tenants with an open plan on the ground floor; equipped with loading docks and state-of-the-art freight elevators for transport of heavy duty materials. Cars will enter the building lot on an elevated ramp and park several feet above sea level. The parking garage is built on an incline with a reservoir to enable drainage of rainwater back into the ground and prevent vehicles from being damaged from flooding. Gardens will be installed along the perimeter of the roof and terraces to extend its durability through the regulation of rainwater and reduction of solar radiation. Tenants on the 2nd floor and above will have access to a terrace space with foliage growth on the walls (also known as “living walls”) to promote air purification.

### Summary of Request

We are proposing a new $21,553,125 Construction Mortgage, which will come with a 2-year interest-only term for the subject property located at 63 Flushing Avenue, Building 127, Brooklyn, NY 11205. The construction mortgage will be utilized in order to redevelop the site into an industrial, environmentally sustainable, and socially responsible design that will make the building one of a kind. Upon completion of the construction period, the construction mortgage will convert into a permanent mortgage with a 10/25 structure. The construction mortgage will maintain an interest rate of 10% and the permanent mortgage will maintain a fixed interest rate of 5.75% for the life of the loan, which is to be priced at 30-day SOFR + 40bps. The loan to value will be 69% with a total property cost of $31,051,476 inclusive of Hard, Soft, and Demolition Costs of $22,467,500, $5,795,000, and $475,000, respectively.

The subject property totals 4 floors and will consist of 6 tenants whose working spaces will be divided equally among the tenants totaling 20,900 SF/tenant. Each tenant will be signing brand-new 20-year net leases in which the tenants will be responsible for paying for their own utilities and insurance. The tenants will have a mix between science, laboratory research, and ecology.

### Underwriting Analysis

At year 1 of full occupancy, the tenants will pay a total combined rental income of $3,511,200, which is set to increase by 4% each year for the duration of the tenant's leases. In addition to the rental income, the tenants will pay $92,634 in year 1 to occupy all of the parking and storage spaces and this income will increase 3% every year. Our analysis includes conservative estimates for losses concerning tenant improvements and general vacancy/credit loss totaling $1.5/SF for tenant improvements and 8% for general vacancy/credit loss. The resulting effective gross income will total $3,180,438. Expenses in year 1 will total $1,006,834, which are primarily attributed to real estate taxes of $638,791. Tenant reimbursements totaled $816,009, due to the triple net leases. The remaining expenses include 2% of EGI for Operating Expenses, 4% of EGI for Management Fees, and 2% of EGI for capital reserves. The resulting Net Operating Income in Year 1 totals $2,989,612.

Our analysis additionally includes unlevered and levered cash-flow differentiations. Additional expenses are realized in the cash flow analysis consisting of CapEx and Ground Lease Payments totaling $59,792 and $426,713, respectively. CapEx totals 2% of Effective Gross Revenue and increases 2% each year for the duration of the holding period. The ground lease payment was calculated using Year 1 NOI minus the reimbursements divided by the Cap Rate of 7% to determine the total value of the property of $31,051,476. Once hard and soft costs are subtracted from the property value we realized a land value of $2,788,976. The ground lease payment is finally realized by taking the land value and utilizing the yield on cost of 15% to get a total of $675,030. This payment is set to increase by 2% every year for an unlevered cash flow of $2,503,106 in Year 1 and a levered IRR of 16.57%. On a levered cash flow basis, once you account for annual debt service payments of $1,646,188. This ultimately results in a levered cash flow of $347,794 and an actual DSCR of 1.39x. Based on our analysis the DSCR is expected to increase on average by 0.14x per year of the holding period.

### Risk and Mitigation

Risk management in the development of the Brooklyn Navy Yard involves addressing several critical areas, with tailored mitigants for each. A prominent risk is related to flood insurance, as the area falls within Flood Zone AE and exhibits higher than average insurance costs, with a noted 13% of properties facing a significant flood risk over the next 30 years.[[9]](#footnote-8) This risk is expected to escalate with time. Mitigation strategies include reinforcing the foundation and the first floor to be above the Base Flood Elevation (BFE), as well as incorporating other resilient design features mentioned earlier. Such measures aim to reduce potential flood damage and, consequently, insurance costs.

