INTERSTITIAL URBANITY

Fragments of Place Within the Post-Modern City

by

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A thesis

presented to the University of Waterloo

in fulfillment of the

thesis requirement for the degree of

Master of Architecture

in

Architecture

Waterloo, Ontario, Canada, 2006

AUTHOR'S DECLARATION FOR ELECTRONIC SUBMISSION OF A THESIS

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

ABSTRACT

This thesis introduces *Interstitial Urbanity* as a strategy for addressing issues of urbanity and place within New York's peripheral developments. Driven primarily by market forces, these developer led office and condominium complexes are currently being constructed along the post-industrial shorelines of New York's outer boroughs. Interstitial urbanity proposes an urban centre: a fragment of place within a non-place settlement. The theory is manifested in the design of an interstice that sits within the Queens West development on the Long Island City waterfront. Taking the form of a multi-layered public space, the interstice is comprised of a waterfront market square flanked by a commuter train terminal and an arts centre housed in a turn of the century power plant.

ACKNOWLEDGEMENTS

I'd like to express my appreciation to everyone who had a hand in shaping this thesis. The road was at times difficult, and I never would have reached the end without your support. A special thank you goes out to my supervisor Ryszard and panel members Marie-Paule and Lloyd for their collective insight and guidance. Thanks also to Nick for being so engaged and thorough as an external advisor. Thanks to Ken and Brian for lending a listening ear and a set of working hands. Thanks also to both my family and friends; I continue to be grateful for your endless encouragement. Finally, thank you Yvonne -- for walking with me step by step and for being everything that you are.

For Yvonne

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INTRODUCTION

This thesis examines the form and nature of Peripheral Developments on the New York City Waterfront. Peripheral developments are the developer driven condominium and office tower complexes currently being constructed on the post-industrial shorelines of New York's outer boroughs. Sitting in park-like surroundings, the luxury high-rises orient themselves towards views of the Manhattan skyline. Queens West, a proposed peripheral development, is slated for Hunters Point on the Long Island City waterfront. It serves as the site of the thesis.

Since its conception in the mid 1980's, the Queens West master plan has faced opposition from a number of fronts. Driven primarily by market forces, criticism stems from the development's disregard for urbanity and inability to address issues of character and sense of place.

Typologically lacking the public spaces and mixed use programming traditionally associated with city neighbourhoods, the settlement is homogenous and bland: a collection of tall buildings and no more. Sociologically, Queens West suffers from a sense of placelessness. Designed without acknowledging the site's history or context, the development fails to cultivate a sense of rootedness or personality. As such, the development is always described in terms of its proximity to Manhattan, as if it lacked an identity of its own.

Peripheral developments are rooted neither modernist nor postmodernist planning ideologies. Instead, they are simply a commodity -- a reality in today's commercial real estate industry. They are relatively inexpensive to build and relatively easy to sell. As such, there is a strong possibility that these profit driven developments may one day form a outer ring around fronting New York's waterfront boroughs.

i.1

Queens West' shortcomings are well documented and a number of architectural alternatives have been proposed in its place Each response takes a different form but all have looked to eradicate all existing plans, working off of a clean slate. The proposals have looked to take the existing program and reshape it typologically. While each is interesting in its own right, all seem destined to remain on paper because they are too ambitious, too expensive and too different from the existing, lucrative master plan.

This thesis proposes an alternative design strategy: Interstitial Urbanity. Taking a moderate course, the proposal looks to integrate elements of urbanity and place into peripheral developments without having to start the process all over again. It seeks only to create an interstice: a fragment of place within a non-place settlement. The fragment is small, but crucial. It serves as the heart of the development -- a means of ushering in both program and identity. In Queens West, the interstice takes the form of a multi-layered public space -- a waterfront market square flanked by a historic train terminal, and an arts centre housed in a turn of the century power station. The site, program and extents of the interstice are determined by principles of location, event and boundary. In combination, these principles look to develop a constructive means of dealing with the complexities and realities of post-modern high-rise development.

The thesis is laid out in five chapters. The first looks at the New York's redeveloping waterfront and introduces peripheral developments as an urban typology. The second chapter is an in-depth examination of the Queens West master plan and its proposed alternatives. The third chapter introduces Hunters Point as a site -- its morphology and contemporary context. The fourth chapter examines the nature of place and its relationship with the post-modern city. It then proposes Interstitial Urbanity as a strategy for cultivating place. The final chapter manifests the strategy in a design proposal for an interstice on the Long Island City waterfront.

1

THE REDEVELOPING WATERFRONT

AN OVERVIEW

1.1

THE CONTEMPORARY WATERFRONT

New York is in the midst of reshaping its waterfront. For the first time in its nearly four hundred year history the waterfront is being conceived as a place for public life. Since its discovery by the Dutch in the seventeenth century the waterfront has been used exclusively as a place of industry. The waterfront was messy and chaotic -- a place for transferring cargo and dumping sewage. At the turn of the twentieth century Manhattan was studded with more than a hundred piers that protruded out from its periphery. Today, the ships and sheds that occupied the piers have moved South into the outlying boroughs and the city's edge sits ready to be reclaimed.

New York's unique geography gives it a particularly long expanse of waterfront. Manhattan is separated from New Jersey by the Hudson River and from Queens and Brooklyn by the East River. Including the boroughs the total length is 578 miles, of which, the urban form is mostly undecided. In *Beyond the Waters Edge,* a survey of the city's contemporary waterfront, Joel Garreau discusses the importance of new development:

> *"The stakes for designing a waterfront interface are very high, and the task is inordinately complex, because in today's New York and in port cities around the world, the waterfront has to serve as front yard and service alley, cultural stage and civic space, playground and profit centre. In short, it is the paradigmatic site for the future of public life.* [1] *"*

As of today the waterfront is without a master plan, governing body or collective vision. Within this context, urban planners, politicians, architects, property developers and community groups are all looking to have their visions realized. Their efforts have been for the most part isolated, and are just now beginning to bear fruit.

1.1
Aerial Over Manhattan

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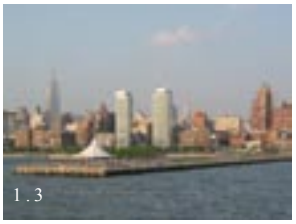

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GREEN INITIATIVES

Community groups have partnered with City and State to create a handful of recreation based projects. The most prominent is the Hudson River Park, a five mile continuous greenway along Manhattan's West side. The park runs from the Battery - Manhattan's southern tip up to 59th street, where the Riverside Park begins. The park is bounded on its Eastern edge by a set of pedestrian and bicycle paths. Its Western edge is animated with a series of recreation based programs that take place on reconstructed shipping piers. Each pier houses a different program, including boathouses, snack bars, playing fields, boardwalks, fishing piers and children's play areas. Construction began in 1999 and was completed in 2005.

A similar design is being proposed for Manhattan's East Side. The East River Esplanade is part of the Manhattan Greenway Initiative, which looks to connect the entire waterfront with a continuous pedestrian pathway. The East River project is less ambitious than the Hudson's as its piers have largely vanished and there is less inhabitable space. Instead of having pier parks that jut out from the land, the esplanade looks to create pocket parks like the Stuyvesant Cove on 18th Street, that exist as green spaces inset along the esplanade.

These public space initiatives along with reduced cargo shipments have sparked a revival in ferry ridership. At the turn of the twentieth century the ferry was a crucial form of public transport, with up to 125 ferry lines in operation. Today, as roads, tunnels, subways, buses and trains face overcrowding, the ferry is once again seen as a viable mode of transport, especially by suburban commuters arriving from New Jersey, Staten Island and Long Island. New ferry companies have emerged and new terminals are being built. Smith-Miller Hawkinson Architects recently completed a small terminal at Wall Street, and larger terminals are planned for both Manhattan and the boroughs.

1.2 - 1.3
Hudson River Park

1.4 - 1.5
Stuyvesant Cove, East River Esplanade

1.6 - 1.8
Pier 11 Ferry Terminal, Manhattan


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PERIPHERAL DEVELOPMENTS

Just as City and State have supported green initiatives, they also support commercial initiatives as well. In the past two decades, large property developments have sprung up along the waters edge. These multi-building condominium and office tower complexes front onto to new waterside parks. Set at the feet of the World Trade Towers in Lower Manhattan, Battery Park City set the precedent in 1980. Created on 92 acres of infill land, Battery Park gave city and developers a rare opportunity to work from an essentially blank canvas. Its residents consisted mostly of affluent young professionals from the adjacent business district, the city's second largest. It became a boom to the local economy, bringing in tax dollars, employment and new sources of revenue to lower Manhattan. A string of imitators followed, most recently the 100 acre Trump Place development on the Upper West Side. Spearheaded by celebrity developer Donald Trump, the wildly extravagant complex promotes architecture as commodity in an increasingly luxurious tower/park scenario.

Newport, across the river from Battery Park, is the first of the city's peripheral developments. Differing from its predecessors, it is sited outside of Manhattan on the New Jersey shoreline. Whereas previous developments were grafted onto existing neighbourhoods, Newport is an isolated creation -- a gaudy collage of luxury towers sitting on a large tract of formerly industrial land. Lacking a centre or any sense of cohesiveness, the development has a decidedly anti-urban character. As such, it is widely disparaged by Manhattanites. Despite the criticism however, it has proven popular with young professionals because of its seductive combination of amenities and proximity to Manhattan. Newport is widely seen as the first of a future string of peripheral developments that may eventually form a spine of towers along the city's waterfront boroughs -- New York's contemporary gold coast. The second of these projects is currently under construction in Long Island City, the site of this thesis. The project is known as Queens West.

1.10
Battery Park City, Manhattan

1.11
Battery Park Infill Proposal,
Governor Rockefeller

1.12 - 1.13
Donald Trump,
Trump Place Development

1.14 - 1.15
Newport, Jersey City, NJ

2

QUEENS WEST

PLANS AND CONCERNS

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QUEENS WEST

Queens West is the city's most ambitious peripheral development. It is sited at Hunters Point in Long Island City, the Southwest tip of Queens. The seventy four acre site sits directly across from the United Nations building in Manhattan. Hunters Point was at one point an important transport interchange but today sits largely vacant, home to a scattering of light industries.

Queens West is a 2.3 billion dollar proposal that calls for the construction of nineteen high rise buildings. Fifteen of the buildings are to be condominiums, the remainder a collection of office towers that cluster together to form an office park at the centre of the site. The towers are designed to hover above a newly created waterfront park -- 1.25 miles of continuous green space that forms an esplanade overlooking the Manhattan skyline.

2.1
Aerial, Hunters Point

2.2
Aerial, Proposed Queens West Master Plan

2.4

EMPIRE STATE DEVELOPMENT CORPORATION

↓

QUEENS WEST DEVELOPMENT CORPORATION

PRIVATE	PUBLIC
Commercial Property Developers	New York City
↓	NY Economic Development Corporation
INVESTORS	Port Authority
Banks & Investment Companies	New York City Planning Department
↓	
RELATED INDUSTRIES	
Architects	
Real Estate Brokers	
Construction Trades	
Landscape Designers	
Urban Planners	
Engineering Firms	

2.5

POLITICAL STRUCTURE

Queens West originated in the early eighties after Battery Park City showed signs of commercial success. The development is a joint venture between public and private partners, both of whom have vested interests in seeing the project succeed. The project is managed by the Queens West Development Corporation, a subsidiary of the Empire State Development Corporation. Both are operated by New York State tax dollars. The Queens West Development Corporation includes New York City, the New York Economic Development Corporation and the Port Authority of New York. Queens West is chaired by Charles A. Gargano, also the chairman of the Empire State Development Corporation and the Ground Zero redevelopment. Private partners are commercial property developers, each of which chosen by the Corporation.

The Queens West Master plan was designed by Gruzen Samton Steinglass and Beyer Blinder Bell in 1984. It calls for four stages of design and nineteen parcels of land. The Corporation is responsible for choosing a developer for each design stage. The developer in turn commissions architects to work up a set of design drawings from which individual condominium units are sold. Based on these sales, banks and financial institutions provide capital in the form of a construction loan.

2.4
Queens West Master Plan

2.5
Political Structure Diagram

2.6
Charles A. Gargano


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STAGE 1

The first of four stages began construction in 1997 and was completed in 2002. The design called for two condominium towers: *Citilights* and the *Avalon Riverview*. Citilights is a 42 storey, 522 unit high-rise designed by Cesar Pelli. The Avalon Riverview is designed by Perkins Eastman architects and houses 372 units in a 32 storey tower.

Both condos have been designed with a tower portion and a four storey base. The base contains amenities and above-ground parking. The towers are strictly residential and maximize views of the Manhattan skyline by siting themselves perpendicular to the waters edge. Both condos offer units ranging from 480 square foot studio apartments to 1450 square foot three bedroom units. The majority of units are for sale with a handful reserved for rental purposes.

Despite being authored by fairly prominent architects the designs are purposely subdued. Instead of design, the condos are marketed on four points: proximity to Manhattan, views to the Manhattan skyline, proximity to subway, train and ferry terminals and availability of amenities, including a daycare and a small waterfront pier park. This strategy has worked well. Though the units are pricey, Stage 1 is completely sold out. It's commercial success has paved the way for stage 2.

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2.7-2.8
Stage 1 Design Renderings. The Citilights condominium is on the left and Avalon Riverview on the right.

2.9
Unit Plans, Avalon Riverview

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STAGE 2

Stage 2 occupies the largest parcel of land at the northern tip of Hunters Point. The scheme houses seven buildings and a waterfront park within the seven acre site. The New York based Rockrose Development Group was chosen to construct the entire complex.

Recognizing that the scheme needed a cohesive and distinct architectural language, Rockrose selected the Miami based architects Arquitectonica to design all seven buildings. In the mid 1980's to early 1990's, Arquitectonica had developed a reputation for creating memorable post-modern condominiums like the Atlantis apartment building in Miami, which famously housed palm trees and a swimming pool within a large opening in its main facade.

For Queens West, Architectonica proposed a dense cluster of slabs whose massing was broken up with set of stacked, box-like volumes. Decorated with a crisscrossing mullion pattern in burgundy, blue, green and yellow, the buildings form a multi-coloured plaid. Retaining a neon-lit Pepsi-Cola sign from an existing factory, the design is hopelessly confused, but remains very popular with property crazed buyers in today's inflated real estate market. The majority of units have been sold and construction broke ground in 2005.


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2.11 - 2.12
Stage 2 Proposal, Arquitectonica

2.13
Atlantis Condominium, Miami, Arquitectonica


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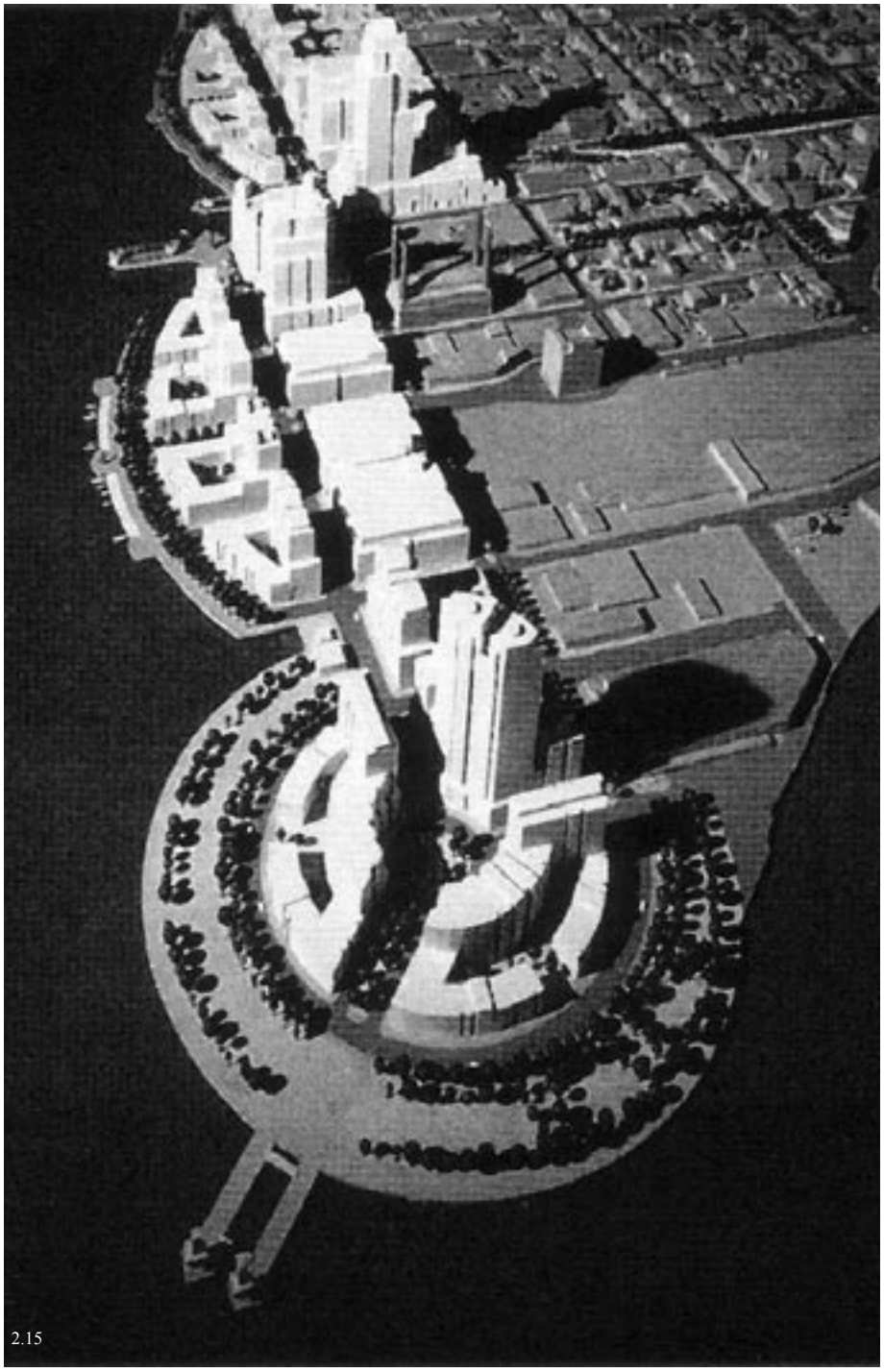

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STAGE 3


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Like Stage 2, Stage 3 calls for a cluster of residential towers, this time at the southernmost end of Hunters Point. There are four towers, three of which are clustered together to form a circular shape in plan. To its north is the fourth condominium building, an isolated double tower unit. The residential dwellings in this section will total approximately 2200 units. 10 000 square feet of retail will be made available at the ground floor. At this point neither a developer nor an architect has been hired. The project is on hold until the second stage is complete. The chances of it being built depend on the financial success of Stage 2.

2.15-2.16
Stage 3 Massing Models


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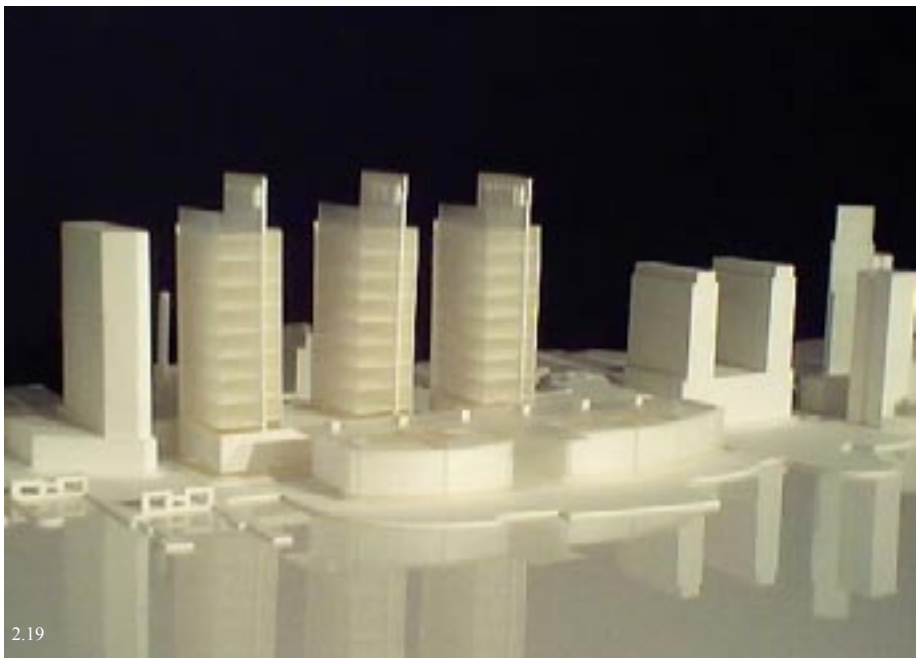
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STAGE 4

The fourth stage breaks away from the condominium and turns its attention to office space. This design has tentatively been dubbed Queensport. Queensport is an office park that functions as the 'commercial core' for Queens West. Five new buildings are slated for the site, which sits at the centre of Hunters Point. LCOR, a Pennsylvania based property developer has been chosen to develop the site. Kohn Pederson Fox has been hired as the architect.

The scheme is made up of five new buildings: two six storey buildings next to the waterfront and three thirty storey office towers backing them up. The lower lying buildings contain primarily offices but also integrate retail space, a conference centre and a hotel.

The masterplan calls for 2.5 million square feet of class A type office space. Each floorplate is approximately 24 000 square feet -- a typical size for leasing purposes. Like Stage 1, 2 and 3, Queensport will be marketed primarily on its proximity to Manhattan and its variety of transportation options. Queensport is a much riskier financial proposition than its residential counterparts. Without precedent, no one is sure whether large corporations will feel comfortable relocating their head offices to Queens. In order to stay competitive, Queensport has to offer low rental prices as an incentive.

The construction cost of Queensport is estimated at $500 million. The city, seeking to return the land to local tax rolls, has pledged to contribute $45 million and the Port Authority another $190 million. Due to the relatively risky nature of the scheme, no groundbreaking date has been set. Marketing campaigns however, are already underway.

2.18-2.19
Stage 4 Proposal,
Kohn Pederson Fox

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CONCERNS AND ALTERNATIVES

From its outset, Queens West has faced a great deal of opposition. Community boards adamantly opposed the plan out of fear that the 30 to 40 storey towers would effectively wall off the waterfront. Local manufacturers and residents were concerned that the new construction would force them out by raising real estate prices. Finally, all parties were outraged that the new scheme made no attempt to integrate itself into the existing neighbourhood and that it's proposed demolition would effectively eradicate Hunters Point's low key post-industrial character.

In 1994 these concerns were brought to light in the form of an alternative master plan. The scheme was initiated by the Hunters Point Community Coalition, a consortium of neighbourhood activists. The coalition hired Bonnie Harkin, a local architect to execute the design. Harkin proposed a scaled back version of Queens West that took the existing program and elongated it into pedestrian friendly blocks. No building would be taller than twenty stories and the Southern tip would remain unbuilt and serve as a public park. This type incorporated more retail frontage and looked to cultivate a decidedly more urban lifestyle. The plan was quickly dismissed by the Queens West, who argued that a scaled back version wasn't economically possible as it lowered the property values of the individual units. The coalition countered by arguing that the corporation's calculations were based on overvalued property estimates for publicly held land.

In the end, the corporation prevailed, making a small concession to the community by constructing a pocket park a few blocks off the waterfront. The park replaced an unused railway cut and is home to a handful of basketball and handball courts. The master plan remain unchanged.

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Alternate Proposal
Bonnie Harkin Architects

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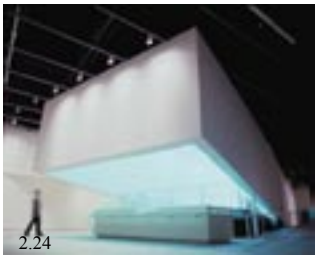
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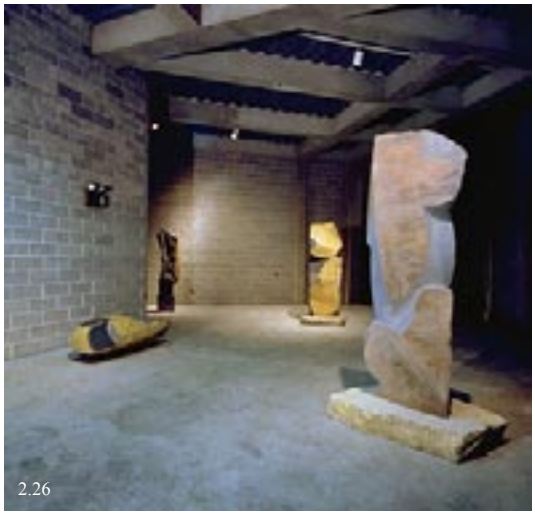
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CREATIVE CITIES CONFERENCE

The same issues were again brought to light in 2001 in a conference organized by the Port Authority, the British Council and the Van Alen Institute. The conference was titled Creative Cities: Renewing New York, A Conference on the Future of Long Island City South - Queens Plaza to Queens West. The conference was held at the P.S.1 contemporary art centre, a subsidiary of the Museum of Modern Art, and just north of Hunters Point. The conference, whose panel included both Harkin and Michael Sorkin, was critical of Queens West's design ideology, which was dead set on isolating itself from its surroundings. The panel challenged Queens West to recognize the value of its adjacency to the emerging Long Island City arts community. In the mid-nineties, Long Island became the new home to a large number of artists, who were scared off by Williamsburg's rapidly rising rental prices. They settled instead on Long Island City, which had an abundance of affordable loft spaces. In turn, many galleries followed suit. In addition to P.S.1, Long Island City is now home to a number of galleries, most notably the Isamu Noguchi Museum, the Sculpture Center, the American Museum of the Moving Image, the Socrates Sculpture Park and in 2002, the MoMa QNS, a temporary exhibition space for the MoMa, whose Manhattan headquarters were temporarily closed for renovation.

The conference challenged Queens West to capitalize on the emerging cultural dynamic by integrating cultural institutions into the masterplan. It also looked at integrating an arts based program to the waterfront through landscaping strategies that would connect the arts corridor at P.S.1 to the waterfront. Queens West took note but later nixed the idea by arguing that any change to the master plan would involve the preparation of a long and expensive environmental impact statement.


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2.22 - 2.24
MoMa QNS

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P.S.1 Contemporary Arts Centre

2.27
American Museum of the Moving Image

2.28
The Sculpture Centre

2.29 - 2.30
Socrates Sculpture Park

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LIC Arts Map, Long Island City Cultural Allianceult

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Creative Cities Conference


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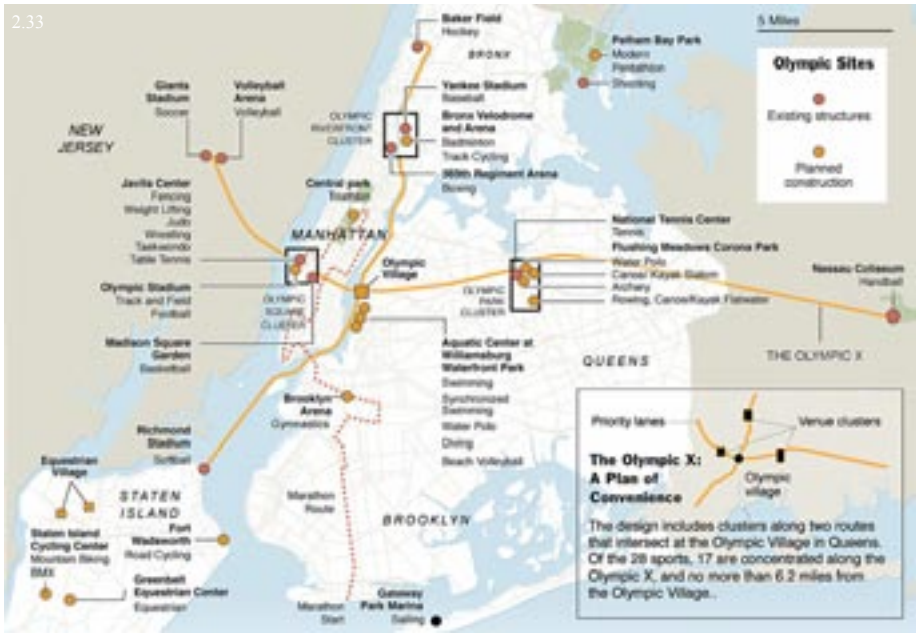
5 Miles
Olympic Sites
Existing structures
Planned construction
Baker Field
Hockey
BRONX
Pelham Bay Park
Modern Pentathlon
Shooting
Giants Stadium
Soccer
Volleyball Arena
Volleyball
NEW JERSEY
Yankee Stadium
Baseball
Bronx Velodrome and Arena
Badminton
Track Cycling
69th Regiment Arena
Boxing
Javits Center
Fencing
Weight Lifting
Judo
Wrestling
Taekwondo
Table Tennis
Central park
Triathlon
MANHATTAN
National Tennis Center
Tennis
Flushing Meadows Corona Park
Water Polo
Canoe/ Kayak Slalom
Archery
Rowing, Canoe/Kayak Flatwater
Olympic Village
Nassau Coliseum
Handball
Olympic Stadium
Track and Field
Football
Madison Square Garden
Basketball
Aquatic Center at Williamsburg Waterfront Park
Swimming
Synchronized Swimming
Water Polo
Diving
Beach Volleyball
QUEENS
THE OLYMPIC X
Brooklyn Arena
Gymnastics
Richmond Stadium
Softball
Equestrian Village
STATEN ISLAND
Marathon Route
BROOKLYN
Fort Wadsworth
Road Cycling
Staten Island Cycling Center
Mountain Biking
BMX
Greenbelt Equestrian Center
Equestrian
Marathon Start
Gateway Park Marina
Sailing
Priority lanes
Venue clusters
Olympic village
The Olympic X: A Plan of Convenience
The design includes clusters along two routes that intersect at the Olympic Village in Queens. Of the 28 sports, 17 are concentrated along the Olympic X, and no more than 6.2 miles from the Olympic Village..

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2012 OLYMPIC BID

The latest challenge to Queens West was initiated by New York City in a bid for the 2012 summer Olympics. The city lost the bid to London, but are seen as a strong contender for the 2016 games. Many of the proposed stadiums and structures will likely be used again for the upcoming proposal, including an athlete's village sited at Hunters Point.

The Olympic village sits at the centre of the bid, which encompasses all of New York's boroughs as well as New Jersey and Long Island. In 2003 the committee held an open architectural competition for the design of the village. Many architectural heavyweights entered, including Zaha Hadid and MVRDV. The winner of the competition however was Thom Mayne's Los Angeles based Morphosis.

