Greenwich Block

Hudson Park Library Remodel and Micro Housing Proposal in New York City 66 Leroy St., New York, NY 10014

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Project Overview

Site History and Context

What is now the Hudson Park Library has served community members and nearby locals as a major public hub for meetings and assembly. The library now circulates most of their material while providing space for community meetings and classes and activities for younger individuals. Over the years, the library has become less and less utilized by the public inhabitants. Most of its users consists of senior citizens who are repeated visitors and children who are signed up for classes and group activities.

Sharing the block, adjacent to the library is the Tony Dapolito Community Center, Leroy Apartments, and Hudson Park. The library's historic entrance along 7th Avenue is no longer used, and the main entrance to the library lies on the north side of the building along Leroy Street. Because the main entrance sits on the smaller residential Leroy Street, many people overlook the library.

NYC Library and Microhousing

The Public Amenity

The Greenwich Block proposal allows the library to obtain a new identity while enriching Greenwich Village's public space and creating new amenities. The proposal for an open first floor cafe and restaurant helps to maximize the public amenities of the adjacent park and community center. The Greenwich Block Library is a three story proposal that will sit on the 2nd floor to the 4th floor. Above the library is a community gym and open terrace. Beyond that is six stories of micro-unit housing which will offer alternative living quarters as opposed to the Leroy Apartments just next door. By allowing more public access to the lower levels, Greenwich Block not only serves the inhabitants of living in the upper micro-units, but it also invites people in the nearby community and in the city to enjoy a day on the block.

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Concept

The basic approach is to increase public space in the lower levels of the building and allow for housing in the upper levels. However, a separation between the private housing space and the public levels below will add value to the micro-housing units which are only 200 square feet.

Increased privacy for the micro-housing residents while providing a variety of amenities and public space for shared use will create a comfortable community residents in the building and in the local community.



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Site Analysis The following information is included in this section:

Neighborhood Context Neighborhood Boundaries Land Use Map Bus Routes **Bike Routes** Nearby Amenities Site Context Current Site Use Project Adjacencies Buildable Area and Site Climate Data



Identifying Place Project Location Neighborhood Context

"The district is defined by its history of political activism, its unique architectural landscapes, active artistic community, and by the cultural and ethnic diversity of its populations," as stated on the New York City Community Board No. 2 website.

"This area features classic artists' lofts as well as new residential towers facing the Hudson River. The Whitney Museum of American Art, designed by Renzo Piano, has a new home in the West Village. Fans of architecture and reading alike can enjoy the Jefferson Market Branch of the New York Public Library. The charming atmosphere combined with the most choice restaurants and nightlife make the West Village one of the most popular neighborhoods in the city," as said by Brodsky property owners on their website.

The project site sits in neighborhood Greenwich Villagein the West Village area of the Manhattan. This area seems to share the city's culture for artistic deference with it's architectural culture and its many small boutiques and corner shops.

image: Julia Robbs (http://juliarobbs.com/) information: (http://www.nyc.gov/html/mancb2/html/district/district.shtml), (http://brodsky.com/rentals/west-village/62-leroy-street)

Manhattan Community District 2



District Boundaries Neighborhood Context

The project site is part of Manhattan Community District 2. The district's boundaries are the south side of 14th Street, the north side of Canal Street, the Hudson River and the west side of the Bowery/4th Avenue.

The following neighborhoods are within the district: Greenwich Village, Little Italy, SoHo, NoHo, Hudson Square, Chinatown, and the Gansevoort Market. The project site lies within Greenwich Village. The district area is also known as West Village.

"The district is defined by its history of political activism, its unique architectural landscapes, active artistic community, and by the cultural and ethnic diversity of its populations," as stated on the New York City Community Board No. 2 website.

