

# THE OLD ESSEX COUNTY JAIL

NEWARK, NEW JERSEY

COLUMBIA UNIVERSITY  
GRADUATE SCHOOL OF ARCHITECTURE, PLANNING & PRESERVATION  
HISTORIC PRESERVATION STUDIO II  
SPRING 2018

# ACKNOWLEDGEMENTS

This report is the product of a Spring 2018 Historic Preservation Studio II at Columbia University Graduate School of Architecture, Planning, and Preservation (GSAPP).

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Many Columbia staff, faculty, and collaborators provided important guidance and feedback during the studio process and reviews. Their invaluable input and support are greatly appreciated.

This report was produced by Madeline Berry.

Cover photo: Hospital Wing, Madeline Berry.



Hospital Wing  
Photo by Madeline Berry

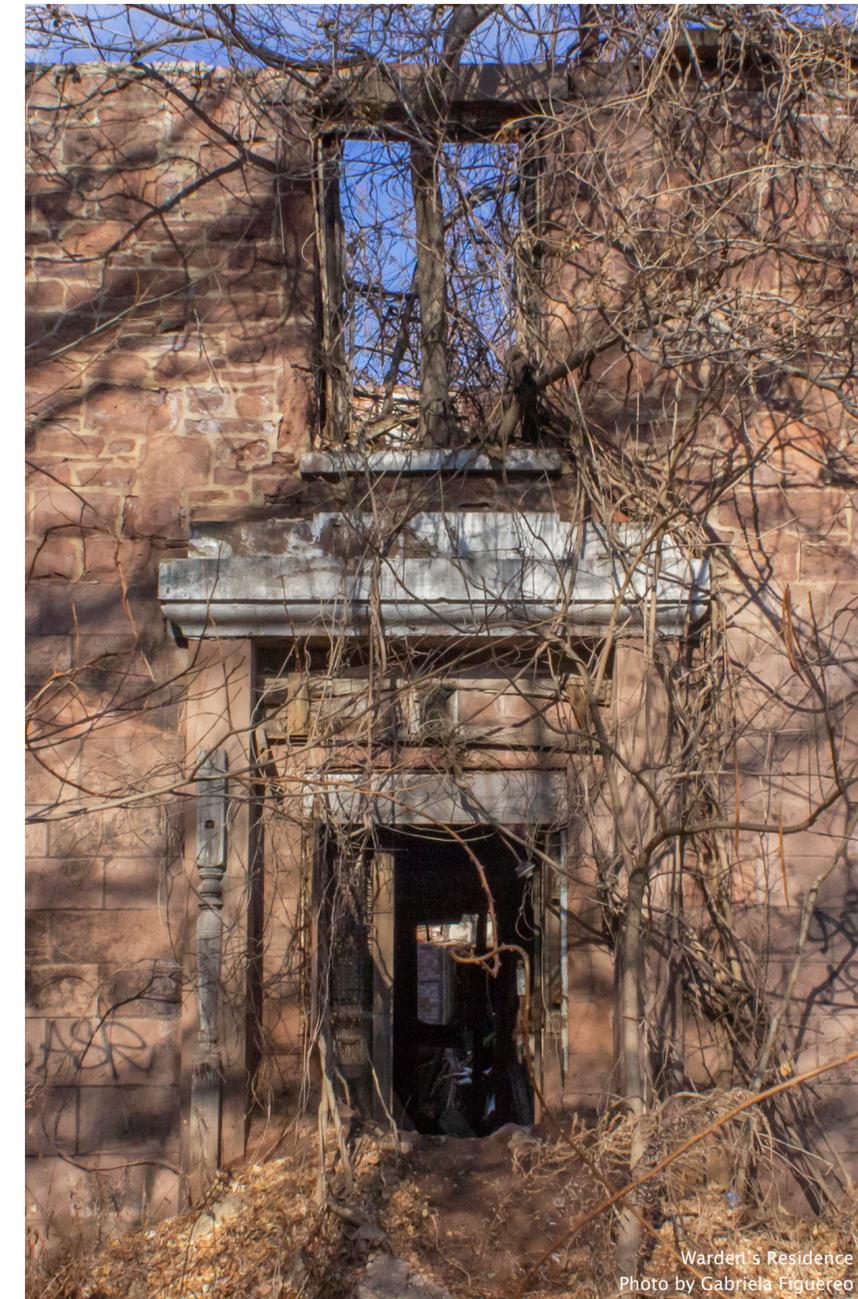


West Wing  
Photo by Rob Kesack



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# INTRODUCTION

Taught in two parallel sections, this studio engaged the site of the Old Essex County Jail in Newark, New Jersey. The original structure was built to designs by the notable Philadelphia architect John Haviland in 1837, with additions in 1890, 1895, and 1905. The site was decommissioned as a jail in 1971, but was used for storage and office space until its complete abandonment in the 1990s. The jail was listed on the New Jersey State and National Registers of Historic Places in 1991. However, a devastating fire in 2001 destroyed a number of buildings and set the site on a path of accelerated deterioration due to open roofs and collapsed walls. Today the site, owned by the City of Newark, lies within the University Heights Science Park and has been slated for UHSP development.

Demolition of the jail for development has thus far been blocked by the NJ SHPO on grounds that the site is still undocumented and preservation avenues have not yet been considered. This joint studio has been the first important step towards documentation and preservation. The first third of the semester focused on documentation and research. Detailed measurements, photos, 3D scanning of the interior, and photogrammetry of the exterior were produced in order to create plans and elevations, as original drawings could not be found. Mechanical systems, building materials, construction technology, prisoner life, jail operations, the historic urban context, as well as the politics and philosophies of imprisonment were extensively researched. After the research phase, the two studios split into two different lenses to view the jail's possible future.

Belmont Freeman's section focused on Architectural Design and looked at options for new programming and building on the site. Students developed detailed proposals for new construction for institutional reuse like a technology center or a charter school hub, and also explored housing options.

Bryony Roberts's section focused on Interpretive Design and focused on developing proposals for editing and transforming the structure in order to communicate its architectural and social history. Students chose to develop projects centered on incarceration history, materials and technology, and community hubs.



East Wing  
Photo by Madeline Berry



Perimeter Wall  
Photo by Rob Kesack



Southwest Courtyard  
HABS 1967, Library of Congress

# SIGNIFICANCE

# SIGNIFICANCE

Old Essex County Jail is significant for many reasons including architectural, material, and social. The Jail is one of the only remaining small-scale jails designed by John Haviland. Haviland was a prolific jail, prison, and penitentiary designer who worked mainly in Pennsylvania, New Jersey, and Rhode Island. His best known work is the Eastern State Penitentiary in Philadelphia. The Old Essex County Jail was designed by Haviland later in his career, and was built around the same time that his Tombs Prison in Manhattan was nearing completion. His contributions to prison design are unparalleled and this project is a testament to the scalability of his ideas. Although Haviland designed many jails, particularly in the northeastern United States, very few remain and those that do are in poor condition.

The materials and technology of the Jail are also significant for their ingenuity and what they can tell us about social norms at the time. Early adoption of technology was common in public buildings like libraries and prisons. A prime example of this is the glass catwalks and self-supporting modular steel cells visible in the East Wing. These are the same technology you can observe in the book stacks of many older libraries. The jail also boasts an early version of a radiant heating pipe system, which lines the walls of the West Wing. The West Wing masonry cells still possess the cell locking mechanism, complete with levers.

Beyond the physical aspects of the jail and its association with John Haviland, there is also a long and troubled social component to the site's significance. Much like the early years of Newark's development (and the jail's parallel timeline) the social and racial tensions that Newark faced in the late 1960s also played out within the jail walls. The 1967 Riots in the streets of Newark—in which police and citizens fought openly for days—also happened in the jail. Overcrowding was a major issue that plagued the already unsanitary conditions of the jail. Prisoners rioted and escaped shortly after the citywide protests.

The Old Essex County Jail site represents both a testament to architectural and material achievements, and a difficult time in Newark's history that is often overlooked, forgotten, or purposefully ignored. And yet, the community, including some of the formerly incarcerated, have stated the importance of preserving such a contested site in order to allow a dialogue to happen about the past.



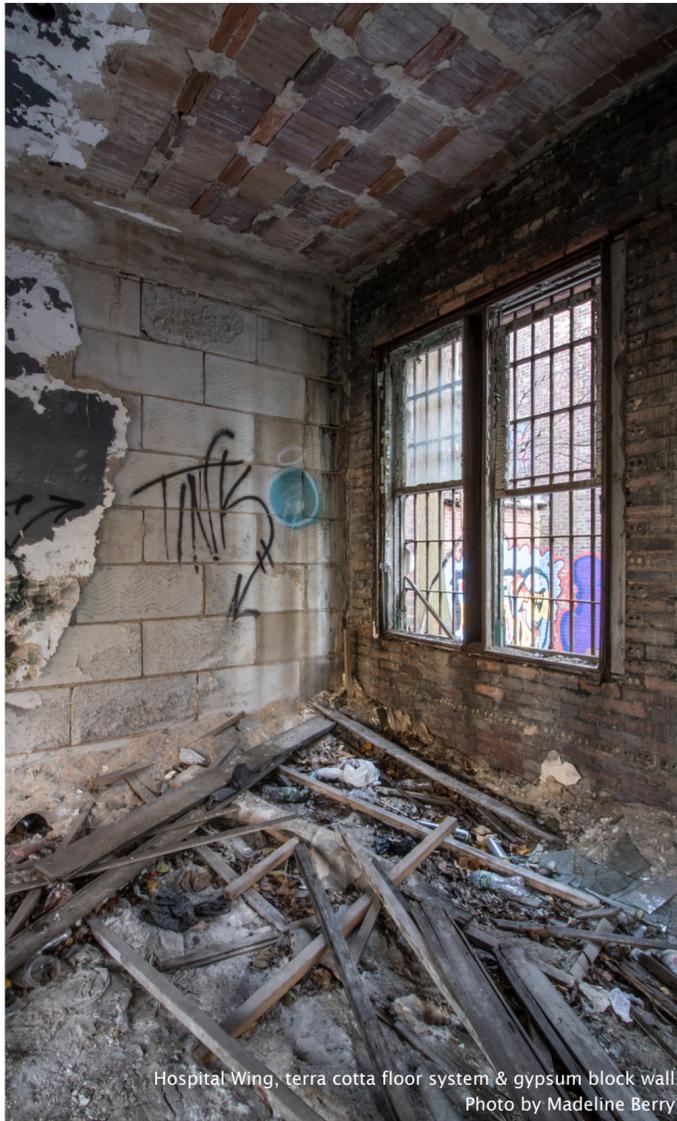
West Wing  
Photo by Rob Kesack



Eastern State Penitentiary  
Photo by Gabriela Figueroa



John Haviland  
Courtesy of the MET



Hospital Wing, terra cotta floor system & gypsum block wall  
Photo by Madeline Berry



Newark Riots 1967  
Courtesy Associated Press



Newark Riots 1967  
Photo by Don Hogan Charles

ARCHITECTURAL

MATERIAL

SOCIAL



Exterior from Newark Street  
Photo by Rob Kesack  
Pictured: Zemin Zhang & Qianye Yu

## SITE CONTEXT

# ACCESS

- ESSEX COUNTY JAIL
- LIGHT RAIL STATIONS
- LIGHT RAIL LINES
- BUS STOPS
- BUS ROUTES



SOURCES: OGIS NJ, NJOIT, NJGIN, ESRI.

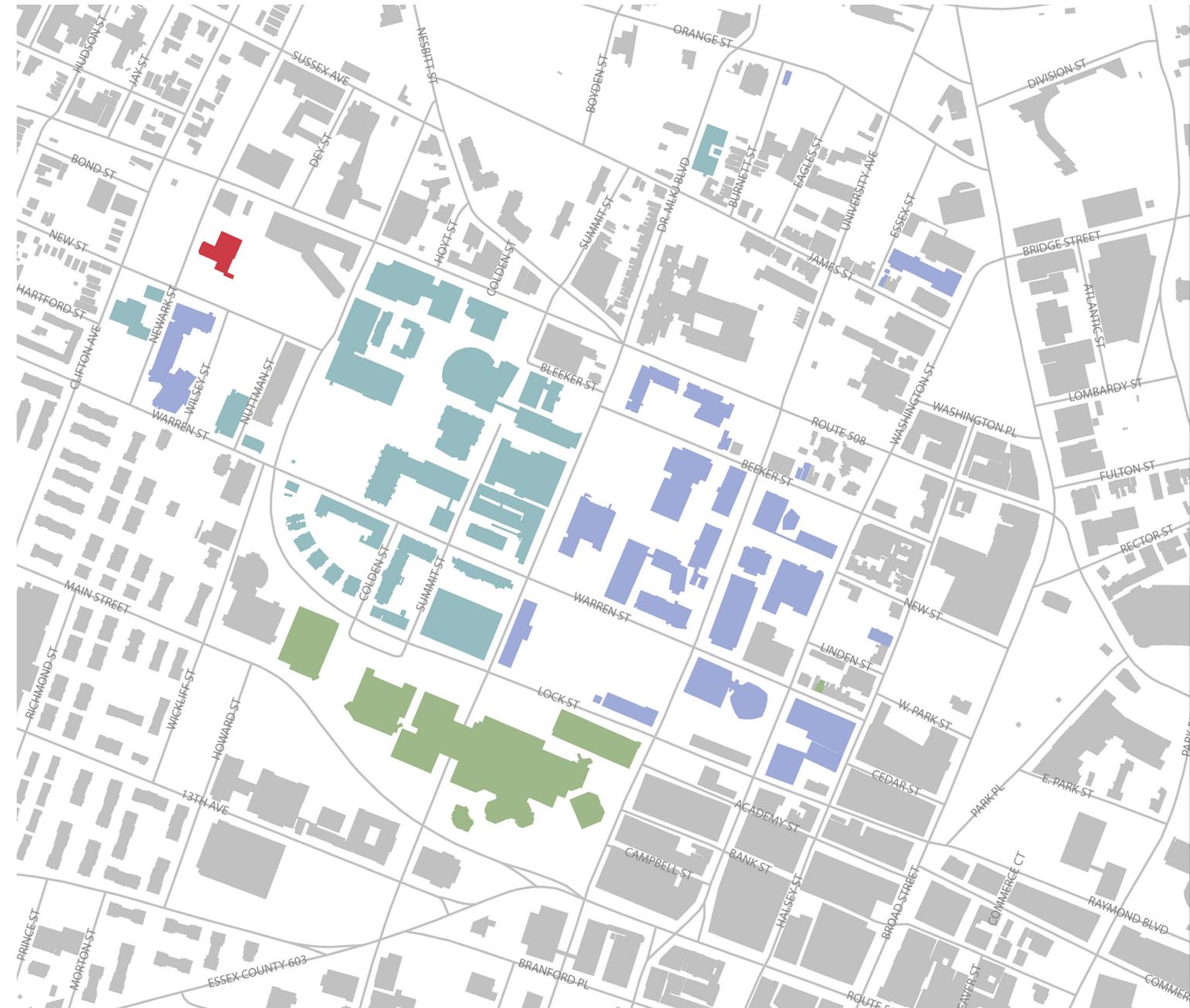


# THE JAIL & NEIGHBORING EDUCATIONAL INSTITUTIONS

- ESSEX COUNTY JAIL
- ESSEX COUNTY COLLEGE
- NJIT
- RUTGERS



SOURCES: OGIS NJ, NJOIT, NJGIN, ESRI.

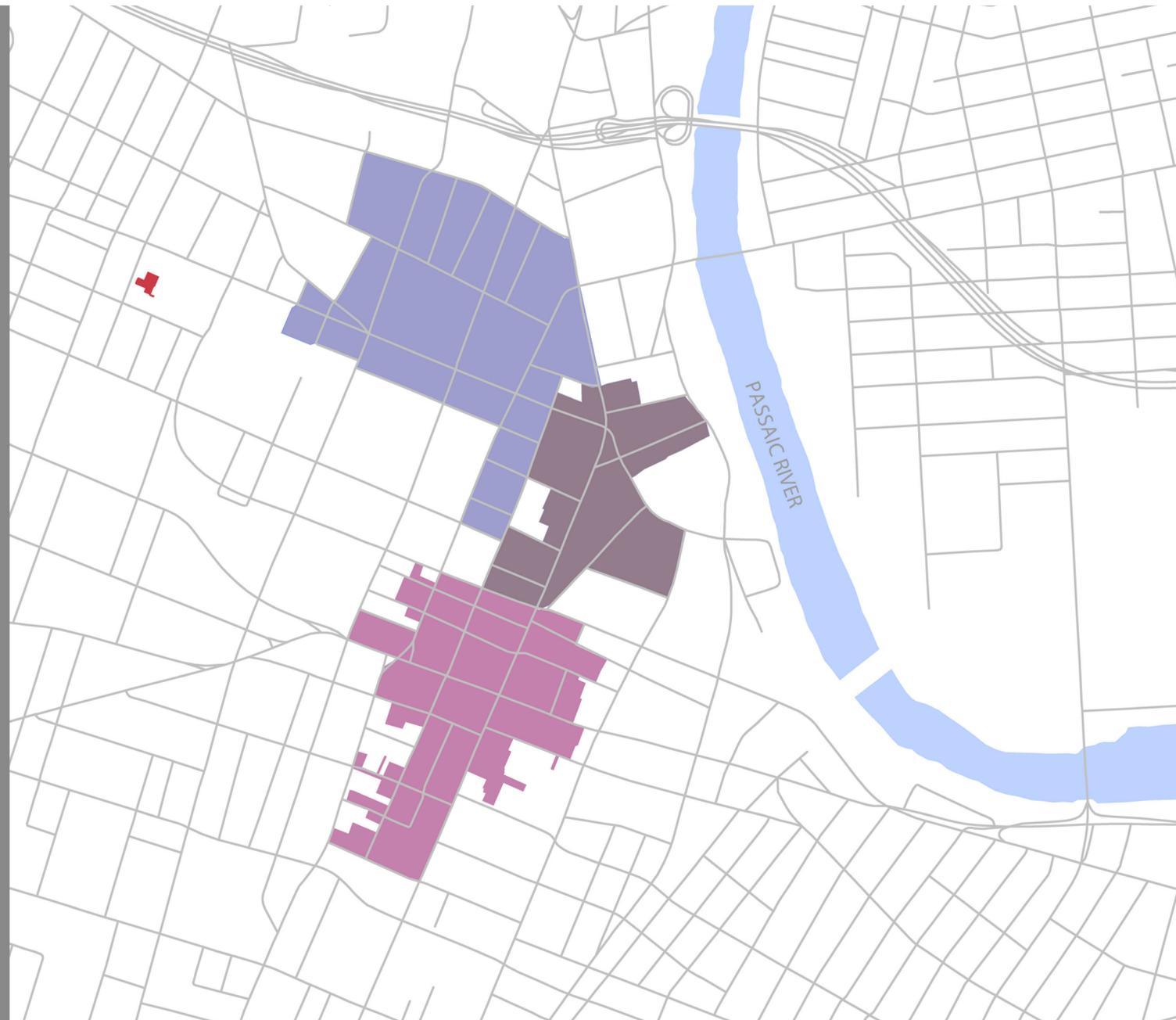


# NEARBY HISTORIC DISTRICTS

- Essex County Jail
- Four Corners
- James Street Commons
- Military Park Commons



SOURCES: OGIS NJ, NJOIT, NJGIN, ESRI.

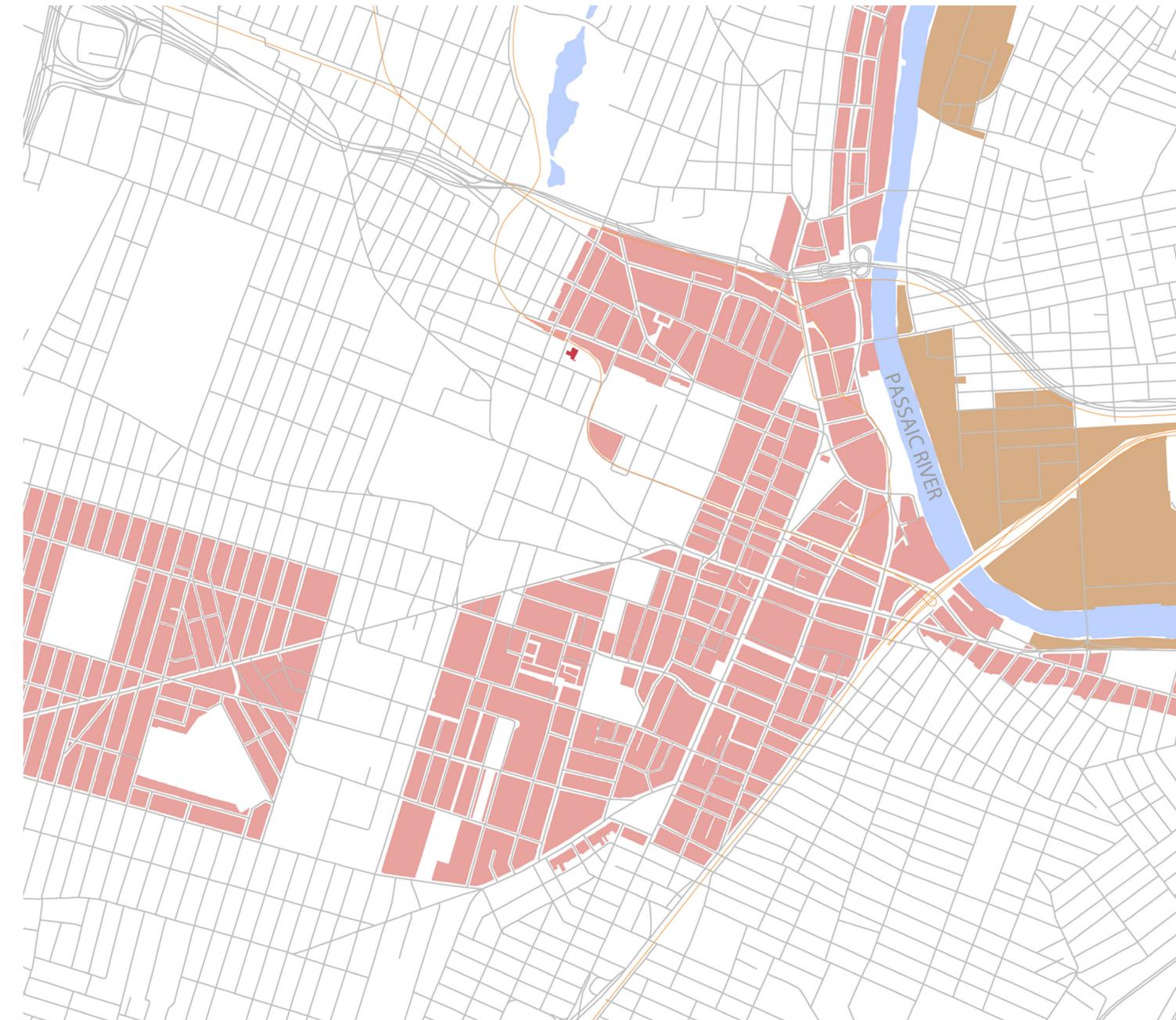


# REDEVELOPMENT AREAS

- Essex County Jail
- Train Lines
- Redevelopment Zones
- Current Brownfield Redevelopment



SOURCES: OGIS NJ, NJOIT, NJGIN, ESRI.



# HISTORIC URBAN CONTEXT

The Old Essex County Jail is located in Newark, NJ, in what is now called the University Heights Science Park district. The history of the jail, in large part, parallels the history and development of the City of Newark itself. Land for what would become the City of Newark was first purchased in 1666 by a Puritan colony from Connecticut. A second purchase of land was made in 1677, after the population of the area had grown beyond farming capacity. The first four settlers built houses at what is now the intersection of Broad Street and Market Street, also known as “Four Corners.” The area was officially incorporated as a township in 1693.

Due to Newark’s propitious location between the major cities of Philadelphia and New York City, the township began to expand rapidly. Newark readily accommodated multiple major transportation routes connecting the entire eastern seaboard, and in doing so, the town expanded into a city. The canal systems and railroads were an important driver in the development of the built environment. Today there are remnants of the canal lock systems and railroad tracks. The city’s light rail runs through the old canal bed and curves along the jail’s boundary.

Newark was officially incorporated as a city in 1836, and continued to expand in step with the industrialization sweeping the east coast. The Old Essex County Jail and Courthouse were among the first civic buildings to be built upon the incorporation of the City. As industrialization continued, so did the growth of Newark. By 1890, the population of the city had nearly tripled that of 1836. In parallel, the Jail required additions throughout the 1890s to accommodate the City’s growing population. It wasn’t until the era of “White Flight” in the 1940s that the population of Newark would stop growing. Following the trends of the City, the Jail closed in 1970 when the City was shrinking in population and demographics were changing. The jail was by then seen as outdated and out of alignment with prison norms at the time.

