

# Chelsea Craft Guild, New York, N.Y.

## Architectural Project: Advanced Studio II

Arch 595 and Arch 506G

New Jersey School of Architecture / HCAD / NJIT

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## Design Philosophy:

The central question is what Architecture might become; what is its potential as each new building is inserted into its unique context and specific place in time? How can architecture simultaneously evolve from its historical continuum, be derived from contemporary culture, appropriately respond to season, weather and time of day, be of its time and place, and also be built for posterity?

Architecture is compelling in its continuous evolution, expression of its embedded ideas, processes of creation, and the instincts of its designer. Architecture is advanced through the purity of its logic, and utility. Architecture is advanced through poetics, imagination and artistry. If Architecture has always been, and is also derived from its particular contemporary circumstance, what strategies and design characteristics advance the realm of Architecture?

The first question of the semester:  
What is Architecture?

The last question of the semester:  
How and why is your design Architecture?

*A great building must begin with the unmeasurable, must go through measurable means when it is being designed and, in the end, must be unmeasurable.*

*Louis Kahn*

*Architecture is an art; the technology merely supports it.*  
*Louis Kahn*

*A proper building grows naturally, logically, and poetically out of all its conditions.*

*Louis Sullivan*

*Form encompasses a harmony of systems, a sense of Order and that which characterizes one existence from another.*

*Form has no shape or dimension.*

*For example, in the differentiation of a spoon from spoon, spoon characterizes a form having two inseparable parts, the handle and the bowl. A spoon implies a specific design made of silver or wood, big or little, shallow or deep.*

*Form is "what."*

*Design is "how."*

*Form is impersonal.*

*Design belongs to the designer.*

*Design is a circumstantial act, how much money there is available, the site, the client, the extent of knowledge.*

*Form has nothing to do with circumstantial conditions.*

*Louis Kahn, Form and Design, 1960*

*Architecture is about exploring culturally, historically, psychologically, anthropologically, and topographically; every commission is different.*

*So, the real risk is that, as an architect, you end up imposing your stamp before you understand what the reality of a place is. Architecture should not simplistically integrate, but should make a contribution to the context.*

*When dealing with cities, you must employ a homeopathic process instead of surgery, because cities are vulnerable and you can easily destroy their subtle dynamics.*

*Renzo Piano*

*Every building is built for a specific use in a specific place for a specific society. Buildings try to answer questions that emerge from these simple facts as precisely and critically as they can.*

*Peter Zumthor*

*We are trying to extend the notion of place to materials as well.*

*We are trying to expand the role assigned to materials in traditional usage by changing their form and making them available to a new manner of perception, thus gaining a new sense of tension at the place.*

*Herzog de Meuron*

## Premise:

Dramatic shifts have taken place across the landscape of contemporary craft in recent years. In the past, the beautiful object was seen as the core of craft, an example of an artist's mastery and indisputably the outcome of a practice that privileges skill, handwork, and time.

Today, however, many artists working with media and forms traditionally associated with craft, such as fiber, clay, metals, glass, wood, furniture, and jewelry, are engaging an expanded range of materials, conceptual practices, ways of making, and modes of display. Likewise, the language and values inherent in or applied to craft are increasingly intertwined with those of art, fashion, and design, raising questions about the usefulness of differentiating between these areas of practice, rather than embracing the new hybrids.

As the conversation about craft has become more interdisciplinary, the very notion of autonomous, unchangeable, and docile objects has shifted toward the consideration of crafted objects as informing and being informed by larger practice. Recent artistic explorations in media and forms historically considered craft look to the ways a made object—a construct that is static—can exist in a state of unceasing change, or simply without resolution of its form, structure, or meaning.

Also in question is the ongoing relevance of traditionally understood markers such as virtuosic and dedicated skill, visible handwork and tactility, functionality, and associations with beauty, domesticity, and decoration.

Many artists address these concerns head-on through artworks that cultivate a productive and complicated relationship to craft's pasts by integrating new and old technologies and forms seamlessly, and drawing our attention to moments in the history of the field that might deviate from standard narratives of why the use of craft matters within art making.

The conventional understanding of craft objects emphasizes an artist's mastery of complicated and transformative material practices, which are often tied in some way to traditions of

making by hand. Yet, as much as craft is centered in the hand, it is also centered in the tool. The long history of innovation in craft shows artists continually expanding the physical and conceptual possibilities of a material through the tools they use and the way they use them. This often involves incorporating entirely new modes of fabrication, drawn from a wide range of practices. Such unconventional ways of making—or re-tooling—present additional questions about artistic production, often expanding conversations and expectations about the meaning of skill and handwork.

Computer-aided design and production technologies are used today in the making of artist jewelry, ceramics, and furniture, even though these tools are more often connected to the development of medical prosthetics, automotive designs, and building materials.

These avenues for approaching materials from new perspectives allow artists to adapt and expand both their own work and the capacity of the broader field, advancing a future in which the language of craft seems infinitely modifiable.

*Crafted: Objects in Flux, Emily Zilber, MFA Publications*

The Chelsea Craft Guild is a hybrid of three functions:

- 1) Residence-Workshop-Gallery: making and selling of crafts.
- 2) Boutique Hotel: unique settings for temporary lodging.
- 3) Café and Michelin Star Restaurant: settings for the culinary craft.

The Chelsea neighborhood of Manhattan, New York City is a unique in its assembly of hundreds of art galleries, indoor marketplaces (Chelsea Market), the High Line, with a mixture of housing types including high-rise residences, town houses and row houses.

Located at the southern boundary of Chelsea, the Chelsea Craft Guild is a non-profit association dedicated to the advancement of the artistry of crafts using both traditional and contemporary methods. Artists from around the world are given a one year residence and apprenticeship to explore their craft, interact with other craftsmen with different working methods or materials, teaching tourists and the Chelsea community, and displaying / selling their works in a gallery setting.

Revenue from the Guild's Boutique Hotel provides income to support the apprenticeships, while providing a unique art based setting for guest of the city. The Hotel's connection to the High Line, Hudson Riverfront, and the diversity cultural and commercial amenities is rarely equaled in New York City. The activity of the Hotel from early morning to late at night is intended to enhance the social life of the Guild and its surrounding context.

The Guild's Café is intended to activate the streetscape and High Line walkway, as a place to meet, rest, take refuge from the weather, and importantly "watch the world go by."

The Guild's Restaurant is intended to maintain its reputation for excellence by the quality of its menu which is based upon locally sourced foods, the finest of the culinary arts and service, the maximizing of its unique art based setting and its unique location within the city.

The master plan for the Chelsea Craft Guild is predicated upon "calming" local traffic by returning to the traditional block pattern of the city.

Although currently part of the landscape infrastructure of the neighborhood, the 14<sup>th</sup> Street Park is planned to be replaced by either an exterior or interior natural landscape that is integrated into the Chelsea Craft Guild project. The Chelsea Craft Guild is also intended to relate and connect to the High Line and Little Island, while connecting the street level and the pedestrian level of the High Line, thirty feet above. The new landscape must be as self-maintaining as the High Line, but can take many forms including an active public garden, natural landscape, and / or interior winter garden.

The master plan also requires a public piazza, square or plaza, open twenty-four hours a day, in all weather. Whether located at street level, at one of the levels of the High Line, or above, it is intended to attract the public for small gatherings and events.



## The High Line:

The **High Line** is a 1.45-mile-long (2.33 km) elevated linear park, greenway, and rail trail created on a former New York Central Railroad spur on the west side of Manhattan in New York City. The High Line's design is a collaboration between James Corner Field Operations, Diller Scofidio + Renfro, and Piet Oudolf. The abandoned spur has been redesigned as a "living system" drawing from multiple disciplines which include landscape architecture, urban design, and ecology. The High Line was inspired by the 4.7 km (2.9 mi) long Coulée verte (tree-lined walkway), a similar project in Paris completed in 1993.

The park is built on an abandoned, southern viaduct section of the New York Central Railroad's West Side Line. Originating in the Meatpacking District, the park runs from Gansevoort Street—three blocks below 14th Street—through Chelsea to the northern edge of the West Side Yard on 34th Street near the Javits Center. The West Side Line formerly extended south to a railroad terminal at Spring Street, just north of Canal Street, and north to 35th Street at the site of the Javits Center. Due to a decline in rail traffic along the rest of the viaduct, it was effectively abandoned in 1980 when the construction of the Javits Center required the demolition of the viaduct's northernmost portion. The southern portion of the viaduct was demolished in segments during the late 20th century.

Repurposing the railway into an urban park began in 2006 and opened in phases during 2009, 2011, and 2014. The Spur, an extension of the High Line that originally connected with the Morgan General Mail Facility at Tenth Avenue and 30th Street, opened in 2019. The Moynihan Connector, extending east from the Spur to Moynihan Train Hall, opened in 2023.

Since opening in June 2009, the High Line has become an icon of American contemporary landscape architecture. The High Line's success has inspired cities throughout the United States to redevelop obsolete infrastructure as public space. The park became a tourist attraction and spurred real estate development in adjacent neighborhoods, increasing real-estate values and prices along the route. By September 2014, the park had nearly five million visitors annually, and by 2019, it had eight million visitors per year.

[https://en.wikipedia.org/wiki/High\\_Line](https://en.wikipedia.org/wiki/High_Line)



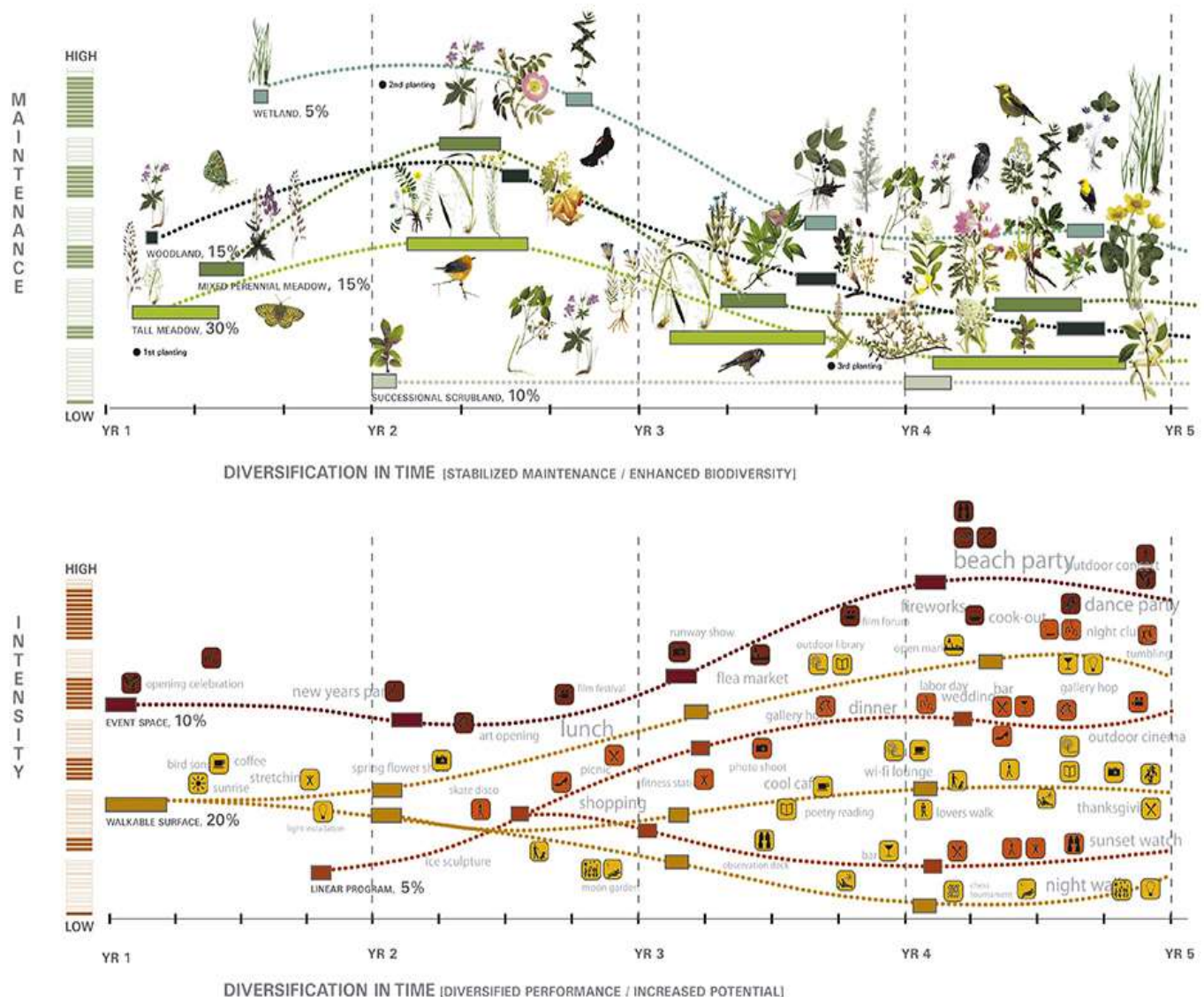
## High Line Landscape Design:

*The landscape design was curated by Dutch landscape architect Piet Oudolf using natural landscaping techniques. includes sturdy meadow plants (such as clump-forming grasses, liatris, and coneflowers) and scattered stands of sumac and smokebush and is not limited to native plants.*

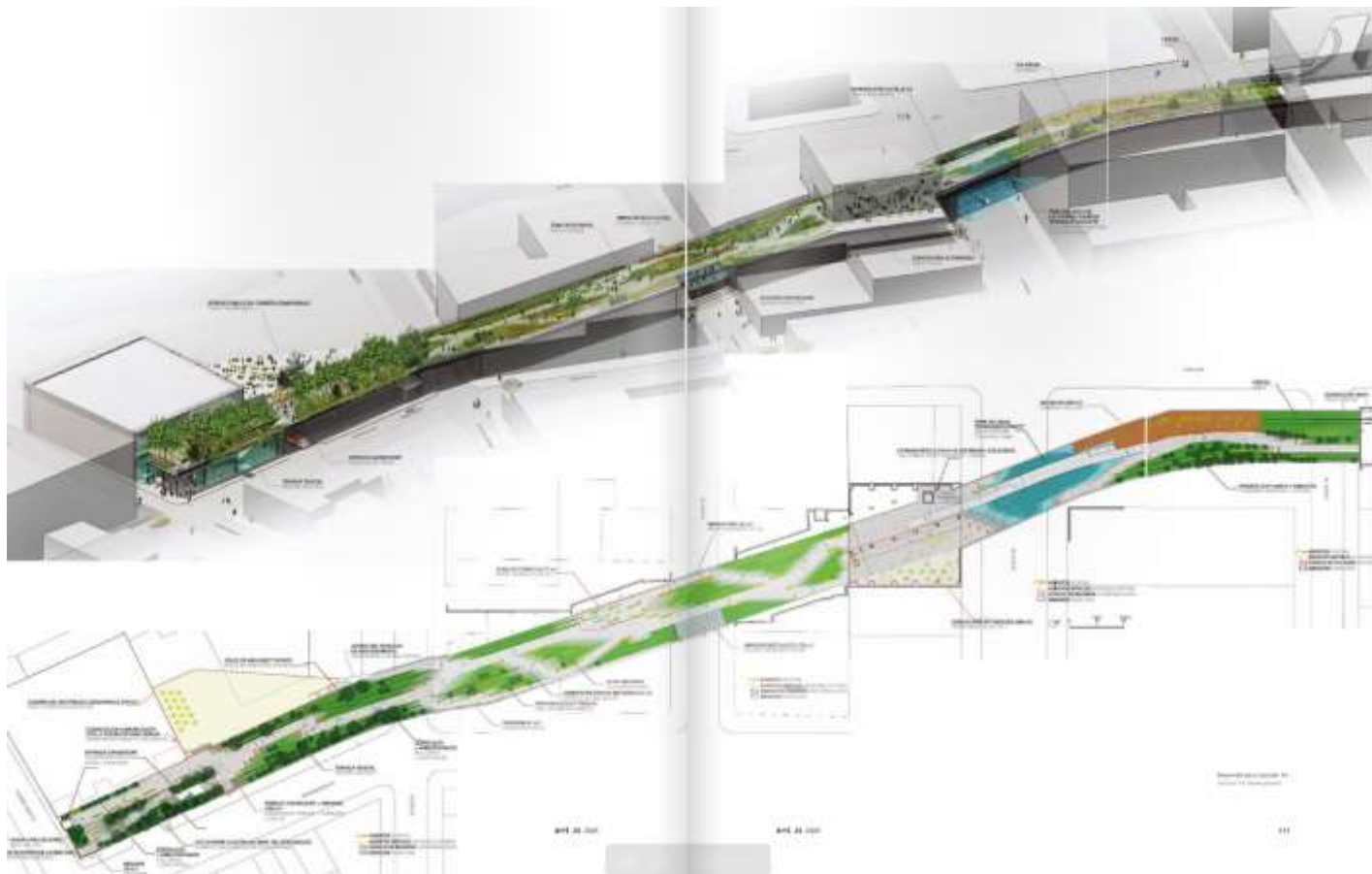
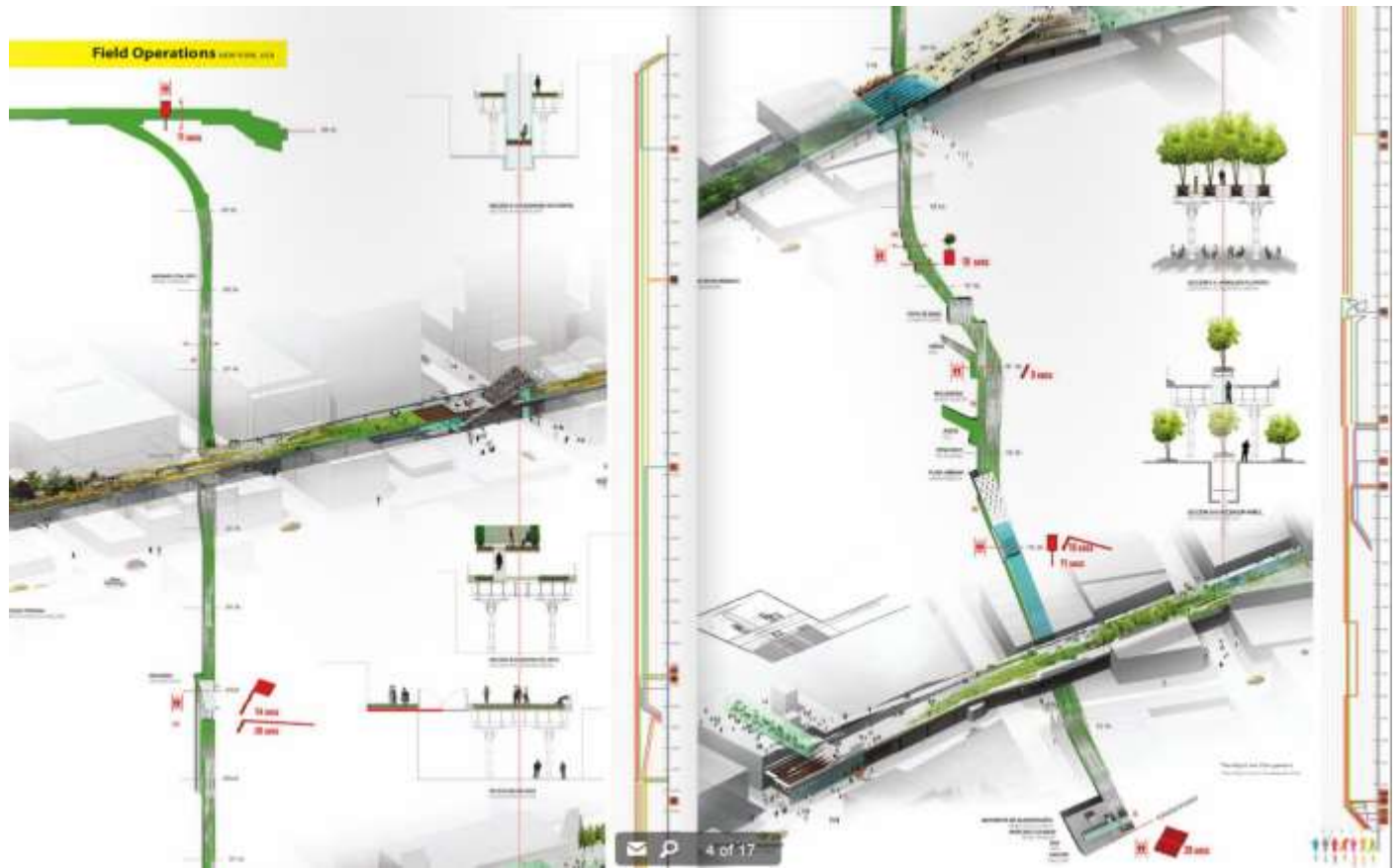
The High Line viaduct had 161 species of plants before it was converted into a park; the modern park has about 400 species of plants, including grasses and trees. There are about 100,000 unique specimens of plants. Each species is selected based on their appearance,<sup>1</sup> in addition to how well they survive throughout the year.<sup>1</sup> The park has a team of 10 horticulturists, who trim and prune the plants throughout the year to prevent overgrowth. Throughout the park, the soil has an average depth of 18 inches (460 mm). The park uses sustainable landscaping and organic lawn management techniques to maintain the space. Native fauna documented in the park include 33 native bee species, butterflies including painted ladies, and migratory birds including warblers.

*The park's attractions include naturalized plantings, inspired by plants, which grew on the disused tracks, and views of the city and the Hudson River. The pebble-dash concrete walkways swell and constrict, swing from side to side, and divide into concrete tines which meld the hardscape with plantings embedded in railroad-gravel mulch. "By opening the paving, we allow the plants to bleed through," said landscape architect James Corner, "almost as if the plants were colonizing the paved areas. There's a sort of blending or bleeding or suturing between the hard paving, the surface for people to stroll on, and the planting ..."*<sup>1</sup> Stretches of track and ties recall the High Line's former use, and portions of track are re-used for rolling lounges positioned for river views. The benches use Brazilian Ipê timber, which came from a managed forest certified by the Forest Stewardship Council. According to James Corner Field Operations, the High Line's design "is characterized by an intimate choreography of movement."

[https://en.wikipedia.org/wiki/High\\_Line](https://en.wikipedia.org/wiki/High_Line)











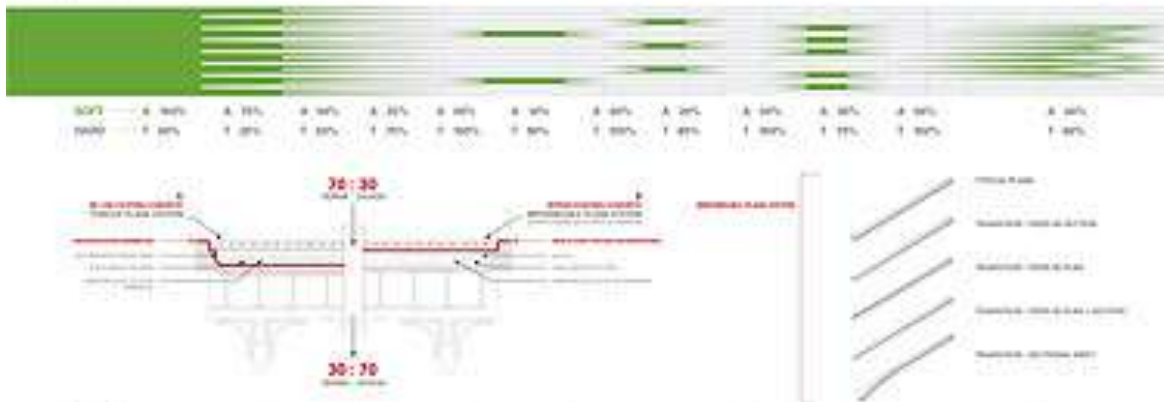
# WHAT WILL GROW HERE ?

Inspired by the melancholic, unruly beauty of the High Line where nature has reclaimed a once vital piece of urban infrastructure, the team retools this industrial conveyance into a postindustrial instrument of leisure, life and growth. By changing the rules of engagement between plant life and pedestrians, our strategy of **AGRI-TECTURE** combines organic and building materials into gradients of changing proportions that accommodate the wild, the cultivated, the intimate, and the hyper-social. In stark contrast to the speed of Hudson River Park, this parallel linear experience is marked by slowness, distraction and an other-worldliness that preserves the strange character of the High Line. Providing flexibility and responsiveness to the changing needs, opportunities, and desires of the dynamic context, our proposal is designed to remain perpetually unfinished, sustaining emergent growth and change over time.

1

## AGRI-TECTURE: A FLEXIBLE, RESPONSIVE SYSTEM OF MATERIAL ORGANIZATION WHERE DIVERSE ECOLOGIES MAY GROW.

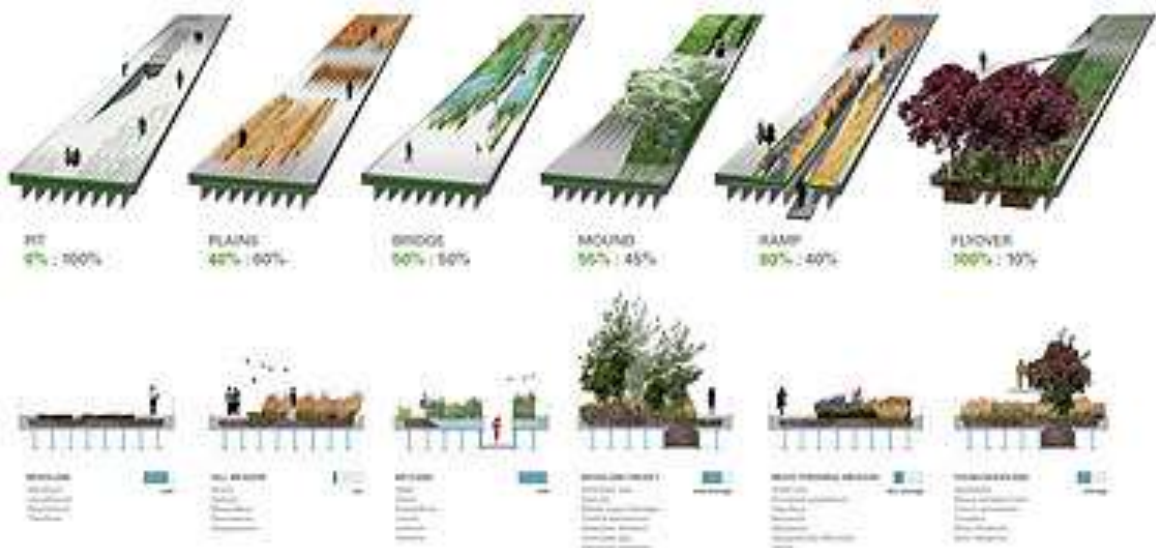
The diagram illustrates a gradient from high intensity (100% hard) to low intensity (100% soft) across a series of 12 segments, each with a specific material ratio.



2

## A METHODOLOGY FOR CONSTRUCTING HARD SURFACES AND STRUCTURES AS MEANS OF PRODUCING DIVERSE SOCIAL AND NATURAL HABITATS.

The diagram illustrates a methodology for constructing hard surfaces and structures as means of producing diverse social and natural habitats. It shows a series of 6 segments, each with a specific material ratio and a corresponding cross-section diagram.



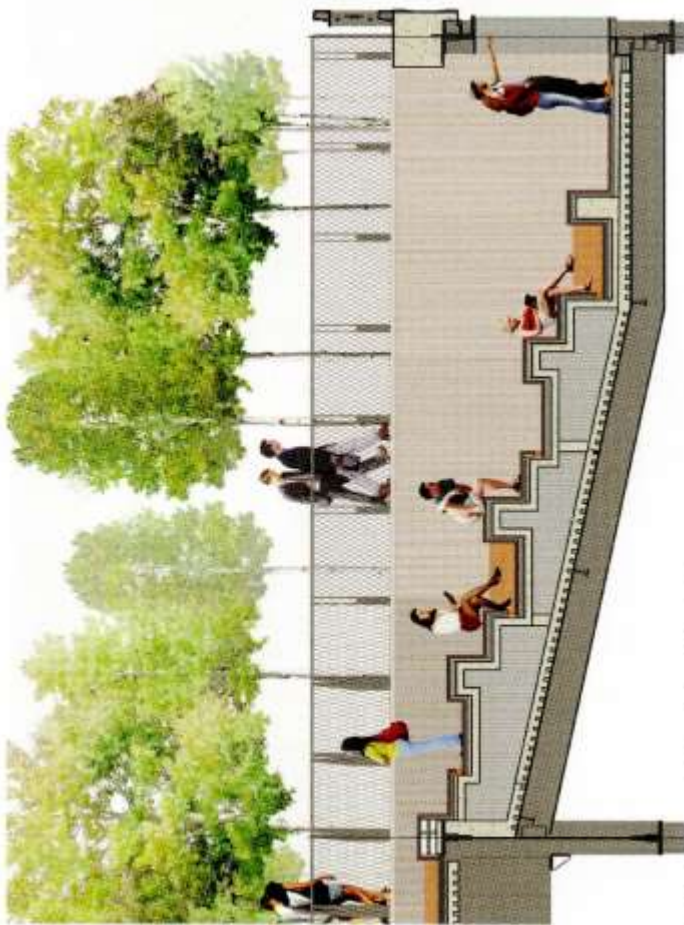




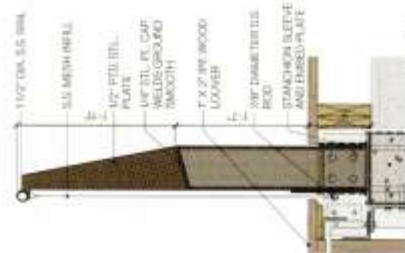




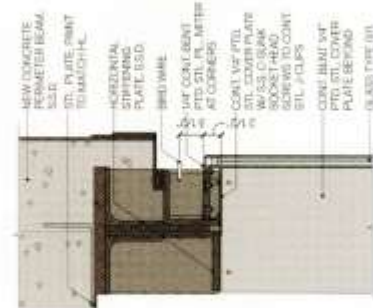




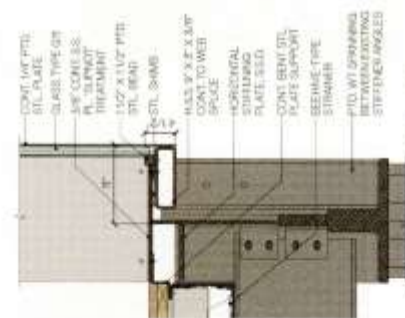
10<sup>th</sup> Avenue Square Sunken Overlook (Section)



10<sup>th</sup> Avenue Square Railing Deck Interface (Section)



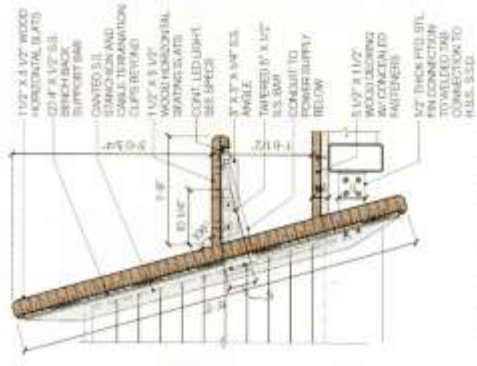
10<sup>th</sup> Avenue Square Window Head (Section Detail)



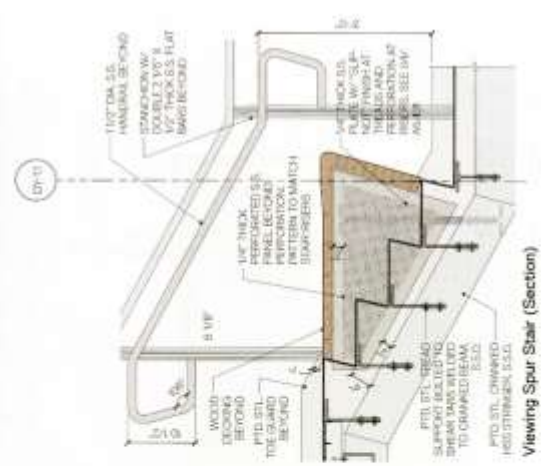
10<sup>th</sup> Avenue Square Window Sill (Section Detail)



West 26<sup>th</sup> Street Viewing Spur (Section)



Viewing Spur Bench (Section)



Viewing Spur Stair (Section)





## High Line: Hudson River Overlook

*Topography often makes a garden. The natural rise and fall of land add variation to any outdoor experience, with low points providing nestled enclosure and high points offering intriguing views. The High Line's single most distinguishing feature—its elevation above the street—is a topographic one, albeit a constructed one.*

*It's easy to forget that from a railroad perspective, varied topography is only a threat to efficiency: trains use less energy on level tracks. The High Line's gardens rest on the former rail bed of the New York Central Railroad's West Side Line. When completed in 1934, the gradient of the dual tracks running from 30th Street south past Gansevoort was approximately one percent or less; meaning the grade level changed less than one foot over a distance of 100 feet. The only exception to this was a switchback section of track that split off at 10th Avenue and 14th Street and descended to the level of spurs between 15th and 17th Streets (the northernmost is now the High Line's Northern Spur garden).*

*This switchback created two distinct levels and provided the opportunity to create the Hudson River Overlook and the Sundeck and Water Garden above and to the north of it. This garden takes advantage of its proximity to the river, offering unique perspectives on historic maritime architecture and activity.*

*Architect Kenneth Murchison's Beaux-Arts styled Hoboken Terminal is the standout on the west bank. Built in 1907 for the Delaware, Lackawanna and Western Railroad, the copper-clad complex was restored to full operation soon after its centennial, connecting New Jersey to Manhattan by ferry and by rails running in tubes under the Hudson.*

*On the east bank the eye is drawn to a steel arch that once framed the entrance to Chelsea Pier 54. Survivors of the Titanic were delivered here in 1912. Three years later the Lusitania departed for Liverpool and was sunk by torpedoes.*

*The Hudson River Overlook is a superb place to contemplate the river's essential yet conflicted role in shaping the city's landscape and communities. Views to the west are framed by plantings except for a balcony-like section and an area with peel-up benches toward the southern end. In initial designs this garden was conceived and referred to as a preserve featuring eastern North American native plants. Although the name "preserve" didn't survive, the planting plan did, and today it remains almost exclusively devoted to regionally indigenous species. Various sumacs which have grown to treelike size function as the shrub and canopy layers, with a robust mix of grasses, asters and other tall-growing perennials below.*

*Positioned on the main level above the Hudson River Overlook, this space is also beautifully sunlit from midday to sunset. The Sundeck's wooden benches invite visitors to kick back and take a break from the journey north or south. Some of these are moveable, having flanged steel wheels that ride on rails, like train cars. An overarching canopy of sumacs is underplanted with a fine-textured mix of grasses and threadleaf bluestar enveloping the benches in a soft surround. In warm months the benches are almost continually occupied, and this is one of the most popular places to watch and be watched.*

*By late autumn, crowds have thinned and it's easy to relax in relative quiet with a book, an apple, or a friend. The benches face west to the Water Garden, which awakens slowly in spring but hits its stride by early summer and remains vibrant and*

*colorful into winter. Although one of the more fantastic plans submitted to the preliminary design competition imagined the High Line's landscape as one long lap pool, the reality is that any conventional sort of water garden would be impractical atop such an elevated and exposed site. Yet water is a uniquely sensual presence in gardens: wonderful to touch, watch, listen to, and often longed for in its absence. This garden represents an elegant design solution that makes water and the enjoyment of it a distinctly memorable and sustainable part of the overall experience. The space presents opportunities to interact with moving water or to simply be by it, engaged in thought or conversation. The core feature is a scrim fountain that sends a thin sheet of water rippling across pavement that is sloped so gently as to be imperceptible. A subtle drain along the edge collects the water for recirculation. Peel-up benches within the scrim encourage barefoot adventures, though the water is so shallow it can be traversed in street shoes. In natural systems, the presence or absence of water profoundly influences the makeup of associated plant and animal communities. The Water Garden tells this ecological story with style and authenticity by lining the edges of the scrim fountain with an association of plant species typical of New York area wetland communities.*

Children growing up in temperate northeastern North America are taught to count only four seasons, and this is simply wrong. Anyone of any age who rejects this convention knows there are as many seasons as the mind's eye can discern. Is it sensible to recognize a season of icy seedheads or a season of long shadows, a season of new greens or a season of unfurling fronds? Celebration of fleeting, barely perceptible events in the landscape's living cycle is absolutely sensible and profoundly sensual. With each recognition comes the ability to see more deeply, and with this a world of beautiful, meaningful detail is continually revealed. The passing of seasons large and small, long and short, account for the greatest dramas of the High Line's gardens, and a sensitivity to ephemera is elemental to the ethos of their design. The concept accommodates a gentle lament for passing but is primarily focused on the notion that awareness of the transitory nature of existence is all the more reason to celebrate each present moment as a gift.

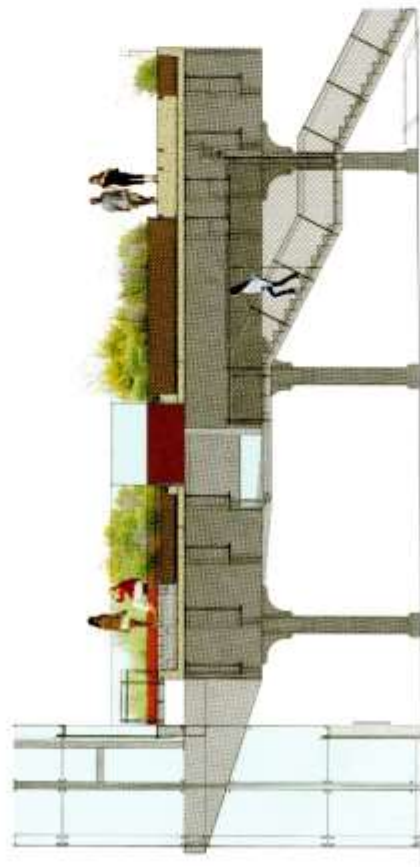
The gardens' free access invites frequent and spontaneous visits, and the complexity of their layering ensures there'll always be worlds of detail awaiting discovery. Contrary to the increasing push of digital technology, the gardens remain a decidedly pull medium. No visitor is pushed to record the number of days redbud blossoms require to open, or how long they remain colorful after falling to the ground, but all visitors are free to pull such insights from experience. Fall in love with last year's coneflower, ice-capped in February, and the bud-tobloom details of its floral morphology will be on full display beginning in May. The emerging stems of maidenhair fern are so coiled, so slight and so strongly red-brown in color it's hard to imagine they can transform themselves into bright green fluttering fronds held aloft on ebony black stalks—unless you take time to bear witness. Despite, or perhaps because of the fixity of its peripheral architecture, the High Line is an intensely seasonal landscape. Changing sky colors and moods reflect off glass and steel, off woods and grass, inviting capture with a sharp lens or sharp eyes. Contemplative visitors know to watch the layers—vertical, temporal and cultural—entwining to endless effect as moments pass in the seasons of the gardens' living characters.

*Gardens of the High Line; Piet Oudolf*



*High Line at the Hudson River Overlook*

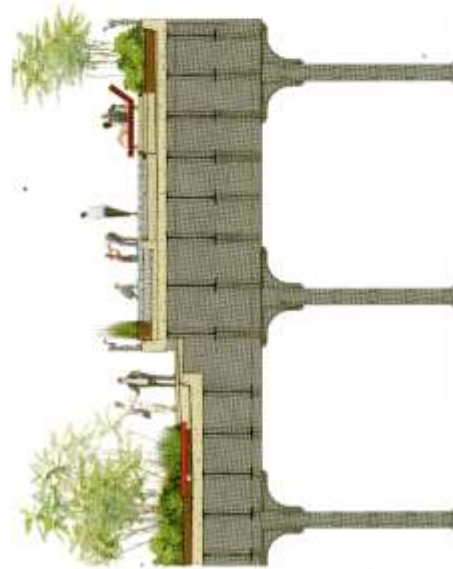




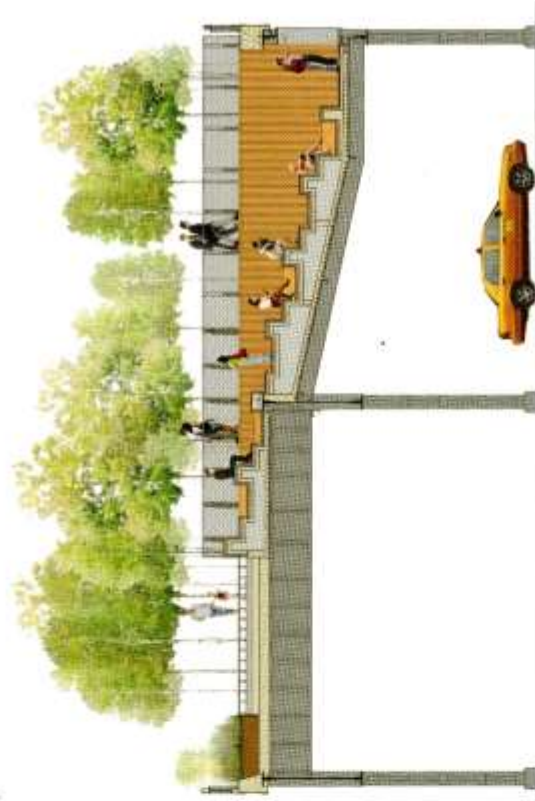
5 West 14<sup>th</sup> Street Entrance



7 Northern Spur Preserve

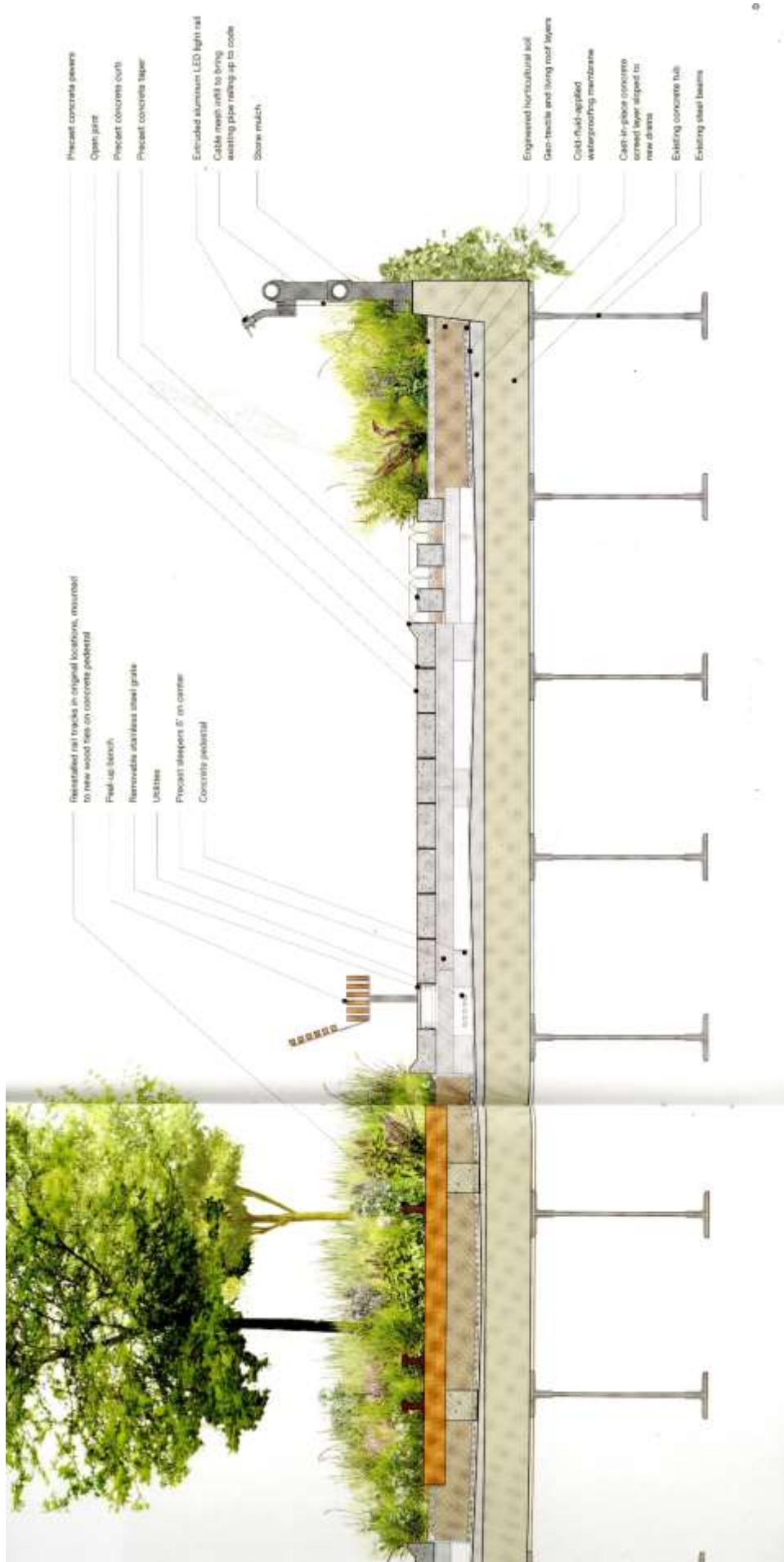


6 Sundeck and Water Feature



6 10<sup>th</sup> Avenue Square and Sunken Overlook

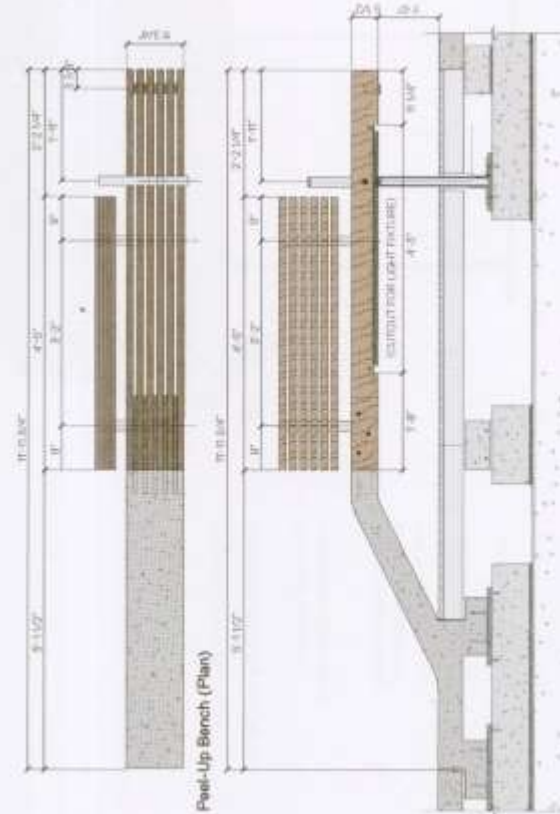




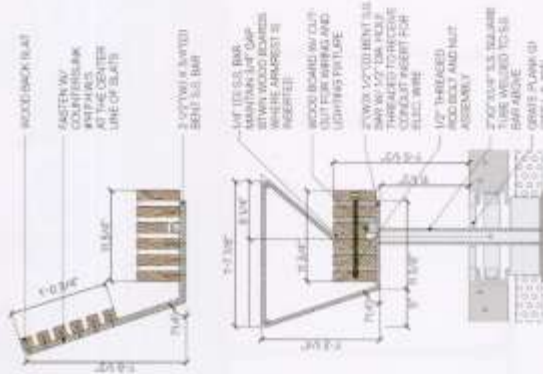




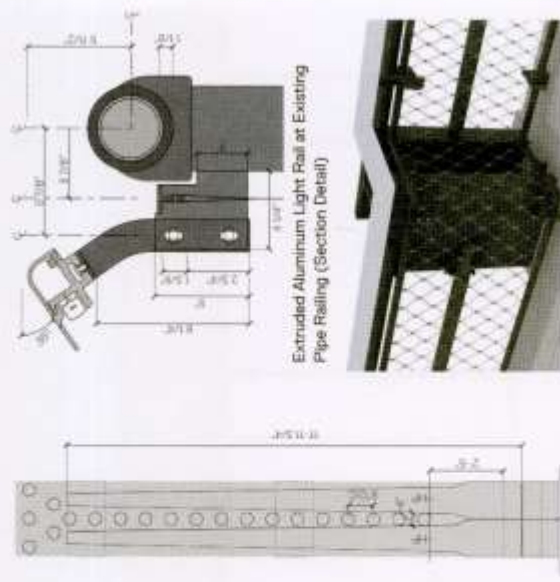
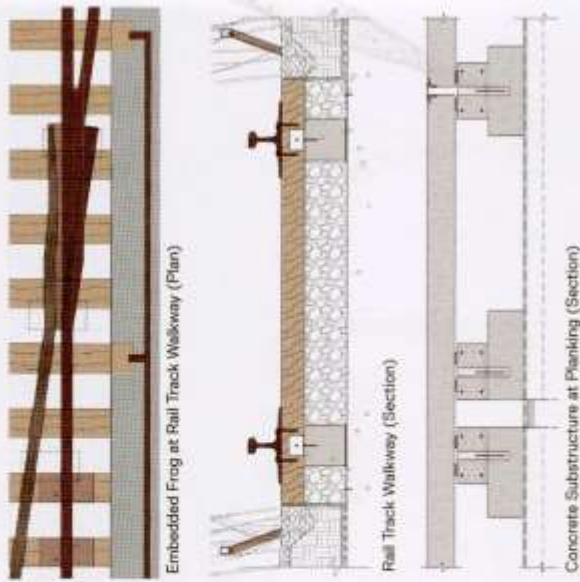
Typical High Line Buildup (Section Perspective)