"This area features classic artists' lofts as well as new residential towers facing the Hudson River. The Whitney Museum of American Art, designed by Renzo Piano, has a new home in the West Village. Fans of architecture and reading alike can enjoy the Jefferson Market Branch of the New York Public Library. The charming atmosphere combined with the most choice restaurants and nightlife make the West Village one of the most popular neighborhoods in the city," as said by Brodsky property owners on their website.

image: (http://www1.nyc.gov/site/planning/community/community-portal-4.page?cd=mn02) information: (http://www.nyc.gov/html/mancb2/html/district/district.shtml) Manhattan Community District 2 - Land Use PLANNING Open Space ——— Community District One & Two Family Commercial/Office MultiFamily Walkup Industrial/Manufacturing Parking Facilities 800 MultiFamily Elevator Vacant Land Transportation/Utility Source: MapPLUTO ™ V.16.2, BYTES of the Big Apple Mixed Commercial/Residential Public Facilities & Institutions All Others or No Data Created lanuary 2017 HUDSON RIVER River Park project site r - - -Pier 40 **MN03**

District Land Use

Neighborhood Context

1 600

The project site lies near the border between building types: north of the project site is predominantly a mix of residential and commercial dedicated buildings, office and commercial-only buildings to the south, a large portion of the district's industry to the west, and a focus of institutions to the east.

The project site shares its lot with James J. Walker Park, being one of the few parks available in this district. Nearby is also Washington Square Park, roughly 8 minutes away regardless if transportation method.

image: (http://www1.nyc.gov/site/planning/community/community-portal-4.page?cd=mn02)



Bus Routes Neighborhood Context

The city has a well developed bus network, as well. Within the immediate reach of the project site is the M20 line which reaches south [🌆 to Tribeca and circles around back north towards Central Park.

Also immediately accessible is the M21 line which travels between the Lower East Side of Manhattan and West Village.

source: (http://web.mta.info/nyct/maps/manbus.pdf)



M98 Washington Heights - East Midtown M100 Inwood - East Harlem M101 East Village - Harlem 2 Harlem - East Village M103 East Harlem - City Hall M104 West Harlem - Times Square 106 East Harlem - West Side West Side - East Harlem 162 Jackson Heights - Penn Station

anhattan Bus Routes

The Cloisters - Penn Station

Washington Heights - East Village

Harlem - East Village

M3 Fort George - East Village

GW Bridge - Midtown

Harlem - 14th Street

West Village - East Village

Battery Park City - Kips Bay

Harlem - Columbus Circle

Riverbank Park - West Village

SBS Chelsea Piers - East Side

SBS Waterside - Port Authority Term. Randall's/Wards Island - East Harlern

SBS LaGuardia Airport - West Side 🗙

Yorkville - Clinton SBS East Side - Javits Center

M42 United Nations - 42 St Pier M50 42 St Pier - East Side

M55 Midtown - South Ferry M57 East Side - West Side

166 East Side - Lincoln Center M72 East Side - West Side M79 Yorkville - West Side

86 SBS Yorkville - West Side M96 East Side - West Side

M12 Columbus Circle - Abingdon Square Lower E Side - Chelsea Piers Lower E Side - Abingdon Square East Harlem - South Ferry SBS East Harlem - South Ferry Lincoln Center - South Ferry Lower East Side - West Village Lower East Side - Battery Park City

M2

MA



Biking Culture Neighborhood Context

There is a large biking community in Manhattan and New York and the city has dedicated much of its development for creating bike paths and other biking amenities. There are several dedicated biking paths on streets near the project site and other connecting biking paths and biking trails. Bike shops are also scattered throughout the city and near the project site no more than 8 minutes by bike or by foot.



source: (http://www.nyc.gov/html/dot/downloads/pdf/bikemap-2016.pdf)



Nearby Amenities Neighborhood Context

Within a 5 minute radius of the project site, there are many options for dining, grocercy shopping, entertainment, recreation, and general shopping, but there are very little options in the immediate vicinity of the exiting library despite having the Hudson Park and the recreation center on the same block.