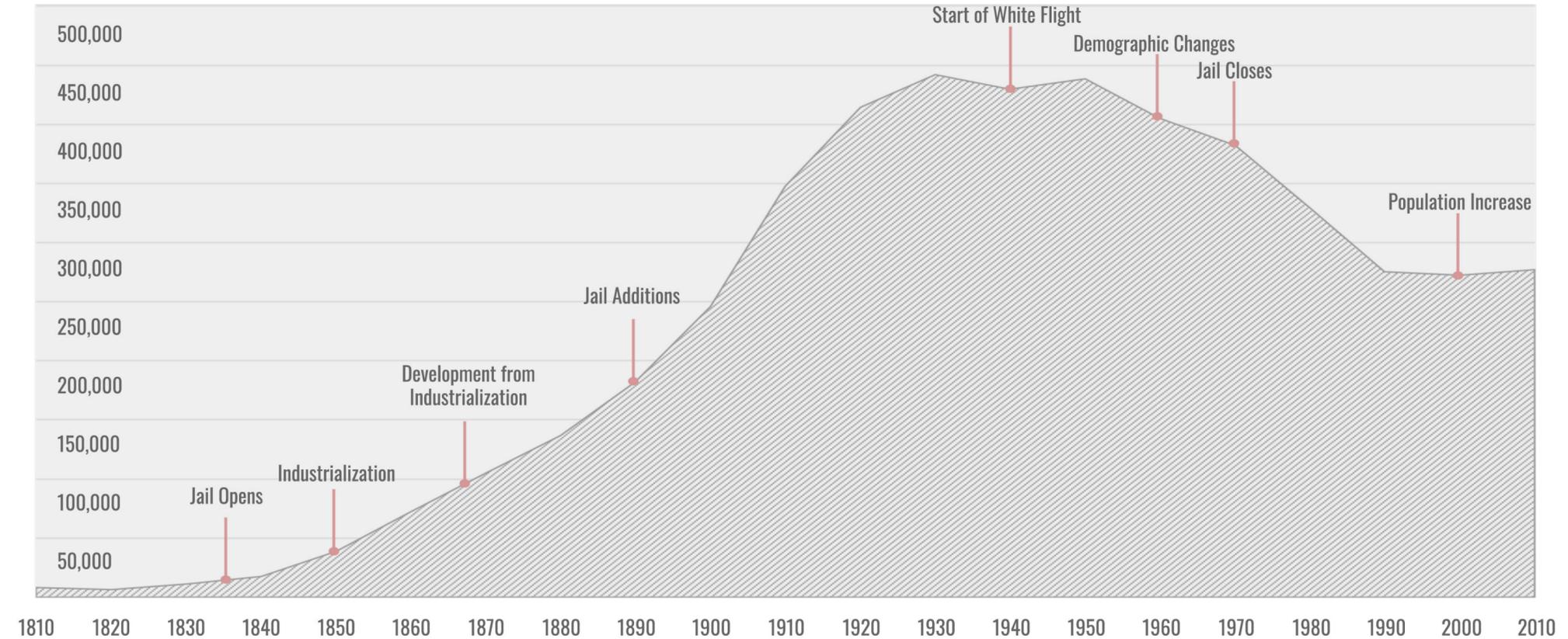
The Jail site is in what was once a manufacturing and industrial area of the city. When it first opened in 1837, it’s surroundings were leather manufacturers and tanneries for the most part, creating a noxious environment. The proximity of the Jail to such poor environmental quality is not unique to Newark, but was common practice all over the world. Over the next few decades the area stayed mostly industrial, with construction of a few residential blocks on the other side of the Canal. Because the area was home to such a wide variety of uses, there is not one style or typology of architecture that is common or unifying. The Jail sat at the cusp of many different neighborhoods, all with varying styles of architecture, something that is still true today.



View from New Street  
HABS 1967, Library of Congress



Warden's Residence  
HABS 1967, Library of Congress



NEWARK POPULATION IN RELATION TO THE ESSEX COUNTY JAIL  
1810 - 2010

Excerpts of Statistics on Gender, Age, Race, Nationality, Average Daily Count, and Average Daily Term for Prisoners at Essex County Jail, Newark, New Jersey, 1875-1960

	1874-5	1890-91	1900-01	1909-10	1917-18	1920	1922	1927	1930	1935	1940	1943	1947	1955	1960
<b>Total</b>	2,436	3,510	3,708	3,657	3,464	2,940	3,494	4,868	7,173	4,559	4,655	3,085	4,548	5,637	7,069
<b>Male</b>	2,152	3,026	3,137	3,172	3,026	2,609	3,082	4,394	6,296	4,034	4,273	2,710	3,938	5,218	6,555
<b>Female</b>	284	484	571	485	438	331	412	474	877	525	382	375	603	419	514
<b>8-15 yrs</b>	115	63	70	150	0	0	0	0	0	0	0	0	80	1	0
<b>15-20 yrs</b>	341	371	431	183	336	329	301	370	748	308	316	962	743	496	802
<b>20-30 yrs</b>	721	1,177	1,360	1,297	1,233	1,323	1,383	1,894	2,557	1,611	1,442	962	1,477	1,926	2,251
<b>30-40 yrs</b>	594	979	956	873	904	777	974	1,345	2,026	1,444	1,520	868	1,015	1,571	2,041
<b>40-50 yrs</b>	422	615	340	597	548	335	512	730	1,109	764	850	579	741	903	1,150
<b>50-60 yrs</b>	191	321	243	256	320	123	234	383	493	321	375	250	354	543	590
<b>60-70 yrs</b>	47	163	90	84	105	36	69	124	158	92	136	83	103	168	205
<b>70-80 yrs</b>	4	30	18	19	18	17	21	22	77	15	12	26	28	29	30
<b>80-90 yrs</b>	1	2	0	2	0	0	0	0	5	4	4	2	0	0	0
<b>90-100 yrs</b>	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>100-110 yrs</b>	0	1	0	0	0	0	0	0	0	0	N/A	N/A	0	0	0
<b>Colored</b>	99	288	328	502	439	408	587	1,501	3,258	2,012	1,875	1,486	N/A	3,332	N/A
<b>Austrian</b>	0	22	157	157	121	63	56	94	81	33	N/A	7	N/A	6	N/A
<b>English</b>	121	175	142	77	89	47	42	37	51	21	N/A	6	N/A	3	N/A
<b>German</b>	291	343	211	149	148	62	64	35	68	46	N/A	12	N/A	7	N/A
<b>Irish</b>	746	761	392	246	113	44	79	106	143	62	N/A	50	N/A	16	N/A
<b>Italian</b>	14	95	180	373	351	317	336	241	274	167	N/A	41	N/A	15	N/A
<b>Polish</b>	0	36	0	91	47	84	81	103	141	85	N/A	33	N/A	14	N/A
<b>Rumanian</b>	0	0	0	4	8	11	3	3	6	1	N/A	1	N/A	0	N/A
<b>Russian</b>	0	28	140	182	242	163	165	110	124	51	N/A	22	N/A	6	N/A
<b>Scottish</b>	40	63	33	58	72	47	24	43	44	27	N/A	22	N/A	12	N/A
<b>U.S.*</b>	1,053	1,818	2,039	2,190	2,044	1,892	2,429	3,915	6,006	3,962	N/A	2,839	N/A	0	N/A
<b>Avg Days Term</b>	N/A	11	19	19	21	21	19	20	18	17	16	17	19	21	22
<b>Avg Daily #</b>	N/A	138	188	188	199	171	189	274	328	220	209	146	234	325	432

Drawn from Selected Annual Reports of the Essex County Board of Chosen Freeholders Proceedings, 1874-1960

Created by Zakalak Associates

\* We presume this to mean native-born white Americans

# JAIL OPERATIONS

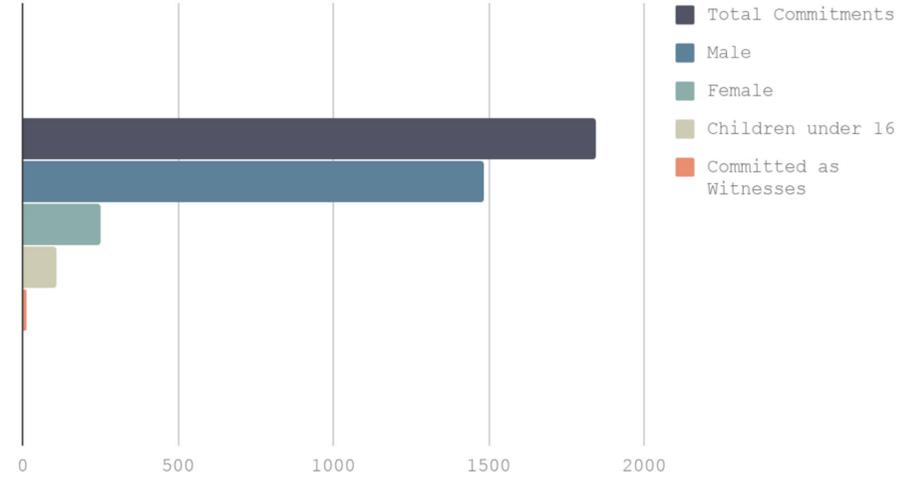
Old Essex County Jail functioned as both a prison and jail when it opened in 1837. Prisons are generally operated by the state or federal level, and are generally for long-term, more serious crimes. Jails are generally run by local law enforcement and are for short term sentences or those awaiting trial.

In the early days at Essex County, prisoners being held for all severities of crime were confined together: assault, robbery, murder, debt, drunkenness, and others. Women, children, men, and witnesses were all kept in the same close quarters. A key theme of this early period was undifferentiation. The only buildings at this time were the East Wing, Warden's Residence, and later the West Wing.

The Women's Wing was introduced in the early 20th century, followed by other facilities like the kitchen, garage, and hospital wing. The jail was plagued by increasing problems with overcrowding and unrest. There were numerous attempted jail breaks. In 1968, nearly 200 inmates rioted within the jail for nearly two hours. The warden revealed to the New York Times that the situation likely arose from overcrowding. Nearly 500 inmates were being kept in facilities meant for only 375.

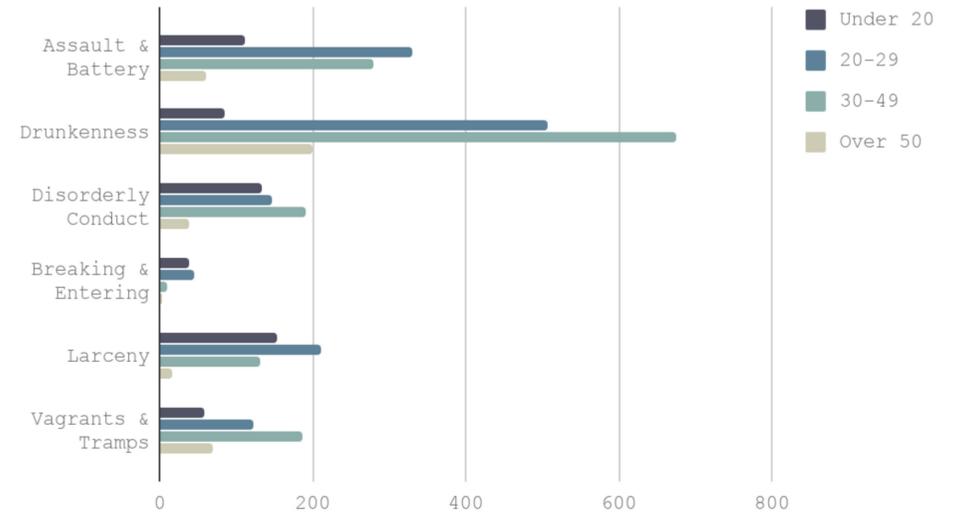
Statistics from 1875 to 1960 show a clear jump in the number of incarcerated persons from 2,436 in 1874-75 to more than double in 1960, when there were 7,069 inmates. In general, adolescent prisoners were no longer kept at the jail after 1910, even though a juvenile reformatory had been built at Jamesburg in 1867. Children were likely kept in the Women's Wing after its completion in the 1890s. This corresponds to changes in the perception of youth crime and juvenile corrections. There is a noticeable jump in number of prisoners who are people of color. In 1874, there were fewer than 100 people of color in the jail. However, by 1955, this figure is well over 3,000.

## 1882 Prisoner Demographics



Fifth Annual Report, Bureau of Statistics of Labor & Industries, 1882.

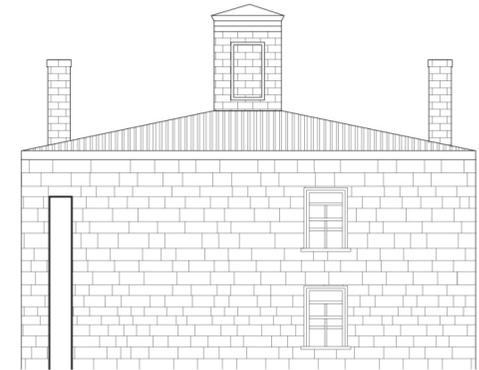
## 1882 New Jersey Crimes by Age



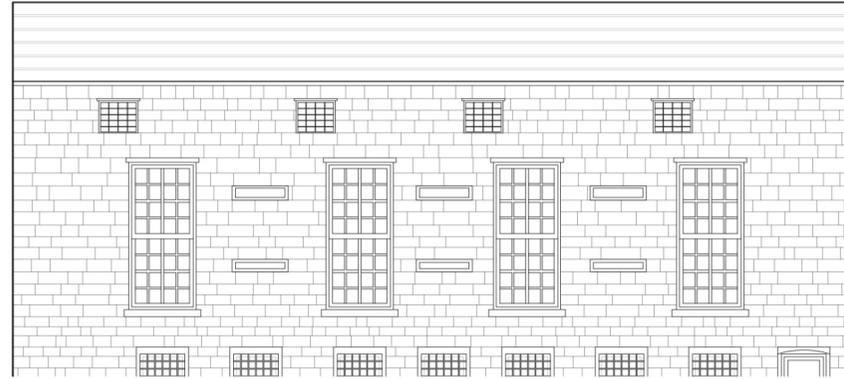
Fifth Annual Report, Bureau of Statistics of Labor & Industries, 1882.

# BUILDING MATERIALS

1837 EAST ELEVATION



Warden's Residence - brownstone exterior walls



East Wing - masonry cells, brownstone exterior walls

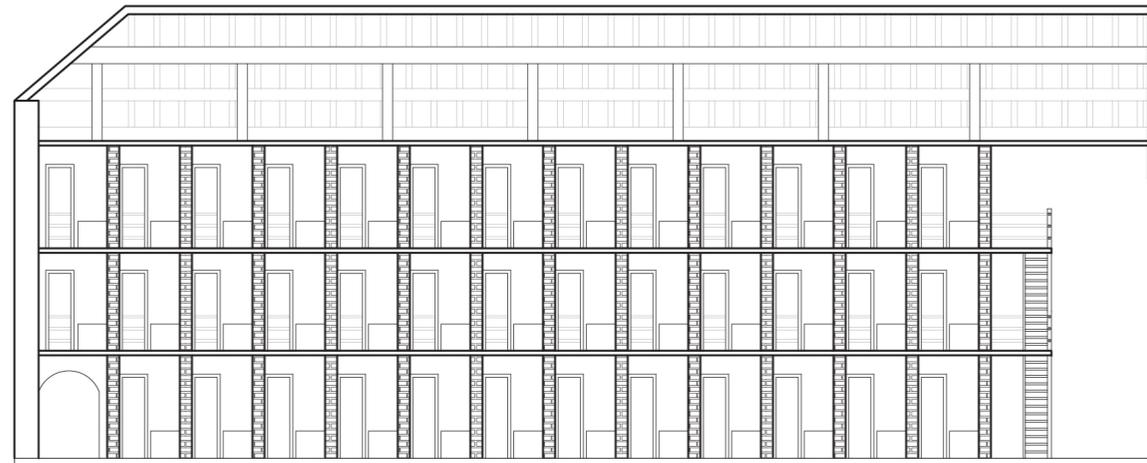


Glass catwalks supported by steel structure, East Wing

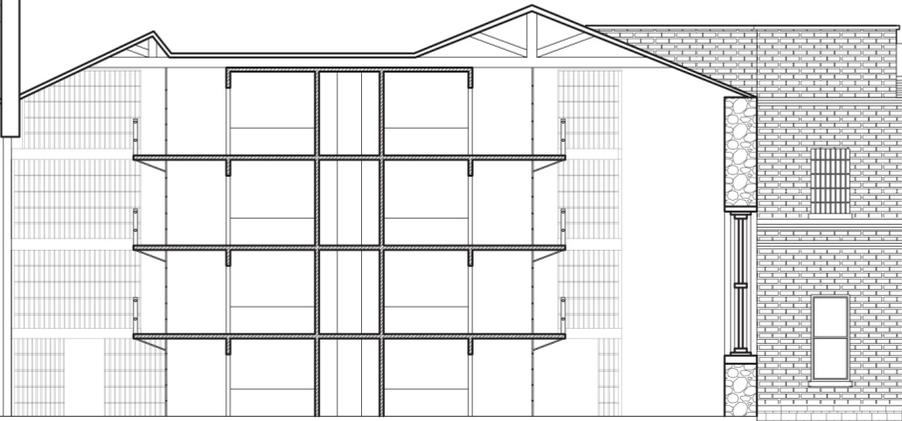


Slate tile flooring, Warden's Office

1895 SOUTH ELEVATION



West Wing - brick masonry cells, brick exterior



East Wing - steel cells, brownstone exterior walls

Warden's Office - brick exterior walls



Bluestone sills and lintels, remains of Warden's Administration from Warden's Residence



Fireproof gypsum block wall partitions for showers, East Wing



### BROWNSTONE

Brownstone was a locally available material in New Jersey, especially in Essex County, represented by a large number of brownstone quarries. It was a popular building material through the 19th century, and it was the principal material for the original construction of the John Haviland design of the Essex County Jail--for the structural masonry walls of the Warden's Residence and the East Wing, as well as the perimeter wall.

Brownstone fell out of favor as a building material once it was noted how easily it degraded if not installed properly. It was used in varying degrees from the colonial era up until the early 20th century, with the last brownstone quarry in New Jersey closing in the 1930s. This may be why it was not used in any later constructions of the Jail.



### BRICK

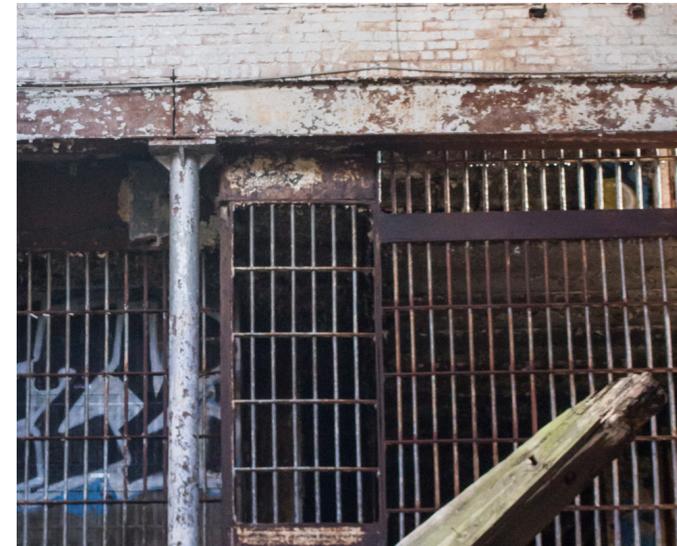
Additions to the Jail show a shift from brownstone to brick. Brick was used for the original cells, which were replaced with steel in the East Wing but are still standing in the West Wing, as well as in the structural walls of all additions, and in the arched ceiling in the Warden's Office. Many bricks are stamped with a manufacturing mark. HB&Co in the West Wing (c. 1890), Brockway in the Power Plant (c. 1904), & the Terry Brothers in the Laundry (c. 1909). A manufacturer of note is the Rose Brick Company, which is most famous for its use in the Empire State Building. There are many Rose bricks near the Women's Wing (c. 1892). Of the 11 different manufacturers marks currently found in the Jail, 5 were matched to companies all located along the Hudson River Valley. All of the brick manufacturers along the Hudson River were closed by the mid 20th century.



### TERRA COTTA

Terra Cotta was a significant material choice for later additions to the Jail. According to building records in the archives of the New Jersey Historical Society, the Raritan Hollow and Porous Brick Company provided the fireproofing tile added to the ceilings of the cell blocks to add a protective layer from the timber framing.

In other areas, such as the Hospital Wing, flat arch floor construction was implemented. This fireproof structural system made use of hollow extruded terra cotta that was lightweight and integrated with steel beam and tie rod supports.



### CAST IRON + STEEL

Two-story cast iron columns can be found in the East Wing, where the original wing meets the West Wing.

The cell structures in the North and East wings of the Essex County Jail are made of steel. There were also steel bars installed over the windows which were later removed, evidenced by the characteristic voids in the masonry seen in the Warden's Office, which is representative of the how the bars were imbedded into the wall.



### WOOD

Wood was primarily used in the roof structures in the Essex County Jail. Fallen beams in the West Wing show dovetail joints, carpenters marks, and cut iron nails, which were used from the late 18 to early 20th century.



### PRESSED TIN CEILING TILES

Remnants of pressed tin ceiling tiles remain in each of the cell blocks of the Essex County Jail. Manufacture of pressed tin ceiling tiles began in the late 19th century and gained popularity in the early 20th century, and so it was most likely installed as part of later alterations to the Jail during and after the 1890s.

The tiles are thin sheets of steel coated in tin and pressed with an intricate design. In the Essex County Jail, the tiles were installed with plaster over metal lath and were originally white, which was popular as an imitation of decorative plaster, and became colored with rust over time.

# TECHNOLOGY

Institutional architecture has traditionally served as a catalyst for the development and evolution of new building technologies. It was the changing needs of hospitals and correctional facilities which housed growing numbers of people in confinement and also faced movement for the humane handling of their inmates, that had the greatest engineering and architectural influences. Manufacturing technologies evolved and allowed for the advances in building construction, notably, the technical systems which kept them sanitary, illuminated, safe, and functional.

The systems within Essex County Jail are typical of these types of institutions to adapt to change and adopt new technologies. Several categories of infrastructure were responsible for the smooth daily function and operations of the jail. The main technological systems were the plumbing, heating, electrical, and cell block locking mechanisms.

## Plumbing

The introduction of modern plumbing in jails was something that began with the development of larger scale institutions like Eastern State Penitentiary in Pennsylvania. It was in the late 19th century that the realization for the need to separate drinking water from sewage and other waste became evident. Essex County Jail saw the addition of such a modern plumbing system just after the turn of the 20th century. It was noted by the Essex County Board of Freeholders, during one of their meetings, how challenging, noxious, and dangerous it was to keep the systems as they were. Changes made within the jail included the addition of private latrines in individual prisoners' cells and showers in each wing. The piping for these systems ran in a continuous void between back-to-back the cells.

## Heating

Prior to modern heating systems in large facilities such as the jail, coal-burning stoves were the standard method for heating spaces like these. This type of system was dirty, unreliable, and costly, and engineers and inventors alike worked on the development of alternative solutions.



Self-Supporting Steel Cell Structure, East Wing  
Photo by Gabriela Figueroa



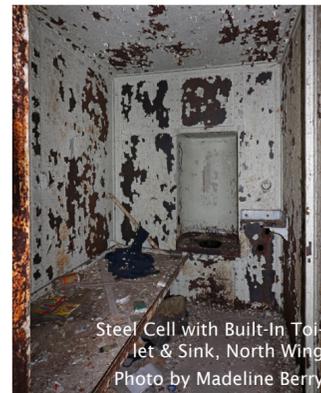
Double Boilers, Engineering Room  
Photo by Gabriela Figueroa



Row of Steel Cells, North Wing  
Photo by Rob Kesack



Cell Block Locking Mechanism, West Wing  
Photo by Rob Kesack



Steel Cell with Built-In Toilet & Sink, North Wing  
Photo by Madeline Berry



Radiant Heat Pipes, West Wing  
Photo by Madeline Berry

It was Angier March Perkins, in the 1830s, who was responsible for the introduction of radiant heat through the use of steam and a system of pipes which would safely and more efficiently warm larger areas. An adaptation of this system is seen at Essex County Jail, where a system of tunnels housed piping which ran from large steam boilers to the radiators in each individual wing.

## Electrical

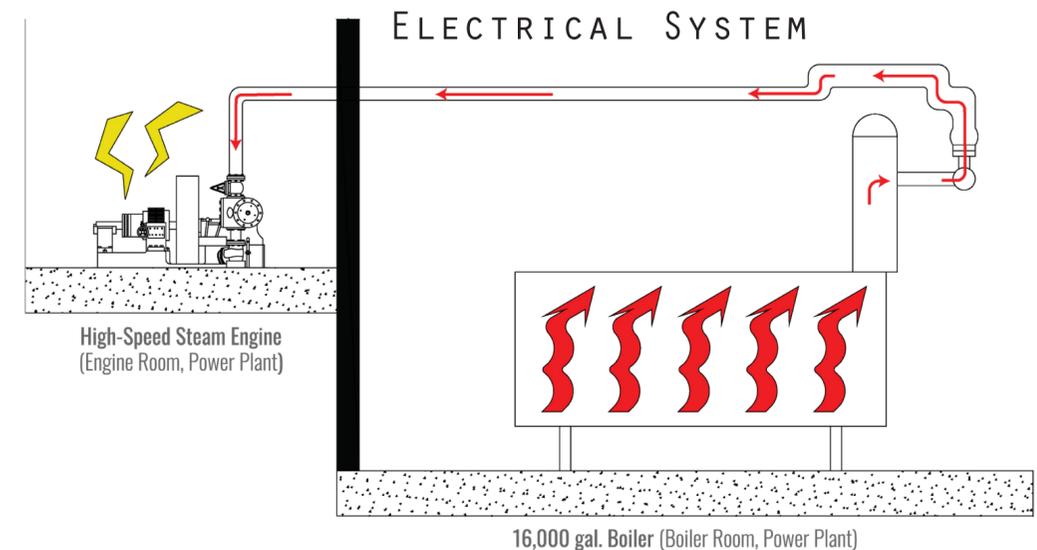
Like many institutions of its time, Essex County Jail used steam-powered engines to produce its own electricity. While Newark was the first city in the United States to have electrically illuminated street lamps, the jail was somewhat behind in bringing electricity to the complex. It wasn't until the construction of the Engineering Room of the Power Plant in 1914 that the steam engines were introduced to the jail. Most remarkably, the power plant and machines still exist. Most institutions that had their own power plants demolished them after switching to the modern electrical grid of their cities. At Essex County Jail these machines and buildings remain as extant historical artifacts.