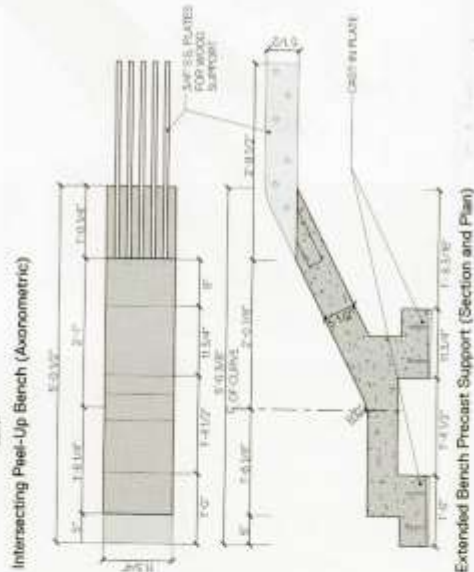
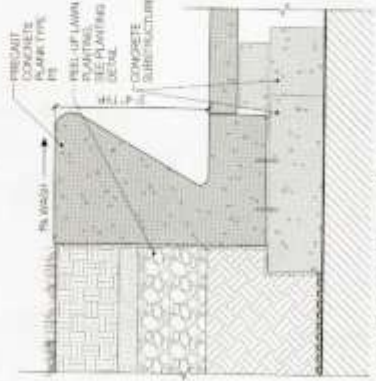
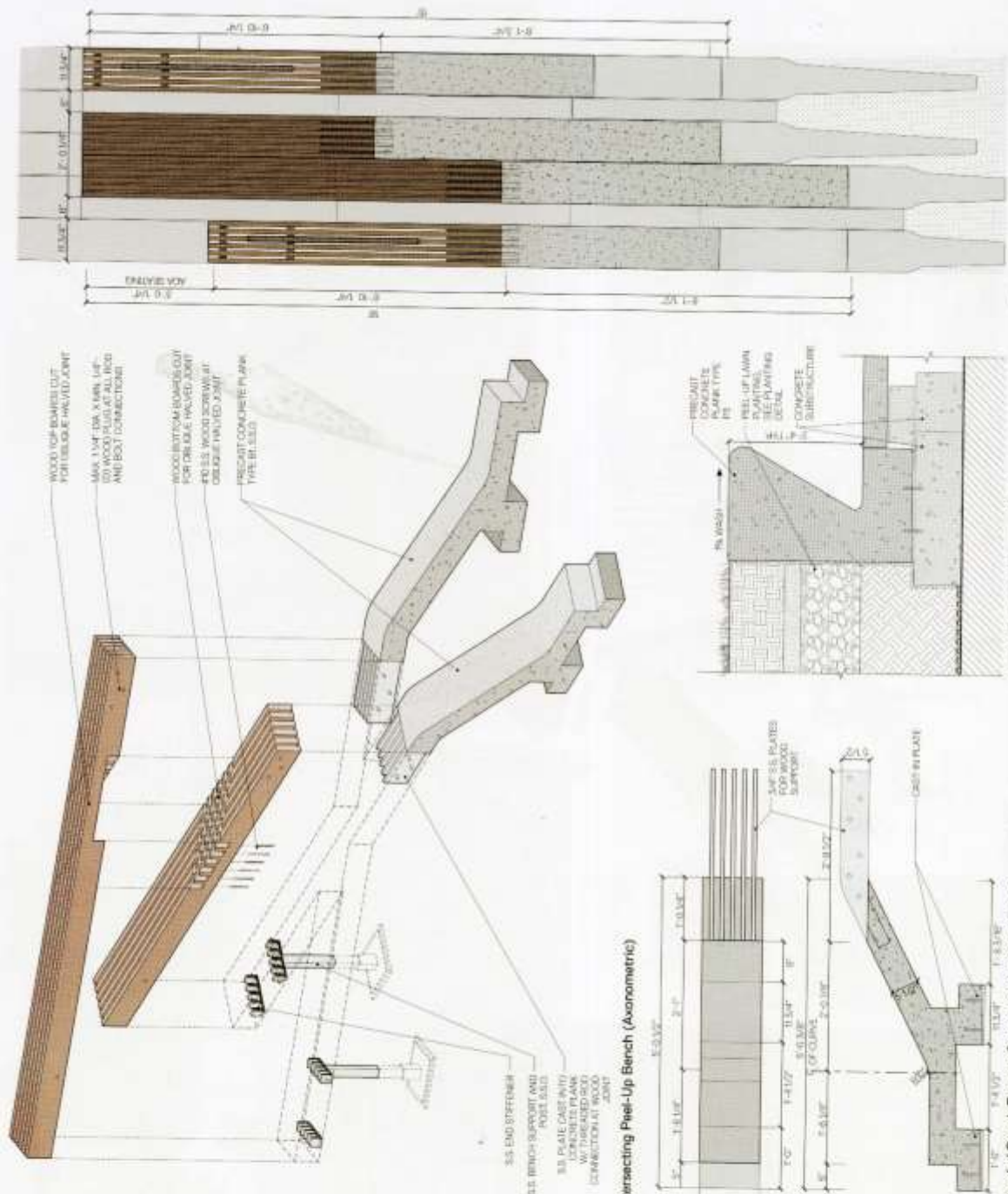
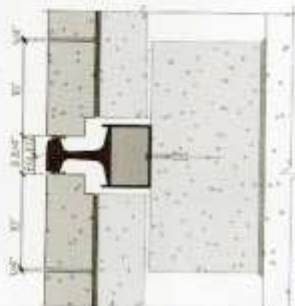
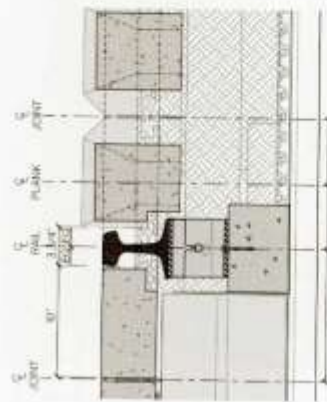
Peel-Up Bench (Elevation)



Peel-Up Bench (Section Details)

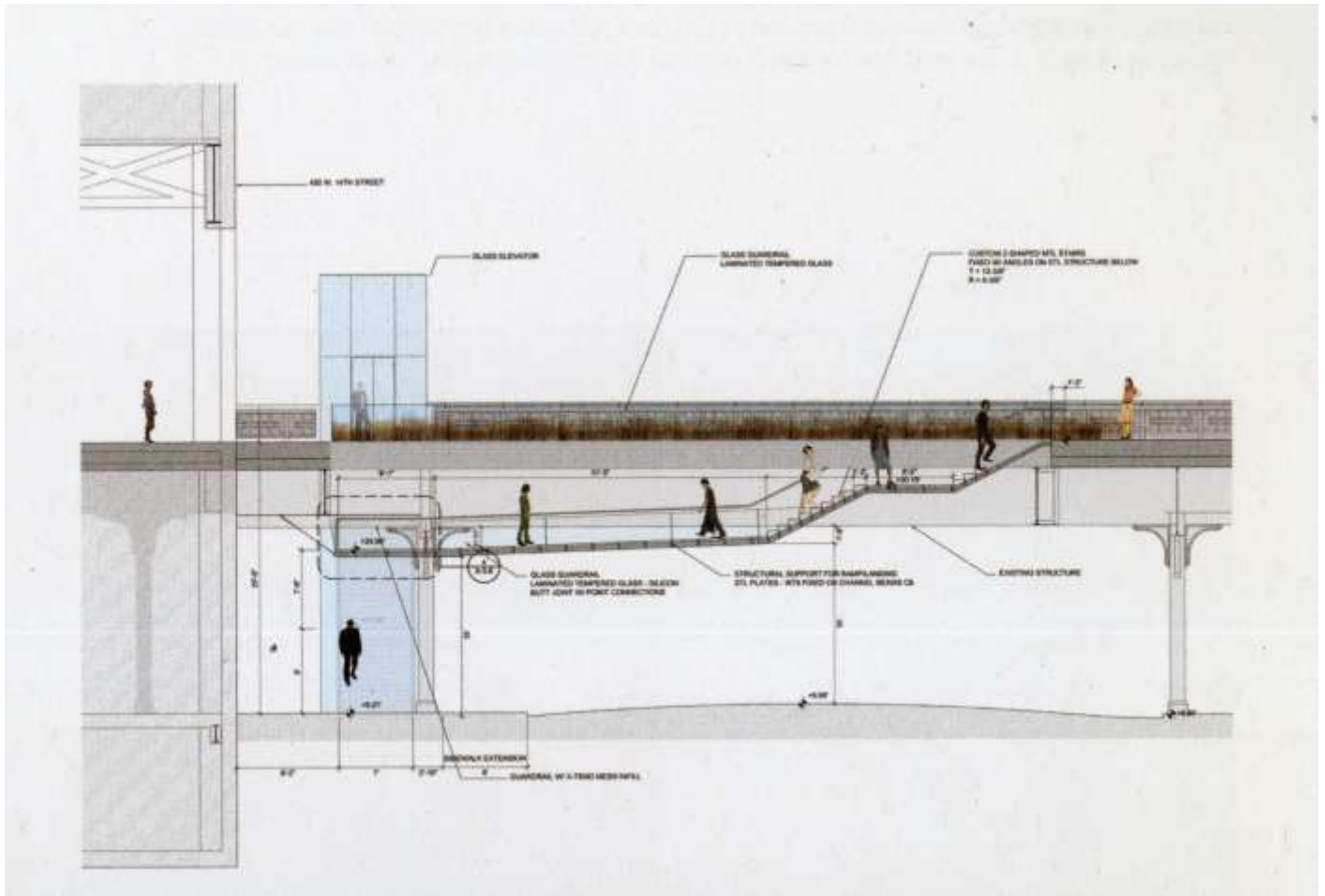


Plant/Plank (Plan)

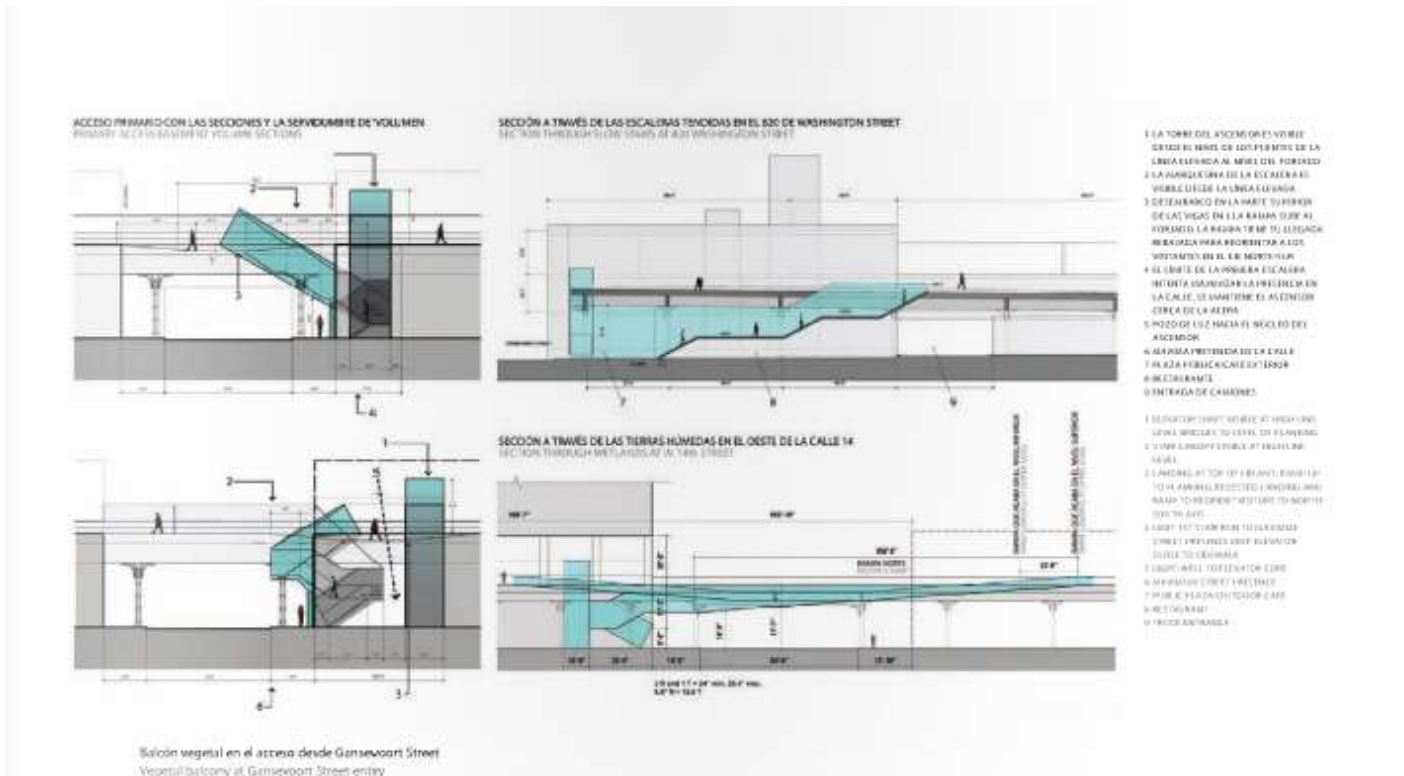








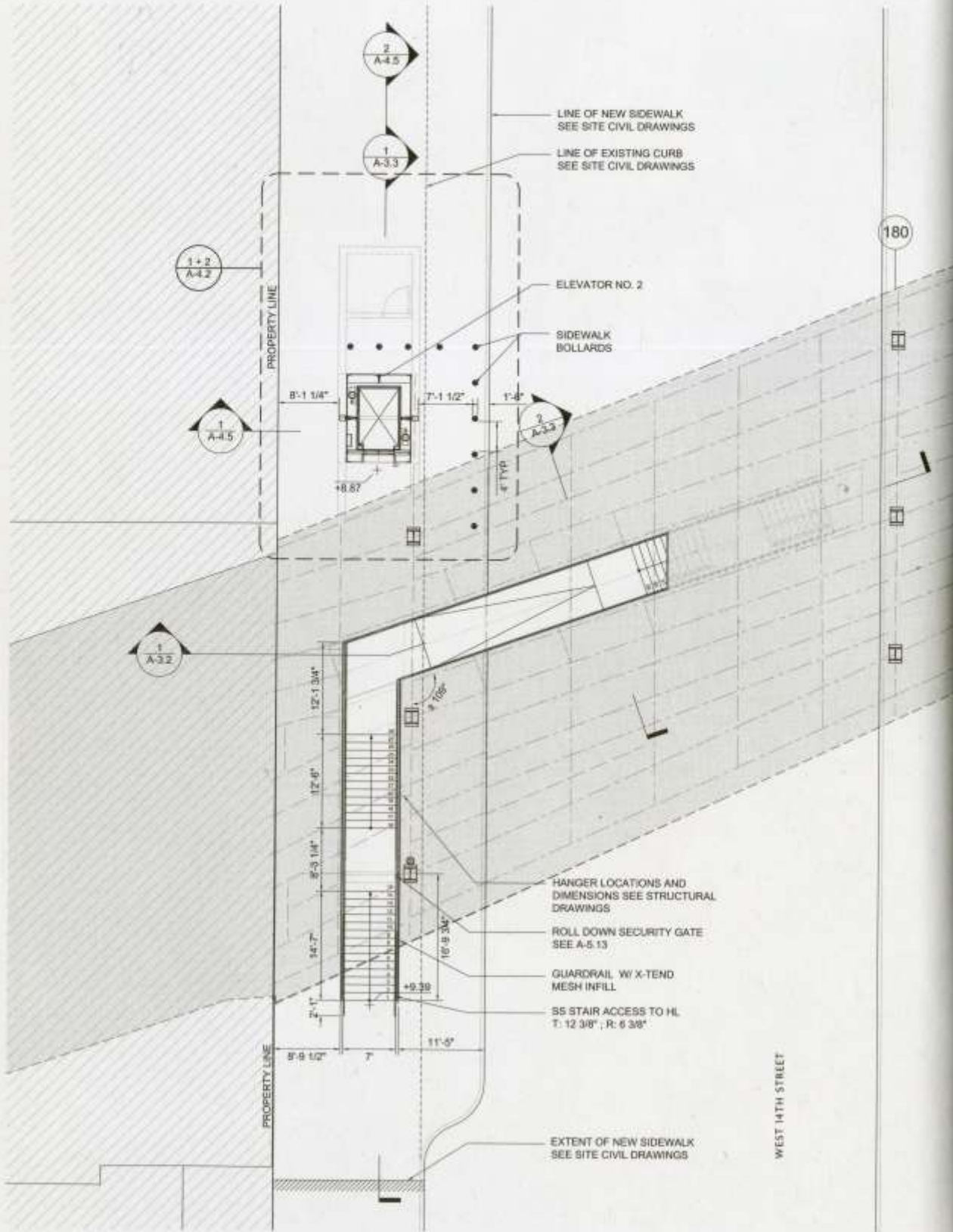
Hudson River Overlook 14<sup>th</sup> Street Entry Section



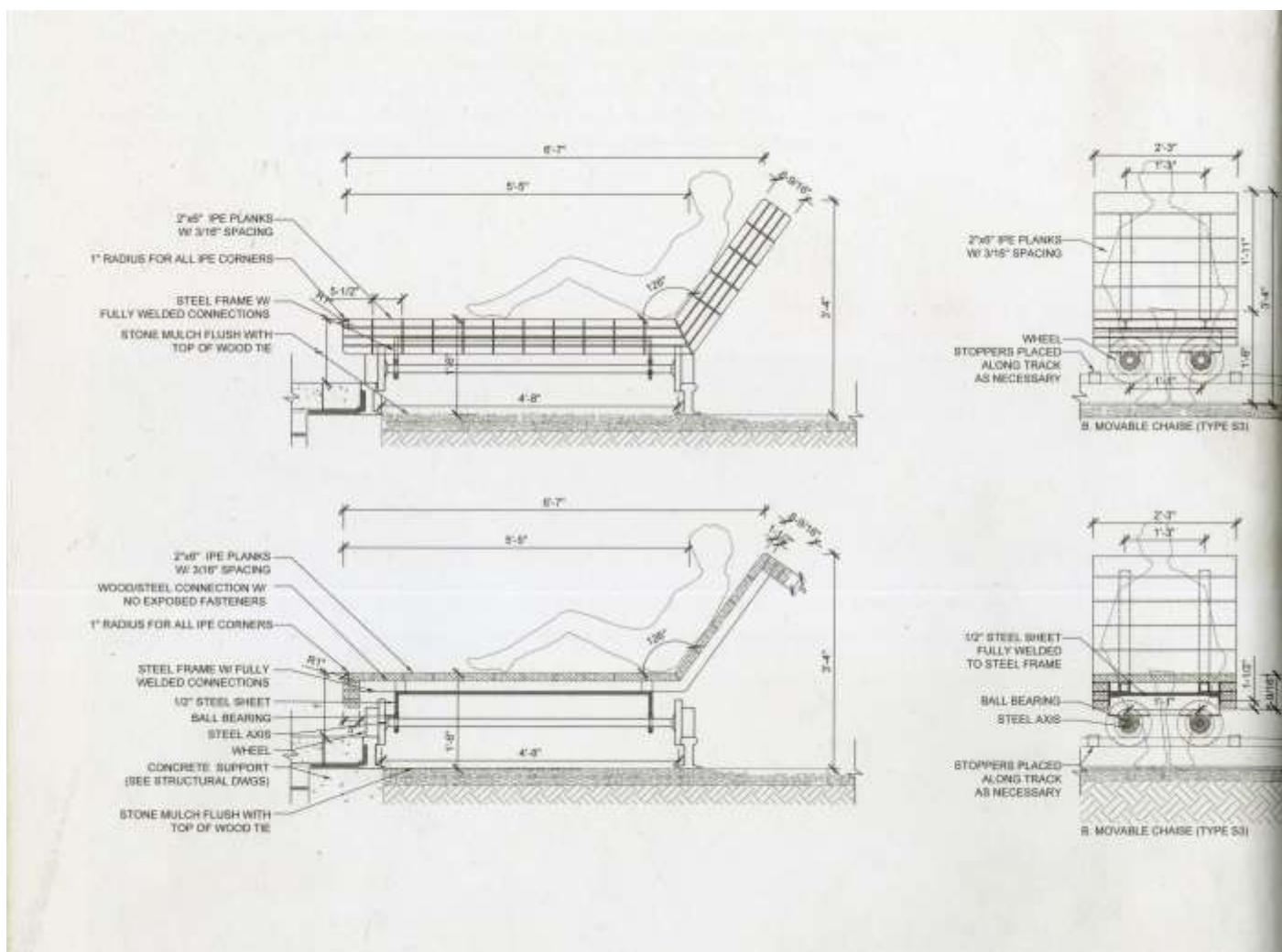
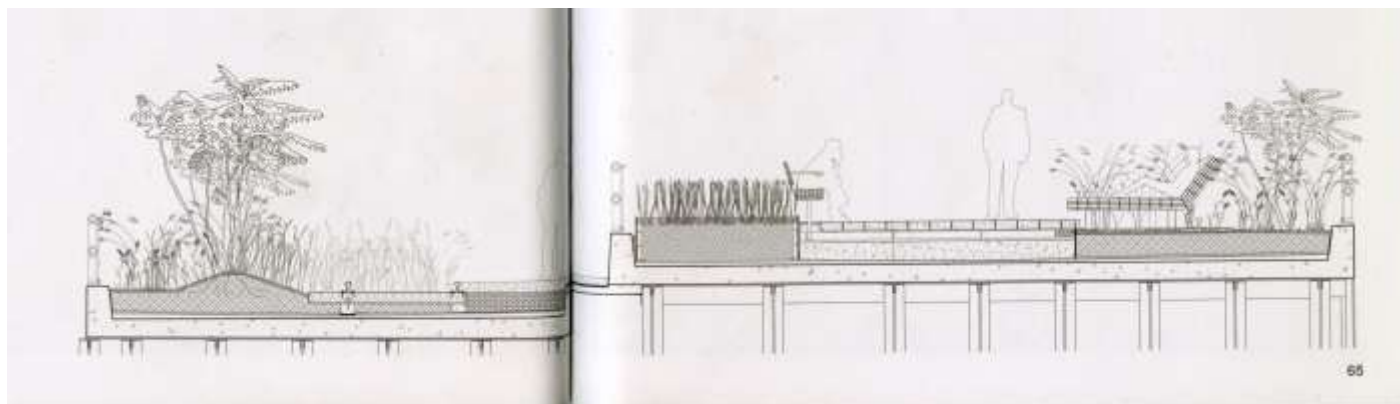


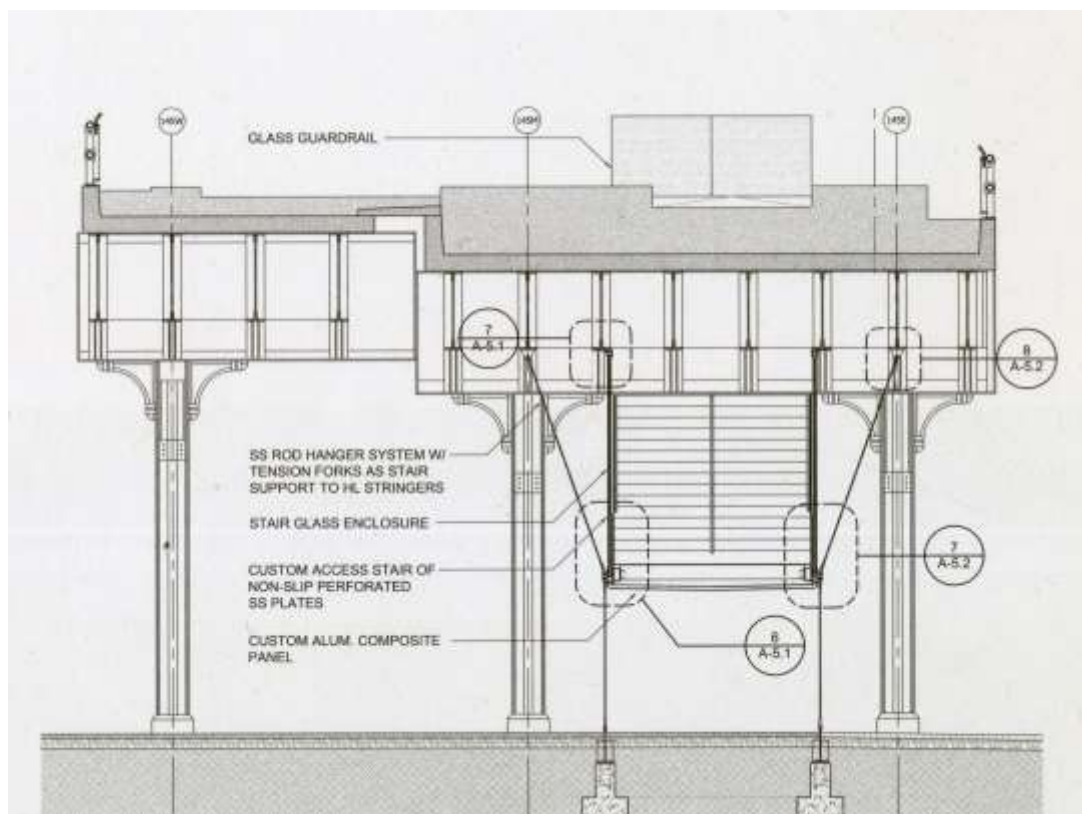
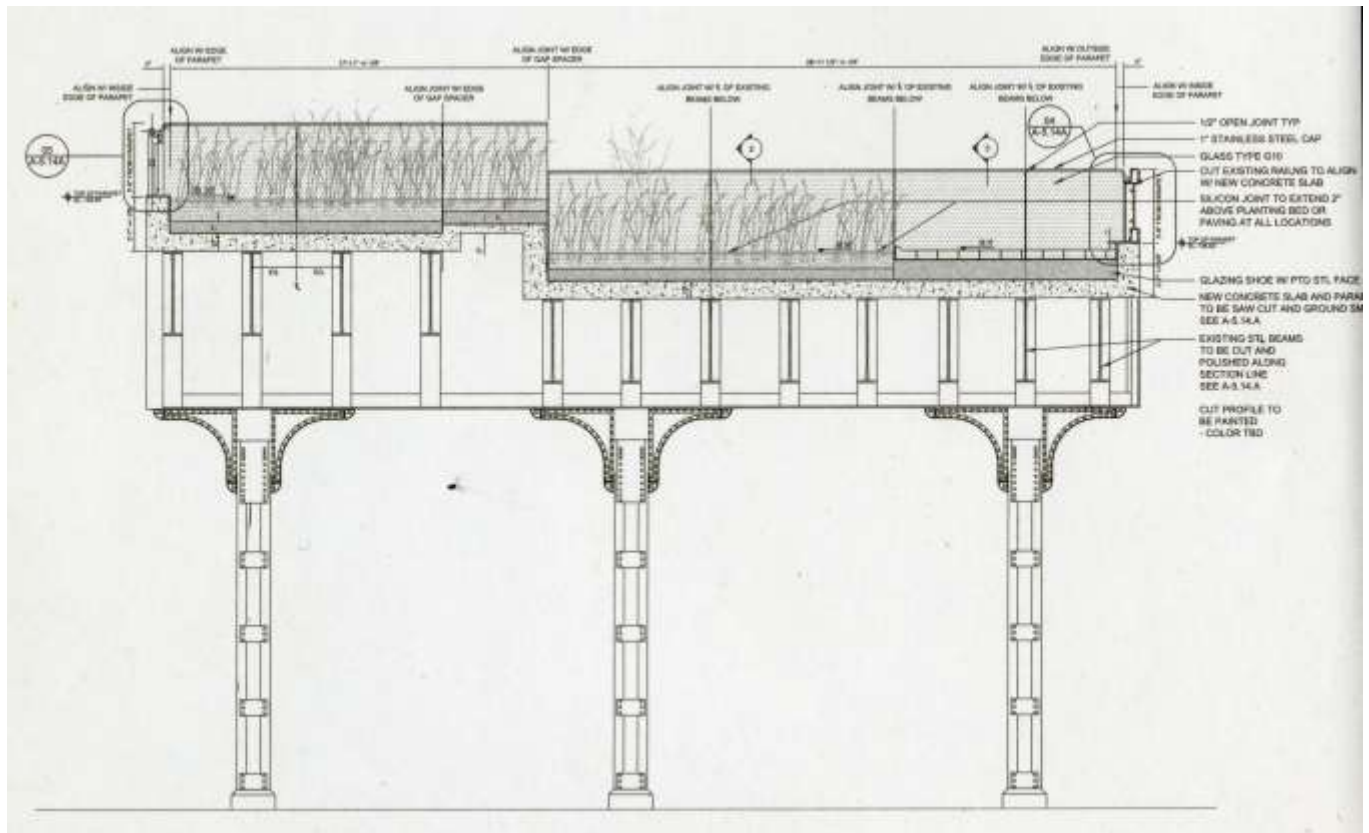
## 14th Street Entry

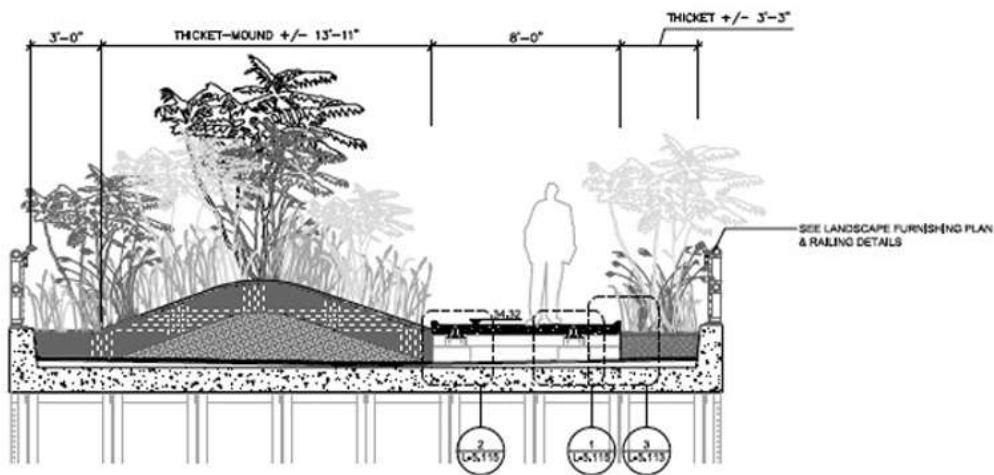
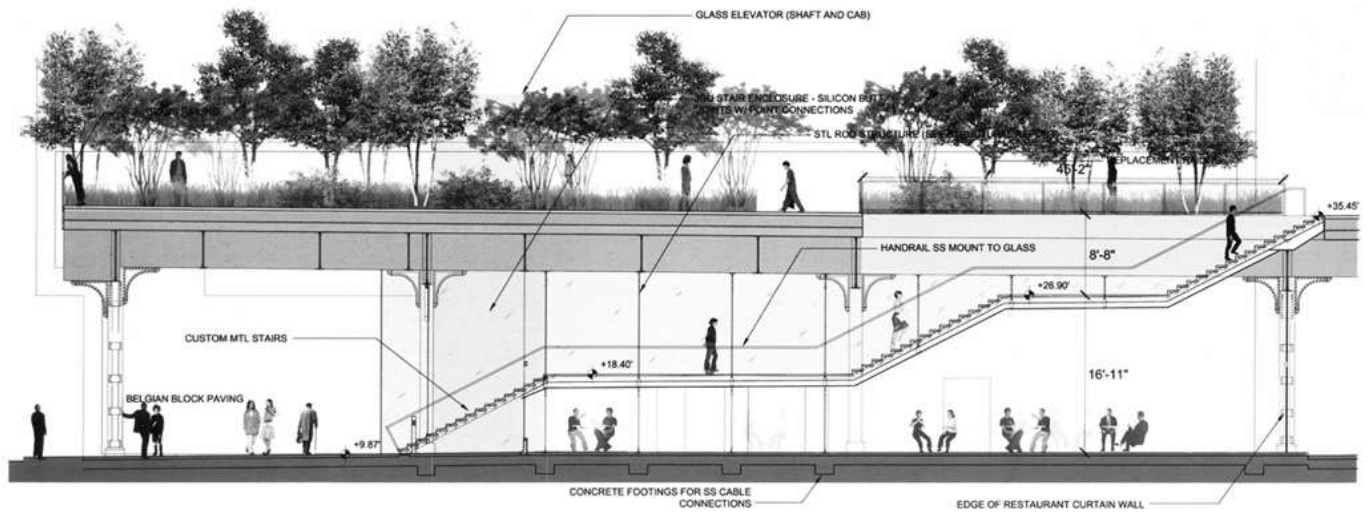
"Slow stairs" rise from the 14th Street sidewalk, supplemented by an elevator. Where the stairs turn to pass over the street and through the steel beams, glimpses of visitors' legs and feet are visible to observers below. The 14th Street Stairs are made possible by Philip and Lisamaria Falcone.



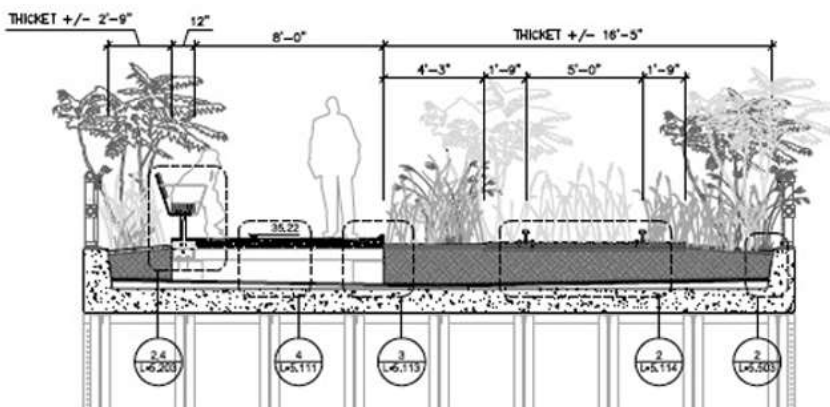






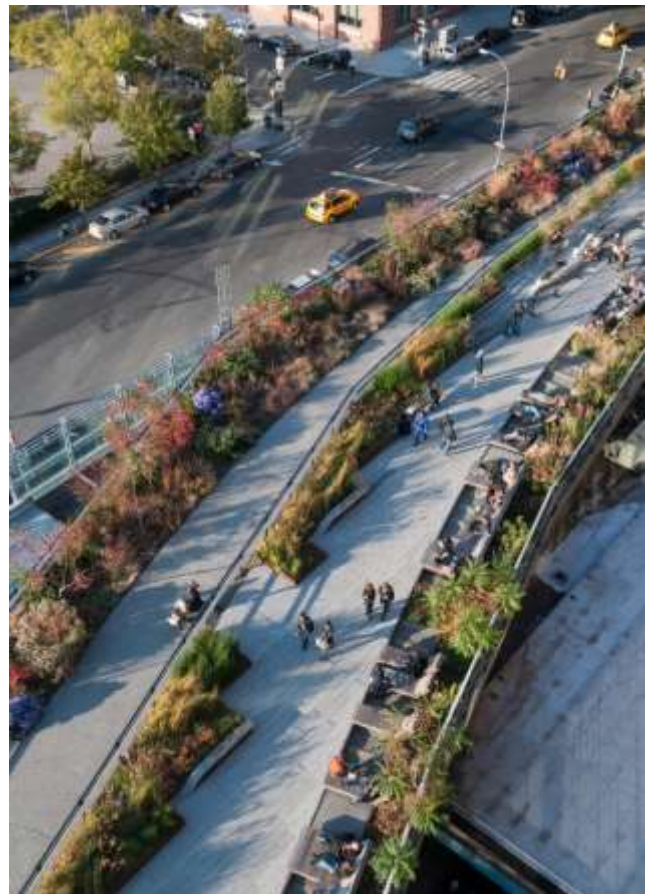


2 W.21st - W.22nd ST. - THICKET  
SCALE: 3/8" = 1'-0"

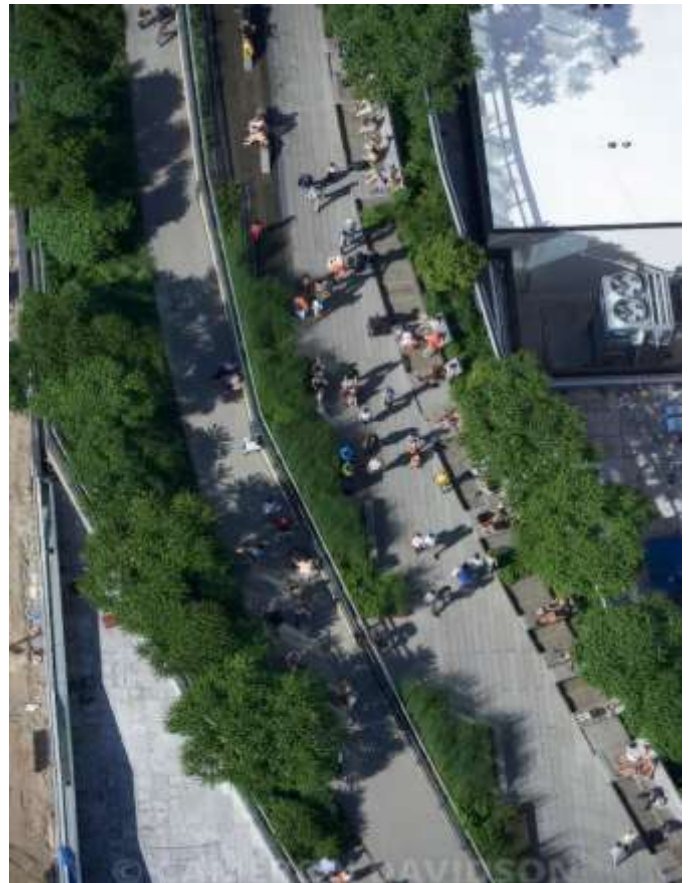
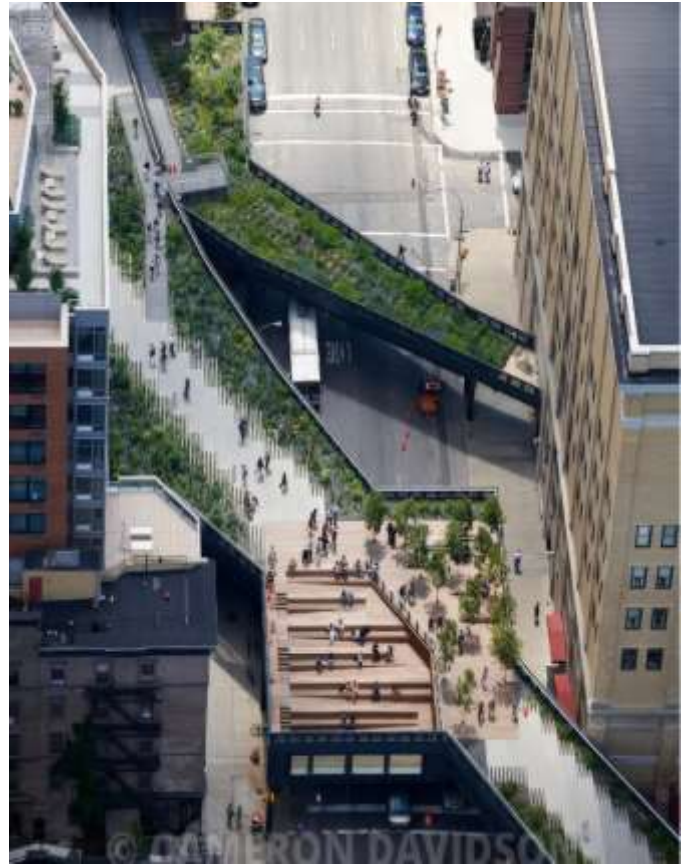


1 W.20th - W.21st ST. - THICKET  
SCALE: 3/8" = 1'-0"

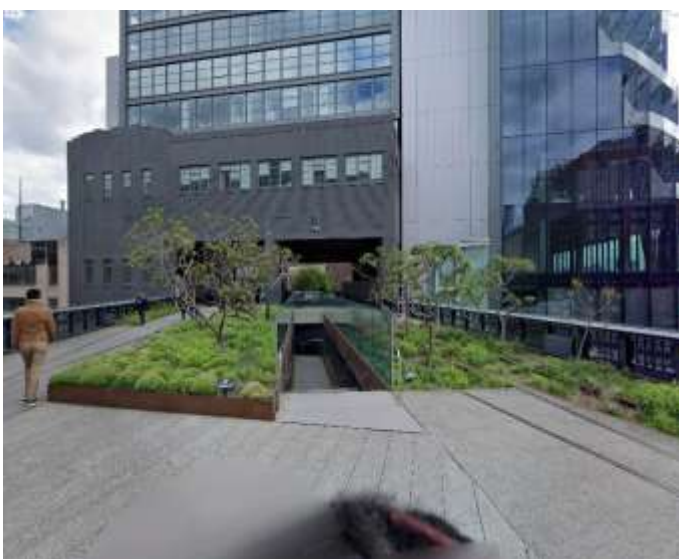






























## Project Site:

The project site is located at the southern boundary of Chelsea in New York City. It is immediately adjacent to the High Line as its Eastern boundary, extending over 10<sup>th</sup> Avenue to include 14<sup>th</sup> Street Park which is between 14<sup>th</sup> and 15<sup>th</sup> Streets.

The Chelsea Craft Guild site is composed of two areas:

**a. 10<sup>th</sup> Avenue: Air Rights Area:** The Eastern boundary is located above and at the front facade line of the Rivian Showroom. Any new construction must conform to the new roadway and sidewalk design shown on the site plan, and maintain the minimum 15'-0" vertical clearance from roadway to underside of the High Line structure. New construction must provide daylighting for the 10<sup>th</sup> Avenue Streetscape and have a maximum of 33% Air Rights Impervious Coverage (747 sq. ft.).  
224' x 100' ROW 22,400 sq. ft.

**b. 14<sup>th</sup> Street Park Area:** The area is currently the 14<sup>th</sup> Street Park. The roadway and sidewalk along its 10<sup>th</sup> Avenue and 14<sup>th</sup> Street boundaries are being revised. Portions or all of the existing park may remain provided they will receive sufficient sunlight, rainfall and be able to grow to maturity over time.  
224' x 165' x 92' x 236' 28,784 sq. ft.

### Adjacent Buildings Elevations:

- Building to North is 172' – 6" sidewalk to roof,  
(Ground floor is 9'-0" above sea level)
- Building to East is 17' – 3" sidewalk to roof  
(Ground floor is 11'-0" above sea level)
- Building to South, 51 10<sup>th</sup> Ave. is to be removed.
- Building to North East is 123' – 6" sidewalk to roof  
(Ground floor is 14'-0" above sea level)
- Building to South East is 199' – 0" sidewalk to roof  
(Ground floor is 10'-0" above sea level)

### High Line Elevations:

- At the south end, at the elevator and staircase, from sidewalk to level walking surface is 25' – 8".
- At the north end, from sidewalk to lower level walking surface is 20'-4".
- The minimum clearance from the curb to the underside of any construction crossing 10<sup>th</sup> Avenue is 15'-0".
- The railing height is 4'-0" from walking surface to top of handrail.

## Urban Design Requirements:

### a. Maximum Building Footprint and Impervious Coverage:

10 <sup>th</sup> Avenue Air-Rights Area:	33% total
14 <sup>th</sup> Street Park Site:	100%
Maximum Impervious Area:	29,531 sq. ft.

Impervious Coverage includes any hard-scape surface at grade. Total Impervious Area is calculated as the total of the building at grade footprint and all other impervious surfaces.

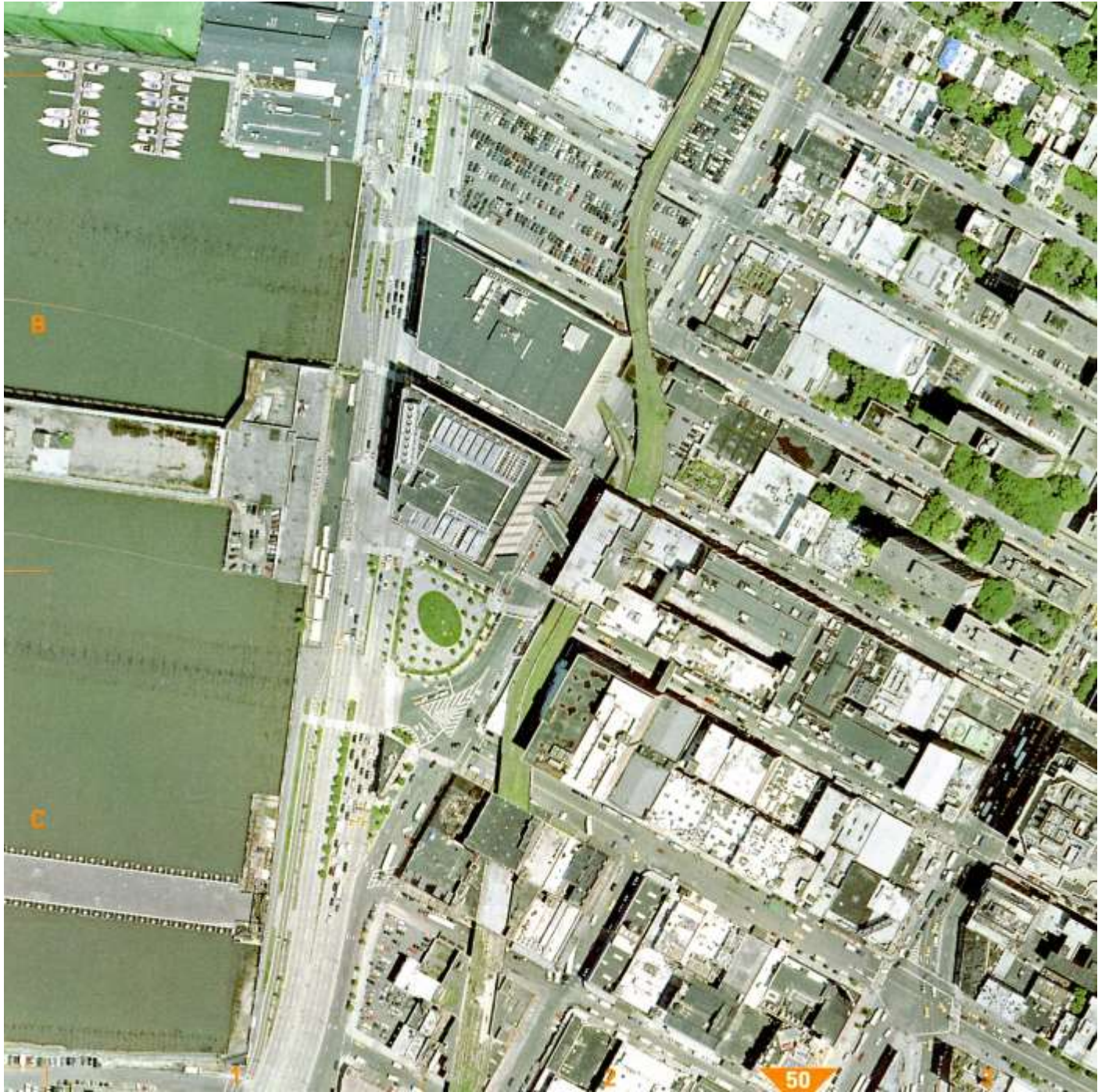
Air Rights Impervious Coverage includes the total "plan shadow" of the building and all other impervious surfaces "from above grade to continuously to the sky." It does not include impervious surfaces at grade.

**b. Planning Approval:** The NYC Planning Department recognizes the unique opportunities that the location and new Chelsea Craft Guild internal and external functions provides for the High Line, its adjoining neighborhood and Hudson River waterfront. As a result, it has approved the project with the following stipulations and requirements:

- 1) Enhance and / or extend the High Line pedestrian exterior promenade and its landscape.
- 2) Provide a publicly active exterior pedestrian connection between the High Line and the new Little Island.
- 3) Replace the existing 14<sup>th</sup> Street Park with a new interior winter garden and / or exterior garden that extends or is integrated with the High Line.
- 4) The Chelsea Craft Guild's building(s) and landscape must be sustainable with minimal energy consumption and low carbon footprint.
- 5) Creates a new piazza, plaza, courtyard for events such as musical performances, street theater, art displays, street market, etc.