As far as transportation, there is access to the subway system within 5 minutes as well as access to the public buses.

source: (https://www.google.com/maps/)



Site Specifics Project Site

The project site is located on 66 Leroy Street where it is now Hudson Park Library. The project site opens it's northern facade to Leroy Street and partially to the east towards 7th Avenue South.

Just south of the project site is the Tony Dapolito Recreation Center, and 62 Leroy Street Apartments share a wall with the project site. On the tip of the block is a small bar called Little Branch, known as a hidden gem of the city. Other than buildings, the James J Walker Park lies to the west past the recreation center's public pool.

Most streets in this district are one ways to vehicular traffic, but there are many alternative transportation options which include bicycle, bus, and subway.

image: (https://www.openstreetmap.org/)



Hudson Park Library Project Site

The library was first constructed in 1906 as a result of lobbying from Greenwich Village Improvement Society as a response to the "scruffy image" of the behemian population. The area was originally associated with the Irish immigrant population trying to find their way into the middle class of American society. The library served as both a place for books as well as a social center.

The main entrance of the library is found on Leroy Street (current view) but there is an additional entrance on 7th Avenue South that leads to the basement level of the building.

image: (https://greenwichvillagehistory.wordpress.com/2012/10/29/lets-talk-real-estate/)







Project Adjacencies Project Site

(Top) Entrance to the Little Branch where Leroy Street can be seen on the right, 7th Avenue South on the left. The building itself appears to be mixed use with extended first floor and an additional two floors for housing. (Middle) 62 Leroy Apartments which is 7 stories tall. Hudson Park Library's East Entrance can be seen on the left of the apartment complex. (Bottom) Tony Dapolito Recreation Center which can seen from the southeast corner of the block.

images: (https://tidepooler.com/2009/06/05/johns-perfect-day-in-new-yorks-west-village/john_ny_little_ branch/), (http://brodsky.com/rentals/west-village/62-leroy-street), (https://www.google.com/ maps/)





Project Adjacencies Project Site

The James J. Walker Park sits west of the project site and is open to public use. The park introduces much needed green space to the district's open space and recreation.

images: (nycgovparks.org)



Site Plan and Buildable Area

The project site shares walls with two different buildings and has potentially 5 different facades: 2 facades to the street (north and east), a facade to the west facing public park space and outdoor space of the recreation center, and 2 partial facades on walls that are also shared with respective building neighbors.

source: (https://www.openstreetmap.org/)





Sun Shading

According to Climate Consultant and using local weather data, June, July, August, and parts of May and Setember experience the most heat gain and require shading to maintain comfortable levels. All other parts of the year maintain a relatively cold temperature due buildings casting shadows from low sun angles and the lack of sunlight exposure during the winter period.

The lack of sunlight during times of rain and snowfall also attributes to New York's low temperatures, especially during winter.

source: (Climate Consultant)



source: (Climate Consultant)



source: (Climate Consultant)

Average high in °F: Average low in °F: Av. precipitation in inch: Days with precipitation:

Hours of sunshine:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
39	42	50	60	71	79	85	83	76	65	54	44
26	29	35	44	55	64	70	69	61	50	41	32
3.9	2.95	4.06	3.94	4.45	3.5	4.53	4.13	3.98	3.39	3.82	3.58
11	10	12	11	11	10	11	10	8	8	9	10
154	171	213	237	268	289	302	271	235	213	169	155

Annual Temperatures and Precipitation

New York's summer hours sit roughly around the average comfort zone, but during all other times of the year, the temperature is below the comfort zone. This is partly due rainfall and other precipitation that takes place for roughly 10 days every month. During the winter solstice (December), hours of sunshine is half as much as that of the summer solstice (June).

source: (http://www.usclimatedata.com/climate/new-york/united-states/3202)



Summer Winds Climate

During the hottest times of the year, prevailing winds tend to come from the south and southwest.