## Cells

As Essex County Jail was primarily designed as a small-scale prison and functioned as a jail for most of its history, the cells were small and cramped. The first cells were masonry construction but were later upgraded to a steel structure (similar to that of library stacks) to accommodate even more prisoners. These upgraded jail cells were manufactured by the Pauly Jail Building Company of St. Louis. Their patented steel cell technology, developed in 1900, was introduced to Essex County Jail shortly after the turn of the Twentieth Century. These cells and their multi-levered locking mechanisms still stand today.



Steam Engine  
Photo & Diagram Below by Rob Kesack



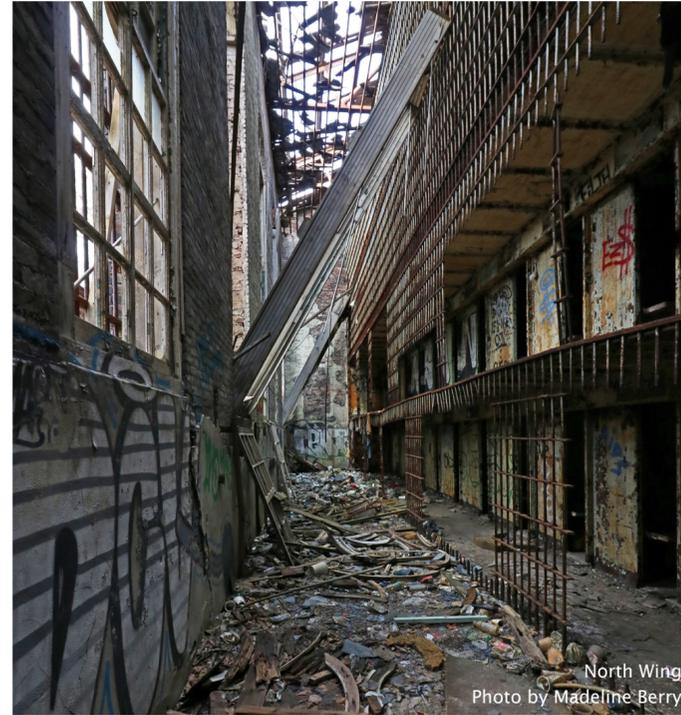
# CURRENT CONDITION OF THE SITE



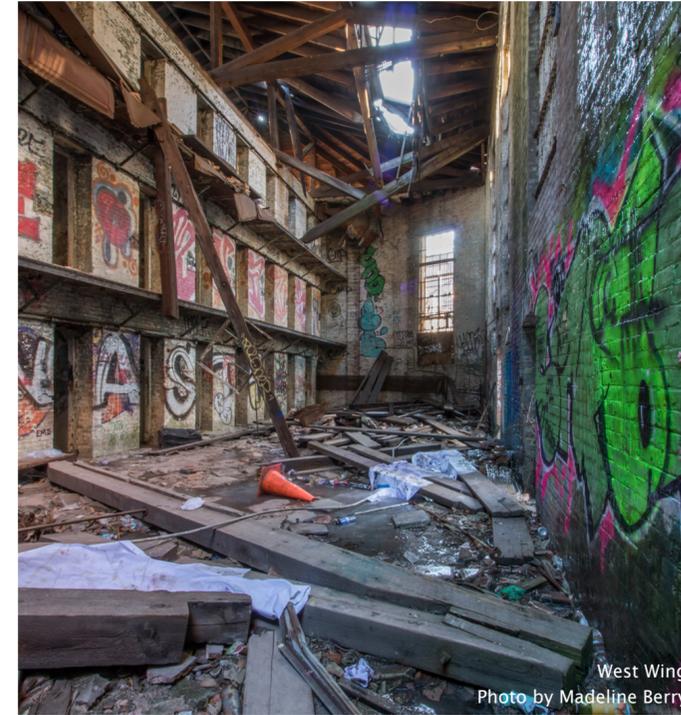
East Wing  
Photo by Madeline Berry



Power Plant  
Photo by Rob Kesack



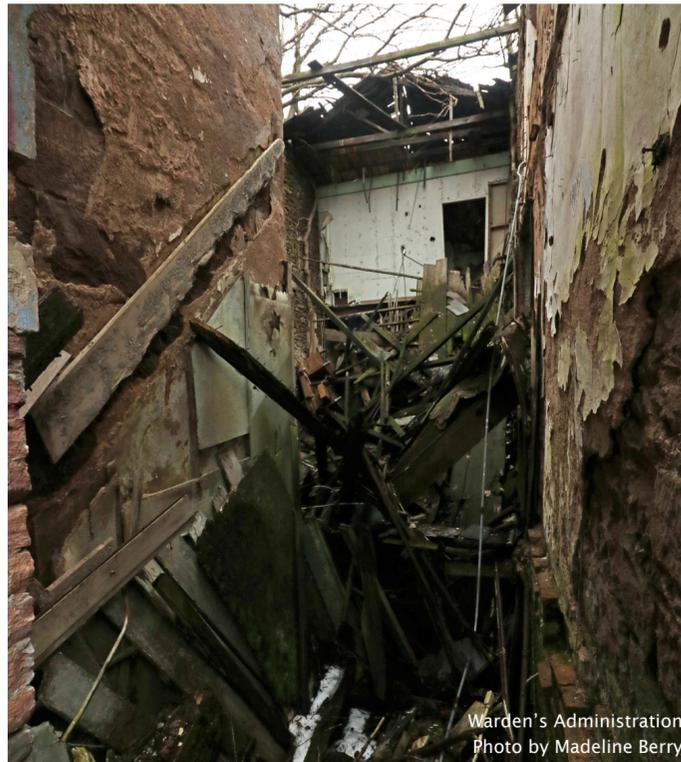
North Wing  
Photo by Madeline Berry



West Wing  
Photo by Madeline Berry



Perimeter Wall near the Warden's Office  
Photo by Madeline Berry



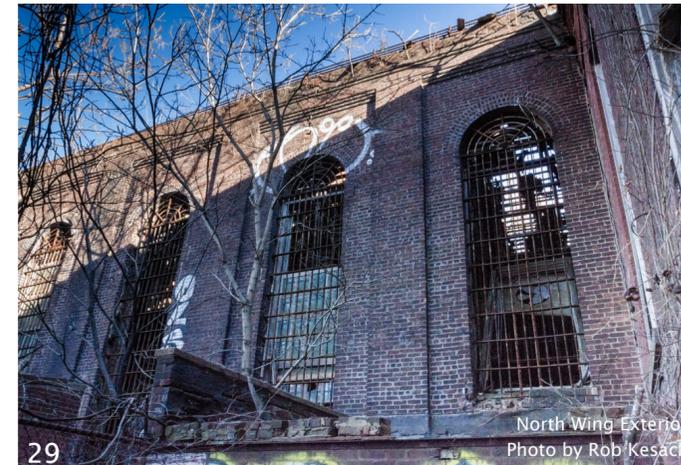
Warden's Administration  
Photo by Madeline Berry



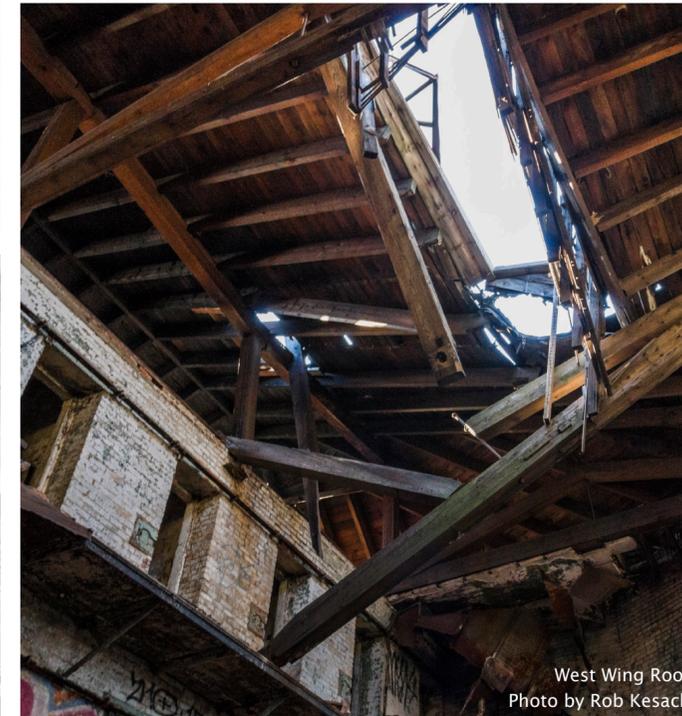
Warden's Office  
Photo by Madeline Berry



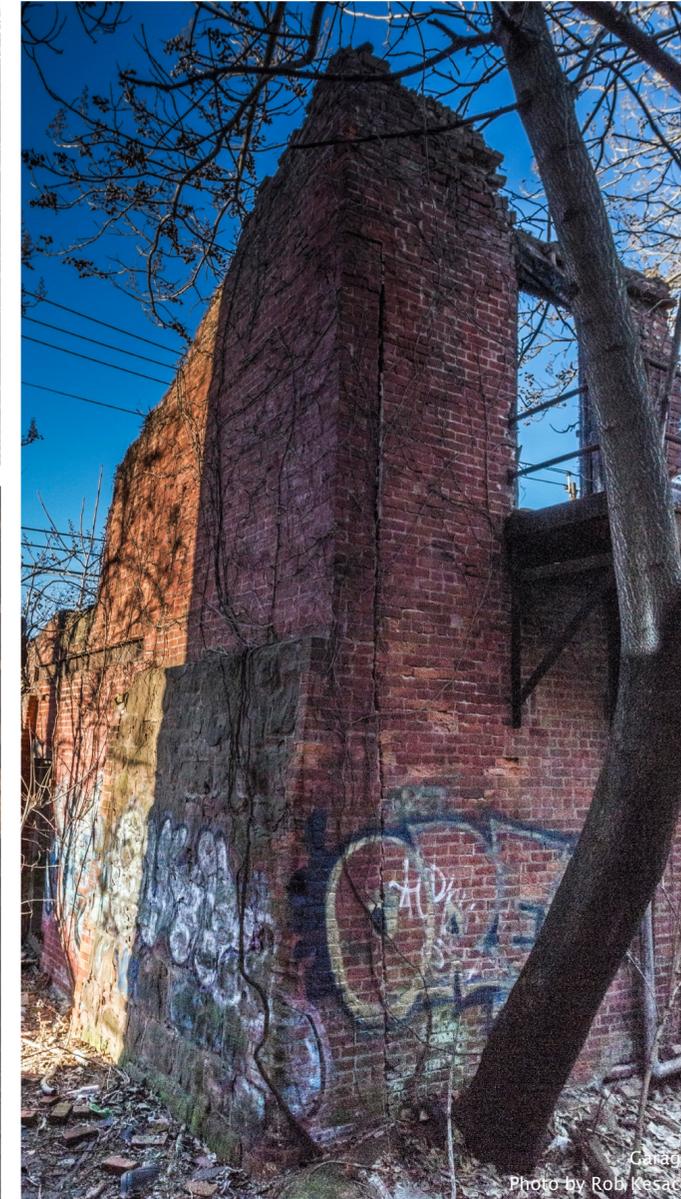
Hospital Wing  
Photo by Madeline Berry



North Wing Exterior  
Photo by Rob Kesack

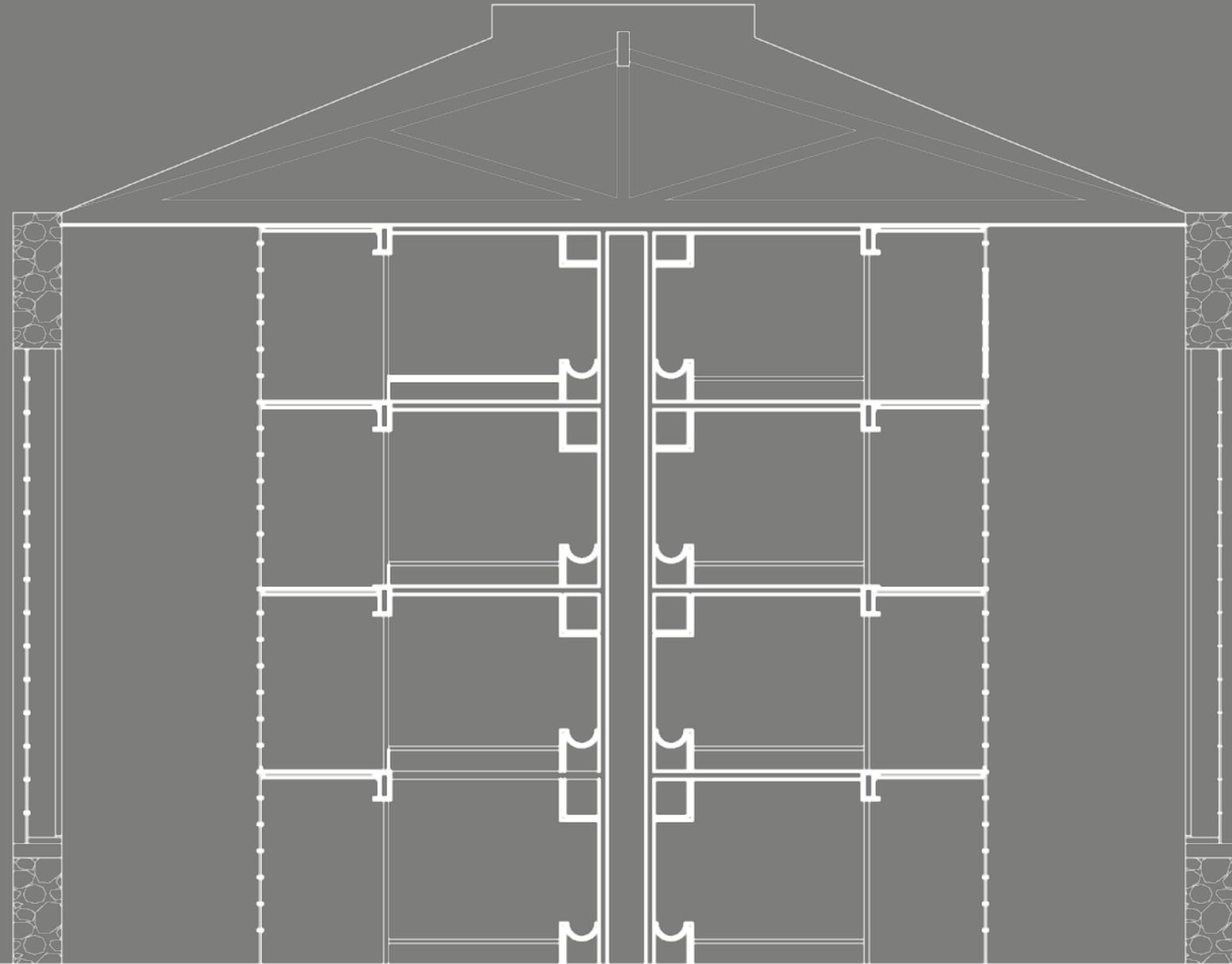


West Wing Roof  
Photo by Rob Kesack



Garage  
Photo by Rob Kesack

NORTH WING SECTION

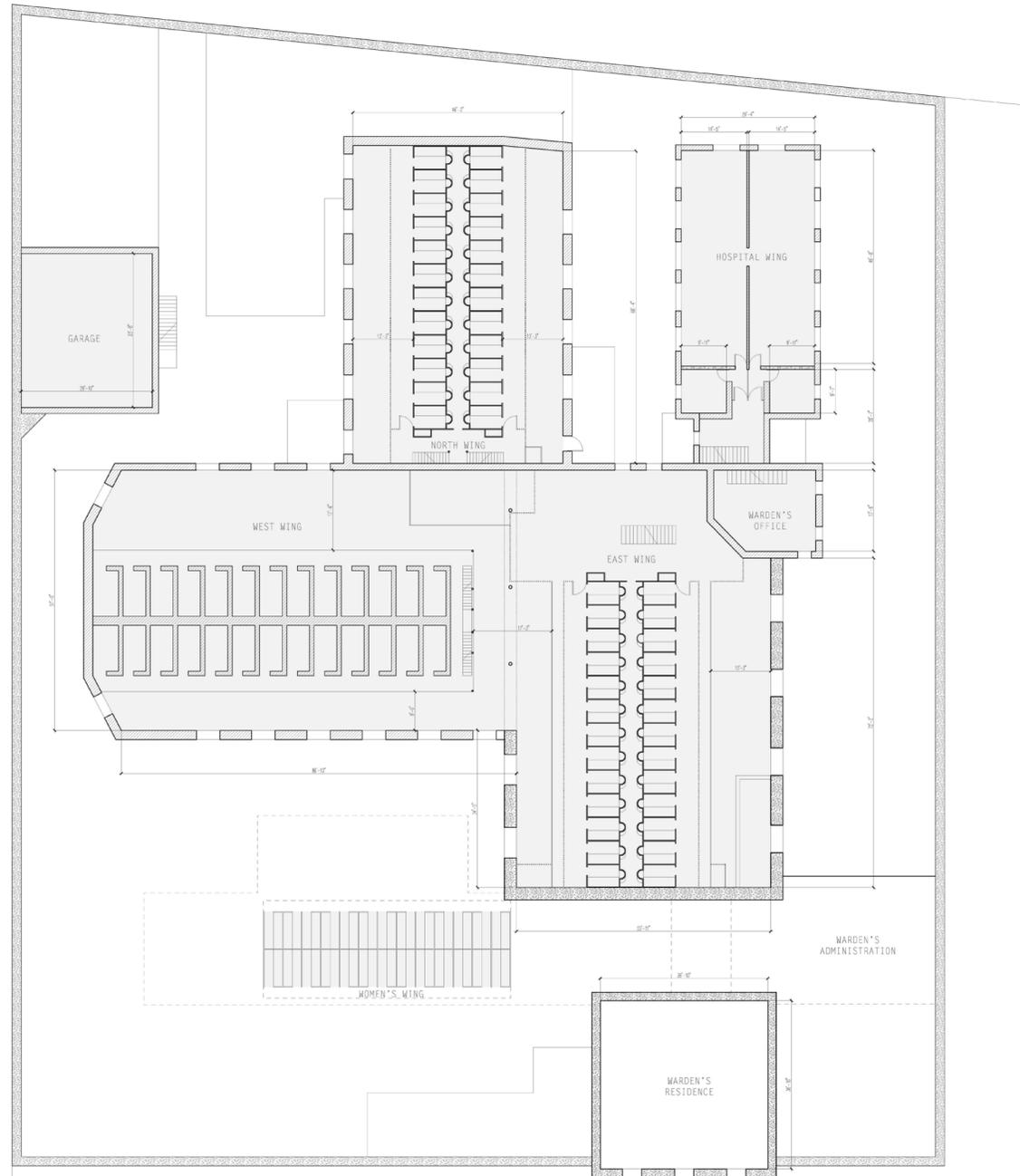


DOCUMENTATION

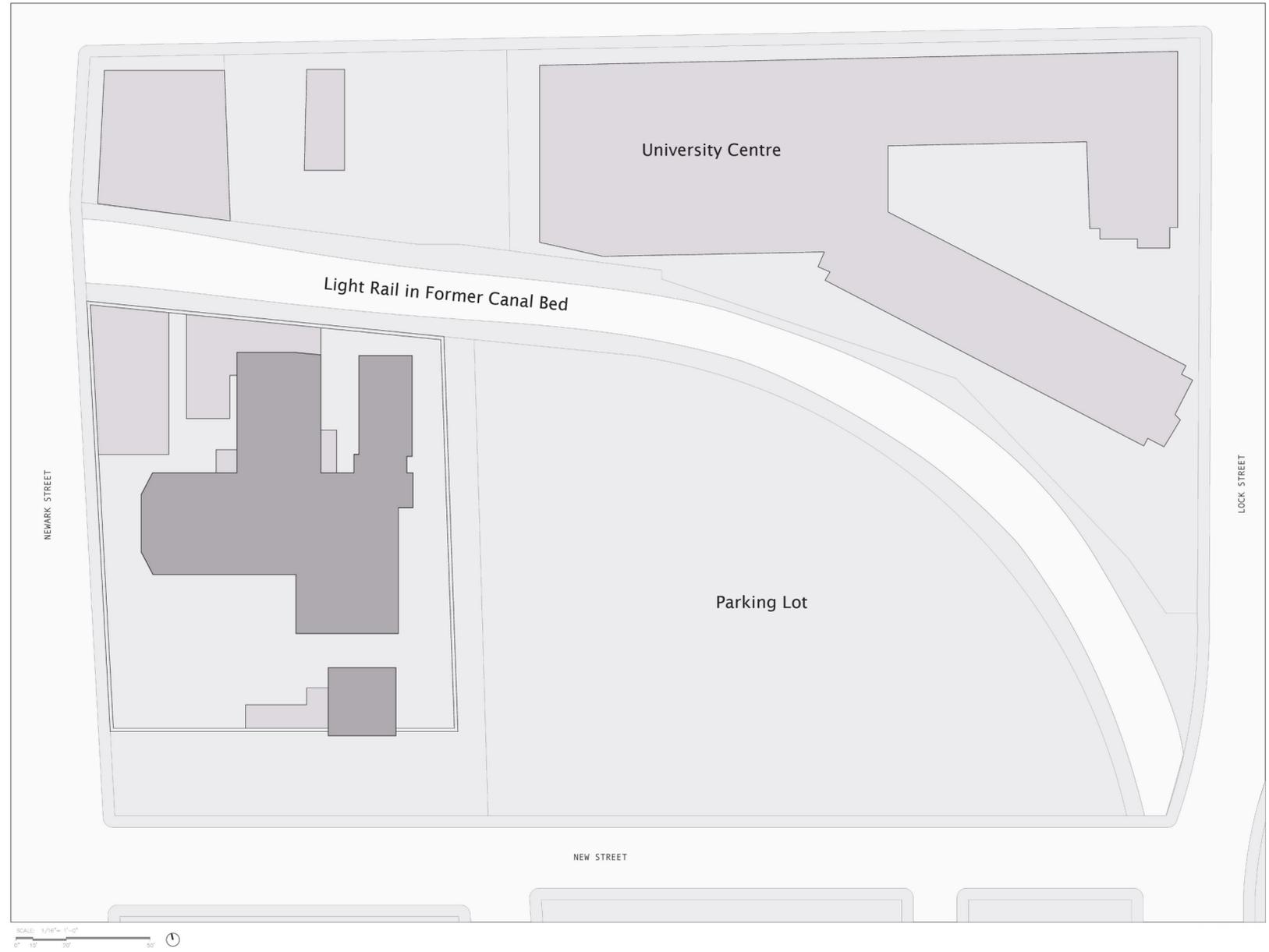
# DIMENSIONED FLOOR PLAN

SCALE: 1/8" = 1'-0"  
 0" 10' 20' 50'

