EXTREME SCALE

Social Infrastructure and Practices of Engagement at the Kingsbridge Armory.
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This exhibition documents the first semester of a GSAPP-wide initiative to envision a future for the Kingsbridge Armory in the Bronx, the largest armory in the United States.

Originally built in 1917 for World War I ammunition storage and firing practice, the landmarked structure sits within a 245,600 square foot site and comprises an 180,000 square-foot column-free drill hall atop two substantial cellar floors. Over the past century since its military function, the facility has been utilized transiently for a diversity of programs ranging from boxing matches to film sets, and the perimeter has become home to a robust street vendor community.

In September, following the announcement of an up to $200 million joint City and State investment to support the redevelopment of the Armory, The NYC Economic Development Corporation who has long-led efforts to permanently rehabilitate and re-purpose the site, issued a request for proposals (RFP). The RFP iterates on the recent release of the Together for Kingsbridge Vision Plan, which was the result of a 9-month visioning process that involved over 4,000 stakeholders.

Building from the RFP and vision plan, Advanced V Architecture Studios and a Seminar on Practices of Community Engagement came together in the fall of 2023 to explore both how the 5-acre site can be integrated into its neighborhood streets and public spaces as supportive community infrastructure, and how imaginative adaptive reuse strategies of extreme scale can be a catalyst for social cohesion while also allowing for dynamic overlap of programs.

Video displays throughout the exhibit showcase moments of community and stakeholder engagement while the architectural boards each interrogate a “what if” for a variety of immersive scenarios.

This exhibition is organized by Columbia University GSAPP.

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Architectural Explorations
What if circulation and movement could transform our social landscape? Picture a parasitic catwalk hanging boldly from the twenty-eight trusses of the Armory, defiantly challenging the overwhelming scale of the building. Blurring boundaries between inside and outside, old and new, the suspended viewing and circulatory apparatus becomes an innovative system of congregation and observation.

Beneath, two axes boldly slice through the fortress-like walls, introducing a newfound permeability at street level. Sculpted site work enables street-level entrances on every floor and upgraded plazas to the north and south. Within this composition, a series of new structures cuts across the armory’s drill hall floor, situating health, work, education, and leisure programs based upon strategic proximities and unexpected adjacencies. Envision the armory becoming a social battery plugged into a network of public schools and universities. Existing educational institutions directly north will be supplemented and supported by pre-kindergarten, childcare, after-school programs, evening classes, continuing education, and technical training.
What if the armory was a place where two entities meet, the city and the park? Where can these entities overlap, weave between each other, and interact? In 1906, the Jerome Park Reservoir was excavated, meant to supply water for the whole of the Bronx and Manhattan. Only the west basin was completed, leaving the east side to be developed. The Kingsbridge Armory was built in 1917 at the south end of the site, where the east and west basins converge.

What if this logic of the binary was used for the armory? Where a line of tension bisects a whole, leaving one to be developed, and one to nature.
What if we were to think about the armory typology in relation to its original architectural inspiration: the 19th century train station?

Both building types, 19th century stations and armories, are organized around entry buildings attached to large columnless halls, both employ similar spatial proportions and structural approaches, and both deal with high volumes of circulation. The Kingsbridge Armory has a strong skeleton, abundance of space, and is situated within a dense urban fabric. However, the building’s impenetrable skin and past functions have left it detached, and vacant, resulting in a building that is situated within a neighborhood in need of meaningful public space without the framework to meet the need.

Our proposal converts the east end of the armory into an urban plaza and the west into a public garden. Connecting these public spaces are linear streets, running the length of the drill hall like train platforms. These terraced platforms capitalize on the “bigness” of the interior, simplify movement throughout, and stitch together the two ends of this behemoth structure forming a cohesive fabric that can be knit into the urban context.
What if the armory transcends its physical boundaries and becomes an urban condenser, a local culinary center, and a nexus of human connection? With a balance of landscape and buildings, density and expanse, passages and destinations, this proposal utilizes the space under the armory roof to integrate various programs and specialized services. The integrated mixture will not only help support healthy lifestyles but also further enhance economic prosperity for its users and the surrounding neighborhood. The project unfolds across four interconnected towers, each dedicated to address specific local needs, including food, culture, sports, and health.