### Neighborhood Map and Aerial Photograph





**Project Site Plan:**

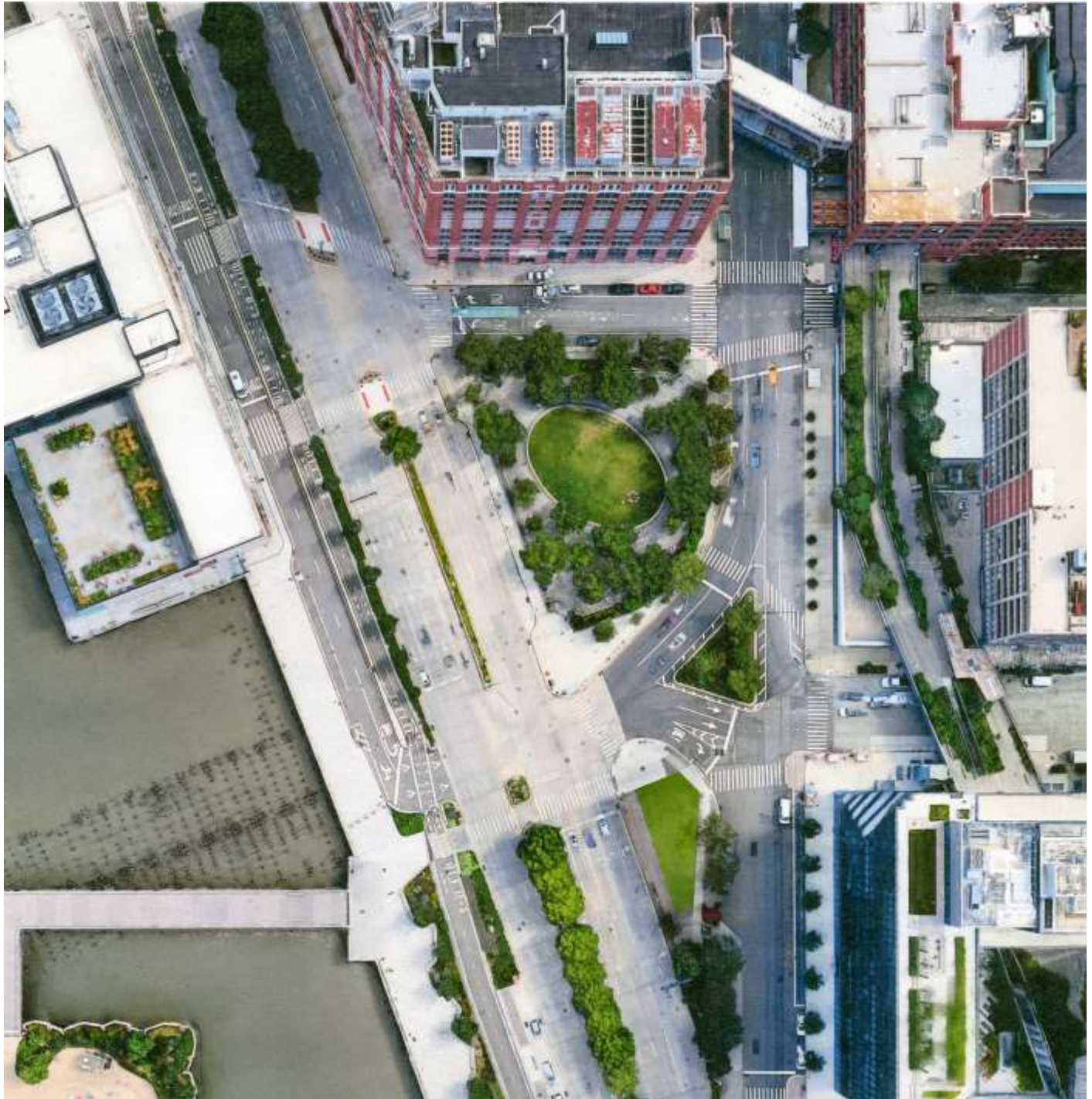
- a. Dashed Orange Lines are the 14<sup>th</sup> Street Park and 10<sup>th</sup> Avenue Air Rights Boundaries.
- b. Thin black Lines are the redesign of 10<sup>th</sup> Avenue and 14<sup>th</sup> Street roadway, sidewalk and curbs.
- c. The new (orange) property boundaries extend the facade lines of the surrounding urban block facades.
- d. There are no required setbacks from the project's site property boundaries.



**Project Topographic Plan MN02 and MN04**

from <https://www.nyc.gov/site/planning/data-maps/open-data/dwn-nyc-3d-model-download.page>





**Site Aerial Plan and Conceptual Model Base Image:**

Image Extents are 768' by 768', or at 1/16" = 1'-0" 48" x 48".

Image is extent of the Studio Section Site Models.

**Image with building at 51 10<sup>th</sup> Avenue Removed.**

Image does not show the changes to the curb and sidewalk configuration of the project site or adjacent context.



Site Survey Plan: with 2'-0" contours









Google Earth Images





Google Earth Street View Images





Google Earth Street View Images



## I. Program: Chelsea Craft Guild Hotel

*The very fact that we name rooms following the objects that they contain – kitchen, bedroom, and bathroom – is a sign of the fact that in the past, objects had the power to give meaning to spaces, which were largely non-typological and more open to interpretation and change. The very presence, form, position and quality of furniture and objects is not neutral but rather a powerful way to characterize the room.*

*Pier Vittoria Aureli*

Boutique Hotels can be considered both a self-contained world, an escape from the pressures of tourism and, on the other hand, an extension of the urban life, the gardens, piazza, riverscape of the adjacent context.

It is not a conference center, nor is it a resort. It is not meant solely as an accommodation for overnight stay, nor is it to provide the anonymous lodging. It is the intention that every room be unique and memorable. Each room should take advantage of its special location in the context, relationship to specific vistas, daylight, summer breeze, having unique architectural attributes.

As an urban hotel, craft art center, culinary venue and public space that is part of vibrant the High Line, Hudson River and Chelsea context there are few precedents.

Boutique-ness implies creating character-rich settings, individualized, either by setting, experience or theme. Each room tells a story, as it is setting for a specific set of memories.

*It was a novelty in the way of excursions, it's like had not been thought of before, and it compelled that interest which attractive novelties always command. It was to be a picnic, on a gigantic scale.*

*Mark Twain*



*Architectural design is only relevant, and ready to be assessed, in its natural feeding-ground and context, the city - and that today's city provides such a culturally rich and authentic composition of building stock that to disregard or turn a blind eye to what is already there would be to dilute its fundamental appeal.*

*Vanlentin Bontjes van Beck*

*Architecture is a technology of borders, it encloses or opens up paths, it organizes visibility, it frames operations and lays out configurations of exchange and interaction. It is a primordial practice of organizations of cohabitation. The very act of its construction is an exclusion of an interior from an exterior. Architecture is the agent of the relationships between the forms of politics and the forms of materials space.*

*John Palmesino*

*Design is not style. It's not about giving shape to the shell and not giving a damn about the guts. Good design is a renaissance attitude that combines technology, cognitive science, human need and beauty to produce something that the world didn't know it was missing.*

*Paola Antonelli*

**A. Lobby:** The lobby will serve as the “public living room for the guests.” Although it is not required to be immediately adjacent to a pedestrian route, street or square, it must be easily found and accessed by those seeking lodging, coming and going.

The operation of the hotel is predicated on the selection of a specific room, and registration via the internet that assigns passwords for entry to one’s room with automated billing. As a result, the traditional functions of the lobby and front desk is replaced by a high level of personal service including recommendations for art exhibitions, craft displays and art courses, as well as recommendations, reservations and guidance to transportation, restaurants, museums, shops, sporting, musical and cultural events in the neighborhood and city.

The Lobby area includes a Front Desk with an adjacent secure Luggage Check and Storage Area.

**1 @ 600 sq. ft. each.**

**B. Guest Rooms / Suites:** The guest accommodations will include a minimum of twelve single rooms for one or two guests with either two single or one king size beds, a dressing area, and bathroom, and a minimum of twelve suites with a king sized bed, a smaller sleeping area accommodating a trundle bed for two, a dressing area, bathroom and living area.

Each guest room or suite must have “equal quality” although the overall objective is for each room or suite to differ in architectural character and experience. The hotel’s reputation is based upon accommodations of varying character, each room being specially remembered. It is the desire of the hotel owners to provide twenty-four to thirty two accommodations, each of which that have distinction, which can be requested for their special qualities and memories, to be returned to, giving the guest the choice of a different experience on their next visit.

The Chelsea Craft Guild Board of Directors ask each guest accommodations benefit and relate to the diverse surrounding urban natural context, without the inclusion of gratuitous exterior balconies.

**12 to 16 @ 300 sq. ft. each.**

**12 to 16 @ 600 sq. ft. each.**

**C. Library / Lounge:** A space for guests to meet other guests and friends, read about the city, its art, architecture, history and culture. A shared “living room.” A place to meet friends who are not resident in the hotel, or to make new friends who are other guests of the hotel.

**1 @ 300 sq. ft. each.**

**D. Dining Room:** Offering the “European Plan,” the hotel will provide breakfast for every guest, in a common dining space. The space should be able to accommodate one third of the hotel’s guests at one time. The Dining Room must accommodate buffet table service providing breakfast upon each guest’s arrival.

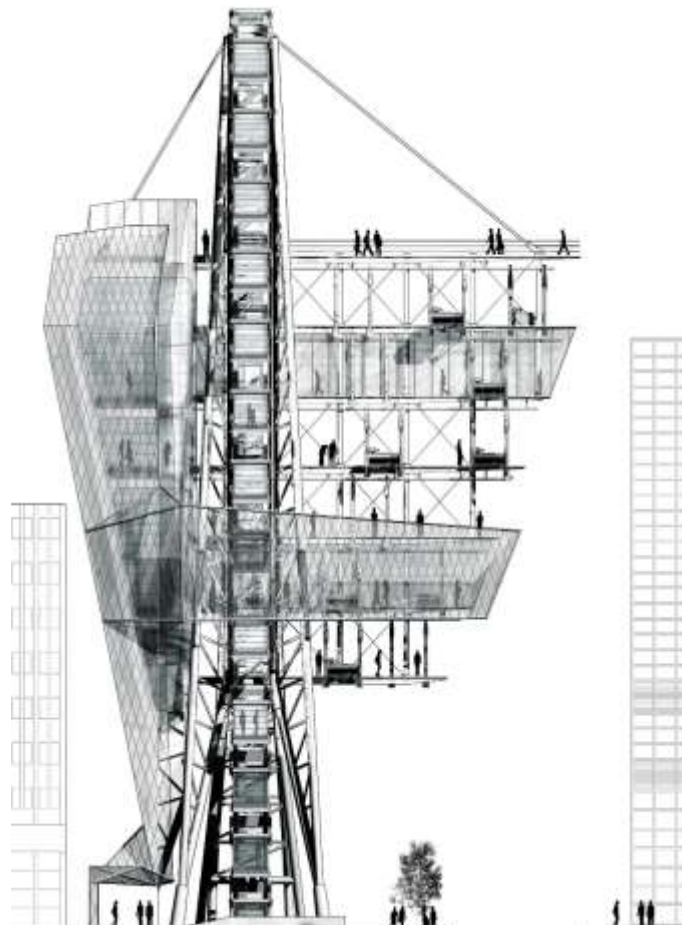
**1 @ 600 sq. ft. each.**

**E. Dining Room Kitchen:** Serving the Dining Room directly, the kitchen serves faire from local bakeries, coffee shops, etc. and freshly prepares a limited selection of breakfast meals. It is a small commercial kitchen which is similar in organization and workflows. The storage of all foods and supplies must be directly adjacent to the Kitchen and near the Dining Room.

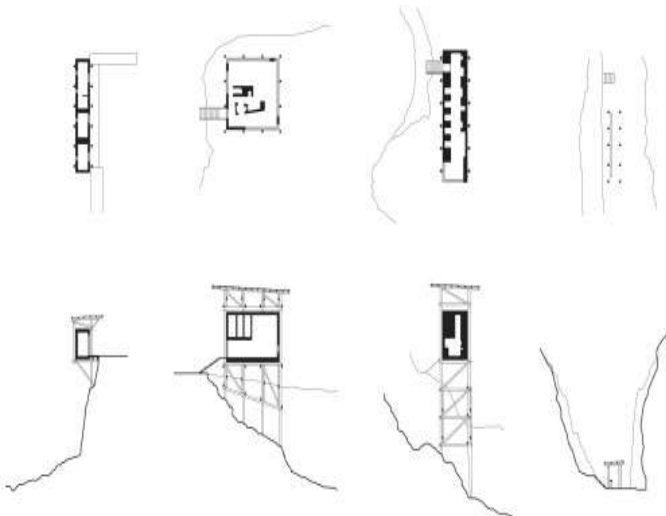
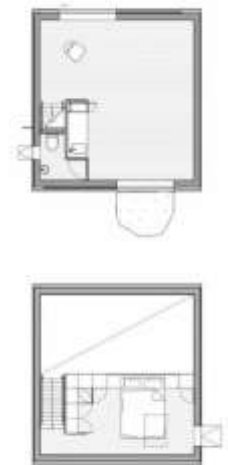
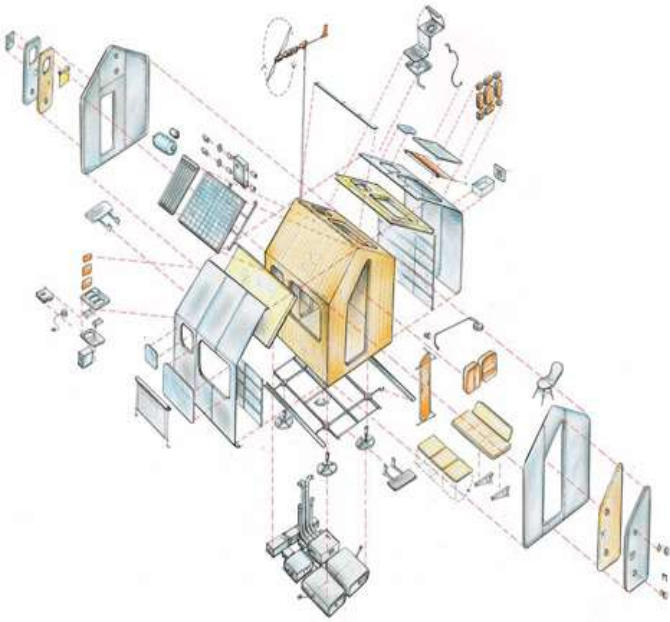
**1 @ 300 sq. ft.**

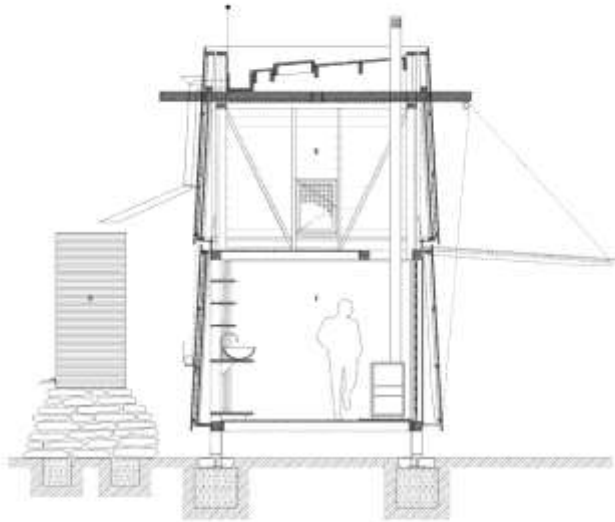
**F. Hotel Courtyard:** The hotel requires a private exterior area that is differentiated from the Chelsea Craft Guild public piazza and other exterior spaces. The courtyard, patio, balcony or rooftop is intended to provide the hotel with a controlled and quiet setting for the exclusive enjoyment of its guests, thus providing a setting for private social and cultural events.

**1 @ 900 sq. ft. minimum**





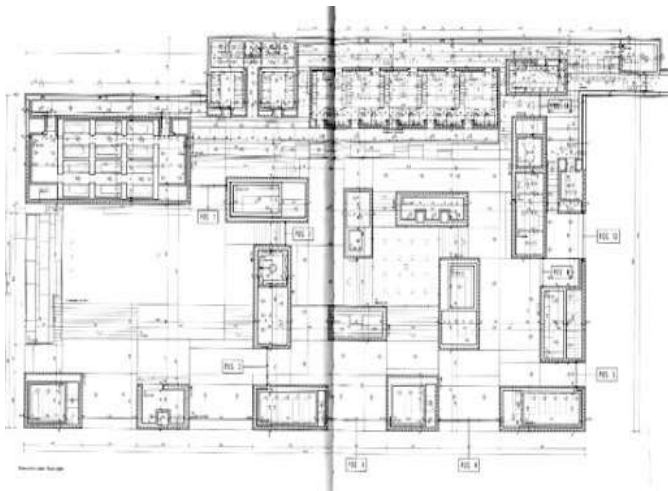




1 LIVING  
2 SLEEPING  
3 WATERLINE

CARRY-BEAM ANCHORED RAMP  
(PERMANENT CAMPING)  
SECTION

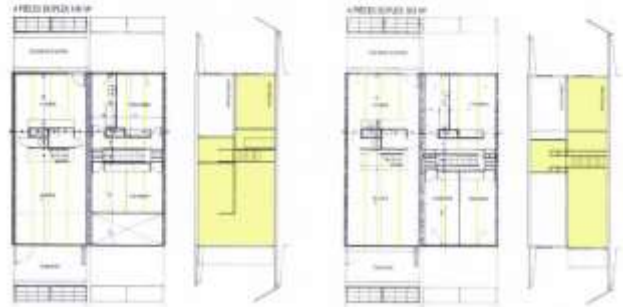
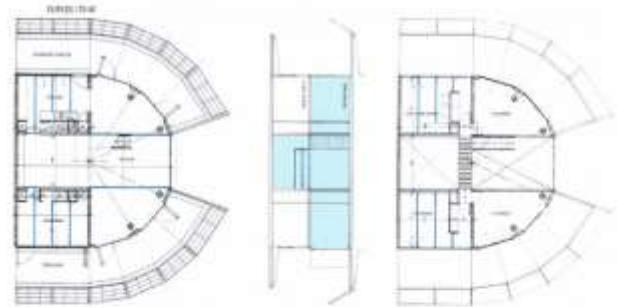
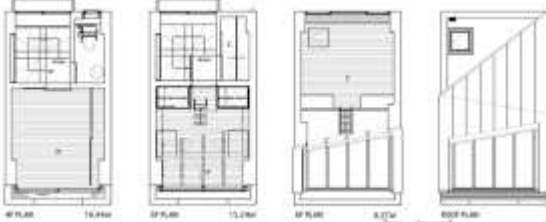
1:20



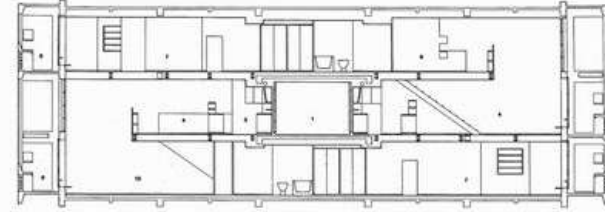
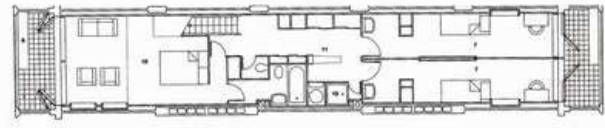
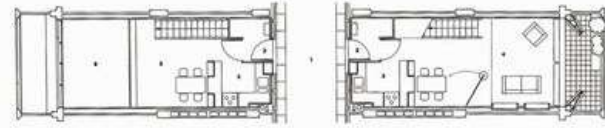
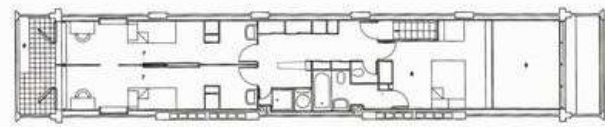
TRUCKS  
(The Vegetables Sales)

- 1. Living kitchen area
- 2. Bed room
- 3. Chapel
- 4. Shop
- 5. Reception area
- 6. Bath
- 7. Bath

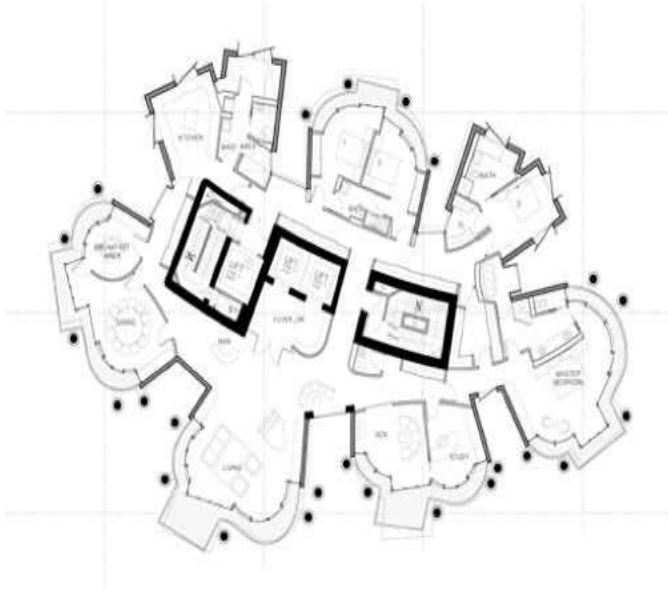
total 32,300



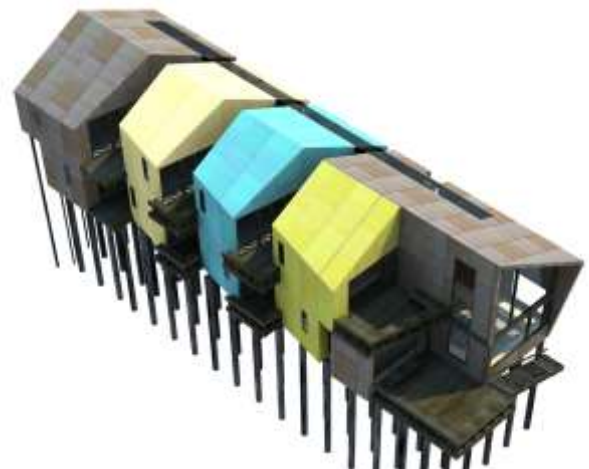
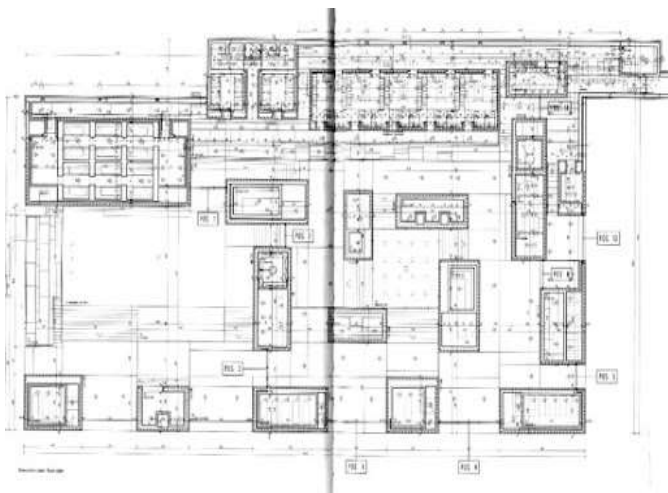
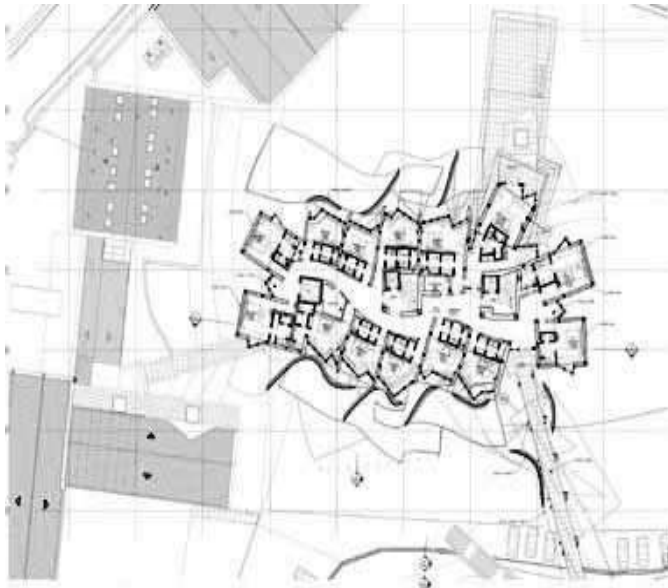
Architectural section drawing of a building. It shows a vertical cross-section with a central space containing a human figure. The structure is supported by a base with several columns. A staircase is visible on the left side. The drawing is labeled 'CARRY-BEAM ANCHORED RAMP (PERMANENT CAMPING) SECTION'.







TYPICAL FLOOR PLAN



## II. Program: Chelsea Craft Workshop

*The best way to understand craft is to think of it as a conversation flowing through time.*

*Or, more precisely, as a recent eddy in a broad conversation about object-making that began at least 2.5 million years ago, when our hominid ancestors were making tools in the Olduvai Gorge.*

*Since then, the making of tools and objects has progressed to increasingly effective techniques, endlessly more inventive forms, and fantastically elaborate functions; from the chipped axes of the Stone Age to the flying stone buttresses of Notre Dame, and the silicon computer chips which have opened the door to new processes and forms.*

*The increase in sophistication has not resulted from any biological evolution of our species; instead, it illustrates the evolution of culture.*

*This flow of information through millennia is the conversation of object making.*

*We participate in it every time we make an object and, to a lesser extent, every time we interact with one.*

*Peter Korn*

Each of the Craft Workshops Gallery/Shops and Residences shall include work areas, art storage, materials and tools storage. Each workshop requires an artist's residence accommodation. Each workshop requires a gallery/shop for the display and sale of its crafts.

The craft workshops will accommodate a wide variety of trades, their materials, working methods, tools and equipment. The Guild Workshops will create and produce a wide variety of small craft items, including some of the following:

Decorative and Marbleized Paper, 3D Print based Sculpture, 3D Print based Pottery, Wood Turning, Goldsmith, Shadow Box Art, Mechanical Toys, Puppets, Weaving, Watches. Lithographs, Etchings, Wood Marquetry, Custom Shoes and Leather Items, 3D Printed and Handmade Jewelry.

Each of the following interpretations of the Workshop program suggest a set of choices which are neither right or wrong, but instead are based upon differing architectural values and specific design objectives:

1) The Chelsea Craft Guild Workshop can be considered as a set of a few closely related studios or conversely separate artisans working privately.

2) The craft studios can be oriented so the public can see the work being made, meet the craftsmen viewing the work in progress or conversely where skilled craftsmen require controlled and private settings in which to create and work, with their work only being seen in a formal gallery/shop setting.

3) The craft workshops, residences and gallery/shops can either be combined or separated. For example, the work and / or shop/gallery functions may be considered to be part of the public domain, and the lodging privatized. The gallery/shop functions may be considered part of the public streetscape domain or integral with the workshop functions.

4) The artist's lodgings may be considered to be a separate social community, requiring an environment which is unique from either the craft workplace, gallery/studios or hotel.

**A. Workshops:** The workshops require adaptable "loft like" workspace to accommodate the wide variety of equipment, from small lathes, saws and sanding equipment, to computer and 3D printing systems, Natural lighting, natural ventilation, ventilation systems, "industrial" finishes, fire protection, acoustical isolation are necessary.

**4 to 8 @ 300 sq. ft. each.**

**4 to 8 @ 600 sq. ft. each.**

**B. Gallery/Shops:** Each of the Gallery/Shops will display and sell the crafts/art currently being created by each of the craft workshops. In other words, the shops/galleries will not be shared by the craftspeople.

a. The Gallery/Shops must be seen and be directly accessible from public pedestrian paths frequented by tourists and those simply passing by. They must have a "public presence" on either the piazza and/or a major pedestrian path.

b. As a major source of revenue, the Gallery/Shop should be a special setting for the display and sale of the craft art. The Gallery/Shop function as both museum and retail establishment.

c. Each Gallery/Shop will store its stock within the shop's wall and island display areas.

d. The service counters should have direct sight lines to control the entry, have access to the display areas, to provide guidance for the visitor, and to provide security.

**8 to 16 @ 600 sq. ft. each.**

**C. Artist's Accommodations:** The artists accommodations will be composed of a major sleeping area with a king sized bed, a smaller sleeping area accommodating two via a trundle bed, a dressing area, shared bathroom, cooking facilities and living area.

The Chelsea Craft Guild Board of Directors ask each artist's accommodations benefit and relate to the diverse surrounding context, without the inclusion of gratuitous exterior balconies.

**8 to 16 @ 600 sq. ft. each.**

*Architecture is a complex matter, but one continuously present dimension is the craftsmanship and the way you do things and, in some way, if you go around the building you can feel it.*

*Everything is well crafted.*

*Every piece is crafted.*

*The building is actually made piece by piece.*

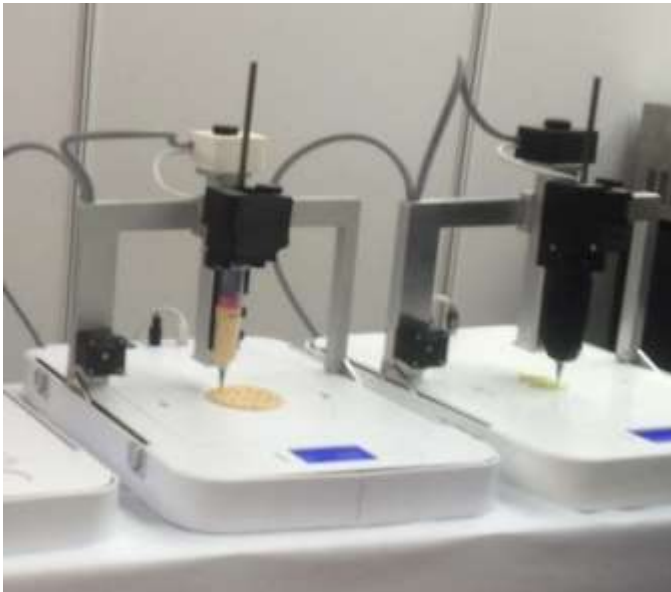
*Everything is designed, tested, made, and re-made.*

*I think this is one of the most essential and inevitable things in architecture.*

*Renzo Piano*







*The building type that combines dwelling and workplace has existed for hundreds, if not thousands, of years.  
It can be traced from medieval longhouse, through proto-industrial weaver's house and nineteenth century artist's house to the contemporary 'live/work' unit.*

*Until the industrial revolution, it was in almost universal use and was called 'house', with sub-sets of ale-house bake-house etc.*

*They conformed to three basic types.  
Firstly, and most commonly, 'home dominated', [primary use: dwelling house; ancillary use: manager who runs a trans-continental team from a purpose-designed office in his detached executive house.*

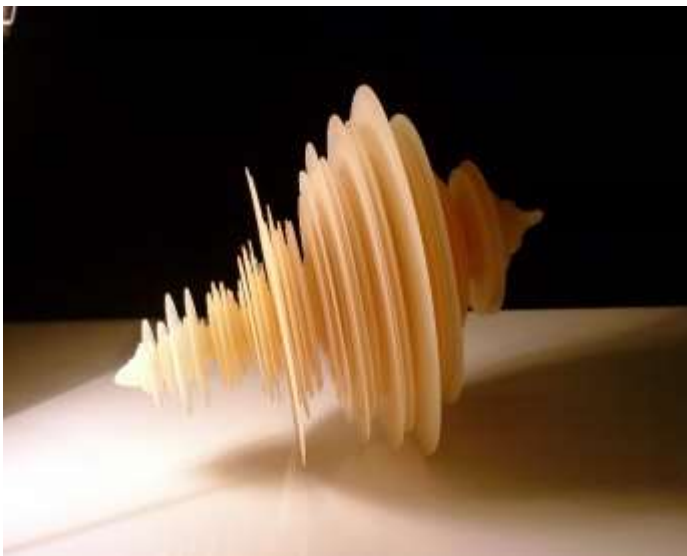
*Secondly, 'work-dominated', ancillary use: dwelling house], for example the carpenter/ furniture-maker who lives at the back of his workshop in an industrial building, or the resident manager of a historic building.*

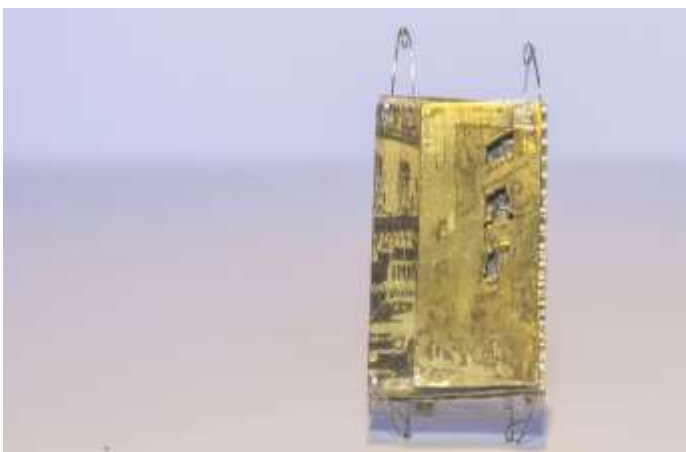
*And thirdly 'equal-status', two primary uses: dwelling house for example the rural baker whose house is adjacent to his bakery, or the urban architect whose office at the bottom of the garden of her Georgian terraced house has its own entrance onto a mews.*

*As the majority of dual-use buildings encountered did not fit with the common understanding of a 'live/work' building, a generic term 'work home' was coined, an umbrella term to refer to all buildings that combine dwelling and workplace, in the same way as 'dwelling' describes all buildings that we live in, and 'workplace' describes all buildings that we work in.*

*Beyond Live/work: Frances Holliss, London Metropolitan University*



















## Craft: Traditional & Contemporary

Traditional "craft" is making by hand which is a crucially important. Generally extending and duplicating historical materials, forms and methods. It is based upon learned behavior and common values that are transferred through word of mouth, internship and established traditions. Artists attempt to remain true to time-honored values. Traditional artists are highly trained and specialized in their ability to control tools, methods and materials to produce valued objects from a shared culture and history. Materials are natural products: wood, glass, leather, gold, paper. Tools are hand controlled: hammer, chisel, knife, and paintbrush.

Contemporary "craft" extends the pallet of materials employed, permits varying the production of series of differing objects, custom personalization, purposefully exploring new synthetic materials, and seeking perfection through manufacture. As the need for exclusively handmade objects no longer exists, contemporary craft is marked by innovation in design. Whether interpreting traditional techniques, styles or form, or developing new methods and visual vocabulary, beautiful pieces that also have a utilitarian purpose remain the focus.

The desire for exact duplication and reproduction of history has been supplemented by the opportunity for advancing craft in a manner reflective of contemporary values, aesthetics and use. Often the process of making is as, or more, important than the object itself. Materials are also synthetic: plastic, resins, polymers, composites. Tools are digitally controlled: router, shaper, and depositor.

In both, the emphasis of the cultural, aesthetic and functional significance remains paramount, in comparison to the values of contemporary art. Craft, whether traditional or contemporary, have direct parallels to historic and contemporary "architecture."

It's true that Art and Crafts share the same roots and that before Giorgio Vasari differentiated them, great artists were defined as craftsmen and not as artists as we know them today. The know how of the artisan is an invaluable asset, a so called "intangible knowledge", a value that isn't always appreciated, understood or well perceived. Craftsmanship isn't so much what is produced, but the inner feelings of the work. The artisan manifests his own self through his work, loaded with his personal history and secrets, exactly in the same way an artist expresses himself in painting, sculpture and architecture.

The cultural load, the intangible know how is something that gets passed down in the workshop through other senior artisans. Experience acquired through gestures seen while working raw materials, sensibility and understanding for what one is doing and for how one does it and in the choice of that particular material for that given project. It's almost impossible to find a book or video explaining in depth certain and it still wouldn't be enough to demonstrate all the techniques, the secrets, the sensitivity, or use of the correct instruments or materials for making a particular piece.

You just cannot produce a piece of artisanal excellence if you don't feel it inside. Nearly always when creating a piece of work, the artisan first thinks it up in his head and once his idea has matured, he then decides how and with which material he's going to get the best results; he considers the technical problems involved with his chosen material, and what form or shape his piece will take. Then follows a

graphic study, sometimes even on a scrap of paper where 'the birth' of the idea which has been brewing for some time, can be drawn in an instant; and then lastly, either fairly quickly or over a longer period of time, the making of the object.

Gherardo Filistrucchi, President  
Associazione Esercizi Storici Tradizionali e Tipici Fiorentini





### III. Program: Chelsea Craft Guild Café

*As we envision the future visitor dining experience, we are delighted to be developing two exciting new dining options—for people who want a wonderful fine dining experience and for families with children looking for casual dining with lots of options.*  
*Gail Harrity*

**Café:** The Café is intended to maximize its relationship to the existing and proposed pedestrian movement paths, around and through the site. To succeed it must be easily found, and directly accessible from the exterior without moving through an interior space such as lobby.

The primary cooking area is to be in the open, and be visually part of the culinary experience, for as many patrons as possible including its adjacent counter seating. Careful attention should be made to the grouping of various types of seating in relationship to the architecture and surrounding contexts.

Other than at the counter, the service is by waiter and waitress. Multiple levels can be serviced by dumb waiter systems to serving stations at each level.

Beyond the service of meals and snacks, the Café is a place to relax, sit, converse, and possibly seek shelter from the rain, cold or the heat of the sun.

The Café must be easily recognized by those walking by with an entrance that is directly found, and is easily accessible from the High Line, adjacent sidewalks and Hudson Riverfront.

The Café's exterior informal dining area must be able to be shaded from the sun and rain, and also have direct access to the food preparation areas.

The Café will open to the public at 7:00 AM and closes at 12:00 midnight.

<b>Cafe Dining Area</b>	<b>1,200 sq. ft.</b>
<b>Kitchen and Storage</b>	<b>600 sq. ft.</b>
<b>Public Exterior Dining Area</b>	<b>900 sq. ft. minimum</b>

## IV. Program: Chelsea Craft Guild Restaurant

**Restaurant:** The restaurant dining experience is intended to maximize its relationship to the unique surrounding context. It too must be easily recognized public pedestrian paths. To succeed it must be easily found, and directly accessible from the exterior without moving through an interior space such as public lobby.

It serves lunch and dinner only, and requires a single reception and waiting area for its patrons. The design should include seating areas of a variety of seating types appropriate to the architecture and surrounding context.

The accommodation of individuals, two people, small or large groups is an important design consideration.

The exterior dining areas must be able to be protected from the rain and heat of the sun.

*To have just a concessionaire wasn't up to the standards of what we were aiming for.*

*We wanted to offer our visitors something on a level of quality with the rest of the Craft Guild.*

Run by the Constellation Culinary Group, the reputation is to be for "Michelin Star fine international dining," serving locally sourced food, inspired cuisine and within its own unique architectural setting.

*Dining is and always was a great artistic opportunity.*  
*Frank Lloyd Wright*

The Restaurant will open to the public at 11:00 AM and closes at 12:00 midnight.

<b>Restaurant Dining Area</b>	<b>3,600 sq. ft.</b>
<b>Kitchen and Storage</b>	<b>1,200 sq. ft.</b>
<b>Staff Restrooms &amp; Changing</b>	<b>600 sq. ft.</b>

<b>Private Exterior Dining Area</b>	<b>1,800 sq. ft. min.</b>
-------------------------------------	---------------------------

**Commercial Kitchens:** The Café and Restaurant food preparation areas are to be organized on the center meal cooking island layout (see examples in the Google Drive "Restaurants" folder), with surrounding dishwashing station, food pickup station, and dessert and salad preparation areas, including a separate entrance for food pickup and dish return.

The island-style layout places ovens, ranges, fryers, grills, and other principal cooking equipment together in one module at the center of the kitchen, while other sections of the kitchen are placed on the perimeter walls in the proper order to preserve a circular flow.

This layout is very open and promotes communication with supervision of the food preparation. It also results in open floor space areas within minimum alcoves for easy cleaning. (Commercial kitchen design includes a complex set of requirements and regulations including fire protection, health and safety, specific ventilation requirements, food handling procedures, etc. which are not part of this course requirements.)



## V. Program: Building Services

### For the entire project program:

Building Maintenance Storage  
Building Supplies Storage  
Employee Restrooms / Lockers  
Building Manager's Office

**Project Total** 1,800 sq. ft.

### For the entire project program:

Electrical Services Room  
Sewage Pump Processing Room  
HVAC Systems Room(s)

**Project Total** 1,800 sq. ft.

## VI. Program: Circulation & Public Services

Public Restrooms	TBD
Egress Refuge Areas	TBD
Emergency Egress	TBD
Public Circulation and Gathering Spaces	TBD
Services Circulation	TBD
(See the IBC and ADA for requirements)	

**Total** TBD

## VII. Program: Winter Garden / Garden

Urban planning approval for the Chelsea Craft Guild is predicated upon the creation of a new interior Winter Garden and or exterior Landscape / Garden within the project site area.

*I hold it for a most delicate and pleasing thing to have a fair gallery, great chamber and other lodging that openeth fully upon the East and West, to be inwardly garnished with sweet herbs and flowers, yea and fruit if it were possible.*

*Sir Hugh Platt, 1654.*

The intention to remove or modify the existing 14<sup>th</sup> Street Park, and portions of the existing vehicular streets, and to provide a new winter-garden and or exterior landscape extending the High Line with an exterior pedestrian path to the Little Island, which is across the West Side Highway, along the Hudson Riverfront.

Considering the uniqueness of the project site and context, the Chelsea Craft Guild Director asks that the public spaces and circulation areas, including their planned and unplanned events, be considered to be as important as the required programmatic areas. She cites the success of the Piano and Roger's Centre Pompidou in Paris and Frank Gehry's Fondation Louis Vuitton also in Paris, where the public experiences may be more as significant and remembered than the art or hotel stay itself.

The Chelsea Craft Guild has interviewed and has chosen two Landscape Architectural firms for the project; Piet Oudolf and Field Operations, based upon their creativity and skill in the design of the urban landscape as illustrated by their adjacent High Line project. You are therefore asked to base the design of the landscape exterior areas upon the principals and architectural characteristics of their work.

The program's landscaped areas can be any combination of completely exterior, completely interior (greenhouse or winter garden) or dynamically openable adjusting to the season, time of day or weather condition.

**Winter Garden / Landscape / Garden     3,600 sq. ft. min.**

*My biggest inspiration is nature. I do not want to copy it, but to recreate the emotion."*

*These landscapes don't just happen on their own.*

*We create different moods and compositions throughout the seasons. Hundreds of plant species evoke the patterns of woodlands and grasslands. Birds and insects thread through and animate the plantings. The mood of each garden changes through the year, conveying the ever-changing wonder and mystery of wild places.*

*Piet Oudolf*

*Public spaces and their thresholds often announce and preface entrances to (functional) spaces.*

*They are integrated into the sequence of arriving and, with their braking properties, slow down those approaching.*

*In particular, thresholds in entrance areas organize the transition and mediate between outside and inside.*

*In their extended form or in summation, thresholds also create spaces. Together with space defining elements, they establish the staging for threshold spaces.*

*Till Boettger*

## Landscapes by Piet Oudolf:









## Landscapes by Field Operations:





## Architectural Landscapes:

**Waterscape:** water garden, reservoir. tidal, reflecting pool, reservoir. natural vegetation. waterways, water displays: water jets and walls, cascades, accessible waterscape. Playful. Calm, Theatrical, Winter-scape, Summer-scape, Night Lit, Turbulent and Still, Reflective and Opaque,

**Natural Landscape:** untamed, never pruned, indigenous materials, reaching its own equilibrium, illustrating the natural cycles of growth and decay. With are no specific paths, nor absolute edges. Natural landscapes are self-maintaining, composed exclusively of indigenous flora and fauna. They evolve into a natural equilibrium with climate, soils and weather.

**Formal Landscape:** creates orchestrated sequences that are integrated into and derived from the classical forms in the city landscape. Plant materials are cultivated for specific effect, trimmed to control and define man made form, and are selected for specific horticultural events throughout the year. Architectural landscapes are outdoor rooms, capable to be enclosed or open to vistas. Their forms, colors, textures and details are often derived from the characteristics of the adjacent and related architecture.

**Self-sustaining Landscape:** self-maintaining, water conserving, soil-less, non-chemically dependent, lightweight. New technologies create an orchestrated series of displays and harvests. No longer ground based, landscapes forms vary from thin lines to vertical planes, from static to dynamic movement. Systems respond to variations seasonal, daily and weather conditions.

I do not divide Architecture, Landscape and Gardening;  
to me they are one.  
Luis Barragan

The world is moving into a phase when landscape design may well be the most comprehensive of the arts. Man creates around him an environment that is a projection into nature of his abstract ideas.

It is only in the last century that the collective landscape has emerged as a social necessity.  
Geoffrey Jellicoe

I must have nature to be soothed and healed, and to have my senses put in tune once more.  
John Burroughs

A path can become the thread of a plot, connecting moments and incidents into a narrative.

The narrative structure might be a simple chain of events with a beginning, middle, and end.

It might be embellished with diversions, digressions, and picaresque twists, be accompanied by parallel ways (subplots), or deceptively fork into blind alleys like the alternative scenarios explored in a detective novel.

Charles W. Moore, William J. Mitchell, and William Turnbull

## Landscape References:

Landscape Architect	Project
Burchhardt	MFO Park
Carlo Scarpa	Brion Cemetery
Carlo Scarpa	IVAV Courtyard
Carlo Scarpa	Querini Stampalia Courtyard
Diller Scofidio Renfro	Highline, NYC
Ecosistema Urbano	Ecoboulevard
James Corner	Field Operations projects
Patrick Berger	Parc Andre Citroen
RO&AD Architects	Moses Bridge
Bruno Munro	
Fernando Caruncho	
Kathryn Giustafson	
Peter Latz	
Piet Oudolf	
Wirtz International	

*The Poetics of Gardens: Moore, Mitchell, Turnbull, MIT*







**MFO Park, Zurich, Switzerland: Burckhardt + Partner**

<https://en.wikipedia.org/wiki/MFO-Park>



## VIII. Program: Piazza

Streetscapes and piazzas are the principal sites of public life in New York City. The squares vary in character, form, size and location in the city offering a rich spectrum of urban experiences to residents and tourists alike. Piazza or any successful urban square are experienced as spaces and events rather than as an object. The spatial experience is dependent on parameters derived from the laws of three-dimensional design, cultural influences and the dynamic effects of public life, time, and variation of seasonal and weather.

It can be formulated on the traditional precedents such as 1) "urban theater" or cultural destination, as 2) "landscape-urbanism", as 3) "aquatic-urbanism" an extension of the High Line, or as 4) "networked-square," an extension of city nodes of activity.

Both the traditional or historic piazza are open public space generally surrounded by buildings and ground floor activity: buildings, often which vary scale, historical period, height and in function. They often contain small shops on the ground floor and private dwellings above, often with exterior dining along one or more perimeter. Traditionally a piazza is located at the crossing point of pedestrian routes, a place to go through rather than to.

A large piazza can bring together ten to fifteen thousand people, of every age and social background, living and working within its neighborhood. It is the village square, public living room, where elders sit and talk, where chance meetings occur, where teenagers flirt, children play, where there are farmers' markets, outdoor theaters, street performances, and where family or community festivals take place. They are unique in their variety, unpredictability, relief from the density of the city, diversity of activity, visual character, and landmark qualities, yet most were anything but formally planned. Almost all have outdoor seating and very importantly are connected to the functions and activities of the surrounding building's ground floor.