-  BROWNSTONE
-  BRICK
-  GYPSUM
-  DEMOLISHED
-  EXISTING FLOORS

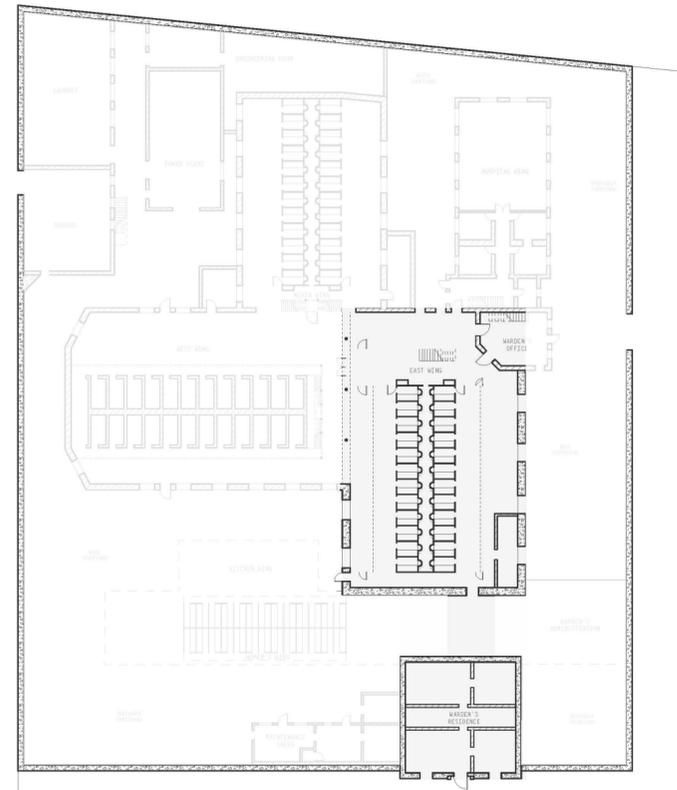


# SITE PLAN

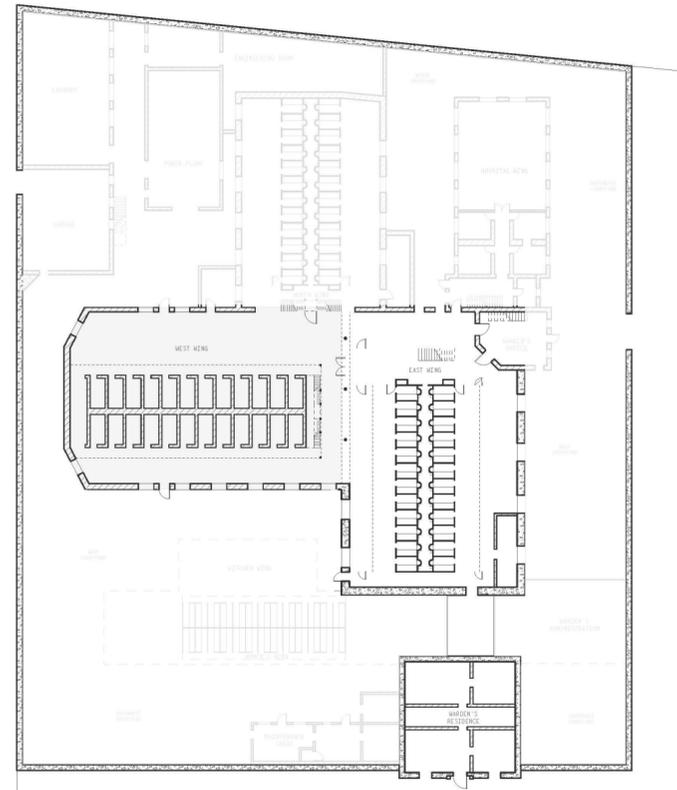


# CONSTRUCTION

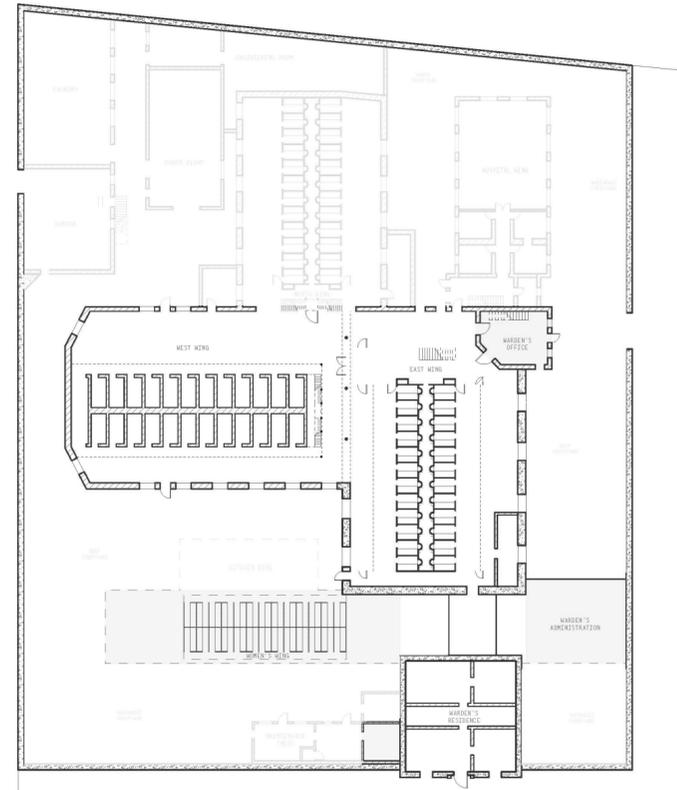
# TIMELINE



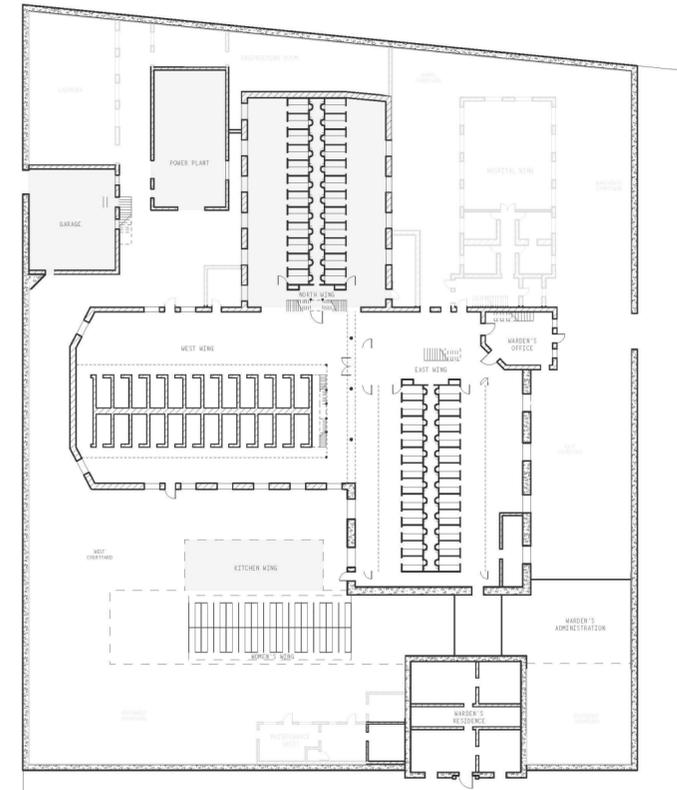
1837



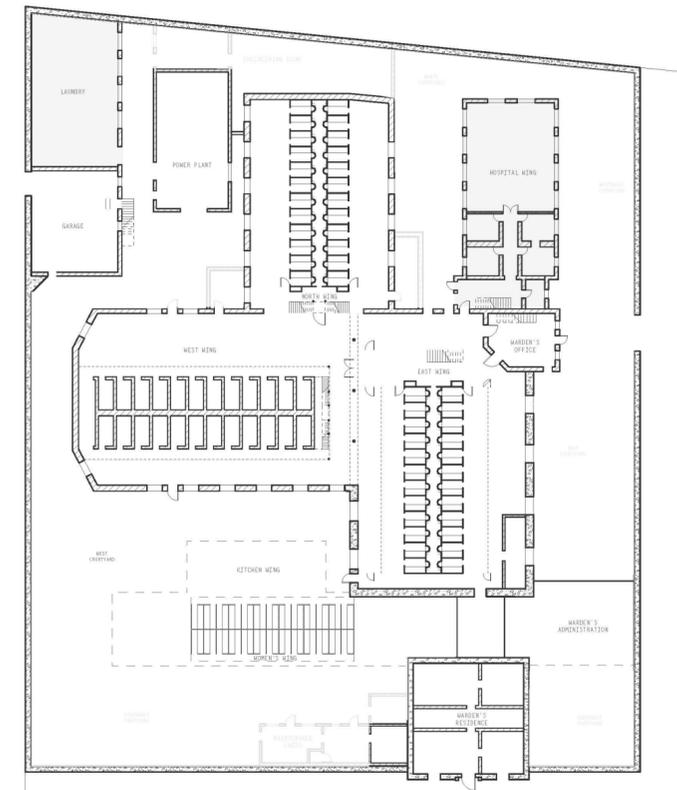
1890



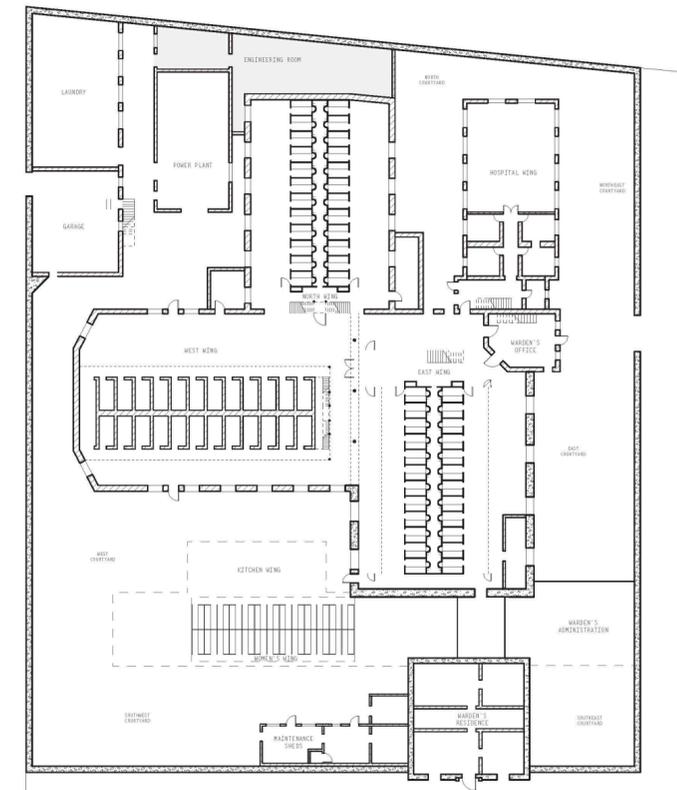
1895



1904



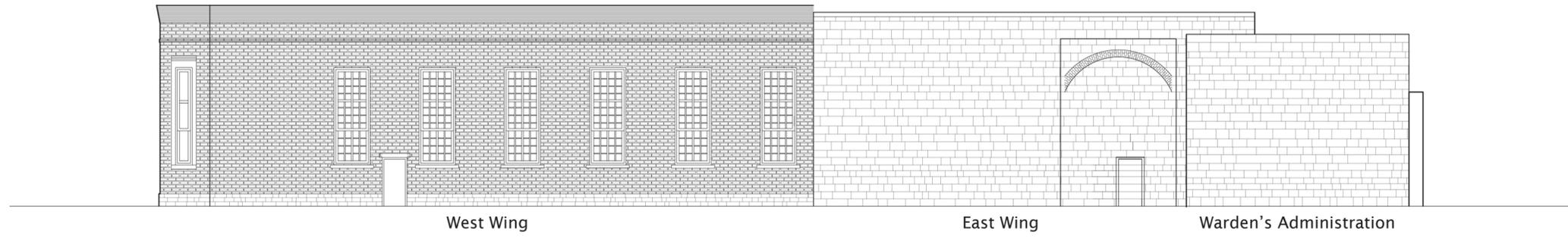
1909



1926

# SOUTH ELEVATION

Section cut behind the Warden's Residence



West Wing

East Wing

Warden's Administration

# WARDEN'S RESIDENCE



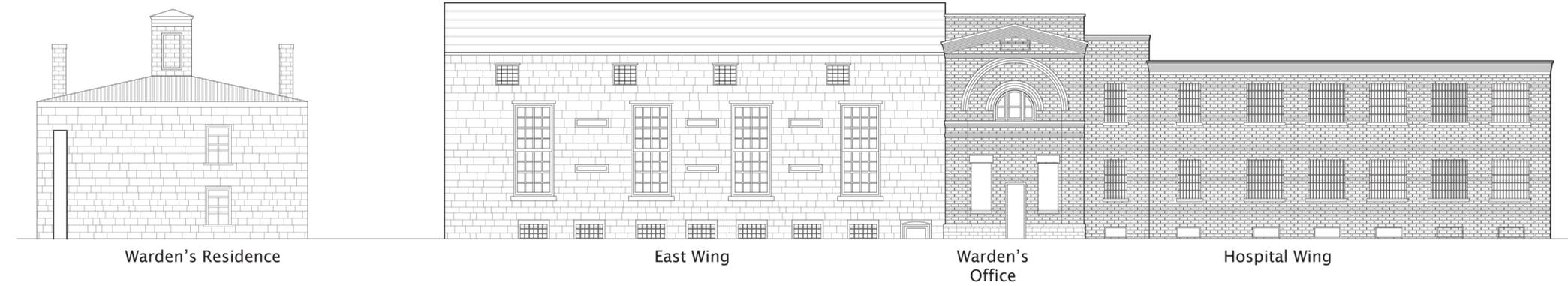
Original

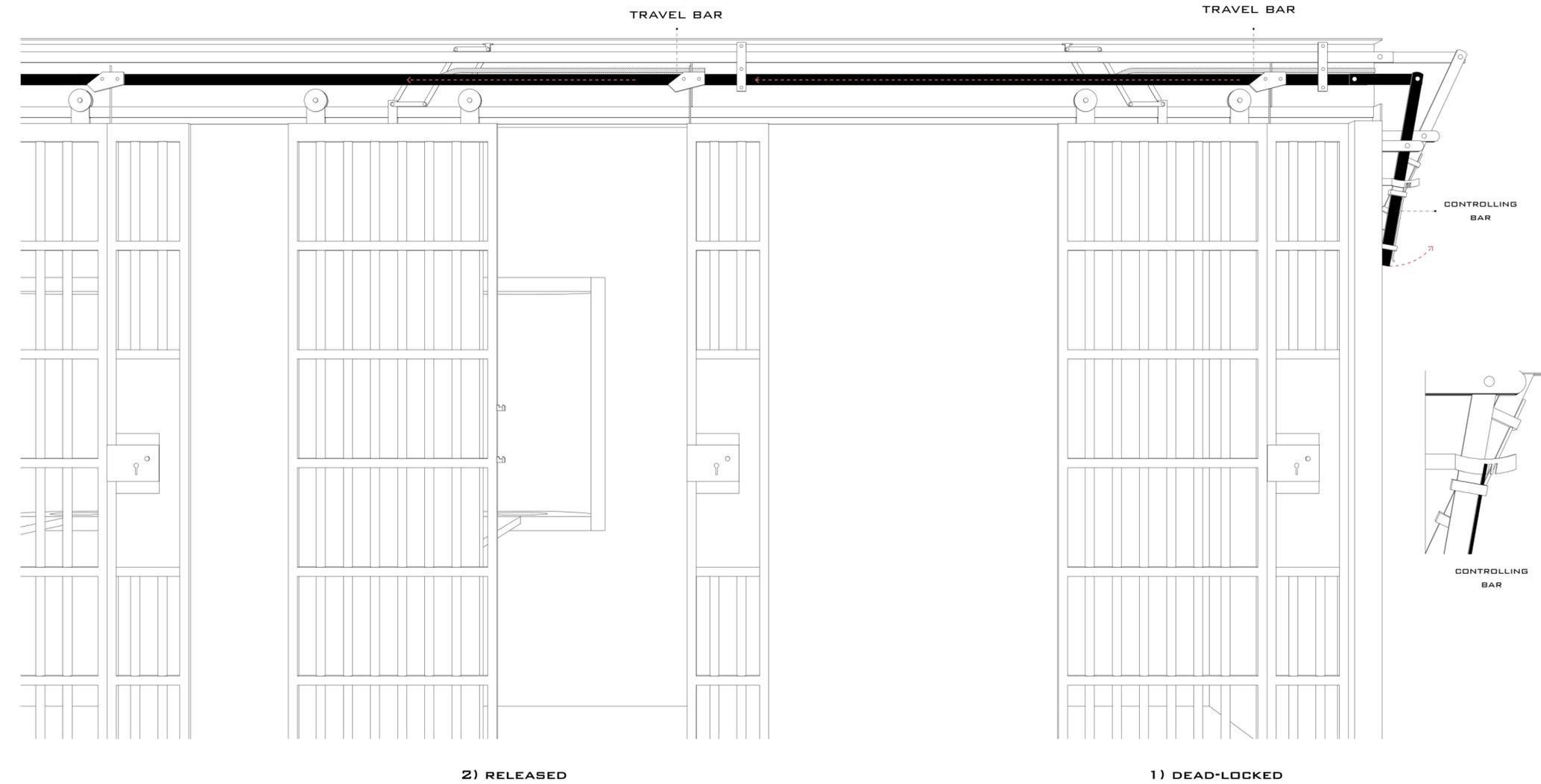
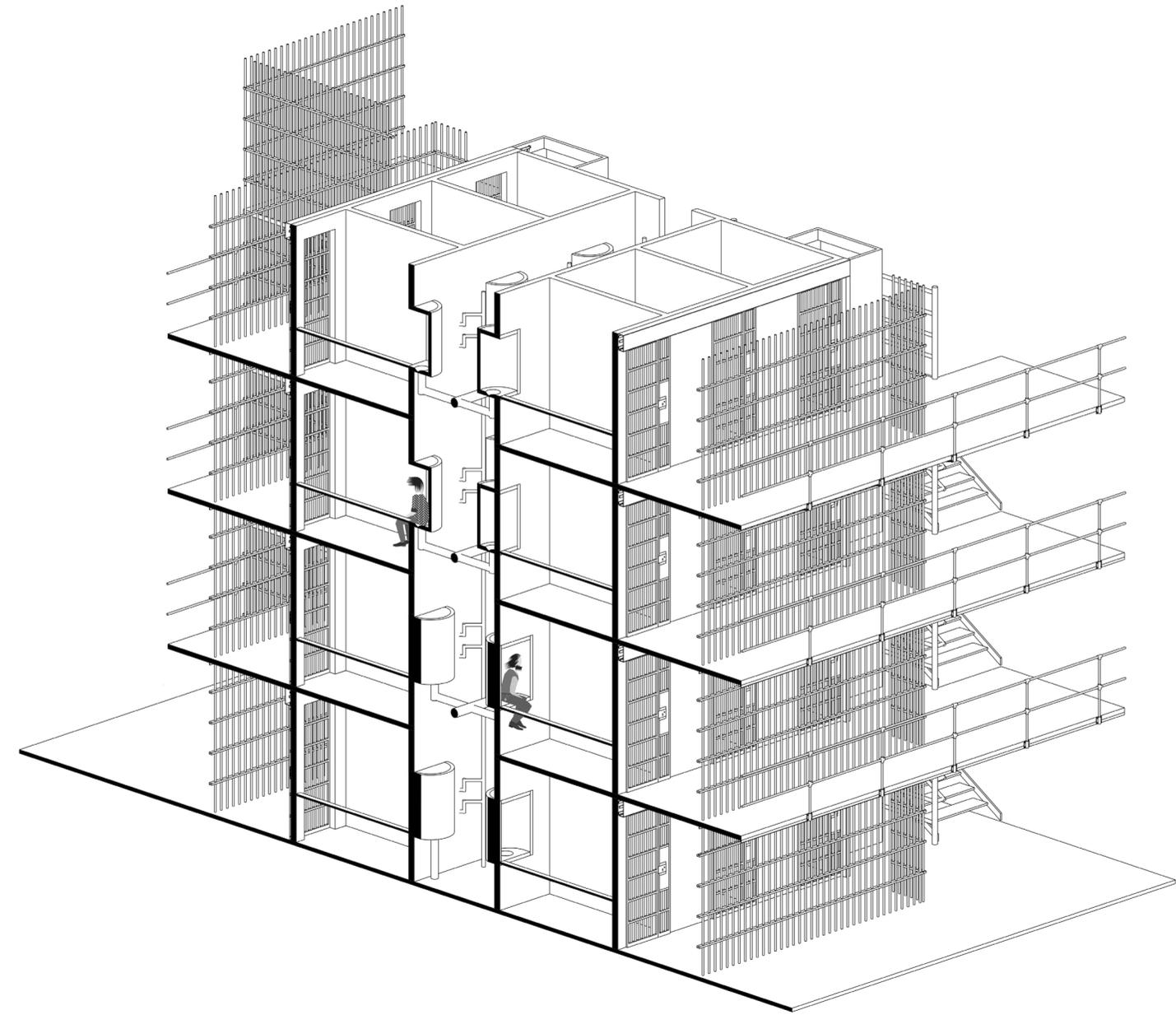
Current

WEST ELEVATION

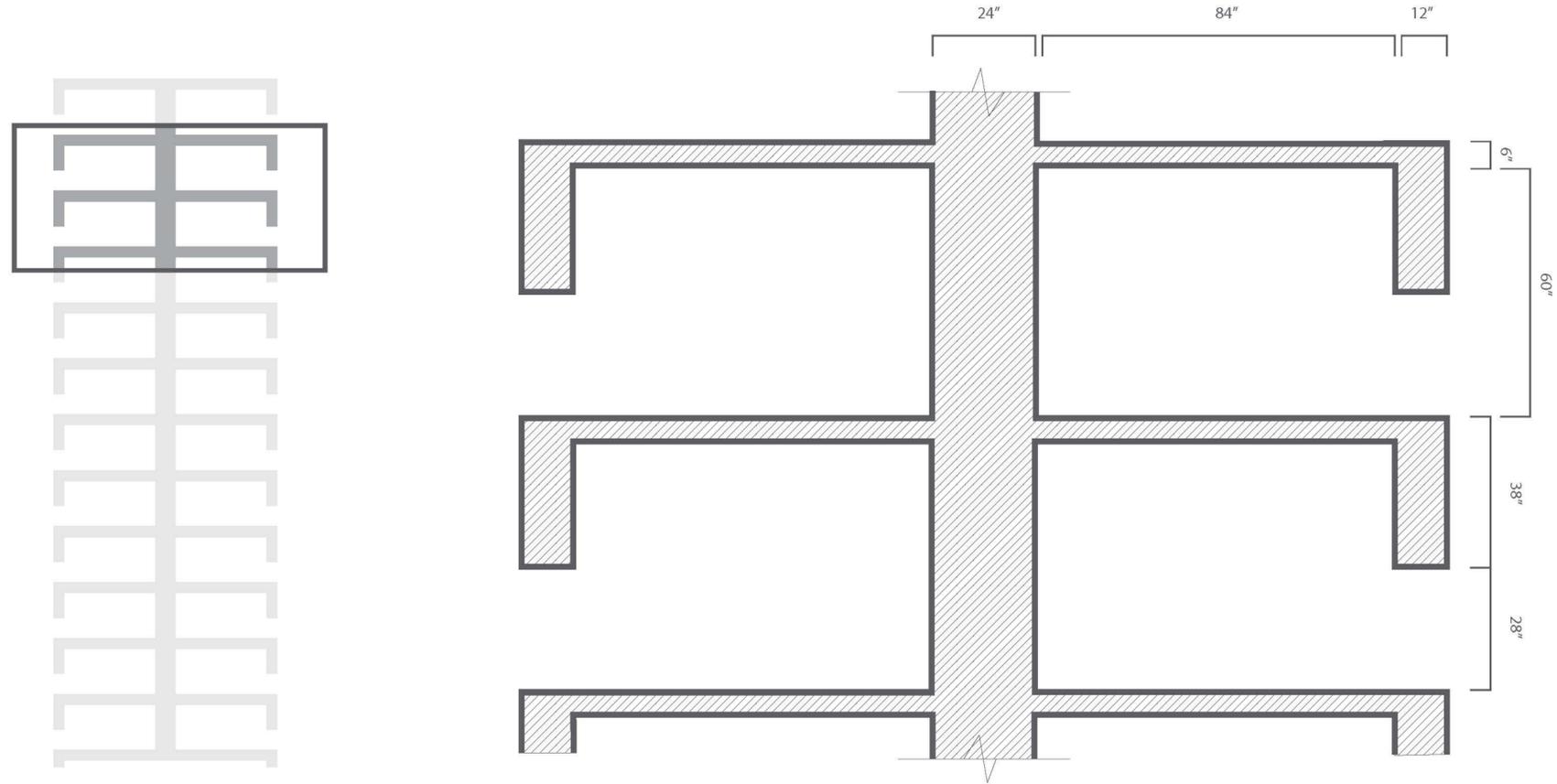


EAST ELEVATION





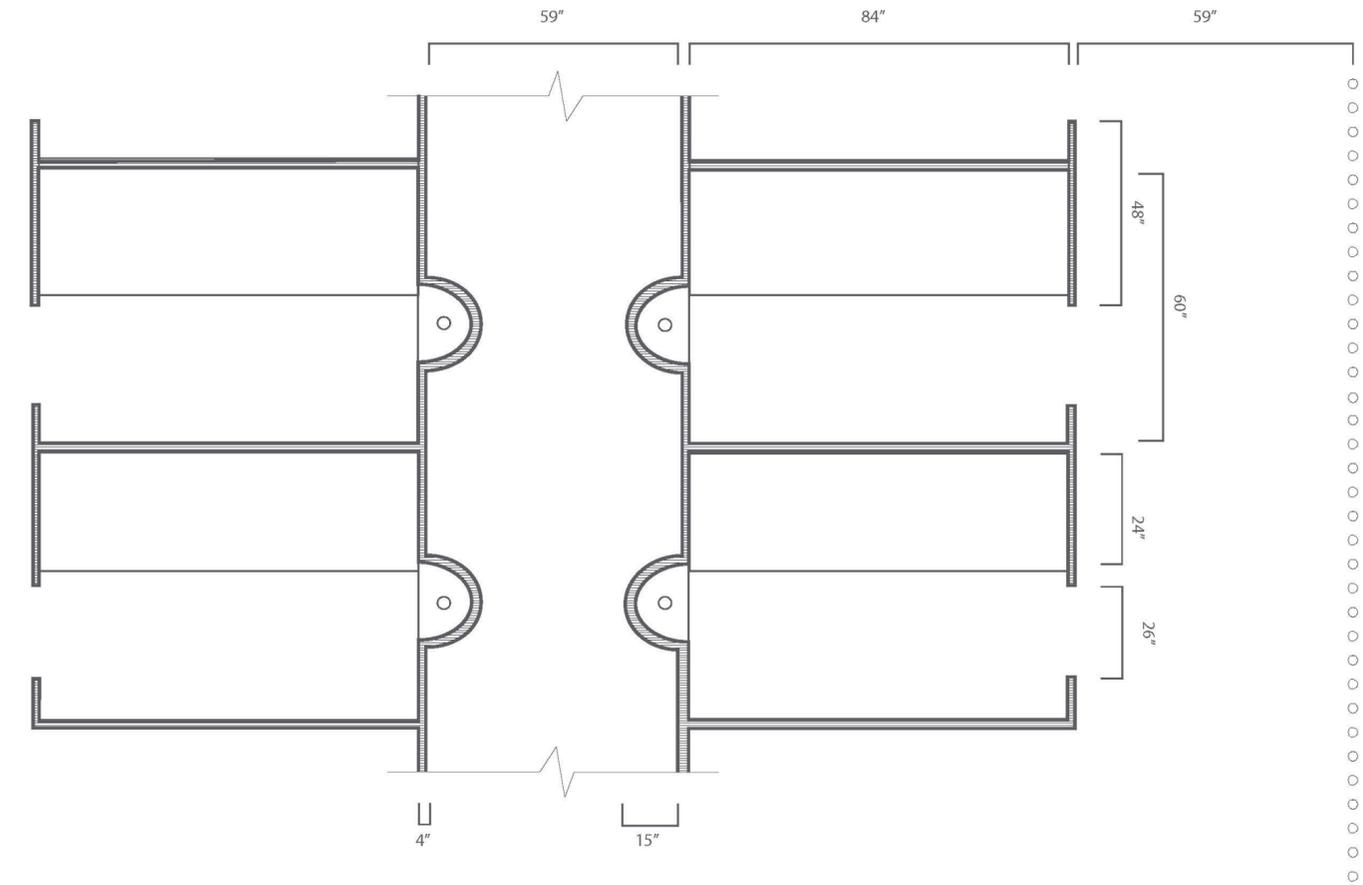
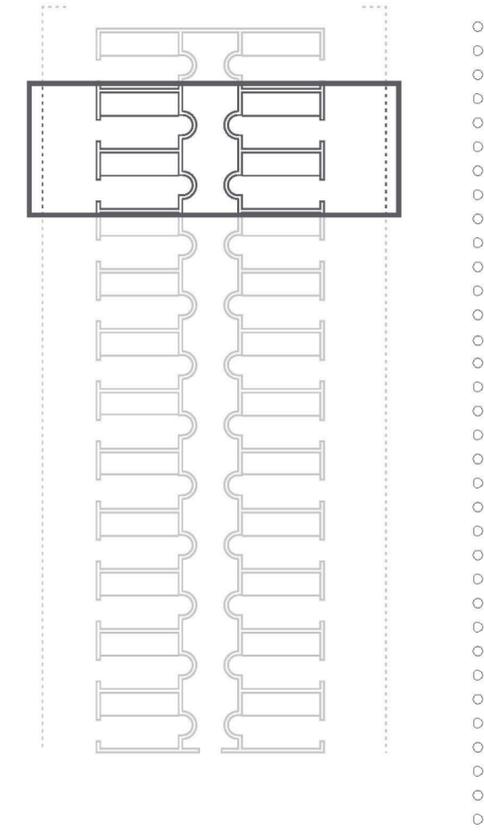
WEST WING CELLS (MASONRY)