Construction risks, notably permitting and bureaucratic delays, are addressed through proactive strategies. Establishing strong relationships with city officials and regulatory bodies, coupled with hiring experienced legal and compliance experts, can streamline the permitting process and navigate bureaucratic complexities efficiently. Furthermore, potential delay costs are mitigated by implementing strict project management protocols, conducting regular reviews, and ensuring effective resource allocation and contingency planning. Financing risks, stemming from fluctuating market conditions and loan rates, are countered through regular market analysis and a diversified investment approach to adapt to market changes. Additionally, securing fixed-rate financing options well below the stabilized value of the property provides a buffer against fluctuating loans, ensuring financial stability in the long term. These comprehensive risk mitigation strategies are designed to ensure the successful development and sustainability of projects within the Brooklyn Navy Yard.

**Sources:**

*Brooklyn Navy Yard Home Page*. Brooklyn Navy Yard. (2023, December 5).

https://www.brooklynnavyyard.org/

*Brooklyn Navy Yard, Brooklyn, NY demographics*. Point2. (n.d.).

https://www.point2homes.com/US/Neighborhood/NY/Brooklyn/Brooklyn-Navy-Yard-Demographics.html

*Brooklyn Office Rent Price & Sales Report*. CommercialCafe. (2022, February 2).

https://www.commercialcafe.com/office-market-trends/us/ny/brooklyn/

*Brooklyn Navy Yard, NY Flood Factor®*. Risk Factor. (n.d.).

https://riskfactor.com/neighborhood/brooklyn-navy-yard-newyork/71969\_fsid/flood

Fitzpatrick, M. (2023, September 19). *How much is Flood Insurance in New York? average flood*

*insurance cost and coverage*. MoneyGeek.com. https://www.moneygeek.com/insurance/flood/new-york-flood-insurance-costs/#:~:text=On%20average%2C%20flood%20insurance%20costs,other%20factors%20affect%20the%20premium.

*Greenpoint/Williamsburg neighborhood profile*. NYU Furman Center. (n.d.).

https://furmancenter.org/neighborhoods/view/greenpoint-williamsburg

*Industrial Space for lease: Brooklyn: United States*. Cushman & Wakefield. (n.d.).

https://www.cushmanwakefield.com/en/united-states/properties/new-york/industrial-for-lease-brooklyn#:~:text=The%20average%20asking%20rent%20for,the%20market%20and%20submarket%20levels

*New York Industrial Properties For Sale*. Commercial Real Estate. (n.d.).

https://www.loopnet.com/search/industrial-properties/new-york-ny/for-sale/?sk=4d74739ac2475fc0378a8a7606829939

*Office space for lease: Brooklyn: United States*. Cushman & Wakefield. (n.d.).

https://www.cushmanwakefield.com/en/united-states/properties/new-york/office-for-lease-Brooklyn

*Retail space for lease: Brooklyn: United States*. Cushman & Wakefield. (n.d.).

https://www.cushmanwakefield.com/en/united-states/properties/new-york/retail-for-lease-brooklyn#:~:text=The%20average%20asking%20rents%20for,demand%20areas%20commanding%20higher%20rents.

1. <https://furmancenter.org/neighborhoods/view/greenpoint-williamsburg> [↑](#footnote-ref-0)
2. <https://www.point2homes.com/US/Neighborhood/NY/Brooklyn/Brooklyn-Navy-Yard-Demographics.html> [↑](#footnote-ref-1)
3. https://mktgdocs.cbre.com/2299/3ae0fe0c-dcf5-44a5-9732-83cc37a53f61-1124855912.pdf [↑](#footnote-ref-2)
4. https://www.brooklynnavyyard.org/history/ [↑](#footnote-ref-3)
5. https://www.brooklynnavyyard.org/ [↑](#footnote-ref-4)
6. https://www.brooklynnavyyard.org/developments-master-plan/ [↑](#footnote-ref-5)
7. https://www.brooklynnavyyard.org/leasing-incentives/ [↑](#footnote-ref-6)
8. https://www.nyc.gov/site/planning/zoning/districts-tools/m3.page [↑](#footnote-ref-7)
9. https://riskfactor.com/neighborhood/brooklyn-navy-yard-newyork/71969\_fsid/flood [↑](#footnote-ref-8)