*Whoever enters the interior of this city never knows what he will see or by whom he will be seen in the next moment. No sooner does anyone appear than they have already left the stage through another exit.*  
*Winfried Georg Sebald*

Anfiteatro Campo, Lucca, Italy	150 x 250	37,500
Campo Dei Fiori, Rome, Italy	150 x 350	52,500
Grand Place, Bruges, Belgium	300 x 300	90,000
Medina, Tunis	150 x 150	22,500
Cheske Budejovice, CZ	400 x 400	160,000
Market Place, Warsaw, Poland	240 x 295	70,800
Square, Prague, CZ	300 x 400	120,000
Piazza Campo, Siena, Italy	300 x 350	105,000
San Gimignano, Italy	130 x 150 + 80 x 100	12,000 + 8,000
Piazza Duomo, Milan, Italy	350 x 500	175,000
Piazza Erbe, Verona, Italy	125 x 400	50,000
Piazza Maggiore, Bologna, Italy	350 x 400	140,000
Piazza Mayor, Madrid, Spain	308 x 423	127,500
Piazza San Carlo, Torino, Spain	200 x 450	90,000
Piazza San Marco, Venice, Italy	260 x 500	130,000
Piazza Signoria, Florence, Italy	250 x 350	87,500
Place des Heros, Arras, France	200 x 400	80,000
Place Vosges, Paris, France	450 x 450	202,500
Plaza Dubrovnik, Croatia	40 x 700	28,000



*It's a deliberate gap that interrupts the mass and clamor of buildings and streets, breaking up the flow of daily business and creating a space where people can come together, by design or happenstance.*

*City squares are planned absences—they're defined, first of all, by what they're not.*

*A city park already has a definition (grass, trees, paths) that tells you how it's to be used: for leisure, for recreation, as a withdrawal from the city, with the illusion of being in nature and often alone.*

*Squares unlike parks, don't take you out of the city.*

*As an extension of urban life, neither natural nor solitary, they're of the city as well as in it, but with a function that alters through history.*

*Because of their very emptiness, they are full of possibility. Their essential feature is open space, and their essential function is sociability.*

*Where much in the modern city is private and inaccessible, squares are for the public.*

*People gravitate to them in order to yak, kibitz, palaver, gossip, argue, show off, watch, eavesdrop, play, protest, hustle, love, fight.*

*In the case of Italian piazze, French places, and Spanish plazas, the restaurants, cafés, and shops that line the perimeters encourage the ease of human encounters. Even squares built to a more modest scale can seem like pockets of (welcome solitude or) isolation at the heart of a city, where the urban buzz suddenly goes quiet.*

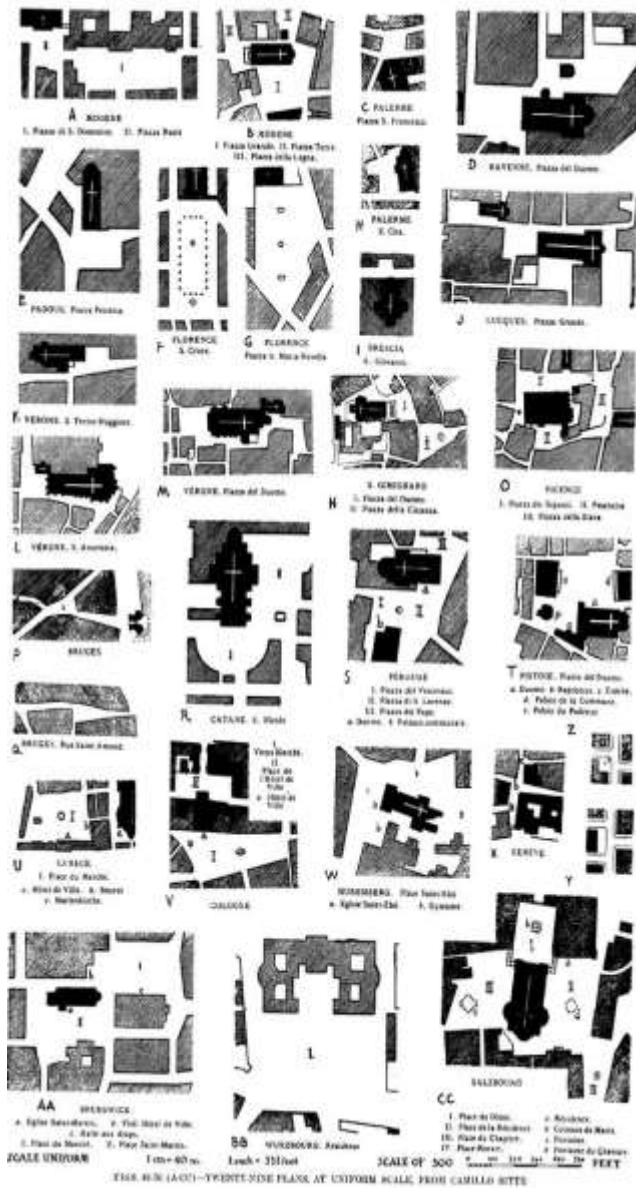
*They possess a theatrical quality, as if the square is a stage and everyone in it a performer, even if the assigned role is that of an audience member.*

*George Packer*

**Piazza**

**3,600 sq. ft. minimum**





### Urban Squares:

Lantern  
Brick Pit Ring Walk  
Ecoboulevard  
Vieux Port  
Market Hall Ghent

AWP Atelier Oslo  
Bloch Durbach  
Ecosistema Urbano  
Norman Foster  
Robbrecht & Daem



## Program Space Summary:

### 1. Approximate Minimum Net Sq. Ft. Interior Areas:

Boutique Hotel	12,600 net sq. ft.
Workshops / Residence / Gallery	13,200 net sq. ft.
Café	1,800 net sq. ft.
Restaurant	5,400 net sq. ft.
Services	3,600 net sq. ft.
Total	36,600 net sq. ft.

\* With Interior Winter Garden (3,600 net sq. ft. minimum)

Total 40,200 net sq. ft.

### 2. Estimated Minimum Gross Interior Floor Area:

44,000 to 62,000 gross sq. ft

### 3. Estimated Exterior Areas:

Hotel	900 sq. ft. minimum
Café	900 sq. ft. minimum
Restaurant	1,800 sq. ft. minimum
Piazza	3,600 sq. ft. minimum

\* With Exterior Garden (3,600 sq. ft. minimum)

Total 7,200 to 10,800 sq. ft.

Architectural programming consultants have provided a list of net floor areas that are preliminary predictions only, based upon interviews with clients and in comparison to similar projects.

Their estimates do not include wall thicknesses, emergency egress, public egress, public staircases, ramps, public and service elevators, escalators, public restrooms, multi-level spaces, light wells.

**It should be assumed that all Net Square Foot areas are preliminary estimates only, and can be adjusted by plus or minus 33% of the Net Square Foot Floor areas indicated.**

**The Total Gross Floor Area, including all programmatic interior spaces, restrooms, stairs, storage areas, service areas, mechanical spaces, elevators and escalators, interior and exterior walls, public and egress circulation is anticipated to be approximately 125% to 150% of the Net Square Foot Floor area.**

## Regulations, Requirements & Data

a. The maximum height of the occupied building(s) is 200' above existing grade, (maximum height of the rooftop to the existing grade of the building's site.)

b. Occupied or unoccupied exterior (not heated or cooled) open or roofed spaces, canopies, shading devices and other construction can occur to a maximum height of 225' above the average existing grade of the building's site.

c. All areas, other than unoccupied storage and mechanical spaces must have natural light as per the International Building Code, including commercial kitchens.

d. Building maintenance and other services will occur between Midnight and 8:00 AM.

e. All occupied and un-occupied interior spaces will be protected by fire suppression and smoke exhaust systems.

f. All elevator lobby areas, egress paths and stairwell landings will be equipped with emergency call and communications systems.

g. All energy consumption for the project will be exclusively electrical; with high efficiency geothermal ground water-based heat pumps for heating and cooling. Energy sources can include alternative energy systems such as photovoltaic systems. (This project will not connect to the Con Edison Steam Operations district heating and cooling steam system.)

h. The solar access, shading, weather patterns of any supplemental solar energy source must be analyzed to prove to be viable a energy source.

i. Air Rights Impervious Coverage is the horizontal projection or shadow, in plan, of all impervious surfaces above the ground plain. Impervious surfaces are any material which prevents either rain or natural light to pass through. It does not, however, include the leaves and branches of natural landscaping.

j. The one third Air Rights Impervious Coverage over 10<sup>th</sup> Avenue is the summation of all surfaces shadowing the site. It can be in one location or the summation of many.

k. The connection to the High Line is to be at the western edge of the High Line only, i.e. not within the footprint of the High Line. Building over the roof of the Rivian building to attach to the High Line is permitted, but the construction cannot touch or be supported by the Rivian building, and the new construction in that area must be exterior spaces only.

l. Any structures spanning over 10<sup>th</sup> Avenue can be a free 100 foot span of the ROW, or include columns which to not restrict pedestrian movement..

m. The 14<sup>th</sup> Street and 10<sup>th</sup> Avenue vehicular and pedestrian intersections will be changed to have the same curb radii and sidewalk configuration as the standard NYC infrastructure grid.

n. The building performance energy calculations are to be based upon the efficiencies of the required ground water heat pump HVAC system listed below.

o. ADA access (elevator or ramp) is required to any new raised or depressed public pedestrian path or space.

p. Approval of the project is predicated changes to the High Line being strictly limited: 1) to the removal of a portion of its Western railing system to provide a pedestrian connection and 2) minimal changes to the landscaping to connect the new projects pedestrian path to that of the High Line.

**W-1000-H-P-D-PP** (Non-reversing)  
Commercial Water to Water Heat Pump  
Dual Refrigeration Circuit, R410a, 60 Hz  
Nominal Size 81 Ton



**Nordic: W-1000 Commercial Water to Water Heat Pump**

Size = 29" x 60" Vertical Configuration

Heating:	1,076,100 Btu/hr	EWT = 104 F
Input =	74,774 Watts	COPh = 4.22

Cooling:	981,700 Btu/hr	EWT = 54 F
Input =	47,213 Watts	COPc = 6.10
		EER = 20.8

Number and location(s) of the W-1000 systems is dependent upon maximum hourly heating and cooling loads, distribution of building functions, building organization, building energy efficiency and building form.

See: <https://www.nordicghp.com/for-dealers/manuals-and-specifications/>



## Project References:

### Advanced Studio II Google Drive:

The Studio's Google Drive is the primary reference for the studio project and includes the following:

#### Architectural References

Cafes & Shops  
Concepts & Theory  
Digital Site Model  
Landscape  
Presentation  
Site  
Student Work  
Syllabus  
Technical References

### Conceptual Design Texts:

#### Architecture Principia: Borden & Andrews

<https://www.pearson.com/en-us/subject-catalog/p/architecture-principia/P200000000814/9780133112023>

#### A Language of Contemporary Architecture: Luna & Yim

<https://www.routledge.com/A-Language-of-Contemporary-Architecture-An-Index-of-Topology-and-Typology/Luna-Yim/p/book/9781032245386>

### Readings:

- Thinking Architecture (Peter Zumthor)
- Layers in Architecture (Carlo Scarpa)
- The Picturesque and Serial View, (Gordon Cullen)
- Urban Composition, (Leon Krier)
- Nodes and Networks, (Bernard Tschumi)
- Heterogeneous Systems, (Rem Koolhaas)

### Websites:

Google Images  
Archdaily.com  
Flickr.com

### Architectural Theories and History:

- Concise Townscape: Cullen
- Embracing the Square: Duncan Corrigall And Byera Hadley
- Layers in Architecture;
- The Pleasure of Architecture: Bernard Tschumi
- The Genealogy of Cities, Charles Graves, Jr.

### Architectural Housing Precedents:

New Forms of Collective Housing in Europe, Birkhauser  
The Urban Housing Handbook, Firley and Stahl, Wiley  
Courtyard Houses, Pfeifer and Brauneck, Birkhauser  
Town Houses, Pfeifer and Brauneck, Birkhauser  
Urban Housing Forms, Zhou, Architectural Press  
Key Urban Housing of the 20<sup>th</sup> Century, French, Norton

### Architectural Concept Precedents:

#### Heavy:

Maryhill Overlook  
Corte San Pietro Hotel  
Innovation Center  
Zamora Offices  
Alcarcer do Sal Residences  
MateusIglesia de Santisimo

Allied Works  
Daniela Amoroso  
Alejandro Aravena  
Albert Campo Baeza  
Manuel Aires  
Fernando Menis

#### Light:

Barrio del Foro Romano  
Everday Coffee Pavilion  
Villa Roces  
Ingfah Restaurant

Amann Canovas Maruri  
Sean Godsell  
Govart Vanhoutte  
Tungthunya

#### Urban Square:

Lantern  
Brick Put Ring Walk  
Ecoboulevard  
Vieux Port  
Market Hall Ghent

AWP Atelier Oslo  
Bloch Durbach  
Ecosistema Urbano  
Norman Foster  
Robbrecht & Daem

#### Landscape:

Parc Andre Citroen  
MFO Park  
High Line  
Moses Bridge  
Parc Della Vilette

Patrick Berger  
Burckhardt  
Diller Scofidio Renfro  
RO&AD Architects  
Tschumi

# Chelsea Craft Guild, New York, N.Y.

## Assignments: Advanced Studio II

Arch 595 and Arch 506G

New Jersey School of Architecture / HCAD / NJIT

Spring 2025

John Cays, Victoria Diskina, Peter Dumbadze, Cleveland Harp, Vera Parlac, Duncan Reid, Marc Rosenbaum, Dincer Savaskan, Stephen Zdepski (Coordinator)

## Phase I: Conceptual Design I, II & III

Architectural design is neither seeking the new with a blank piece of paper, nor defined by precedent and the past, with a pre-established set of rules and characteristics. Architectural design in the profession is evolutionary, biased by the values and previous work of the practice, the history and lineage of architecture, legal regulations and liability, short-term and long-term cost, among many other factors.

**The Advanced Studio's conceptual design process will consider a set of architectural concepts and theories, which are fundamental to all architecture, past, present and future, regardless of time period, architect or style.**

Past architectural periods can be defined by their "styles" which evolved from a unique set of common values and rules. The Beaus Arts emphasized surface, symmetries, "room", base-middle-top, etc. The Bauhaus emphasized space, asymmetry, structural expression. Recent contemporary architecture is diverse, devoid of a single set of well-defined set of values or rules, often characterized as the result of personality, or new design methods. Today, it is difficult to define a common design vocabulary on which to base architectural design.

Architecture's responsibility to building performance and environmental sustainability has no common set of design characteristics nor defined architectural vocabulary. Its analytical measurement may not directly influence a design's visual, programmatic nor contextual characteristics. While it suggests a climate based regional architecture, based upon local reclaimed materials or advanced materials and systems, it has yet to define a clearly articulated set of rules comparable to that of either the Beaus Arts or Bauhaus.

The creation of architecture has never been either completely new or derived for historical precedents. It is neither the personal expression of one individual, nor the collective decision of many. To be relevant over time it must develop from architectural history and theory, express contemporary conditions and diverse values, all of which maintain their relevancy and appreciation into the future, in some cases many centuries or millennium.

Unlike almost everything else that is designed, architecture is fixed in place and responds to its specific context; culturally, programmatically, environmentally, aesthetically, physically and technically. Significant architectural practices are the result of insightful and skilled practitioners who develop a set

of values that prioritize many design determinants, utilizing both personal and shared design methods. Their work progresses from their relationship to both ancient and recent architectural history and their own insights and instincts.

The greatest of architecture is the result of design experimentation within a framework of theoretical, technical choices and philosophical values. Whether it is a specific formal or visual aesthetic, a set of technical systems and details, or discrete design vocabulary, architectural is built upon previous work.

The Conceptual Design Phase will begin by starting with design concepts selected from a library of images. Each image or pair of images will be superimposed upon three dimensional models of the site suggesting alternative designs; functionally, contextually, formally and conceptually.

***The two dimensional designs are to be brought into the third dimension, both in plan and section, and in combination within the context of the site, and to scale.***

Designing is informed by; the design process itself, what is learned from the creation of alternatives, what is consciously created, what is instinctively discovered. What should be done and why is developed from seeing and responding to a varying set of architectural characteristics, at scale, in response to the specific details of the site and context, and programmatic conditions.

The following concepts are part of the initial Conceptual Design I studies:

- a) Abstract Urban Form
- b) Singularity, Linear and Network
- c) Order and Disorder

## Studio Section Site Model:

To include the 768' by 768' area shown on the aerial site photo and topographic map included in this Syllabus, including accurate facades of the surrounding buildings, High Line details, people, landscape, sidewalks and roadways, etc.

It is suggested that each three-studio group work collectively to create the semester's 3D digital model of the site and its context, and the 3 physical models composing of 48" x 48" model bases, surrounding buildings, High Line and details such as people and vehicles for each of three studios.

**Due: Site Model should be completed by 6:00PM, on Friday, 14 February 2025.**



# Conceptual Design I:

## Part I: Urban Form:

Architecture at its core is the establishment of order, creating relationships between architectural elements, space, movement, time. The formation of building structure, movement systems, hvac systems, and functionality all require ordering and formal decisions. Whether patterns of symmetry, proportion, center line, symbolism or contemporary devices such as networks, non-Euclidean form, dynamic or adaptive forms, 2D patterns, random or complex systems, all are fundamental to creating urban and architectural design. Regular grids, checker boards, geometric patterns all provide ordering devices requiring "difference and exception" to respond to non-regular forces such as climate, seasonal variation, hierarchy, orientation, experience, interest.

**Process: Using the studio's Google Drive's Library of 2D Abstract images select one or more images and experiment with numerous design alternatives extending the 2D images into three dimensions, in the context an aerial photograph of the site plan, and in 3D section bisecting the site and its context.**

Working at 1" = 32' scale develop numerous conceptual 3D physical models addressing the basic scalar programmatic requirements and contextual conditions of the project. Physical Site Model is to have a Google Earth aerial view image, to scale, as the base of the model and 2D chipboard "stage set facades" on the three sides of the existing site.

## Conceptual Design I Concepts:

**A. Singular, Linear or Network:** Part of the Conceptual Design studies are to consider and illustrate how the design studies can become a singular, linear or network ordering system in the context of site and a means for conceptualizing the program.

**B. Order, Disorder:** Part of the Conceptual Design studies are to consider and illustrate how the design studies can be based upon ordered or disordered ordering system in the context of site and a means for conceptualizing the program.

What is discovered from the design process, the reaction and instinct to what is seen, is as important as logically developed designs. The objective is to discover in the selected image(s) and their 2D and 3D models the best architectural concepts, characteristics and strategies that suggest meaningful site and context relationships at the urban scale, and begin to define a set of architectural concepts and strategies for the project at the building scale. The studies are to speculate and understand not only what is possible but what are the range of strategies for the "best" architectural and urban scale design concepts.

## Part II: Architectural Precedent:

(Also see Conceptual Design III description)

Architecture and the practice of architecture evolves over time in response to the transitions in its history and theory, development of materials and systems, changes in cultural

values, and the insights and preferences of great architects. Research and analyze at least one work of contemporary architecture that informs conceptual design.

Create a set of drawings, notations, and statements which illustrate the potential relationships between the precedent(s), the specific characteristics of both the project context and functional program, and your set of architectural ideas and motivations.

*We cannot construct anything if we have not thought of it and conceptualized it first, and we shouldn't conceptualize anything that we cannot build.*

*One must dream, but at the same time be capable of making those dreams a reality.*

*Architecture can mysteriously materialize ideas; it is the Built Idea. Therefore, when I speak of the structure, I want to underline that the importance of structure lies not merely in its bearing of loads, but also in something much more important, namely in establishing the order of the space. The "structure of the structure" relates to the need to establish an order proper to the structure itself.*

*Only when Architecture is true, in its conception, in its idea, and in its material expression can it gain access to beauty. It does this when it is the result of a specific and developed idea that is laid down in a coherent structure and remains consonant with logically arranged materials.*

*In short, this architecture fulfills the Vitruvian principles of Utilitas, Firmitas and Venustas.*

*Only when the idea, the development, the structure, and the construction are true can it arrive at the level of aesthetic beauty.*

*Principia Architectonica, Alberto Campo Baeza*

Questions:

a) What are the architectural characteristics, ordering systems, and concepts that are inherent in the selected abstract images and architectural precedent(s)?

b) What are their design characteristics that best relate to the specific conditions of the design project?

c) Exterior Areas: What should be the location, scale and character of required public Piazza / Square and Landscape / Garden?

d). Movement Systems: What are the alternative strategies for connecting the pedestrian movement systems around or through the site?

e) Does the 2D overlaid image on the site and the 3D models approximate the overall scale and volume of the programs interior and exterior spaces?

f). Typology: What are the advantages of abstract ordering systems that is implied or illustrated by the original image?

g) Complexity: What are the advantages a singular, linear or network organizational systems? Order: What are the advantages of an order verses a disorder?

h). Context: How does the conceptual design integrate into the site, in three dimensions?

g). Form: Is the plan or section orientation of the original image a better source for the development of the conceptual design?

## Part I: Conceptual Design I Presentation

1, Notated Conceptual Design Image(s) of photographs, drawings etc of a minimum of two alternative conceptual design studies:

How are the “best designs” a development of the selected image(s) and models?

What architectural characteristics are they based upon which have been derived from the original selected images?

How has the best architectural attributes of the selected images been maintained and become the basis of the design?

2. Conceptual Phase Models: Physical model detail equivalent (  $1/32" = 1'-0"$  )

3. Photographs: Four (minimum) of the best two Abstract physical design models in the context of the site.

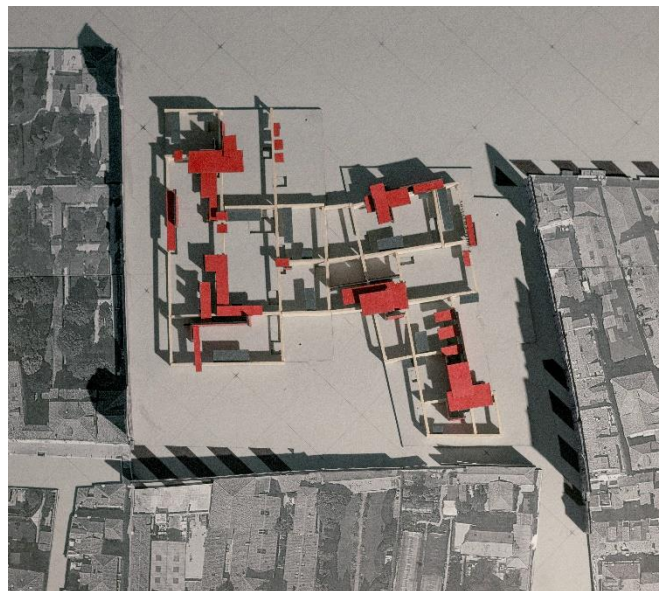
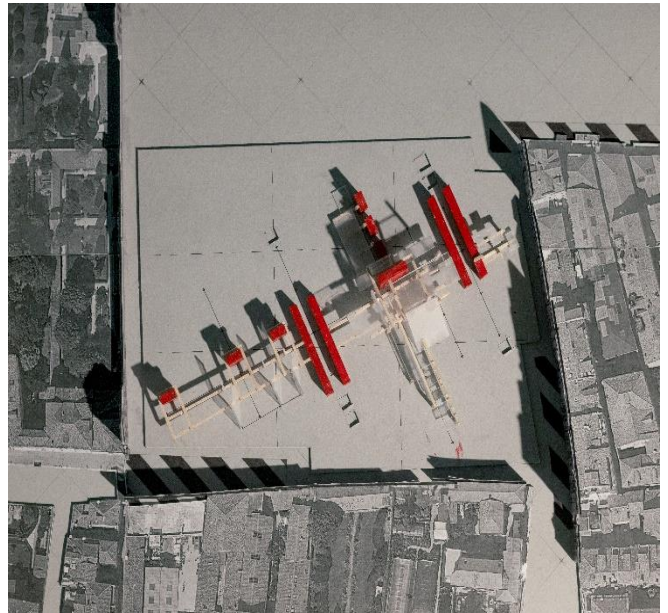
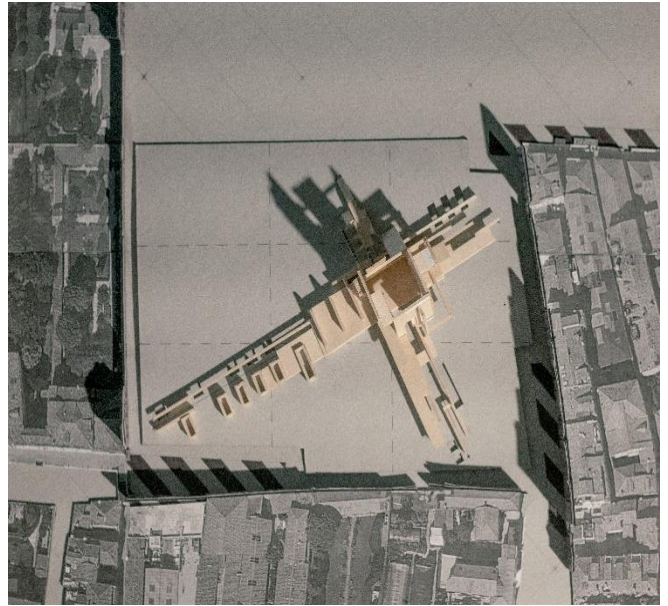
4. Perceptual Views: Eye Level photographs of the best two (minimum) physical models.

5. Architectural Concepts and Theories: Notated diagrams and statements of two “best designs,” which illustrates how the following concepts have formulated the design:

- a) Abstract Patterns, Forms, Character
- b) Singularity, Linear and Network
- c) Order and Disorder

6. Written Statement: One hundred words, maximum, defining your initial conceptual basis of your project.

**Due: Thursday, 30 January 2025**





## Conceptual Design II:

The design studies are to add the following concepts:

- a) Heavy & Light
- b) Mono-Type & Multi-Type
- c) Picturesque, Formal, Node, Composite

All architecture is a combination of the characteristics "Heavy to Light," and "Mono-Type to Multi-Type." These architectural characteristics define the broadest range of architectural forms and aesthetics, structural systems, environmental and functional relationships, technological and material choices within architectural design.

All great architecture over the millennium express these characteristics. While they define specific architectural characteristics, they do not prescribe a specific architectural concept, period or style. Often great architectural works are the result of being exclusively heavy or light, such as cave verses a tent. Some are based upon the opposing differences between heavy and light such as that of a Gothic cathedral. Edward Lutyens is quoted as saying; *"That all great works of architecture are best made out of one material, organized and expressing by how it is made."*

The intention of the Conceptual Design II studies is not to begin anew, but rather develop the Conceptual Design I "best designs," finding appropriate Heavy-Light and Mono-Multi Type characteristics which relate and develop your architectural concept, while completing the context, and generally organizing the interior and exterior functions.

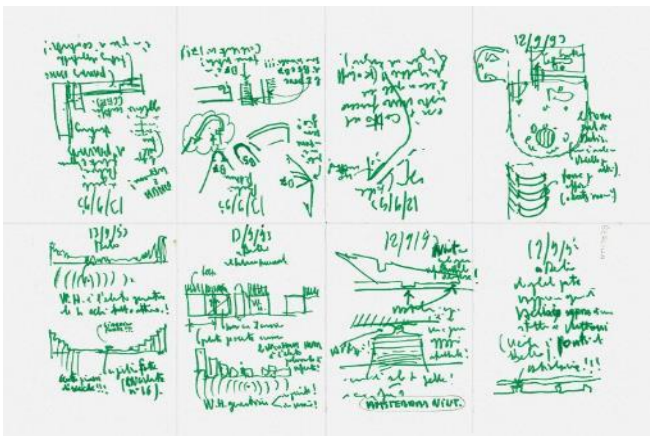
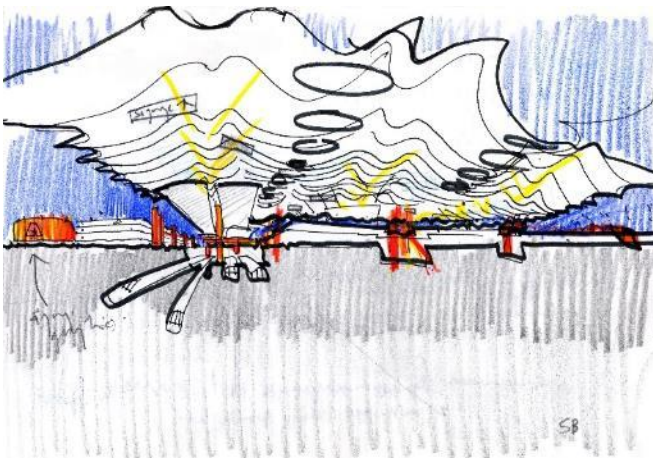
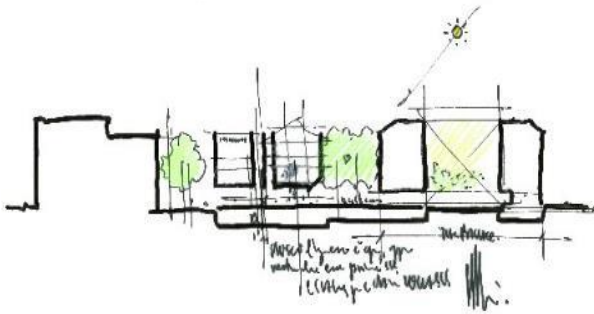
What are the best possible expressions of the original Conceptual Design image, and its "best design" that result from considering the architectural concepts of Heavy & Light, and Mono-Type & Multi-Type?

For example: the polarity or dialogue between Heavy and Light includes a wide range of architectural characteristics:

- 1) The psychology of space,
- 2) The relationship between spaces,
- 3) The separation or connection between interior and exterior spaces,
- 4) The nature of the structural system,
- 5) The degree to which the architecture is dynamically changing or static,

For example: the polarity or dialogue between "Monotype and Multi-type" includes a wide range of architectural characteristics:

- 1) The identicalness of functionally similar spaces,
- 2) The balance between order and disorder,
- 3) Variations of experience, scale, mood,
- 4) Importance,
- 5) Human and contextual scale,
- 6) Logic of structural and mechanical systems logic,
- 7) Relationships to varying conditions such as sun paths, seasons, times of day, variety of events, weather, orientation,
- 8) Hierarchy of scale or systems, etc.



## Conceptual Design II Process:

Working at 1" = 32' scale develop numerous conceptual physical models addressing the basic scalar programmatic requirements and contextual conditions of the project.

The conceptual architectural models should accurately represent the general size and height of all programmatic spaces both interior and exterior, the piazza and garden public spaces, and interior and exterior circulation systems in three dimensions, within the context of the Maximum Building and Impervious Coverage requirements, Site Boundaries, and adjoining context and neighborhoods.

Physical Site Model is to have a Google Earth aerial view image, to scale, as the base of the model and 2D chipboard "stage set facades" on the three sides of the site.

## Conceptual Design II Concepts:

### A. Heavy - Light:

1. Select a few similar examples of Heavy and Light images from the Conceptual: "Heavy-Light" folder. Interpret their potential meaning, design potential as it applies to the specifics of this studio project and, importantly, to your work this far. The images should illustrate Heavy-Light characteristics that illustrate your architectural ideas, concepts and design intentions, and also provide new insights about the development of your design.

2. Review the images and select the single "best" Heavy and single "best" Light image.

If your design was to be developed as exclusively Heavy, what would be the advantages and disadvantages?

How would it advanced your architectural intentions and redefine your concept?

If your design was to be developed as exclusively Light, what would be the advantages and disadvantages?

How would it advance your architectural intentions and redefine your concept?

3. Create a set of "Heavy" and "Light" 3D models. Overall, the studies also strive to maintain the best conceptual and architectural characteristics of the original selected image(s), while also developing your design further.

### B. Mono-Type and Multi-Type:

1. Select a few similar examples of Mono-Type and Multi-Type images from the Conceptual Design: "Mono-Multi" folder. Interpret their potential meaning, conceptual and design potential as it applies to the specifics of this studio project and, importantly, to your work this far. The images should illustrate Mono-Multi characteristics which illustrate your architectural ideas, concepts and design intentions, and also provide new insights about the development of your design.

2. Review the images and select the single "best" Mono-Type and single "best" Multi-Type image. If your design was to be developed as exclusively Mono-Type, what would be the advantages and disadvantages?

How would it advanced your architectural intentions and redefine your concept?

If your design was to be developed as exclusively Multi-Type, what would be the advantages and disadvantages?

How would it advance your architectural intentions and redefine your concept?

3. Create a set of "Mono-Type" and "Multi-Type" 3D physical study models. Overall, the studies strive to maintain the best conceptual and architectural characteristics of the original Conceptual Design selected image(s), while also developing your design further.

## C. Picturesque, Formal, Node, Composite Theories:

Each of the following four design theories encompass a different point of view regarding the overall organization, ordering system, visual and spatial character, relationship between functions, formal/informal characteristics of buildings, relationships to context and neighborhoods.

Consider each theory as a means for further defining your architectural concept and design study. What are, its design "rules," form, influence on program and relationship to context?

Which of the four theories most closely aligns with your Conceptual Design studies thus far?

Which of the theories or combination of the theories should be the basis for the Schematic Development design phase, and why?

**1. Picturesque:** is typified by "vernacular" urban settings which have developed overtime, adapting to topography, pedestrian movement, hierarchies of importance, variation in "human" scale, shared aesthetics, and uniformity of materiality. Buildings are differentiated as "background, continuous" and "landmark, symbolic."

**2. Formal:** is typified by predetermined and unified organizational systems, typically orthogonal grids, centerlines, with urban blocks. Formal systems generally include hierarchical characteristics through the emphasis of the "center," the uniform distribution of "centers," emphasis of axis such as boulevards and streets, relating locations of importance with cultural or commercial functions.

**3. Node:** based urban systems establish a network of paths whose intersection create a hierarchy of experience and function. The system is based upon 1) movement along or adjacent to and 2) arrival at events. The node based system can be congruent with existing conditions such as topography, existing patterns of use, completing existing conditions. The node based system can also be a unique pattern or system overlaid onto the existing context, establishing new or unexpected conditions.

**4. Composite:** based urban systems interrelates or combines functions, removing differentiations of use, or separation. It is a system that adapts over time. Often a system of a general or universal architectural context whose functionally is accomplished at the scale of "furnishings," rather than "room."



## Conceptual Design II Presentation:

The Conceptual Design II Presentation studies should include:

1. Notated Conceptual Design Image(s) of photographs, drawings etc of a minimum of two alternative conceptual design studies:

How are the “best designs” a development of the selected image(s) and models?

What architectural characteristics are they based upon which have been derived from the original selected images?

How has the best architectural attributes of the selected images been maintained and become the basis of the design?

2. Conceptual Phase Models: Physical model detail equivalent ( 1/32 = 1'-0" )

3. Photographs: Four (minimum) of the best two Abstract physical design models in the context of the site.

4. Perceptual Views: Eye Level photographs of the best two (minimum) physical models.

5. Architectural Concepts and Theories: Notated diagrams of two “best designs,” which illustrates how the following concepts have formulated the design:

- a) Heavy & Light
- b) Mono-Type & Multi-Type
- c) Picturesque, Formal, Node, Composite

6. Written Statement: One hundred words, maximum, defining your initial conceptual basis of your project.

Consider the following:

- a) How does the concept “complete” the urban?
- b) How is the concept derived from and expressive of the selected design concept images?
- c) How does the design interpret the functional interior and exterior program?

**Due: Thursday, 6 February 2025**

# Conceptual Design III:

## Part I: Conceptual Design Development

The last phase of Conceptual Design synthesizes the two previous design studies, the initial research of architectural precedent, site and functional programmatic analysis and the development of the architectural characteristics of the selected conceptual image.

Does the model maintain or develop the best architectural concepts, forms, characteristics of the two previous Conceptual Design Studies?

Does the model maintain or develop the best architectural concepts, forms, characteristics of the original 2D abstract source images?

Does the model illustrate relationships to the architectural precedent analysis?

Does the model illustrate the diverse characteristics of the functional program?

Does the model respond or complete the unique conditions of the site and its context?

## Part II: Precedents, Program, Context, and Concepts:

Based upon your site visit, Synthesis Seminar Site and User Requirements research, and Conceptual Design I Part II architectural precedent research consider the following.

What are the specific details and conditions of the existing site and context that determine or prove the conceptual design?

What are the specific details and conditions of the existing site and context that interfere or question the conceptual design?

There are numerous relationships between the project's site conditions and the various elements of the functional program.

For example, the site can be considered a series of unique layers:

- 1) Below grade: isolated, hidden remote
- 2) Depressed space: interconnected to streetscape
- 3) At grade: site walk, extending NYC streetscape
- 4) Above grade space: interconnected to streetscape
- 5) Depressed below High Line: interconnected to streetscape and or High Line,
- 6) Extension of High Line public walkway / garden
- 7) Above High Line: interconnected overlooking
- 8) Middle levels: private realms
- 9) Penthouse: unique, overlook panorama
- 10) Roof-scape: panorama, private or public.

For example, the existing site includes numerous unique conditions.

1) At this location, the High Line is called the Hudson River Overlook, as it is one of the few places where it has a view westward. Should that be maintained by building over or under the view from the raised pedestrian level, building to the side, dispersing the program into smaller elements, by extending the High Line to the Westside Highway, etc?

2) The Hudson River Overlook landscape has two pedestrian levels and routes. At what points and how should the project connect and interrelate?

3) The project requires either an interior or exterior landscape. What locations within the three dimensional volume of the proposed site receives sufficient sunlight for a natural landscape?

4) How should the proposed design continue the definition of the sidewalk and building facades of the NYC urban blocks?

5) How are the existing topographic conditions of the site accommodated in the proposed design?

6) What is the visual character of the historic neighborhood and the new High Line development?

7) What is the historic and contemporary architectural morphology of the surrounding context?

8) What relationship should proposed design be create between the High Line and the Little Park?

For example, the program can be considered as a set choices of the interrelationships between the functions and the functions relationship to the layers of the site:

1) Hotel: connection or entry from streetscape and or High Line, privacy of rooms, uniqueness of setting, visual interrelationship to Hudson riverfront and High Line.

2) Craft Workshops: public access, privacy, industrial space, separate or connected to Gallery/Shops, separate or interconnected to Craftsperson Lodging.

3) Craftsperson Lodgings: separate or connected to Gallery/Shops, separate or interconnected to Craftsperson Lodging, separate or part of the Hotel.

4) Craft Gallery/Shops: connection and visibility to NYC streetscape or High Line. public display, separate or connected to Workshops, separate or interconnected to Craftsperson Lodging

5) Restaurant: connection and visibility to NYC streetscape or High Line, uniqueness of setting, relationship to Hudson riverfront and High Line.

6) Café: connection and visibility to NYC Streetscape or High Line.

7) Garden / Winter Garden: the existing 14<sup>th</sup> Street Park, extension of the High Line Landscape, unique setting, connection between High Line and 14<sup>th</sup> Street Park or Little Island,

8) Piazza: interrelationship to NYC streetscape, High Line, unique setting,

9) Pedestrian Movement Systems: What is the existing pattern of pedestrian movement (in 3D), and how should be maintained or completed? What are the public and private pedestrian spaces and how should the interrelate? Where and in what way should the raised High Line pedestrian spaces be connected to the streetscape, the waterfront, the Little Island?

For example, the architectural precedent(s) might inform the project through:

- 1) Organization inherent of the functional type.
- 2) Response to similar urban conditions.
- 3) Examples of natural landscapes.
- 4) Conceptual or Theoretical basis.
- 5) Formal Ordering Systems
- 6) Building Performance strategies.
- 7) Sustainability strategies.
- 8) Architectural Language, facade or aesthetics.
- 9) Materiality, Structural and Façade Systems.
- 10) Design Vocabulary of an architectural practice.



## Review I: Conceptual Design

**A. Conceptual Design:** Explain your design objectives and strategies by answering each of these questions through written statements and diagrams:

1. Through notated illustrations explain how your best conceptual design is developed from your selection, study and application of the following Concepts:

- a) Singularity, Linear and Network
- b) Order and Disorder
- c) Abstract Urban Form
- d) Heavy & Light
- e) Mono-Type & Multi-Type
- f) Picturesque, Formal, Node, Composite

2. Through notated illustrations explain how your best conceptual design is developed from your selection, study and application of the following Concepts:

- a. Picturesque
- b. Formal
- c. Nodal
- d. Composite

4. Written Statement: One hundred words, maximum, defining your revised conceptual of your project.

- a) What is the conceptual basis for your design?
- b) How does the design complete the urban context?
- c) How does the concept interpret and express the functional program?

### B. Precedents, Program, Context, and Concepts:

1. Precedent Analysis: Illustration, explanation of the relationship between the selected precedent(s) that determined the “best designs” architectural decisions and characteristics.

2. Site Relationships: Illustrate the best Conceptual Design's exterior courtyards and public spaces, gardens, pedestrian circulation and entries, relationships to the surrounding context, etc..

3. Selected Conceptual Images: Illustrate the best Conceptual Design's concepts, determinants of form and scale, patterns, organizing principles and relationship to the context.

4. Functional Organization: Illustrate the best Conceptual Design's locations of primary functions, and inter-relationships between interior and exterior functions, circulation systems, the site and context.

### C. Architectural Documentation of Physical Models:

1. Contextual Site Plan: view of “best design” to scale in the context of the surrounding neighborhood. (1/32" = 1'-0")

2. Conceptual Floor Plans: Diagrammatic Plans of “best design” of all other levels in the context of surrounding site. Ground level floor plan to be in the context of the Google

Earth aerial view (1/32" = 1'-0")

3. Conceptual Building-Site Sections and Elevations: Diagrammatic Longitudinal (one minimum), Transverse Building-Site Sections (one minimum), Diagrammatic Elevations (two minimum) in the context of surrounding site. (1/32" = 1'-0")

### D. Perceptual Documentation in 3Dof Physical Models:

Explain the “best design” in context and from eye level experientially.

1. Comparison of the selected original Conceptual images, images in context of the site and the three Conceptual Design physical models I, II and III. Physical model detail equivalent (1/32" = 1'-0"), with photographs in the context of a site model.

3. Serial Views: A sequence of best design's eye-level Serial View perspectives in context. The sequential views are to illustrate moving to and through the design, as experienced at eye level and in its surrounding site context,.

4. Contextual Views: A set Contextual Views of best design from eye-level (two minimum) and aerial level (two minimum), superimposed on site photographs.

**Due: Thursday, 13 February 2025**

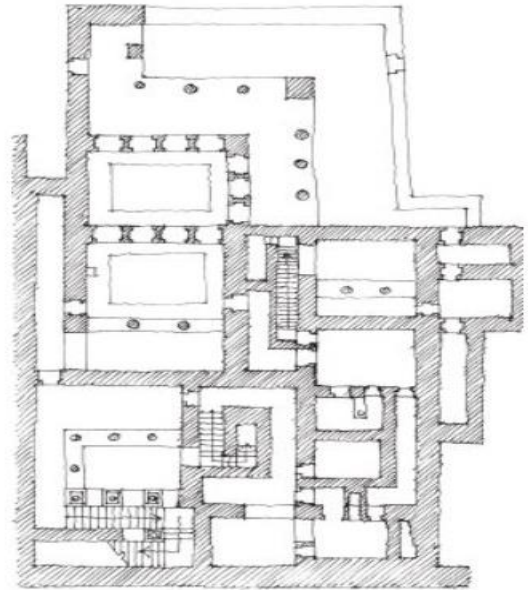
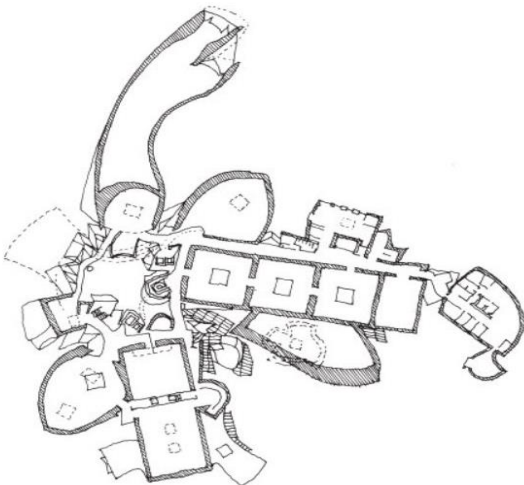
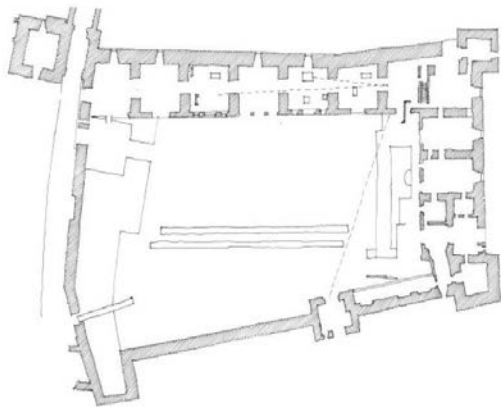
## Phase II: Schematic Design

### Schematic Design:

Schematic Design focusses upon the development of architectural drawings, while further developing architectural concepts and formal strategies, the physical and technical aspects of the design. Architectural schematic drawings illustrate the functional development of rooms and spaces, the architectural and technical characteristics of the building section, the fundamental characteristics of the structural and mechanical systems, and the environmental and contextual response.

Schematic Design illustrates functional relationships of location, size and proportion of all interior and exterior spaces, the design of the primary egress and exit system, design of the primary accessibility, the further development of conceptual strategies.

It develops the conceptual design to incorporate the primary exterior elevation characteristics including glazing, foundations, and conceptual landscaping / site characteristics. Approximate wall, floor, roof thicknesses, illustration of primary decisions regarding the structural system. They are based upon slenderness ratios of columns and walls, and structural span to depth ratios of girders, beams, slabs and trusses and to provide lateral stability and minimized deflection for the structure.



### Exterior Elevation Notebook:

Develop an annotated notebook of examples of exterior facades or portions of facades of projects with similar architectural characteristics and materials that you are considering to use as a basis for the future development of the project.

Consider the application of façade alternative materials, aesthetics, relationships to surrounding context, environmental response, expression of light and heavy architecture, expression of mono-type and multi-type architecture and express to the conceptual and technical aspects of your project.

What should the architectural character of your design be to express its architectural concepts, programmatic functionality, relationship to the surrounding context, and environmental response?

See the following:

1. Studios Google Drive
2. HCAD Library
3. See: \FACADES
4. See: \TECHNICAL REFERENCES
5. See: \CONCEPTS & THEORY

**Due: Thursday, 20 March 2025**

### Schematic Design Format:

The level of detail is increased to that associated with 1 to 200 (1/16" = 1'-0") scale architectural drawings.



## Review II: Schematic Design

### A. Concepts & Theories:

1. Written Statement: One hundred words, maximum, defining your revised conceptual of your project.

- What is the conceptual basis for your design?
- How does the design complete the urban context?
- How does the concept interpret and express the functional program?

2. Diagrams and Drawings: Illustrate how your Schematic Design is a development of your Architectural Precedent, Functional Program, Contextual Analysis and Conceptual Design Studies.

### B. Comparable Architectural and Building Systems

**Diagrams:** Explain and illustrate the Schematic Design though the following notated three-dimensional diagrams.

1. Site Analysis: Illustration, proof and explanation of specific site conditions that determined the "best designs" architectural decisions and characteristics.

2. Site Relationships: Illustrate the best Conceptual Design's exterior courtyards and public spaces, pedestrian circulation and entries, pedestrian, relationships to the architectural and physical context.

3. Formal Ordering Systems: Illustrate the best Conceptual Design's concepts, determinants of form and scale, patterns and organizing principles and relationship to the surrounding context.

4. Functional Organization: Illustrate the best Conceptual Design's primary functions location, approximate size and height, and inter-relationships, both for interior and exterior functions and circulation systems.

5. Schematic Environmental Response: Illustrate the Conceptual Design's response to Solar Orientation, Daylighting, views, changes of season, weather, time of day, etc.

6. Schematic Structural Form: Illustrate the Schematic Design's basic structural form character, heavy or light, frame-grid-load bearing wall, etc.

**C. Architectural Documentation:** (Detail equivalent to 1/16" = 1'-0", except at notated)

1. Schematic Site Plan: Aerial Google Earth view of concept to scale in the context of the surrounding neighborhood. (1" = 32')

2. Schematic Floor Plans: Diagrammatic Plans of all other levels of proposed design in the context of surrounding site. Ground level floor plan to be in the context of the surrounding site details and context. (1/16" = 1'-0")

3. Schematic Building-Site Sections and Elevations: Longitudinal (one minimum), Transverse Building-Site Sections (one minimum), Elevations, including basic façade characteristics (two minimum) in the context of surrounding site. (1/16" = 1'-0")

**D. Perceptual Documentation:** Explain the design in context and from eye level experientially.

1. Comparison of the selected original Conceptual images, images in context of the site and the three Conceptual Design physical models I, II, III and Schematic Design physical models.

2. Conceptual Phase Models: Physical model detail equivalent, ( 1/16" = 1'-0" with photographs.

3. Schematic Phase Model: Physical model, detail equivalent ( 1/16" = 1'-0"), with photographs.

4. Serial Views: A sequence eye-level Serial View perspectives in context. The sequential views are to illustrate moving to and through the design, as experienced at eye level and in its surrounding site context, including all major interior and exterior spaces.

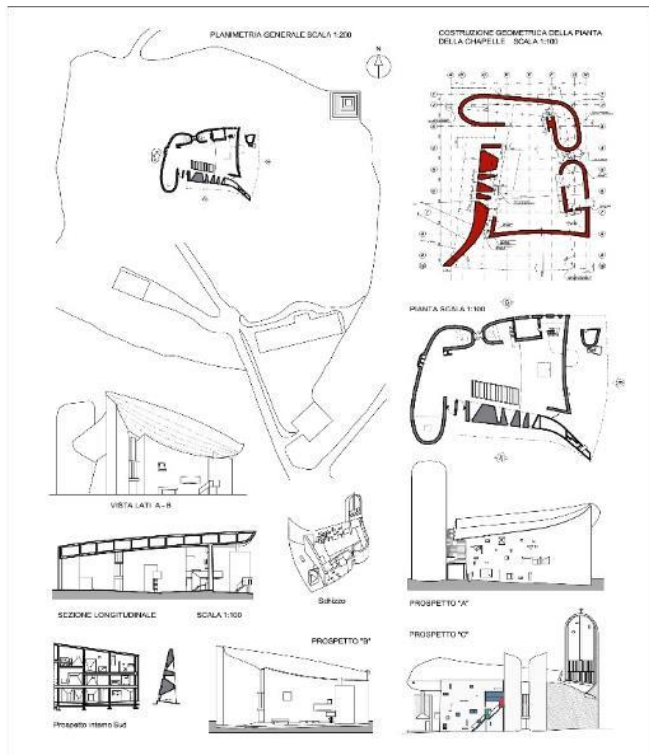
5. Contextual Views: A set Contextual Views from eye-level (two minimum) and aerial level (two minimum), which are basic monochromatic with solar shadow renderings of the conceptual building massing superimposed on eye level and aerial site / context photographs, with accurate matching of perspective, size, horizon line, lighting conditions and shadows, (without building surface color or textures.)

**Due: Thursday, 6 March 2025**

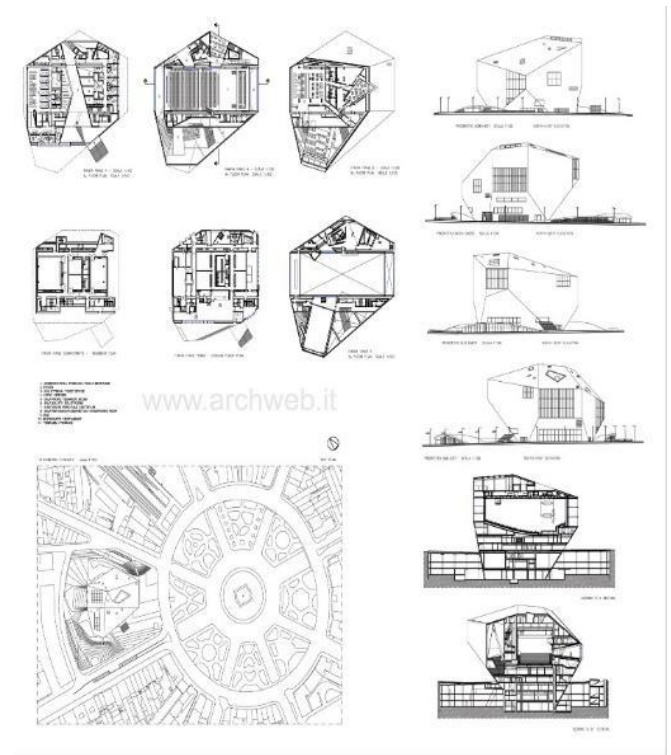
## Phase III: Design Development

Design Development is to further develop the conceptual, functional, regulatory and technical aspects of the Schematic Design.