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Winter Winds Climate

During the coldest times of the year, prevailing winds tend to come from the northwest.







source: (Climate Consultant)

Program Analysis and Research The following information is included in this section:

Preliminary Program Proposal Implemented Program and Square Footages Initial Program Studies

Proposed Program Program Analysis

i i ogi ann i inacjolo	NASF	QTY	TSF
Library Entrance entry area reception area/reference desk public cloakroom/lockers public restrooms	100 100 100	1 1 1 1	300 100 100 100 n/a
Collections books music film reference & periodicals other media special collection(s)	4,000 200 200 200 200 200 200	1 1 1 1 1	5,000 4,000 200 200 200 200 200
Active Spaces carrel - one person carrel - two person shared work & study area children's story space children's restrooms study room - 4 person study room - 6 person classrooms/meeting rooms computer lab/classroom meeting/conference room(s) copy/printing/scanning area computer stations	30 50 1250 150 100 100 150 300 600 450 200 35	15 4 1 2 2 3 1 2 1 24	6,190 450 200 1,250 150 200 200 300 900 600 900 200 840
Library Staff Areas circulation desk secure material return depositor office-library manager circulation workroom staff breakroom staff restroom (unisex) supply storage	200 ry 50 120 200 200 80 200	1 1 1 1 1 1	1,050 200 50 120 200 200 80 200
	Total NASF for Libr	ary:	12,540

	NASF	QTY	TSF
Ground Level entry vestibule mailbox area security reception desk commercial space optional egress stair elevator custodial room trash room mechanical room	100 100 100 tbd 250 100 100 100 200	2 1 1 2 1 1 1 1	1,400 200 100 100 tbd 500 100 100 100 200
Micro-Housing entry area micro-housing unit exercise areas or rooms meeting rooms ADA restroom	100 200 1500 will vary 80	1 15 1 1	4,680 100 3000 1500 tbd 80
Restaurant entry area waiting area kitchen/food prep dining area private dining room restroom - women restroom - men office custodial	100 200 400 1500 200 200 200 120 100	1 1 1 1 1 1 1 1	3,020 100 200 400 1500 200 200 200 120 100

Total NASF: 9100

Grand Total:		21,640
Allowable Building	g Area:	7,510
Floors Required:	3	22530
	4	30040

Actual Program and Square Footages		Floor 2-4 Library		Floor 5 Gym							
				Gross Square Footage			20740 sqft	Gross Square Footage			7800 sqft
				Non-Assignable Spaces	sqft	qty	total	Non-Assignable Spaces	sqft	qty	total
				Elevator	75	9	675	Elevator	75	2	150
				Egress Stairs	315	3	945	Egress Stairs	315	2	315
				Restrooms Staff Restroom	35 50	6	210 50	Restrooms Lobby	75 315	2	150 315
				Storage	95	3	285	Storage	95		95
Floor 1 Restaurant and Ca	afe			Custodial Storage	175		175	Mech.	75		75
Gross Square Footage			7115 sqft	Lobby	500		500			total	1100
Gloss Squale i Oblage			TID SQIL		tot	al	2840			lolal	1100
	sqft	qty	total			.ort	2010	Net Assignable Spaces			
Non-Assignable Spaces			4= 0	Net Assignable Spaces				Classroom A	270	2	540
	75	2	150	Main Reading Area	1630	2	1630	Classroom B	355		355
Egress Stairs Restrooms	315 75	2	315 150	Secondary Reading Area	500 700	3 1	1500 700	Classroom C Machinery/Workout Space	585 435(h	585 4350
North Lobby	500	2	500	Tertiary Reading Area Periodicals	250	1	250	Machinery/ Workout Space	4550)	4550
Storage	250		250	Stacks	1065	3	3195			total	5830
South Vestibule	130		130	Additional Stacks	700		700			efficiency	74%
			4.405	Audio/Video Records	700		700			(1970 sqft d	of tare)
		total	1495	Audio/Video Room	285	C	285	Floor 7-12 Micro Housing			
Net Assignable Spaces				Computer Lab Circulation Desk	285 375	2	570 375				F000 G
Cafe	1175		1175	Staff Break Room	275		275	Gross Square Footage			5000 sqft
Restaurant Seating	1875		1875	Director's Office	150		150		sqft	qty per floor	total
Retaurant Private Seating	275	2	550	Additional Office	130		130	Non-Assignable Spaces	• 4. •	40) poi 11001	
Foot Prep	130	2	260	Small Study Area	125	3	375	Elevator	75	2	150
			2000	Open Study Area	640 185	2	1280 185	Egress Stairs	315		315
		total efficiency	3960 56%	Small Meeting Room Med. Meeting Room	275		275	Custodial Storage	50		50
		(3155 sqft)		Meeting Room	400	2	800	Lobby	250		250
				-			40075			total	765
					tot		13375				
						iciency 365 sqft	64% of tare)	Net Assignable Spaces			
					(7.	505 Sqrt	or tare,	Unit A 20x10	200	6	1200
								Unit B 14x14	196	5	980
										total	2180
										efficiency	44%
										(2820 sqft (of tare)
									Tota	LGSF (6 floors)	30000
										I NASF	13080
										lEfficiency	44%
										l Tare.	16920
							PROGRAM ANALYSIS	AND RESEARCH Richard Pham / Arcl	n 004 Pla	an III - Spring 20	1/