2.33
2012 NYC Olympic Bid,
Master Plan

2.34 - 2.36
Olympic Village Renderings
Morphosis

2.35

Morphosis' design is sited at the southern tip of Hunters Point -- the location of Queens West's Stage 3. It calls for a series of interlocked low-rise housing complexes that run parallel to the waters edge. These sinuously shaped buildings act as a frame for a new 52 acre public park. The waterfront along the East River is to become a 4 acre public beach. The village is to house 16000 athletes in 4400 apartments. Each two bedroom unit is a relatively luxurious 1200 square feet -- more than twice the I.O.C. requirements. The scheme is anchored by four high-rises, three office towers which sit at the north end of the design and a residential tower at the south. The office towers are an attempt to integrate Queens West's vision into the new village. Stage's 3's program has been retained and given a makeover by renaming it the 'International Zone' and applying a similar architectural vocabulary.

The post-olympic village is to become a residential condominium complex. The estimated cost is $1.5 billion, of which, the

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entire sum is to be raised privately. Like Ground Zero, the actual construction will be left in the hands of a developer or group of developers who will oversee the financing, land purchase, detail design and construction of Mayne's master plan.


2.39

Response to the design has by and large been good. Some have criticized its unorthodox urban form but most have found the scheme dramatic and refreshing. In fact, the scheme won the competition based on formal ingenuity. All other schemes called for some variation of a tower in the park typology.

Most agree however that the scheme is destined to remain on paper. Even if New York is successful in its bid for the olympics, the athlete's village faces both financial and political hurdles. The Olympic committee drew up their original plans without the approval of Queens West, who own the land and have already invested $120 million into it. Without their cooperation, the bid needs to be financed privately as it does not have financial backing from state, city or Port authority. Queens West is reported to be extremely upset with the Committee. When pressed by a New York Times reporter for an opinion, Queens Borough president Claire S. Shulman responded with an adamant "over my dead body."

2.37 - 2.41
Olympic Village Renderings
Morphosis

On top of political opposition, the scheme also faces economic hurdles. The same unconventional form that helped win the competition would also prevent it from being built as drawn. The estimated cost is $1.5 billion -- an enormous sum considering that all other sites and infrastructure have an estimated cost of $3.7 billion combined. There is little precedent for a building of this size, typology or expense. For any prospective investor, there would be no guarantee of return. In short, it is unlikely that they would be able to find a developer or bank willing or able to take the project on. A best case scenario would probably look much like Ground Zero today, with the original master plan being divided up into smaller, more conventional building types that could be parcelled off to individual developers and architects.


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3

HUNTERS POINT

A BRIEF HISTORY

3.1

3.2

EARLY SETTLEMENT

New York was first settled by the Dutch in 1626. The city began its growth at the southern tip of Manhattan and soon expanded into both upper Manhattan and Brooklyn. By the 19th century Manhattan and Brooklyn were thriving but Hunters Point would not begin developing until the mid 1800's.

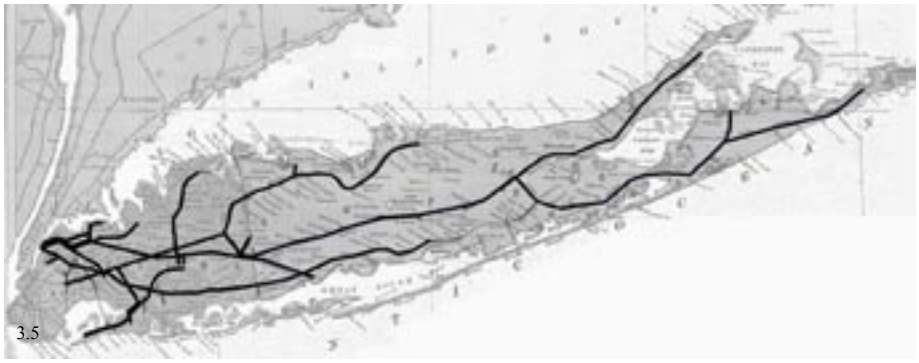
Up until this time, Hunters Point had been privately owned and occupied as farmland. In 1817, it was inherited by Captain George Hunter and took on its current name. In 1835 Hunter turned the land over to a group of property developers. Together, they began constructing a series of roads that began to open up the land to new development. A major breakthrough arrived in the 1850's when they began to infill the marshy waterfront with sand from adjacent hills. Eventually the entire length of the Long Island City waterfront was bulkheaded and the area became home to a number of shipbuilding and manufacturing businesses. These businesses developed along a street grid that ran parallel to the river.

3.1
Hunters Point in the
Eighteenth century

3.2
Birds Eye View of New York, 1868

3.3

3.4



3.5

FERRIES & TRAINS

Hunters Point came into prominence in the late nineteenth century when it became the principle gateway into Queens and Greater Long Island. Rail lines that traversed across Long Island all came to a terminus at the waters edge in Hunters Point. From here, the trains -- some containing passengers and others cargo -- would transfer their contents onto ferries that would head into various stops all over Manhattan. At the time, the Brooklyn and Queensborough bridges were yet to be built and anyone wanting to cross over from Greater Long Island into Manhattan or vice versa passed necessarily through Hunters Point.

Passenger ferries were bound mostly for three destinations: to the Wall Street Terminal in lower Manhattan, the 34th street terminal in Midtown Manhattan and the 92nd street terminal in upper Manhattan. The service ran for sixty-seven years beginning in 1858. At its peak in 1906 it carried twenty eight million passengers with eight ferries running every four minutes during rush hours.

Cargo ferries transferred their contents onto land with the help of steel framed towers known as gantries. The gantries were mechanisms that were used to hoist freight cars from barges onto railroad tracks. They operated by raising or lowering a float bridge to the height of the barge. At this point the car could be released from the barge onto tracks and a towed to the waiting freight yards before further delivery.

Only two gantries remain today. They have been restored and remain on the site as a reminder of Hunters Point's importance as a gateway into Long Island. The only other remnant of Hunters Point's transportation period is the Westinghouse Power Station.

3.3 - 3.4
Long Island City Gantries

3.5
Long Island Rail Road Train Lines, 1898

3.6
Hunters Point Ferry, 1904


3.6

3.7

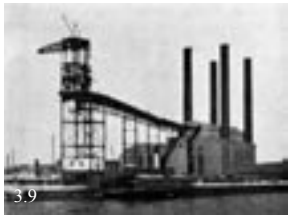

3.8

THE WESTINGHOUSE POWER STATION

The Westinghouse Power station was designed by Stanford White of McKim Mead and White in 1909. It was set next to the railroad tracks at what was then the waters edge -- the intersection of 50th Avenue and 2nd Street. The station was commissioned by the Pennsylvania Railroad at a time when trains were switching from steam power to electrical power. The new locomotives accessed electricity by using a third rail system. This third rail was a live track housed between the two standardly spaced rails. Electricity for the third rail was generated by burning coal and converting the heat into electricity. Although the generating stations are no longer in use, the third rail system is still being employed today.

The Westinghouse power station was a sister station to the IRT Power station in Manhattan. Also designed by White, the IRT station supplied electricity for trains entering the newly built Penn Station. The IRT station was more ornate than the Westinghouse but their internal arrangements were similar.

The Westinghouse station was divided into two long parallel sections. The South section contained a generating building where coal was loaded, stored and fired; the North section contained a long boiler house. Both North and South sections were naturally lit by a series of 10 by 45 foot arched windows that ran across the length of each façade. The Southern section is punctured by four large chimneys that begin on the ground floor and rise up almost 200 feet into the air. Slightly taller, coal was loaded into a steel hopper that ran the length of the upper most portion of the building. The North section contained a three storey turbine hall. The ground floors for both were ancillary spaces and are lit by a correspondingly smaller set of punched square windows.


3.9

3.7
Westinghouse Power Station Exterior

3.8
North Turbine Hall, 1907

3.9
Coal Loading Mechanism

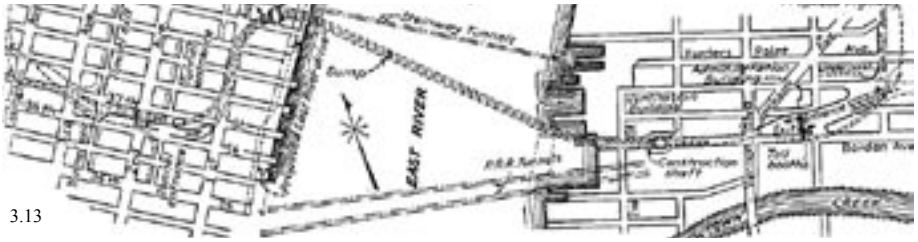
3.10
IRT Powerhouse, Manhattan

3.11
Section through IRT Powerhouse


3.10


3.11

3.12



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3.15

BRIDGES, TUNNELS & INDUSTRY

The construction of the Westinghouse power station signified the end of Hunters Point as an entryway into Queens. Electrically powered trains were capable of passing through underground tunnels and in 1910 four tunnels were burrowed under the East River providing direct access to the Pennsylvania Station on 34th street in Manhattan. A further set of tunnels was burrowed in 1917. These were subway tunnels and they led directly to Grand Central station on 42nd Street. Finally, in 1909 the Queensborough Bridge was constructed, providing automobile access into Manhattan. The combination of these bridges and tunnels effectively put to rest the need for a passenger ferry. Cargo ferries continued to run for many years but the final passenger ferry ran in 1925.

The Westinghouse power station continued to generate electricity for the railroad until the late 1920's when it was taken over by the Queens Electric and Light Company, which occupied the building until 1949. At this point the Schwartz Chemical Company bought the station and converted it into a factory that produced a variety of products including epoxies, cleaners, polishers, lacquers, dyes, cements and adhesives.

By the mid-twentieth century Hunters Point was completely taken over by industry. Hunters point became home to a messy collection of factories of warehouses. Not much was recorded from this period except for a series of paintings by Georgia O'Keefe. O'Keefe lived in the Shelton hotel in Manhattan and captured Hunters Point's hazy industrial skyline from her bedroom window. Through her paintings the Westinghouse power station became romanticized and memorialized as the icon of Hunters Point: its smokestacks memorializing the passage from gateway to industry.


3.16

3.12
East River from the Shelton,
Georgia O'Keefe

3.13
Tunnel Crossings, Hunters Point

3.14
Manhattan/Queens Skyline

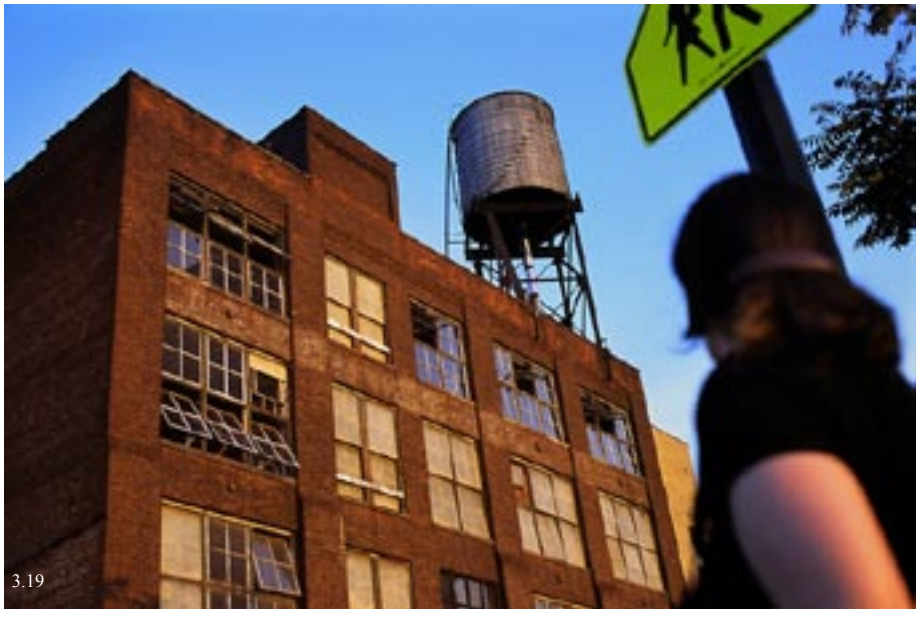
3.15
East River From the Shelton,
Georgia O'Keefe, 1928

3.16
Queens Midtown Tunnel,
Hunters Point Entrance, 1940

3.17
Queensborough Bridge,
Edward Hopper, 1913


3.17

3.18



3.19

THE SITE TODAY

Hunters Point today is in a period of transition. For the last quarter century Long Island City has been home to a low key mix of one to six storey rowhouses and warehouses. Physically, the site has changed very little. The railway lines that once ran to the waters edge have now been cut back, with the one active Long Island Rail Road line now coming to a terminus at the foot of 2nd Avenue. The Schwartz Chemical building was home to an indoor tennis court up until a few years ago but today sits vacant, awaiting redevelopment.

Demographically, the area is mixed -- home to a large hispanic population as well as a large number of artists and hipsters attracted by affordable studio and loft type spaces. Since construction began on Queens West in 1997, an influx of young upper middle class professionals has entered into the mix. Today, new cafes, bars and restaurants cluster around the subway station and sit alongside ethnic eateries and neighbourhood establishments. Increasingly, Hunters Point is developing a reputation as an up and coming neighbourhood.

An indicator of an increasingly gentrified Hunters Point can be found in Long Island City Greenmarket, an organic farmers market held three times weekly from 8 am to 3 pm. Set at the intersection of 48th Avenue and Vernon Boulevard, the market overlooks the Citilights condominium and the Manhattan Skyline. The market is operated by the Greenmarket Farmers Market, a program on the Council on the Environment of New York City that targets neighbourhoods traditionally underserved by local grocery stores. Similar to the open air market in Union Square, the market is grown and sold by organic farmers from Long Island, New Jersey and upstate New York. The produce is seasonal, allowing an economic outlet for local farmers while promoting healthy eating for city dwellers. The market is also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3.21


3.22

3.18
Pepsi-Cola sign on North end of site. Retained as part of Stage 2 Development.

3.19
Typical Hunters Point Warehouse

3.20 - 3.22
Long Island City Greenmarket

3.23

3.24

3.25

3.26

3.27

3.28

home to producers of organic baked goods, preserves, fresh cut flowers and nurseries. Its presence has been welcomed into the neighbourhood by old and new residents alike.

Despite the onset of gentrification, Hunters Point has retained much of its post-industrial character. A landscape still dominated by chain link fences, brick faced warehouses and graffiti-spattered concrete, pedestrians can walk for very long time before coming in contact with another soul. One of the remarks most often heard about Hunters Point is that it feels somehow removed the city. Only one stop away from the bustle and intensity of midtown Manhattan, individuals find open space, clear skies and a very unique sense of quietness and isolation.


3.29


3.30

3.23 - 3.31
Cross-Processed photographs taken in and around a redveloping Hunters Point. Photographer Quarlo NYC, a Long Island City resident.


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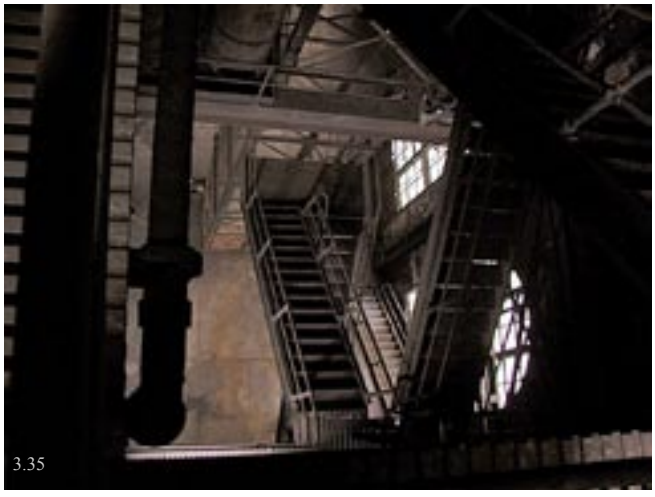

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3.39


3.40

3.41


3.42


3.43

3.32
Schwartz Chemical Building today

3.33
Puncture within smoke stack

3.34
Outer bay of North Hall, formerly used as office space

3.35
South Hall, upper stairwell

3.36 - 3.37
Views towards Empire State Biuld-ing, South Hall looking West

3.38
North Hall Looking West

3.39
North Turbine Hall, former tennis court

3.40
Within stack

3.41
Existing Signage

3.42
North Hall outer bay

3.43
South Hall beneath Hopper

3.44


Residential
Mixed Use
Commercial
Institutions
Industrial
Vacant Lots

3.45

3.46

3.47

3.48

3.49

3.50

3.51

3.52

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3.54

3.55

4

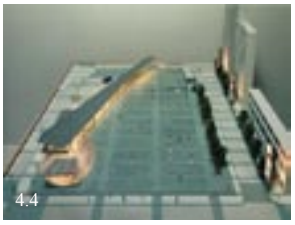
INTERSTITIAL URBANITY

PRINCIPLES OF PLACE

4.1

4.2

4.3



4.4

4.5

4.6

PLACE WITHIN THE POST-MODERN CITY

> *"The making of place in the post-modern city has been discussed within architectural, planning and political circles. The post-modern city is seen as the antithesis of the modern city. There is a belief in 'public space' and that these spaces will be a communal vessel for shared activity. There is a new respect for place and tradition. If modernism was driven by universalizing forces, then the postmodern city is a return to difference and particularity."* [2]

Place-making has emerged as an issue at the heart of post-modern planning. A commonly understood phenomenon, place or 'sense of place' is thought of as a 'space with a distinct character.[3]' For example, we think of a house as a space, but a home a place. Place has an 'environmental character[4]' that can only be created over time and through human occupation. Defying objective measurement, places are meaningful to its inhabitants. While space can be measured in terms of quantity, place is subjective and measured qualitatively.

Place has become an issue both in suburbia and within city centres. In the suburbs, movements like new urbanism have concentrated on restoring place by combining nostalgia and typology. Within city centres, place has emerged in the form of public space. Largely seen as the key to place-making, this belief is based on the idea that public space cultivates urban life, which in turn cultivates place.

Within the past decade, metropolitan cities have begun to manifest this belief by investing in new squares, pedestrian districts and cultural facilities. Toronto for example has seen the emergence of Dundas Square, the Distillery District and a renewed interest in redeveloping the waterfront. London is now home to the Tate Modern and Millennium Bridge while New York has seen a revival of Times Square and of course, Ground Zero.

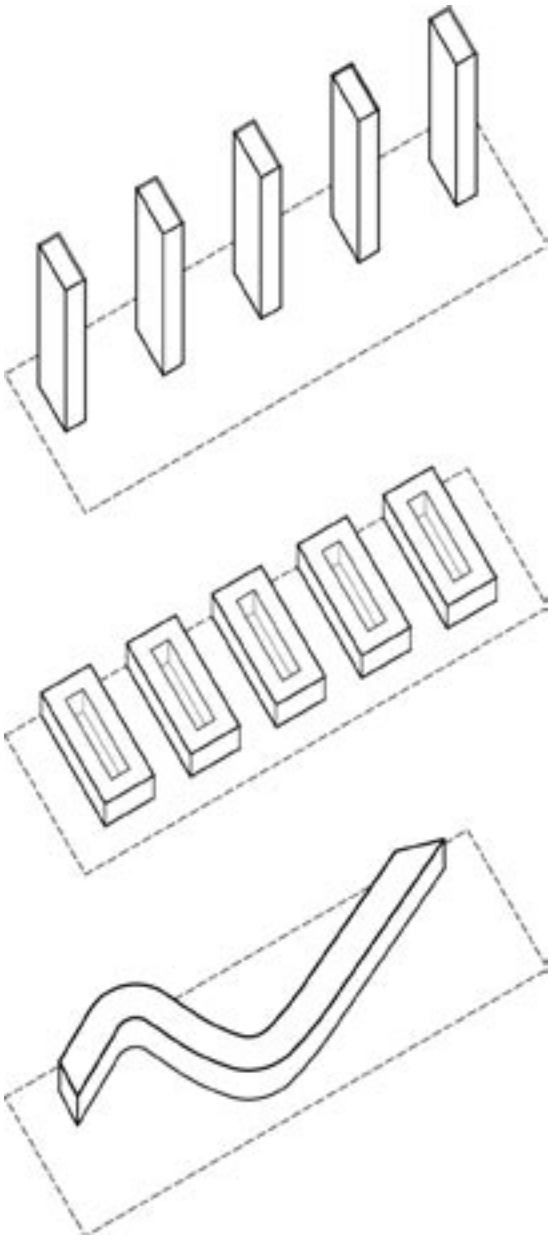
4.1 - 4.4. 4.2
Tate Modern, London

4.3
Distillery District, Toronto

4.4
Dundas Square, Toronto

4.5
Times Square, New York

4.6
Ground Zero, New York



4.7

TYPOLOGICAL CONFIGURATIONS

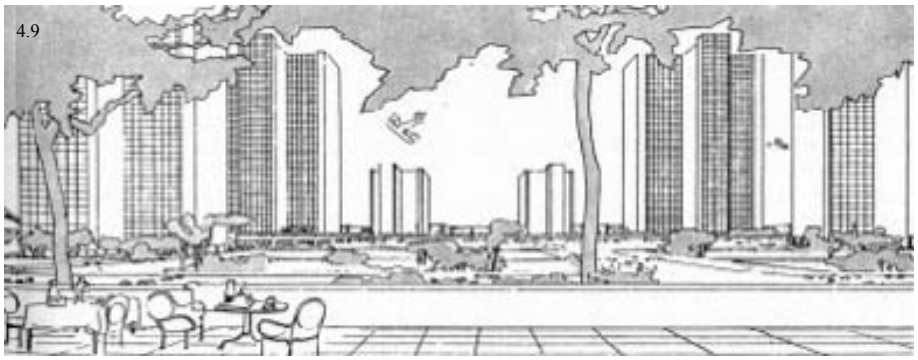
The post-modern belief in the value of public space can be seen in Queens West's two proposed alternatives. At a surface level, Harkin and Mayne's proposals seem to have little in common. At a deeper level however, the proposals are united in the common belief that urbanity cannot exist within a waterfront park and tower typology. Both seem to imply that urbanity can only be created by dispensing with the type altogether; working from a clean slate within a more pedestrian focused framework.

Harkin's proposal, no doubt influenced by Jane Jacob's *Life and Death of Great American Cities*, flattens and elongates the high-rises into a mixed-use, six storey block style urbanism. Morphosis' response is more radical, circumventing traditional urban typologies by removing the street as the primary means of circulation. In its place is an entirely new system: a hyper-programmed park and a set of horizontal mega-buildings that span the length of three Manhattan blocks. While Harkin's public space is concentrated within the street, Morphosis' public space is stretched across the recreationally programmed green spaces that lie within the building's shadows. Both proposals have are not without merit. Harkin's approach is time tested and rationally sound. Morphosis' proposal has higher shock value, drawing attention to itself and usually eliciting a love/hate response.

Both designs have been well received critically but both have been rejected by Queens West, principally on the grounds of cost.

4.7
Typological Configurations
Queens West, Harkin, Morphosis

4.8



4.9

PERIPHERAL DEVELOPMENTS AS COMMODITY

> *"By the time an architect gets his hands on a high-rise project these days, all that remains to be done is to clad the pre-determined volume in one material or another and to decorate the lobby."*[5]

Peripheral developments are first and foremost a commodity. Rooted neither in modernist or post-modernist planning ideologies, their form is determined almost entirely by the pursuit of profit. Within this context, architecture and planning are reduced to real estate; physical properties whose monetary value takes precedent over all other forms of analysis and understanding. For developers, waterfront high-rises are both easy to build and easy to sell; a proven economic model. Towers and slabs have proven to be particularly useful vessels, maximizing water facing units. Overlooking the Manhattan skyline, these units are highly sought after and are priced accordingly. With repetitive floor plates and pre-fabricated components, high-rises are relatively inexpensive to build. The waterfront park forms the final part of the equation. A half-hearted nod to public space, its costs are absorbed by developers in exchange for the rights to develop the publicly owned land.

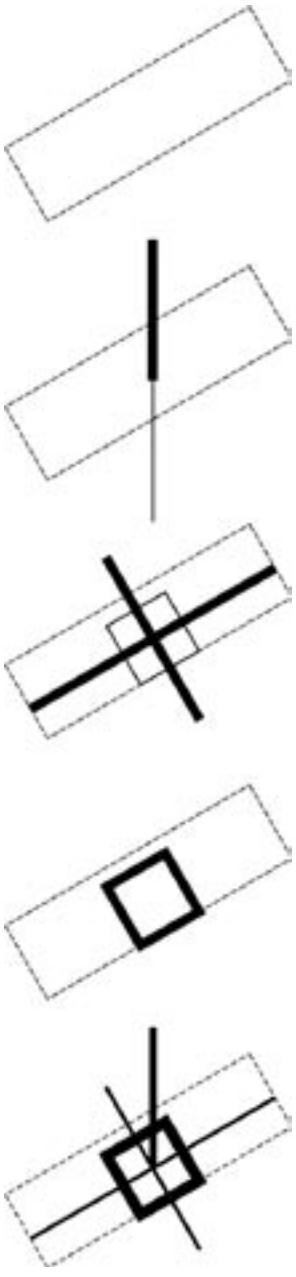
4.8
Hugh Ferris, the Lure of the City

4.9
Le Corbusier
The City of Tomorrow

4.10
The Manhattan Skyline
from Hunters Point

4.11
Stage 2 Elevation, Architectonica

Within this commodified context, it is not difficult to understand why Harkin and Mayne's proposals hold little sway with the powers that be. Seen at best as an interesting diversion, their plans are overly ambitious; veering too far from the established economic model. Harkin's plan does away with the tower and its water facing units. Morphosis' plan retains some of these units, but the buildings are over scaled and without precedent in terms of both construction costs and long term leasability. Unsupported by Queens West, it would be difficult to find any developer, bank or private investor willing to take it on. Construction of any kind in New York is always difficult and highly dependent on current and future economic conditions. Without any guarantee of return on investment, the Olympic village may very well exist end up existing only on paper.



Location

Event

Boundary

4.12

A THIRD RESPONSE

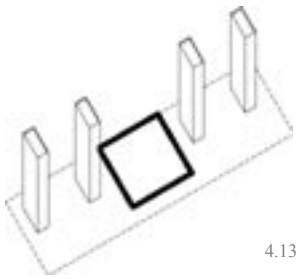
With profit and place seemingly at odds, perhaps a third, more moderate approach can be taken. This approach doesn't look to circumvent the existing four stage design. Rather, it looks to work with what has already been established and to fill in the missing elements. I have chosen to call this approach *Interstitial Urbanism*. The general theory will first be introduced in this portion of the thesis and will later be manifested in an urban design proposal.

Like the Morphosis and Harkin proposals, Interstitial Urbanism looks to introduce urban culture and sense of place into the Queens West waterfront. Differing from its predecessors primarily in terms of scale and scope, the proposal is much smaller and hopefully more attainable. While Harkin and Mayne looked to create urbanism on a mass scale through the intermingling of property development and urbanity, Interstitial Urbanism looks only to create an interstice -- a narrow space in between two objects. The interstice takes the form of a public space. It exists as a fragment of intense urbanity imbedded within the context of non-place commercial development.

4.12
Layered Principles

4.13
The Interstice

Interstitial Urbanity begins to cultivate place through a layering of three design principles: location, event and boundary. Mutually exclusive, all three are required in order for place to be formed. Location refers to the establishment of site. It looks to find a specific place of significance that can be utilized as a foundation point for the design. Event looks to create programs that draw a consistent stream of people into the site. Finally, boundary looks to create enclosure; defining the physical and visual extents of the interstice.



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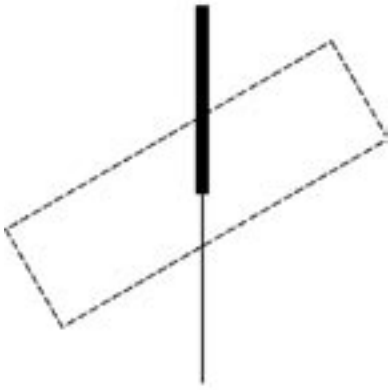


4.14

"Space is quite readily shaped, as a singular act, by an architect; place can only be made by many agents, acting over time, often not in concert with one another. Place in the full sense cannot be designed by an architect or anyone else. Its creation is beyond the design of any single person or group." [6]

Randall Mason

"The existential purpose of building (architecture) is therefore to make a site become a place, that is, to uncover the meanings potentially present in the given environment. The structure of a place is not a fixed, eternal state. As a rule places change, sometimes rapidly. This does not mean however, that the genius loci necessarily changes or gets lost" [7]

Christian Norberg-Schulz

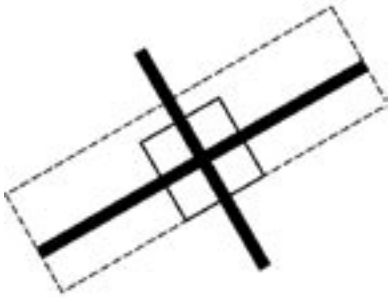
LOCATION

Location is the act of identifying a place of particular meaning within a site and using it as a foundation point for the design of the interstice. A place can be recognized as any space with a unique history, context, or topography.

In a paper entitled *Knowing Place*, Randall Mason argues that place cannot be authored. Made up of complex variables, it defies the vision of any solitary designer. In *Genius Loci*, Christian Norberg-Schulz argues that place exists in many locations and that its meaning and significance is uncovered through the act of architecture. Location then is the act of identifying and signifying a specific place. It looks to grasp onto pre-existing site conditions to bring forth the sort of meaning and rootedness that could never be created from scratch.

In Queens West, the location of place is fairly straightforward. It is the intersection of 50th Avenue and 2nd Street: the site in and around the Schwartz Chemical Building. The building and site have long served as the focal point for Hunters Point. Its smoke stacks serve as a visible reminder of its past histories and is a natural starting point as Long Island City as it enters into the twenty first century.

4.14
Location



4.15

"From a thousand different sites the production of place continues to be possible. Not as the revelation of something existing in permanence, but as the production of an event… What these lines seek to defend is the value of places produced out of the meeting of present energies, resulting from the force of projective mechanisms capable of promoting intense, productive shock… The contemporary place must form a crossroads and the contemporary architect must have the talent to apprehend it as such. Place is not a ground, keeping faith with certain images; nor is it the strength of topography or archeological memory. Place is, rather, a conjectural foundation, a ritual of and in time, capable of fixing a point of particular intensity in the universal chaos of our metropolitan civilization." [8]

Ignasi de Sola-Morales

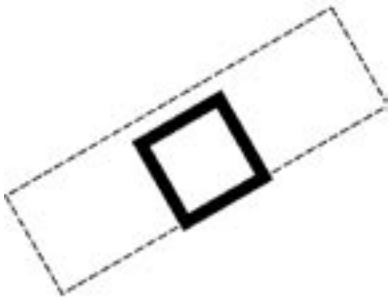
EVENT

The second principle is *Event*, the creation of program that draws people into the interstice. In *Differences*, Ignasi de Sola-Morales argues that place in the post-modern city is the production of event: a place of particular intensity capable of producing energy and shock. Place is a foundation that serves as a counter point to the banality and homogeneity of post-modern real estate development. Event's purpose then is to create places of collective gathering: public space. In Queens West, the program for the interstice needs to address not only residents of the new development, but also those of its surrounding community.