The level of detail is that associated with 1/8" = 1'-0" architectural drawings. The focus is the development of a set of detailed 2D architectural drawings. All drawings of proposed design are to be shown in the context of the site and neighborhood.



All drawings must be in context (not as illustrated).



All drawings must be in context (not as illustrated).

## Piazza and Landscape Design Notebook:

Develop an annotated notebook of examples of public squares and landscape spaces with similar architectural characteristics that you are considering to use as a basis for the development of the project.

Consider both the application of contemporary landscape systems for self-sustaining plant materials, water conversation, new landscape forms.

The notebook should be the basis for the development of the exterior public spaces for your design.

1. Studio's Google Drive
2. HCAD Library
3. See: **LANDSCAPE**

**Due: Thursday, 13 March 2025**

## Design Development:

The design development phase will focus upon the following:

- a. Compliance with all major regulatory, life safety and accessibility requirements.
- b. Structural system design and dimensions including building foundations, component dimensions and lateral stability
- c. Environmental control systems locations and distribution systems.
- d. Design of the building exterior envelope at the scale of the entire project.
- e. Functional details such as the design of kitchens, restrooms, dining areas, exterior courtyards and site landscapes / hardscapes.
- f. Selection and design of the exterior façade, its materials, systems, and visual and thermal performance at the building scale.

See the Studios Google Drive:  
"Facades" & "Technical References and Tutorials"



## Review III: Design Development

**A. Design Concept:** Explain your design objectives and strategies by answering each of these questions through diagrams and words:

- 1) What is the story of your design (concept)?
- 2) What are architectural characteristics of the design which best response to the site and context?
- 3) What are architectural characteristics of the design which best response to the program, both its interior and exterior functions?

**B. Architectural Documentation:** (Detail equivalent to 1/8" = 1'-0" except as noted)

1. Design Development Contextual Site Plan: Sectional view of building's ground floor plan in the context of site and surrounding context. (Detail Associated with 1/16" = 1'-0" )

2. Design Development Floor Plans: Architectural ground level site plan and plans of all other levels. Ground level floor plan to be in the context of the surrounding site details and context.

3. Design Development Building-Site Sections: Architectural Longitudinal (one minimum) and Transverse Building-Site Sections (one minimum) in the context of surrounding site.

4. Design Development Building-Site Exterior Elevations: Architectural Exterior Elevations (four) in the context of the surrounding site and context.

5. Design Development Exploded Axonometric of Design in Context: Illustrating architectural concepts, formal ordering systems, structural systems, life safety regulations, environmental response, etc. (Detail Associated with 1/32" = 1'-0" )

**C. Perceptual Documentation:** Explain the design in context and from eye level experientially.

1. Comparison of the selected original Conceptual images, images in context of the site and the three Conceptual Design physical models I, II, III, Schematic Design and Design Development physical models.

1. Conceptual Phase Models: Physical model detail equivalent (1/16" = 1'-0" ), with photographs.

2. Schematic Phase Model: Physical model, detail equivalent (1/16" = 1'-0" ), with photographs.

3. Design Development Phase Model: Physical model, detail equivalent (1/16" = 1'-0" ), with photographs.

4. Serial Views: A sequence twelve to twenty-four eye-level Serial View perspectives in context. The sequential views are to illustrate moving to and through the design, as experienced at eye level and in its surrounding site context, including all major interior and exterior spaces.

5. Contextual Views: A set Contextual Views from eye-level (two minimum) and aerial level (two minimum), which are basic monochromatic with solar shadow renderings of the conceptual building massing superimposed on eye level and aerial site / context photographs, with accurate matching of perspective, size, horizon line, lighting conditions and shadows, (without building surface color or textures.)

### D. Design Development Technical Documentation:

A selected portion of the overall building and site as follows.

1. 3D Building Section Digital Model: from footing to roof. A three-dimensional detailed digital model including building structure, enclosure systems, roof, floors, foundations, HVAC integration, natural light control, materials and systems.

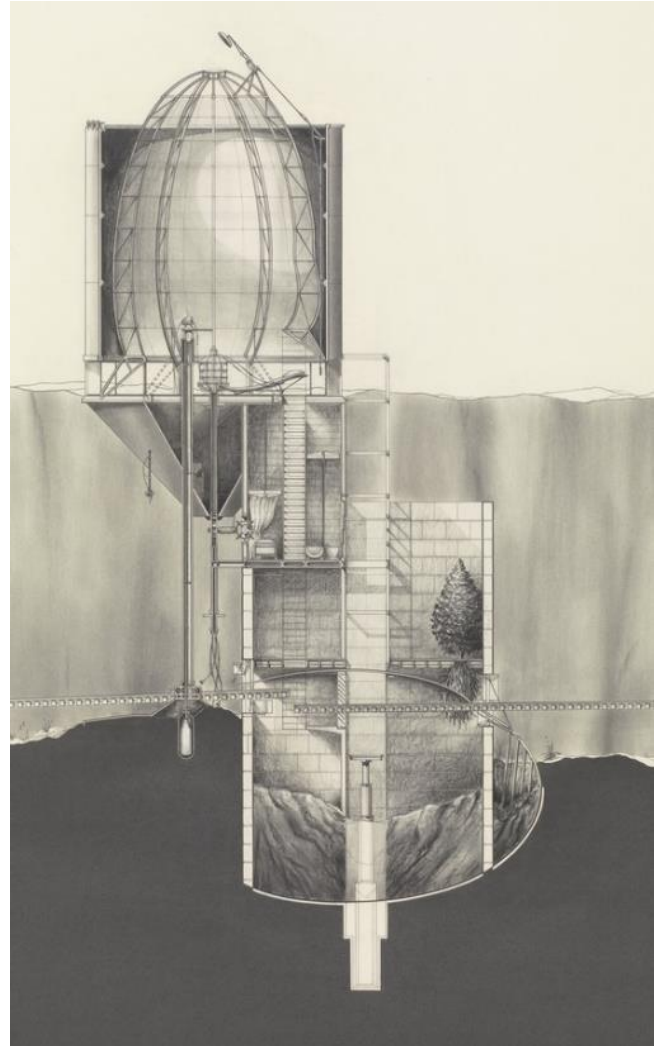
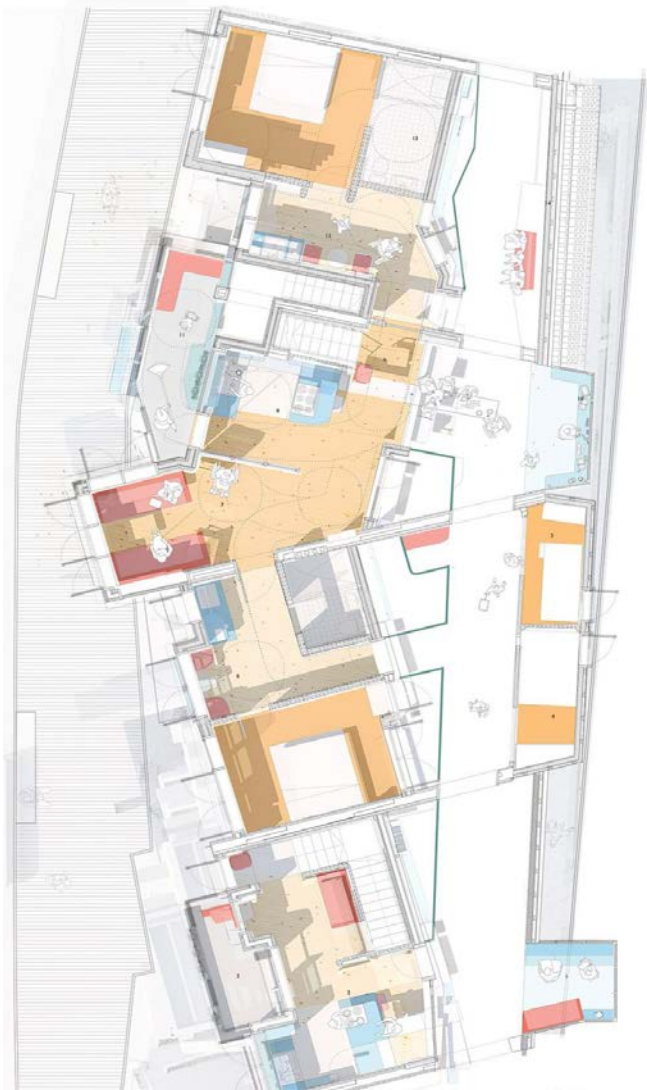
The 3D Building Section model must include the two major façades and their immediate context, including a minimum of one and one half structural bays along the length of the building section. (Detailed associated with 1/8" = 1'-0".)

Illustrate the 3D Building Section model as a one point perspective Building Section and Floor Plans of each level, Interior and Exterior Elevations.

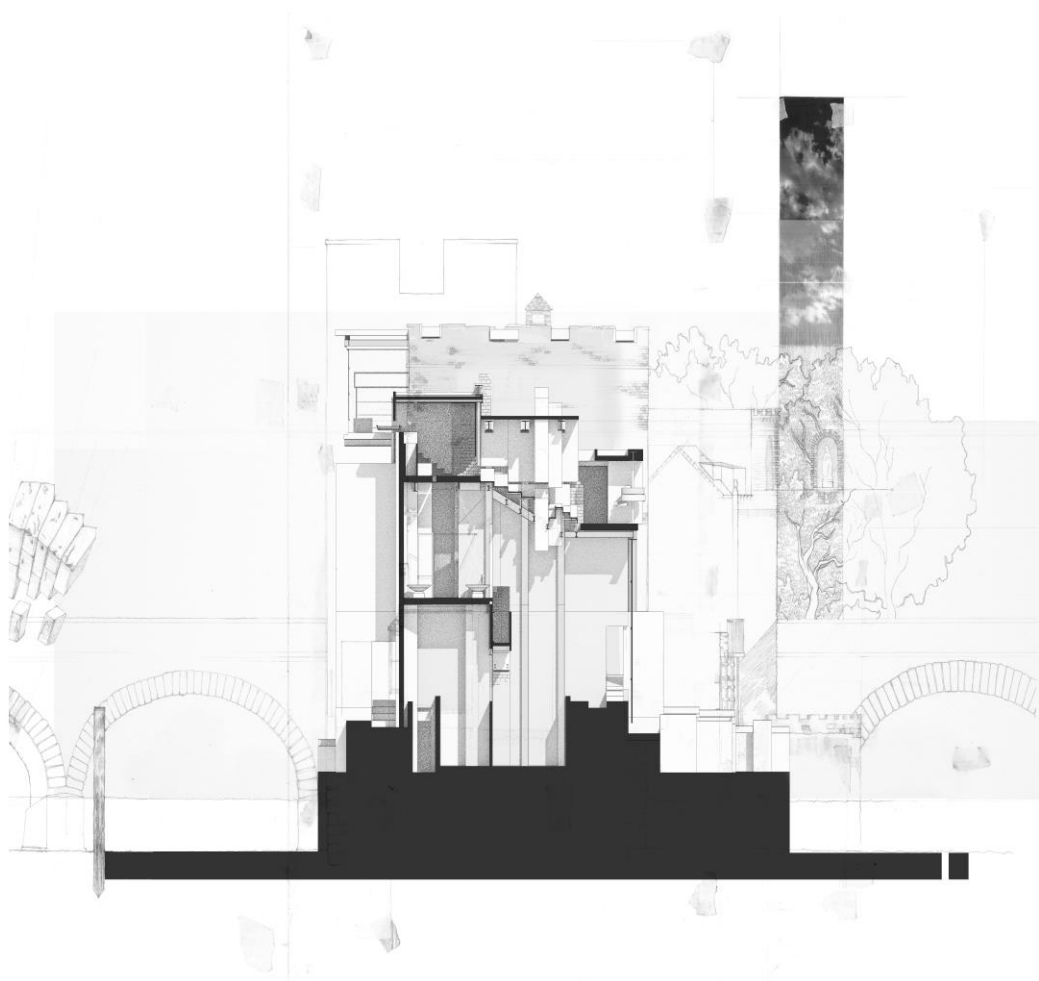
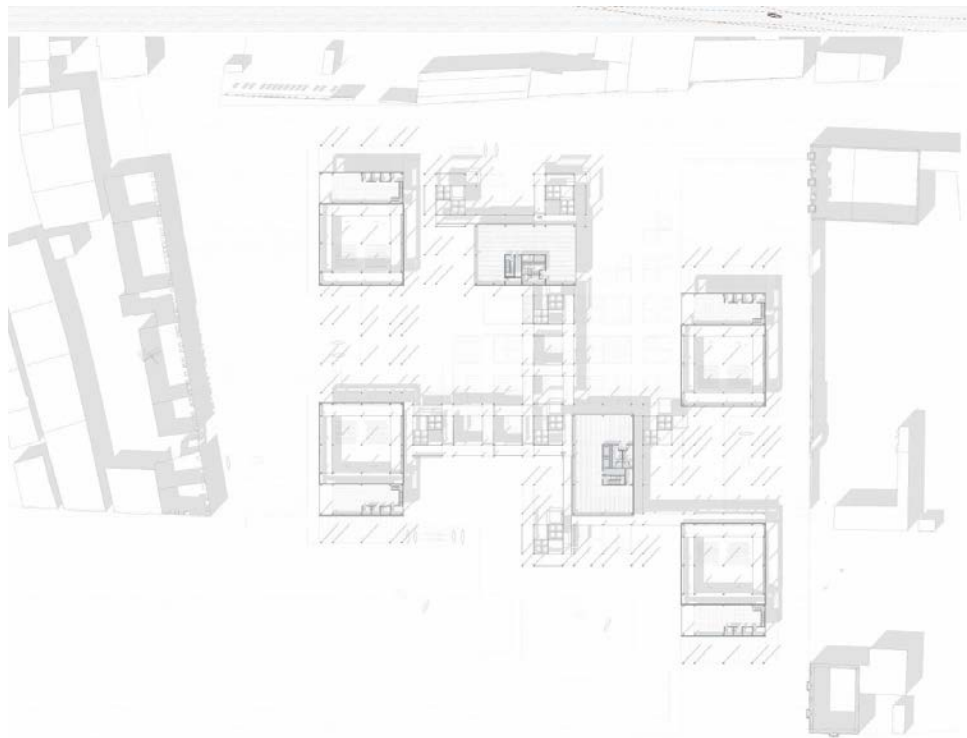
**Due: 6:00 PM, Friday, 14 March 2025**  
**Submitted to Google Drive.**

**Review: Noon, Monday, 24 March 2025**

**Design Development Level of Detail and Graphic Quality:**







## PHASE IV: Technical Development

(The Technical Development is for a selected portion of the Design Development 3D Building Section model.)

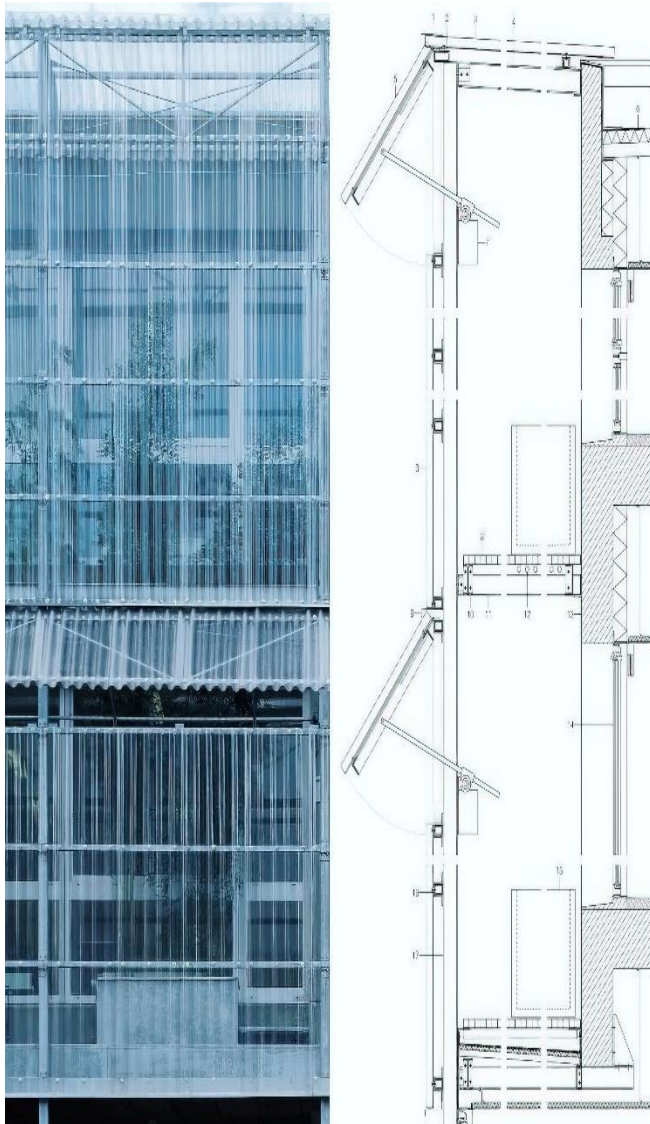
The Technical Development phase of the project will focus upon the architectural design and technical development of the major exterior façades of the proposed building, located within the 3D Building-Wall Section studied in the Design Development phase of the project. The study includes issues of building thermal insulation requirements, sun control and shading, natural ventilation, integration of structural, mechanical systems, waterproofing, building foundations, interior finishes and building facades, construction detailing.

From the Design Development's 3D Building Section Digital Model select a portion of the model which includes one major exterior façade, from footing to sky, with a minimum depth into the building and along the façade of twenty feet.

Its level of technical development will therefore be greater than the other portions of your design. The level of detail is that associated with 1 1/2" = 1'-0" architectural drawings.

As part of the development of this portion of the project, select specific materials and systems, which will be noted on the 2D Technical (a one point perspective) view of the 3D Building-Wall Section model.

See the Studios Google Drive:  
"Technical References and Tutorials"





## Materials and Systems Notebook:

Develop an annotated notebook of the primary building products, materials and assemblies that you are considering to be part of the development of the project.

Select architectural precedents that are similar to the conceptual and technical aspects of your project.

Notate selected building and wall sections identifying the aspects that apply to your design, including the structural, mechanical and building envelope systems and materials, approximate dimensions, etc.

The notebook should be the basis for the technical development of your design.

1. Studio's Google Drive
2. HCAD Library
3. Detail Magazine
4. Transmaterial 1, 2 and 3
5. <https://transmaterial.net/>
6. Manufacturer's websites
7. [sweets.construction.com](https://www.sweets.construction.com)
8. [materialconnexion.com](https://www.materialconnexion.com)
9. <https://www.thomasnet.com>
10. <https://www.azom.com/>
11. <https://transparencycatalog.com>
12. <https://calrecycle.ca.gov/condemo/products>
13. <https://www.archdaily.com/641265/introducing-our-new-materials-catalog>
14. [https://www.arcad.com/catalogs/divs/product\\_catalogs.shtml](https://www.arcad.com/catalogs/divs/product_catalogs.shtml)

**Due: Thursday, 27 March 2025**

Some of the issues that are relevant to the selection of the materials include and the Technical Development of the project:

- a. The appropriate thickness for performance, deflection and stability of structural systems, walls, columns, slabs, girders, beams, mullions, etc.
- b. How materials and systems are assembled, attached or supported by other systems, and the structural system.
- c. Required thermal insulation performance of all exterior surfaces.
- d. The requirements for minimum Fire Ratings.
- e. The carbon footprint.
- f. The drainage of rainwater.
- g. Control of sunlight throughout the diurnal and seasonal cycles.
- h. The lateral and vertical stability of systems and structure.
- i. The continuity of thermal insulation and requirements for thermal breaks.
- j. Infiltration and vapor barriers.
- k. Integration of the structural, HVAC, electrical lighting, fire protection, building services in the wall, floor, ceiling and roof assemblies
- l. Relationship between materials and systems addressing the conceptual and aesthetic characteristics of the project.
- m. The relationship between the design of the exterior façade and the surrounding context.
- n. The relationship between the design of the exterior façade and the specific interior and exterior functions of the project.

## Review IV: Technical Development

### A. Architectural Documentation:

(Detail equivalent to  $1/8" = 1'-0"$  except as noted)

1. Design Development Contextual Site Plan: Sectional view of building's ground floor plan in the context of site and surrounding context. (Detail Associated with  $1/16" = 1'-0"$ )

2. Design Development Floor Plans: Architectural ground level site plan and plans of all other levels. Ground level floor plan to be in the context of the surrounding site details and context.

3. Design Development Building-Site Sections: Architectural Longitudinal (one minimum) and Transverse Building-Site Sections (one minimum) in the context of surrounding site.

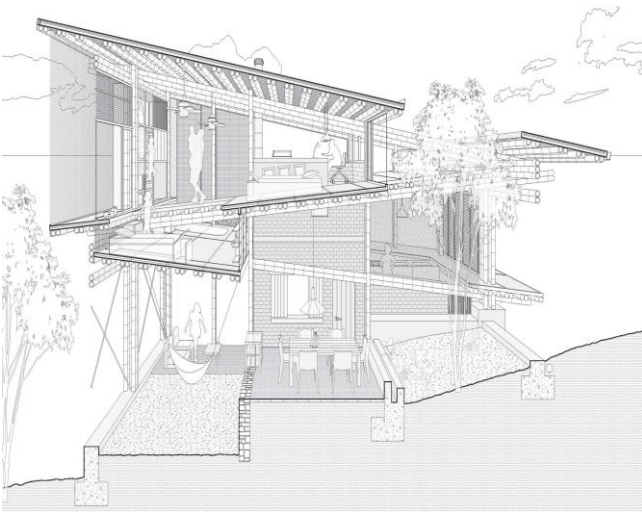
4. Design Development Building-Site Exterior Elevations: Architectural Exterior Elevations (four) in the context of the surrounding site and context.

5. Design Development Exploded Axonometric of Design in Context: Illustrating architectural concepts, formal ordering systems, structural systems, life safety regulations, environmental response, etc. (Detail Associated with  $1/32" = 1'-0"$ )

### C. Technical Documentation:

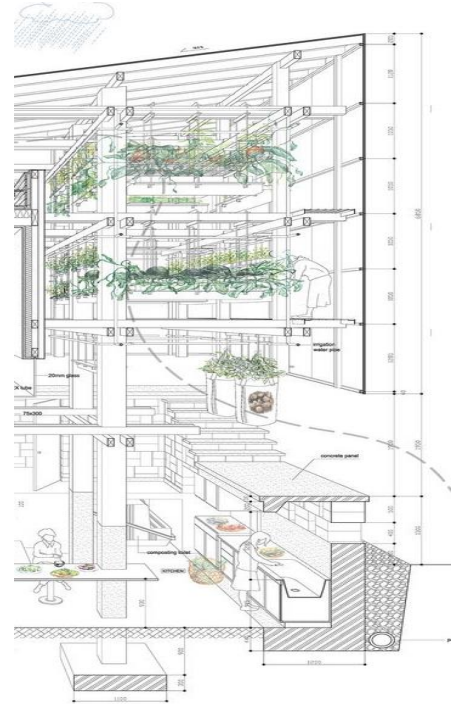
1. 3D Partial Building Section Model, with a One Point Perspective View: (Detail Associated with  $1/8" = 1'-0"$ .)

Illustrate the 3D Building Section model as a one point perspective Building Section and Floor Plans of each level, Interior and Exterior Elevations.



2. 3D Wall Section Model: (a developed portion of the 3D Building Section Model): (Detail associated  $1 \frac{1}{2}" = 1'-0"$ ).

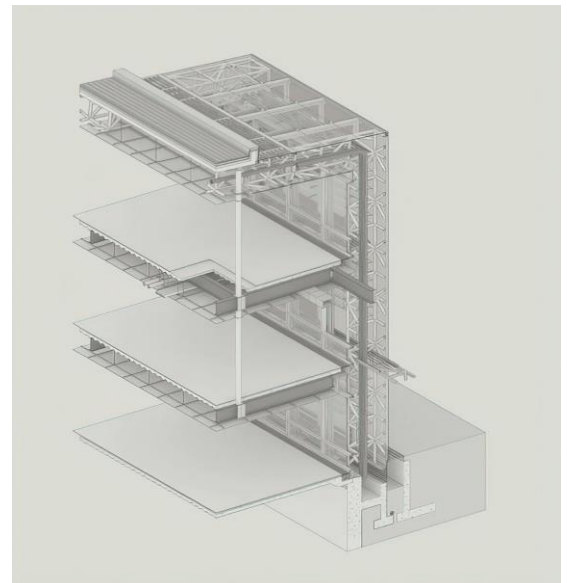
a. 3D Wall Section Model: One point Perspective View: from footing to roof which illustrates relevant relationships between materials, assembly and support, visual characteristics, integration of major building systems, thermal insulation, waterproofing details.



Annotate building materials and products, including notation of building systems, material thicknesses, (not shown).

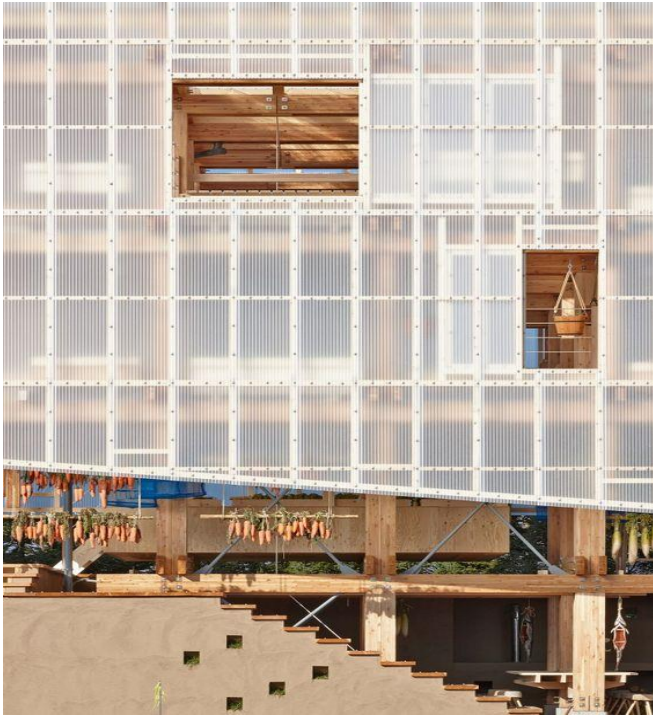
Include vertical dimensions of floor to floor heights, construction thicknesses etc.

b. Axonometric View of 3D Wall Section Model.





c. 3D Wall Section Model: Partial Exterior and Interior Elevations (2): One point Perspective Views: rendered with shadow of both the Exterior and Interior elevations of the 3D Wall Section model.



**Due: Thursday, 10 April 2025**





## PHASE V: Final Review

The Pre-Final Review and Final Review are presentations of both printed architectural and technical drawings of all the Final Review requirements, and a supplemental series digitally projected single images of design concepts, diagrams, contextual and perceptual images.

The time after the Pre-Final Review is dedicated to the revisions of the Pre-Final Review, the creation of the Final Review Model and its photography.

The Final Review and Final Record tells the “story of your final design,” and should maximize the relationship between the architectural and technical drawings, organizing all the information in a logical manner, and be as graphically “clear and simple” as possible. Consider the hierarchy of importance of each image and image type.

Graphically design both the Final Review’s multi-sheet printed “wall poster” and companion sequential digital presentation to be logical and graphically simple, dividing the overall presentation into topical areas and reading sequence, interrelating the architectural drawings, giving visual clarity to the most important architectural aspects of the design.

### A. Final Review Perceptual Images:

**1. Serial Views:** Develop Serial Views that illustrate moving to and through the proposed design. Carefully select a variety of the most important interior and exterior spaces and create Final Review quality images from exactly eye level and in the context of the surrounding site, from approaching and walking to the building and by walking through all major programmatic interior and exterior spaces. (Eye level photographs must be from exactly 5'-0" off the ground plane or floor. Avoid excessive use or representation of material textures and saturated colors. Use digital 3D people, furnishings, etc. rather than superimposing 2D cutouts or masks.)

**2. Contextual Views:** Develop images of the proposed design that are superimposed on **site photographs** of the project site and surrounding locations to accurately illustrate the relationships between the proposed design and the overall and local context. Carefully match the perspective, horizon line and point of view, shadows, colors and tonality of the original photographs to the rendering.

**Using Lumion for renderings is not sufficient as Contextual Views require actual site photographs from above and eyelevel be the context, not a Lumion abstracted version.**

### B. Presentation Formats:

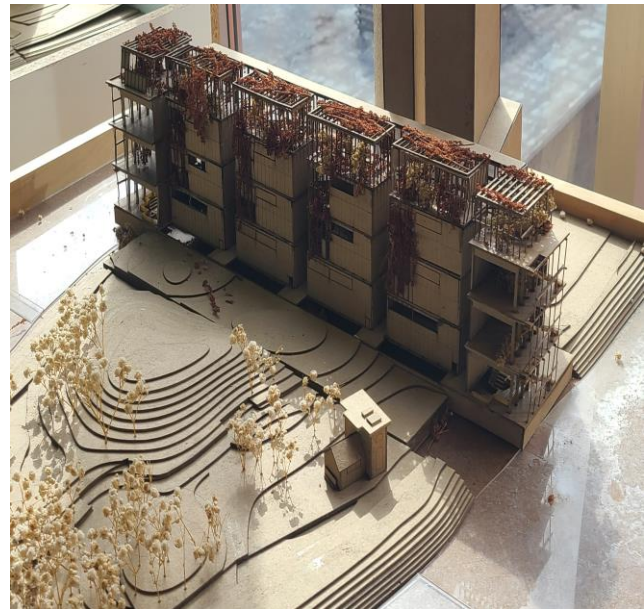
All sections of the Advanced Studio I require a hybrid media Final Review presentation:

**1. Wall Poster:** Printed Sheets (landscape or portrait), including **ALL** of the listed Final Review Requirements, including those shown by the sequential digital display.

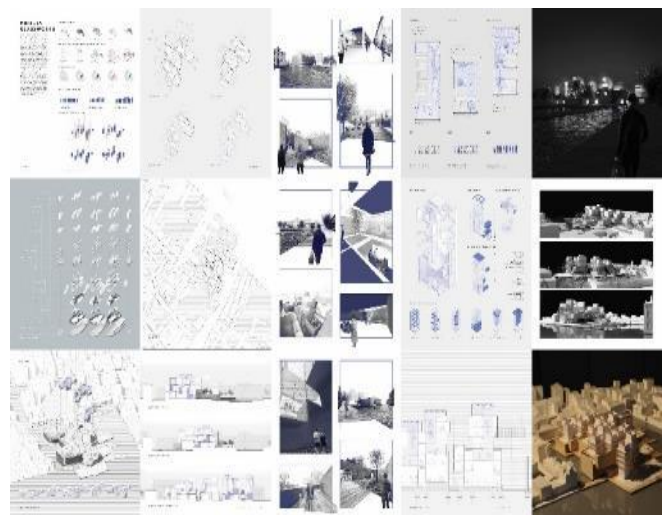
The Final Review Poster design generally measures between 72" x 108" and 72" x 252". The Final Review graphic design can be scaled when being printed to fit a maximum 72" wall height and the available wall width.

**2. Sequential Digital Display:** A section limited to four to eight key images, drawings, diagrams, renderings, etc. which illustrate the key concepts and attributes of the proposed design.

**3. Final Review Physical Model and Photographs:** in the context of the studio sections site model and poster presentation.



### Example of the Final Review Wall Poster:



## Pre-Final Review:

The Final Review Physical Model and its photographs are **not** due for the Pre-Final Review presentation.

1. The Pre-Final Review is intended to be the last design and technical informal review where you have the opportunity to revise or edit your project based upon the insights and comments of your studio teacher and other critics.

2. The Pre-Final Review is primarily the time in which the Final Review should be graphically designed illustrated by a *one-half full size printed mocked-up including all the Final Review requirements*.

See the Presentation Types examples at the end of this document and examples of Final Review posters in the studio's shared Google Drive.

3. The range of scale listed in the Final Review requirements is to indicate the level of information and detail that is required and not the required size or actual scale of the printed drawing. In other words, all drawings, diagrams and images are to be adjusted to fit the format of the printed presentation.

The size of an image or drawing is a function of readability from a variety of viewing distances, and the relative importance or level of detail required.

4. All Architectural Drawings must have a graphic scale, but a specific scale is not required.

5. The ground floor plan, exterior elevations and building sections must be in the context of the site and its surrounding context. Generally, this means at least 1/3 of the drawing or image should be the surrounding context.

6. The Final Review can be printed completely in black and white (grey scale) to completely in color. Individual sheets can be printed either in black and white or color.

7. Individual images or drawings can be any size, but spanning more two or more sheets with match lines is not advisable.

**Due: Thursday, 24 April 2025**

## Printed Poster and PDF File:

The Final Review Poster's have ranged in size from between 72" x 144" and 72" x 252".

Graphically larger Final Review Poster designs can be scaled to fit the available wall space.

The maximum vertical dimension of the printer poster is 72".

There is no minimum size for the Final Review poster.

For example:

Black and White Xerox printing:

24 x 36"	BW	Bond	\$2.50
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The AIASNJIT Print Room cost per sheet is :

36" x 72"	BW	Bond	\$11.00
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36" x 72"	Color	Bond	\$21.00
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Alphagraphics, 40 Commerce Way, Totowa, NJ  
973 435 0762

Bernardsville Print Center, 20 Mine Brook Rd, Bernardsville, NJ  
908 766 4073

Printworx, 30 George Dye Road, Hamilton, NJ  
609 586 3006

MGM Graphics, 8 East Grand Avenue, Montvale, NJ  
201 326 5169

Blue Dog Graphics, 222 River Street, Hackensack, NJ  
201 343 3343

Hudson Blue Print, 883 Clinton Avenue, Irvington, NJ  
973 372 5200

Blueprints Printing  
888 507 1002

## Tutorials and References:

Rhino Camera Matching:

<https://www.youtube.com/watch?v=W6RwUZmo79I&t=1234s>

Basics of Model Building, Alexander Schilling

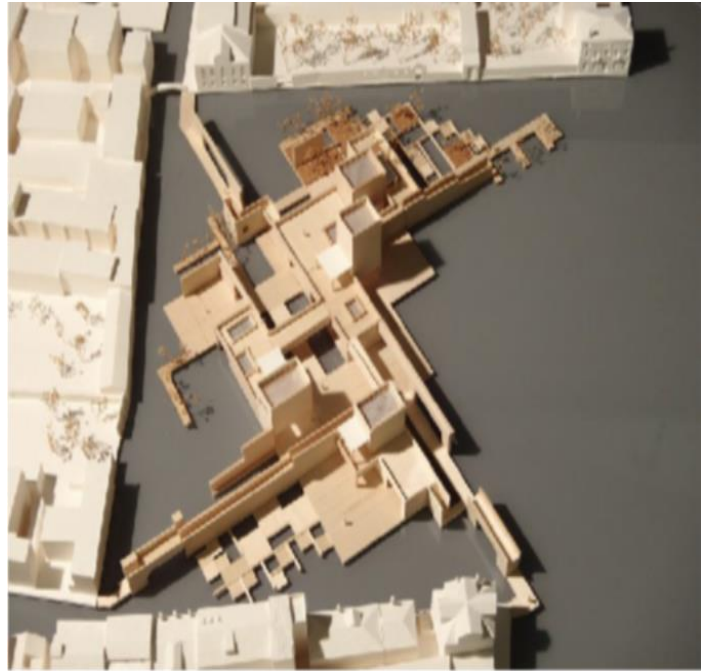
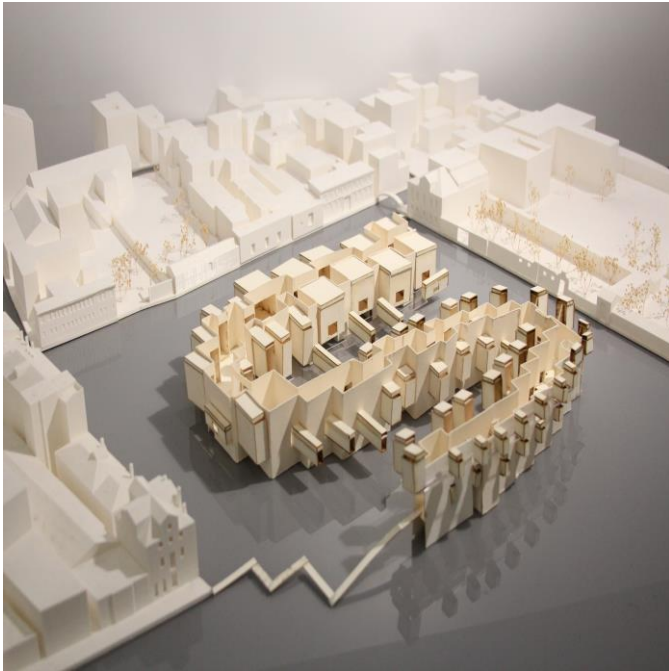
[https://primo-njit-](https://primo-njit-du.libdb.njit.edu:8443/discovery/fulldisplay?context=L&vid=01NJIT_INST:NJIT&search_scope=MyInst_and_CI&isFrbr=true&tab=Everything&docid=alma991359573405196)

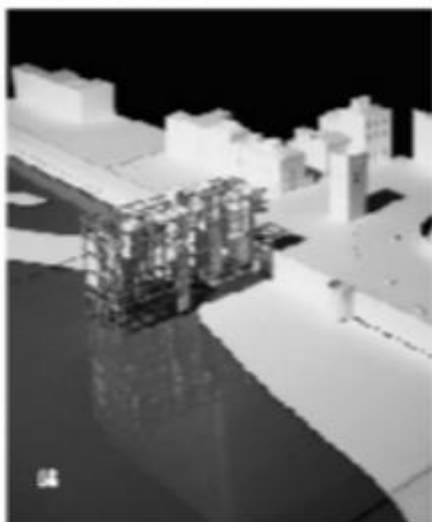
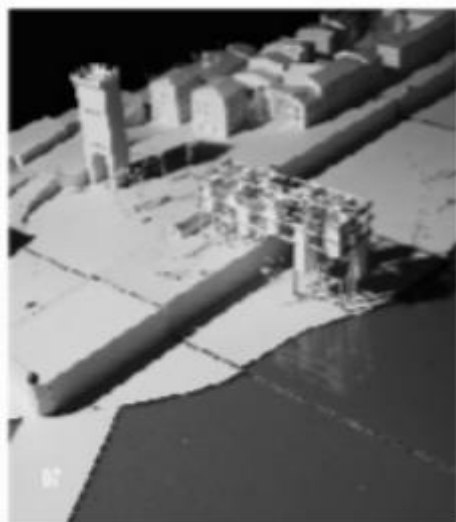
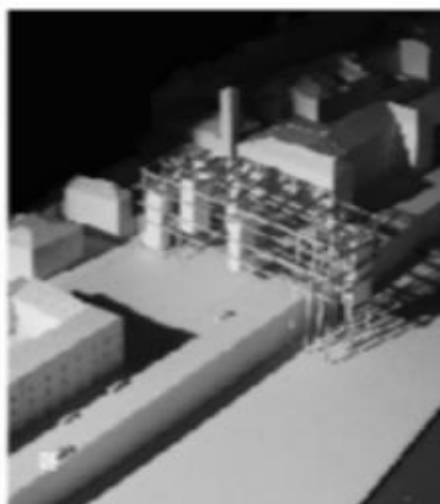
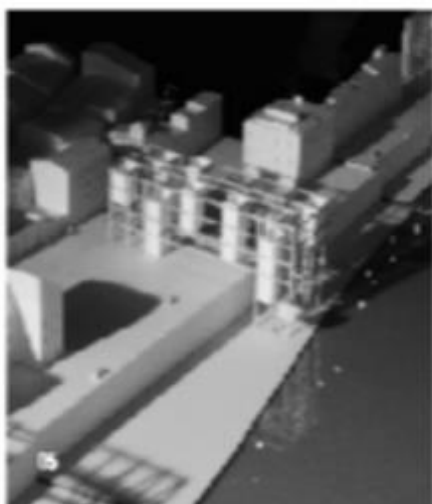
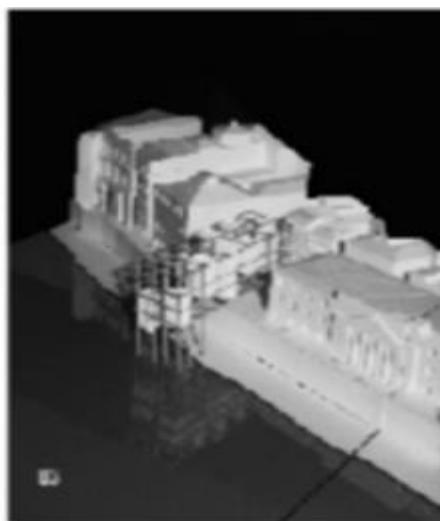
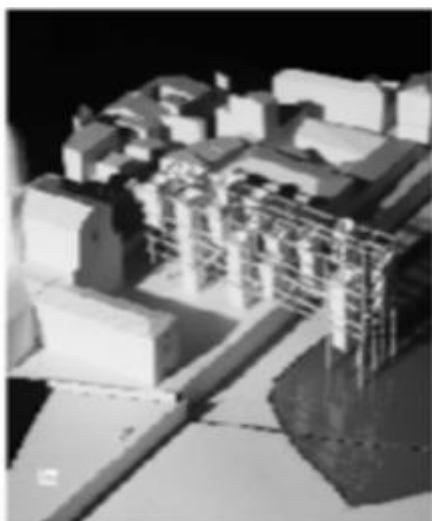
[du.libdb.njit.edu:8443/discovery/fulldisplay?context=L&vid=01NJIT\\_INST:NJIT&search\\_scope=MyInst\\_and\\_CI&isFrbr=true&tab=Everything&docid=alma991359573405196](https://primo-njit-du.libdb.njit.edu:8443/discovery/fulldisplay?context=L&vid=01NJIT_INST:NJIT&search_scope=MyInst_and_CI&isFrbr=true&tab=Everything&docid=alma991359573405196)



## Physical Models:

Physical Model: Create the Schematic Design and Final Review Physical Model in the Studio Section's 1/16" = 1'-0" Site Model and its photographs are included as part of the Final Record submission. The model is to include the surrounding context and detail as illustrated below.







## Review V: Final Review

The Final Review is a combination of a printed poster, physical model and on-screen display of single images or drawings from the printed poster:

**Poster Presentation:** All Final Review Requirements (A – E) must be included in the poster printed display.

**Final Review Physical Model:** The Final Review Model must be displayed within the studio section's site model.

**Digital Presentation:** The digital presentation is a summary explanation to include a sequence of a few single images, drawings, diagrams, photographs etc. that illustrate the design concept and its development in the context of the site and program.

Information on the Poster Presentation is to be self-explanatory.

### Final Review Requirements: (A-G)

**A. Design Concept:** Explain your design objectives and strategies by answering each of these questions through diagrams and words:

- 1) What is the story of your design (concept)?
- 2) What are architectural characteristics of the design which best response to the site and context?
- 3) What are architectural characteristics of the design which best response to the program, both its interior and exterior functions?
4. Explain why is your design "Architecture?" including conceptual, programmatic and contextual issues.

**B. Design Process:** Illustrate, notate and explain your design process from the original selected 2D image(s), through the development of the three best Conceptual Design physical models, through the Schematic and Design Development physical models to the Final Review physical models.

**C. Design Development Process:** Illustrate, notate and explain your design development from your sketchbook of notes, diagrams and drawings, the Exterior Elevation, Piazza & Landscape, and Materials & Systems Scrapbooks.

**D. Comparable Architectural and Building Systems Diagrams:** Explain and illustrate the design through the following notated diagrams.

1. **Site Analysis:** Illustration and explanation of the specific site and environmental conditions that determined your design architectural characteristics.

2. **Site Relationships:** Illustrate your design development of exterior courtyards and public spaces, pedestrian circulation and entries, pedestrian movement systems, relationships to the surrounding neighborhood, public and private functions, scale, materiality, etc.

3. **Functional Organization:** Illustrate the interior and exterior functions locations and relationships, and public, private and egress circulation systems.

4. **Environmental Response:** Illustrate the design's response to Solar Orientation, Daylighting, changes of season, weather, time of day, etc.

5. **Structural Form:** Illustrate the design's structural form character, heavy or light, frame-grid-load bearing wall, logic of the load paths, lateral stability and approximate dimensions of structural members.

### E. Architectural Documentation:

(Detail equivalent to 1/8" = 1'-0" except as noted)

1. **Contextual Site Plan:** Aerial view of proposed design overlaid on a Google Earth Aerial view. (Detail Associated with 1/32" = 1'-0" )
2. **Floor Plans:** Architectural ground level site plan and plans of all other levels. Ground level floor plan to be in the context of the site and surrounding context.
3. **Building-Site Sections:** Architectural longitudinal (one minimum) and transverse Building-Site Sections (one minimum) in the context of surrounding site.
4. **Building-Site Exterior Elevations:** Architectural Exterior Elevations (four) in the context of the surrounding site and context.

### F. Technical Documentation:

1. **3D Partial Building Section Model**, with a One Point Section Perspective, Floor Plan, Interior and Exterior Elevation views: (Detail Associated with 1/8" = 1'-0".)

2. **3D Wall Section Model:** (a developed portion of the 3D Building Section Model): (Detail associated 1 1/2" = 1'-0").

a. **One point Perspective View:** from footing to roof which illustrates relevant relationships between materials, assembly and support, visual characteristics, integration of major building systems, thermal insulation, waterproofing details. Annotate building materials and products, including notation of building systems, material thicknesses, (not shown). Include vertical dimensions of floor to floor heights, construction thicknesses etc.

b. **Axon View of 3D Wall Section Model.**

c. **Partial Exterior and Interior Elevations:** One point Perspective Views: rendered with shadow of both the Exterior and Interior elevations of the 3D Wall Section model.

**G. Perceptual Documentation:** Explain the design in context and from eye level experientially.

1. Conceptual Models (3): Physical model detail equivalent (1/16" = 1'-0" ).

2. Schematic Model: Physical model, detail equivalent (1/16" = 1'-0" ).

3. Design Development Model: Physical model, detail equivalent (1/16" = 1'-0" ).

4. Final Review Model: Physical model, detail equivalent (1/16" = 1'-0" ).

5. Serial Views: A sequence of eye-level serial view perspectives in context of the site. The sequential views are to illustrate moving to and through the design, as experienced at eye level and in its surrounding site context.

***Provide at least one view of each function listed in the project program, both interior and exterior.***

Images should be perceptually accurate.

6. Contextual Views: A set contextual views from eye-level superimposed on eye level site photographs, with accurate matching of perspective, proposed building size, horizon line, lighting conditions and shadows.

Images are intended to accurately illustrate the proposed design within its specific context, time of day and season. (Do not use "automatic site contexts" generated by rendering software. Superimpose designs into actual site photographs.)

7. Final Review Model Photography: The equivalent of at least one 36" x 36" sheet should be devoted to the Final Review physical model photographs, in the context of the site model including people to scale, accurate facades of surrounding buildings, and landscape and topography.

Photograph the physical models with a neutral background, without other objects or images of the room appearing in the photograph. The model photography should have distinct shadows simulating the position of the sun.

It is recommended that photographs be taken with a camera on a tri-pod rather than cell phone. And, that lighting be provided by studio lights on stands, or other stable light sources available in the HCAD Library. Generally, one light is used to simulate sunlight and shadows, and two or more indirect lights are used to simulate skylight.

It is recommended that a minimum of four dozen photographs be taken from all directions, eye level, axonometric and from directly above, with the best selected for Final Model Photography.

**Due: Tuesday, 6 May 2025**



## Review VI: Final Record

### 1. Final Record Individual Drawings, Renderings, Diagrams and Photographs:

Final Record includes a folder of *ALL* individual drawings, renderings, diagrams, model photographs, etc. as *single images*, which are part of the revised Final Record poster, and selected *singles images* of important work illustrating the design process.