Different user groups of the neighborhood meander through the armory, gaining a diverse range of experiences and social interactions with others. Opening up the exterior facade of the monolith introduces a myriad of activities orchestrating along the paths, such as farms, mercados, cultural center, sports courts, and clinics. The space transcends into an intersection of extended opportunities for the explorers.
**KINGSBRIDGE STUDIOS**

*Emilie Kern
Marika Falco*

**What if** this armory - this sleeping giant of a building - awoke and set the stage for a new future for the Bronx? What if this armory embraced an industry that utilized the uniqueness of its size and space? And, what if this industry then embraced the residents of this neighborhood, offering new opportunities, training, and jobs? We imagine Kingsbridge Studios to do just that. A neighborhood within a neighborhood. A place that embraces the armory’s past proclivity for leisure and arts, but leaves behind its exclusionary practices. It’s here that film becomes an accessible industry and a new storyline for the Bronx is born.
What if the Armory, currently a monolithic shell blockading communities around it, became a social emulsifier, drawing in diverse communities through a mission of both service and economic growth? In our proposal, the headhouse serves as a career and business incubator, becoming an economic engine that weaves its reach through the armory and extends to the greater neighborhood around it. Spaces within the incubator partner with other programs in and outside the armory, becoming a symbiotic catalyst for community members to not just find jobs, but further their careers.
What if the Armory transformed from being observed to being an observer? In embarking on the redevelopment of the Kingsbridge Armory, our initial inspiration was deeply rooted in appreciating the unique character of the building itself. It became clear that the Kingsbridge Armory stands as a significant feature in the cityscape, attracting attention from all surrounding viewpoints. Its substantial presence not only holds a notable place in the urban setting but also captures the curiosity of passersby from every direction.

This observation led us to an intriguing design concept - transforming the Armory from being observed to an observer, utilizing its significant vertical height to bring the cityscape into the architectural space. Our proposal fosters a mutual relationship between the Armory and the city, preserving and celebrating the Armory’s history while introducing modern functionality that emphasizes its inherent grand scale and visual prominence in the urban environment. Through careful design strategies, we will create new visual pathways. These paths, establish a dynamic interaction between the interior spaces and the continually changing urban scenery beyond, positioning the Kingsbridge Armory as both a protector and a narrator of the urban story.
What if the armory was a farm? Our F-Armory proposal aims to feed the surrounding community with year-round fresh, locally and sustainably grown produce. Located in the neighborhood of Kingsbridge Heights in the northwestern Bronx, our project reinvents the armory as the ground for the meeting of the urban farm and the “social condenser”, creating an economy, ecology, and event engine.

The farm’s goal is the creation of a circular, community-owned economy. Hydroponic towers distributed along elevated platforms in the drill-hall connect to an underground aquaponic system to support the growth of lettuce, tomatoes, and tilapia year-round. The distribution of tomatoes and lettuce to grocers and local businesses will constitute the main source of income for the farm while seasonal soil greenhouses on the top levels of the platform will help create a community supported agriculture program. In the basement levels, a Cannabis farm with material research labs will complement the F-Armory program above.

The social condenser programs are reinterpreted to unfold, interact, and superimpose in the freest way possible as amplifiers of the site’s already vibrant urban fabric, as well as in support of the farm’s economy.
What if the Kingsbridge Armory itself became a city? What kind of city could it be? How could this city integrate into existing infrastructure and help support the wellbeing of its community members?

Our proposal creates a city within the Kingsbridge Armory that can provide inspiration, enlightenment and education for community residents and subtly affect their lifestyle. They can get some thinking about education and health, and gain totally new cultural and entertainment experience here. From the precedent of how urban space shapes people’s behavior and mode of thinking, we can see that in Diocletian’s Palace, once a fortification system, various walkable spaces were formed due to the retained city walls, gates, and streets. People can wander aimlessly to gain leisure, entertainment and even inspiration.

Therefore, we realize that the void spaces of the city really belong to the public and provide the possibility for various events to occur, which is an important part of stimulating urban vitality.
THE LIVING ARMORY

Preethi Ganesh
Xinyi Liu

What if the armory could bring the outside in? Imagine a sanctuary where the boundary between exterior and interior dissolves, revealing a harmonious coexistence between nature and architecture. “The Living Armory” is an architectural endeavor that transforms the conventional notion of an armory into a dynamic living space. Three unconditioned vessels, inspired by organic forms, serve as immersive outdoor environments, blurring the boundaries between nature and architecture. These vessels act as extensions of the surrounding conditioned spaces, creating a seamless transition between the built environment and the outdoors.

The upper floor becomes a canvas for the unpredictable, allowing the outside city elements to infuse the spaces with life and spontaneity. Through our proposal, imagine open adaptable areas that respond to the pulse of the city, seamlessly integrating the energy of the streets with the tranquility of the surrounding natural vessels. Meanwhile, underground spaces host formal programs, creating a juxtaposition between the organic above-ground vessels and the structured below-ground spaces. What if the armory could bring the outside in? This project seeks to answer that question by redefining the boundaries of traditional architecture, offering a transformative experience where nature becomes an integral part of the architectural narrative.
What if we worked with what we have? Where, by building as little as possible, the armory’s most unique quality—open space—stays intact for current and future use. Taking a careful approach to preservation, current needs are programmed within the 180,000 square feet below the drill hall floor, leaving the floor above open and flexible.
What if there was a park in the Armory that could weave the gap between parts of the neighborhoods, enhance the health of the community, support local businesses, and also preserve the feeling of bigness? A vibrant oasis of landscaped hills connect to a water valley where kids can play, therapy gardens for elders tie in between informal amphitheaters for theatrical performances, and a subway station plugs into the adjacent street station.