In the various conferences, forums and proposals for Queens West, a number of interesting programmatic focal points emerged. The Harkin proposal looked at mixed-use programming and street level retail. The Creative Cities conference focused on cultural programs and institutions. The Olympic bid looked at recreational facilities like beaches, marinas and playing fields. Finally, the Queens West plan looked at commercial facilities like a hotel, conference centre and retail space.

With this in mind, a multi-layered program for the interstice emerges. The first is a contemporary arts centre; a cultural institution that finds a natural home within the post-industrial confines of a restored Schwartz Chemical building. The second, a new train terminal built to meet the needs of a growing population. With the necessity of train/ferry interchange the terminal is restored to the waters edge. Connecting the two buildings is a new market square, home to an enlarged Long Island City Greenmarket. The market square works to bind together the different aspects of the interstice and serves as the focal point of the new development.

4.15
Event



4.16

"What, then do we mean with the word 'place'? Obviously we mean something more than abstract location. We mean a totality made up of concrete things having material substance, shape, texture and colour. Together these things determine an 'environmental character', which is the essence of place. In general a place is given as much a character or 'atmosphere.' A place is therefore a qualitative, 'total' phenomenon, which we cannot reduce to any of its properties such as spatial relationships, without losing its concrete nature out of sight." [10]

Christian Norberg-Schulz

BOUNDARY

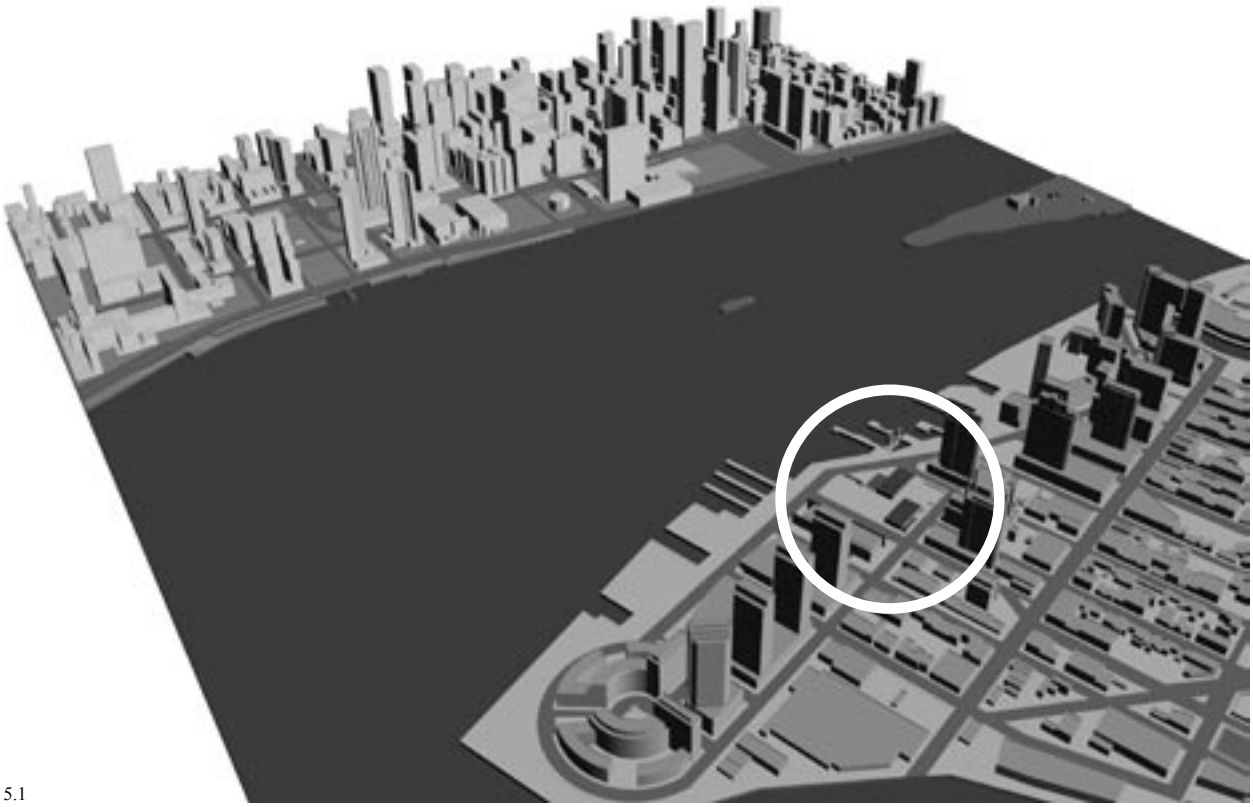
With *location* and *event* established, *Boundary* becomes the final principle and the finishing touch. Christian Norberg-Schulz argues that place is a total phenomenon. It is an enclosed environment made up of material elements. Boundary then is the establishment of an architectural language and character that distinguishes the interstice from its surroundings. In other words, Boundary is the design itself.

4.16
Boundary

5

THE INTERSTICE

PLACE AND THE NEW WATERFRONT



5.1

THE INTERSTICE

The interstice takes the form of a market square flanked by a new commuter train terminal and an arts centre housed within a restored Schwartz Chemical building. The buildings work hand in hand to begin the crafting of a set of interconnected public spaces.

The design portion of the thesis is divided into two sections, a 1:5000 site planning exercise which operates at the scale of the city and a 1:500 architectural design which looks at the spatial definition within the interstice itself.

5.1
Axonometric showing relationship between Hunters Point and the Manhattan skyline


Stage 3 Condominiums
Stage 4 Office Complex
Stage 1 Condominiums
Stage 4 Condominiums

URBAN DESIGN

The site planning exercise carves a niche along the waterfront in which the interstitial public spaces can sit. In order to appease all intersted parties, the goal of the urban design is to allow for the new program without losing any of the original residential or commercial programming originally called for in the 1984 master plan.

The proposed interstice sits directly adjacent to the power station and train lines, where the three KPF office towers are currently sited. In the original master plan, the towers sit directly in front of the power station -- effectively cutting it off from the water.

As a means of addressing this, the entire office complex is relocated one block south to sit next to the circular cluster of Stage 4 condominiums, whose location remains unchanged. The remaining condominium is moved two blocks north, sitting parallel to the power station, overlooking the square. Originally composed of two half-height towers, it is replaced by a solitary point tower that rises up to the same height as the top of the smoke stacks.

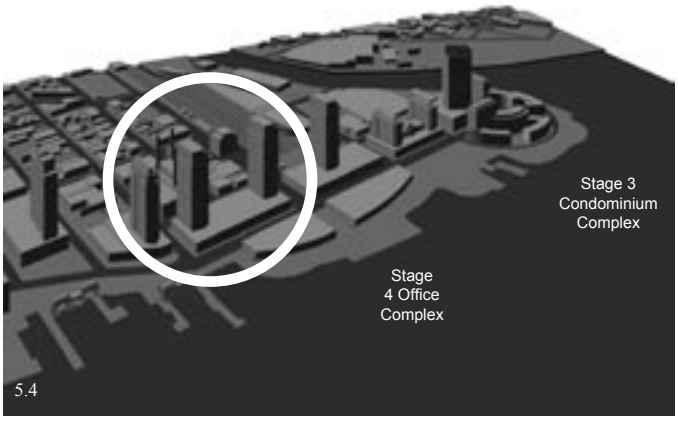
The plan allows Queens West to keep nearly all of its intended programming. The tower portions of the design remain unchanged in terms of square footage, while the base portions shrink slightly to fit within the existing city blocks. The retail space lost in the base portions of the condos is easily replaced within the interstice, which is more condusive to this type of programming anyways. The revised masterplan also creates more green space than originally proposed by pushing all buildings behind the waterside boulevard and creating new infill land from construction excavation.

5.3

5.2
Proposed revision to Queens West Masterplan showing addition of the interstice

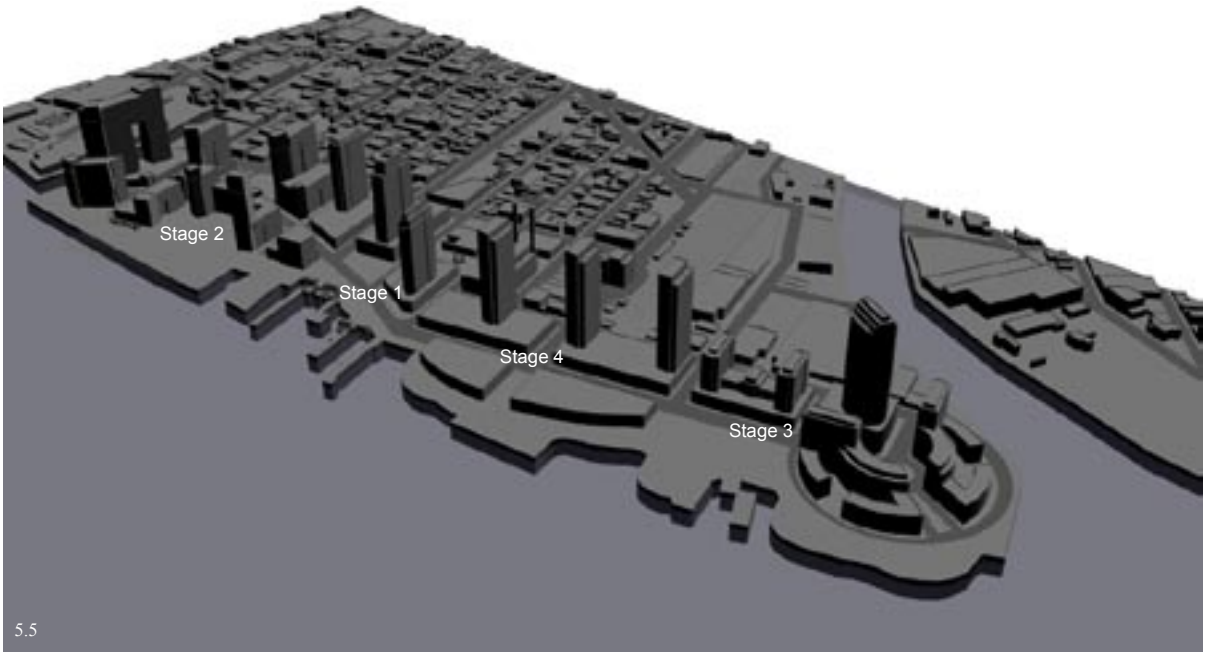
5.3
Original Queens West Masterplan

Existing Queens West Master Plan



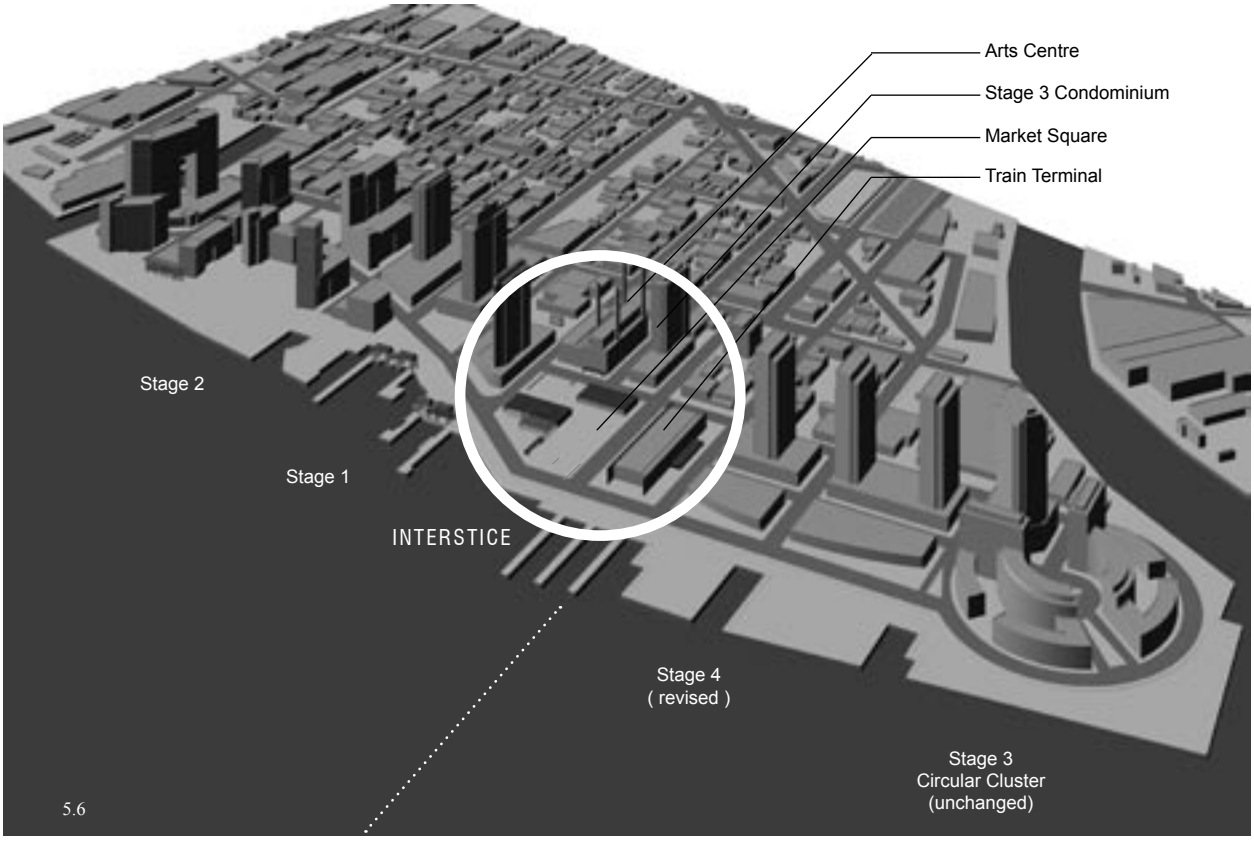
5.4
Rendering of the existing Queens West master plan showing how the Stage 4 office complex effectively cuts off the power station from the waterfront.

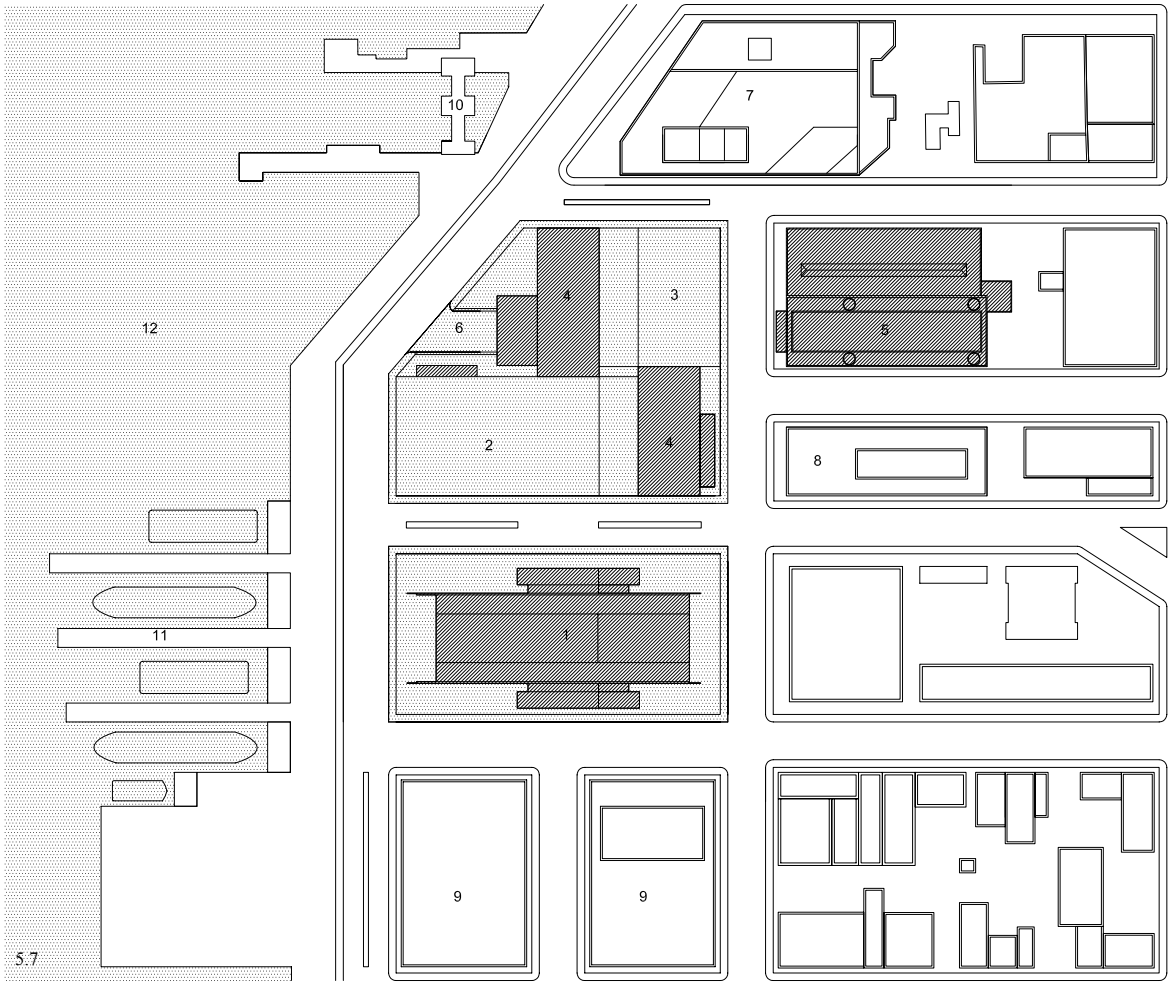
5.5
Rendering of existing Queens West master plan showing all four development stages



Proposed Revision to Master Plan Including Interstice

5.6
Rendering of the revised master plan, showing the relocated Stage 4 office complex, the relocated and reshaped stage 3 condominium tower, and the introduction of a new LIRR train terminal, ferry piers, market square and revitalised power station as the extents of the interstice.





1. LIRR Train Terminal
2. Market Square 1 - Open Square Facing Waterfront
3. Market Square 2 - Enclosed Square Facing Power Station
4. Market Buildings
5. Arts Centre within Power Station
6. Ramp to Underground Garage
7. Stage 1 Condominium
8. Stage 3 Condominium
9. Stage 4 Office Complex
10. Gantry + Existing Piers
11. Proposed Ferry Piers
12. East River

ARCHITECTURAL DESIGN

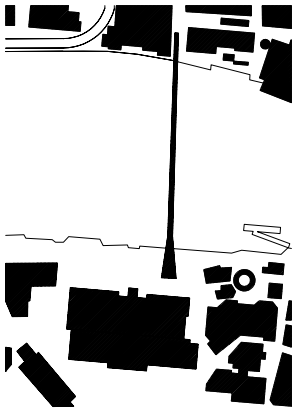
Architecture is inevitably a physical manifestation of an idea or a number of ideas. Earlier in the thesis, three guiding design principles were introduced as a framework for the crafting of place. Two of these have in some ways already been exercised within the site plan design.

Location refers to siting the interstice around the in and around the power station and train lines -- powerful monuments whose rejuvenation signals a continuation of an infrastructural narrative that began at the beginning of the twentieth century. *Event* refers to the layering of a number of different types of programs in order to create a broad ranging and complex space that can be of interest to both the Long Island City residents and suburban commuters who would populate the site. The arts centre addresses issues of culture, the train and ferry terminals create new transportional access into the site, and the market square provides animated outdoor spaces in which to pause and take in views of the Manhattan skyline.

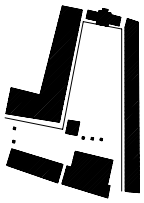
The final principle is *boundary*, which addresses the architectural, urban and landscaped form of the interstice itself. What the two previous principles established was a physical perimeter within which the public spaces sit. Emerging out of this is a large waterfront square with four distinct edge conditions. The southern perimeter is marked by the train terminal, the western perimeter by the waterfront and the north and eastern edges marked by two condominiums and the power plant.

The square's scale is perhaps best understood as compared to other well known public spaces. Diagram 5.8 reveals a matrix of four different types: waterfront squares in the form of Piazza San Marco and the Tate Modern and Millenium Bridge, contemporary squares in the form of Toronto's Dundas Square

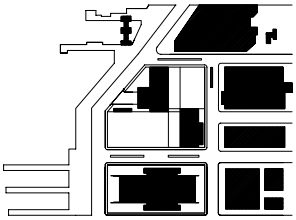
5.7
The Interstice, Proposed Site Plan



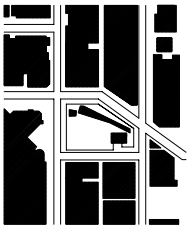
Tate Modern, London



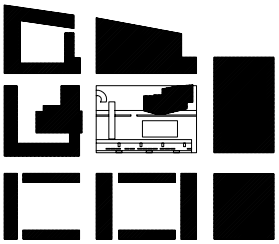
Piazza San Marco, Venice



Hunters Point, Long Island City

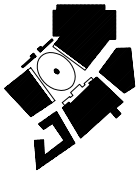


Dundas Square, Toronto

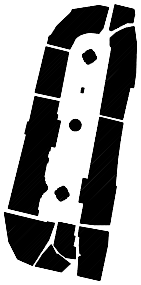


Schouwburgplein, Rotterdam

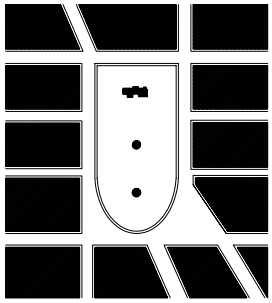
5.8



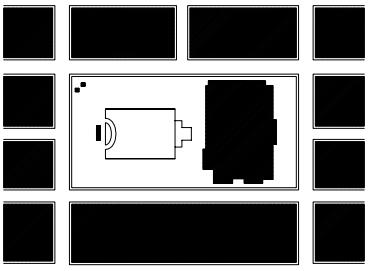
Campidoglio, Rome



Piazza Navona, Rome



Union Square, Manhattan



Bryant Park, Manhattan

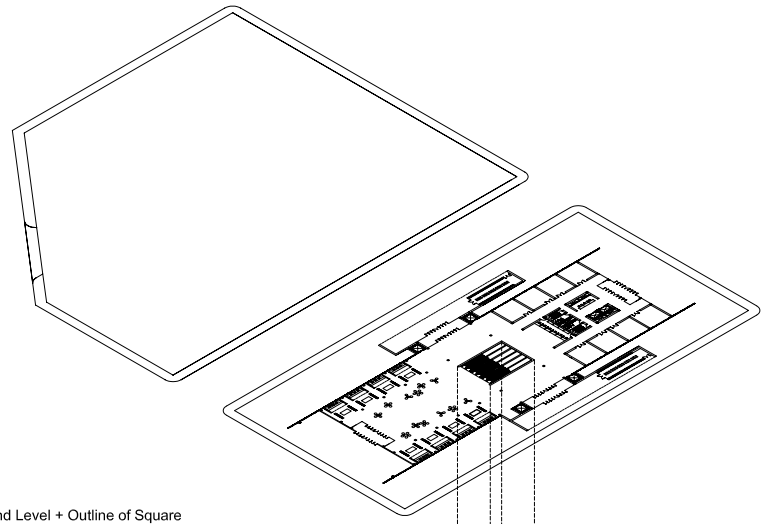
and Rotterdam's Schouwburg Square, classical Roman piazza's in the form of Piazza Navona and the Campidoglio, and New York based squares in the form of Manhattan's Bryant Park and Union Square.

In terms of clarity, enclosure and occupation the Italian piazzas are the most easily read and show the highest level of resolution. The language and massing of the similarly scaled surrounding buildings effectively forge the square and the spaces themselves need little in the way of embellishment. The modern and contemporary squares are invariably less enclosed, due in no small part to the existence of two to four lanes of traffic that encircle them on all sides. The New York squares fit within the Manhattan city grid and are much larger. They look to address enclosure with vegetation, becoming heavily landscaped public spaces that are as much parks as squares. The contemporary squares attempt to address enclosure by introducing buildings and small structures within their confines. They rely heavily on surface treatments, especially the groundplane in an attempt to introduce texture and interest within their voids. Finally, the waterfront squares address their edge conditions with light structures that act as gateways -- permeable framing devices that craft selective views out onto the water. The structures become thresholds, helping to simulatenously accentuate and lessen the abstraction of their vistas.

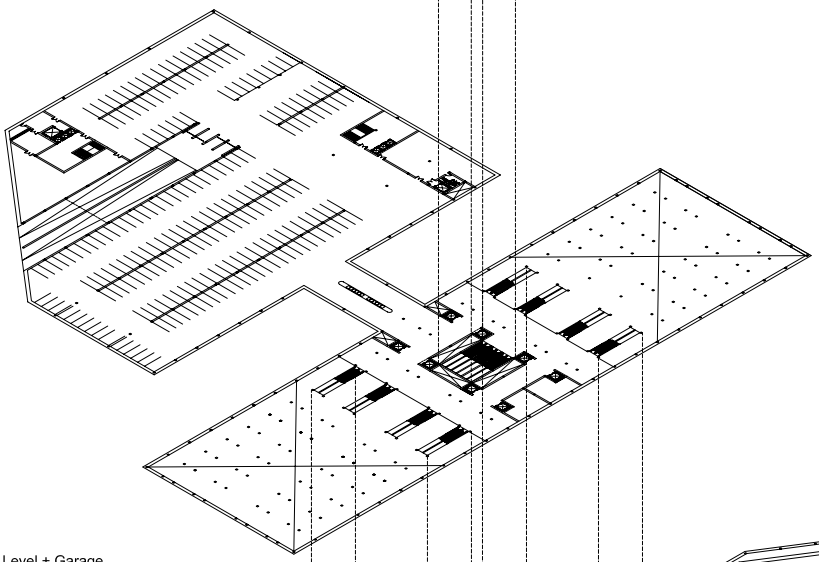
The design for the Hunters Point market square then, is generated from ideas of physical enclosure and perimeter thresholds. Two market buildings are introduced to effectively create two smaller squares out of one large one. The interlocking squares are of different sizes and different characters. The inner square is secluded, facing the power plant and restricting views of the waterfront. The outer square is framed by the train terminal and faces directly out onto the water. Employing a variety of surface treatments, outdoor furniture, vegetation and temporary market stalls, the collaged elements animate the space and act as visual thresholds that frame views out towards the Manhattan skyline.

5.8
Matrix of Public Spaces at 1:10000

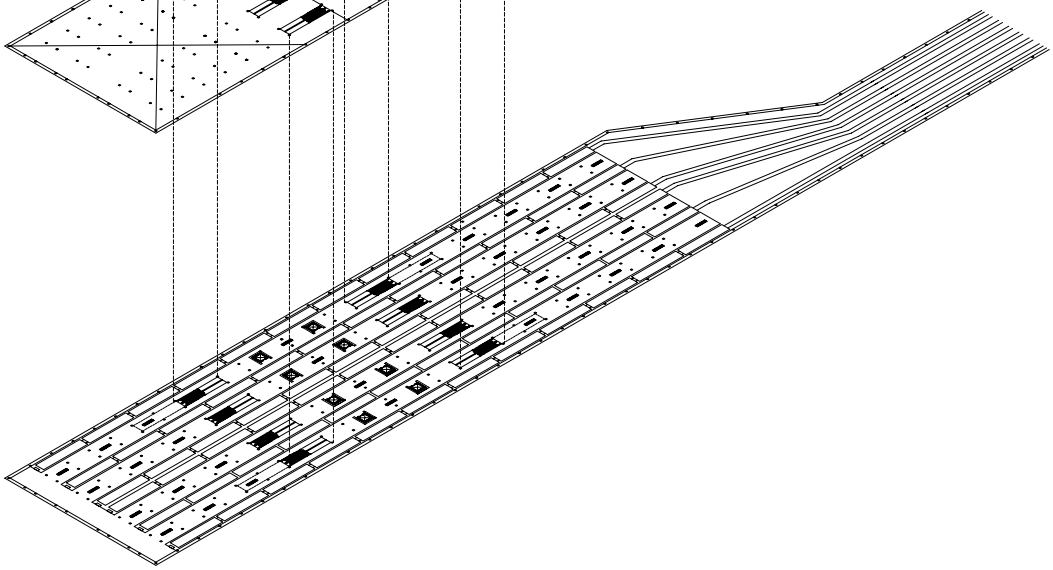
5.9



Ground Level + Outline of Square



Transfer Level + Garage



Arrivals Level

LIRR TRAIN TERMINAL

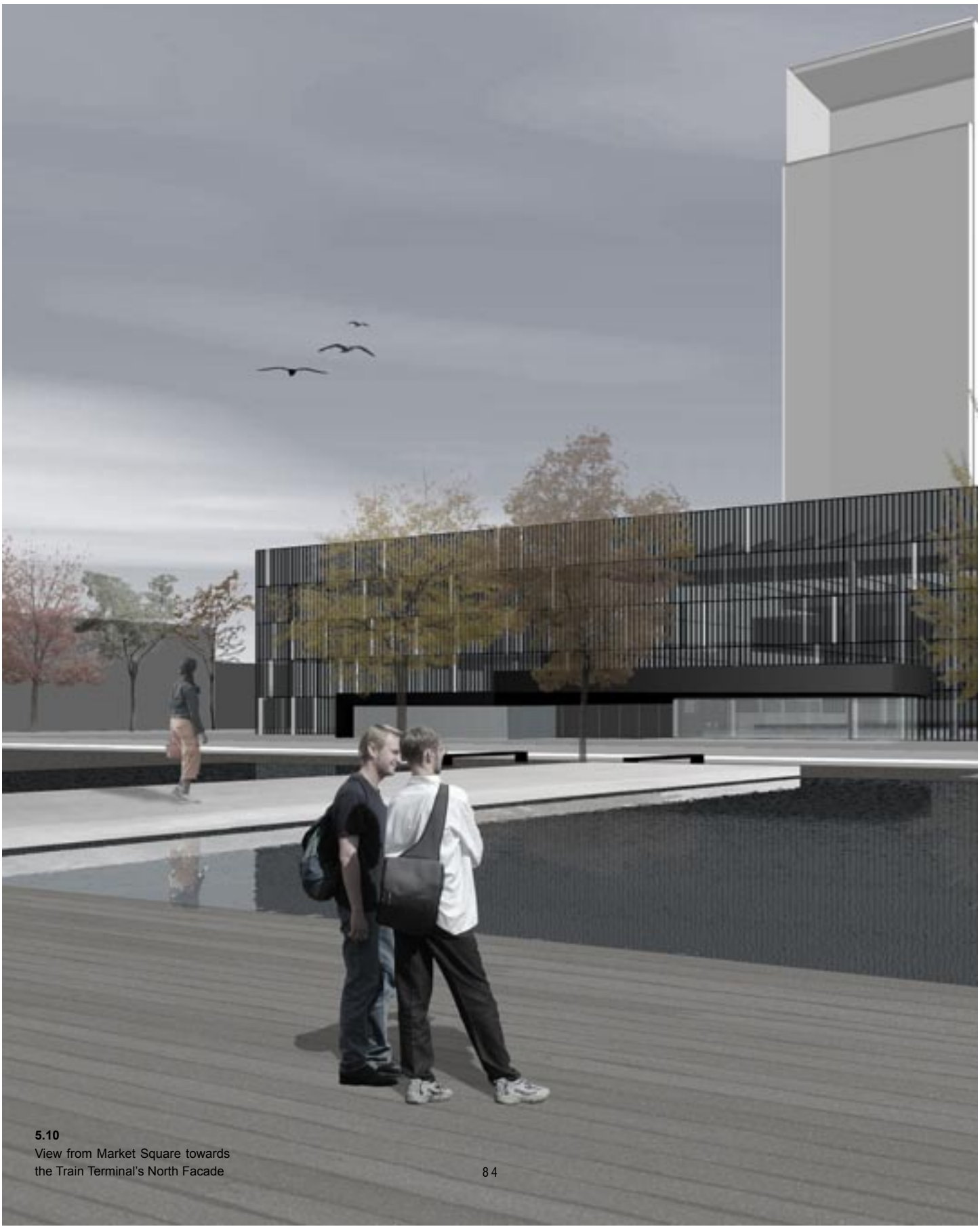
The new Long Island Rail Road train terminal forms the southern perimeter of the square. Currently terminating at 2nd Street, nearly thirty metres away from the waterfront, the existing train tracks are sunken underground and extended out to the edge of the East river, where a corresponding set of new ferry piers awaits.