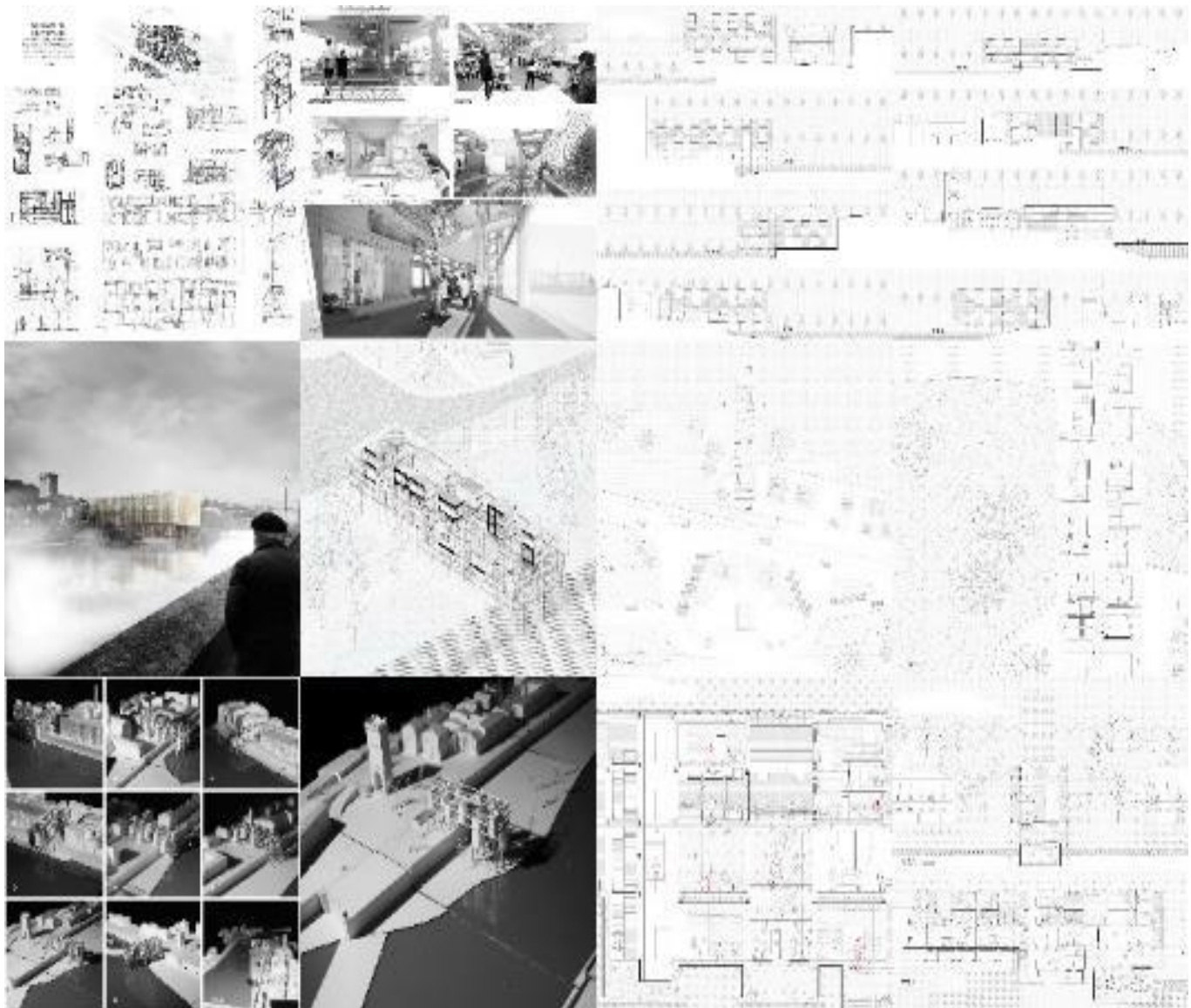
**The submission of the Final Record is intended to be the studio's final examination. Students are strongly encouraged to revise, edit, correct, and clarify their Final Review presentation responding to the discussions and criticism of the Final Review.**

**The faculty's collective review of the revised Final Record (which is 1/5 of the course evaluation) can have a significant impact on a final grade. It is important that all aspects of the Final Record Combined Presentation and JPG Images illustrate the best characteristics of the proposed design within the context of the site and conditions of the program.**

### 2. Final Record Poster Documentation:

All sections of the Advanced Studio require a single file digital PDF and JPG format poster of the revised Final Record presentation.

This results in a single PDF and also a JPG file of the entire presentation, see the examples below:



One PDF and one JPG file of the *entire* Final Review, which includes photographs of the physical model.



**Due: Tuesday, 13 May 2025**



## Final Record Submission Requirements:

As per HCAD / NJIT policy, Final Grades cannot be issued until your work is completely submitted to your Studio Section's shared Google Drive:

### A. Advanced Studio I on Studio Google Drive:

**Studio Google Drive: SPRING 2025 / Craft Guild / STUDENT WORK / "\_\_\_\_\_ Studio" / Final Record / "Last First Name" folder.**

**Due: 8:00 AM. Wednesday, 13 May 2025**

**Upload must be complete and readable by day and time indicated to receive academic credit.**

**All submissions must exactly follow requirements listed below:**

1. **JPG File Type:** sized or resized to JPG format in 300 dpi minimum. (JPG file type ONLY)

2. **JPG File Naming:** "Students Last Name"\_"Students First Name"\_Image Name and Number, . (i.e. "Jones Sally 001.jpg")

3. Create and upload to the following sub-folders under "Student Work" / "Studio Section Name" / "Final Record" / "Last-First Name" / and in the following "Subfolder" names:

**Organized in the following six Sub-Folders, and as Titled:**

1. **Combined Presentation:** One PDF and one JPG of the combined sheets of the revised Final Review poster, at the maximum resolution possible. In other words, a single PDF and single JPG that shows the revised Final Review, as if it were a "large scale on the wall" presentation.

Individual sheet PDF files can be converted to JPG2000 in Acrobat, adjusting the DPI to accommodate the large page size. It can then be combined into one image in Photoshop using the snap edge or grid option. The Photoshop image can be saved as both a single JPG and PDF file, adjusting the DPI as required for maximum size file.

2. **PDF Sheets:** Each of the revised Final Review PDFs individual sheets, at the maximum resolution possible.

3. **JPG Images:** All individual drawings, renderings, diagrams, model photographs, etc. as **single images**, which are part of

the revised Final Review poster, and selected **single images** of important work illustrating the design process.

Each image should show only one view, without labeling, or borders, etc.

4. **Process Model Photographs:** JPG format high-resolution images of the three best Conceptual Design models, the Schematic Design, and Design Development models.

5. **Final Review Model Photographs:** JPG format high-resolution images of the Final Review model in the context of the site model.

6. **Source Files:** All source 3D Digital Model and 2D Drawing files, SketchUp, Revit, Rhino, Photoshop, Illustrator, Insight, etc. used for the Final Review.

### B. Advanced Studio I on Canvas/NJIT Kepler:

**Due: 8:00 AM, Wednesday, 13 May 2025**

**Upload must be complete and readable by day and time indicated to receive academic credit.**

Follow the Instructions for Kepler on Canvas uploading

[https://njit.service-now.com/sp?id=kb\\_article\\_view&sysparm\\_article=KB0010630&sys\\_kb\\_id=1cb35bf41ba319104c82cddf034bcbdb&spa=1](https://njit.service-now.com/sp?id=kb_article_view&sysparm_article=KB0010630&sys_kb_id=1cb35bf41ba319104c82cddf034bcbdb&spa=1)

All files must be renamed as indicated below.

**File Naming:** "Students Last Name"\_"Students First Name"\_Image Name and Number ("001" etc) (i.e. "Jones Sally 001.jpg")

Upload all the files to Canvas / Kepler:

**Individual Final Review Poster:** One PDF and one JPG of the entire poster.

SUN.	MON.		TUES.	WED.	THURS.		FRI.	SAT.
	STUDIO	SEMINAR			STUDIO	SEMINAR		
					23 AH MTG			23 SITE VISIT
	12:30 ARCH PREC.	27 USER 3-A			30 CONCEPT I			
		3 ARCH PREC			6 CONCEPT II			
		10 REGUL. 4-A LIFE SFTY 5-A			13 CONCEPT REVIEW		14 SITE MODEL	
	12:30	17 ACCESS. 6-A			20 ELEV NB		21 STUDIO ASST 1	
		24 BLDG PERF 10-A			27			
		3 STRUCTURE 7-A			6 SCHEMATIC REVIEW			
	12:30	10 ECS 8-A			13 LANDS NB		14 SEMINAR ASST	
		S P R I N G		R E C E S S				
	* DESIGN DEV REVIEW	24 ENVELOPE 9-A			27 MAT NB			
	12:30	31 BLDG PERF 10-B			3		4 STUDIO ASST 2	
		7 ENV IMP 2-A			10 TECHNICAL REVIEW			
		14 ENV IMP 2-B			17			
	12:30	21 ENVELOPE 2-B			24 PRE-FINAL REVIEW			
		28 DRAFT D-A SEMINAR			1 DRAFT D-B SEMINAR			
		5	6 FINAL REVIEW		8			
SEMINAR RECORD	12		13 STUDIO RECORD	14	15 FACULTY REVIEW		16 FINAL GRADES	

\* Design Development Review Google Drive submission due 6:00 PM Friday, 14 March 2025.



# Chelsea Craft Guild, New York, N.Y.

**Administration: Advanced Studio II**

Arch 595 and Arch 506G

**New Jersey School of Architecture / HCAD / NJIT**

Spring 2025

John Cays, Victoria Diskina, Peter Dumbadze, Cleveland Harp, Vera Parlac, Duncan Reid, Marc Rosenbaum, Dincer Savaskan, Stephen Zdepski (Coordinator)

## **NJSOA / HCAD / NJIT Academic Policies:**

### **1. Advanced Studio Policies:**

a. The use of cell phones for texting, emailing in the studio is not permitted. Emergency calls should be taken outside of the studio environment. Entertainment including movies, and games within and during studio hours is prohibited.

b. The studio section will be divided into discussion groups. Each group may engage in project research, evaluation of alternative design strategies, and design reviews. However, each student is required to complete a unique and separate project for the Advanced Studios.

c. It is the responsibility of each student to seek architectural criticism, references and general guidance throughout the entire semester from their studio critic, other members of the NJSOA faculty, guest critics, HCAD library, and the studio's shared Google Drive resources.

d. The courses shared Google Drive includes extensive project reference materials, course Syllabi, examples of Presentation Types and Final Reviews, Architectural Precedents, Required Readings, Site Data and Photographs, Technical References, Tutorials. It is the responsibility of each student to be familiar and study the provided materials.

e. The submissions of late work, non-participation in studio or class discussions, and absence from interim critiques or formal presentations can be the sole basis for not passing the course.

**f. In fairness to all students and following Institute Policy, unless there is cause due to bereavement, medical conditions, military activity, legal obligations, or university-sponsored events, justification for the submission of late work and / or the issuing of the final grade of "Incomplete" must be approved by the Dean of Students Office within fourteen days of assignment's due date.**

**Without this approval by the Dean of Students assignments uploaded or submitted late will be reduced in grade as follows: up to 24 hours = 15% reduction, 24 to 48 hours = 30% reduction, after 48 hours = no academic credit for the assignment.**

**g. Without the approval by the Dean of Students Office, not attending or presenting at a Review will result in a reduction in the grade for that Assessment of the semester's assignments. Presentation to studio teachers and guest critics is a fundamental aspect of professional Architectural Studio education.**

**Not participating or not presenting work will result in a 15% reduction in the grade of that Assessment of the semester's assignments, if the work is uploaded on time to the appropriate Student Work folder. Work not submitted on time is subject to an additional late penalty as described above.**

h. It is important to note that solely meeting the individual Advanced Studio Criteria is not, in itself, a basis for passing the Studio or in determining the final studio grade. The synthesis of the many criteria into a significant work of architecture is result in the sum being greater than its constituent parts. Additionally, the architectural design process is not linear, as it requires reconsideration or revision throughout the semester to create a significant work of architecture, which is both technically and artistically complete.

Professional Architectural programs across the USA require that each student will engage in studio assignments beyond studio classroom hours. The general expectation or standard is two or three hours of "homework" for every hour of the scheduled studio.

i. The list Advanced Studio and NAAB Criteria categories and their questions indicate the specific topics to be addressed, without suggesting that the thirteen topics have equal value.

**j. The final Studio course grade is composed of two mid-semester Assessments, the Final Review, and the Final Record Faculty Review:** The letter grades for each Assessment during the semester are provided to give a general appraisal of the quality and rigor of the work, but whose summation may not predict the final course grade, which is primarily determined by the Final Review, Final Record submission.

The relative importance of each portion of the semester's work is:

First Assessment	20%	
Second Assessment	20%	
Final Review	40%	
Final Record	20%	(Faculty Review)

Architectural design involves the synthesis and integration of multiple issues, both in a linear/progressive and reflective/reconsideration process. As a result, it is impossible to measure or predict the quality of final architectural design work solely by the summation of individual assignments or reviews during the semester.

k. Final course grades are determined by:

- 1) The written definitions of letter grades listed below as defined by the faculty of NJIT.
- 2) The level of architectural sophistication, rigor and quality illustrated by the proposed design.
- 4) By the opinions of guest critics.
- 5) By review of the studio section's teacher throughout the semester,
- 6) By the collective review of the teachers of the Advanced Studio during and at the end in the semester.
- 7) Participation and sophistication of a student's contribution to the studio's discussions of architectural design processes, theories, history, etc.
- 8) Integration into the proposed design of course's design concepts and theories as outlined in the Syllabus.

**I. The Advanced Studio faculty collectively review the Final Record documentation to determine grading parity among studio sections, minimum standards of performance and the determination of unacceptable, poor, excellent or superb projects. A portion of the Final Grade is determined by this collective faculty review.**

The overall completeness, sophistication, design quality, technical development and performance of the proposed design is evaluated based upon that of an upper level accredited professional education in architecture in the context of the minimum criteria set by the National Architectural Accreditation Board.

## 2. Course NAAB Accreditation Criteria:

The National Architectural Accrediting Board (NAAB) accredits NJIT's architecture programs. The NAAB criteria must be covered by any architectural curriculum to attain their approval. This course directly addresses the following, as outlined in the 2020 NAAB Conditions for Accreditation:

**PC.2 Design**—How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

**PC.4 History and Theory**—How the program ensures that students understand the histories and theories of architecture and urbanism, framed by diverse social, cultural, economic, and political forces, nationally and globally.

**SC.5 Design Synthesis**—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of: 1)

user requirements, 2) regulatory requirements, 3) site conditions, 4) accessible design, and consideration of 5) the measurable environmental impacts of their design decisions. See the "Advanced Studio Criteria List" list for their topics and questions.

**SC.6 Building Integration**—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating: 1) integration of building envelope systems and assemblies, 2) structural systems, 3) environmental control systems, 4) life safety systems, and 5) the measurable outcomes of building performance. See the "Advanced Studio Criteria List" list for their topics and questions.

## 3. Course Pre-Requisites:

The Advanced Studio II course has the following requirements:

Bachelor of Architecture:

1. Grade of "D" or higher in Advanced Studio I, Arch 495.
2. Grade of "D" or higher in Structures I & II, Construction I & II, ECS I & II and Landscape and Urbanism.
3. Advanced Architectural Studio Course Outcomes as listed in the 2020 HCAD/NJIT NAAB Documents:

Master of Architecture:

1. Grade of "C" or higher for Advanced Studio I, Arch. 505G.
2. Grade of "C" or higher in Structures I & II, Construction I & II, ECS I & II and Landscape and Urbanism.
3. Advanced Architectural Studio Course Outcomes as listed in the 2020 HCAD/NJIT NAAB Documents:

This course requires that all students achieve the following competencies:

a. Explore and analyze various modes of discourse related Architectural Design. These include site documentation, architectural precedents, verbal presentations, informational diagrams, technical drawings, and analysis of technical requirements.

b. Engage in and respond critically to discussions of readings, research and the development of alternative architectural designs as they pertain to the architectural project, its site and program, contextual and environmental conditions, and technical requirements.,

c. Synthesize multiple design variables and architectural objectives into an independent architectural design proposal.

d. Formally present an integrated architectural project including:

- 1) Design Intent Diagrams and Statements
- 2) Architectural Drawings
- 3) Perspective and Axonometric Building Wall Sections
- 4) Perceptual Views in Photographic Context
- 5) Architectural and Building Systems Diagrams
- 6) Exterior and Interior Serial Views
- 7) Conceptual through Final Physical Models
- 8) Building Performance: Energy Consumption and Daylighting Performance



- 9) Environmental Impact: Sustainability
- 10) Life Safety, Accessibility and IBC Regulatory Requirements

See the NJIT Website for the general course description.

## **5. NJIT / HCAD / NJSOA Academic Policies:**

### **A. Studio Culture:**

Design studio is an intense experience. Learning takes place continuously alone at the desk, in individual discussion with the critic, and most critically in dialogue with a larger group. Students must complete all assignments on time, and be must be present and fully engaged in studio work during all class sessions.

Assignments are given as minimum requirements. It is expected that Superb and Excellent work will exceed the expectations of the assignment. Design work is graded according to many factors; quality, invention, and development of the design proposal are essential to superior work. Neither attendance nor completion of assignment(s) guarantees a passing grade.

The studio is an academic environment; it is a place that allows the exchange of information and knowledge. The majority of class time will be spent discussing your work in a group. It is required that you participate in group discussions and reviews, and that you actively participate in the review of your classmate's work. Although there may be individual one-on-one critique, much of the studio time will be group discussions where work will be presented collectively to class, and in small discussion groups. For this format to be effective, everyone must participate. Absence from studio will also significantly affect your ability to achieve the desired educational outcomes.

Attendance and participation for the entire duration of any class Review or Presentation is mandatory.

Students should not expect that they would be able to work on their project during studio time; as many of these sessions will be dedicated exclusively to group critique, discussions, seminars, etc.

All students are required to review the HCAD Studio Culture Policy at the start of the semester in order to facilitate communications and clarify expectations between students and instructors.

In addition to the values and ethics of the university, the New Jersey School of Architecture is dedicated to diversity, professional conduct, constructive evaluation and instruction, a collaborative community, health and wellbeing, time management, school-life balance, respectful stewardship and space management, and well-rounded academic enrichment. The pedagogy of architecture and design is as complex as it is rewarding, and as dynamically evolving as the people who learn and teach it. This understanding resides at the core of the NJSOA.

### **B. Academic Integrity:**

Academic integrity and honesty are of paramount importance. Cheating and plagiarism will not be tolerated. The NJIT Honor Code will be upheld, and any violations will be brought to the

attention of the Dean of Students. All students are responsible for upholding the integrity of NJIT by reporting any violation of academic integrity to the Office of the Dean of Students. The identity of the student filing the report will remain anonymous. All students are expected to adhere to the University Code on Academic Integrity and to the Code of Student Conduct.

Please note that it is the teacher's professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing, or using any illegal software will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu.

Dean of Students: [www.njit.edu/doss](http://www.njit.edu/doss) Code of Academic

Integrity:  
<https://www.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf>

Code of Student Conduct:  
<https://www.njit.edu/doss/policies/conductcode/index.ph>

### **C. Plagiarism:**

It is extremely important that students familiarize themselves with a proper way to cite visual and intellectual sources. Plagiarism whether deliberate or inadvertent is not tolerated. Plagiarism is the use of visual or intellectual material created by others without proper attribution. The use of one's own material for more than one assignment can be considered plagiarism. Students should not do so without the expressed written consent of all instructors involved.

Students are particularly cautioned that the use of artificial intelligence software or systems requires the proper citation regarding the origin and outcome of any A.I. generated written, graphic or other output. Without proper and complete citation of the origin of the AI material, AI generate submissions or submissions of edited AI generate work is considered plagiarism. The source of AI generated or Internet accessed materials can be evaluated through attribution software analysis systems.

The HCAD Librarian, Dr. Maya Gervits has assembled excellent resources on copyright, plagiarism citing, and avoiding plagiarism:

<http://researchguides.njit.edu/c.php?g=671665&p=4727> 920

### **D. Students with Disabilities:**

It is the school's moral, ethical, and legal obligation to provide appropriate accommodations for all students with physical and/or learning disabilities. If students need an accommodation related to disabilities, all official documentation must be filed with the Dean of Students and the Disability Support Service Office. It is the responsibility of the student to notify the instructor at the beginning of the semester if accommodations have been applied for.

Dean of Students: <https://www.njit.edu/doss/> Disability Support Service:

### E. Students Rights and Responsibilities:

<http://catalog.njit.edu/undergraduate/academic-policies-procedures/student-rights-responsibilities/>

### F. NJIT Undergraduate Grading Definitions:

Final course grades are determined by the following standards as defined by NJIT:

Letter	Points	Definition
A	94	Superb
B+	88	Excellent
B	82	Very Good
C+	76	Good
C	70	Acceptable
D	64	Minimum
F	0 - 64	Failure
I		Incomplete

**A (Superior)** Architectural design proposal demonstrates advanced understanding of learning objectives and a high level of achievement. Work is reflective of an intensive process of conceptual and technical development. Work illustrates a sophisticated connection to and development of contemporary architectural theories, objectives and values, relationships to physical and environmental context, specific characteristics of the functional program and technical / aesthetic development. Presentations demonstrate a very high level of sophistication, craft, attention to detail, contextual, programmatic and technical accuracy. The architectural proposal artistically and technically incorporates the all the specific design issues which are outlined in the course documents to create a significant work of architecture.

**B+ (Excellent) / B (Very Good)** Architectural design proposal demonstrates excellent understanding of learning objectives and a very good level of production abilities. Work is reflective of a complete process of conceptual and technical development. Work illustrates a well-defined connection to and development of contemporary architectural theories, objectives and values, relationships to physical and environmental context, specific characteristics of the functional program and technical / aesthetic development. Presentations demonstrate a high level of sophistication, craft, attention to detail, contextual, programmatic and technical accuracy. Work illustrates a connection and development of contemporary architectural theories, objectives and values. The architectural proposal incorporates all the specific design issues that are outlined in the course documents to create a work of architecture.

**C+ (Good) / C (Acceptable)** Architectural design proposal fulfills the requirements in terms of conceptual understanding and technical ability. Work has good engagement with an iterative design process. Work illustrates a purposeful connection to and development of contemporary architectural theories, objectives and values, relationships to physical and environmental context, specific characteristics of the functional program and technical / aesthetic development. Presentations demonstrate an average or above average level of sophistication, craft, attention to detail, contextual,

programmatic and technical accuracy. Work demonstrates basic level of independent initiative. Work illustrates an understanding contemporary architectural theories, objectives and values. The architectural proposal incorporates all the design issues that are outlined in the course documents to create a satisfactory work of architecture.

**D (Minimum)** Work fulfills the requirements of the Syllabus terms of conceptual understanding and technical ability. Presentations are complete but demonstrate below average development of craft, attention to detail, understanding and integration of architectural concepts and theories, contextual, programmatic and technical accuracy. Work illustrates a basic awareness of contemporary architectural theories, objectives and values. The architectural proposal incorporates all the design issues that are outlined in the course documents to create a complete building illustrated in its context and accomplishing the functional needs of the program.

**F (Failing)** Work is incomplete or does not demonstrate an understanding of the course content or abilities related to required skills. Work does not illustrate an awareness of contemporary architectural theories, objectives and values. The architectural proposal does not incorporate design issues that are outlined in the course documents to create a work of architecture.

Faculty teaching the Advanced Studio courses collectively review the Final Record submissions to coordinate the quality and rigor of the submitted work in relationship to the NJIT grading scale and among the sections.

**Historically the average grade of all students for the undergraduate Advanced Architectural Studio I has been between "C+ and B." (Good to Very Good)**

### G. NJIT Graduate Grading Definitions:

Final course grades are determined by the following standards as defined by NJIT:

Letter	Points	Definition
A	94	Excellent
B+	88	Good
B	82	Acceptable
C+	76	Marginal
C	70	Minimum
F	0 - 70	Failure
I		Incomplete

**A (Excellent)** Architectural design proposal demonstrates advanced understanding of learning objectives and a high level of achievement. Work is reflective of an intensive process of conceptual and technical development. Work illustrates a sophisticated connection to and development of contemporary architectural theories, objectives and values, relationships to physical and environmental context, specific characteristics of the functional program and technical / aesthetic development. Presentations demonstrate a very high level of sophistication, craft, attention to detail, contextual, programmatic and technical accuracy. The architectural proposal artistically and technically incorporates the all the specific design issues which are outlined in the course documents to create a significant work of architecture.

**B+ (Good) / B (Acceptable)** Architectural design proposal



fulfills the requirements in terms of conceptual understanding and technical ability. Work has good engagement with an iterative design process. Work illustrates a purposeful connection to and development of contemporary architectural theories, objectives and values, relationships to physical and environmental context, specific characteristics of the functional program and technical / aesthetic development. Presentations demonstrate an average or above average level of sophistication, craft, attention to detail, contextual, programmatic and technical accuracy. Work demonstrates basic level of independent initiative. Work illustrates an understanding contemporary architectural theories, objectives and values. The architectural proposal incorporates all the design issues that are outlined in the course documents to create a satisfactory work of architecture.

**C+ (Marginal)** Architectural design proposal fulfills the requirements in terms of conceptual understanding and technical ability. Work has some engagement with an iterative design process. Presentations demonstrate a marginal level of sophistication, craft, attention to detail, contextual, programmatic and technical accuracy. Work demonstrates basic level of independent initiative. Work illustrates an understanding contemporary architectural theories, objectives and values. The architectural proposal incorporates all the design issues that are outlined in the course documents to create a satisfactory work of architecture.

**C (Minimum, Passing)** Work fulfills the requirements of the Syllabus terms of conceptual understanding and technical ability. Presentations are complete but demonstrate below average development of craft, attention to detail, understanding and integration of architectural concepts and theories, contextual, programmatic and technical accuracy. Work illustrates a basic awareness of contemporary architectural theories, objectives and values. The architectural proposal incorporates all the design issues that are outlined in the course documents to create a complete building illustrated in its context and accomplishing the functional needs of the program.

**F (Failing)** Work is incomplete or does not demonstrate an understanding of the course content or abilities related to required skills. Work does not illustrate an awareness of contemporary architectural theories, objectives and values. The architectural proposal does not incorporate design issues that are outlined in the course documents to create a work of architecture.

Faculty teaching the Advanced Studio courses collectively review the Final Record submissions to coordinate the quality and rigor of the submitted work in relationship to the NJIT grading scale and among the sections.

**Historically the average grade of all students for the Graduate Advanced Architectural Studio I has been between "B and B+." (Acceptable to Good).**

#### **H. Faculty Office Hours:**

All faculty teaching Advanced Studios are available by appointment for either in person at their posted office hour, by email or online conferencing. Contact your instructor to determine their availability and to make an appointment.

#### **I. Course Documentation:**

1. **GOOGLE DRIVE:** This course will use the studio's shared Google Drive as the repository for each phase of the semester's assignments including for the Final Record.

All phases of student work must be uploaded in the appropriate assignment folders.

Course Final Record: Student work must be uploaded to the studio's shared Google Drive as listed and described in the course Syllabus.

2. **CANVAS / KEPLER:** Final Record: Kepler on CANVAS

The Canvas / Kepler system will be used only for the NJSOA Final Record documentation for the course.

All course materials will be available only on the Studio's shared Google Drive.

To access CANVAS, you must have a UCID account with NJIT. KEPLER: Students must upload copies of their assignments to the new KEPLER 5 system found under the KEPLER tab in CANVAS "Modules".

CANVAS Final Record folder is automatically ported to KEPLER, although students need to initiate a separate KEPLER upload. Pdfs and .jpegs format files are required ensure view ability. KEPLER no longer has individual student folders.

#### **J. Rights and Conditions:**

1. All student work, both digital and physical, may be retained by the New Jersey School of Architecture, HCAD, NJIT, teacher or faculty member, for accreditation purposes, academic reference, design competitions, conferences, papers, institute publications, and / or public display, whether in print and online.

NJSoA/HCAD/NJIT retains the right to a copy of all academic material prepared by students in conjunction with all courses and research. Student work includes preliminary and final academic work including physical models, digital images, prints, drawings, writings and their digital source files.

2. All reference materials provided on-line, via electronic communication or as part of classroom instruction, (including but not limited to videos, music, sounds, books, e-book links, journal and magazine articles, online images, links to any other publication, tutorials, images, models, articles, writings, diagrams, drawings) are to be used in conjunction with this academic course's assignments only, and cannot be retained, copied, distributed or used for any other purpose, person or at any other location.

3. All educational and reference materials are to be deleted completely, including from all public or private storage devices, no later than the end of the last exam day of the semester. They are not to be shared nor retained for any other purpose, nor in any form, beyond the direct use for academic assignments during this semester.

4. Academic presentations, reviews, discussions, recordings, and other materials which are part of the course materials are not to be transmitted, shared, posted online, made publically accessible, or to be used by any person not enrolled in the course, or other third party without the **written** and dated permission of the course Coordinator.

5. All in-class or online discussions, formal and informal reviews, which are part of this course, are not to be screen captured, recorded, transmitted, shared, posted online, made accessible or made public at any time or in any manner without the express **written** and dated permission of the instructor and all attending guest critics.

6. Students, whether on or off campus, attending class, participating in field trips, engaged in model making, or any other type of academic activity are responsible for their own safety and well-being. Faculty, teachers, guests and critics accept no responsibility, directly or implied, for the safety, health, actions or inactions of any student or group of students regardless of their age or the circumstance.

7. The course Syllabus is the minimum outline of project issues, requirements, review and presentation requirements and overall course standards and content. Each studio section may also add to the design research, project references, design methods, presentation requirements, assignments and reviews as appropriate.

**Registering for this course, accessing any course material or attending any meeting of this course, in person or remotely, confirms your acceptance of all the “Rights and Conditions” listed above without exception or modification**





# Chelsea Craft Guild, New York, N.Y.

## Concepts & Theory: Advanced Studio II

Arch 595 and Arch 506G

New Jersey School of Architecture / HCAD / NJIT

Spring 2025

John Cays, Victoria Diskina, Peter Dumbadze, Cleveland Harp, Vera Parlac, Duncan Reid, Marc Rosenbaum, Dincer Savaskan, Stephen Zdepski (Coordinator)

*The history of architecture is defined by trends and principles that repeat and reoccur.*

*The evolutionary nature of function and form, and the interrelationship of the way in which building types are conceived, define the meaning of our largest cultural objects.*

*The built world as a mediator of daily life and a snapshot of cultural technology and humanity embodies a moment of time and an associated way of thinking.*

*Every piece of architecture emerges from a context that is specific and rational.*

*Theories are attempts to resolve known problems that are fundamental*

*I to how we think, understand and make architecture. These principles establish a genealogy of thought manifested through form.*

Architecture Principia: Borden & Andrews

The polarity and diversity of great contemporary works of architecture do not immediately suggest a shared set of design concepts, principles or philosophies. Often this diversity is discounted to be the expression of the architect's personality, contemporary fashion, the new, shocking or simply well photographed. There are however a set of architectural concepts and theories which are sufficiently fundamental to have existed through millennia, and maintain their significance without prescribing transitory outcome.

*Things are not important; rather it is the relationship between things that matters.*

Antoine de Saint-Exupéry

**Design Concepts:** The following five sets of architectural concepts and their polarities are inherent in any work of architecture throughout time:

- A. Singularity, Linearity and Network
- B. Order versus Disorder
- C. Abstract Urban Morphology
- D. Heavy versus Light
- E. Mono-Type versus Multi-Type.

**Architectural Theories:** As architectural history includes philosophies and traditions of design derived from collective evolution over time, and those defined by an individual. While they include "style or period" their implications for architecture

and urban design are far more fundamental, determining the natural, urban and architectural world. Each expresses a combination of collective and personal values that define design strategies, variables, rules and decisions.

The following four design theories trace architectural ideas and traditions throughout time:

- F. Picturesque
- G. Formal
- H. Nodal
- I. Composite

**A. Singularity, Linearity and Network:** One of the most fundamental systems of form and order is singularity, linearity, and network:

A singular form, a dot, defines and locates a center of importance, forming relationships to all the surrounding conditions. It can establish presence and landmark status, or be predicated on idealized geometric systems.

A line defines a linear system, establishing sequences, beginning and end, differentiating sides, a sequential ordering system in time, space and experience.

A series of adjacent, perpendicular, askew or overlapping lines defines a network system. Elements are both connected and distributed. Elements are nodal connected by paths and spaces.

Singularity, Linearity or Network systems order and define form which create the shape, scale, relationship of interior and exterior spaces differently. The choice establishes primary relationships to environmental conditions such as the path of the sun, prevailing winds. The choice orchestrates experience by defining significant views, enclosing space, sequencing events. It becomes the underlying system for defining spatial and functional relationships, structural systems, etc.

**1. Singularity:** The separation and differentiation of a cultural work of architecture is often accomplished by its singularity as it is located in the background vernacular context. Often the landmark characteristics provide hierarchy and wayfinding within the larger urban or natural context.

**2. Linearity:** A thin and linear form creates site-scale transitions separating the surrounding contexts. It permits the creation of an orchestrated sequence of movement and space that connects activities and contexts. At the larger scale, it can create a series of adjacent urban scale forms, events, paths. Openings within the linear form create passageways or transitions from one side to the other.



Locations in the middle, ends, edges, in-between, are all a profound influence upon the buildings functional relationship to their immediate surroundings, the scale of the design, the movement of people to, through or around the design. Linearity in this context can emphasize panoramas; connect riverbanks, streets or pedestrian movement, correlate to solar movement patterns and seasonal variations.

Linearity separates one side from another. Its thinness divides to varying conditions such as North and South, East and West, etc. The thinness of linearity connects through its transparency, doubling of orientation and connection between inside and outside. Linearity suggests a scale associated with urban systems, infrastructure, landscapes and urban form.

**3. Network:** A series of paths, interlocking or distributed forms permits ordering systems to create a network of spaces, events, with a series of interior and exterior spaces closely integrated into the context. It potentially separates events and building forms. It can be a series of paths and destinations, patchwork of spaces and enclosures.

Network reduces the scale of functional elements, permits each element to be unique, influences and completes the entire content, is integrated or directs pedestrian movement and experiences, serializes events.

**B. Order verses Disorder:** The degree to which a system of form is organized, the degree to which the rules of its composition are recognized defines the Order and Disorder spectrum. It can be compared to music; harmony verses dissonance.

**1. Order:** develops alternative designs from highly ordered, pattern based, rectilinear rooms, spaces and sections, well accommodate programmatic functions, close packing and efficient, are easily measured, are generally repetitive and predictable, provide uniformity of structure or modularity. Repetitive or Tartan Grids, Centerline Relationships, Modules, Proportional. The traditional ordering systems have a nested relationship; created urban patterns, city blocks, building form, individual rooms and spaces, closets and alcoves.

Ordered systems may be discrete "idealized forms," extensions to existing axis, related to formal patterns and geometries of "manmade" environments. Overall, the order is recognizable and defined by a well established set of rules. Extreme ordered systems can result in boredom, fatigue, disorientation, un-functionality, environmental and contextual miss-fit.

**2. Disorder:** develops alternative design from abstraction of form and geometry non-orthogonal plans and sections, irregular structural patterns, complex shapes and facades, new spatial experiences and functional relationships, novel structural and enclosure systems, a new aesthetic or style.

Disordered systems may appear highly unique, complex, un-understandable. Extreme dis-ordered systems can result in fatigue, disorientation, un-functionality, environmental and contextual mis-fit.

**C. Urban Morphology:** To what degree should architecture, at its many scales, be derived from its surrounding context, extension of the lineage, traditions and patterns of development? To what degree should architecture, at its many scales, be derived from differing patterns and forms,

establishing new relationships, forms and visual characteristics?

**1. Abstract Urban Morphology:** Urban and building form, including exterior private and public spaces, can be derived from abstract or new patterns of form and movement, redefining the relationship between functions, new materials and responses to contemporary social and environmental conditions, such as energy conservation and sustainability. Carried to extreme, it can result in private statements or radical events, welcomed as today's fashion but dismissed tomorrow. It can result in dysfunctional relationships between buildings, functions, and aesthetics. Architectural contexts in which relationships between its elements are non-existent or broken.

**D. Heavy verses Light:** develops alternative experiments derived from pre-existing images of 2D and 3D conceptual models which suggest a spectrum from enclosed to open, thick to thin, etc.

**1. Heavy architecture:** has a relationship to the materiality context; earth and stone.

**2. Light architecture:** has the potential to maximize the relationship between the interior functions and the exterior natural and urban landscape.

**E. Mono verses Multi Type:** develops alternative designs that vary the sameness or uniqueness of the form, order and character of architecture at many scales. This suggests sets, pairs, patterns, and groupings.

*A strange and compelling contradiction exists in architecture today. As digital communication and digital tools make everyone and everything in the world more accessible and more alike, there remains a powerful desire to express qualities of difference unique to each regional community, each specific place, and each individual designer. Global digital unification also fosters an equally powerful desire to express new ideas in architecture independent of regional place, which fosters a voracious appetite for a new global architecture built around common ideas, not common place.*

*James Stevens & Ralph Nelson*

**1. Mono-Type:** resolves or perfects a single element, functional, structural, environmental, etc. into a repeatable element. The relationship between the elements is both derived from the sameness and relative position. The pairing of two mono-type elements create the simplest set. A grouping of mono-type elements creates series and sequences. Exclusively mono-type systems of design risk monotony, and disorientation.

**2. Multi-Type:** resolves or perfects each element for its unique function, position in context, solar orientation, visual aesthetic, etc. The relationship between the elements is both derived from similarities and differences. A random grouping of multi-type elements can be both monotonous and disorientating

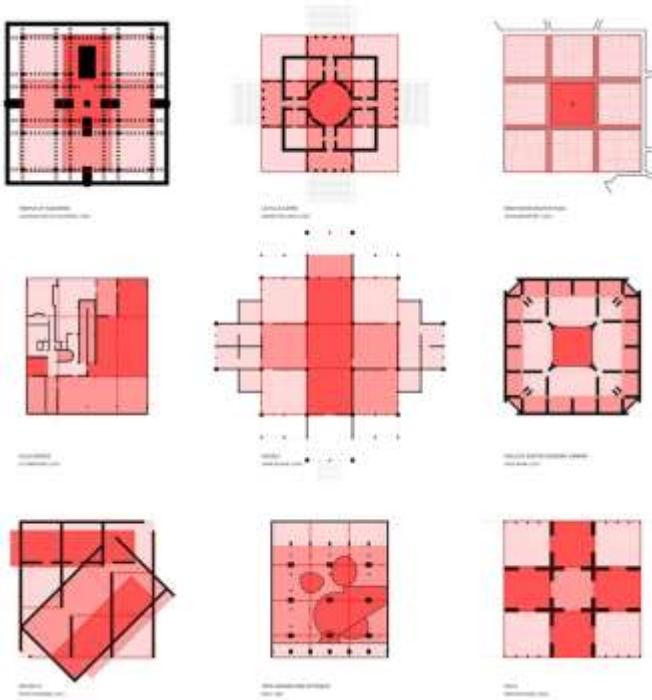
**F. Picturesque (Cullen):** Architecture and urban design orchestrating the scale, variety, hierarchy, visual characteristics, and movement patterns to provide a story based or theatrical set of experiences. The spaces between buildings and their facades become the "stage-set" of public life.

**G. Formal (Krier):** Architecture and urban design ordering the relationships between the public exterior spaces, building elements and movement patterns of the context, to create design strategies at multiple nested scales. The relationships of scale, axis, aesthetic, etc. result in rooms becoming coherent buildings, buildings becoming blocks, blocks becoming neighborhoods, and neighborhoods becomes cities. Often Formal systems are intended to provide permanence, as sense of history, cultural lineage.

**H. Nodal (Tschumi):** Architecture and urban design structured through its systems of pedestrian movement, its points of intersection and nodes of hierarchy of events, A time and experience based system of paths to, connecting with, and experiencing differing functions, both interior and exterior. A system of movement and discovery, a patchwork of places or landmarks interconnected, experienced through a combination of hierarchical paths or random patterns of movement.

**I. Composite (Koolhaas):** Architecture and urban design that combines and interrelates functions, interior and exterior areas, movement and space into a overlaid, heterogeneous and less differentiated system. Composite systems are often adaptable, strategized to combine diversity and difference. Composite systems may purposefully negate rules, traditions, precedent. Often composite systems are intended to adapt over time.





## Singularity:

### At the Center, Differentiated, Self-Contained, Internally Ordered, Set Apart, Separated

Inherent in the project is the expression of a culturally significant work of architecture. To be recognized and valued over time, through its relationship to the surrounding context. Whether courthouse, museum, library, religious structure, or other cultural institution, singularity is integral to their expression of value.

The collective recognition of cultural value requires singularity to be separated from the vernacular or background context. Conversely, singularity expressed by uniqueness or novelty risks obsolescence or dismissal over time. Replicating past architectural characteristics discounts the integrity of the new cultural institution, while solely personal or unique architectural characteristics may not find lasting value or positive recognition.

Singularity can be created through idealized formal or geometric ordering systems, such as the Palladio's 1567 Villa La Rotonda's outside Vicenza, Italy. It is a completely symmetrical design, intersection of cross and square plan, 3x3 grid, with central circular hall and dome, and four porticoes.

All proportioned in plan, section and elevation to proportional ratios and patterns. From each of the four porticoes there are panoramic views to the surrounding countryside, as the Villa sits both on top and within the surrounding landscape.

Singularity can be created by new forms and aesthetics. The 2014, Fondation Louis Vuitton by Frank Gehry has been received as a unique, emblematic and bold building, presentation Paris with an extraordinary space for art and culture.

*To reflect our constantly changing world, we wanted to create a building that would evolve according to the time and the light in order to give the impression of something ephemeral and continually changing.*

Frank Gehry

*Historically, centralized systems have been the most common organization system.*

*A centralized system is one that focuses on a central space or object in the plan.*

*Centralized systems come in the form of squares, circles, ovals, triangles, and stars.*

*Often the space can be recognized as a singular, self-resolving, and formally complete entity, such as a church interior or a courtyard. In other examples, it might take the form of a solid structure or object, either as an architectural (building) or urban (city) element.*

Architecture Principia



## Linearity:

### Sequence, Dividing, Thin, Ends and Middle, Short verses Long, Perspective, Distance, Opposing Sides

Inherent in the project is the expression and benefits of the linear building envelope. The building envelope's length and narrowness is similar to the collection of many similar and different "pieces" which are part of an urban block. The narrowness and proportion of the building envelope can be developed as a discrete sequence of varying events or spaces, an assembly of differing building forms, floor heights, number of stories, all with a variety of scale and architectural characteristics. But, the simple linear building envelope might also suggest a singular larger scale cultural institution, with continuity of events, or large scale spaces, taking a more important role in the urban fabric, consistent with the many adjacent architectural and cultural landmarks.

Linearity suggests an order of succession, a sequence that combines the attributes of uniformity and predictability, with difference and surprise. Compositionally, like music, it is the choice between one continuous note, a musical phrase or tune or random notes. Somewhere between a single note and random notes is music. Architectural linearity enhances the need to define and develop a set of organizing principles, forms, patterns, and then selectively choose and create differences. All of the arts, of which Architecture is one, share the attributes of order, rules, logic and disorder, random, surprise. Linearity may emphasize the difference between north and south, or east and west. End conditions are particularly unique and important.

*Linear A linear system is one that organizes elements along a line or axis.*

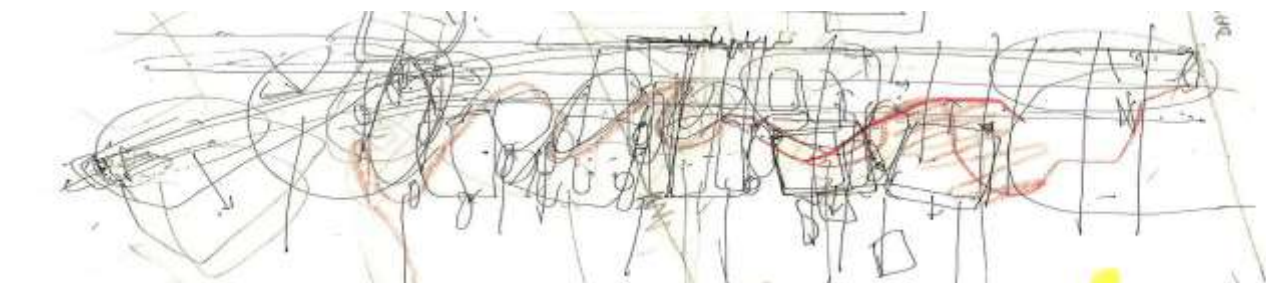
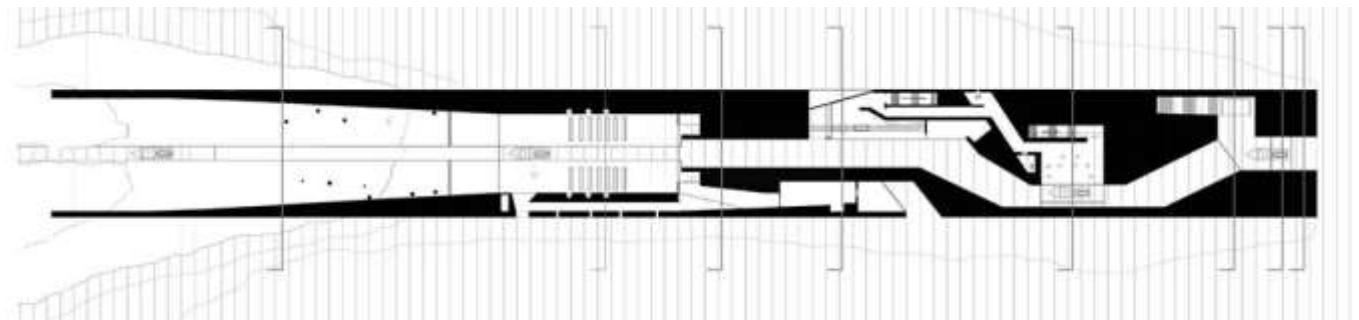
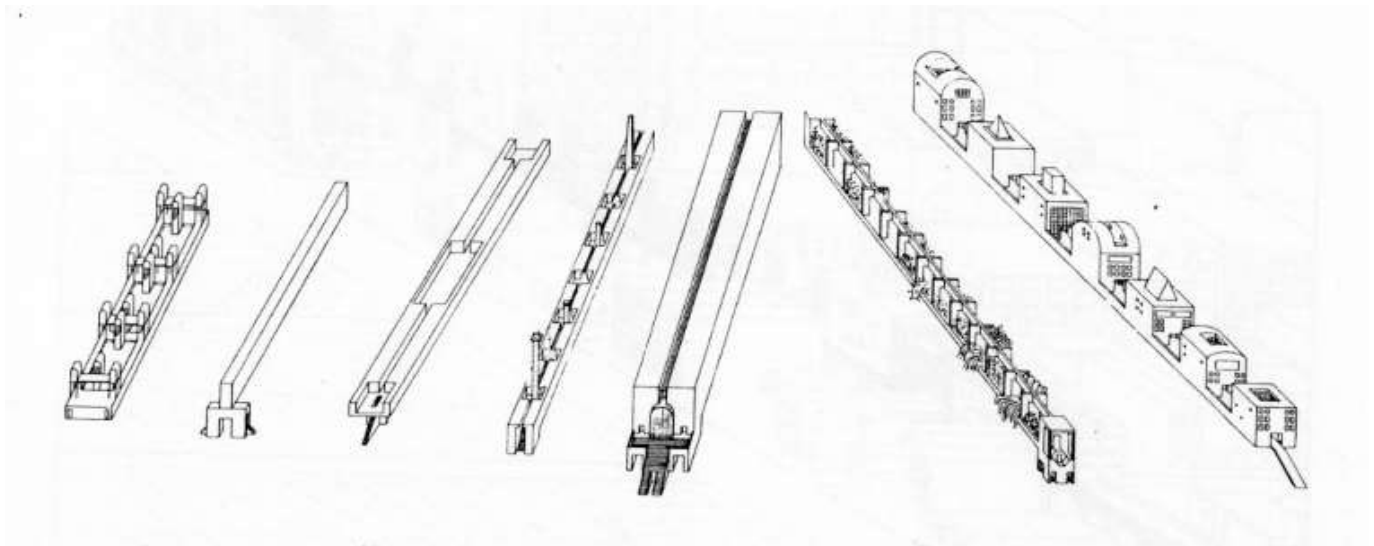
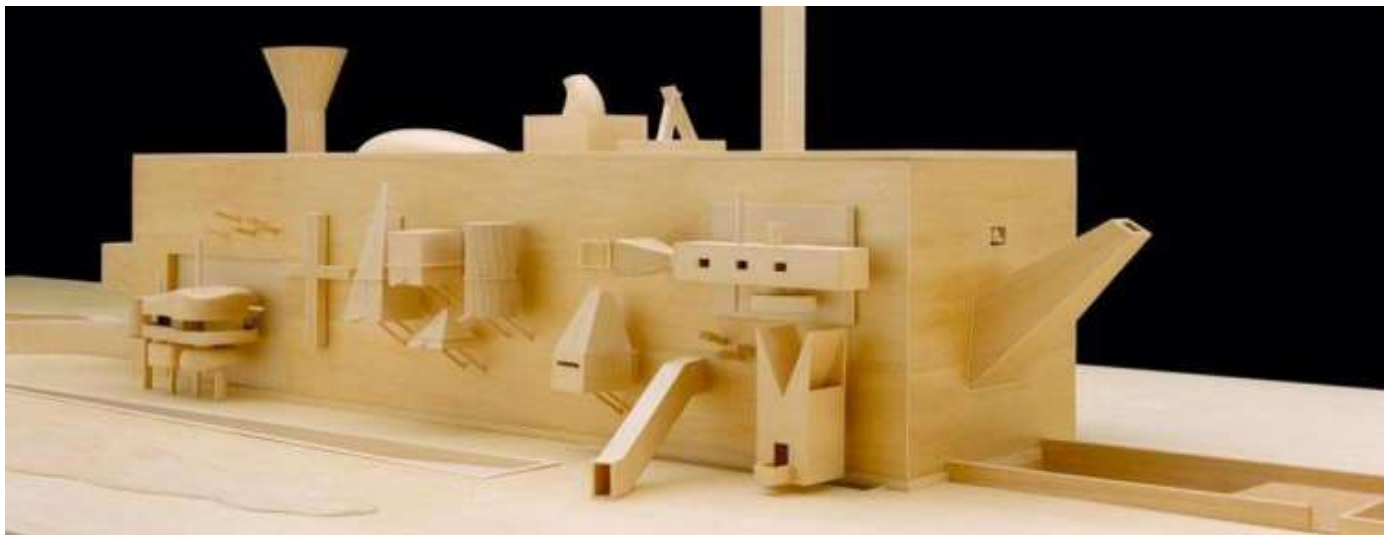
*A linear system can be single-loaded or double-loaded, or have a point-to-point arrangement. These schemes can be either architectural in scale (such as a simple hallway) or urban in scale (such as a boulevard).*

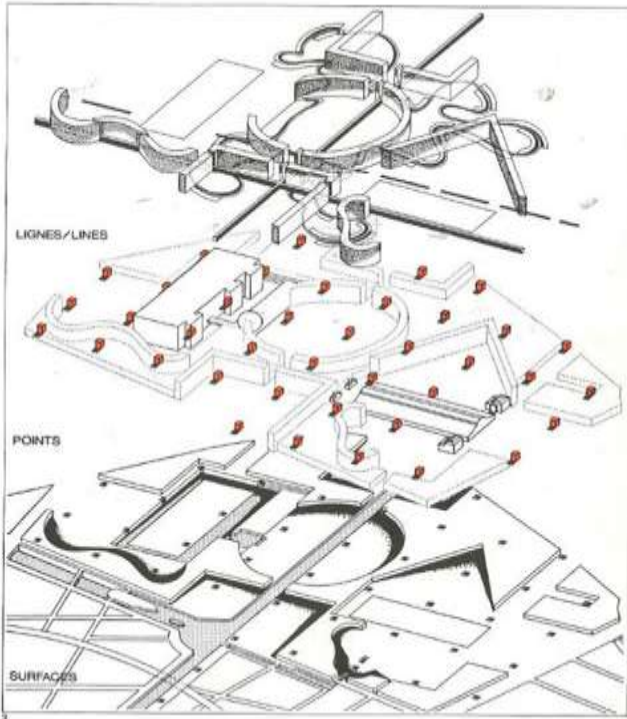
*A single-loaded system implies that one side is given priority and weighted with ancillary spaces; a double-loaded system uses both sides, whereas a point-to-point system is concerned with the elements being connected at either end.*

*Architecture Principia*









Parc de la Villette

Bernard Tschumi



## Network:

### Field Theory, Distributed, Connecting, Diverse

Contemporary architecture as a multifaceted, combining traditionally separated functions, creating a distributed system of events, basing architecture on time-based experiences, adapting or generalizing architecture to accommodate unknown and future conditions.