SCALE 1/2" = 1'-0"



EAST & NORTH WING CELLS (STEEL)



SCALE 1/2" = 1'-0"



# PHOTOGRAMMETRY: EXTERIORS



HOSPITAL WING FACADE FACING  
THE NORTH WING

NORTH WING FACADE  
FACING THE HOSPITAL WING

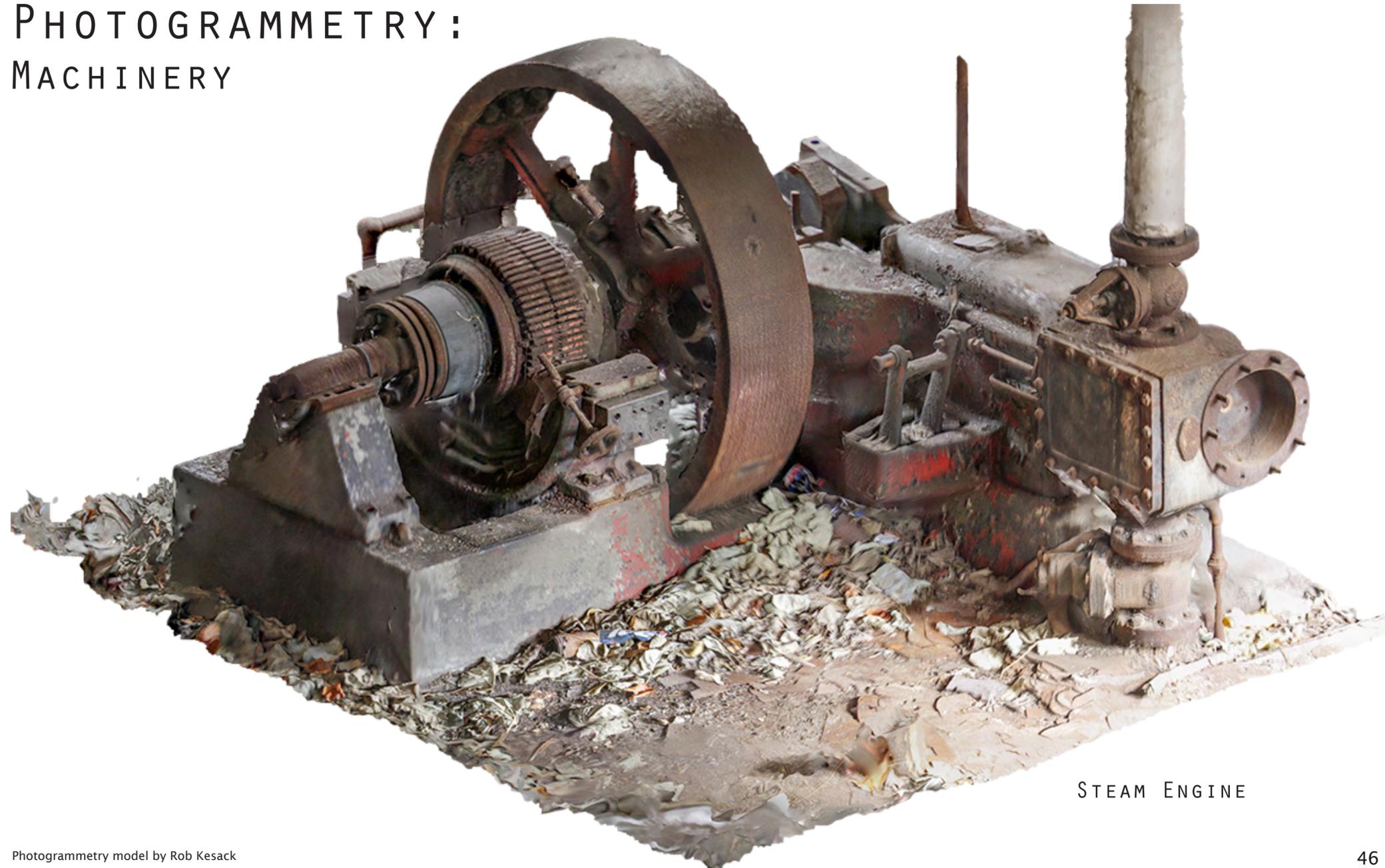


HOSPITAL WING FACADE  
FACING THE NORTHEAST COURTYARD



WARDEN'S RESIDENCE & PERIMETER WALL  
FACING NEW STREET

PHOTOGRAMMETRY:  
MACHINERY

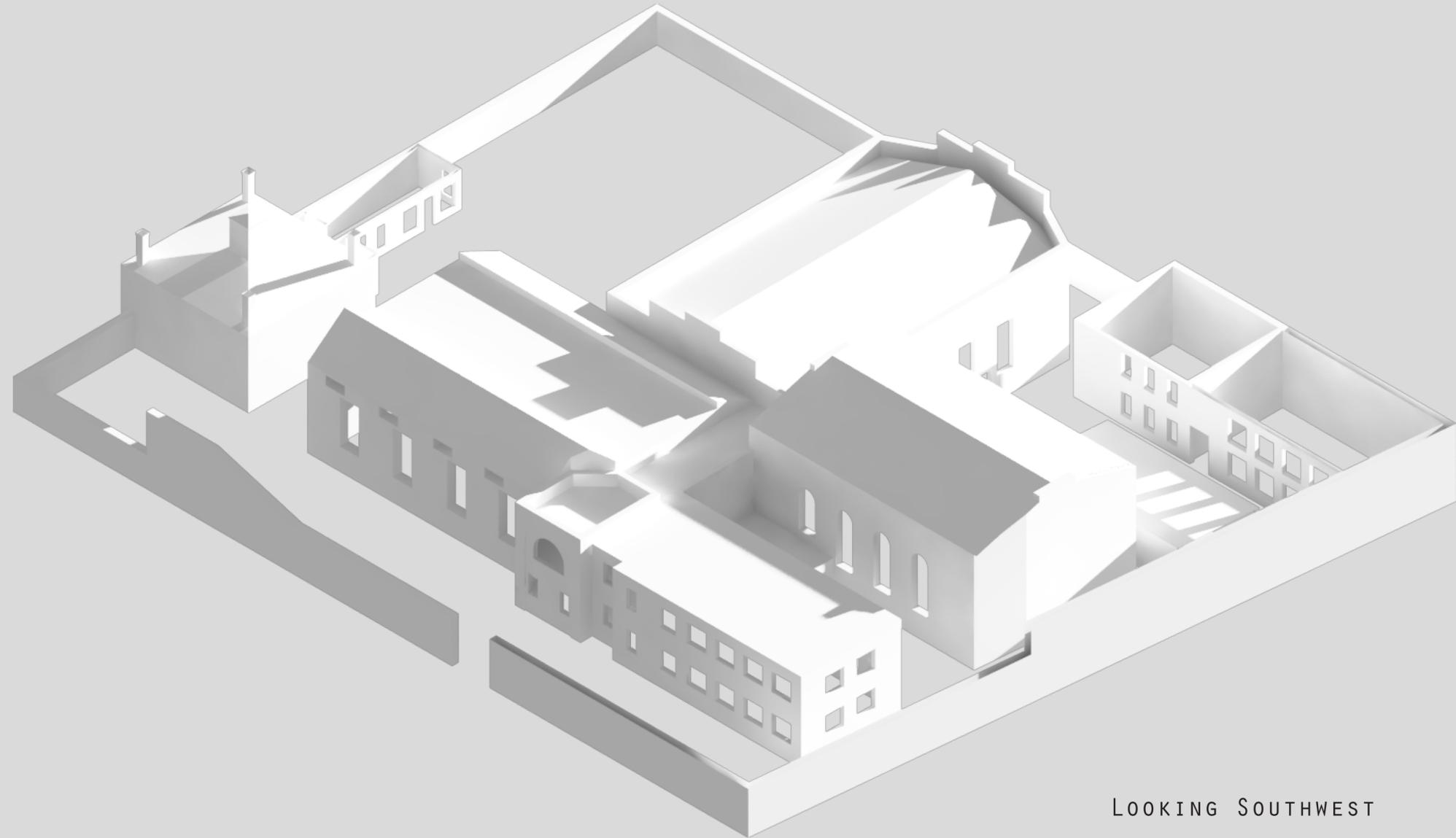


STEAM ENGINE

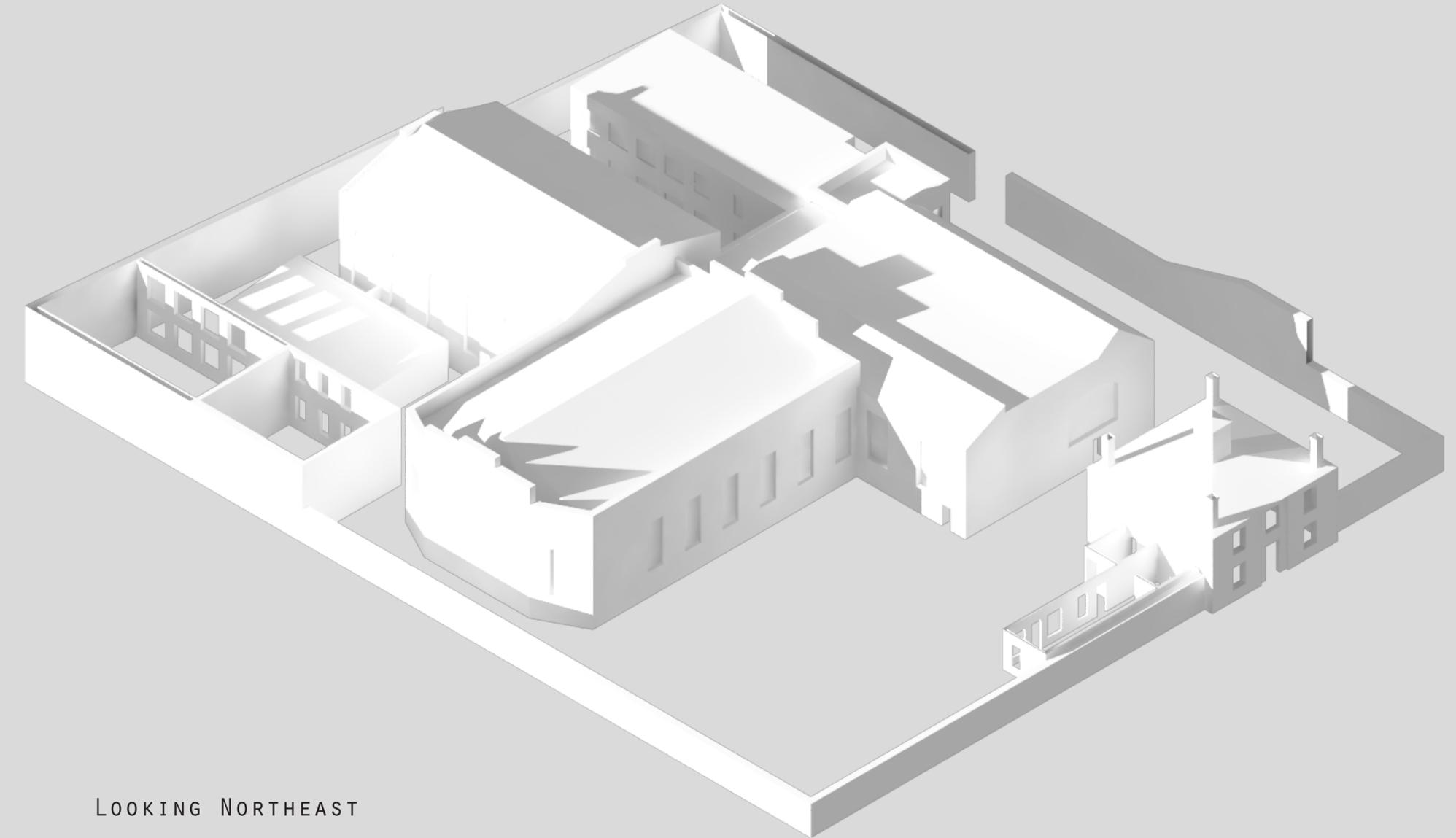


"ONAN POWER PLANT"  
ELECTRIC GENERATOR

# 3D MODELING



LOOKING SOUTHWEST



LOOKING NORTHEAST



North Courtyard  
Photo by Madeline Berry

## CONTEMPORARY CONTEXT

# STAKEHOLDERS

Throughout the semester we explored the numerous sets of stakeholders who have an investment in the Old Essex County Jail. The list grew to be quite lengthy and the more we learned, the more it continued to grow.

The City of Newark is the main stakeholder in the site. The City has the primary decision-making role in terms of what happens to the jail, as well as political and financial capital. Currently the jail property is part of what is known as the University Heights Science & Technology Park, and as a constituent entity of the UHSTP, New Jersey Institute of Technology (NJIT) has expressed interest in obtaining the land for expansion of their campus. The New Jersey State Historic Preservation Office also maintains power over the site, as the jail is still landmarked.

The rest of the stakeholders can generally be broken down into categories including Government, Private Business, Civic Organizations, and Residents. It should be noted that while some stakeholders may have more of an obvious or literal investment in the site, the interests of ALL stakeholders are significant.

In terms of our outreach with identified stakeholders, the studio held a community meeting in Newark on March 23, 2018, to which many on the preceding list were invited and attended. While the room may not have been an accurate representation of the full scope of stakeholders, the meeting was critical for us, at the midway point of the semester, to take stock of exactly what values might be important to us in our own projects in recognition of the voices and opinions we heard that day.

Additionally, those of us who hoped to take a slightly more social angle in the development of our work, reached out and met with the New York/New Jersey Healing Justice and Prison Watch, which gave us the amazing opportunity to meet and talk with some formerly incarcerated community members, one of whom actually spent time in the Essex County Jail.



East Courtyard  
Photo by Madeline Berry

## EDUCATIONAL INSTITUTIONS

**University Heights Science & Technology Park (UHSTP)**

**Council for Higher Education in Newark (CHEN)**

- NJIT
- Rutgers University-Newark
- Essex County College
- UMDNJ/Rutgers Biomedical & Health Sciences

**New Jersey Institute of Technology (NJIT)**

- **Tony Schuman** - Interim Dean, School of Architecture
- **Darius Sollowhub** - Associate Professor, Architecture
- **Real Estate Development & Capital Operations** - Andrew Christ, VP
- **Matt Gasser** - Professor, exhibition on Essex County Jail

**Rutgers University-Newark**

- Including Rutgers Law School, School of Criminal Justice, Arts & Sciences, and School of Public Affairs & Administration

**Essex County College**

**University of Medicine & Dentistry of New Jersey (now Rutgers Biomedical & Health Sciences)**

**Seton Hall University**

**Columbia University GSAPP**

**Other local and regional institutions of higher education**

## NEWARK COMMUNITY GROUPS

**Newark Community Collaborative Board (NCCB)**

- 20 members from field of substance use disorders & related health disparities (e.g. HIV, HCV, incarceration)

**La Casa de Don Pedro**

- Newark community organization committed to empowerment of Newark's Puerto Rican & Latino community

**Ironbound Community Corporation**

- Newark community organization providing support for the people of the Ironbound with services, resources, and opportunities

**James Street Commons Historic District**

**Truth, Racial Healing and Transformation Center at Rutgers University**

**National Council on Public History, Rutgers**

## LOCAL INTERESTS

**Neighbors & Newark residents**

- **Nell Irvin Painter** - Princeton Professor, author of *The History of White People*
- **Zemin Zhang** - NPLC
- **Gabrielle Esperdy** - Newark Historian & Assoc. Professor at NJIT

**Local community artists**

- e.g. **Maureen Beitler**, the photographers we ran into, *Abandoned America*, *Forbidden Places*, etc.

**Former inmates; their families & friends**

- Essex County Executive **Joseph N. DiVincenzo, Jr.**

**Potential corporate philanthropy**

## OWNER

**The City of Newark**

- Mayor **Ras Baraka**
- Department of Economic & Housing Development
- Department of Engineering
- Office of Sustainability

## ECONOMIC INTERESTS

**Newark Community Economic Development Corporation (NCEDC)**

- Newark's primary economic development catalyst

**Newark Alliance**

- Economic non-profit organization dedicated to ongoing economic revitalization of Newark

**The Trust for Public Land, Newark**

- Newark community organization dedicated to the creation of parks and saving land for people to enjoy

## NEWARK COMMUNITY ARTS

**Newark Arts**

- Powering the arts to transform lives

**Express Newark, Rutgers University-Newark**

- Local community arts incubator run out of Rutgers-Newark
- **Anne Englot** - Director, Professor

**Humanities Action Lab (HAL), Rutgers-Newark**

- University coalition that produces community-curated public humanities projects on urgent social issues

**Project for Empty Space**

- Newark non-profit gallery; safe & equitable spaces for social discourse & contemporary art

## SOCIAL JUSTICE, INCARCERATION, ETC.

**Essex County Bureau of Narcotics**

**Newark Community Solutions: Center for Court Innovation**

- Community justice initiative

**State of New Jersey Department of Corrections**

**New Jersey State Parole Board**

**New Jersey Appleseed Public Interest Law Center (NJA)**

- NJ community organization
- **Renee Steinhagen** - Executive Director
- **PLANewark** - Planning & Land Use Advocates for Newark, Tyler Tourville, Chair & architect

**New Jersey Institute for Social Justice**

- NJ community organization

**New Jersey Reentry Corporation (NJRC)**

- Non-profit helping citizens find employment after incarceration

**New Jersey Scholarship and Transformative Education in Prisons Initiative (NJ-STEP)**

- Association providing higher education for the incarcerated & assistance with transition to college life after incarceration

**New York/New Jersey Healing Justice & Prison Watch**

- **Bonnie Kerness**

**American Civil Liberties Union: National Prisons Project**

**Citizens United for Rehabilitation of Errants (CURE)**

## PRESERVATION

**New Jersey State Historic Preservation Office (NJ SHPO)**

- New Jersey State Historic Trust **Glenn Ceponis** - Principal Historic Preservation Specialist

**The Newark Preservation & Landmarks Committee (NPLC):**

- **Zemin Zhang** - Executive Director
- **Liz Del Tufo** - President

**New Jersey State Register of Historic Places**

**Preservation New Jersey**

**New Jersey Historical Society**

- **Dr. James Amemasor** - Research Librarian

**Zakalak Restoration Arts**

- **Ulana Zakalak** - President

**National Register of Historic Places**

**David Cornelius, AIA**

- The legacy of John Haviland
- Archives in Somerset, England
- Notebooks at UPenn

**Janet Foster, Acroterion**

## DEVELOPMENT INTERESTS

**RBH Group**

- Newark developers, currently involved with Richard Meier's Teachers Village project
- **Linda Morgan** - Planner & Manager

**Other local developers**

# NEIGHBORHOOD ARCHITECTURAL CONTEXT



**AMERICAN HISTORY HIGH SCHOOL**  
Warren & Wickliff Streets



**MELIDA MINI MARKET & APARTMENTS**  
Central & Newark Streets



**PRIVATE RESIDENCES**  
Sussex Street



**PUBLIC HEALTH RESEARCH INST.**  
Warren & Newark Streets

Photos by Rob Kesack



**PRIVATE APARTMENTS**  
Lock & New Streets



**OTTO H. YORK CENTER (NJIT)**  
Warren & Summit Streets



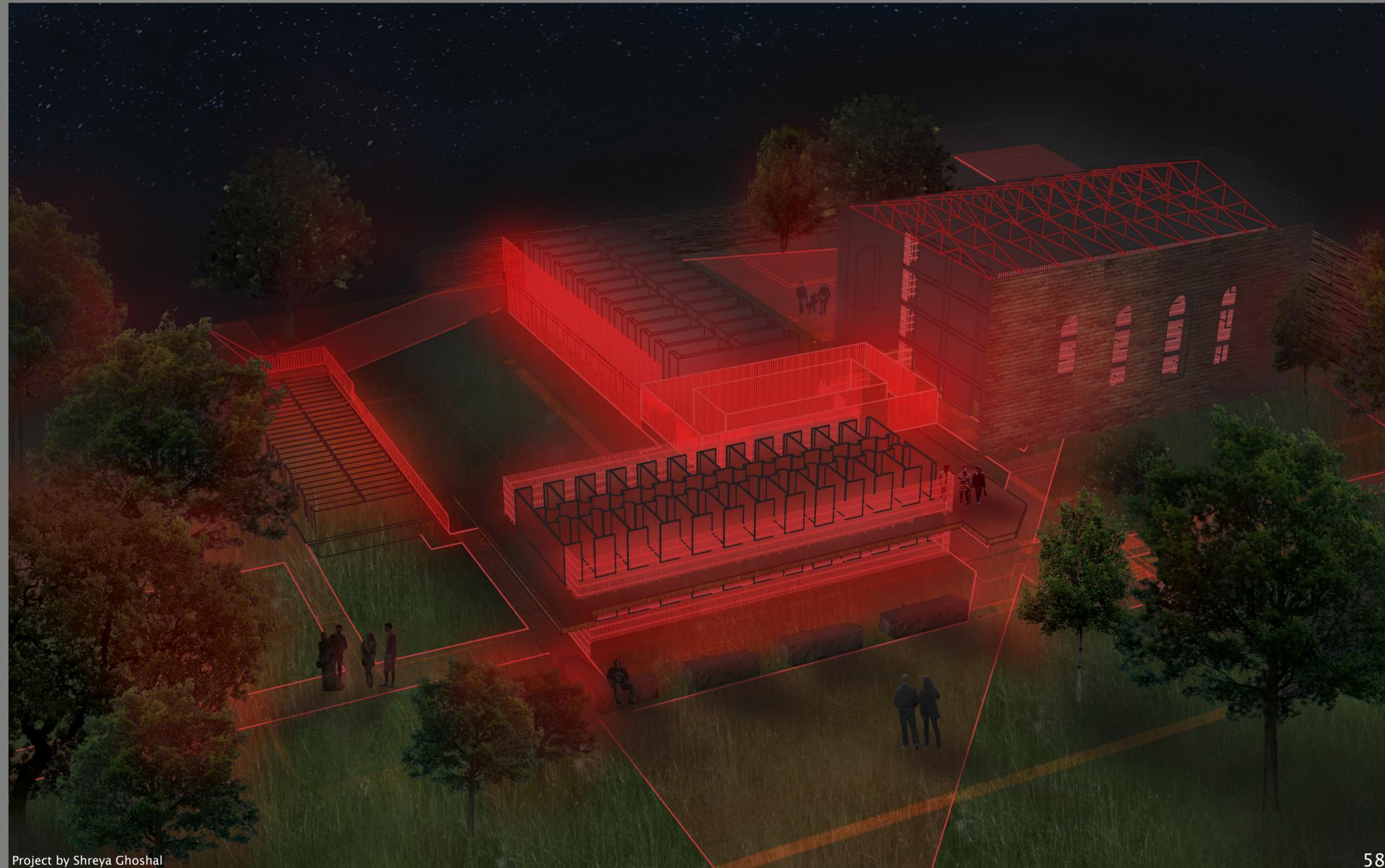
## NEIGHBORING PROPERTY OWNERS

- ESSEX COUNTY JAIL
- PRIVATE
- CITY OF NEWARK
- NJIT
- RUTGERS UNIVERSITY
- UNIVERSITY HEIGHTS
- HOUSING AUTHORITY
- ESSEX COUNTY IMPROVEMENT AUTHORITY

0 0.08 0.16  
MILES

SOURCES: OGIS NJ, NJOIT, NJGIN, ESRI.