The terminal is developed principally in two parts: an underground arrivals area and a ground level waiting hall. In combination, they look to re-establish the infrastructural narrative inherent to the site. By uncovering and revitalizing underused modes of transport, the terminal begins to reshape Hunters Point identity as a principle point of entry from greater Long Island into Manhattan.

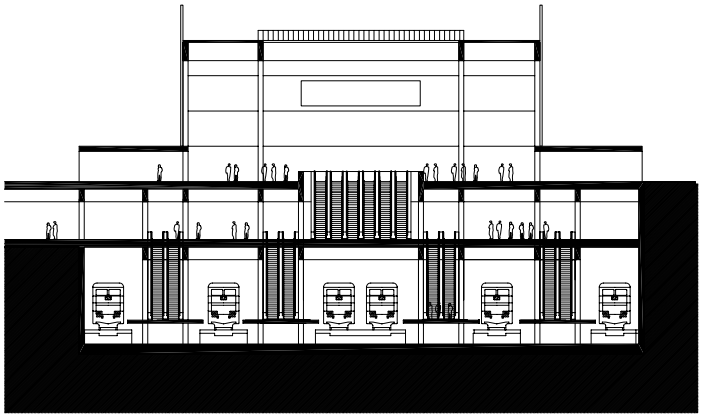
The terminal functions as a true terminus in that arriving trains house locomotives on either end, departing in the same direction that they arrived. While ferry passengers arriving from Manhattan enter the building at grade, train passengers arrive two stories below ground. Measuring close to two hundred metres, the tracks and waiting areas are roughly twice the length of the building above. The arrivals area is a double storey space, with a pair of escalators ascending from each track onto a transfer level mezzanine that hovers one storey above. Now one floor below grade, the transfer level congregates both train passengers and individuals arriving from an interconnected parking garage which sits below the square. A large escalator core sits at the building's physical centre. Gathering passengers from below, the escalators ascend into a grand waiting hall that frames views out towards the Empire State building on the Manhattan skyline.

Whereas train passengers coming from Long Island arrive

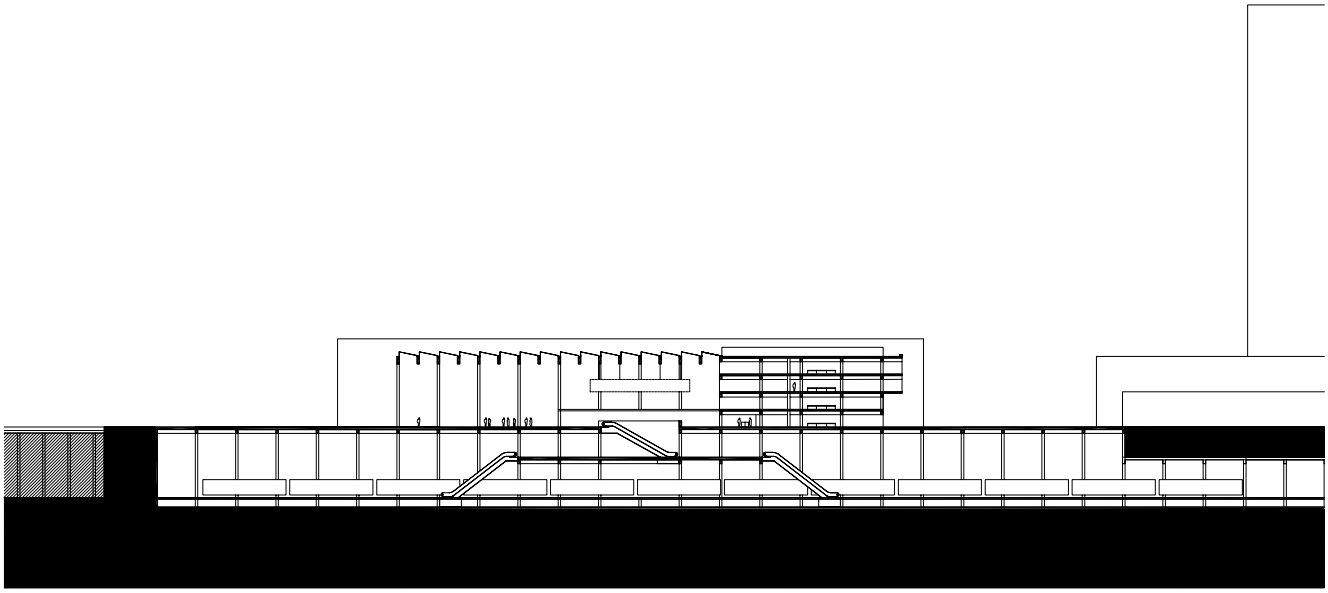
5.9
Train Terminal, Exploded Axonometric highlighting circulation core. 1:2500



5.10
View from Market Square towards
the Train Terminal's North Facade



5.11



5.12

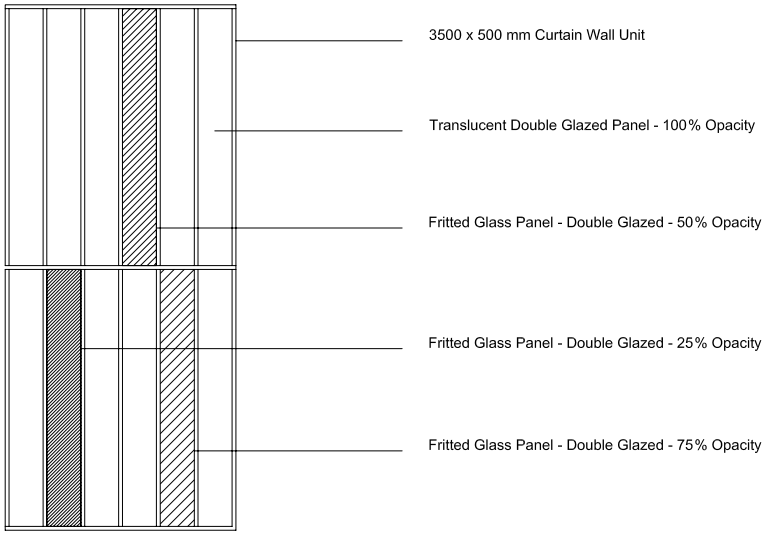
underground, ferry passengers arriving from Manhattan enter the building at grade. The ferry piers sit at the waters edge, seperated from the train terminal only by the waterside boulevard that connects all of the Queens West point towers. Exiting the ferries and water taxis, individuals simply cross the street to enter into the waiting hall, which becomes a shared space for both modes of transport.

The four storey waiting hall is composed of three structural bays of varying dimensions. The centre bay is the largest and is devoted primarily to circulation. The outer bays are lined with an assortment of small retail kiosks and different types of seating. Electronic display boards are suspended from a bulkhead above the circulation core and a ticket office lies at the hall's western edge. The building exits into the square from the north and into the office complex from the south. The two entries are articulated with large exterior canopies which also house a set of elevators into the waitng hall and a sheltered bus and taxi stand on its street facing edges.

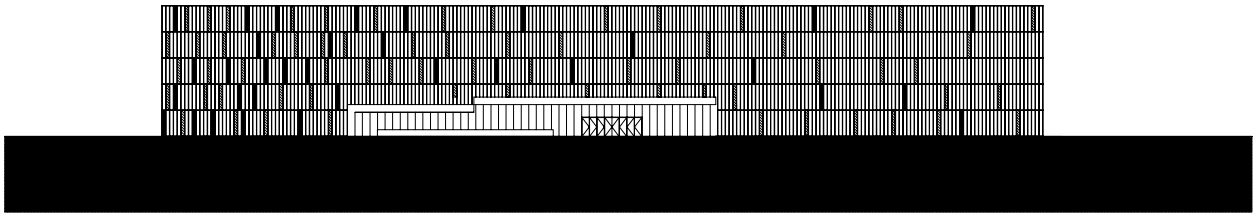
Beyond the waiting hall, two single storey hallways lead into a set of retail spaces that can be occupied by larger retailers like bookstores, drugstores or cafes. These spaces surround the buildings second circulation core, which leads to three stories of offices above. The offices are occupied by the Long Island Rail Road, who previously held office space next to the existing tracks. The three floors share essentially identical floorplates and modes of circulation. They are entered principally by elevators, which open out onto a small reception desk. On its west is a set of bathrooms and two fire exits, which exit onto the main floor. The north and southern ends are divided up into 8x8 metre structural bays, which house six workstations each. The centre bays are devoted to congregation, with the eastern bay becoming a meeting room and the western bay forming a small kitchen and lounge area, which overlooks the waiting hall below.

5.11
Short Section through Terminal Waiting Hall

5.12
Longitudinal Section through Terminal


3500 x 500 mm Curtain Wall Unit
Translucent Double Glazed Panel - 100% Opacity
Fritted Glass Panel - Double Glazed - 50% Opacity
Fritted Glass Panel - Double Glazed - 25% Opacity
Fritted Glass Panel - Double Glazed - 75% Opacity

5.13



5.14

The building as described up to this point, is defined by a set of clearly articulated spaces. Most are devoted to occupation and the remainder to circulation.

This duality is reinforced within the building's architectural language: spaces of occupation are faced with large expanses of glazing while the spaces of circulation are marked with boxy steel frame vestibules that are clad in zinc sheet metal panels which have been finished with a matte black outer coat.

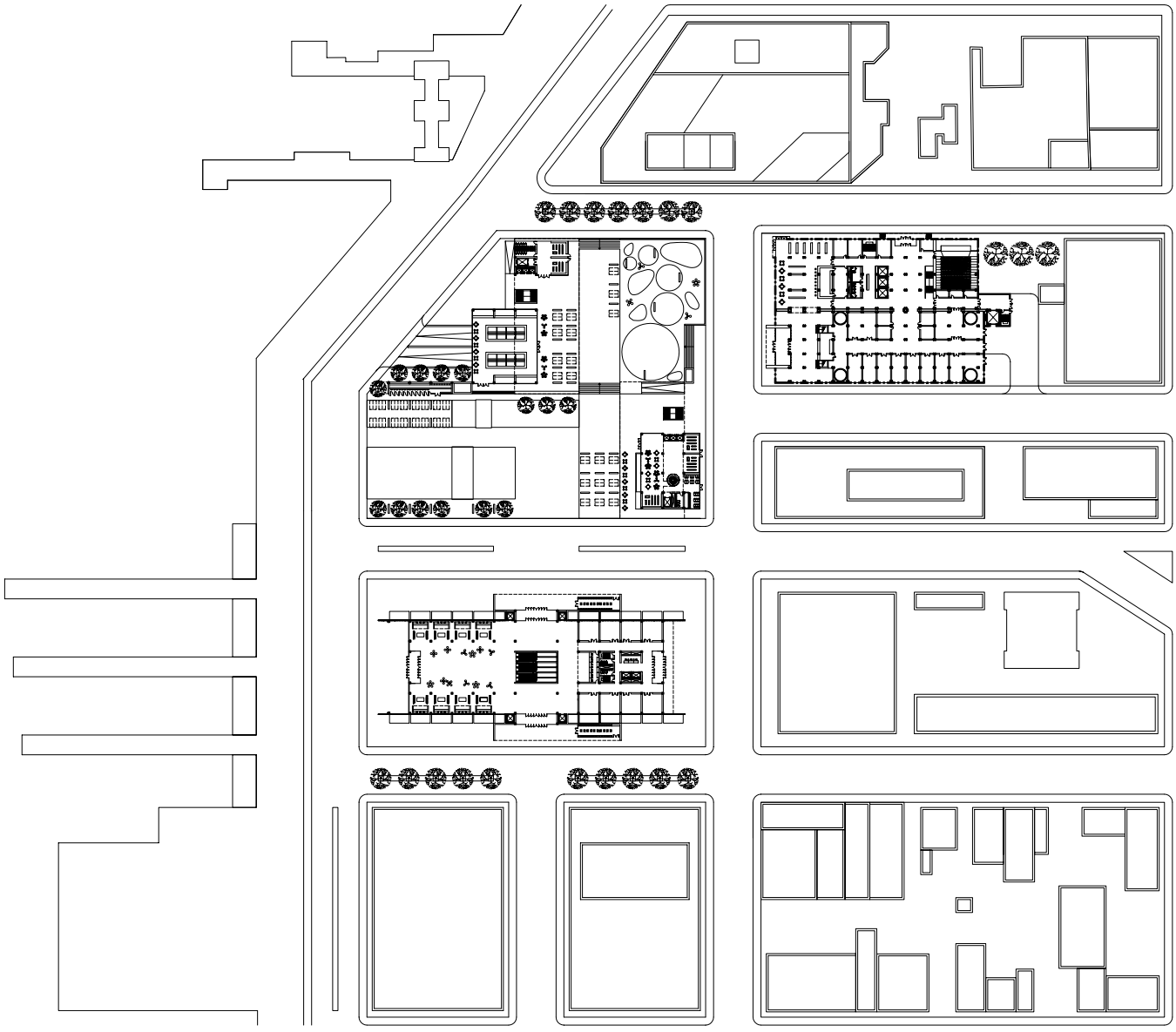
The north and south curtain walls are composed of a continuous five storey double glazed curtain wall structure that has a base unit dimension of 3500x500 mm. The vertically inclined units figuratively reinterpret the Schwartz Chemical building's repeated punched window structure. Whereas the power station is clad in 50% glazing and 50% masonry, the train terminal is clad entirely in glass of varying levels of translucency. The north facade is primarily translucent, with an intermittent patterning of 25%, 50% and 75% fritted glass. The southern facade is more opaque, tempering the sun's glare with a a greater density of fritted panes.

Countering the lightness, verticality and reflectiveness of the glass are solid, heavy and horizontally inclined circulation vestibules. Enclosing the entrance canopies as well as the central escalator core, the vestibules act as gateways, defining the buildings entrances and marking the transitions between its key spaces. Loosely based around the form and function of the gantry, the vestibules become a language found throughout the interstice. Although the architectural language of the power station and train terminal are vastly different, they are united in their markings of their principle circulation zones. Taking this basic idea one step further are the market buildings, which form a richer and more complex bond between spaces of circulation and inhabitation.

5.13
Train Terminal Facade Detail

5.14
Elevation, T5.erminal North Facade

5.15
Train Terminal Waiting Hall



5.16

MARKET SQUARE

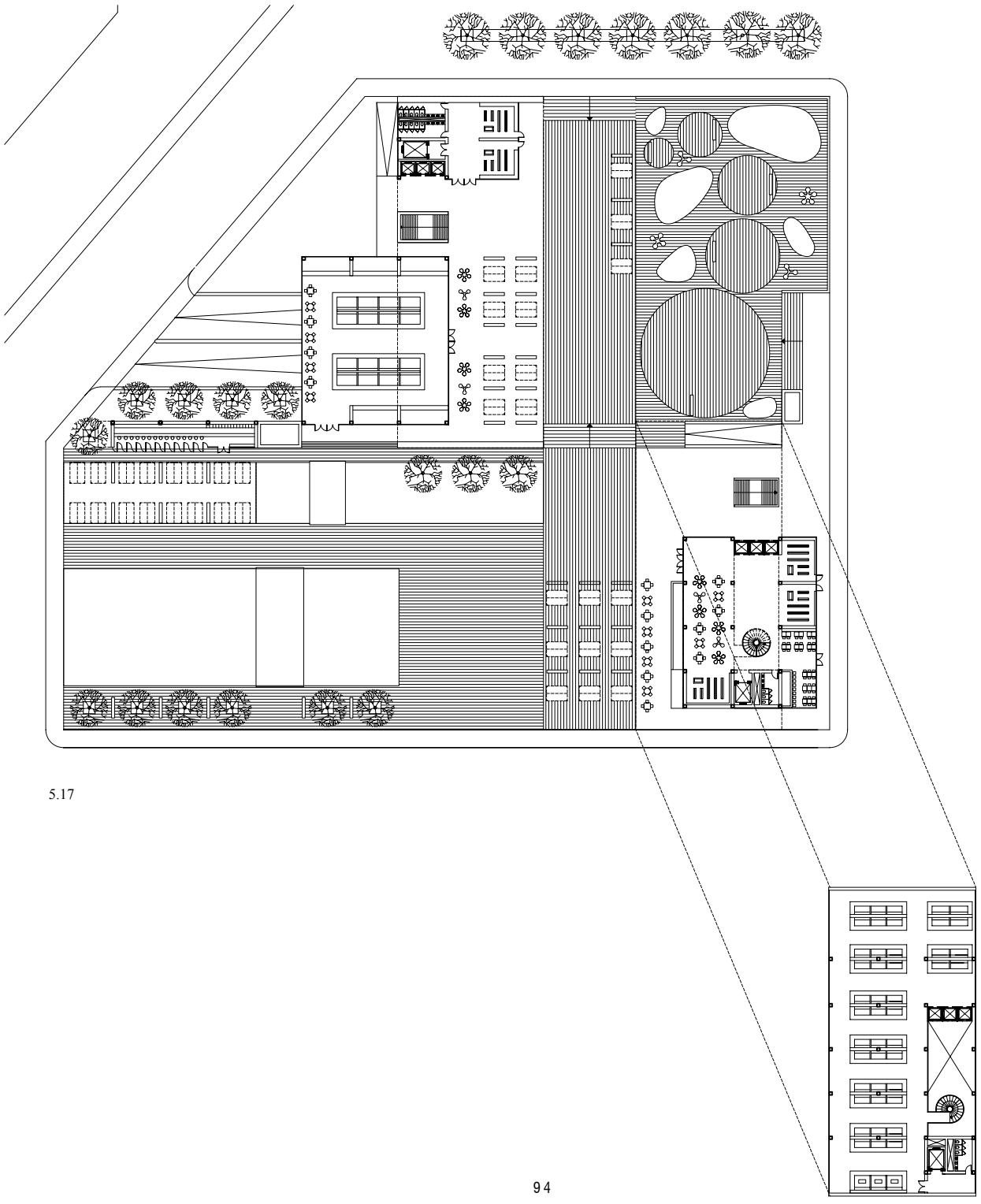
The square becomes the new home of the Long Island City Greenmarket, which takes the form of two permanent market buildings and a series of interspersed seasonal pavillions Within the space, the market buildings are simulateously spaces of occupation and circulation. Their massing and form become an infrastructural instrument whose purpose is the crafting of two public spaces within the larger square.

Because 51st street - next to the power station - bisects the square, the space has a natural two part split as opposed to a more classical three way division. As such, the buildings are strategically placed at opposite corners to accentuate the duality of the square instead of attempting to craft the space into an alien form.

The two squares are of different sizes and characters. The inner square is raised one metre above grade and faces the classical facade of the power station. It is enclosed and garden-like, revealing only glimpses of the skyline beyond. The outer square is larger and open to the skyline. It houses two clusters of seasonal market stalls within a landscape of different surface treatments and built structures. While the inner square is home to soft, organically shaped vessels and plantings, the outer square is harder edged and linear, housing reflecting pools and vegetation within rectilinear shells. The two spaces are connected via a pedestrian cross street, which is paved with wood decking whose direction rotates ninety degrees to indicate the transition. The street is lined with stalls on either side, forming what is essentially a market walk.

The permanent buildings share a similar architectural

5.16
Site Plan showing Ground Floor Plans of Market, Train Terminal and Arts Centre. 1:2500



5.17

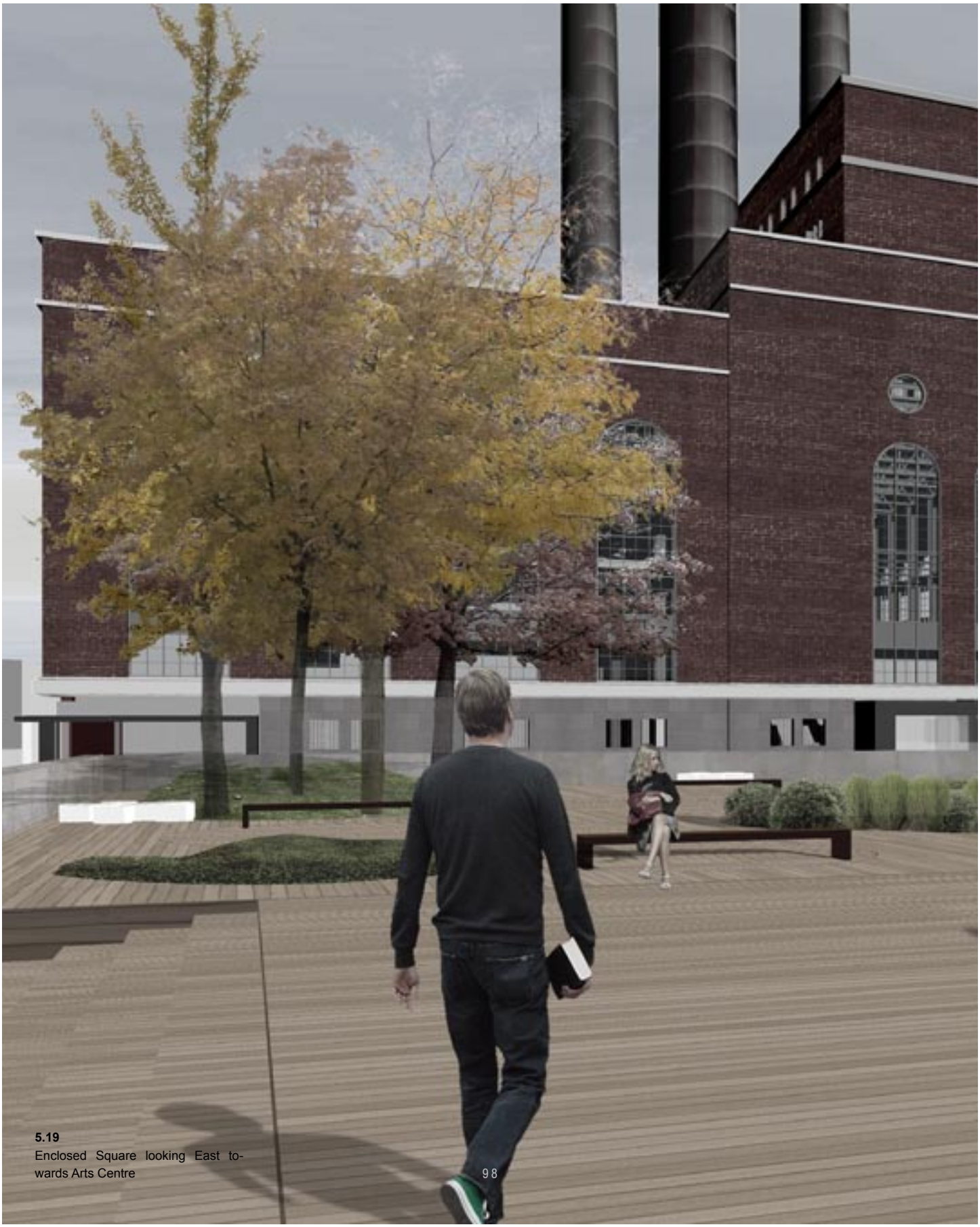
language but take on different forms of massing. The outer building is a two storey structure with a small base portion and a longer upper volume which cantilevers overtop of the 51st street pedestrian entry. The cantilever forms a gateway which allows both through traffic and views out towards the skyline from beyond the square. Reinforcing the idea of a circulation gateway is one way stair from parking garage below. Mimicking the form of the train terminal's escalator core, the architecture of entry becomes more systematized and clearly read, both in plan and section.

Entering into the building, the ground floor is largely open, with seating and retail areas divided by a two storey atrium that is linked to the upper storey market via a circular staircase. The upper market is home to seven rows of market stalls which are devoted to organic produce, seafoods and meat. Dried and baked goods are housed in the second market building, which faces onto the power station.

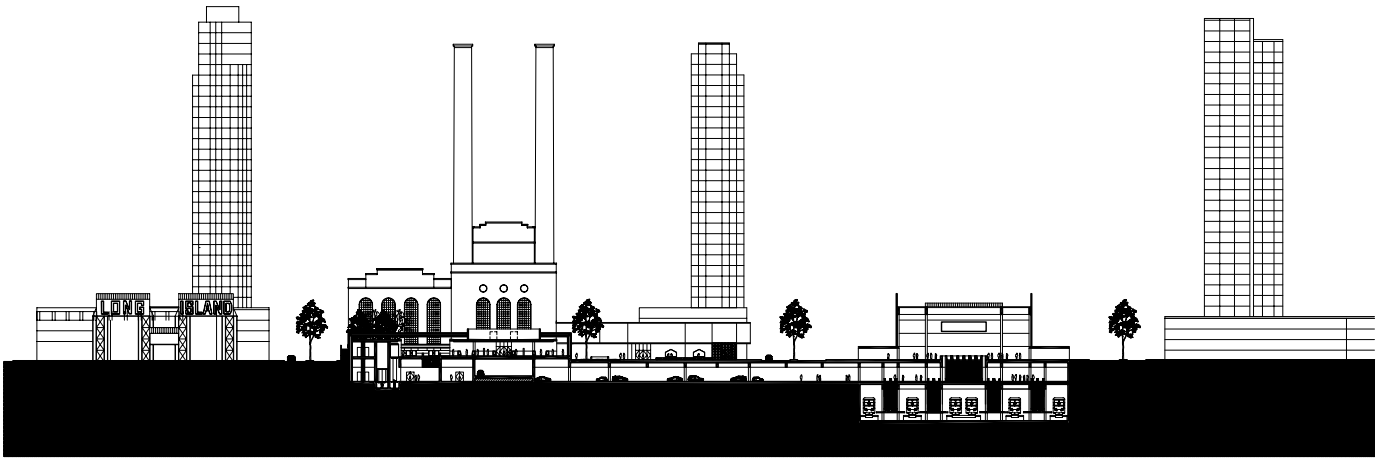
An inverted L-shaped, the baked goods market houses two glass volumes beneath a long span black canopy. The larger volume protudes out towards the water, forming a covered entry for cars entering and exiting the underground garage. The smaller volumes houses a pedestrian and service escalator core as well as two small cafes, which front onto the square. A secondary staircase servicing the north end of the garage exits into the raised garden. The void it creates allows glimpses of the skyline from the garden, without entirely revealing the entirety of its vista.