Network ordering systems value decentralized movement in which there are points of activity, a diverse and distributed system of events, places and functions affecting a large portion of the entire site.

Points of interest would either be found in the existing context, or new / missing points of interest are created. The strategy is to find unique places and events, move from one to the other, see or find one's next destination that are part of a larger system and scale, fitting into or creating a relationship to the overall urban or natural context.

Multiple paths might connect existing and surrounding contexts and create new points of interest. The pedestrian system provides choice in movement from direct and purposeful connection to random and spontaneous travel.

**Dispersed Field** A dispersed field first refers to buildings that separate the components into discrete objects and then deals with the interrelationships of the piece-to-piece, piece-to-field, and the field as a whole.

The geometric association of one component to another can be overtly organized into legible patterns, surreptitiously organized through more concealed ordering, or fully disorganized to intentionally disregard a collective order.

This system can be employed at both the architectural and urban scale.

The typical Roman encampment is a prime example of an organized dispersed field system.

It arrays disparately dimensioned objects within a regimented field. A disorganized and dispersed field is typified by the ubiquitous sprawl of suburban development, where independent local decisions outweigh the collective vision of the total composition, resulting in juxtapositions and anomalies.

Architecture Principia

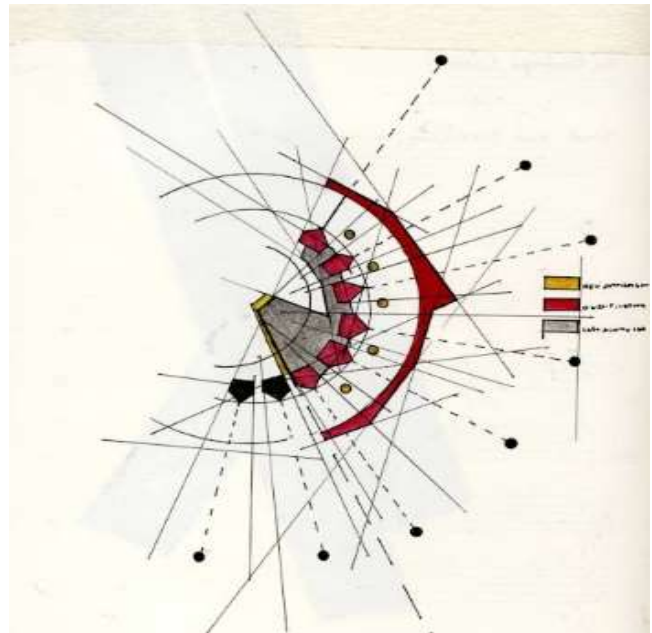
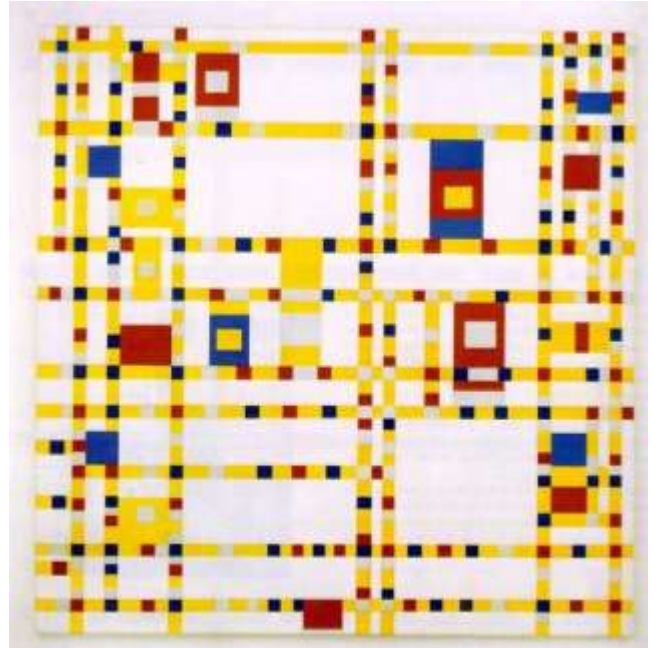


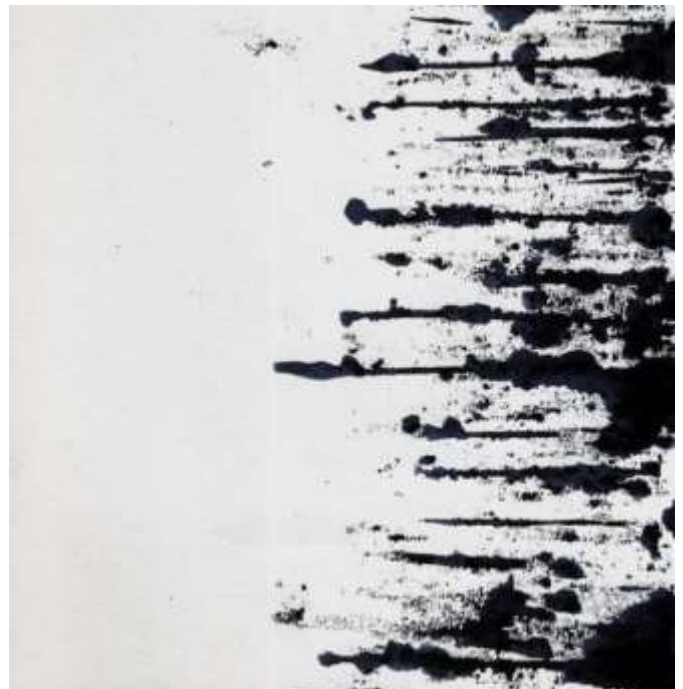
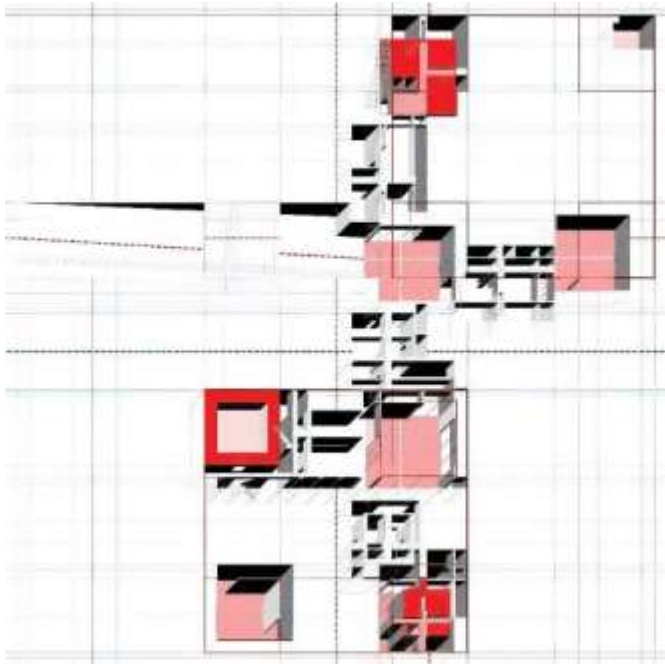
## Order:

The often symmetrical, highly ordered, pattern based pre-contemporary or "Modern" architecture, i.e. prior to the Bauhaus School, is the underlying ordering system for most architecture. Rectilinear rooms, spaces and sections well accommodate programmatic functions, are close packing and efficient, are easily measured, are generally repetitive and predictable, provide uniformity of structure or modularity.

Repetitive or Tartan Grids, Centerline Relationships, Modules, Proportional Systems have been a fundamental aspect of traditional drafting, "T" Square, Parallel Rule formulated architecture.

The traditional ordering systems have a nested relationship; created urban patterns, city blocks, building form, individual rooms and spaces, closets and alcoves.







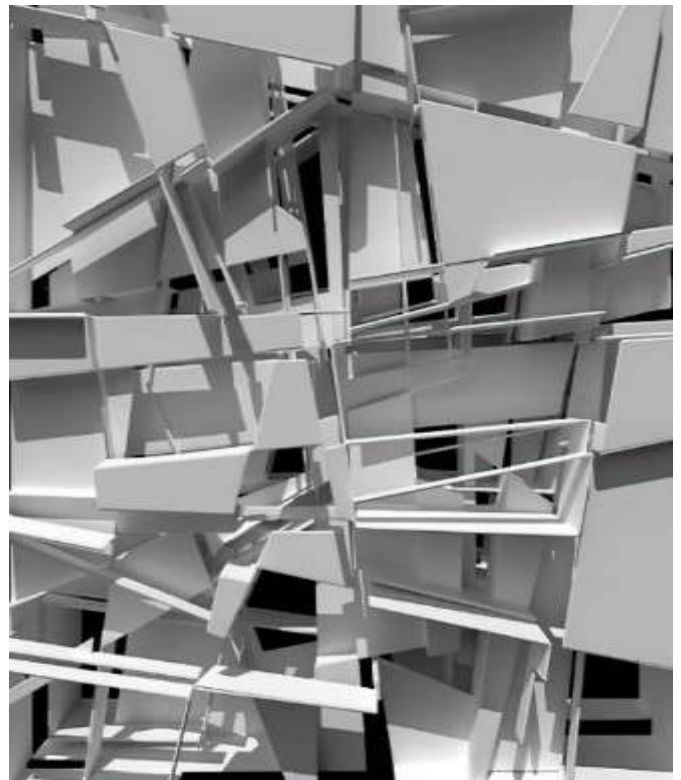
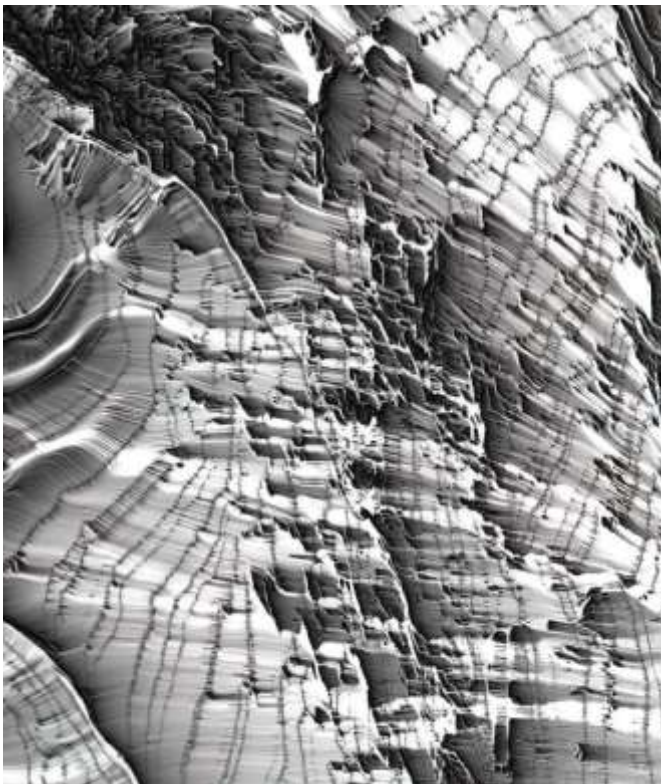
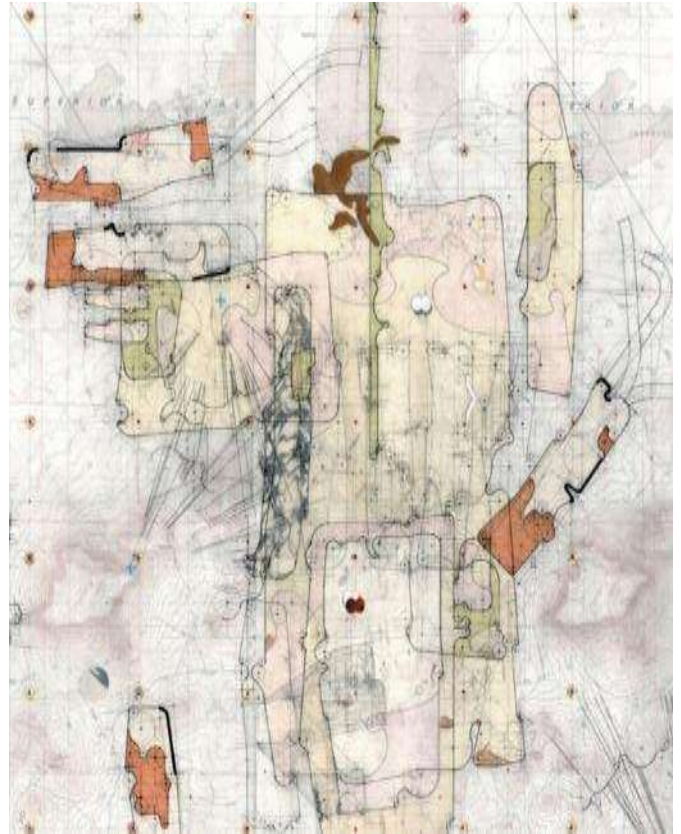
## Disorder:

The abstraction of form and geometry has been a fundamental and integral attribute of post Beaux-Art architecture. The symmetrical basis of pre-contemporary architecture has developed into a language of form that includes non-orthogonal plans and sections, irregular structural patterns, complex shapes and facades.

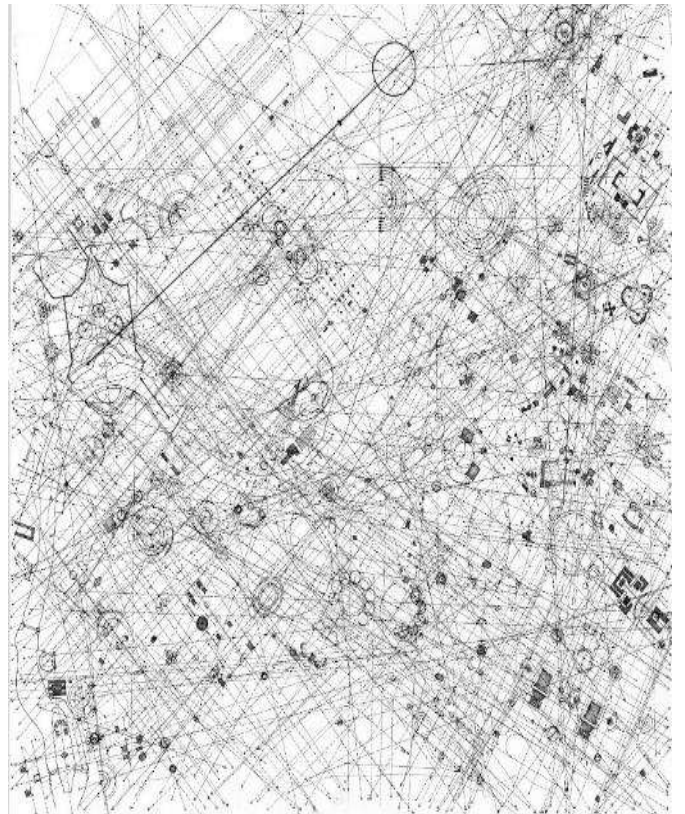
Starting with Dis-Order images and geometries can be instrumental in creating new or novel forms and aesthetics. It provides one of the means for creating new spatial experiences, functional relationships, novel structural and enclosure systems, a new aesthetic or style. All of which illustrate the time and place of a new work of architecture in the current 21st Century. Its abstraction, separation from context, whether physical, environmental, aesthetic, technical or form proves the opportunity for experimentation and newness.

On the other hand, novel newness may grow out of fashion, seem out dated, obsolete, the shock or joy of the new may become boring, possibly only understood by its designer, soon dismissed, forgotten, and possibly hated?

How does starting with Disorder image provide a means for the design to “express the new: be of its time and place” without negatively affecting its context, or becoming un-respected or discredited over time? What qualities are necessary for a new work of architecture to become timeless?









## Heavy Architecture:

### Figure-Ground, Permanence, Enclosed Space, Isolated, Stable

Monumentality in architecture may be defined as a quality, a spiritual quality, inherent in a structure that conveys the feeling of structural perfection that has contributed in great part to their impressiveness, clarity of form and logical scale.

Heavyweight buildings are those which have their facades and internal walls subdivide space, provide environmental protection and act as the structure of the building. Composed of a single material that provides water and air tightness, thermal insulation, visual and light control, acoustic isolation, physiological isolation and are related to the landmarks of architecture until the last century.

Generally, building of this type have thick walls that extend from the foundations to the sky. The lateral stability of the building is either accomplished through thick walls, or positioning walls at right angles for buttressing. Internal surfaces, colors and textures extend to the external elevations of the building. Heavyweight architecture can also be accomplished through thin physiological barriers, permanently in place, dividing, stable illustrated by the sculpture of Richard Serra.

*No architect can rebuild a cathedral or another epoch embodying the desires, the aspirations, the love and hate of the people whose heritage it became.*

*Therefore, the images we have before us of monumental structures of the past cannot live again with the same intensity and meaning.*

*Their faithful duplication is irreconcilable.*

*But we dare not discard the lessons these buildings teach for they have the common characteristics of greatness upon which the buildings of our future must, in one sense or another, rely.*

*Louis I. Kahn*

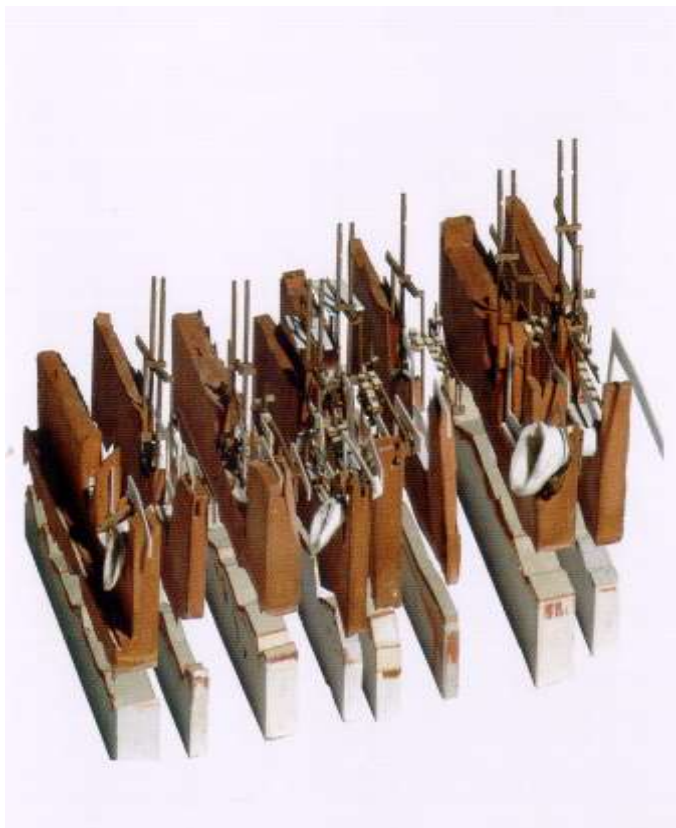
*Proportions should govern the parts, so that they may give the appearance of a body perfect and whole, rather than a sum of incomplete and disjointed parts.*

*Leon Batista Alberti*

Maryhill Overlook  
Corte San Pietro Hotel  
Innovation Center  
Zamora Offices  
Alcarcer do Sal Residences  
MateusIglesia de Santisimo

Allied Works  
Daniela Amorso  
Alejandro Aravena  
Albert Campo Baeza  
Manuel Aires  
Fernando Menis







## Light Architecture:

### Movable, Connective, Adaptive, Anti-Space, Unbounded, Continuous

An architecture which is contemporary: new materials, environmentally responsive, expressive of the limits of what is possible, eventful, exploring new methods and assemblies, risk taking, extending the new, a surprise and a celebration, other than. The search for slim, light, transparent, adaptive architecture has led to the use of glass, metal and other thin sheets as the primary space dividing system.

The role of structural support and stability is provided by a separate structural frame rather than the wall itself. As a result, the building is "skin and bones."

Transparency, environmental responsiveness, and direct connection between spaces emphasized. While protection from sunlight, direct views to the exterior provide the opportunity for dynamic elevations. Added to the variety of single layer and double layer glass technologies, lightweight buildings are often clad in metal sheet, fabric or other light filtering materials. Lightweight architecture has the potential to move, adapt, and respond to seasonal change and weather, changes in use, enclosing or extending space.

*Architects have preferred to change the existing environment rather than enhance what is there.*

*Yet architects who irreversibly denaturalize environments and contexts do so on behalf of third parties.*

*Do architects really operate in an empyrean realm governed solely by personal aesthetics, which bear no relationship to society, citizenship and cultural memory? Should they not have a broader vision when they design and build a structure transforming a city or the natural landscape?*

*Salvatore Settis*

*Director of Getty Research Institute*

*I used to be a symmetrical freak and a grid freak. I used to follow grids and then I started to think and I realized that those were chains, and that grids are an obsession, a crutch. You don't need that if you can create spaces and forms and shapes. Scale is a struggle.*

*Lighting is always a difficult, complex problem.*

*The question: do we make an absolutely new thing that has nothing to do with its context and surrounding architecture, or do we make a kind of homage to the place but not like the real place, real architecture.*

*I am not going to do either of those things.*

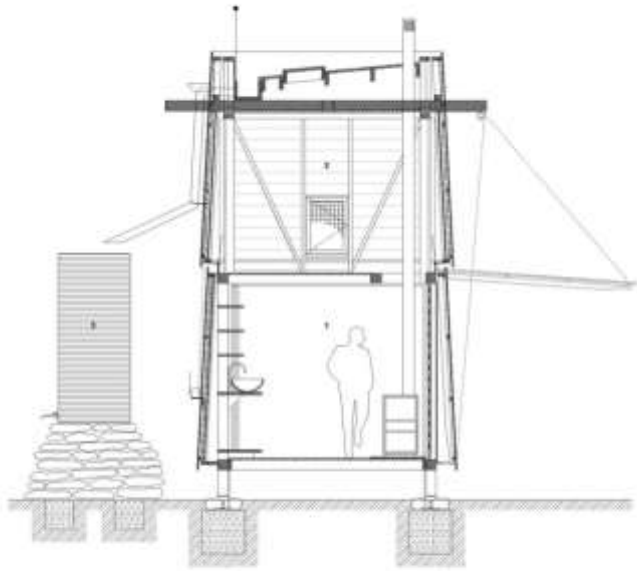
*It will have a familial relationship.*

*Frank Gehry*

Barrio del Foro Romano  
Everyday Coffee Pavilion  
Villa Roces  
Ingfah Restaurant

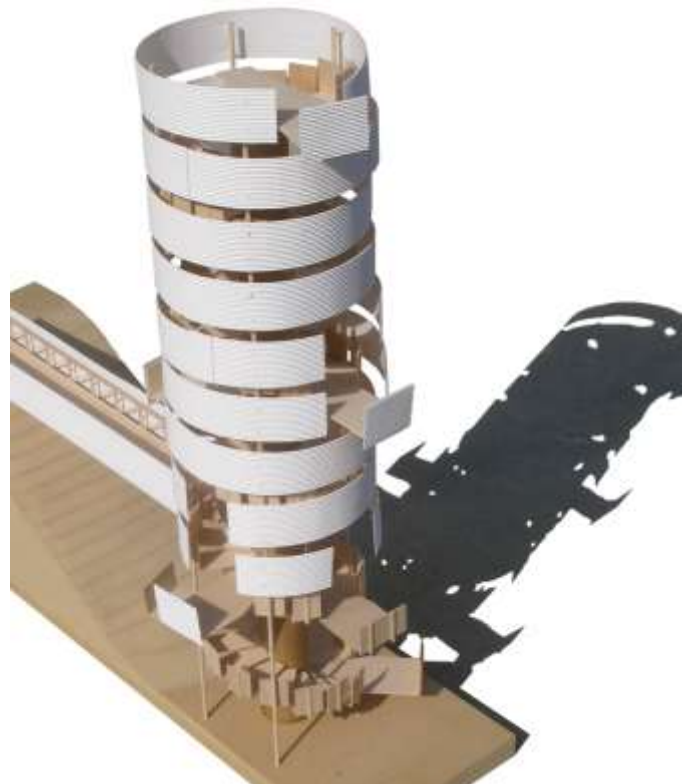
Amann Canovas Maruri  
Sean Godsell  
Govart Vanhoutte  
Tungthunya

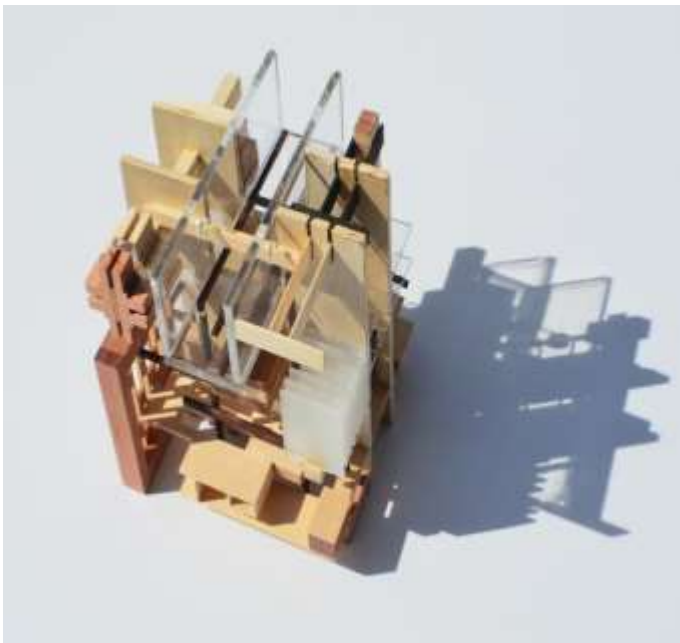
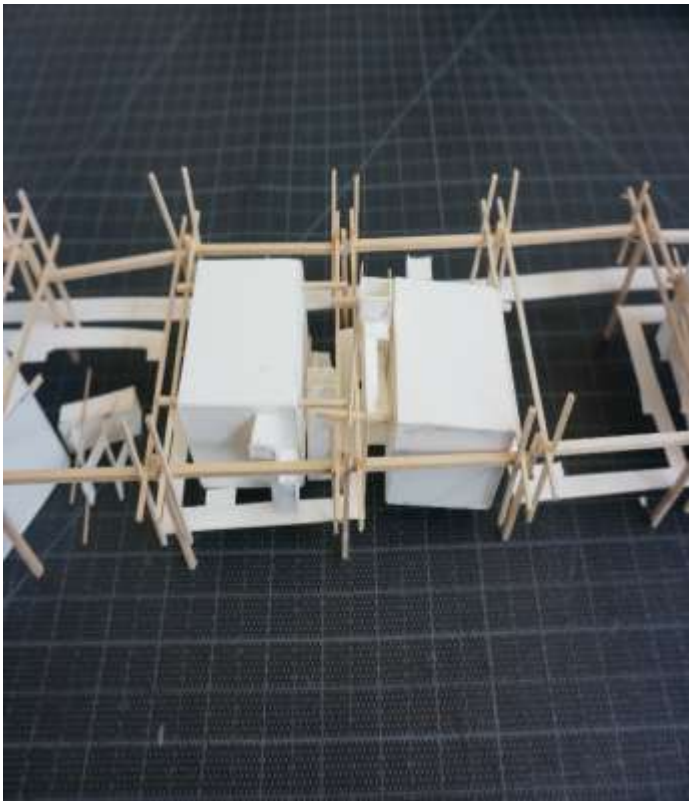




- 1. LIVING
- 2. SLEEPING
- 3. WATER TANK

LAKEY BROWN ARCHITECTURE  
PERMANENT CAMPING  
SECTION









## Multi-type Architecture:

### **Varied, Maximizing Differences, Perfected, Localized, Ideal**

The multi-type is generally viewed as a precise fit to site, function, local conditions, climate, the nuances of place, and differences of function, variation of experience, diversity, surprise, contextual differences, and hierarchy. Their uniqueness can be generated from local conditions, the expressive values of the design or builder, disregard for precedent, desire to be or express the new. The multi-type provides potentially the highest level of visibility, identity, ownership, functional and environmental perfection to the architectural work.

In its purest sense, every room/space is unique, nothing is exactly the same. Multi-type can range from a purposefully rich variety of experiences, to an extreme condition of undifferentiated complexity, delight or chaos.

The complexity of multi-type is often illustrated by random or hybrid visual systems, ranging from countless elements randomly within a context or conversely strategically differentiated elements in a complex framework or context.

In what ways can a multi-type be more than a collection of non-repetitive elements?

What relationships can develop between non-repetitive elements?

When should irregularity or non-predictability be introduced into an architectural concept or situation?

At what point does complete variety result in chaos, extreme or oppressive complexity, disorientation?



## Mono-type Architecture:

### Similar, A Set, One of Many, Related, Identical

A monotype is generally viewed as having a rational set of spatial, formal and functions relationships which are idealized, logical when identically or near identically repeated, creating recognizable symbols. Their basic attribute is sameness, a set of similar or identical pieces.

Monotype implies multiple instances of the identical designs, whether discrete or part of a larger whole.

In its purest sense, monotypes are replicated with little difference, or developmental variation. Their advantage is in part their twin-ness. As they are a set, they often collectively create an architectural system at a larger scale. Commonality results in uniform and predictable relationships. However, the repetition of monotype elements in architecture can obscure larger concepts, where a collection of many identical smaller elements do not create other scales of building mass, scalar relationships to context, appropriate human scale, or are inconsistent with structural or environmental requirements.

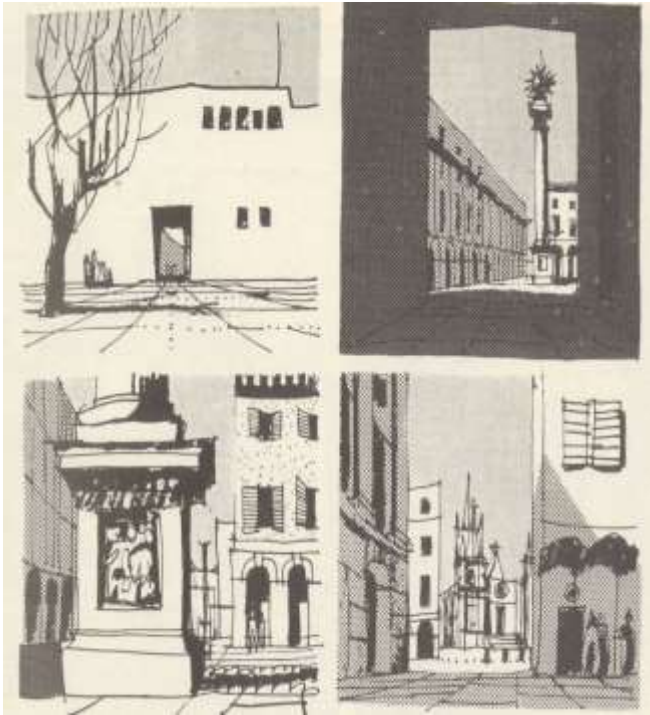
Is it possible to create a prototypical architectural design, which is also adaptable with minimal variation to the specific physical locations, environmental orientations, architectural characteristics, urban conditions?

In what ways should a monotype be more than a collection of exactly repetitive elements?

What types of variations or exceptions should be introduced into a mono-typical system?

At what point does complete uniformity result in disorientation, boredom, a force-fit?





## Picturesque:

Gordon Cullen's Townscape focuses upon analyzing and extending existing conditions, creating visual variety and hierarchical architectural characteristics, and seeks to find the most appropriate fit for new architecture in its setting.

Cullen's (picturesque, vernacular) focuses is upon the sequence and variety of the visual experience in time, from eyelevel, way finding, landmarks, arrival, etc. He prioritizes architecture as series of events, "theater" which one discovers over time. It is at the scale of someone walking, finding their way, seeing a destination, discovering, finding somethings unexpected, thus creating visual memories. It is analogous to a comic strip or theatrical script.

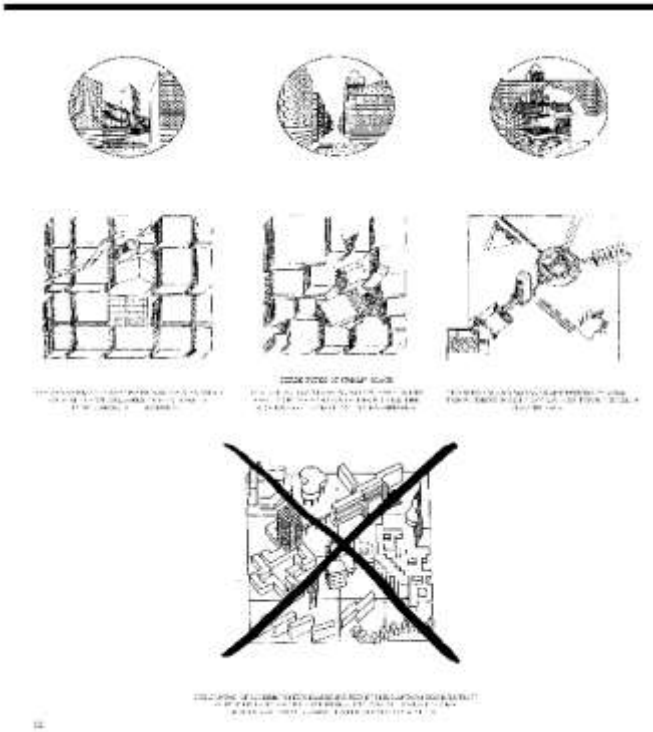
Cullen's asks how does the design take advantage of the place itself, and use the program to create a specific experiential / visual narrative.

His objective might be to design based solely upon the picturesque and contextual conditions of the existing context,

or to orchestrate specific experiences within a neutral or uniformly experiences context. In a sense, the design is a "stage set" viewed by the pedestrian from eye level as they move through the site and building. Its focus is the boundary conditions between inside and outside, public and private, human scale, way finding, background and foreground buildings, vernacular and landmark.

Cullen's view is that urban landscapes and the buildings that help form them are pedestrian experiences, experienced from eye level at a walking pace. They provide a variety of experiences, scales of space, near and far views, present surprise experiences, provide multiple paths for exploration, combine multiple functions, have hierarchy and formulate exterior space as a series of public rooms and varying visual experiences.

[https://en.wikipedia.org/wiki/Gordon\\_Cullen](https://en.wikipedia.org/wiki/Gordon_Cullen)



## Formal:

Leon Krier's *Architecture and Urban Design* focuses upon analyzing and extending existing systems of organization and form to find the most appropriate fit for new architecture in its setting.

Krier's (formal, classical) focus is upon the architectural relationship between the existing contexts ordering principles such as axis, hierarchy, urban blocks, landmark and background, related architectural characteristics and language, particularly as an extension of the public realm,

Design principals are derived from center-lines, axis, hierarchy of streets, background and landmark buildings, definition of the

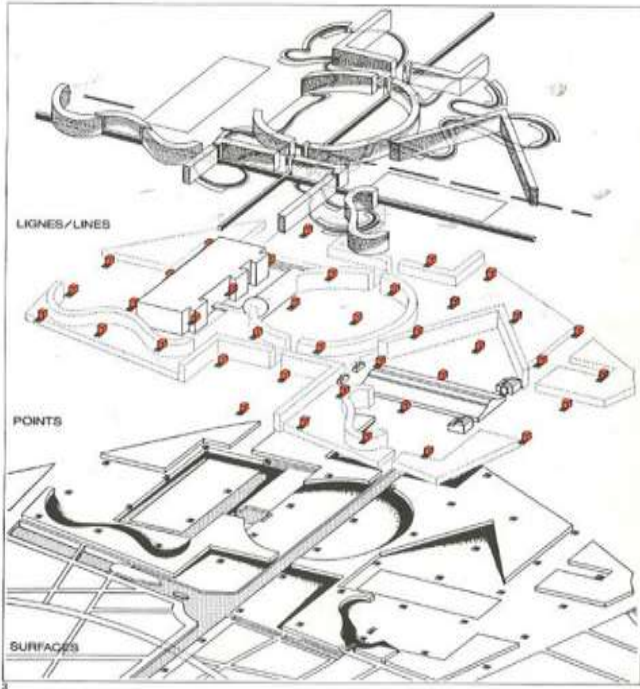
public realm, the shared character and aesthetic of the facade, common architectural characteristics such as fenestration, roof forms, variation in size and scale, organization of interior functions, private exterior areas, etc.

Individual buildings are derived from and considered to be an extension of the existing urban and landscape context. There is an emphasis on the collection of individual buildings into an urban block. Blocks and landscapes are part of a larger urban system.

Cultural and other public institutions are given importance,

[https://en.wikipedia.org/wiki/Leon\\_Krier](https://en.wikipedia.org/wiki/Leon_Krier)





## Nodal:

Tschumi's *The Manhattan Transcripts* and *Architectural Concepts* views contemporary architecture as a multifaceted condition, combining traditionally separated functions, creating a distributed system of events, basing architecture on time-based experiences, adapting or generalizing architecture to accommodate unknown and future conditions.

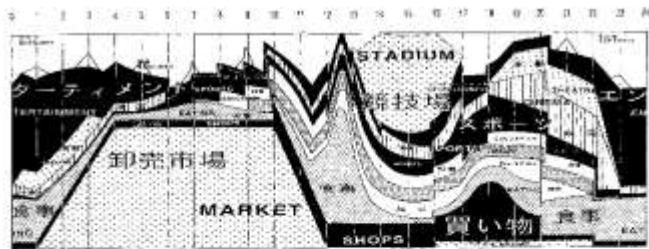
Tschumi values an orchestrated system of movement to interact with a system of activity or landmark nodes. The points of activity create a diverse system of events, differences of place and functions which impact the entire site, connecting adjoining neighborhoods which are also understood as a singular construct..

Points of interest are either be found within the existing context, or are created as new / missing points of interest.

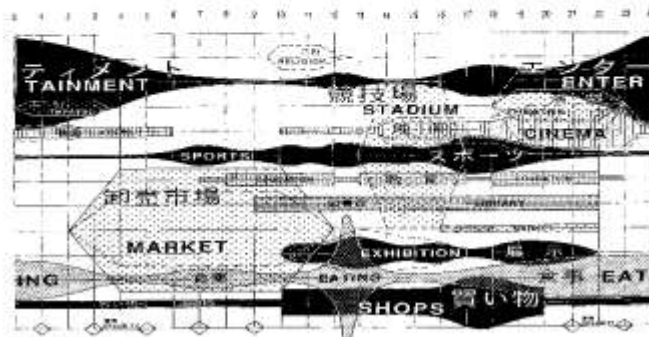
The strategy is to find unique places and events, move from one to the other, see or find one's next destination, create a system of unique and individual places that are part of a larger system and scale, while fitting into or creating a relationship to the overall urban or landscape context.

Nodes located at the intersection of pre-existing or new pedestrian paths are enhanced by "follies" which provide points of interest, and a variety of interior and exterior functions. The pedestrian system provides choice in movement from direct and purposeful connection to random and spontaneous travel.

[https://en.wikipedia.org/wiki/Bernard\\_Tschumi](https://en.wikipedia.org/wiki/Bernard_Tschumi)



Montage of programs



Time/Space diagram

111

## Composite:

Rem Koolhaas's *Delirious New York* and S, M, L, XL view contemporary architecture as a multifaceted condition, combining traditionally separated functions, creating an interrelated system of disparate events, basing architecture on time-based experiences, adapting or generalizing architecture to accommodate unknown and future conditions.

Koolhaas considers contemporary values, the politics of art, the clash between tourist and resident, the purposeful combining of elements as a means to provoke change and adapt into the future. He might consider the traditional separation of both the private and public functional elements of the design no longer appropriate. Space would be defined by activity and program. New architectural forms are derived from functional overlaps, and movement paths.

[https://en.wikipedia.org/wiki/Rem\\_Koolhaas](https://en.wikipedia.org/wiki/Rem_Koolhaas)

### Composite / Hybrid

*Perhaps the most common condition is not the employment of any one organizational system taken through a project, but the combination of multiple organizational systems, deployed for their localized efficacy.*

*Synthesizing aspects of multiple systems or splicing varied systems into one another, the hybrid is perhaps the most common method of the pluralist, postmodernist style that emphasizes form over the clarity of plan.*

*The integration of varied systems allows for internal contrast of spatial types, collagist formal composition methodologies, reinterpretation of traditional types through contemporary cultural conditions, varied material and technological capabilities, and diverse spatial agendas.*

*The resulting hybridizations allow for spatial complexities, nested compositions, and diverse (yet juxtaposed) decedents of the primal organizational methods.*

*Architecture Principia*

# Chelsea Craft Guild, New York, N.Y.

**Presentation Types: Advanced Studio II**

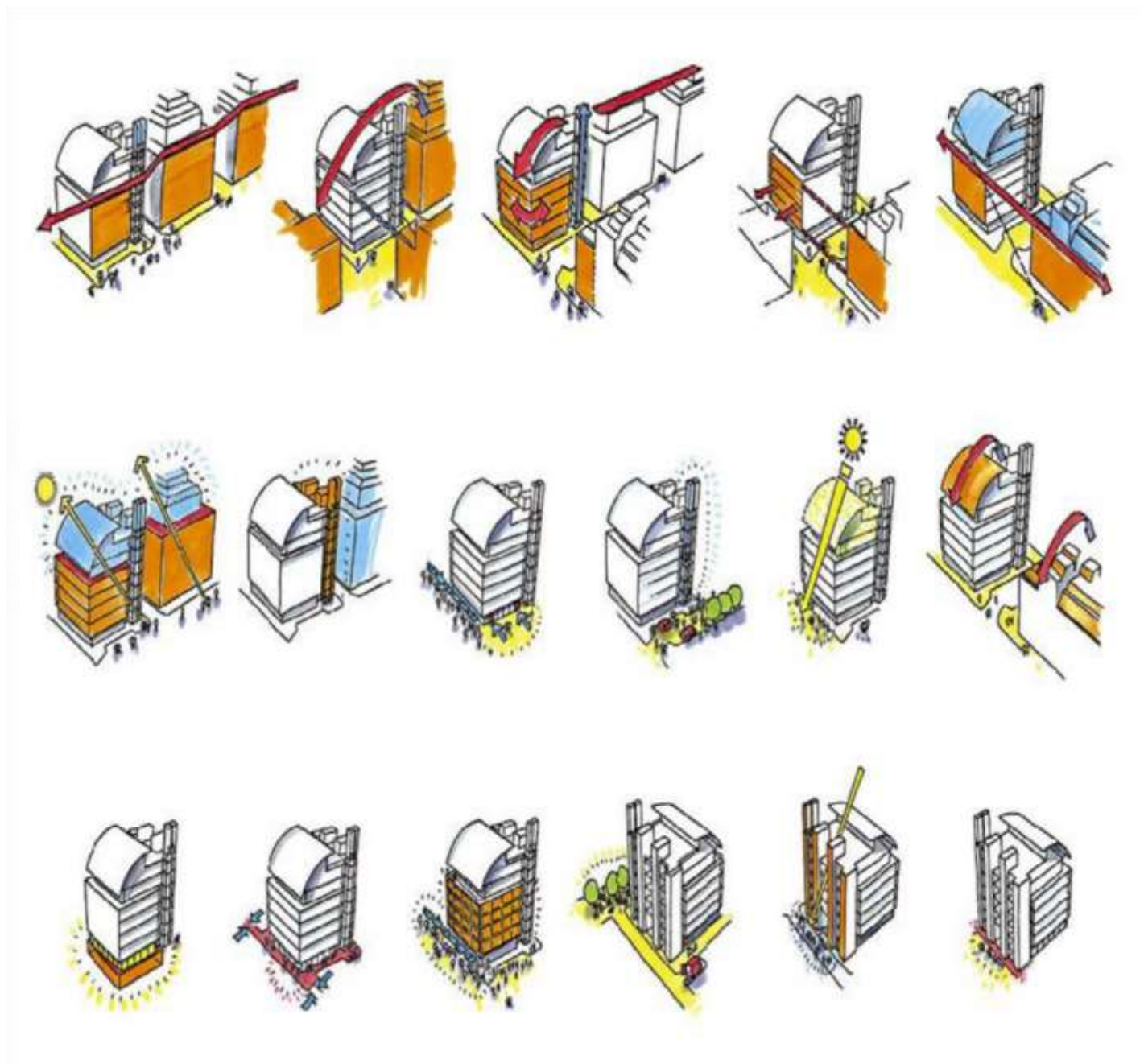
Arch 595 and Arch 506G

**New Jersey School of Architecture / HCAD / NJIT**

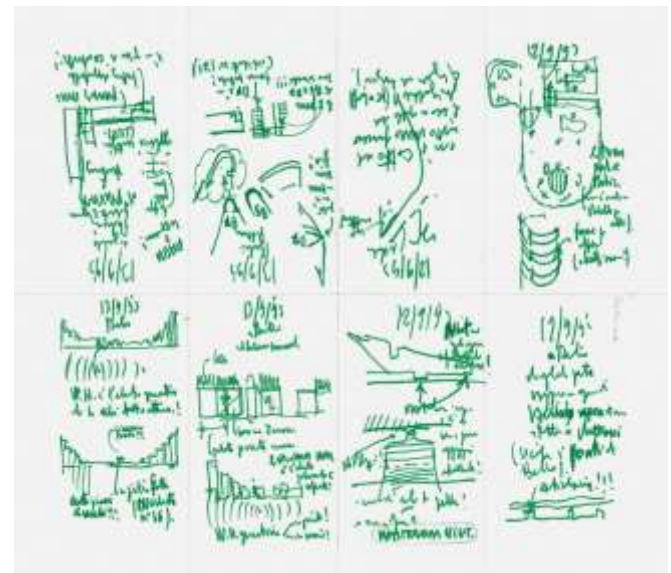
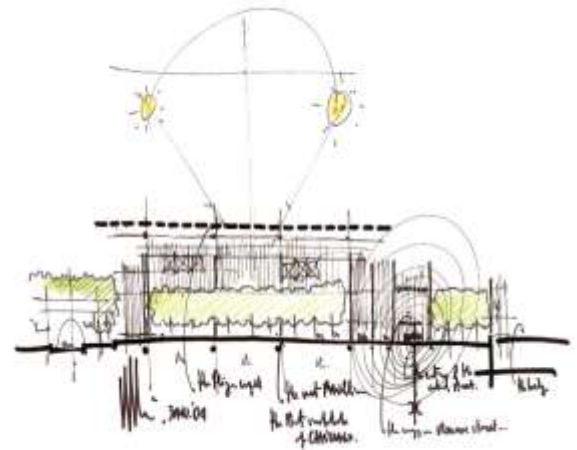
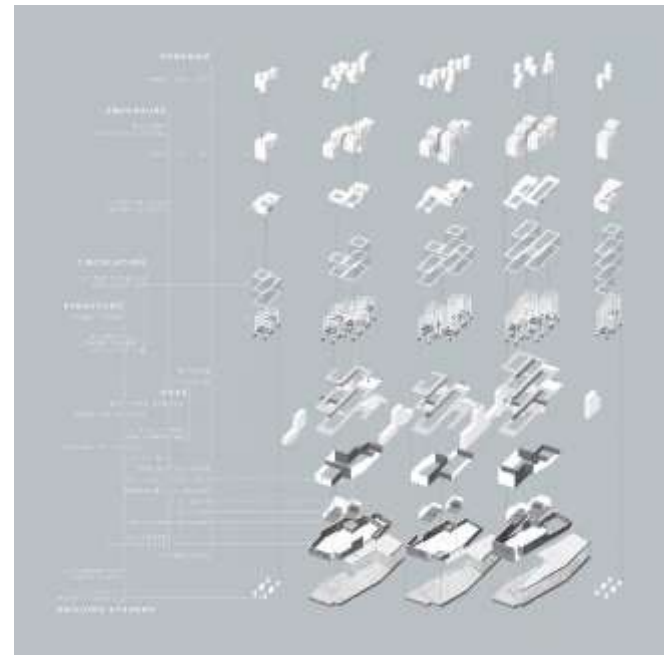
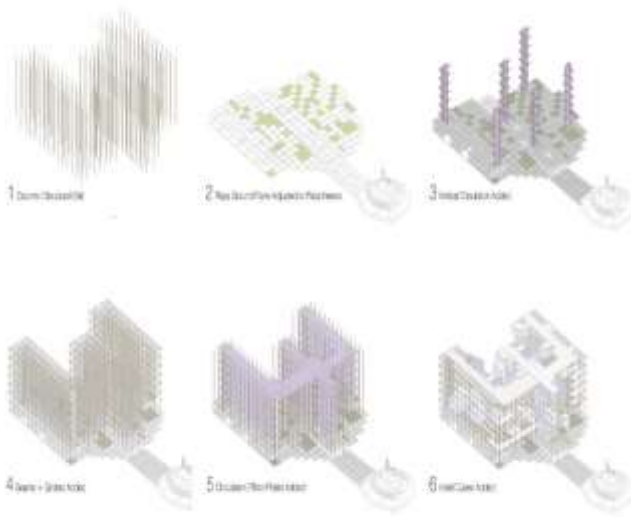
Spring 2025