## STUDENT PROPOSALS

**Interpretive Design: Social History**

Maura Whang 62  
Shreya Ghoshal 64

**Architectural Design: Institutional Re-Use**

Janine Lang 66  
Shivali Gaikwad 68  
Xianqi Fan 70

**Interpretive Design: Materials & Technology**

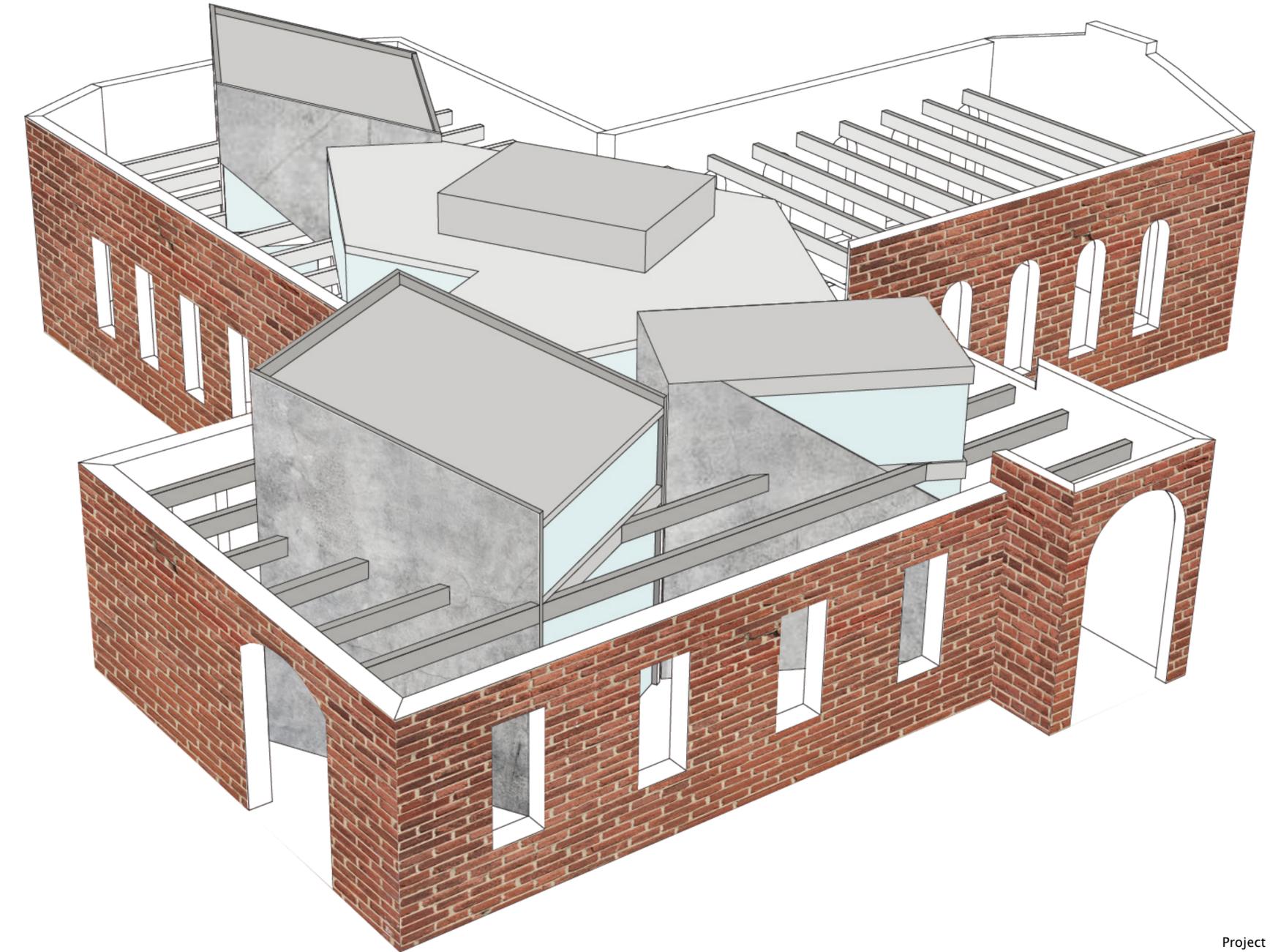
Rob Kesack 72  
Gabriela Figuereo 74

**Architectural Design: Housing**

Qianye Yu 76  
Myron Wang 78

**Interpretive Design: Community Hubs**

Madeline Berry 80  
Daniella Zamora 82

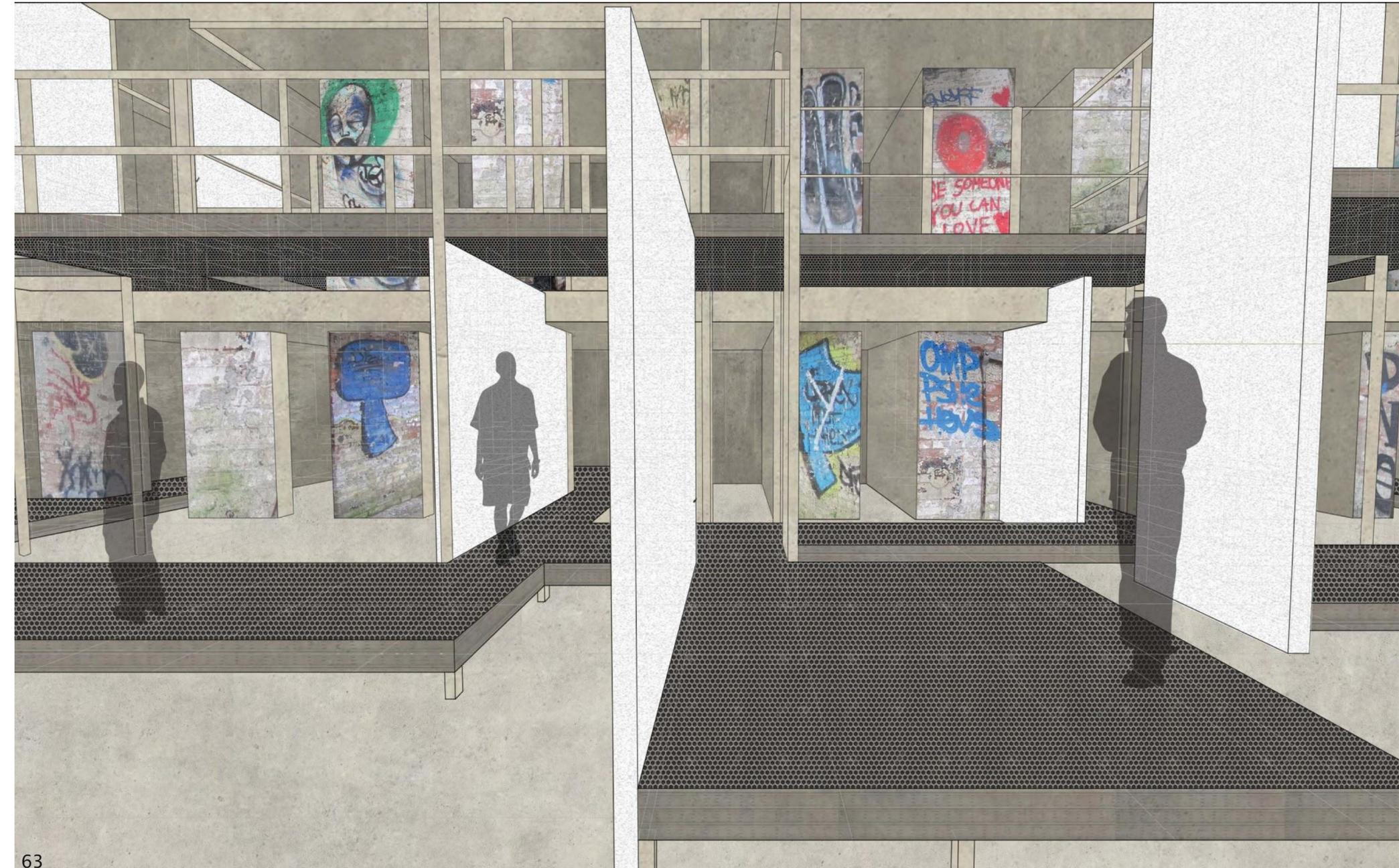
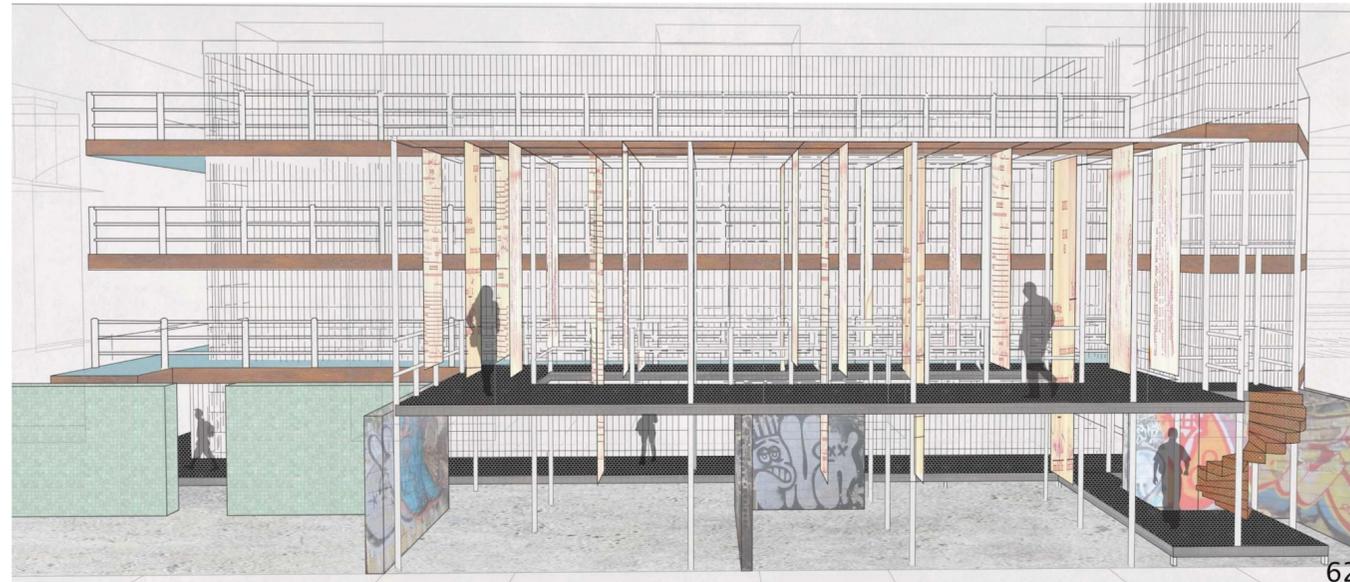
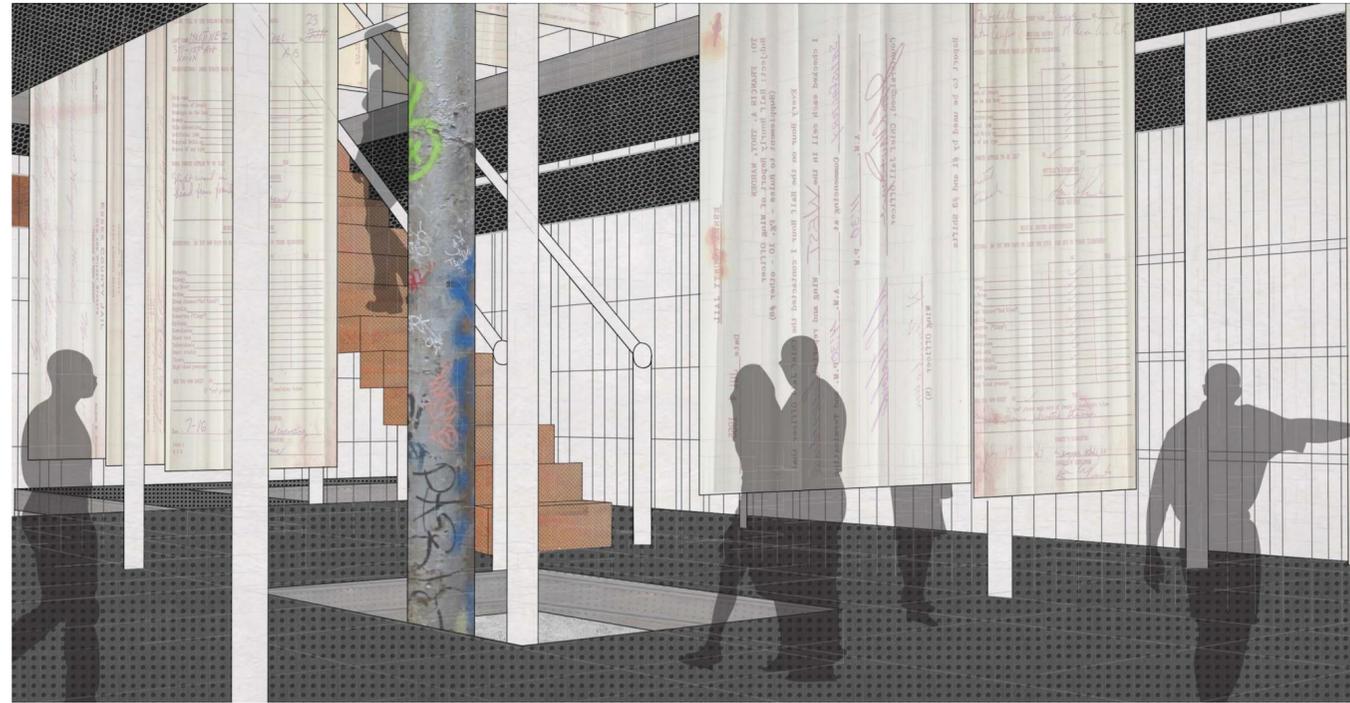


# MAURA WHANG

Up until now, the jail's social history has been largely lacking from the conversation about not only what to do with the site, but also from the preservation conversation, as well as its place in the social context of the City of Newark.

I am proposing a temporary public exhibition, which will invite the community into the space. Through a curatorial focus on the daily lives of the jail's inhabitants, including both the prisoners and the guards who worked there, and their distinct movement within the jail, my hope is to reveal the physical space and its untold stories in a way that challenges the themes of prevailing conversations about what to do with this place. Ultimately, the goal is to make a fresh case for the jail's significance, and potentially set a new ball in motion for its preservation.

The movement of the prisoners back and forth, back and forth in the plan of their individual cells is a movement of choice. As was stressed in our conversations with those who spent time in jail, the most important aspect of life behind bars was survival by movement. The movement up and down, as well as back and forth, of the guards is a movement of obligation, and highlights these individuals' jobs as the surveillers of the space, needing to keep an equal eye on all of the cells. It is these two differing spatial logics that drive the rest of the exhibition design.



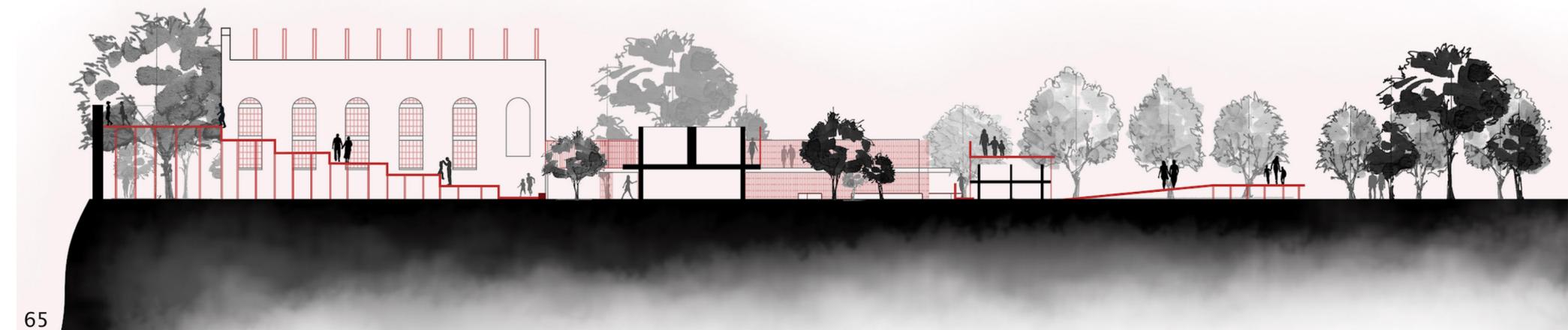
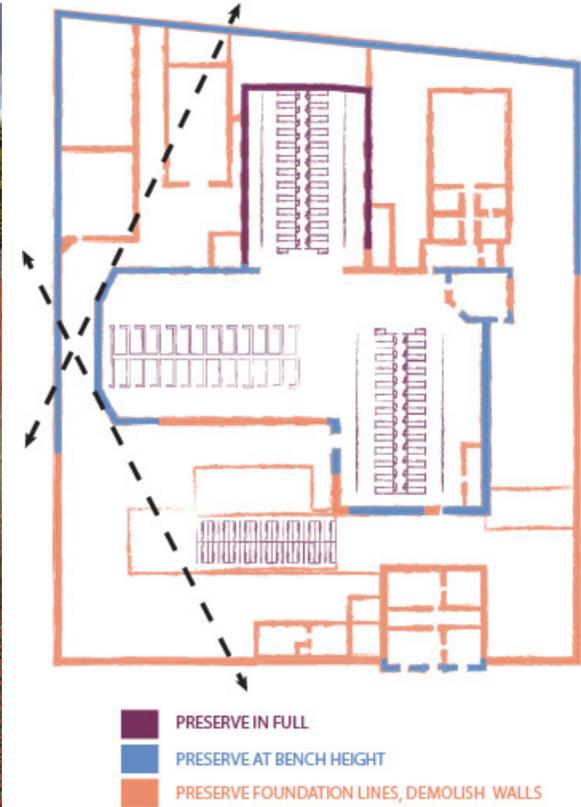
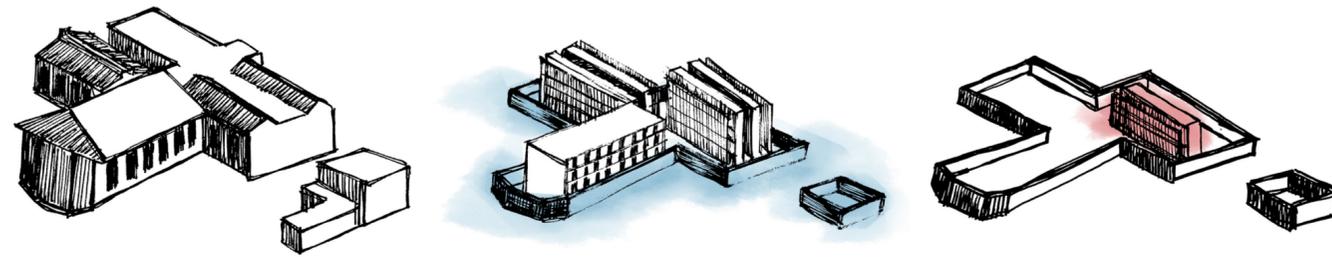
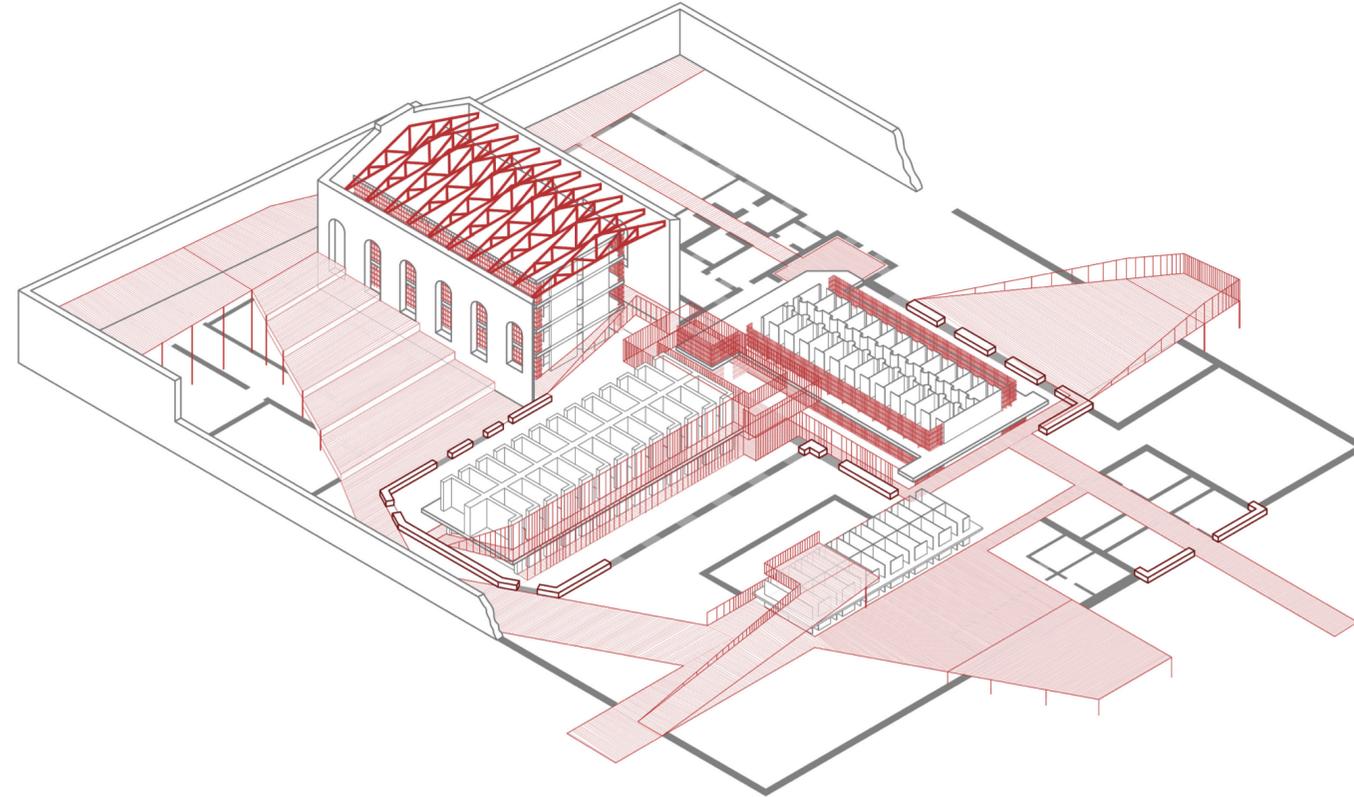
INTERPRETIVE: SOCIAL HISTORY

# SHREYA GHOSHAL

Preservation can go beyond architectural history, and begin to address social histories and changing site conditions as well. This project captures the difficult history of the abandoned jail site and uses it to encourage people to cross social barriers and experience the feelings of confinement versus freedom.

My proposal is a park space that integrates the original jail's physical fabric with a proposed new circulation path that hovers above the overgrown grasses, wildflowers, and shrubs. The jail cells themselves become the focus of preservation efforts in this project because the cells could become a means by which people could have the same experience as the prisoners, even if only for a few minutes at a time. The buildings' walls are preserved at either bench height to encourage gathering and spending time on the site, or as outlines on the ground to show the original John Haviland plan.

A series of light installations highlighting the thresholds of cells and quotes from former prisoners completes the proposed preservation and interpretation scheme for this site.

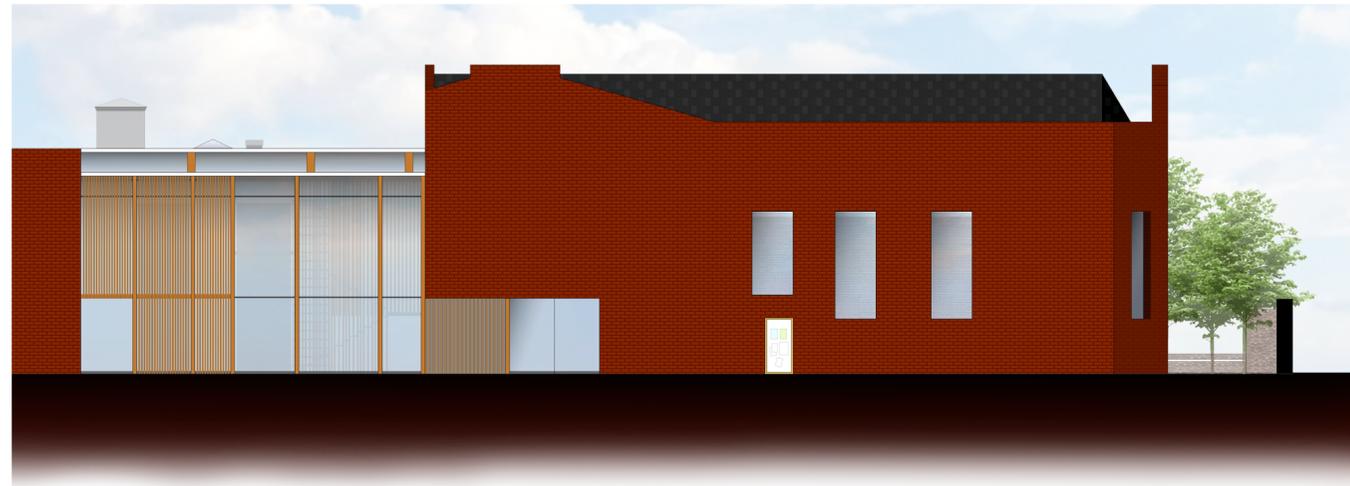


# JANINE LANG

Because of its location on the edge of both residential and institutional zones, the Old Essex County Jail is well situated to serve as a hinge point between the university and the community.