5.17
Detailed ground plan of market showing second storey of produce market. 1:1000

5.18
Enclosed Square looking West from Arts Centre Entrance



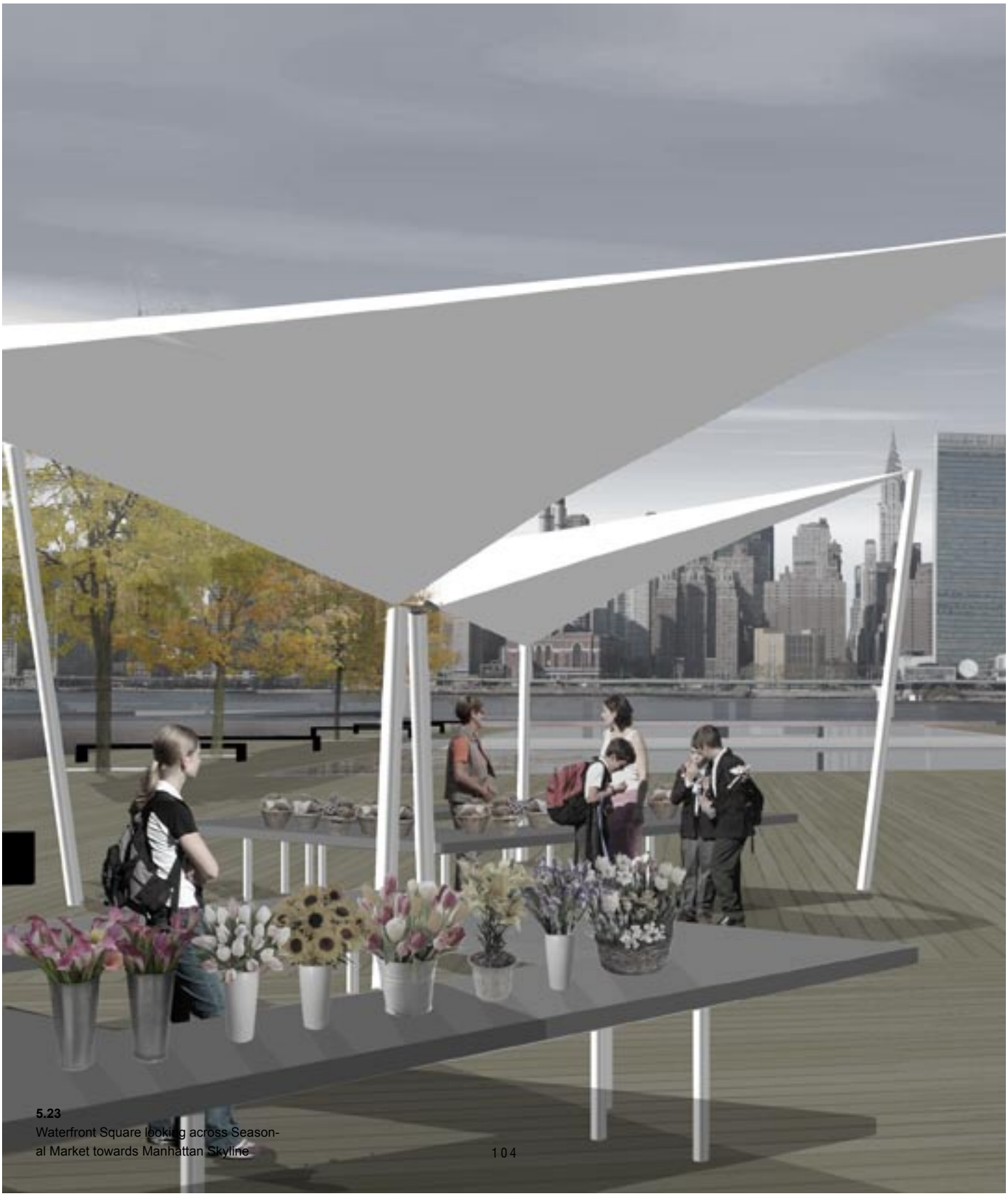
5.19
Enclosed Square looking East towards Arts Centre



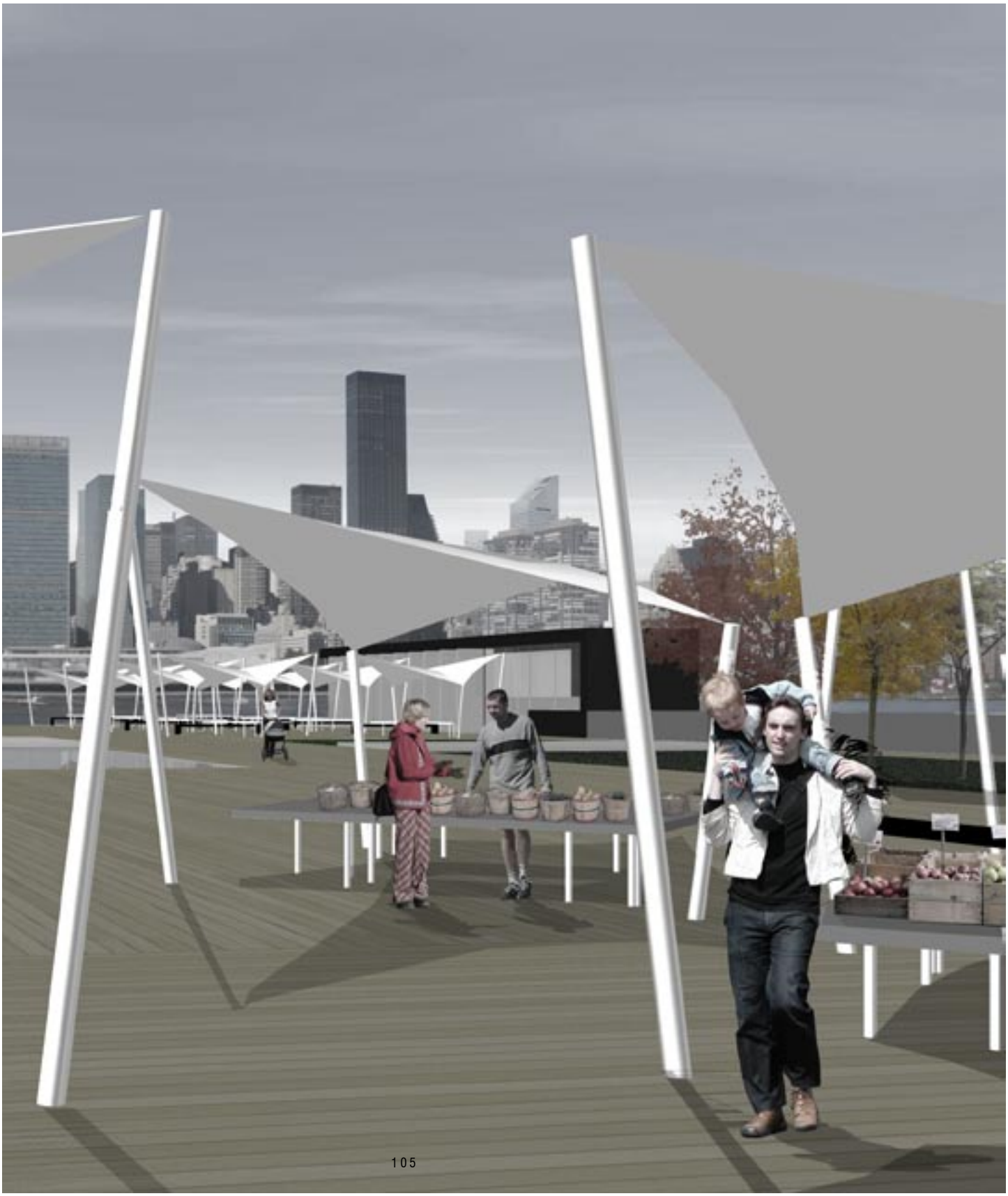
5.20
Short Section through Site

5.21
Longitudinal Section through Site

5.22
Waterfront Square looking East towards
Market Buildings and Arts Centre

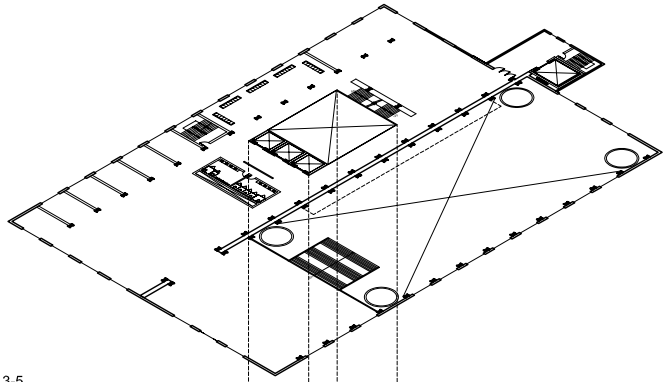


5.23
Waterfront Square looking across Seasonal Market towards Manhattan Skyline

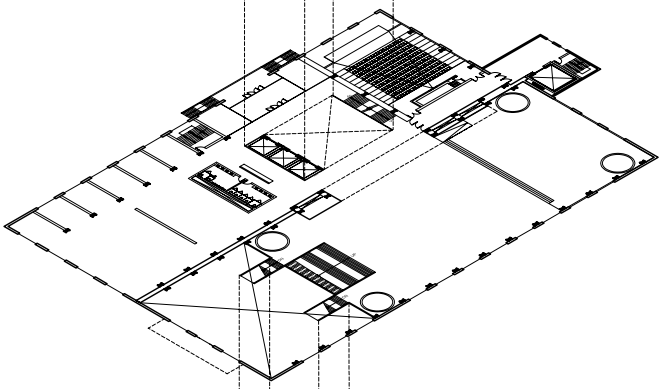


5.24
Waterfront Square looking East towards Manhattan Skyline5.

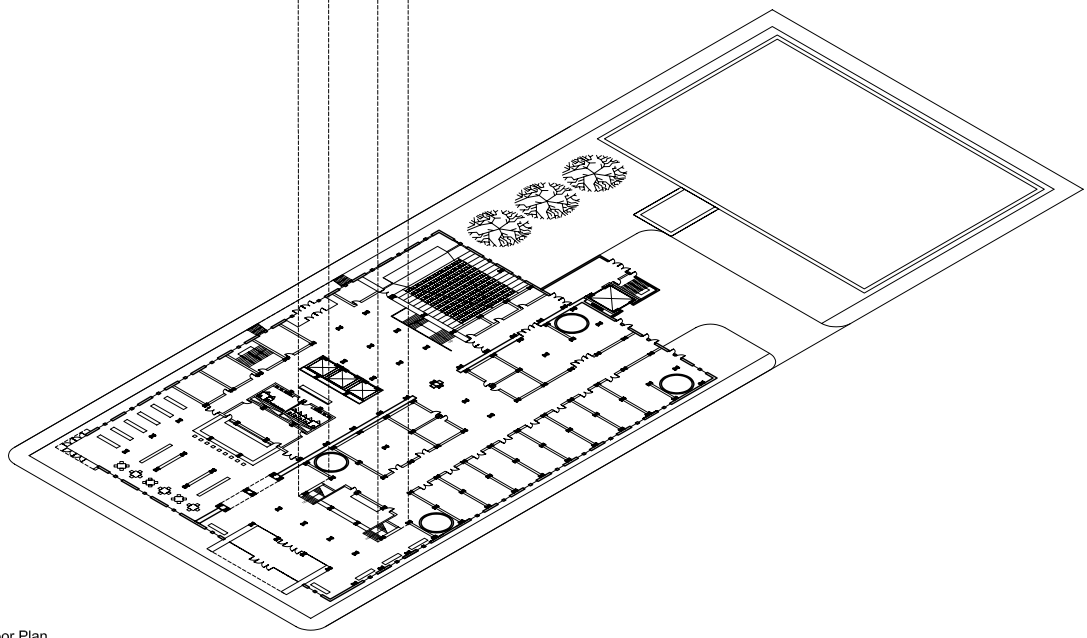
5.25



Typical Plan Floors 3-5



Second Floor Plan



Ground Floor Plan

LONG ISLAND CITY ARTS CENTRE

The Schwartz Chemical building becomes a new centre for the Long Island City arts community. Rather than dedicating the building to any specific institution, the space becomes a collective gallery for the community as a whole. The rationale for a shared exhibition space stems from the location of the existing galleries and working studios themselves. Most of these spaces have opted to re-inhabit post-industrial buildings, choosing them based on the quality and availability of the space itself. Because Long Island City is so large however, these spaces are often miles apart and visiting them requires individuals to take both subways and buses into surprisingly inaccessible residential and industrial areas. Lacking both visibility and centrality, the galleries lack the cohesive presence of New York's more established art communities like Soho, Dumbo and Upper East Side's museum mile.

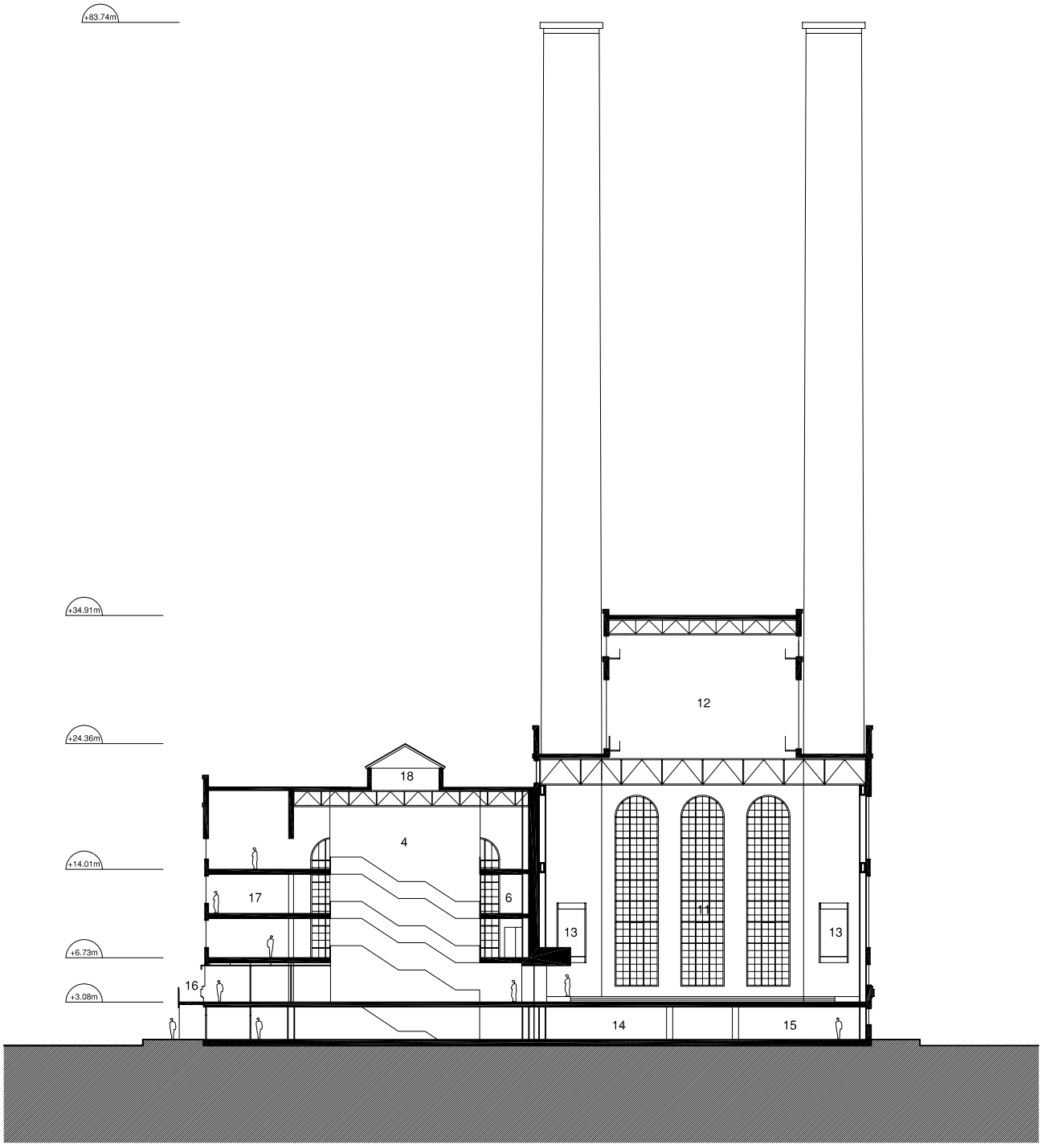
The new arts centre then, functions as a centralizing hub and a visible presence that represents the Long Island City's arts community in both program and form. Housing rotating exhibitions, leasable studio space and a small permanent collection, the centre becomes a gateway into the community. Gallery goers can purchase a multi-entry pass that allows them to access the centre before catching shuttle buses out to affiliated galleries. Architecturally, the building offers curators a chance to showcase their work in much larger and prominent spaces than they might be accustomed to. This is particularly advantageous as much of the community's work has traditionally been geared towards oversized installations and sculptures.

The existing building looks very much like it did nearly a century ago, containing two principle blocks -- the turbine hall to the north and the boiler house and smokestacks to the south. The north block is divided into four lateral structural bays. The outermost bay houses a set of one storey office spaces while

5.25
Arts Centre, Exploded Axonometric

5.26
Long Island City Cultural Association map showing scattered locations of principal arts based institutions and studios

5.27
Sculpture Hall looking East



5.28

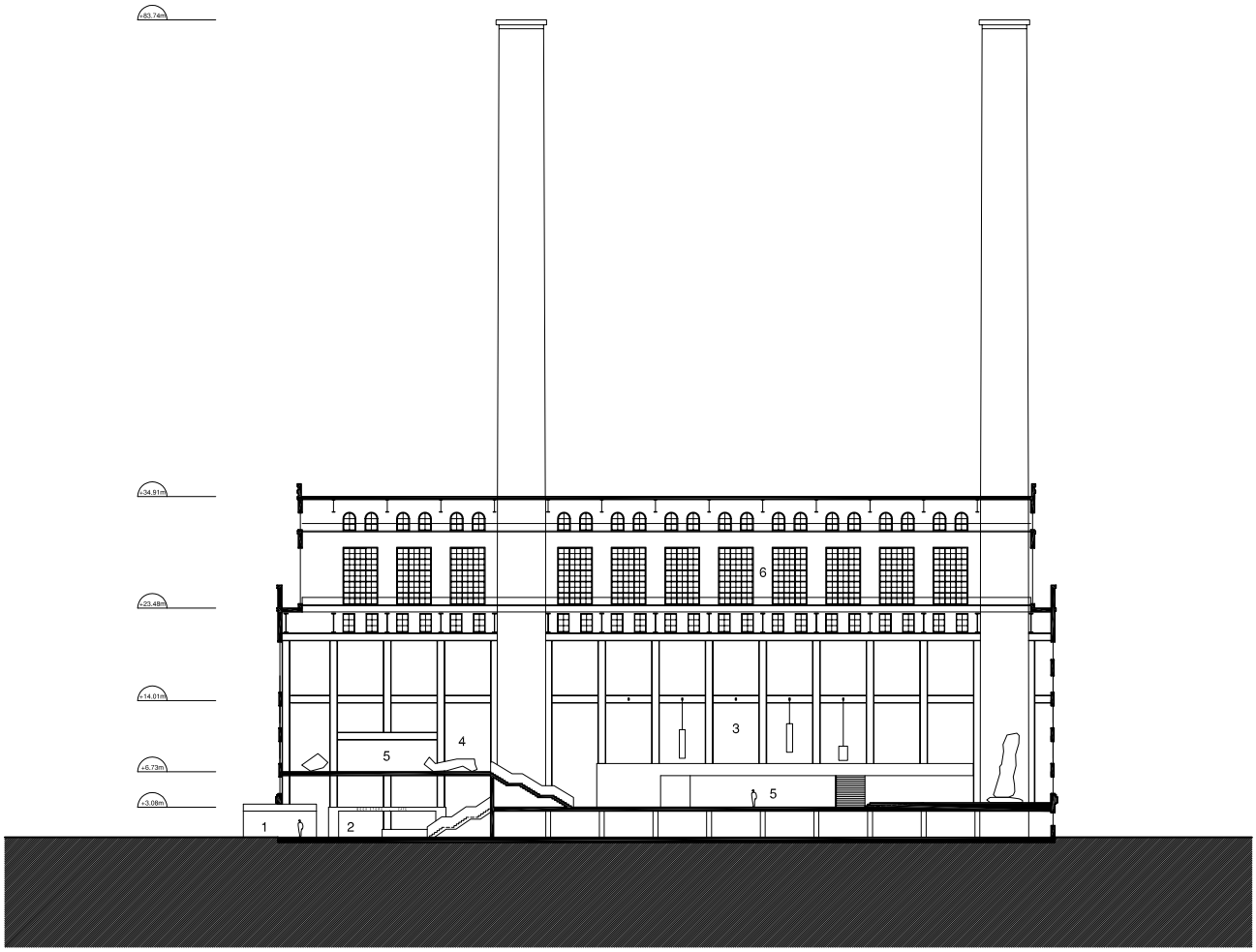
the inner three bays house the turbine hall, a three storey space centered on a skylight that runs the length of the building. The turbines were removed in one of the buildings previous incarnations and the space was last used as an indoor tennis court. The south boiler house once housed six floors of machinery on an exposed steel framework. The four stacks are constructed out of steel plate and are lined with a thick layer of masonry. They were constructed to stand independent of the building, preventing stress in case of deflection. Today, the stacks remain intact with the hoppers and framework standing, but heavily rusted. Dividing the two blocks is a full height brick wall with a semi-enclosed steel column substructure spaced at 5.5 metres on centre. This enclosure wraps around the outer shell of the building as well, replacing the brick however with enormous 15 metre tall arched windows that were designed allow light into the deepest recesses of the building. A set of clerestory windows hover above the hoppers in the building's uppermost volume.

The renovated power plant takes on a simple parti. As it sits today the space is heavy on character and weak in terms of accessbility and usable spaces. The goal of the design then is to essential strip the building down to its defining elements -- its masonry walls, smoke stacks and vertical windows. The building is transformed from one that houses many dark and confined single storey spaces to one that is open, light filled and clearly marked in terms of circulation.

Gutted of both machinery and steel framing, the boiler house becomes a vast, five storey tall sculpture hall. In contrast, a corresponding set of single and double storey exhibition spaces occupy the old turbine hall. The ground floor houses a variety of functions including studios, an auditorium and retail space. All of these spaces are linked together via a new circulation atrium that bisects the sculpture hall.

5.28
Cross Section through Arts Centre
Sculpture Hall and North Atrium

5.29
Arts Centre North Atrium



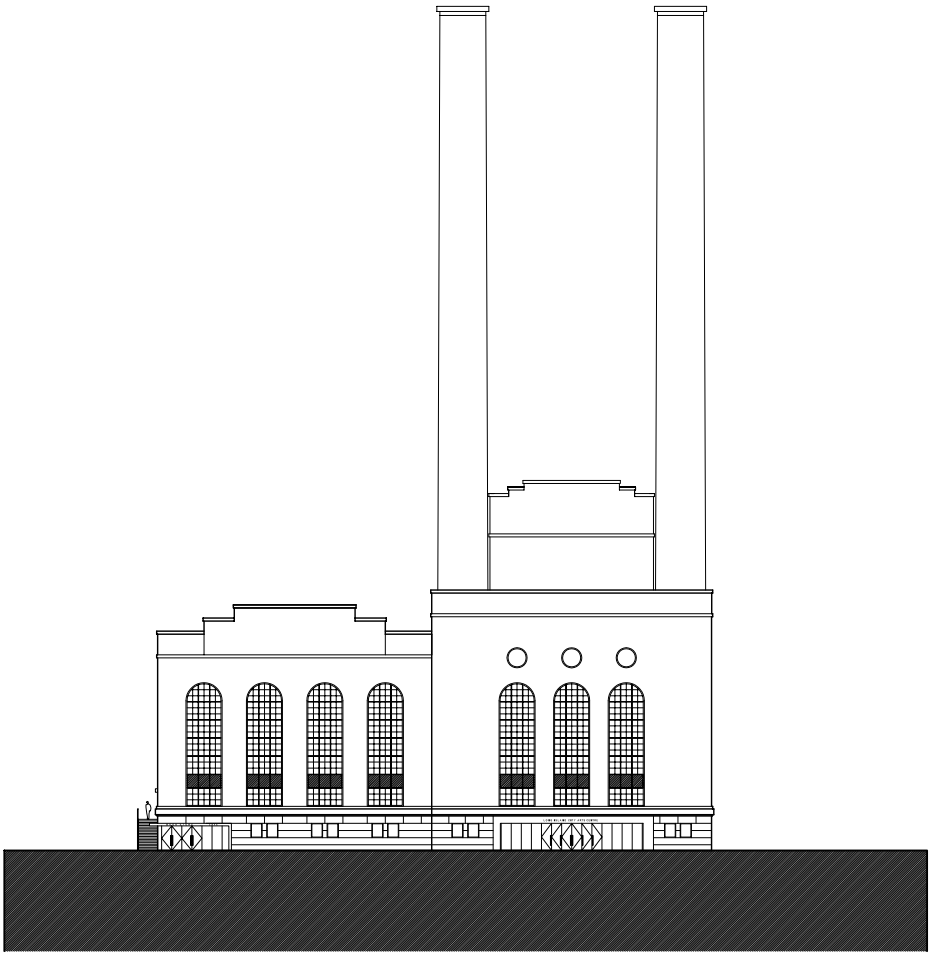
5.30

The exterior shell is left largely untouched save for a simple entrance vestibule projecting from the boiler house into the square. Entering the main lobby, visitors find a café/bookstore on their left and a ticket office directly ahead. A set of gently inclined staircases enclose the ticket office and lead into the sculpture hall above. At a length of 80 metres and a height of 20, the sculpture hall functions as the key space within the centre. Stripped of five floors of steel framing, the boiler house transforms into a lofty sculpture hall, framed by alternating bands of weathered brick, exposed steel and the full height panes of newly exposed arched windows. Centred on the smokestacks, the main level of the hall is finished in a polished concrete. The third floor mezzanine level hovers above the entrance lobby and frames views both into the hall and out across the square and towards the Manhattan skyline. The sculpture hall is intended for rotating exhibitions and site specific installations.

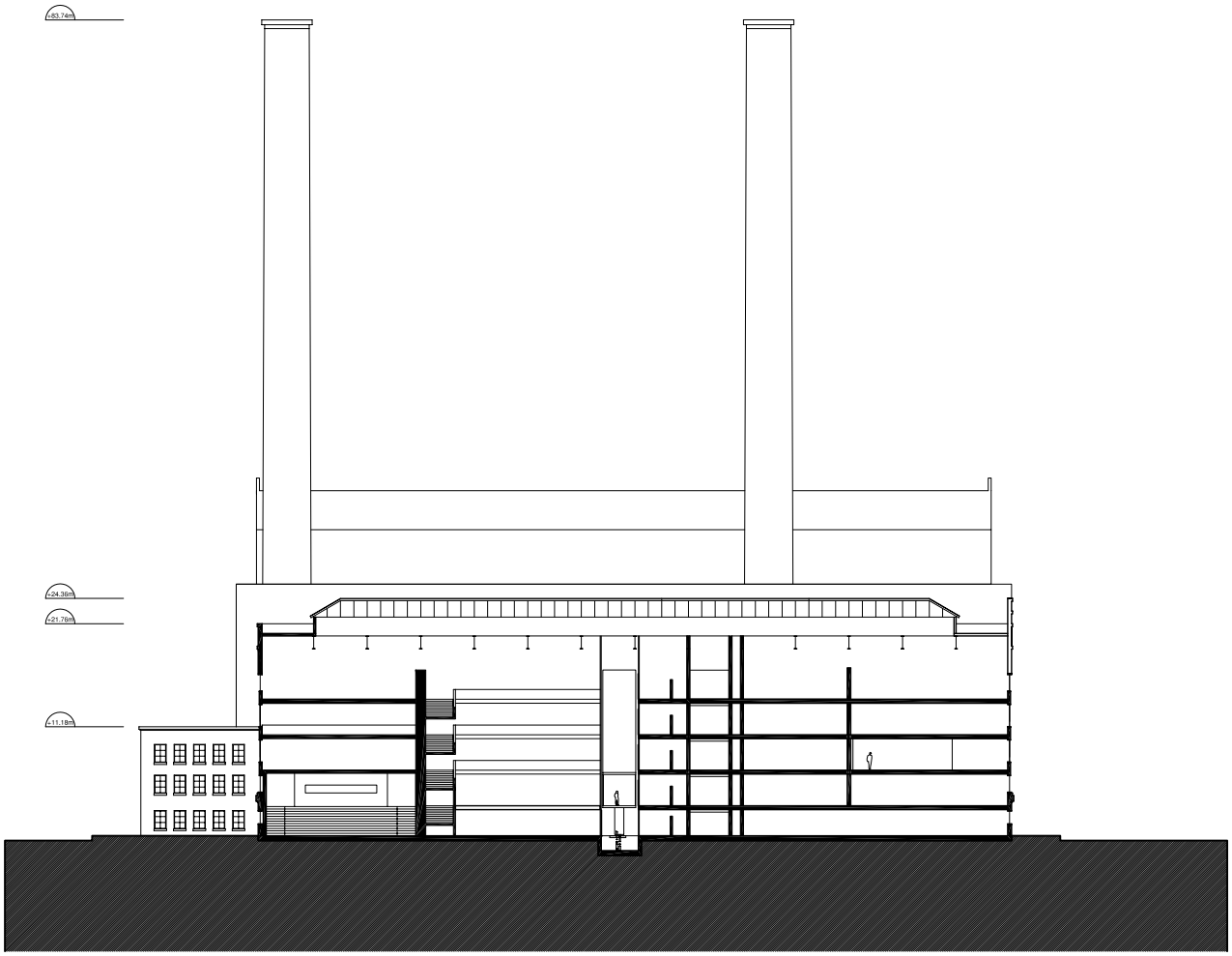
The stacked galleries are accessed through a puncture in the dividing wall and marked with a black entrance vestibule that also houses a small accessibility ramp. The atrium has an elevator to its left and stairs to its right. The north end functions as a secondary entrance into the building. The basic layout of the galleries is to have a series of single storey galleries to the west and double storey galleries to the east. These galleries are centred on the skylight and the innermost three bays. The outer bays, which were formerly used as offices are retained as is and used as smaller north-lit exhibition rooms which can be used for paintings and wall mounted art. A small lounge area graces the outer bays and looks into the atrium. A small auditorium is accessed form the second level of the atrium and slopes down towards the ground floor. The remainder of the ground floor is devoted to community workshop and library spaces, administration and studio spaces which can be leased to local artists.

5.30
Longitudinal Section through Arts Centre Sculpture Hall

5.31
North-East Double StoreyGallery

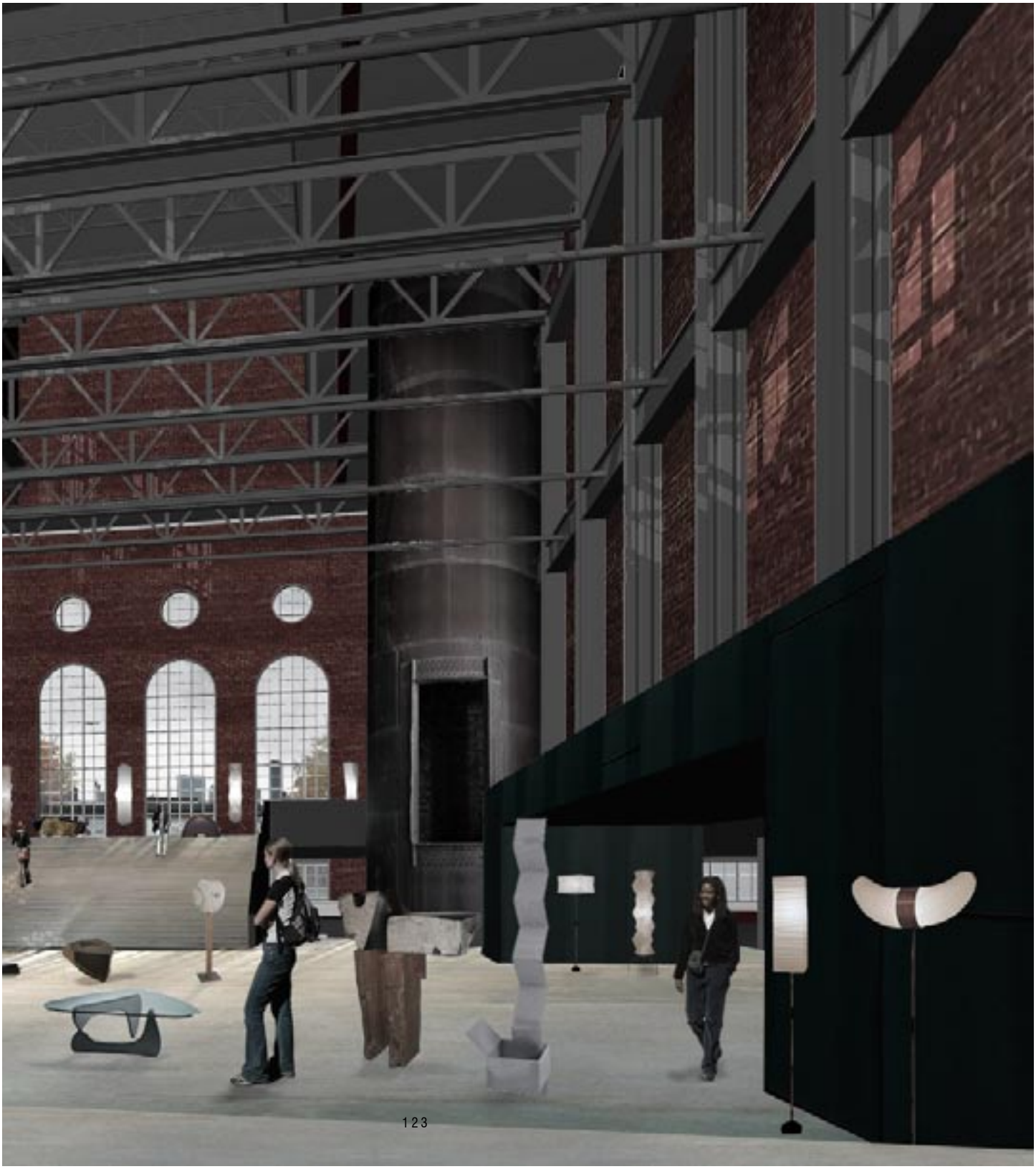


5.32
Arts Centre West Elevation



5.33
Longitudinal Section through North Galleries

5.34
Sculpture Hall Looking West



CONCLUSION

The language of city making is inevitably complex, and often times without a hard set of rules or governing bodies. *Interstitial Urbanity* has been an attempt to operate within the realities of the post-modern city; investigating alternative means for place-making within the difficult context of contemporary development.