Imagine taking your evening walk through a contained forest atmosphere, dining at your favorite local business while listening to upcoming artists, sitting atop the landscape volumes to finish a book with panoramic views, or grabbing a drink and watching the local basketball game.

Whether you are making your evening pit stop at the local market or just here to enjoy the feeling of a park indoors, transparent roof panels allow natural light to enter and create an outdoor ambiance within the armory. You can catch a breath of fresh air even when you’re indoors, with a park inside the armory!
Despite the Kingsbridge Armory being vacant and fenced, the surrounding street is lively. Strollers frequently take a moment to observe the products showcased on the fences, highlighting the significant role played by street vendors in bringing vibrancy to this area. The street vendors add a dynamic and engaging dimension to the empty armory. Their strategic location in the commercial corridor and near the subway station caters to locals and commuters. These vendors, often families working together, are crucial to the local economy. As the armory undergoes redevelopment, the key for these vendors lies in securing licenses, and transcending spatial considerations.

Legal adherence becomes paramount, aligning their operations seamlessly with the forthcoming surge in foot traffic, transforming the area into a dynamic hub where commerce and revitalization converge harmoniously.
Do fences outside the armory represent a hostile means of controlling access and usage? ‘Boundaryless Armory’ aims to provide recreational, cultural, and social opportunities that enhance the neighborhood’s vibrancy and connectivity. We propose a shift from traditional, restrictive boundaries towards an open, inclusive space that transcends the physical confines of the Kingsbridge Armory.

By dismantling perceived physical and symbolic barriers, the surrounding streets can genuinely belong to the community. At our pop-up event, we deliberately pushed the boundaries of conventional public usage beyond the footpath to invite the community to explore new possibilities. Employing innovative tools such as futuristic visualizations, activity usage, time mapping, and an interactive physical model, we prompted individuals to envision and embrace the potential of the surrounding area.
Our project was centered around the question- “How can W 195 street become an extended space for the youth?” Drawing from the aspirations of The Together for Kingsbridge Vision Plan “to prioritize the youth”, we used our project as an opportunity to engage with the students, parents and teachers at the primary school “PS 340” to envision the street as a space that is not meant solely for cars. Our engagement activity consisted of two parts.

First, we collaged the street with activities that could create the vitality desired and demonstrate the possibilities the street could host. Then, we invited the students to draw, color and paste stickers over an illustrated map, to discuss activities they would like to have in their neighborhood.
Interested in the relationship between the elevated subway station and Kingsbridge Armory, we offered four scenarios for discussion with passersby:

1. Extend access to the Kingsbridge Armory through the platform on the second floor of the station, increasing engagement with the historic building.

2. Enhance accessibility features at the existing station, such as elevators and escalators.

3. Replace the current exterior walls of Kingsbridge Armory with more transparent materials to facilitate the possibility of hosting functional shops.

4. Install additional lighting facilities below the subway to improve nighttime safety. the footpath to invite the community to explore new possibilities.
The redevelopment of the Kingsbridge Armory has the potential to attract a significant number of users to this once-abandoned infrastructure in the Bronx. With this influx of people in the neighborhood, there are speculations on how it will impact the surrounding area. Our project focuses on the adjacent school zones, specifically the street between the armory and schools (W 195th St.), which has the potential to be an extension of the project outside the physical boundary of the armory. We believe the streets between the armory and the school present an opportunity to be used for functions much more relevant than an on-street car parking zone. Through our interactions and engagement with numerous children, teenagers, parents, and teachers, we draw inferences about the desired changes that can benefit the overall experience of the neighborhood. Utilizing large survey boards, we discerned their priorities and explored how their needs vary at different times of the day.
COMMUNITY DREAM-WORKS

Ching-An Lu
Xin Ge
Xinyu Cao

As a landmark with historical significance in the community, Kingsbridge Armory is also a large volume. For the school district adjacent to it, it only exists as an old building that cannot be touched in the eyes of children. The road next to the school is like a moat and the fence next to the factory is like a city wall, preventing them from understanding and contacting this unique place.

From a community development perspective, we should work with the local community to collect opinions and discover the potential of this historical site, with the goal of turning it from a vast wasteland into a dream factory for community development.