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general ground floor layout 1090 library restaurant 7th Avenue housing units circulation and lobby space

Early Program Studies Program Anaylsis

The initial idea was to allow the buildable site to split in half and thus allowing the building to split the program in two sides. However, the entry level became difficult to manage and undesirable.

To maintain the community-enhanced design as proposed earlier in the document, the split became facilitated veritically through the building as opposed to spliting the building down in half.

Precedent Studies The following information is included in this section:

Pixelated by ODA Gifu Media Cosmos by Toyo Ito

Pixelated by ODA

Long Island, NY
Precedent Study

A high-end resdential complex in Long Island City using protruding boxes to give unique views as well as well as create a sense of identity. The separation between the ground plane and the upper levels due to the protrusion gives a strong sense of luxury and privacy for residents living in the building.

The building's portruding boxes develops an architectural language that gives identity to the individual inhabitants of those living in the building while unifying the building as a whole. For a mixed-use building, this is important in helping to identify the building as a place while still maintaining a level of individuality for each of the programs and each person who lives in the building.



Gifu Media Cosmos by Toyo Ito

Gifu, Japan Precedent Study

The library located in Gifu, Japan features an open floor plan with overhanging illuminants that help define space. The open floor plan allows for a massive floor plan and together creates an extreme sense of pubic open space within the library. Inspiration for both library organization as well as public space planning.

In addition, the media cosmos is a major inspiration and precedent in the design of natural lighting and using it to provide adequate lighting levels for reading spaces while also helping to define spaces of interest.



Mid-Review Presentation The following information is included in this section:

Building Plans Building Section Northern Wall Section Micro Unit Plans Snapshots of Building Development









Unit A 200 sqft











Final Design Work The following information is included in this section:

Various Renderings of Building Building Floor Plans Building Section Elevation Drawings Interior View of Building





East Entrance View - 7th Avenue

West Bird-Eye's View





North Entrance View - Leroy Street









Richard Pham 604 Masters Architectural Design IV





North Elevation



West Elevation 1/24" = 1'-0"





South Elevation





Technical Information The following information is included in this section:

Exterior Wall Section and Reflected Elevation Interior Wall Section and Micro-Unit Floor Plan Structural System Diagrams HVAC System Diagrams Codes and Regulations







Corrugated Concrete Floor — Structural I-Beam Joist — 2x4 Ceiling Mount — 2x4 Wall Mount — 2x6 Alternating Frame — 2x8 Wall Frame — Batt Insulation -Gypsum Board -Acoustic Sealant – Plywood Base –