As the author of the thesis and of the design itself, the question that I've necessarily needed to reflect upon is whether or not I would enjoy being within environments that have been proposed. Similarly, would others find value or even meaning within these spaces?

The answers to these questions are of course subjective, and in reality perhaps not even static. This continuing investigation then, continues to drive the author and in fact all authors of designed space. As architects, we inherently believe in the idea of place and continue to operate with the hope we would in some form be able to affect the built environment for the better.

In closing, designing theoretical projects is always an abstract process. Well aware that the proposition has little chance of being realised in physical form, I do however hold onto the idea of the interstice as a potentially powerful fragment. I believe strongly in the value of interconnected public spaces and continue to hope that they will find new ways take form within the streets and cities we call home.

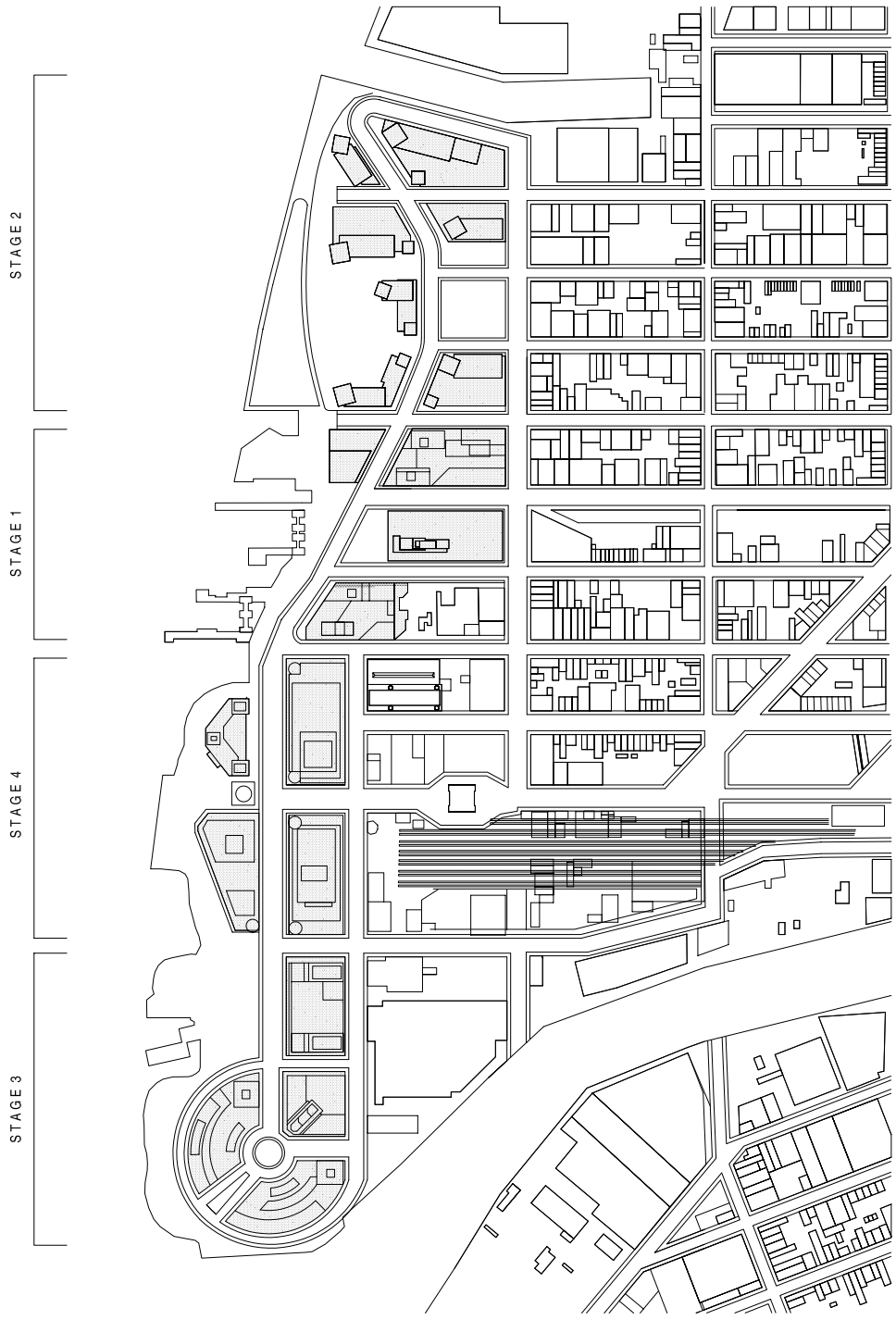
APPENDIX A

URBAN DESIGN DRAWINGS

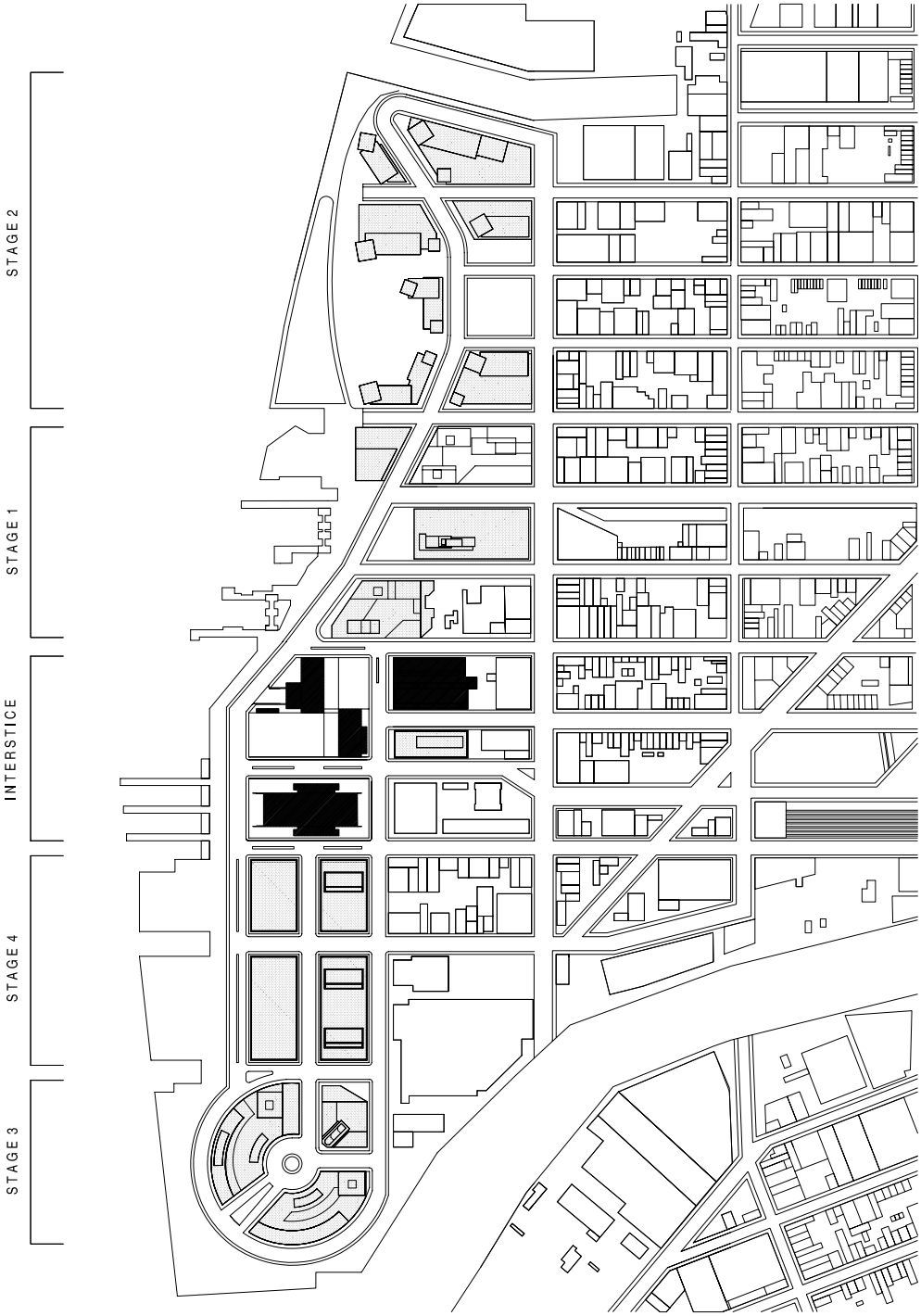
0 100m 200m 500m

APPENDIX A - URBAN DESIGN DRAWINGS | A.1

EXISTING SITE PLAN | p129



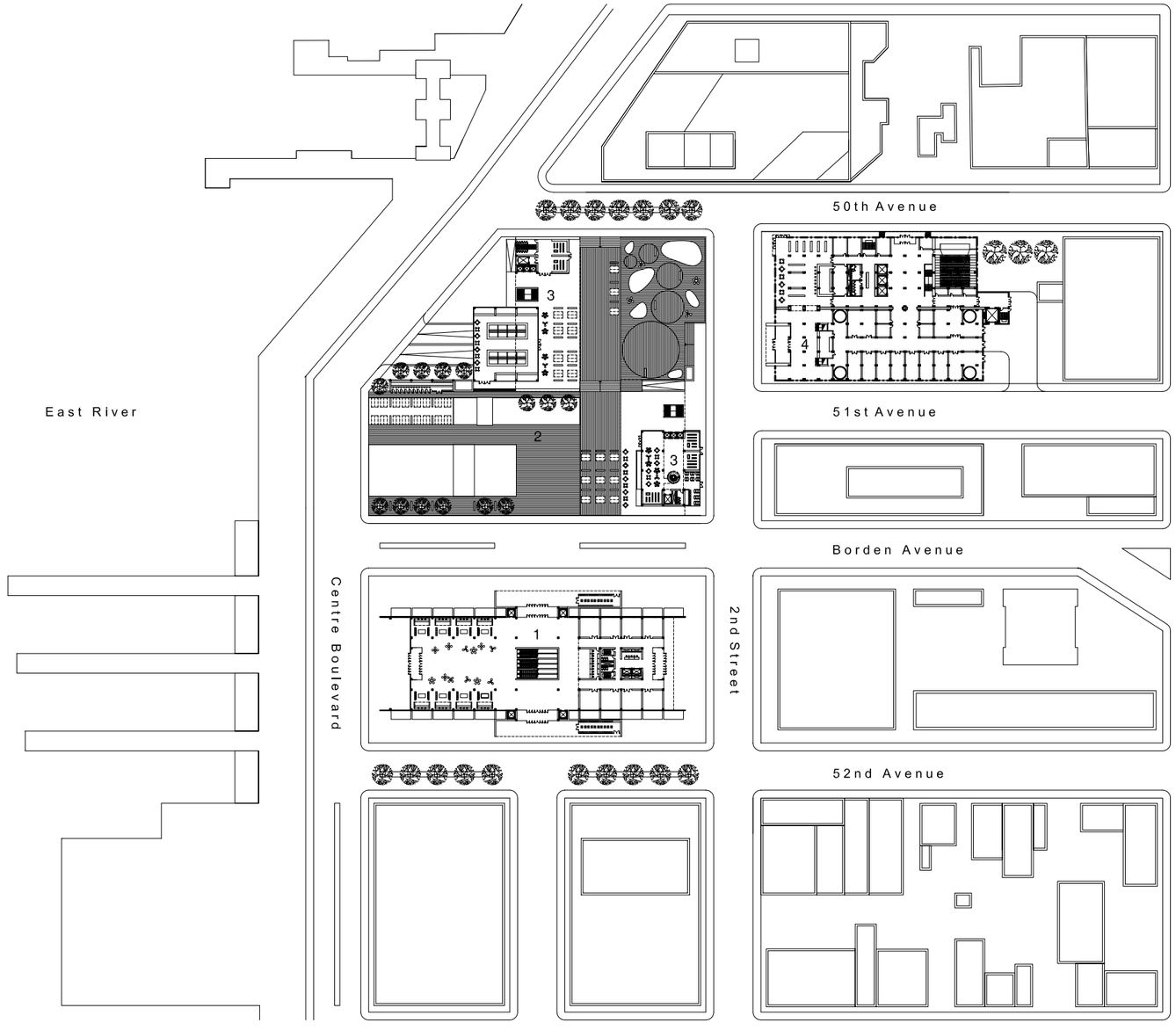
0 50m 100m 250m



0 50m 100m 250m

APPENDIX A - URBAN DESIGN DRAWINGS | A.3

REVISED MASTER PLAN SHOWING INTERSTICE | p133

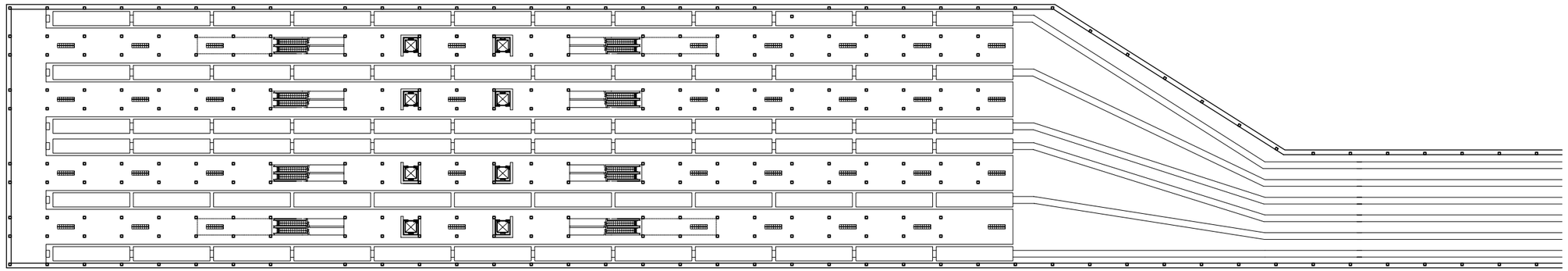


1. Train Station
2. Market Square
3. Market Buildings
4. Long Island City Arts Centre

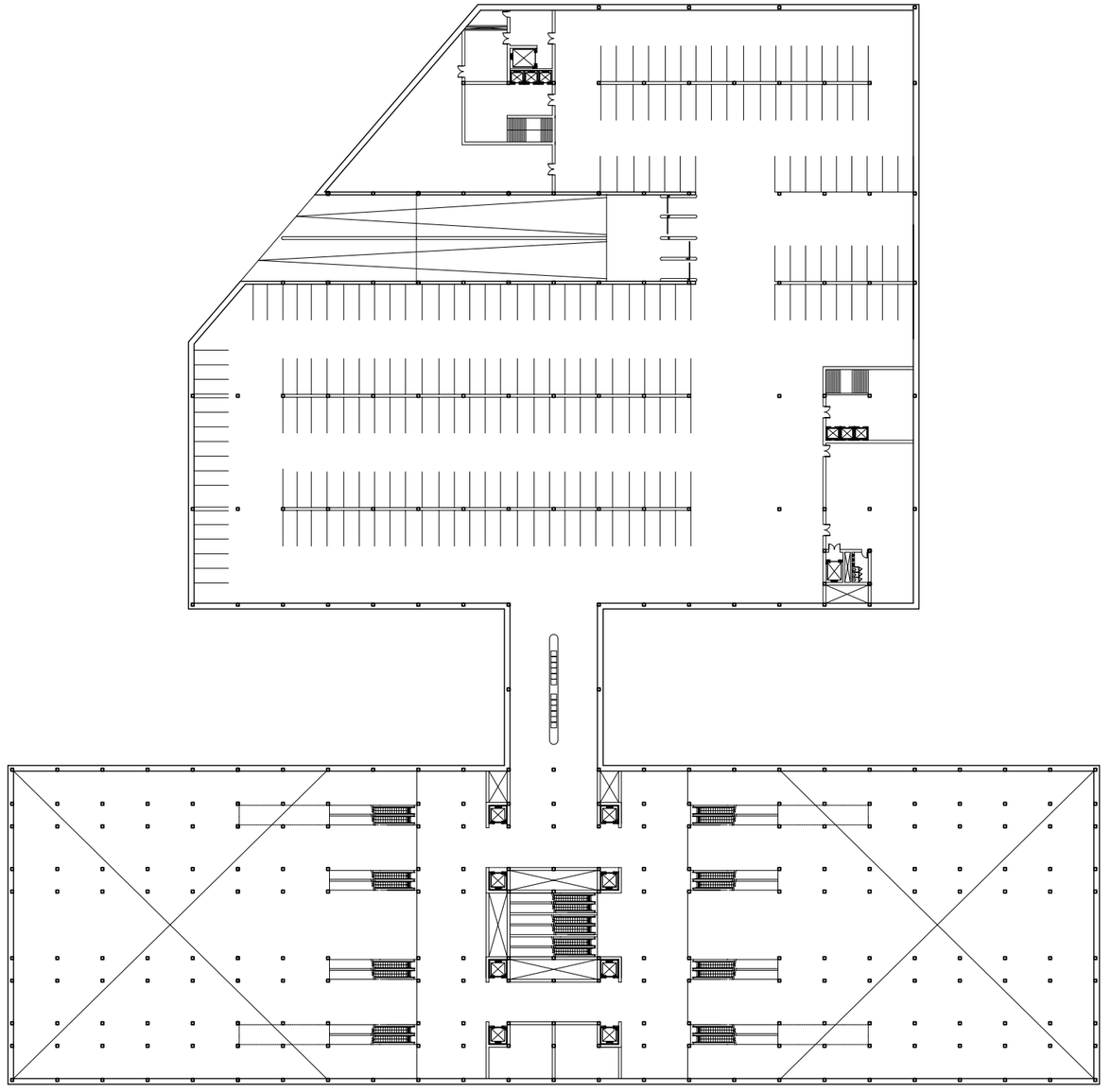
0 10m 20m 50m 100m

APPENDIX B

LONG ISLAND RAIL ROAD TERMINAL DRAWINGS



0 5m 10m 25m 50m



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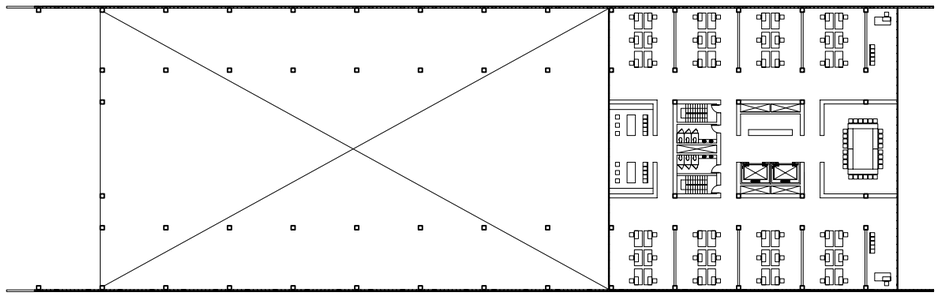
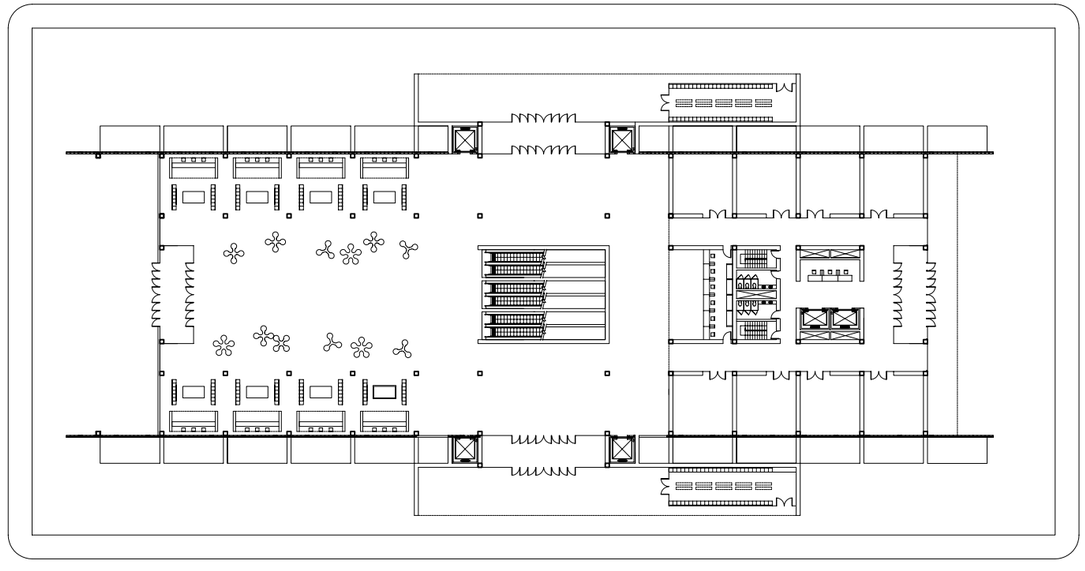
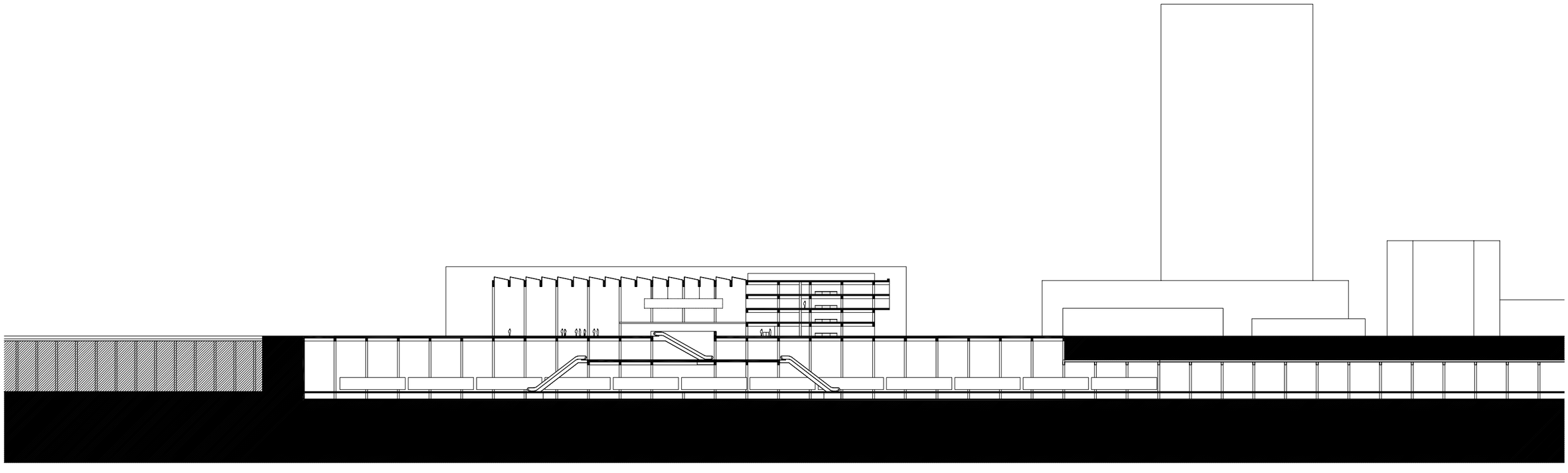


TYPICAL OFFICE LEVEL PLAN (FLOORS 2-4)

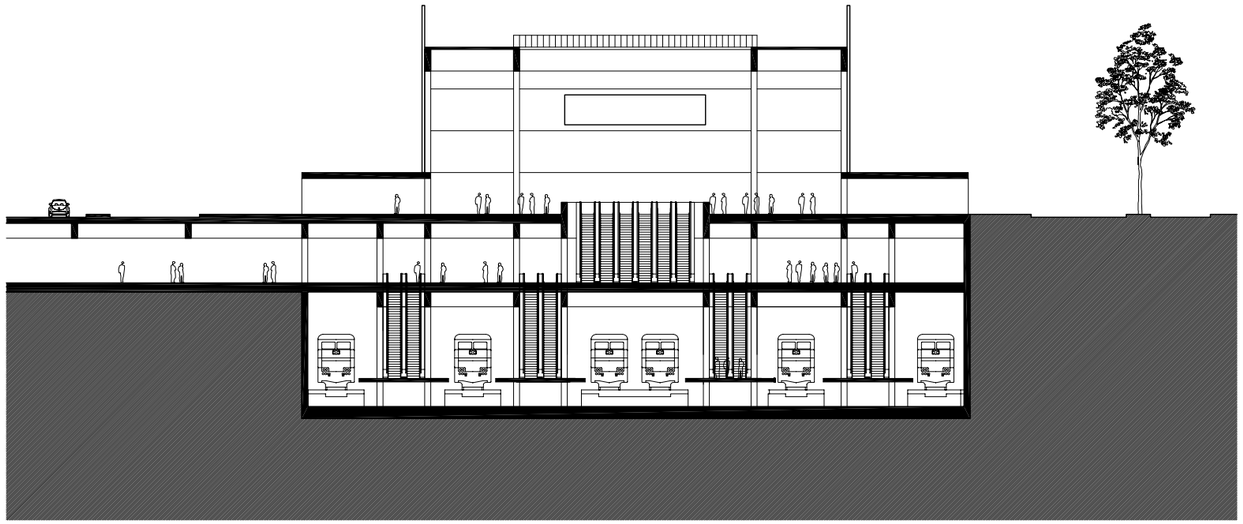


GROUND FLOOR PLAN

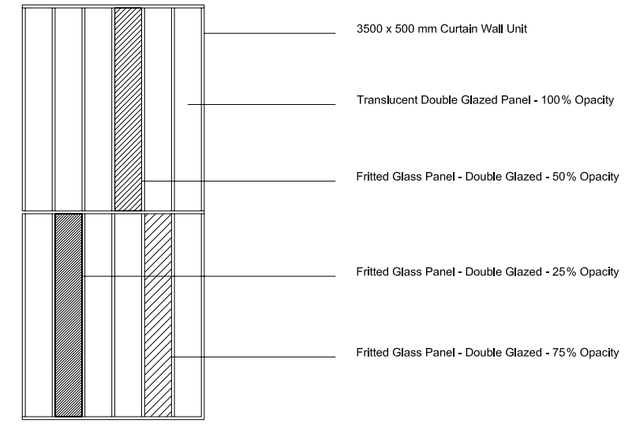
0 5m 10m 25m 50m



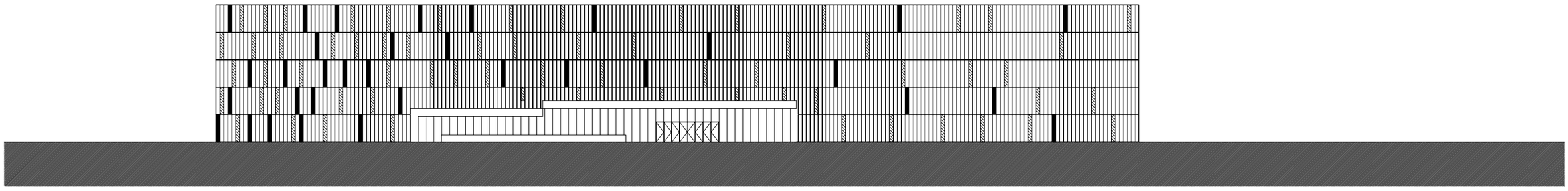
0 5m 10m 25m 50m



CROSS SECTION 1:500



FACADE DETAIL 1:100

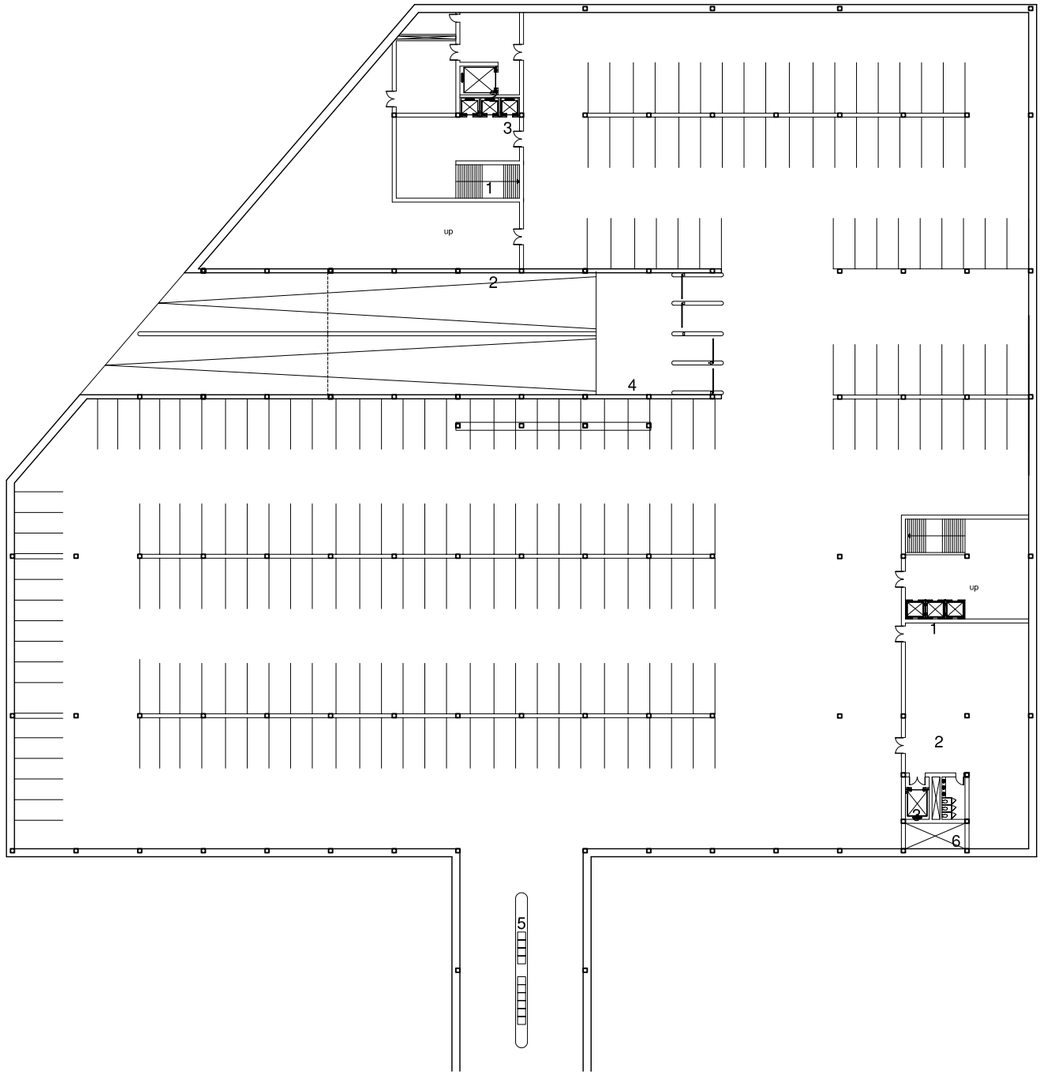


NORTH ELEVATION 1:500

0 5m 10m 25m 50m

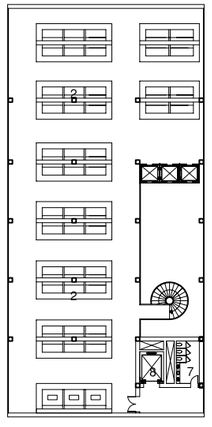
APPENDIX C

MARKET SQUARE DRAWINGS



1. Pedestrian exit to Market Square
2. Service
3. Freight Elevator
4. Vehicular exit to street level
5. Pedestrian connection to train terminal
6. WC