This design is comprised of two wings: one for existing NJIT programming like their technology assistance program, and one for after-school programs and community activities. I would demolish the North Wing to create an outdoor recreation area, while preserving and renovating the two remaining cell blocks to create classrooms and offices. To create a larger gathering space in the community wing, this design proposes a glass meeting hall inserted into the masonry cell block. In the NJIT wing, the design calls for a new roof, which is set apart from the historic building material.

Because each jail building is indicative of advanced building technology at the time of its construction, this new roof and any new construction on the site will be built in cross-laminated timber, an up-and-coming building material of today. A connector piece containing entry and circulation areas serves to integrate the new and the old construction through rhythmic use of CLT framing, steel, and glass which signal new intervention on the site while preserving the building's overall historic appearance.



ARCHITECTURAL: INSTITUTIONAL RE-USE

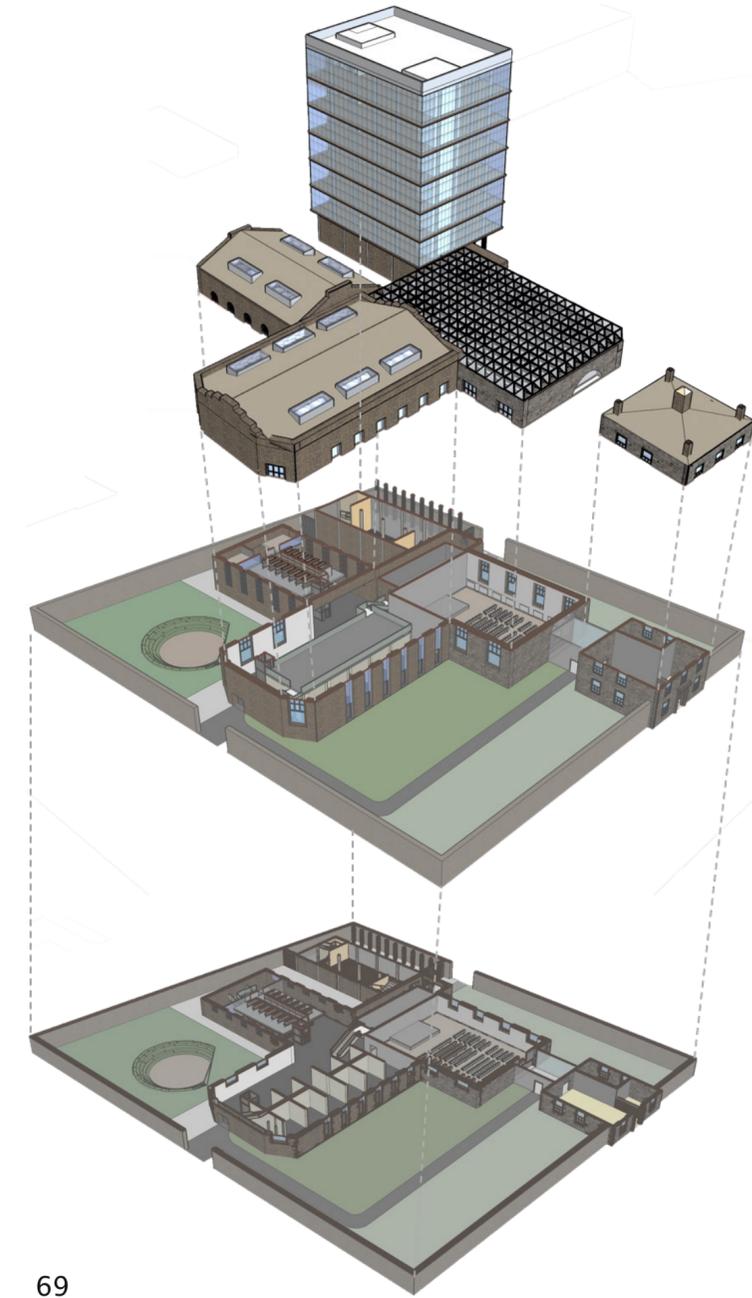
# SHIVALI GAIKWAD

The jail site lies at the edge of the campus of NJIT which is one of the stakeholders and potential decision makers for the site.

In 2008, NJIT inaugurated the School of Art and Design, which is currently sharing space with the architecture department. My suggested program is to house this program within the jail site. I intend to have a flexible space for exhibitions which may include the social history of the site. In this manner, a new 8-story building could be developed to house the NJIT School of Design and the jail site becomes a practical training ground for design students to collaborate and give back to the community.

Zooming in, I've divided the different wings of the site to house the main college building, library, auditorium, and café. The steel jail cells could be repurposed into library stacks and reading booths, as seen in the drawings. The outdoor area could be converted into a sculpture garden to complement the exhibition gallery.

Through this intervention, I've tried to preserve the historical skeleton of the jail site while adding new functions that allows the university community, neighboring residents, visitors and artists to come together and have a dialogue.

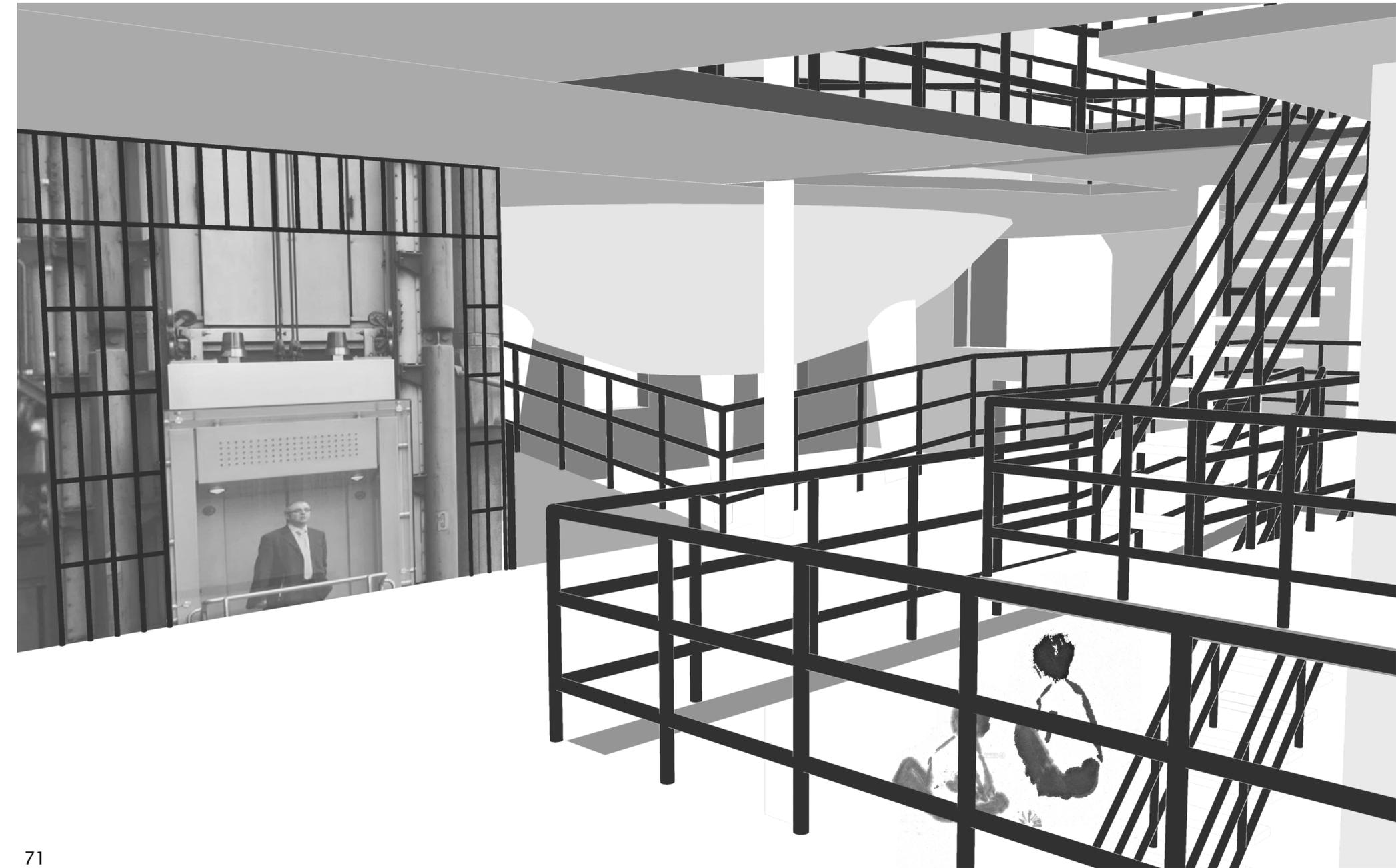
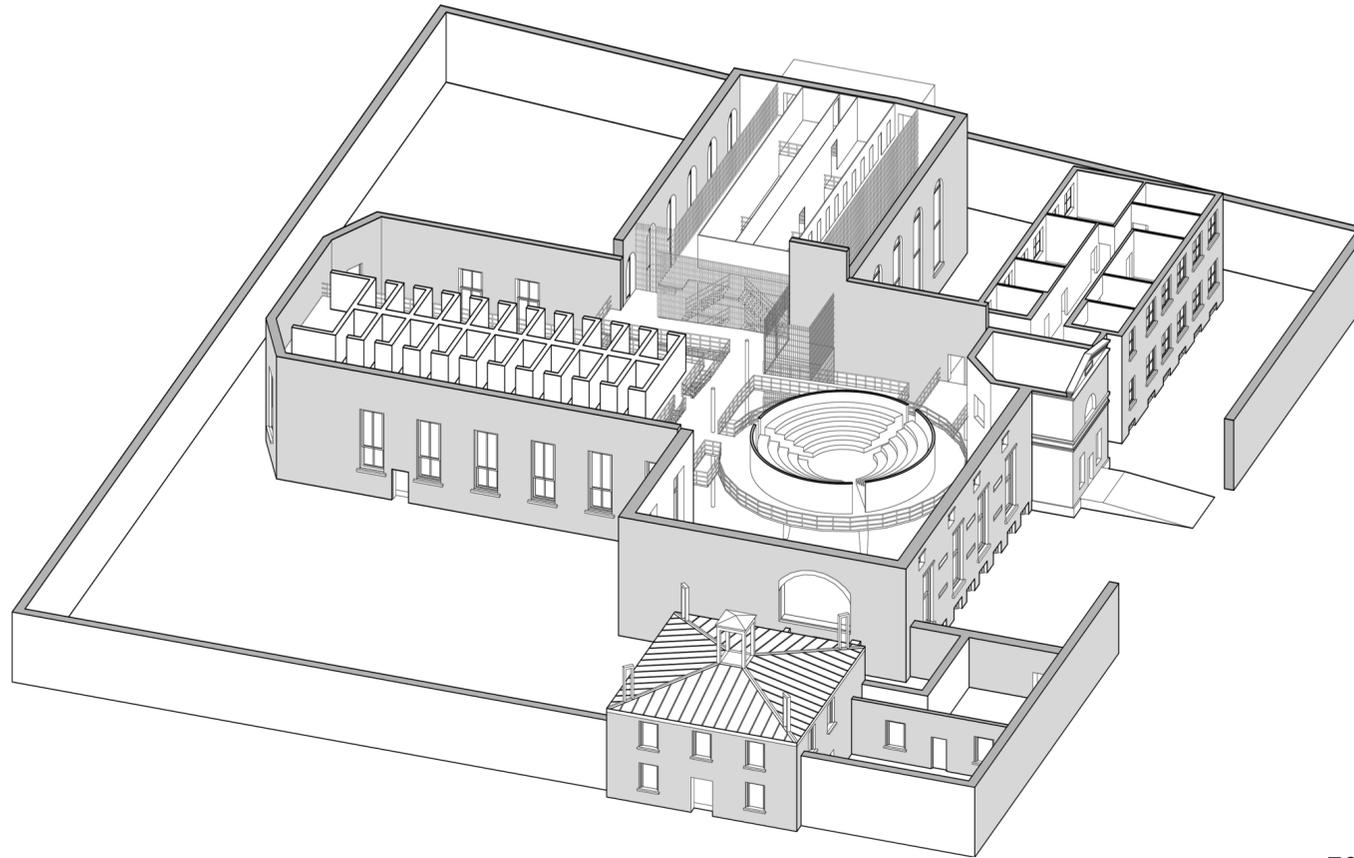
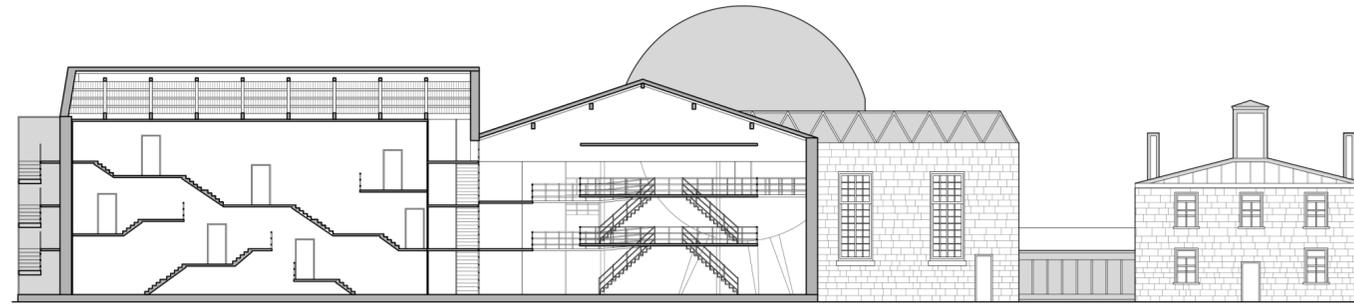


# XIANQI FAN

Considering its location within the University Heights Science & Technology Park, I propose to repurpose the jail as a science and technology museum.

The Warden's Office will become the main entrance, and the East Wing serving the main exhibition hall with a 3D theater housed in a new spherical structure above. The original structures of the West Wing would be kept and transformed into small-scale science labs for interesting physical and chemical experiments. The mechanical chase between the cells in the North Wing is distinctive and worthy of preserving. The small cells would be combined to form a large space for a laser maze. The corridor is designed to be used as the channel linking different floors. The Hospital Wing will be used as office space, classrooms, coat check, and restrooms.

The original Warden's Residence will be transformed into a café. To get more open space, other buildings in the jail are cleared, including garage, laundry house and the power plant. The outdoor space is designed to be a park. The inner structures of the Women's Wing could be maintained as climbing frames.

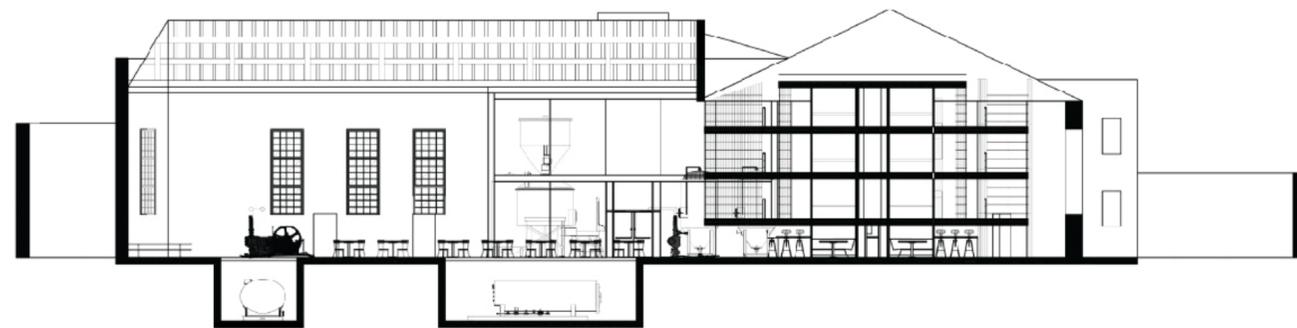
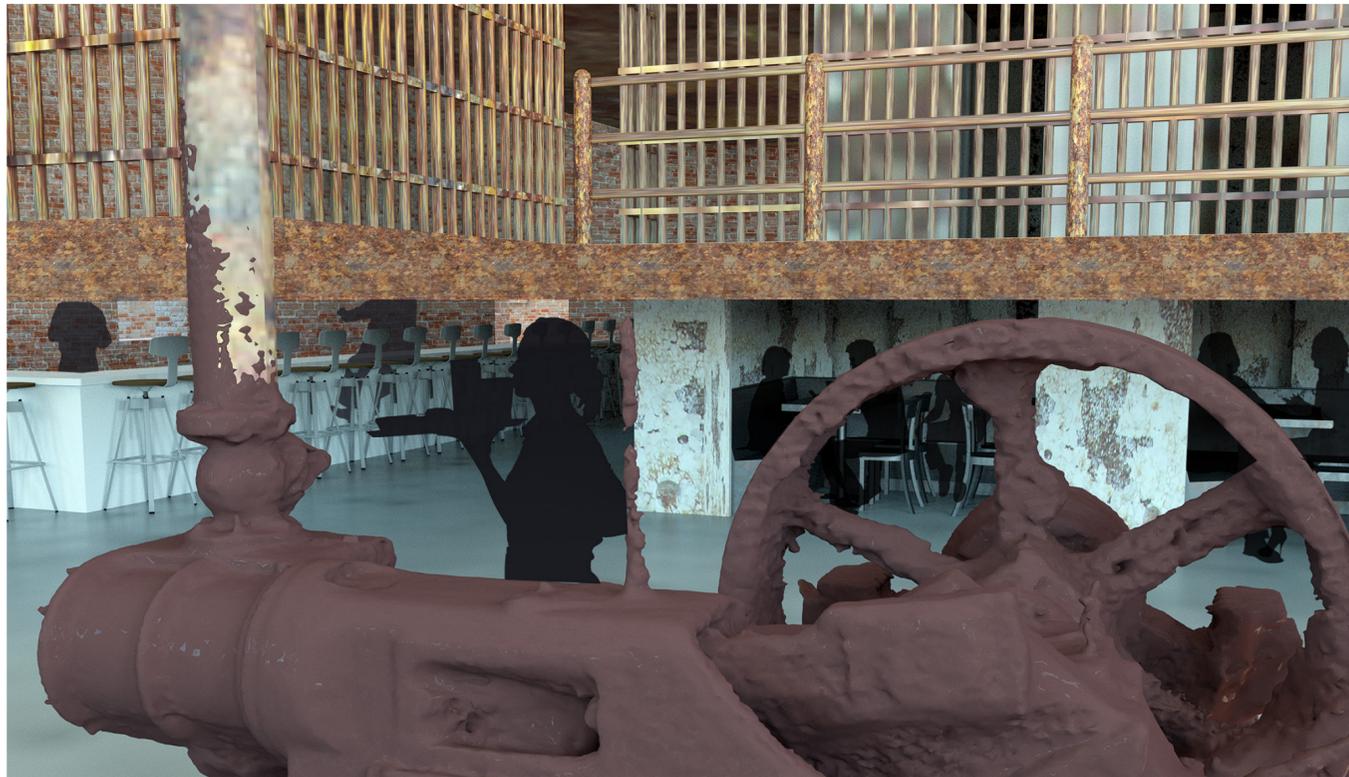


# ROB KESACK

Newark was once a city of industrial greatness, having been one of the country's hubs for invention and manufacturing well into the 20th Century. Much of that celebrated past, since erased by years of neglect and the wrecking ball, is now forgotten.

The focus of this project was on rekindling a lost history. This proposal took into consideration ways in which the specific technological history of the jail site, along with a forgotten business of brewing beer, might complement popular and modern socio-recreational trends. The objective was to produce a viable for-profit business scenario which could retain the integrity of the site and Newark's industrial heritage.

Therefore, my proposal is to create a brewery and brewpub within the existing building envelope. A retail space will be placed within the Warden's Residence, which will also become the main entrance to the site. The East Wing and West Wing will become dining halls, with the West Wing also serving as an event hall. The two steam engines and attached boilers will be relocated to the West Wing and partially submerged into the tunnels beneath and the masonry cells will be removed. The intention is to showcase the jail's mechanical artifacts and create natural divisions of space in the triple height room. The North Wing will become the brewery and a portion of the Hospital Wing and Warden's Office will become the kitchen. The remainder of the Hospital Wing will be a bottling area.



LEFT TO RIGHT: WEST WING DINING HALL, BREWERY, EAST WING DINING HALL



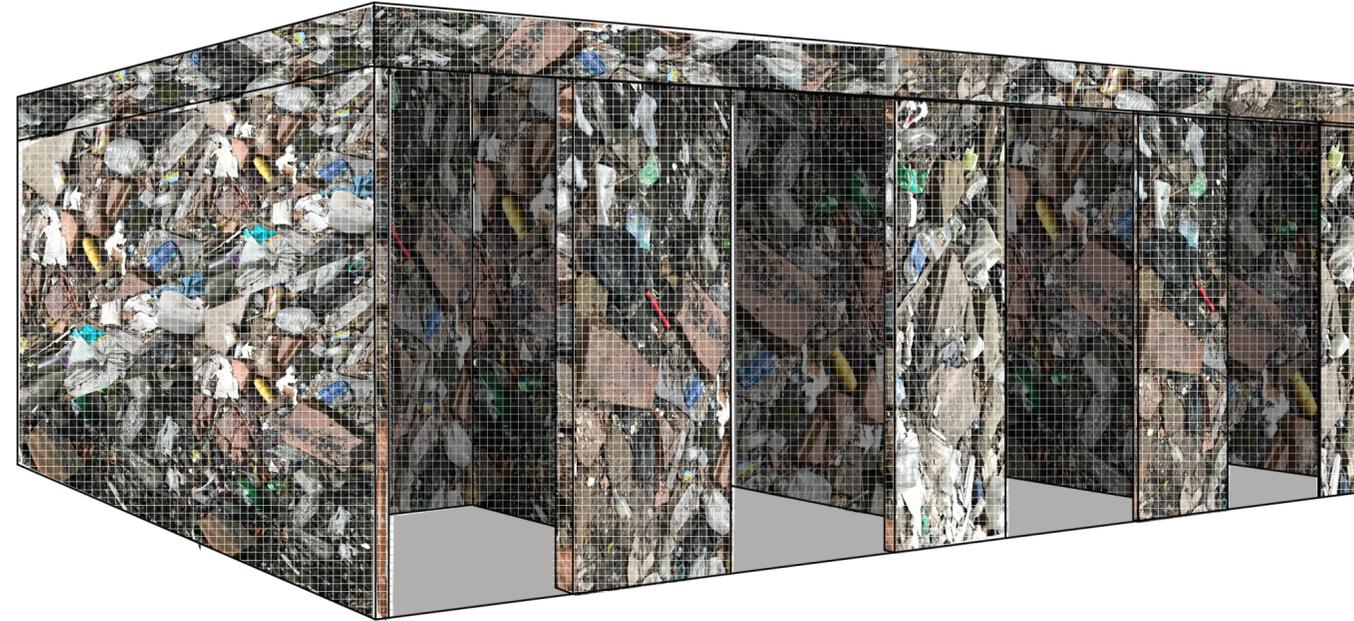
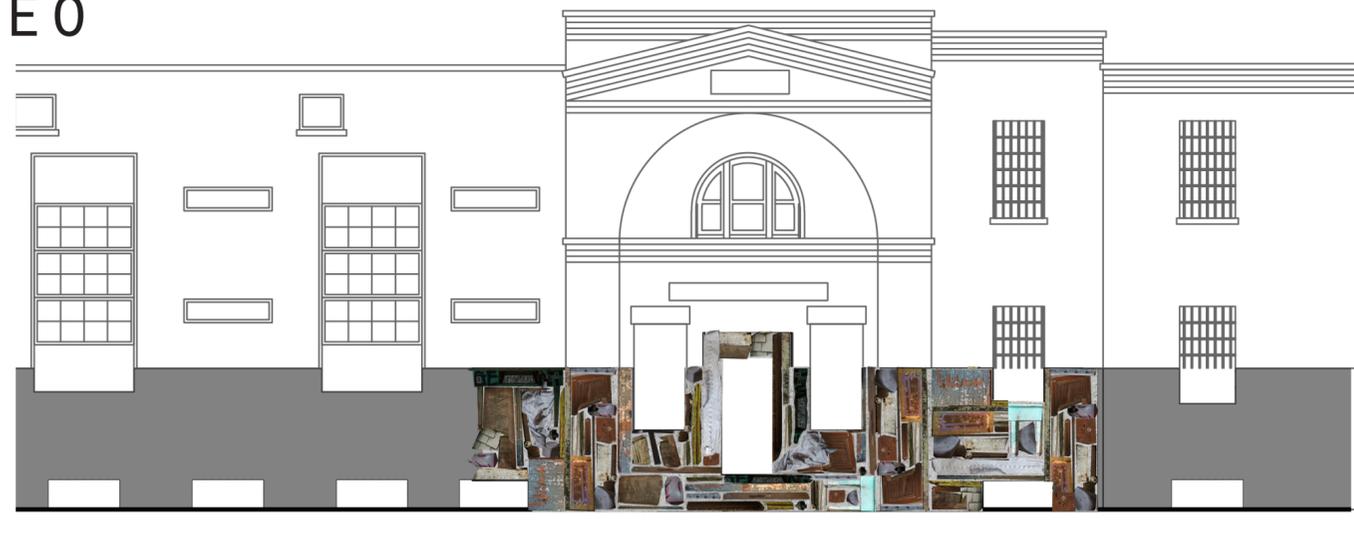
WEST WING DINING HALL

# GABRIELA FIGUEROO

Culture Quarry is an interpretive art project that tells the history of material sourcing, social use, and decay of the Essex County Jail in Newark.