Micro Housing Plans 1/4" = 1'-0"













Steel Framing Diagram Northwest View

Interior Wall Section 1/2" = 1'-0"





Framing Plan Diagram

0'	15'	35'			75'
<u>.</u>		~~ · · ·	•	 	 <i>i</i>







Egress Stairs 1/8" = 1'-0"

Elevator Cab and Restroom 1/4" = 1'-0"

The public restrooms located in the library and public areas are currently too small to meet the current ADA and ICC/ANSI accessibility standards. The restroom sizing should be re-evaluated to create a more comfortable space for wheelchair users as according to standard sizing.





East Entrance Vestibule 1/8" = 1'-0"



The first floor restroom and entrance vestibules have more than enough adequate space to meet accessibility standards. The designed dimensions are larger than the minimum requirements demonstrated in the ADA and ICC/ANSI standards.

1st Floor Restroom 1/8" = 1'-0"

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Photo Credits Cover: Mark Clampet, OEM Page 10: Jonathan Gaska, Queens CB 14 Pages 12: Spencer T, Tucker Pages 12-13: Mark Clampet, DEM Page 14: FDNY

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Natural Disasters Climate

The New York City Government prepares its citizens with an emergency preparedness guide that warns against the following natural disasters:

- 1. Severe weather (thunderstorms, flash floods, tornadoes)
- 2. Coastal storms and hurricanes
- 3. Earthguakes

Other considerations by the goverment include:

- 1. Extreme heat
- 2. Utility disruptions
- 3. Building collapse and explosions
- 4. Fire
- 5. Carbon monoxide
- 6. Hazardous materials, chemical spills, and radiation leaks
- 7. Outbreak of disease
- 8. Terrorism

source: (http://www.nyc.gov/html/oem/downloads/pdf/household_guide.pdf)



1200 1800 FEET

NOTE: Where no dimensions for zoning district boundaries appear on the zoning maps, such dimensions are determined in Article VII, Chapter 6 (Location of District Boundaries) of the Zoning Resolution.







(212) 720-3291.

APPENDIX C.

APPENDIX D.

MAP KEY

8b

12a

12b

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C2-6 Zone Parcel and Zoning

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EDEM?

According to the New York City Planning Commission, the project site lies in zone C2-6, which is a less restrictive commercial zoning. Noted for this zone is are the following:

- 1. Building cannot penetrate sky exposure plane, beginning 85' above street
- 2. In mixed-use, residential must be above commercial
- 3. Parts of building above 120' must be set back (10' facing wide, 15' facing narrow street)4. 170' maximum height

C1 & C2 Commercial Districts														
		C1-6A C2-6A		C2-7	C1-7A	C2-7A	c2-7X	C1-8	C2-8	C1-8A	C2-8A	C1-8X	c1-9	C1-9A
Commercial FAR	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Residential FAR	0.87-3.441	4.03	0.94-6.022	0.99-7.52	6.021	7.521	9.0	0.99-7.52	10.03	7.52 ³	10.0 ³	9.0	10.0 ³	10.0 ^s
Residential District Equivalent	R7	R7A	R8	R9	R8A	R9A	R9X	R9	R10	R9A	R10A	R9X	R10	R10A

4.0 FAR on wide streets outside the Manhattan Core under Quality Housing Program
 7.2 FAR on wide streets outside the Manhattan Core under Quality Housing Program

³ Increase in FAR with Inclusionary Housing Program bonus

In addition, the maximum commercial floor area ratio (FAR) allowed is 2.0 and the maximum residential FAR is 3.44 (4.0 along wide streets).

images: (https://www1.nyc.gov/site/planning/zoning/about-zoning.page)

Appendix The following information is included in this section:

Various Views of Mid-Review Model Various Views of Final Review Site Model Final Presentation Board























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APPENDIX