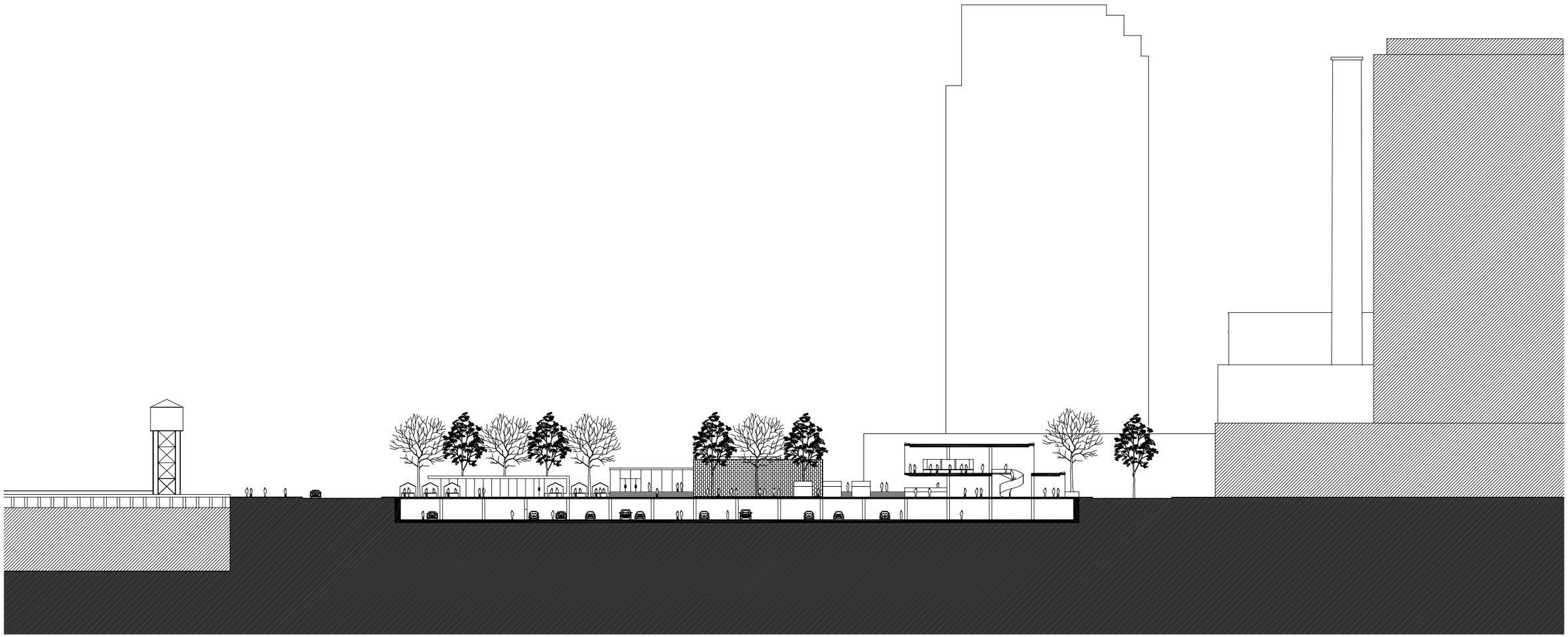
0 5m 10m 25m 50m



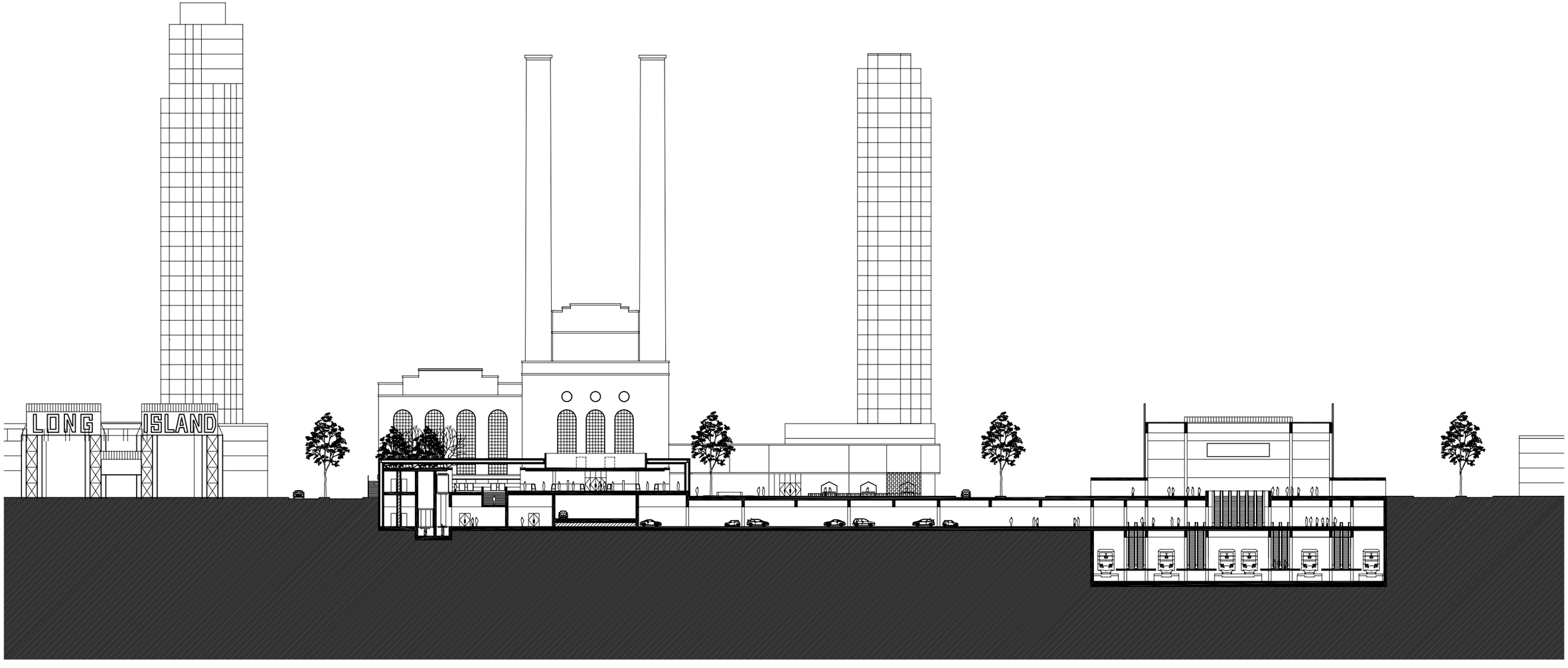
SECOND FLOOR PLAN 1:750

1. Market Buildings
2. Market Stalls
3. Pedestrian Entrance to Underground Garage
4. Benches
5. Seasonal Market Stalls
6. Shops
7. WC
8. Freight Elevator
9. Vehicular Entrance to Underground Garage
10. Skate Rental Shop and Snack Bar
11. Lawn
12. Reflecting Pool / Skating Rink
13. Platform (removable for winter skating)
14. Garden
15. Low Planting
15. Cafe

0 5m 10m 25m 50m



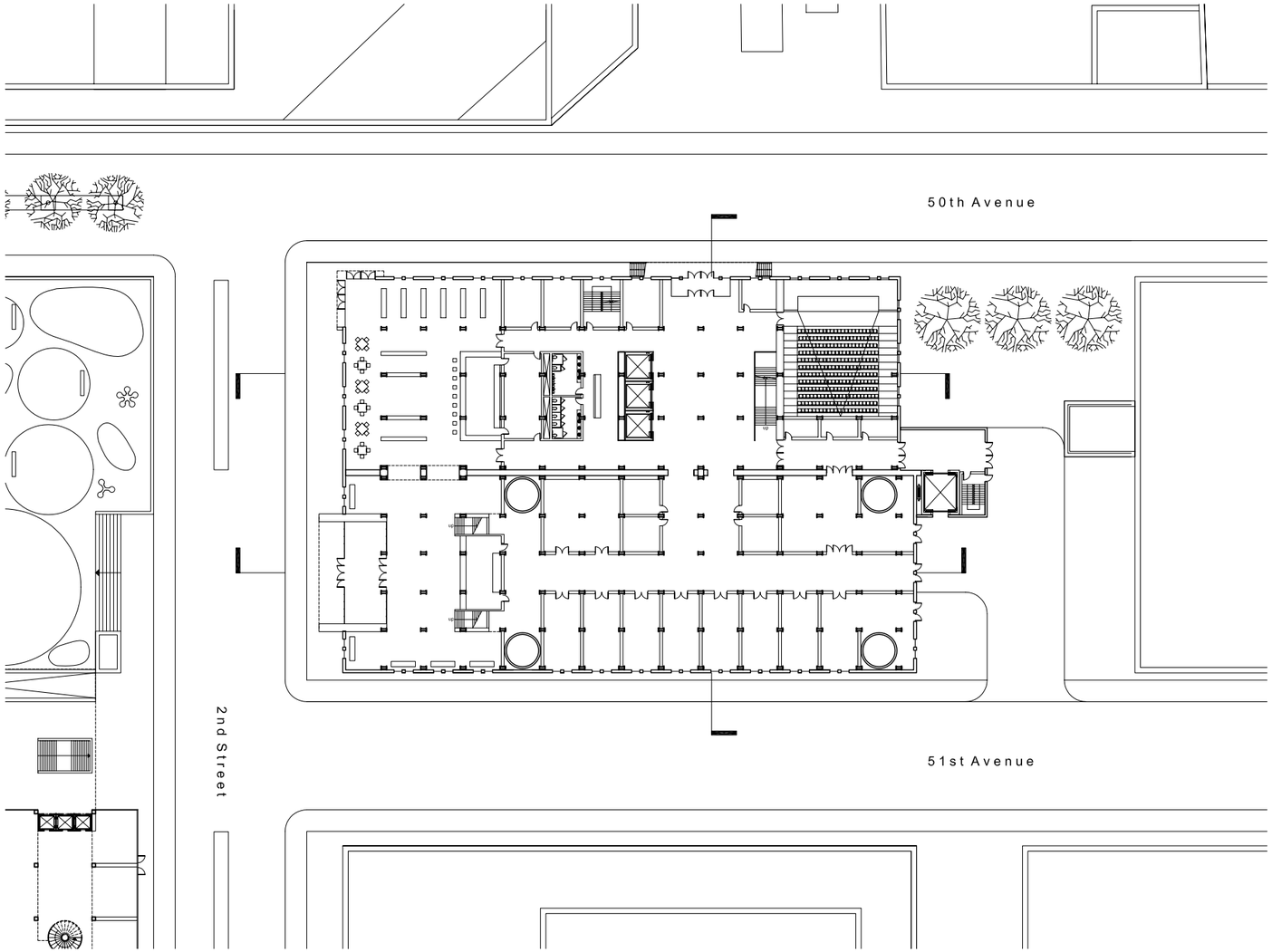
0 5m 10m 25m 50m



0 5m 10m 25m 50m

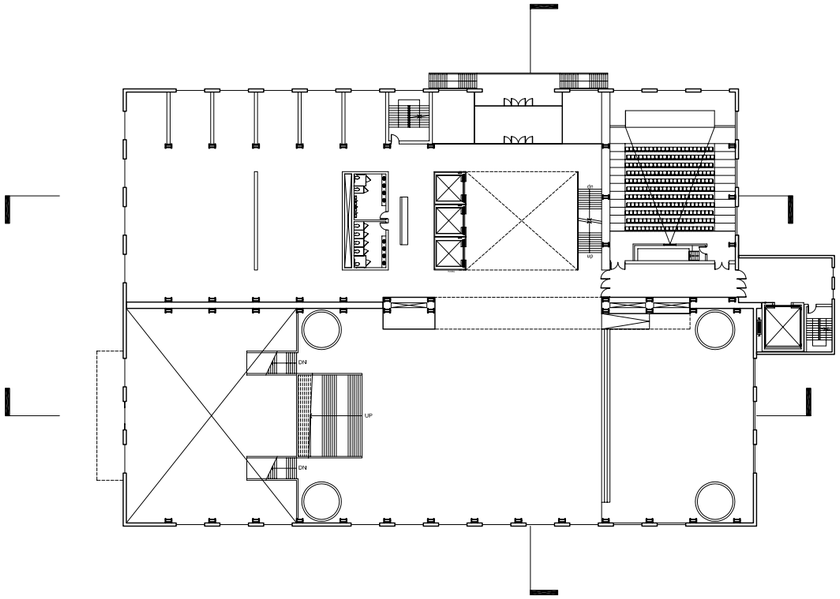
APPENDIX D

LONG ISLAND CITY ARTS CENTRE DRAWINGS

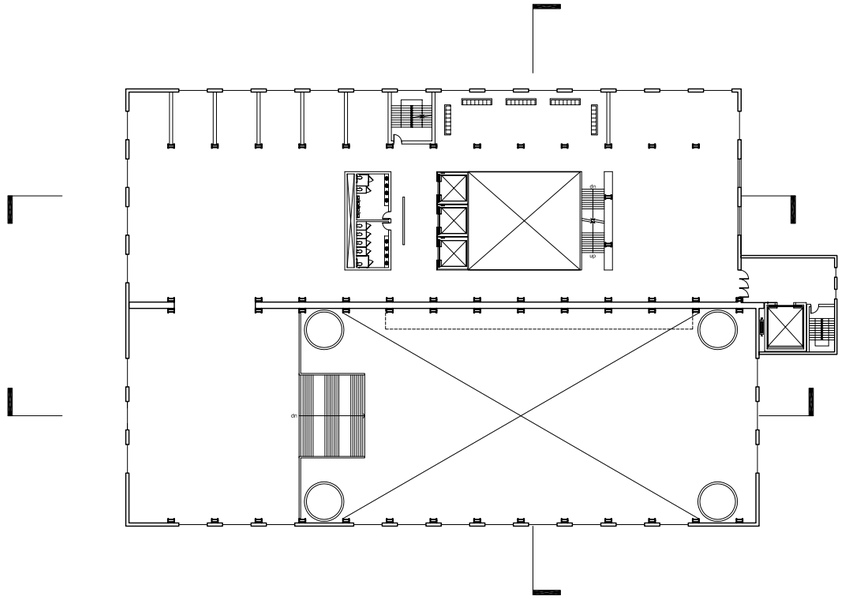


1. Primary Entrance from Square
2. South Lobby
3. Ticket Booth
4. Cafe/Bookstore
5. Secondary Entrance
6. North Lobby
7. Offices
8. WC
9. Community Workshops
10. Leasable Studio Space
11. Storage
12. Auditorium
13. Receiving

0 5m 10m 25m 50m



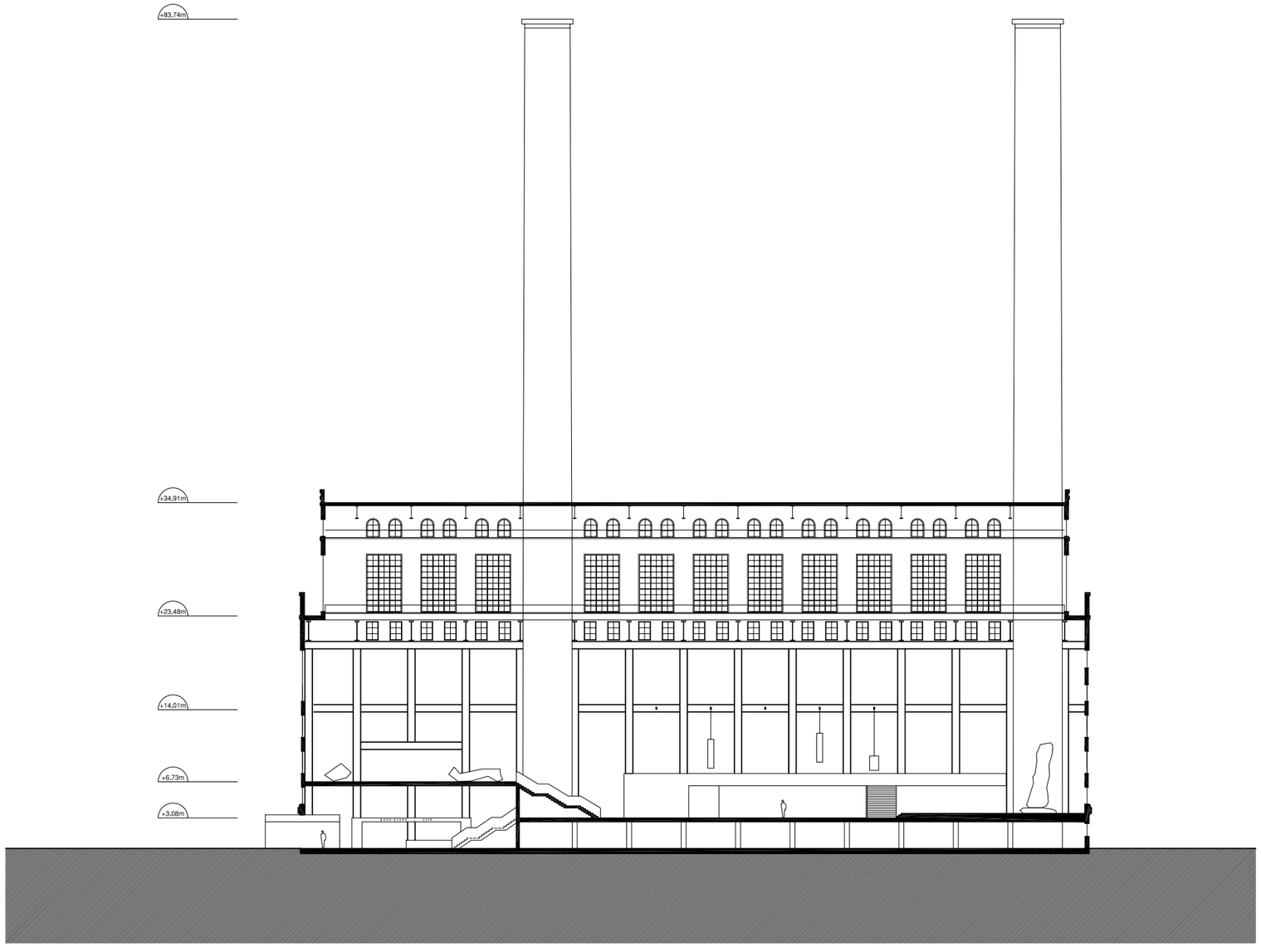
SECOND FLOOR PLAN



TYPICAL FLOOR PLAN (FLOORS 3-5)

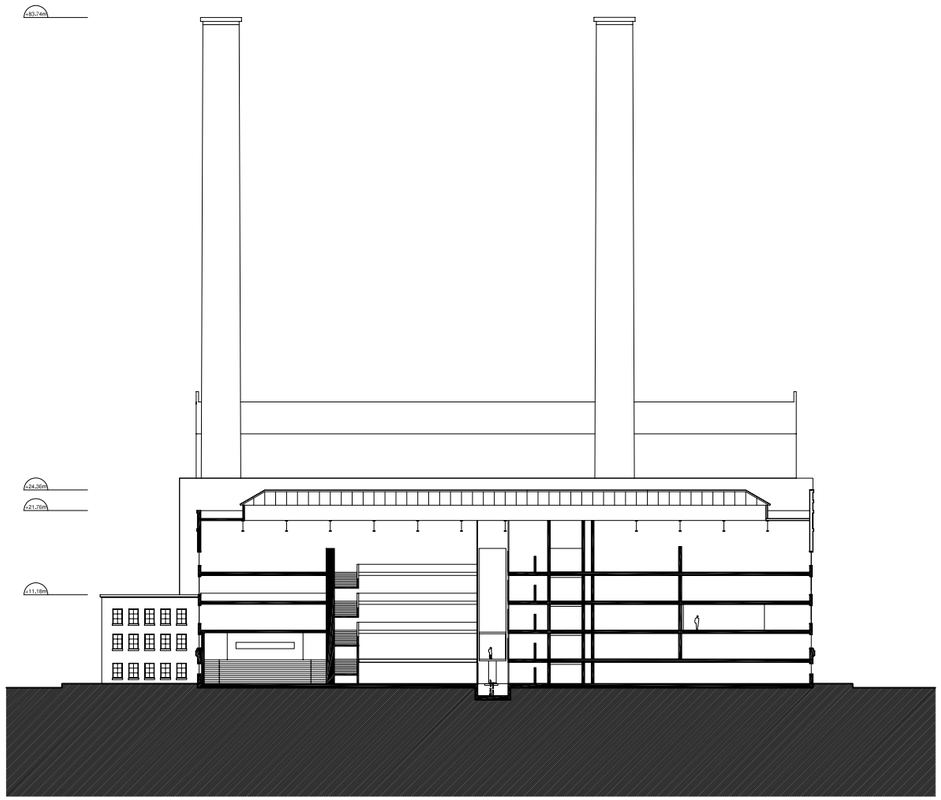
1. Sculpture Hall
2. Stairs Down to South Lobby
3. Stairs Up to Mezzanine
4. Vestibule
5. Secondary Entrance
6. North Atrium
7. Single Storey Galleries
8. North Facing Galleries
9. WC
10. Auditorium Ticket Office
11. Auditorium
12. Freight Lift
13. Mezzanine
14. Lounge
15. Double Storey Gallery

0 5m 10m 25m 50m

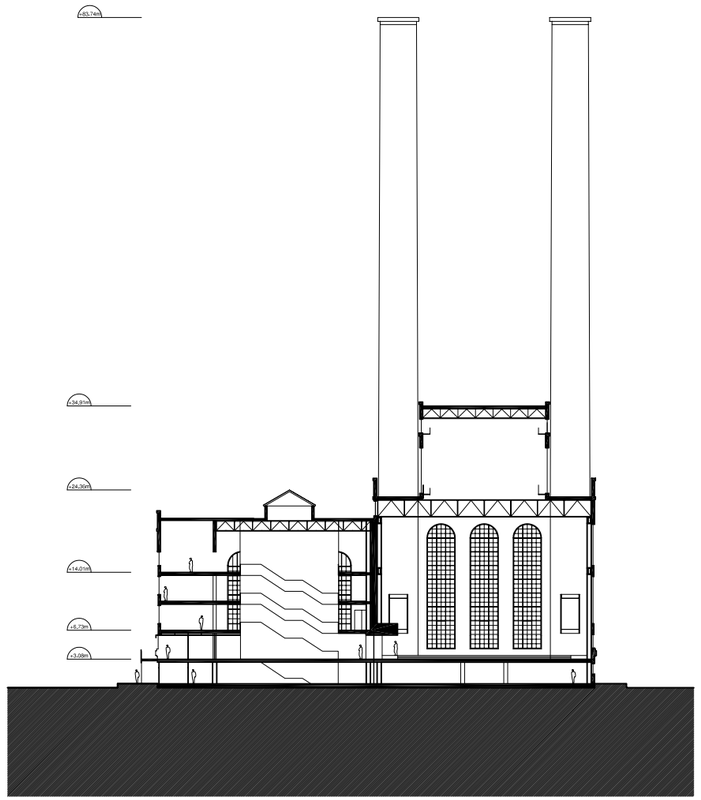


1. Primary Entrance from Market Square
2. South Lobby
3. Sculpture Hall
4. Sculpture Hall Mezzanine
5. Entrance into North Hall
6. Clerestory Lighting

0 5m 10m 25m 50m

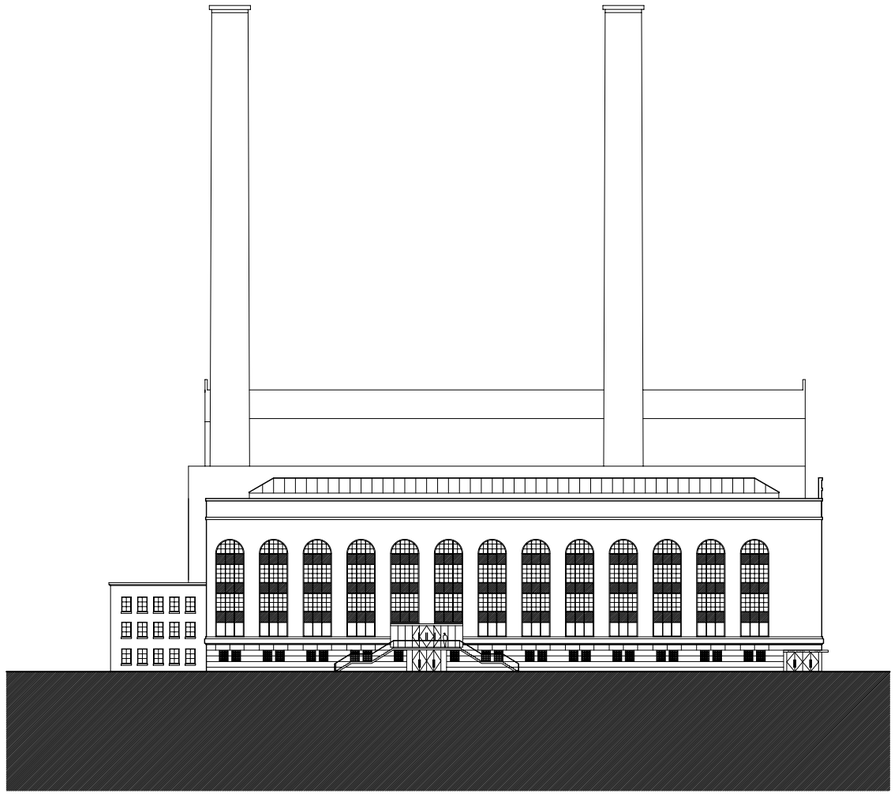


SECTION B

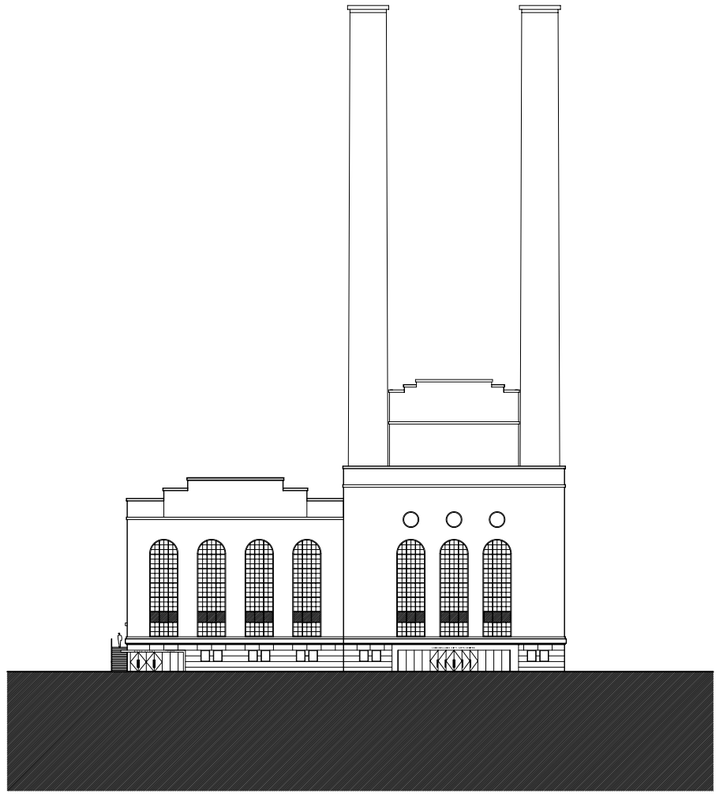


SECTION C

1. Double Storey Galleries
2. Auditorium
3. Stairs
4. North Atrium
5. Entrance into Sculpture Hall
6. Walkways
7. Elevator Core
8. WC Core
9. Single Storey Galleries
10. Entrance into Sculpture Hall Mezzanine
11. Sculpture Hall
12. Clerestory Lighting
13. Existing Openings in Stacks
14. Community Workshops
15. Leasable Studio Space
16. Secondary Entrance
17. Lounge
18. Existing Skylights