The Essex County Jail has been accumulating artifacts deposited by natural forces and human interaction. In any rehabilitation of this site, these discarded items would be lost, and along with them an intangible history of how the jail's role has changed over the years. Culture Quarry is an exhibition of partial reconstructions made entirely of discarded items, concrete, and wire mesh- of the buildings on the Essex County Jail site. In these structures, the artifacts collected from the Essex Jail behave as building blocks and are an example of how materials, in this case anything from deteriorated brick and stone to tattered shoes and empty spray cans, can be representative of a building's complicated history.

This project will address the multifaceted history of use at the Essex County Jail and its significance to various groups of people, which includes the homeless, graffiti artists, those previously incarcerated, residents of Newark and New Jersey, photographers, and those interested in the architectural and material history of the site.



# QIANYE YU

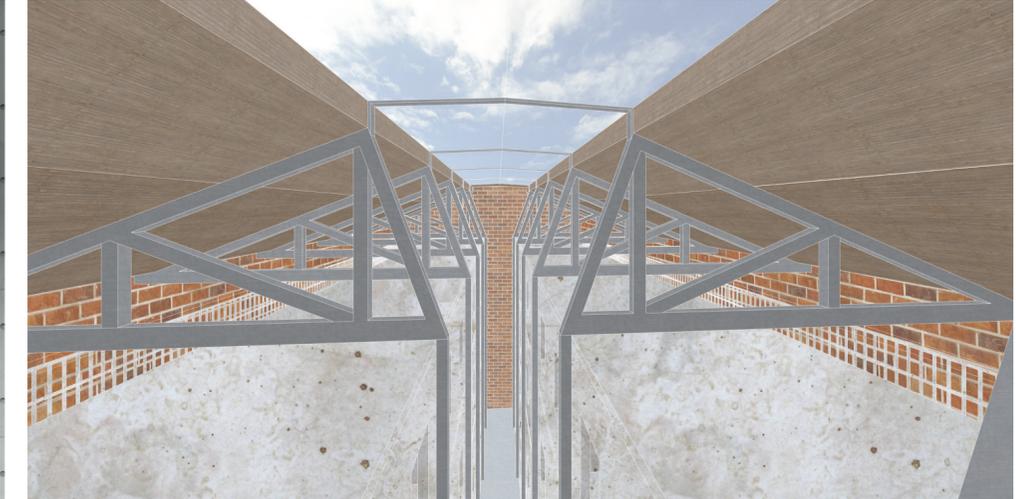
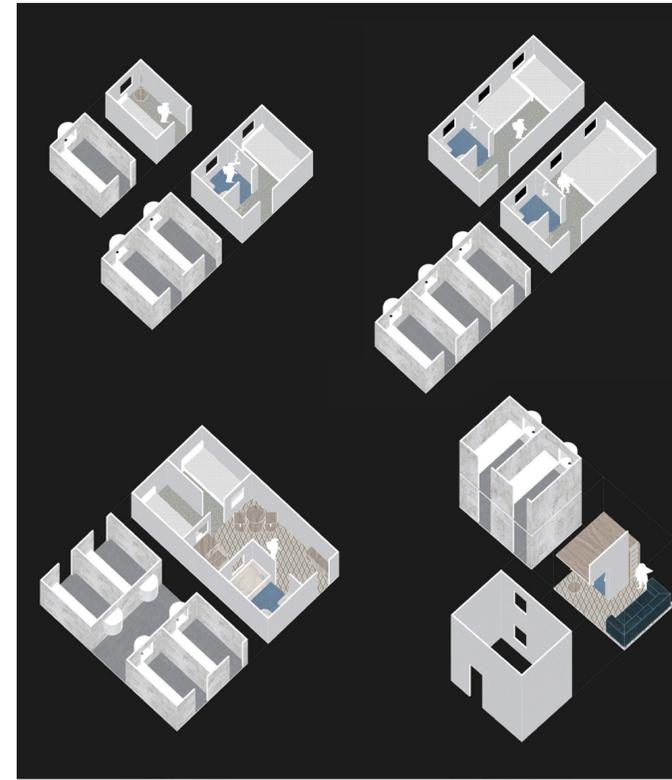
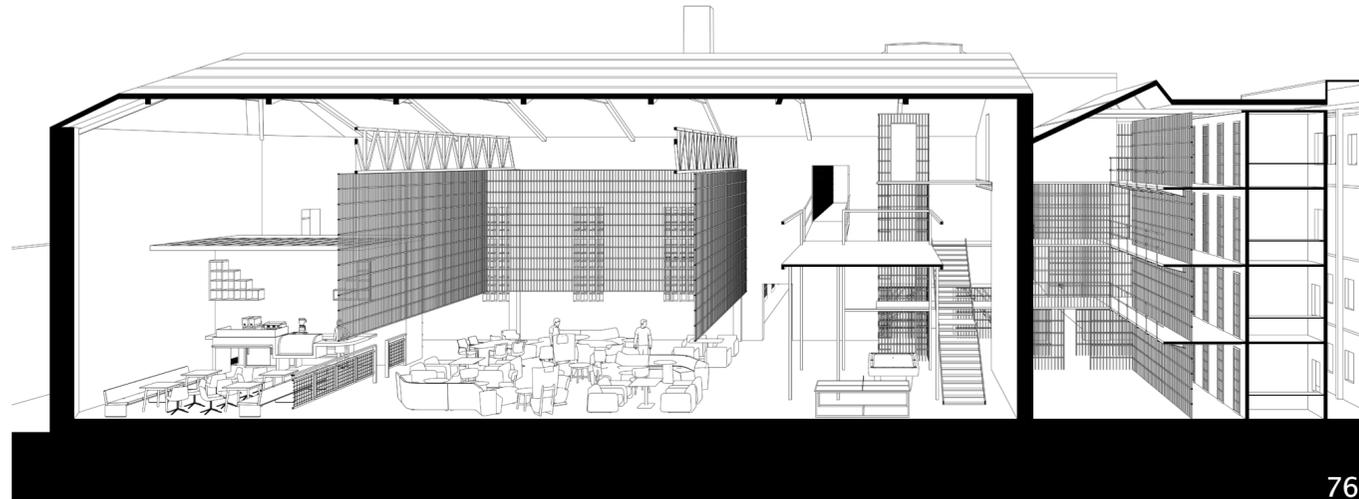
I propose to convert the jail into a hostel to serve young travelers, exchange students, or visiting scholars and athletes. My strategy is to consolidate and restore exterior walls, rebuild the roof with new trusses, and introduce ventilation through a skylight over the existing mechanical shaft. Structures in poor condition and of little historical significance will be demolished to create public space.

Steel cells in the north and east wings will be guest rooms. Masonry cells in the west wing will be removed to make space for reception, a cafe, lounge, and circulation. The engineering room will be reused as a gym and the warden's residence will be an exhibition room of the jail's history and the office of the Newark Preservation Commission. The only addition will be the shower room extending from the north wing.



The size of the smallest guest rooms will be that of a prisoner's single cell. Two units will make up of a guest room with independent toilet. Three units for people travel with friends and family. The last type is double height, with its own living room.

The steel bars will be the defining element of the lounge space. An elevated cage indicates the transition from being trapped to being freed, like lions are freed in the coloseums. Circulation within the hostel will be organized around a hydraulic elevator and bridges at different levels.



# MYRON WANG

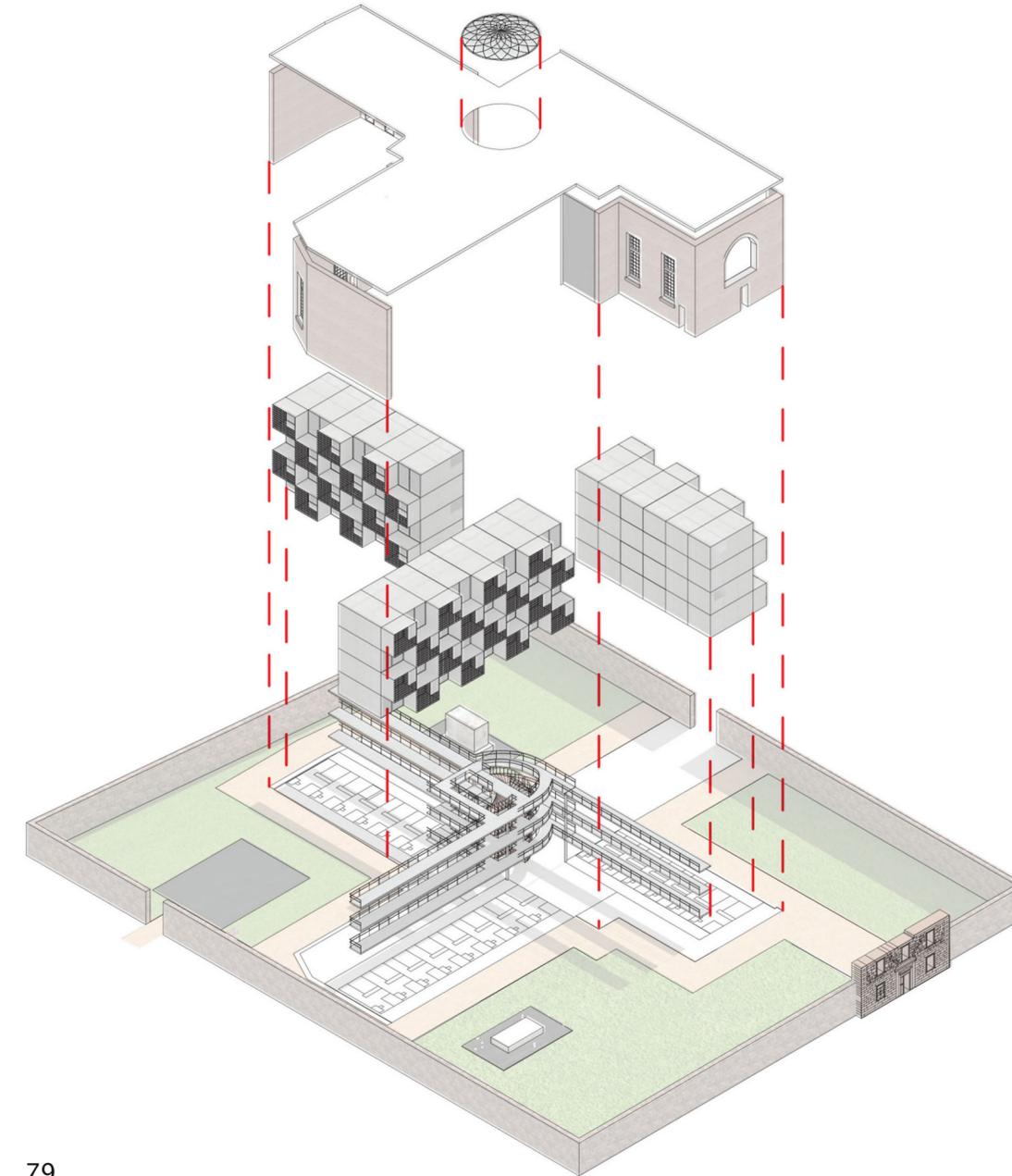
With the addition of the West and North Wings to the original cell block in the 1890s, the Essex County Jail took on a pinwheel configuration. I propose the further growth of the site by mimicking its original organization.

Programmatically, the design calls for the conversion of the site into student housing. The single volume of a jail cell is highlighted as the basic module of design. This module is then multiplied to form different units of the new structure.

By taking over the adjacent parking lot, more adequate space can be provided to form a new master plan for the complex. The central focus of the design is the intersection between the old and new.

A hyphen wing clad in channel glass acts as the link while providing amenity spaces. This wing intersects and incorporates the original perimeter wall, creating a conscious point of differentiation between the old and new forms.

The original jail blocks are converted to dormitories and are tied together with a central spiral stair case. This staircase becomes the focal point of the public space where the entrance to the converted jail site is located. From each of the original jail wings one exterior wall is removed, to provide light and air into the dorm rooms.



- ● ● ● ● New tinplate roofing with shallow dome above stair case
- ● ● ● ● Remaining original masonry walls
- ● ● ● ● Dormitories with balcony and cross ventilation occupying original footprint
- ● ● ● ● Central circulation connecting all three corridors from original cell blocks
- ● ● ● ● Outer walls and warden's residence facade from 1865.

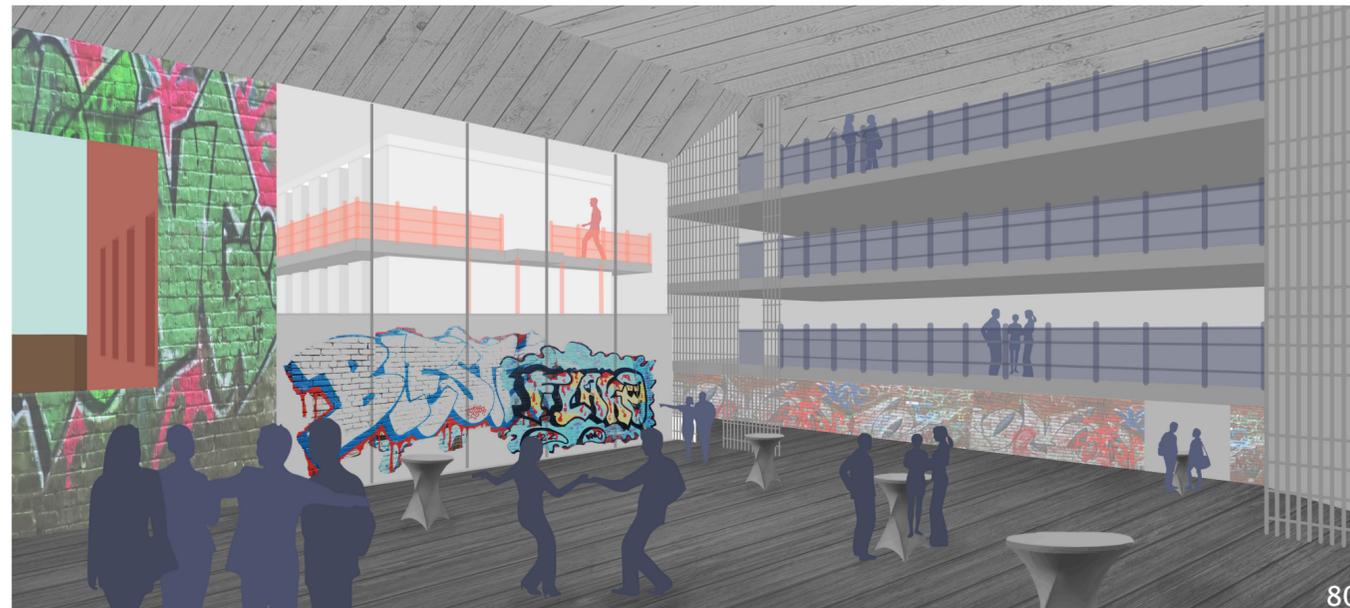
# MADLINE BERRY

For me, the significance of the site is tied to the physical and social history of the jail, but also to the history of the community around it and who has been using the site since its abandonment. I chose to interpret the site based on 3 major themes: interactivity, access, and decay. These themes led me to proposing to transform the jail into a community art space and event center.

Phase 1 is a series of weekend events. This isn't the main focus of my proposal, but I envision a series of weekend photography exploration events to document the site's current condition, further foster community pride in the site, and also to help break down the stigma against this abandoned place of incarceration.

Phase 2 is to convert the current site into a community art space and event center. A permanent exhibition will showcase the work from the photography event in the North Wing. Rotating installations on social topics like incarceration will be in the West Wing, along with studio space and darkrooms. An event space will occupy the East Wing and this will bring in enough revenue to maintain the rest of the site.

The walls will be treated with a translucent white sealer to create a more exhibition-like space. This treatment should also allow for the existing graffiti to show through.

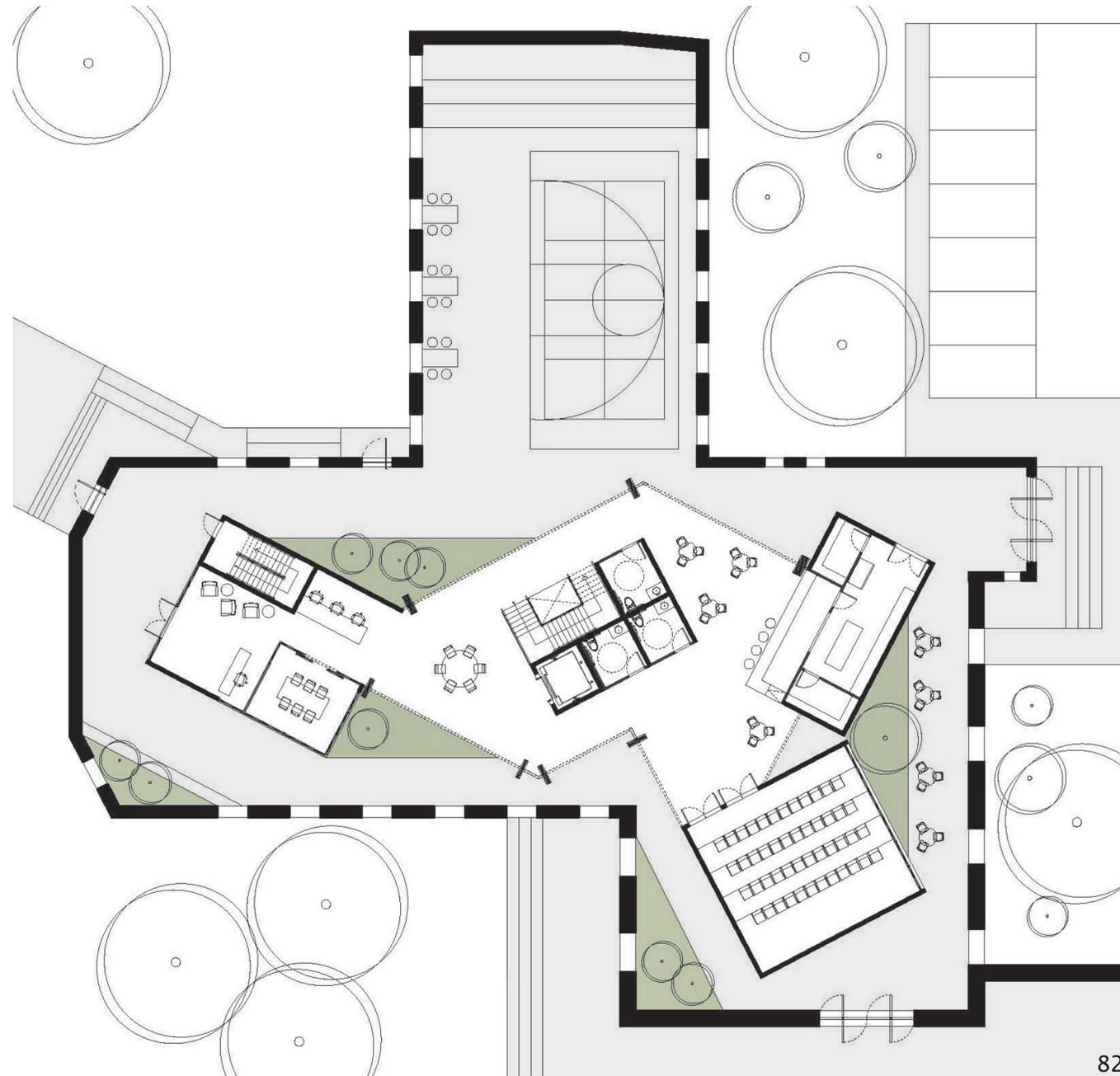


# DANIELLA ZAMORA

The Essex County Jail not only is of great significance because of its architectural value, but also because of the social history it contains. As being the first jail in Newark, it can become a vessel in which we can talk about the problematics of incarceration and also shed light on the problems that people encounter when they are released from prisons. Some, if not most, don't have a support system that will guide them and help them to reintegrate and be positive contributors to society.

My proposal is to create a reentry program for the Newark community that can provide the necessary tools to support the people that are being released from prison. The program focuses on education and employment by creating classrooms and computer labs for workshops and vocational training. Medical attention where people can get counseling/therapy or they can be examined and treated. Office space that will support the nonprofit organization, and an auditorium that can be used for larger scale events.

I also wanted to create open spaces within the program and decided to use the exterior walls of the former Essex County Jail as a transition from the exterior public space to the private space within the walls. The design is, literally, a new building of glass and concrete within the masonry shell of the old; creating a sense of openness that contrasts with the original use of the building.





Warden's Office  
Photo by Madeline Berry

## SPECIAL THANKS TO:

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**David Cornelius**, AIA, PE

**Sara Jane (Sally) Elk**, President and CEO, Eastern State Penitentiary

**Don Friedman**, material identification and structural integrity, Columbia GSAPP

**Ryan Johns**, 3D scanning

**Bonnie Kerness**, Healing Justice & Prison Watch

**Kenny Lin**, PLANewark

**Ojore Lutalo**, Healing Justice & Prison Watch

**Tim Michiels**, 3D scanning, material identification and structural integrity, Columbia GSAPP

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**Will Raynolds**, Photogrammetry, Columbia GSAPP

**Anthony W. Schuman**, Acting Dean, College of Architecture & Design at NJIT

**Jae Shin**, Hector, guest lecturer

**Darius Sollohub**, Department of Architecture, NJIT

**Renee Steinhagen**, NJ Appleseed

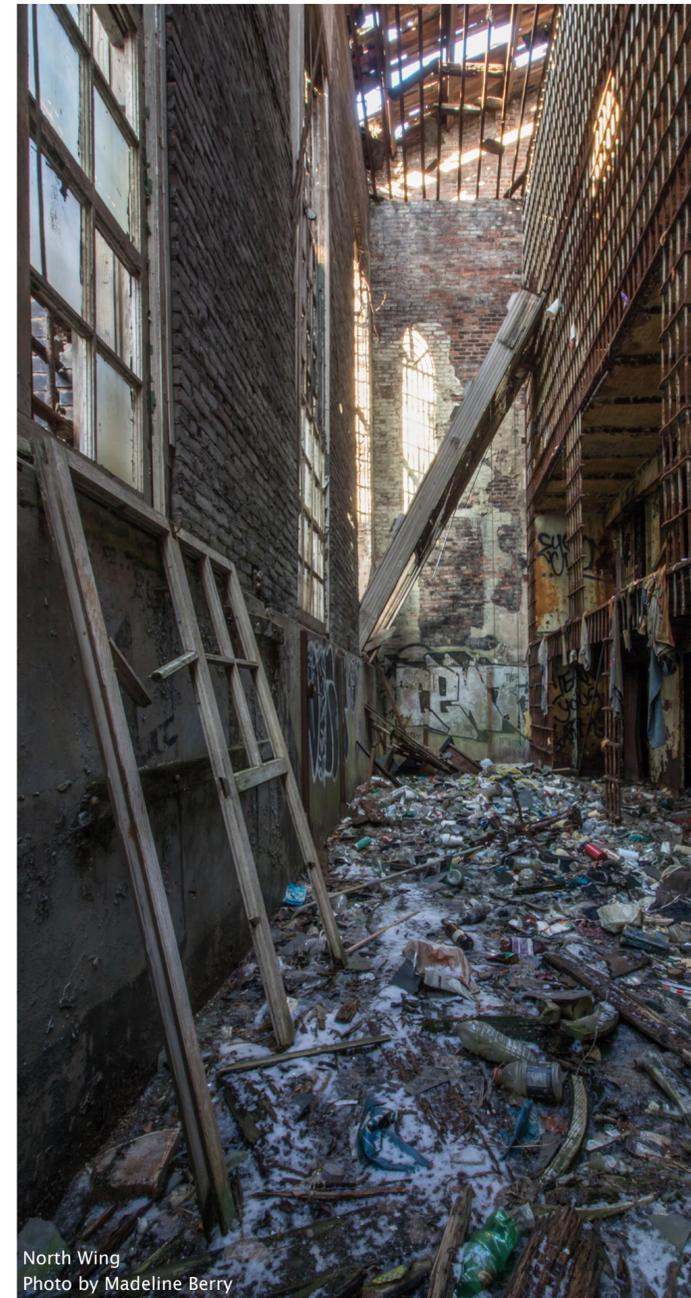
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**Ulana Zakalak**, Zakalak Restoration Arts

**Lauren Zalut**, Director of Education and Tour Programs, Eastern State Penitentiary

**Zemin Zhang**, Executive Director, Newark Preservation & Landmarks Committee



North Wing  
Photo by Madeline Berry

LEFT TO RIGHT:  
BRYONY ROBERTS  
ROB KESACK  
SHIVALI GAIKWAD  
MAURA WHANG  
XIANQI FAN  
GABRIELA FIGUERO  
QIANYE YU  
MADELINE BERRY  
MYRON WANG  
SHREYA GHOSHAL  
JANINE LANG  
DANIELLA ZAMORA  
BELMONT FREEMAN



Students from both studios at stakeholder meeting

THE OLD ESSEX COUNTY JAIL:  
ARCHITECTURAL DESIGN &  
INTERPRETIVE DESIGN STUDIOS

2018