NORTH ELEVATION

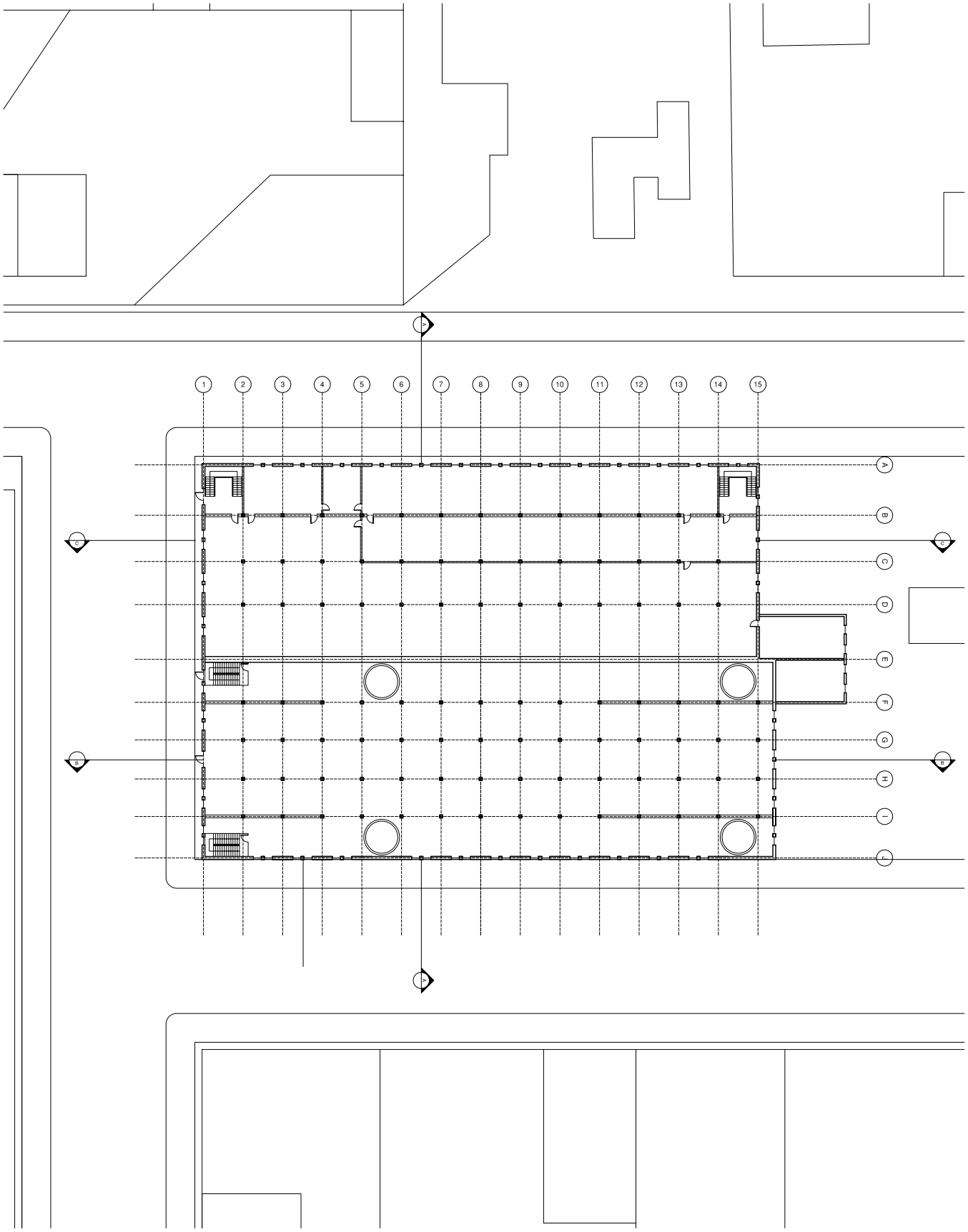


WEST ELEVATION (FACING MARKET SQUARE)

0 5m 10m 25m 50m

APPENDIX E

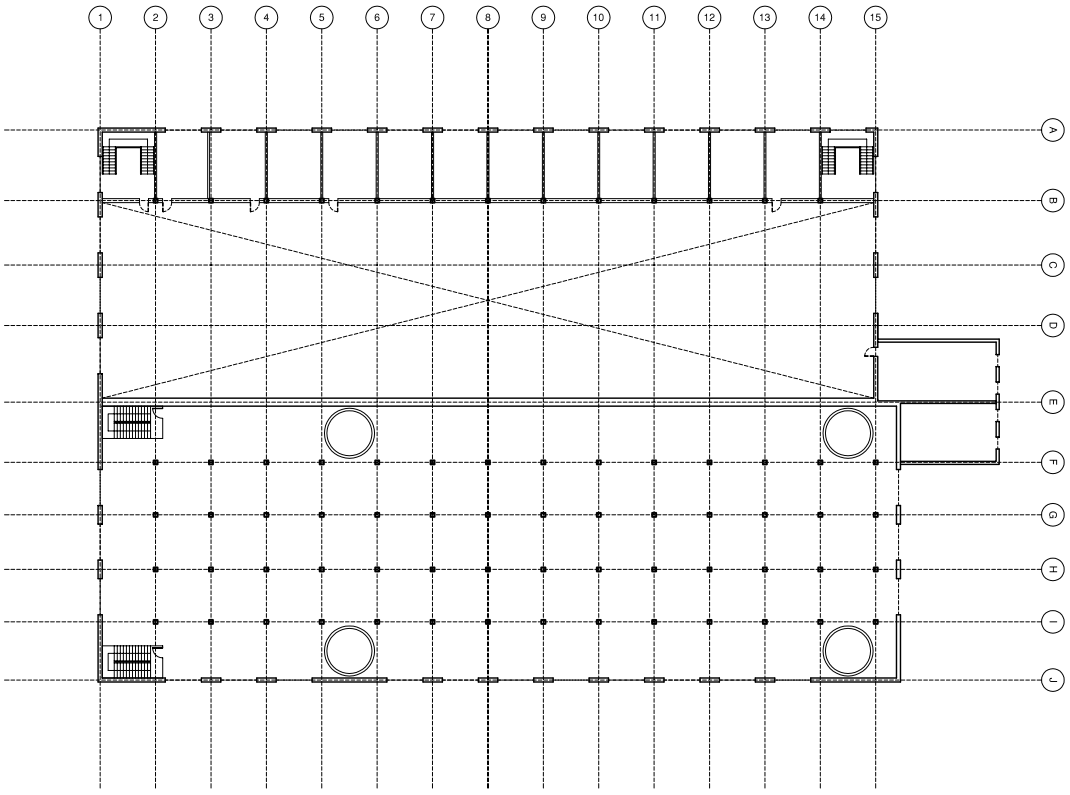
EXISTING SCHWARTZ CHEMICAL BUILDING DRAWINGS



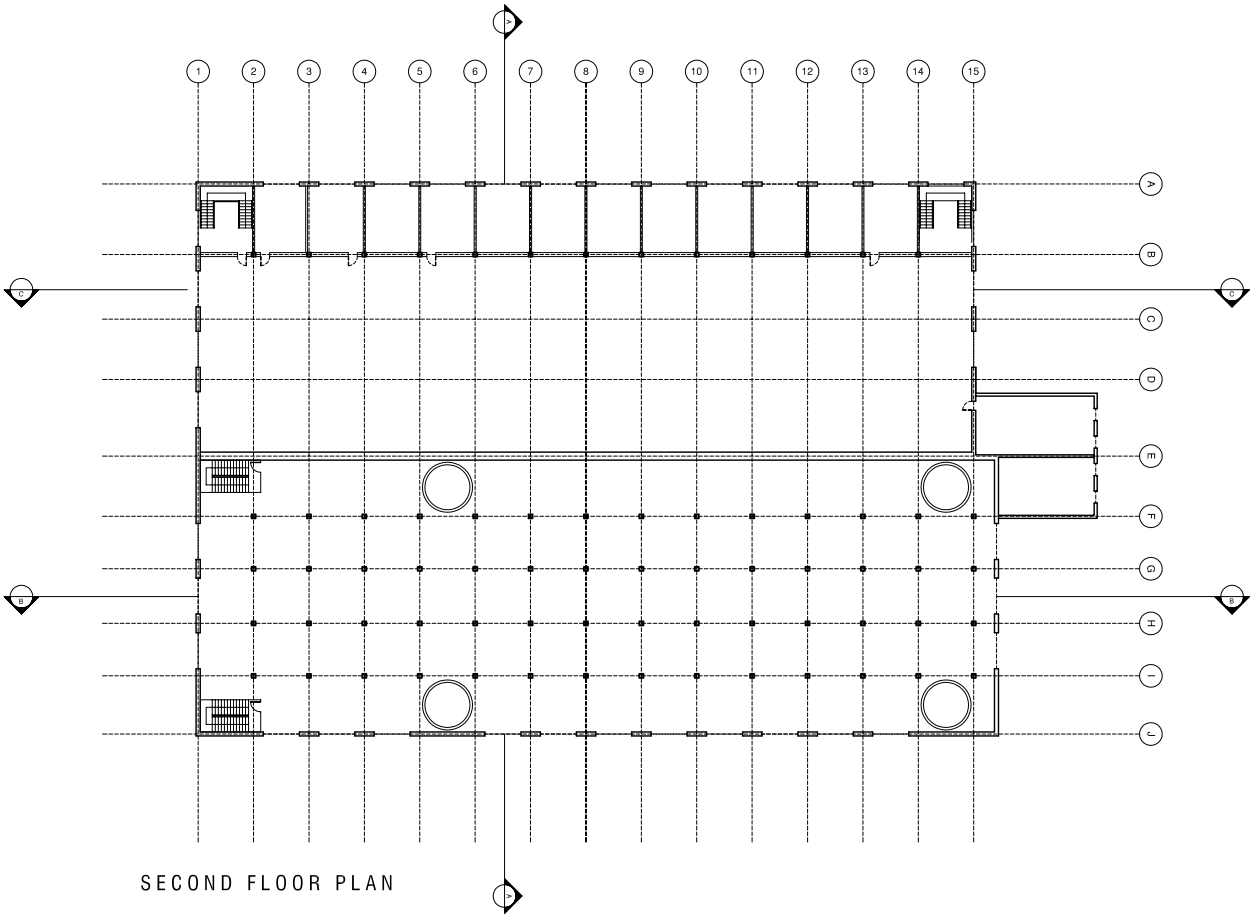
0 5m 10m 25m

APPENDIX E - EXISTING POWER STATION DRAWINGS | E.1

GROUND FLOOR PLAN | p175

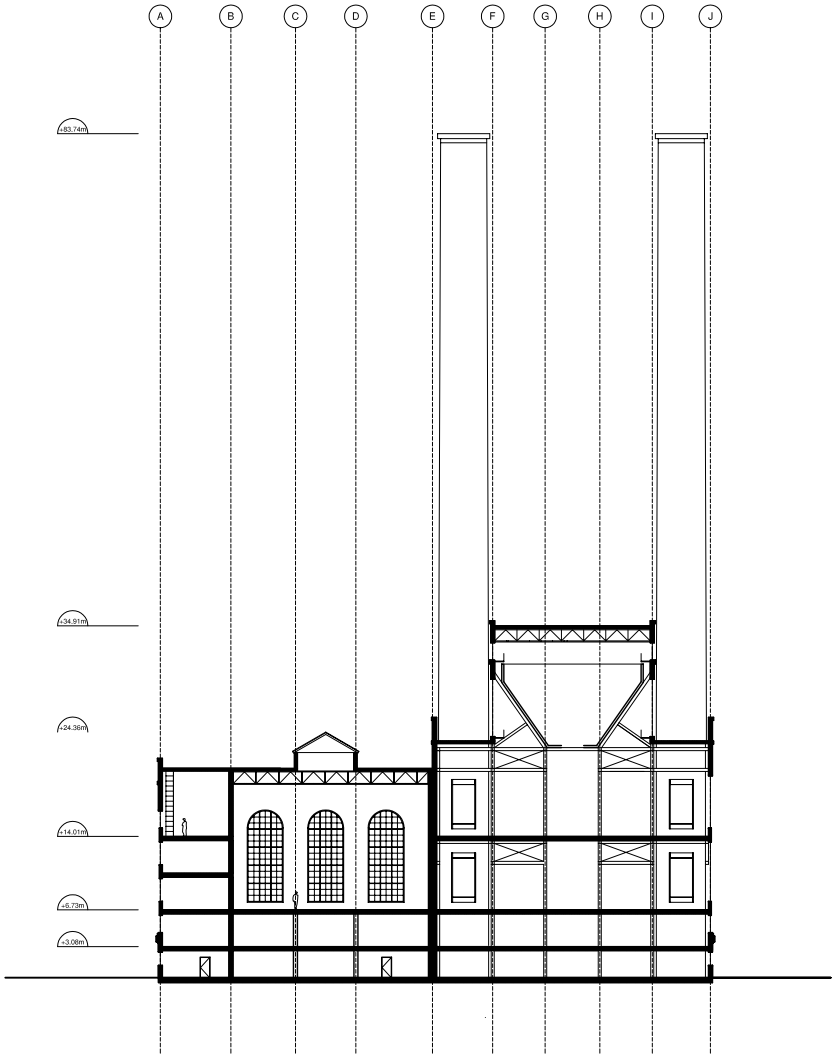


TYPICAL PLAN: FLOORS 3-5



SECOND FLOOR PLAN

0 5m 10m 25m



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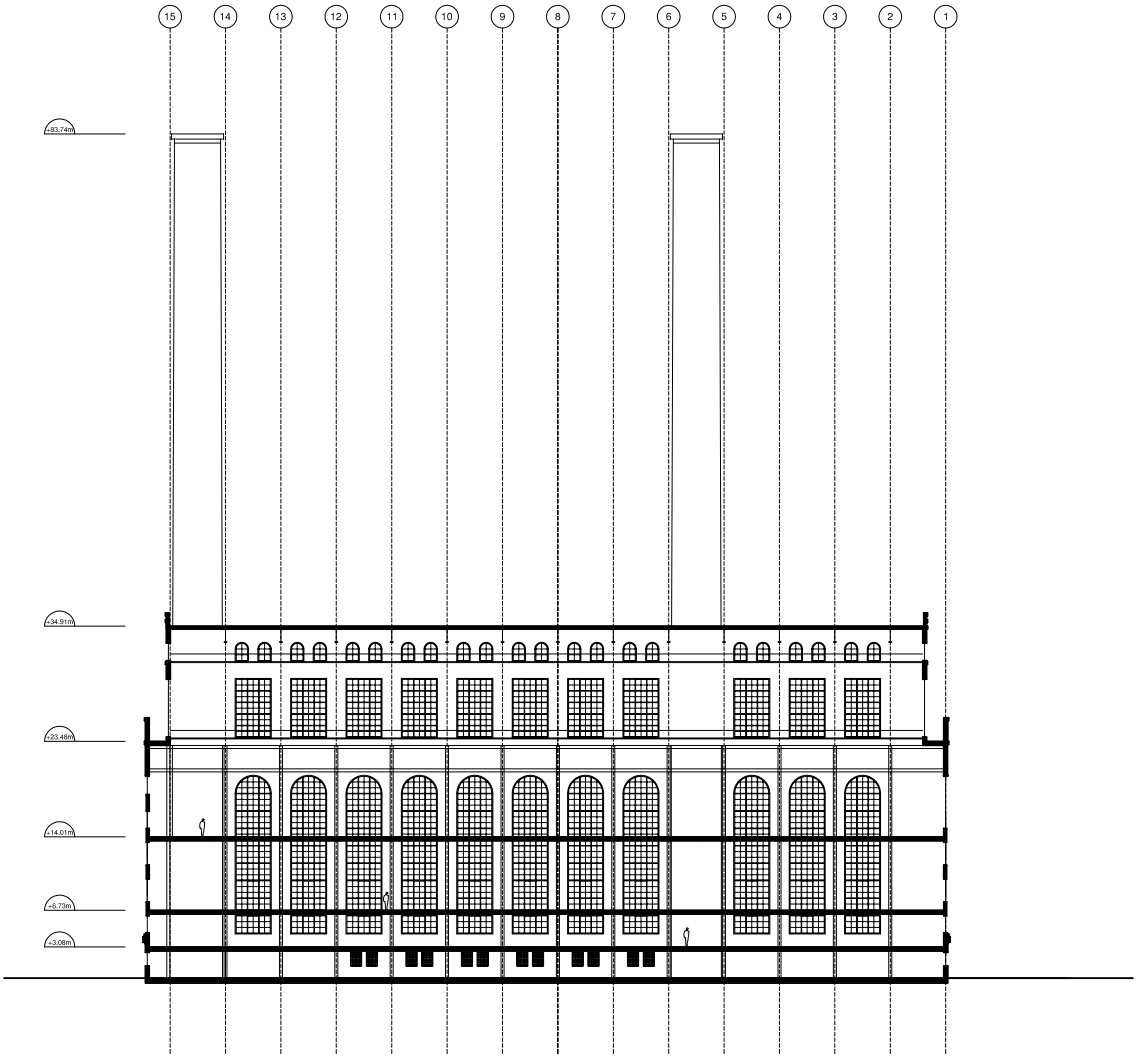
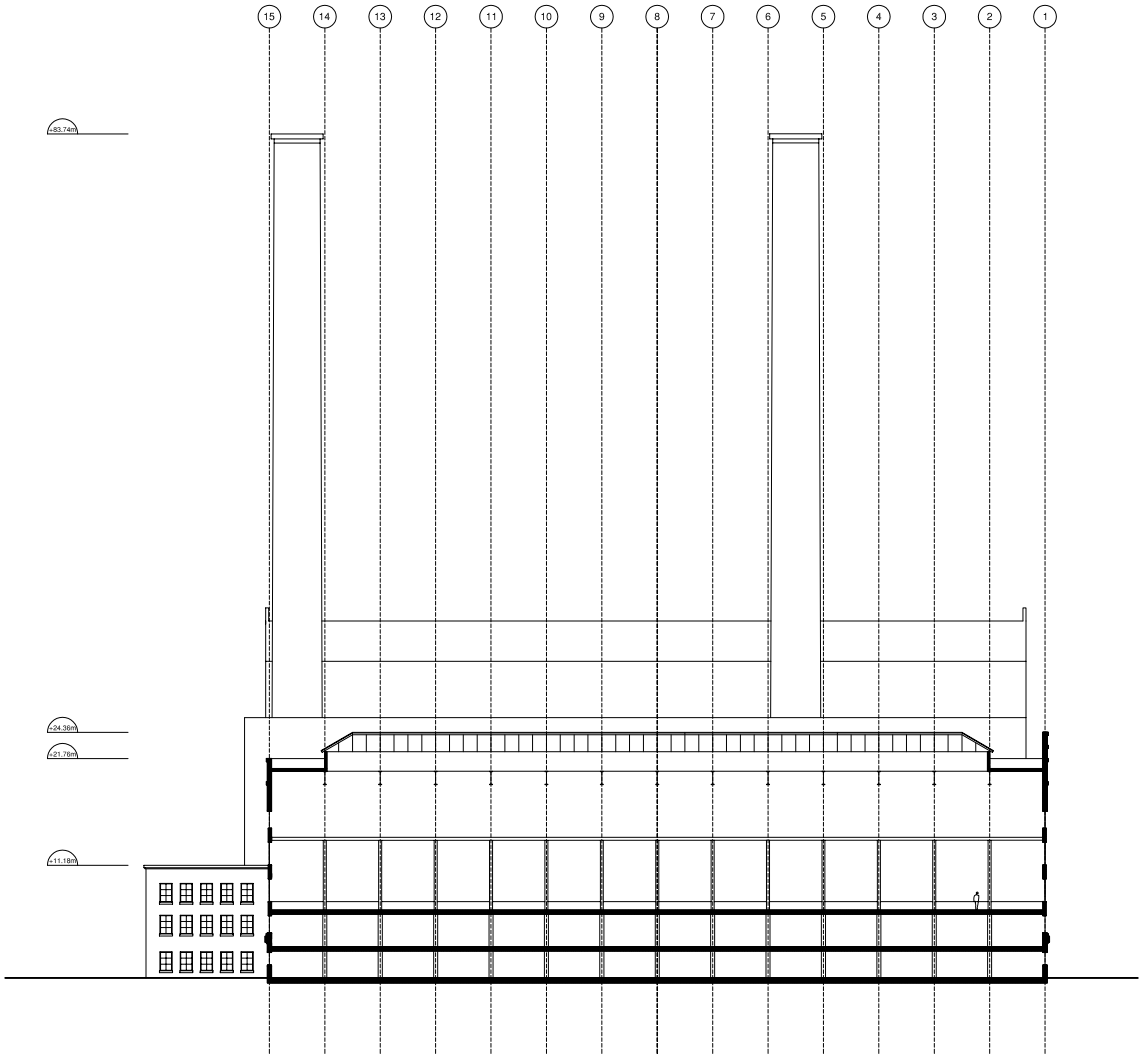


0 5m 10m 25m



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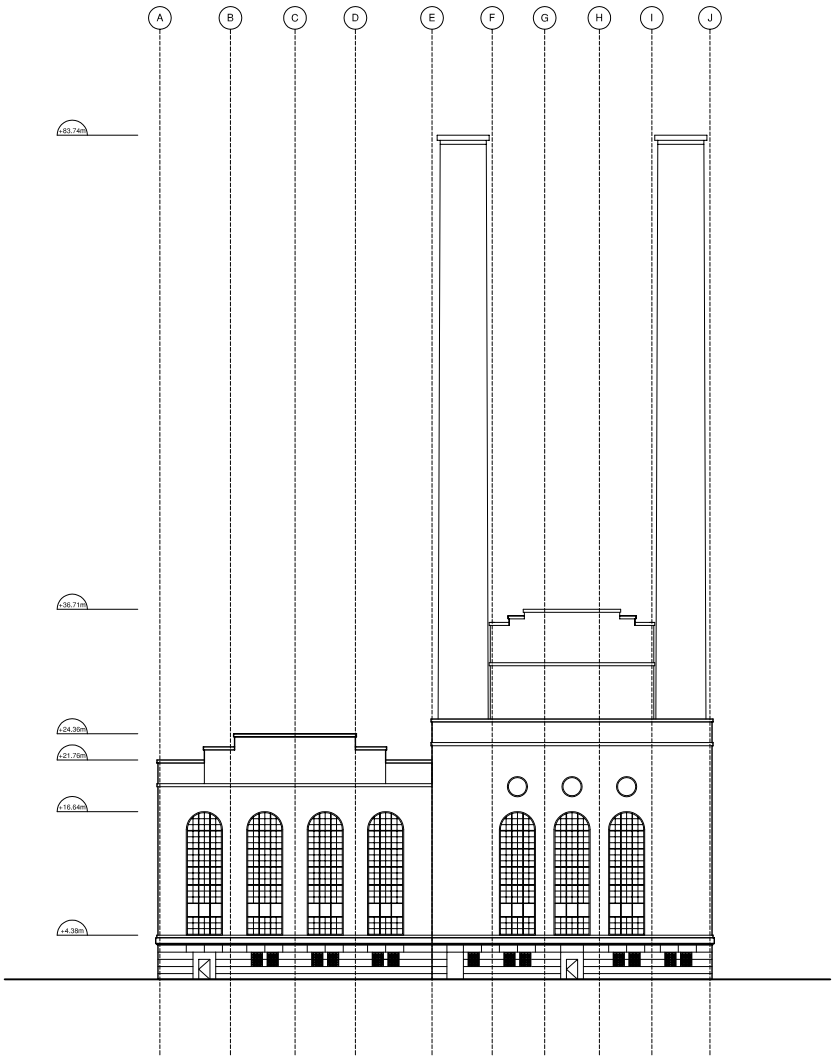

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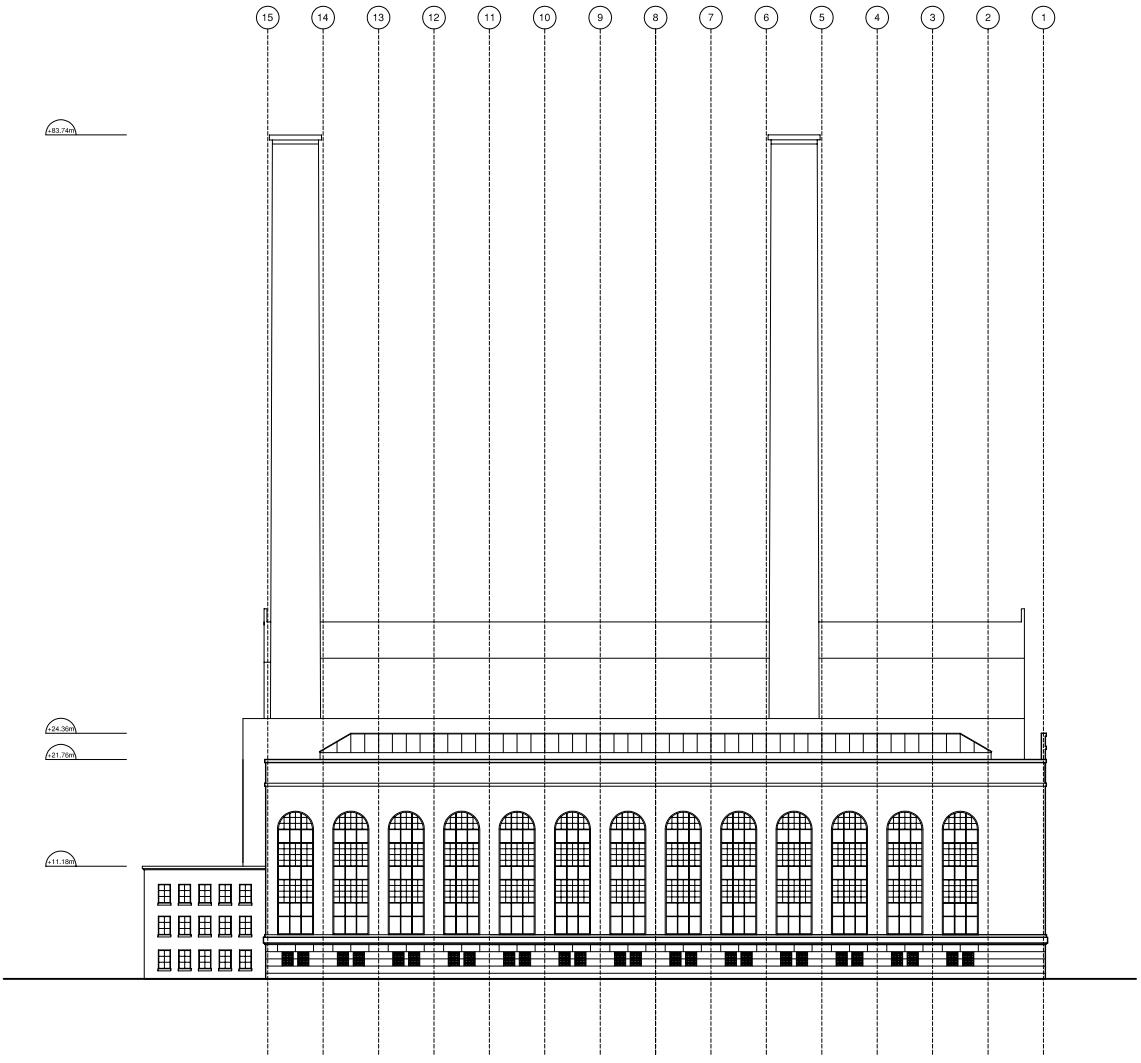
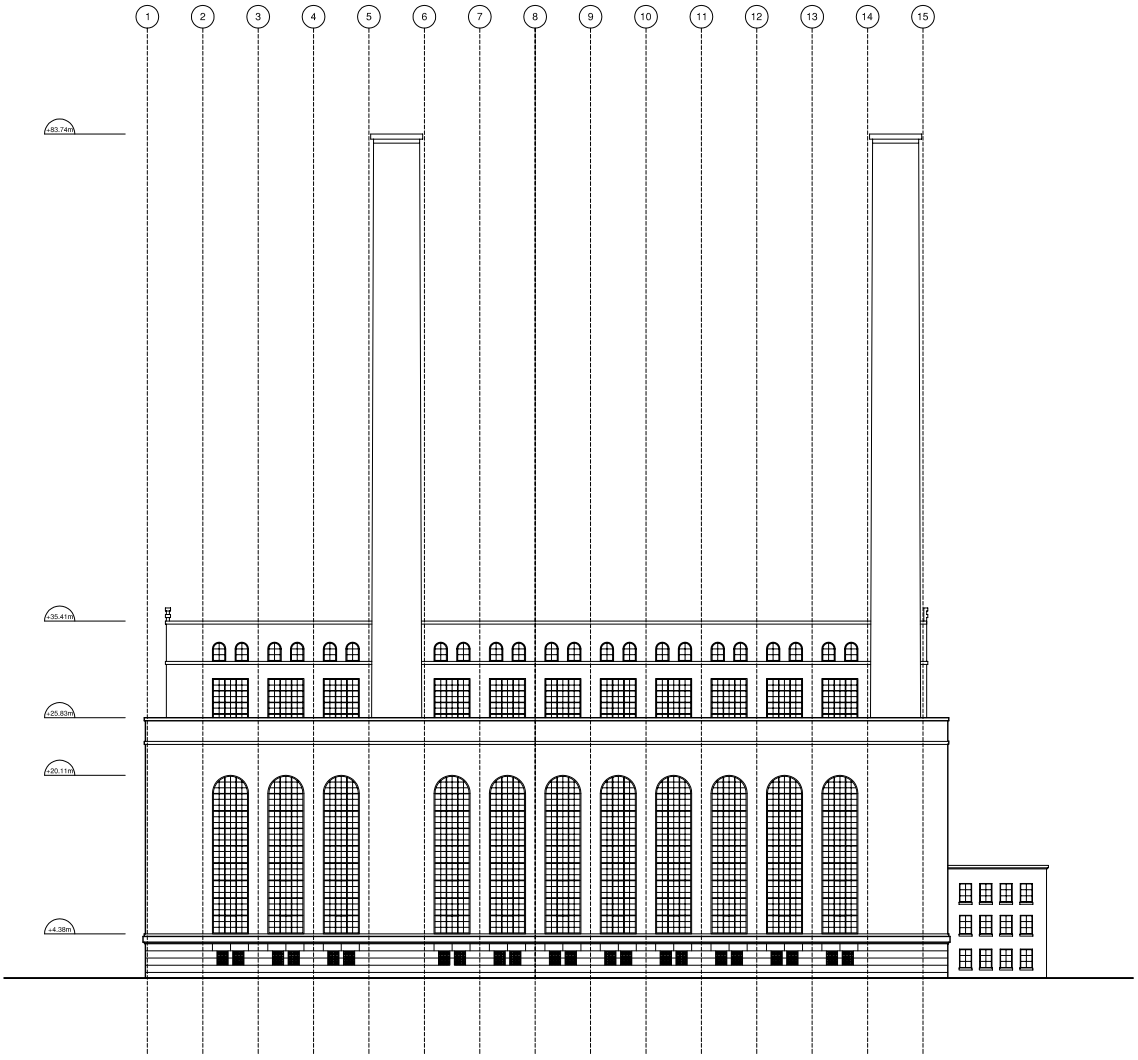


0 5m 10m 25m



0 5m 10m 25m

NOTES

1 Robins, Kevin. 'Prisoners of the City: Whatever Could a Postmodern City Be?', in E. Carter, E. Donald and J. Quires, (eds), Space & Place: Theories of Identity and Location. (Lawrence & Wishart: London, 1993), 303.

2,3 Norberg-Schulz, Christian. Genius Loci: Towards A Phenomenology of Architecture. (Rizzoli: New York, 1979), 5-6.

4 LCOR, Company Profile: http://www.lcor.com/profile.html 2004.

5 Frampton, Kenneth. 'Place-Form and Cultural Identity' in J. Thackara, (ed), Design After Modernism: Beyond the Object. (Thames and Hudson: 1988), 51.

6 Filler, Martin. 'Goodbye Columbus', The New Republic. (August 2000).

7 Mason, Randall. 'Knowing Place', CRiT Magazine. (Spring 2003), 18.

8 Sola-Morles, Ignasi de. Differences, Topographies of Contemporary Architecture. Cambridge, Massachusetts. The Mit Press. 1996.

9 Johnson, Philip.

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