John Cays, Victoria Diskina, Peter Dumbadze, Cleveland Harp, Vera Parlac, Duncan Reid, Marc Rosenbaum, Dincer Savaskan, Stephen Zdepski (Coordinator)

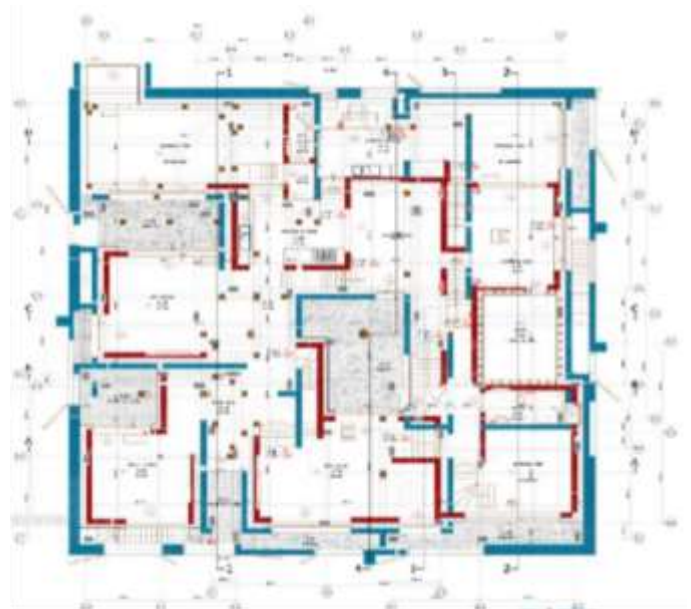
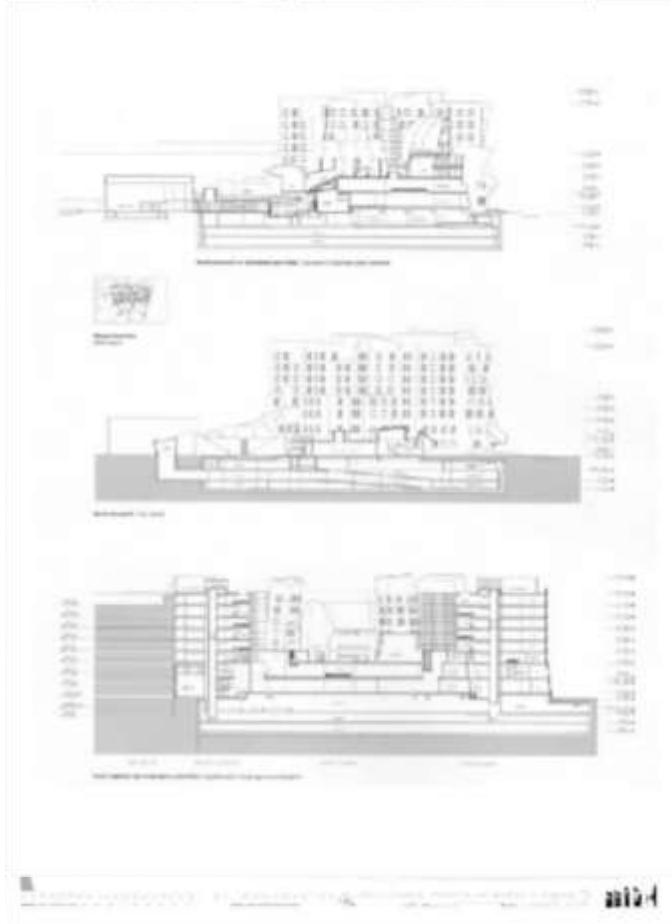
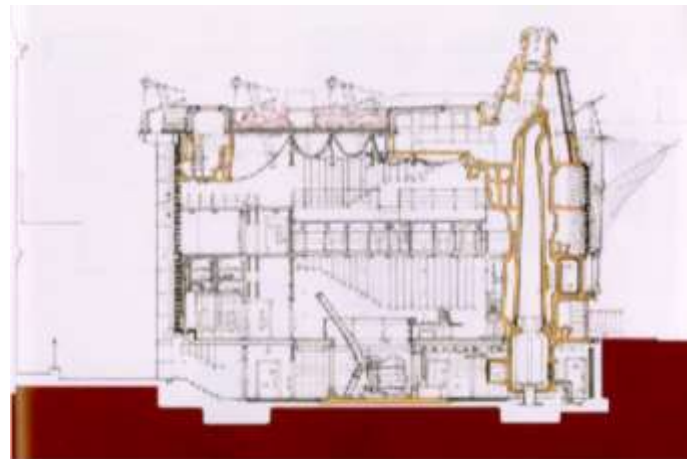
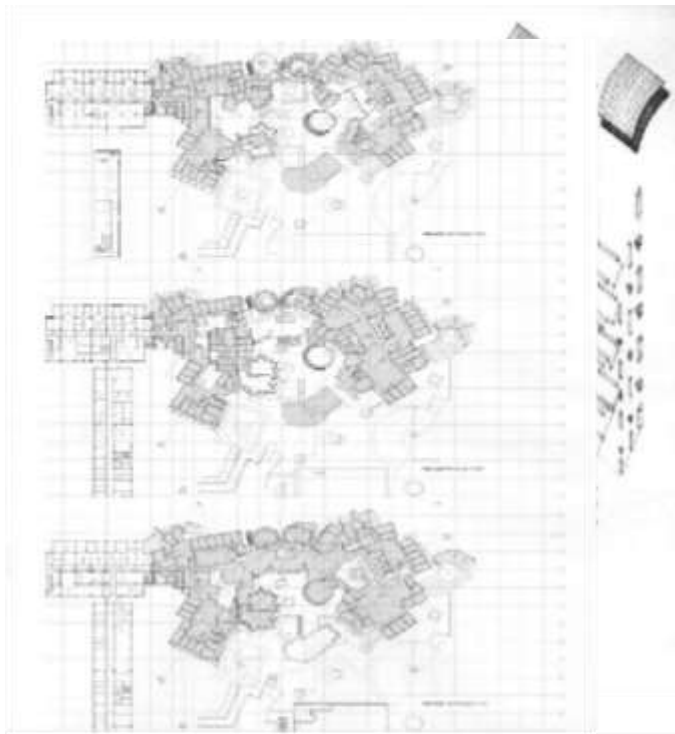
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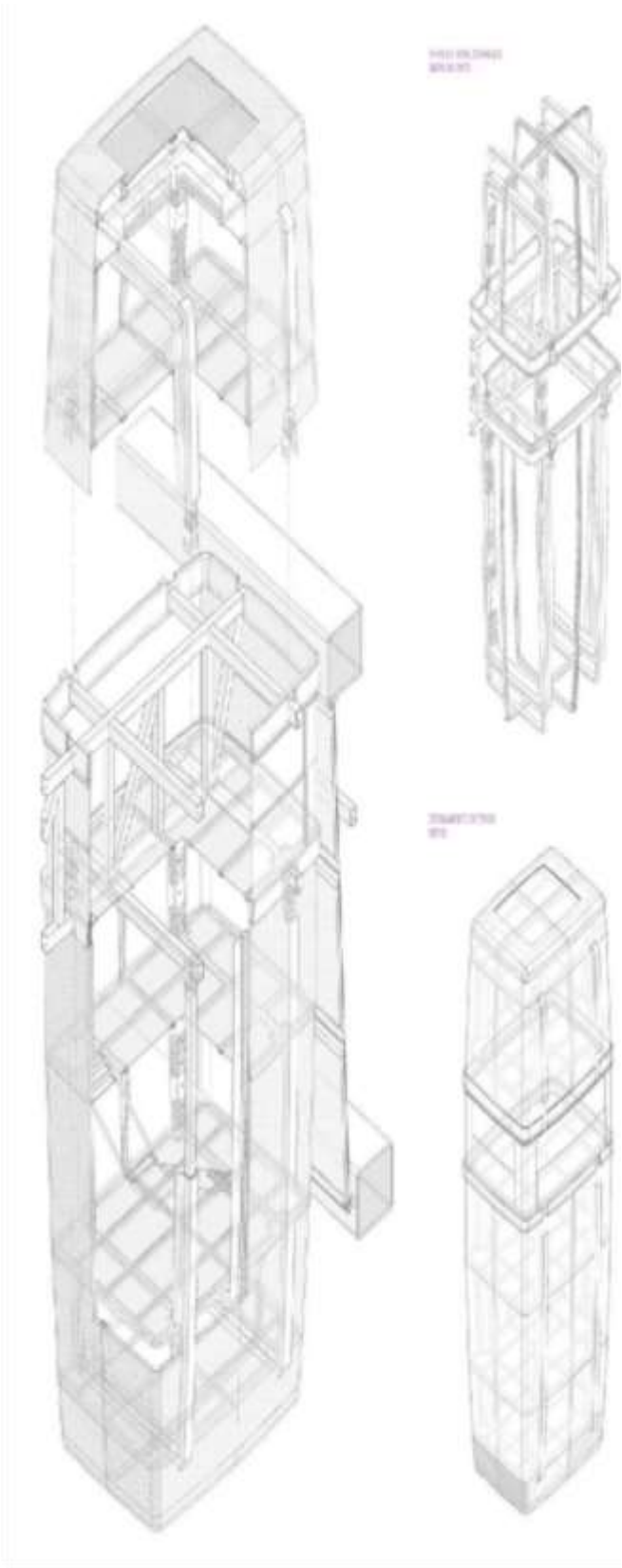
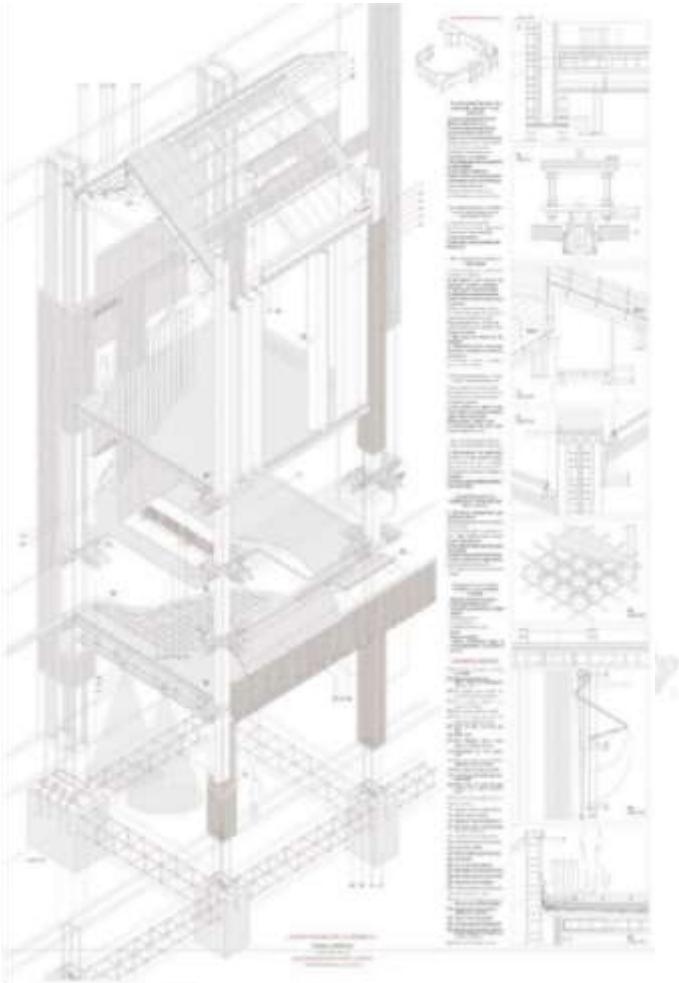
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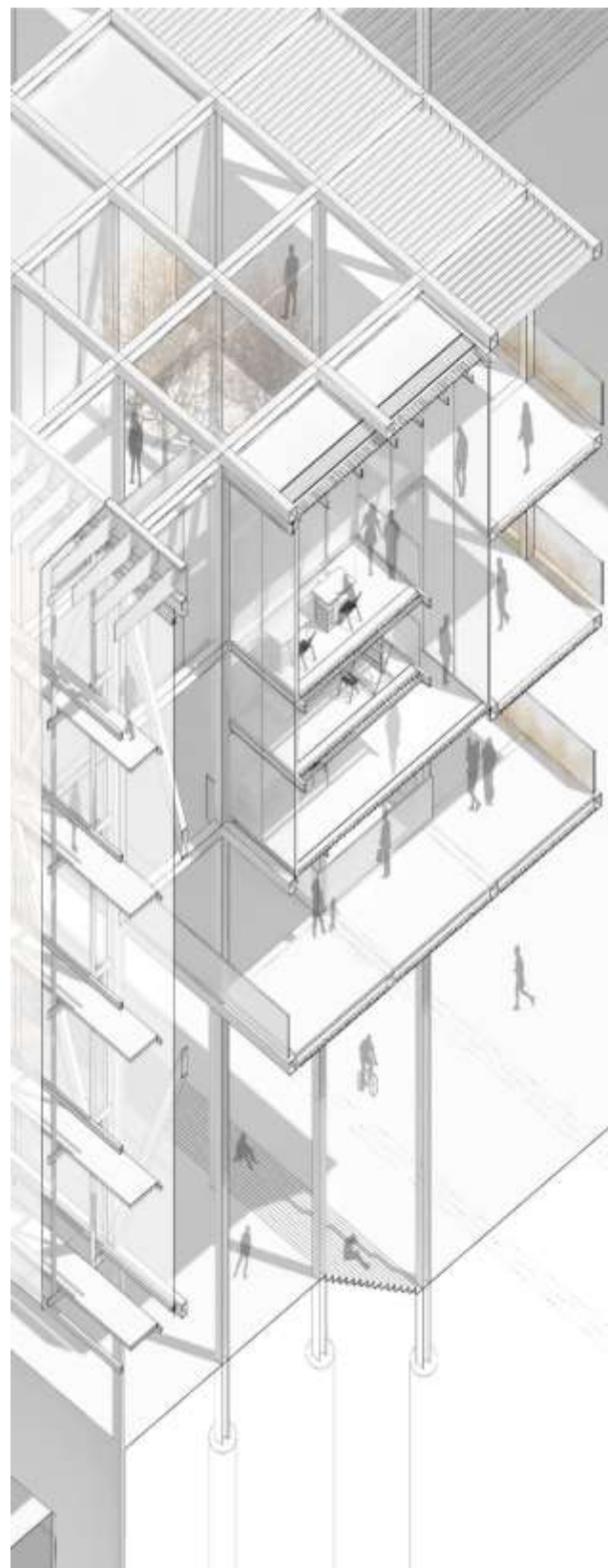
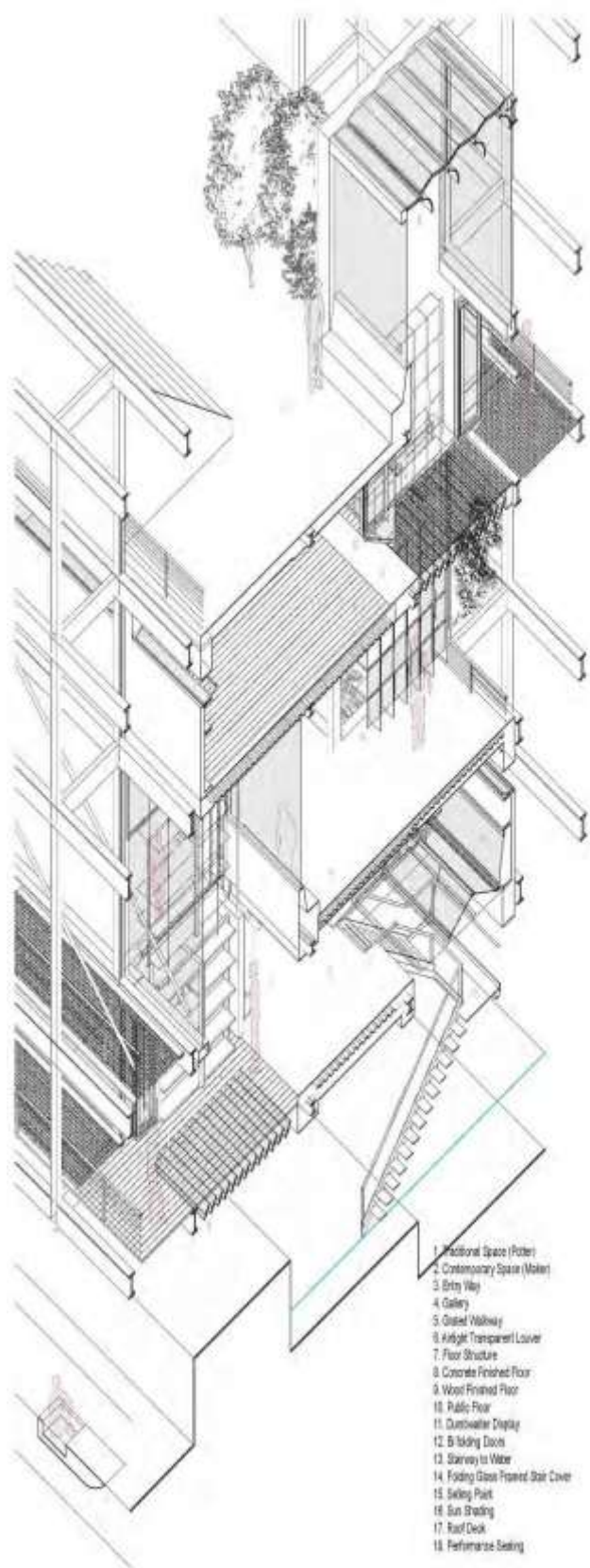
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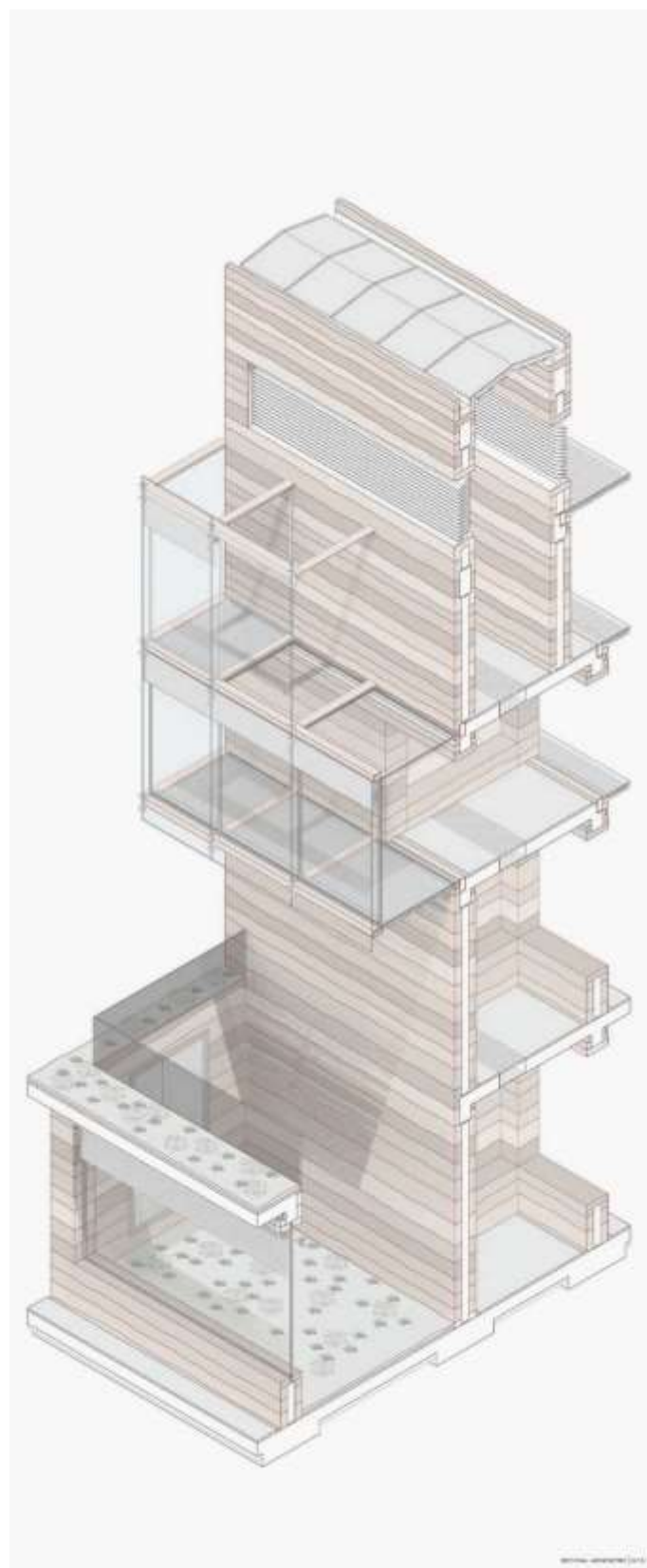
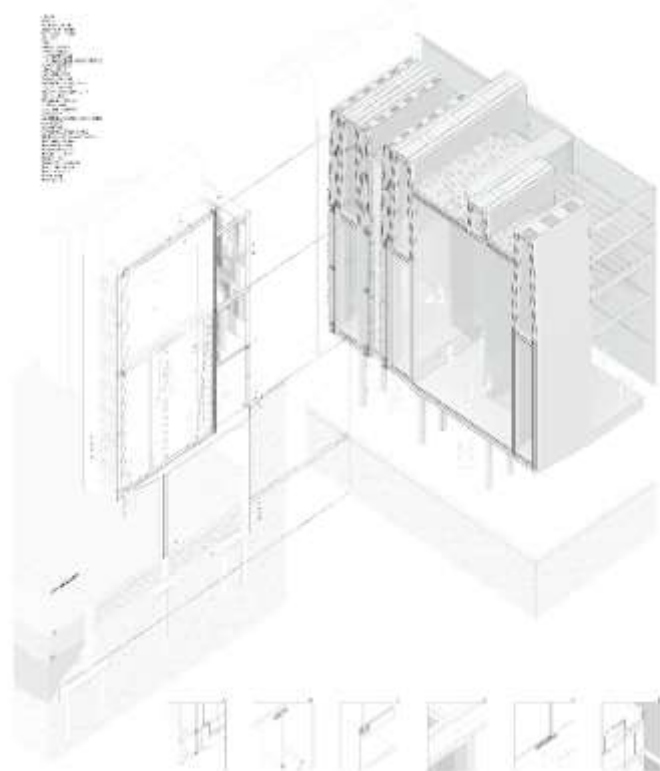
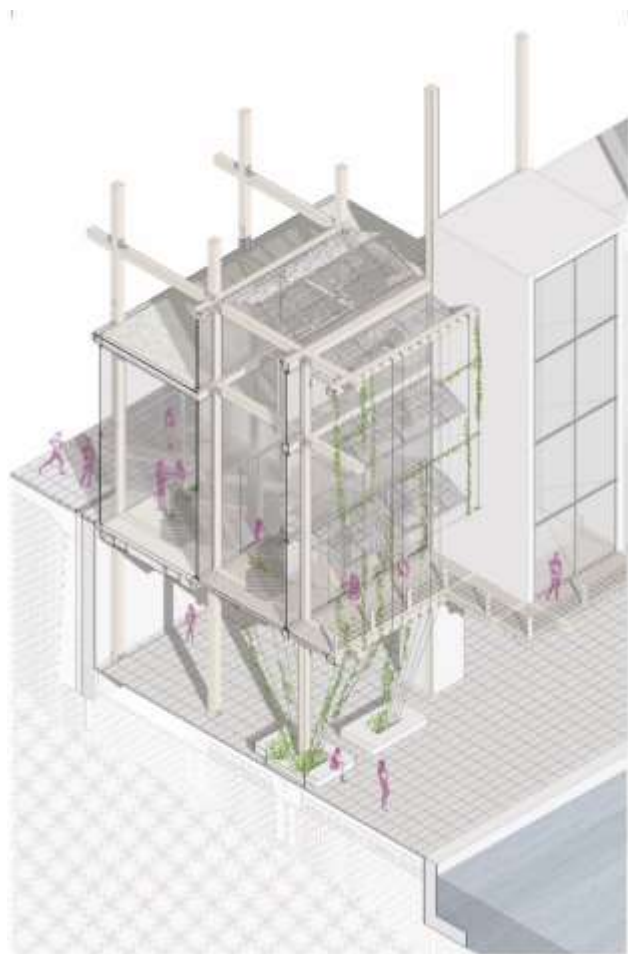


3D (X054)



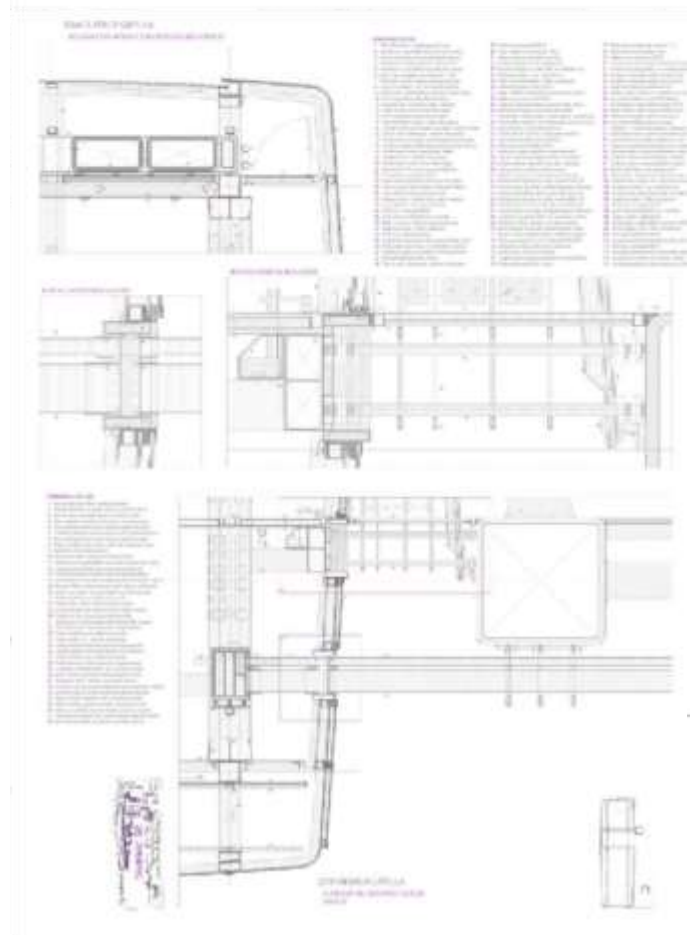
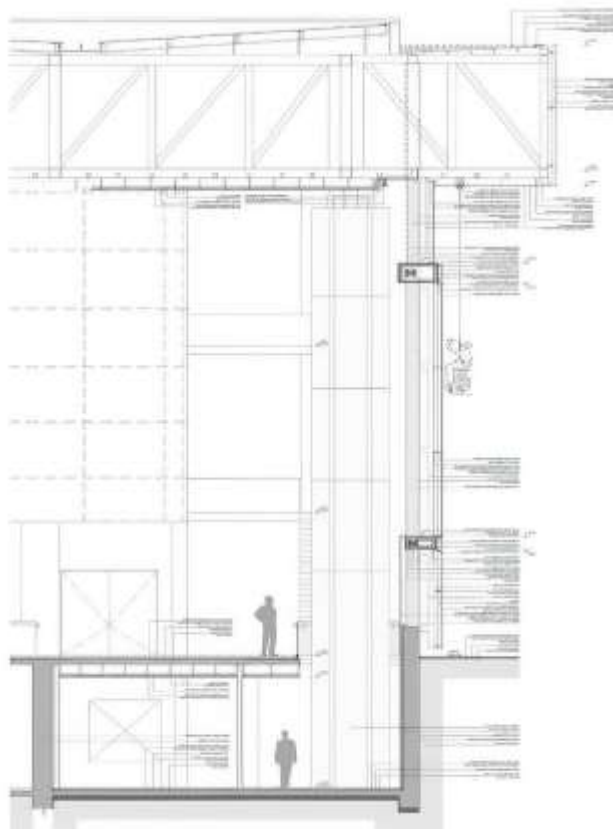
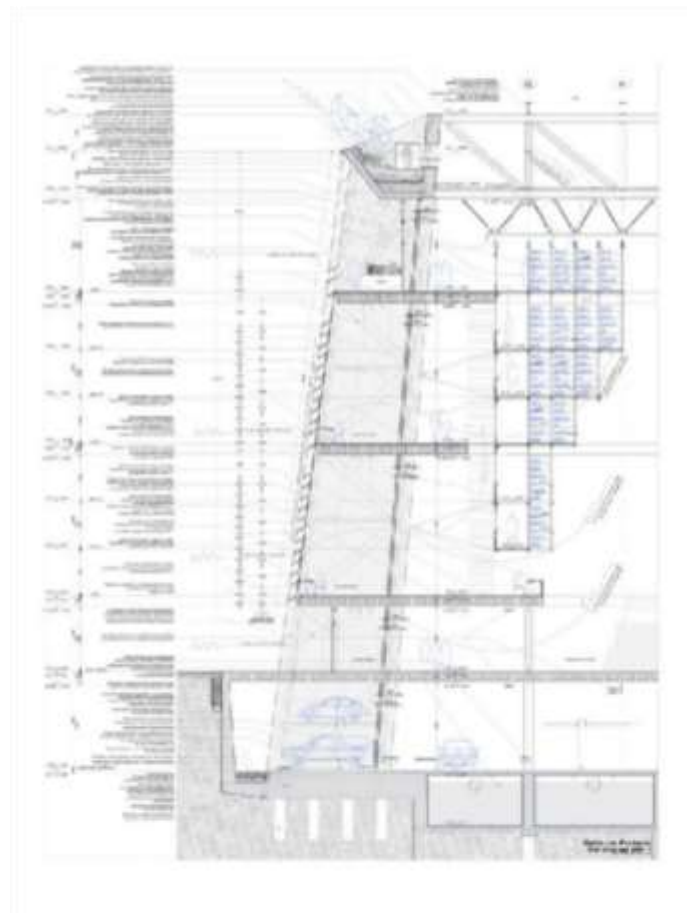
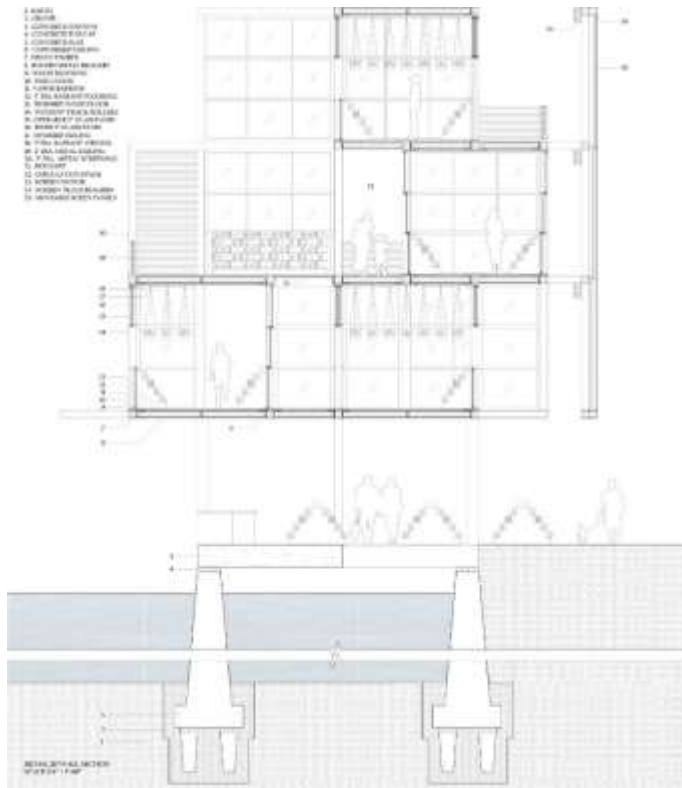




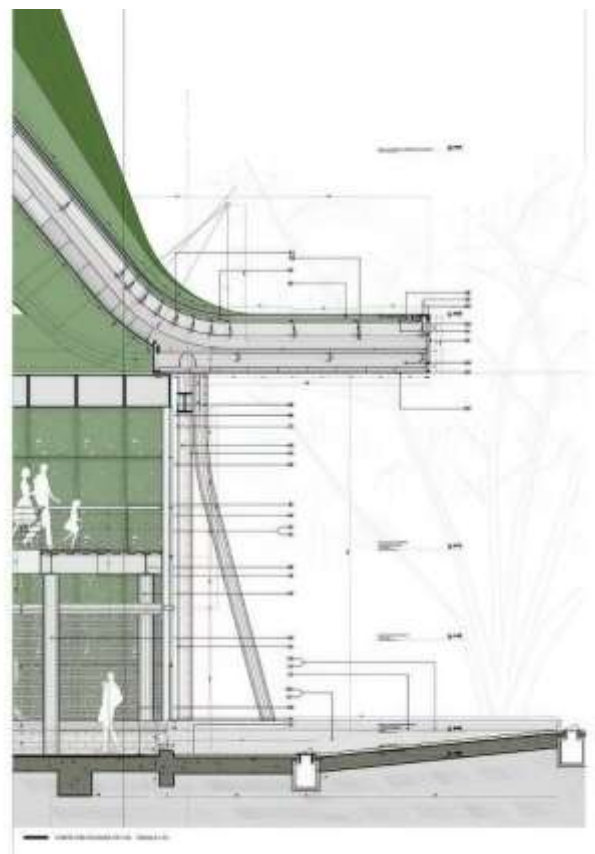
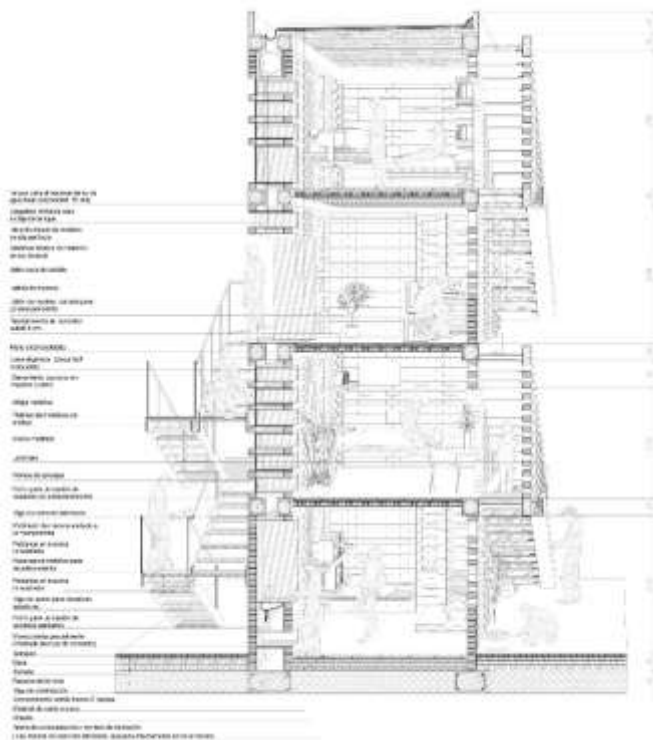
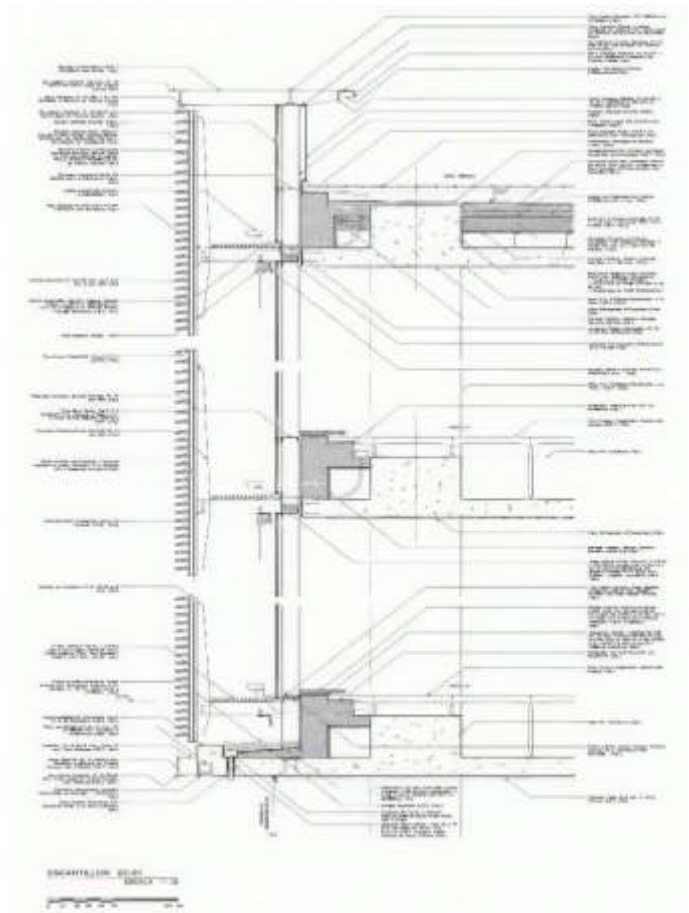
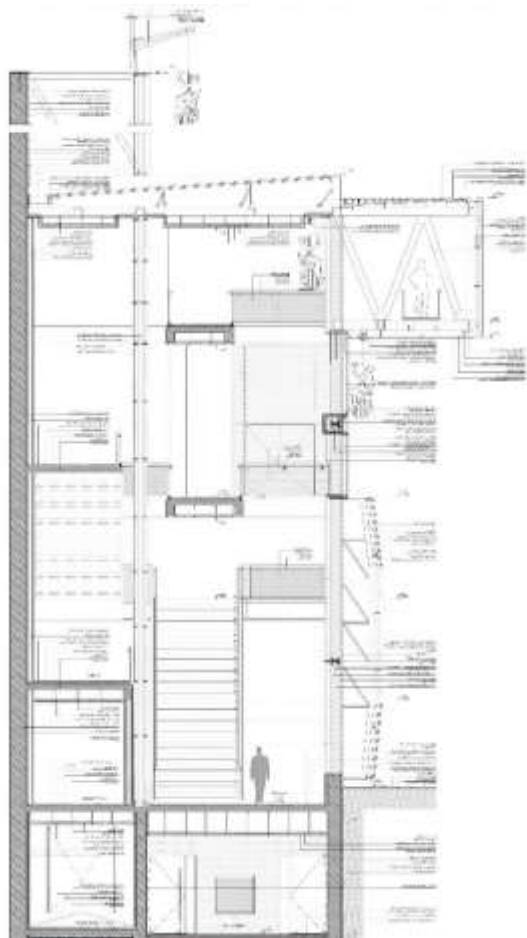


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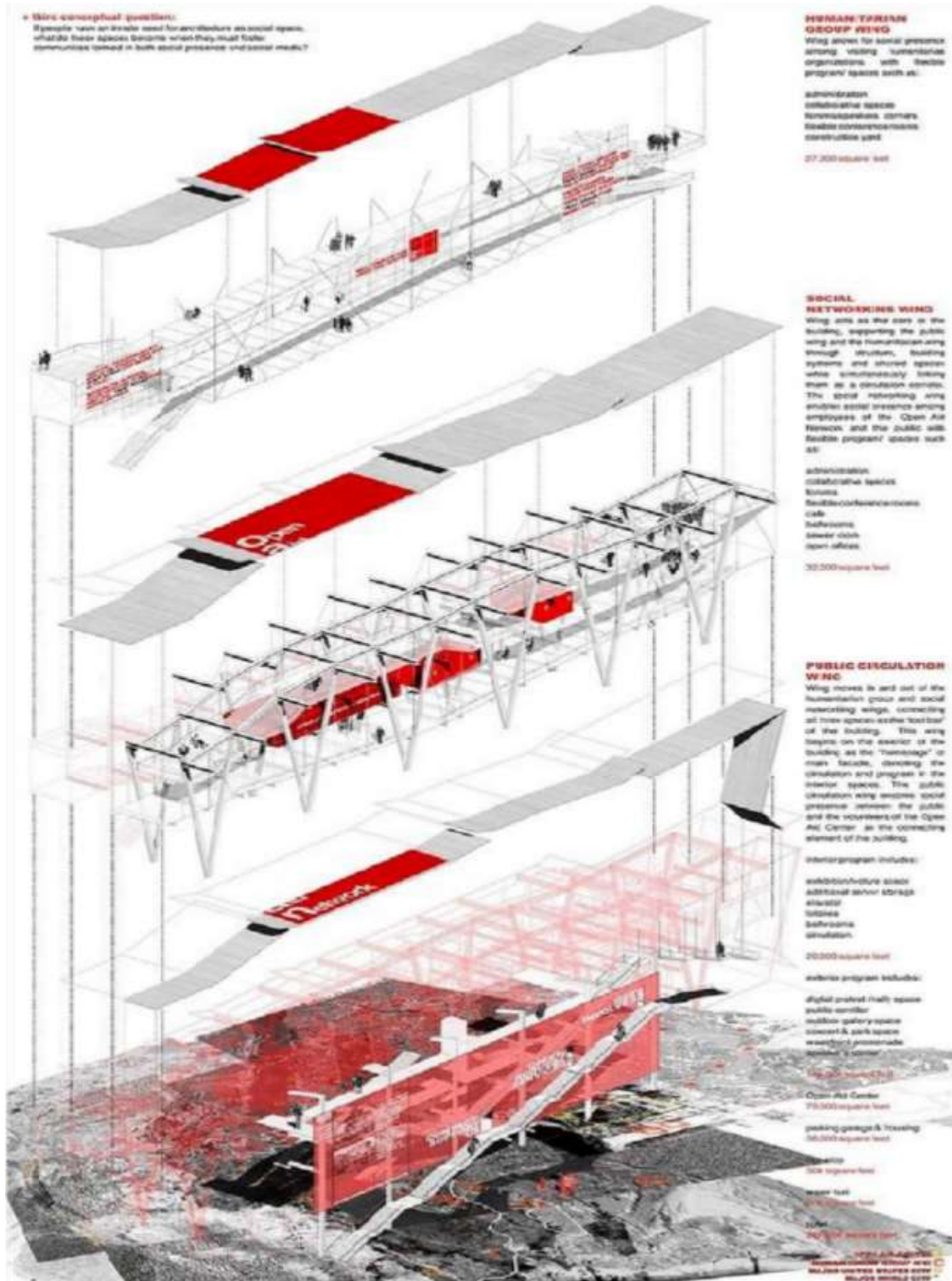
(To be a One Point Perspective view of the 3D Wall Section model)







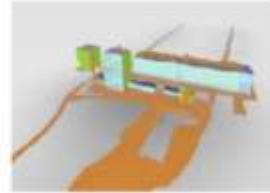
## Exploded Building / Site Axonometric:



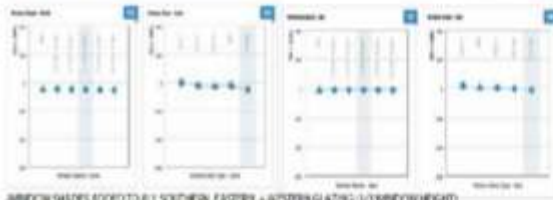
### Building Performance: (Synthesis Seminar)

## INSIGHT RESULTS + ENERGY EFFICIENCY MEASURES

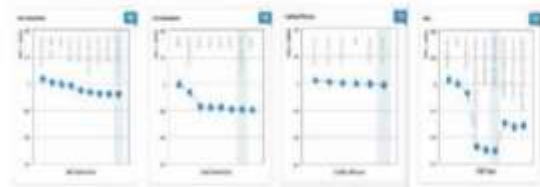
INSIGHT-THROUGH REVEAL ALLOWS FOR A BENCHMARK COMPARISON TO BE SET SO THAT A STUDY CAN BE DONE TO UNDERSTAND THE IMPROVEMENTS NECESSARY AND SUGGESTED TO ACHIEVE HIGHER ENERGY EFFICIENCY. THE GOAL IS TO ACHIEVE ENERGY EFFICIENCY BETWEEN THE ASHRAE 90.1 AND ASHRAE 2005 STANDARDS, WHICH IS ACCOMPLISHED FOLLOWING THE IMPLEMENTATION OF THE FOLLOWING DESIGN MODIFICATIONS:



## DESIGN IMPROVEMENTS, CONVENIENT RESULTS:



WINDOW SHADES ADDED TO ALL SOUTHERN, EASTERN + WESTERN GLAZING (1/3 WINDOW HEIGHT)  
WINDOWS ON ALL ELEVATIONS TO USE TRIPLE LOW-E GLAZING



WALL CONSTRUCTION TO BE 1" STRUCTURAL INSULATED PANELS (SIP) CONSTRUCTION WITH  $R_{\text{VALUE}} = 10$  AND CONSTRUCTION TO CONTAIN STRUCTURAL INSULATION CLAMPERS AT LEAST 10" THEN 1" TO COMPRESS 1" DEPTH OF RIGID INSULATION. WALL DESIGN UTILIZES 1" SIP PANEL + 1" RIGID BATT INSULATION, TOTAL  $R_{\text{VALUE}} = 12$ . U-VALUE EFFICIENCY TO BE 0.27 W/M<sup>2</sup>.

AIR-SEAL SYSTEM TO BE HIGH-EFFICIENCY HEAT PUMP EXHAUST/INLET SYSTEM.

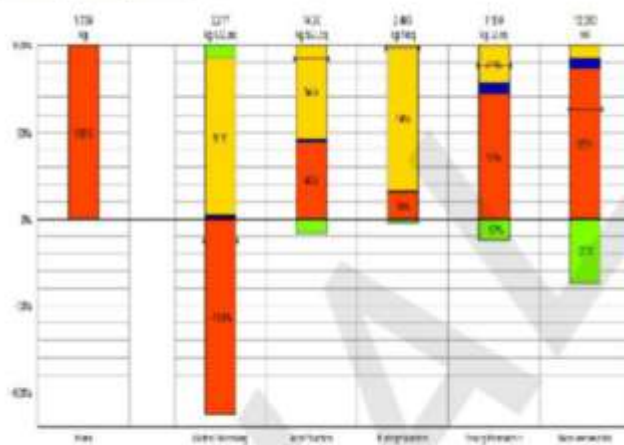




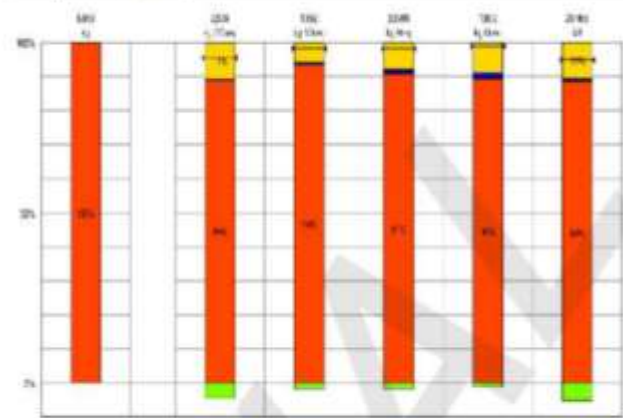
## Environmental Impact: (Synthesis Seminar)

### CLT vs Reinforced Concrete

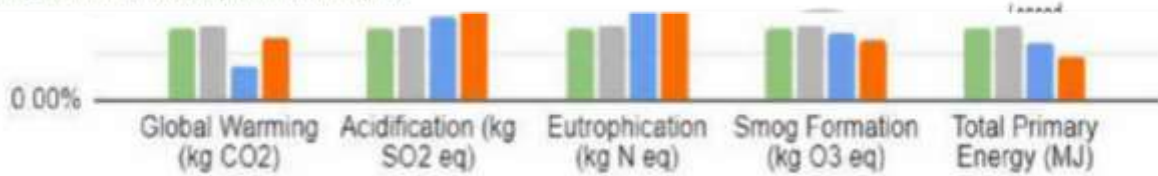
Results per Life Cycle Stage CLT



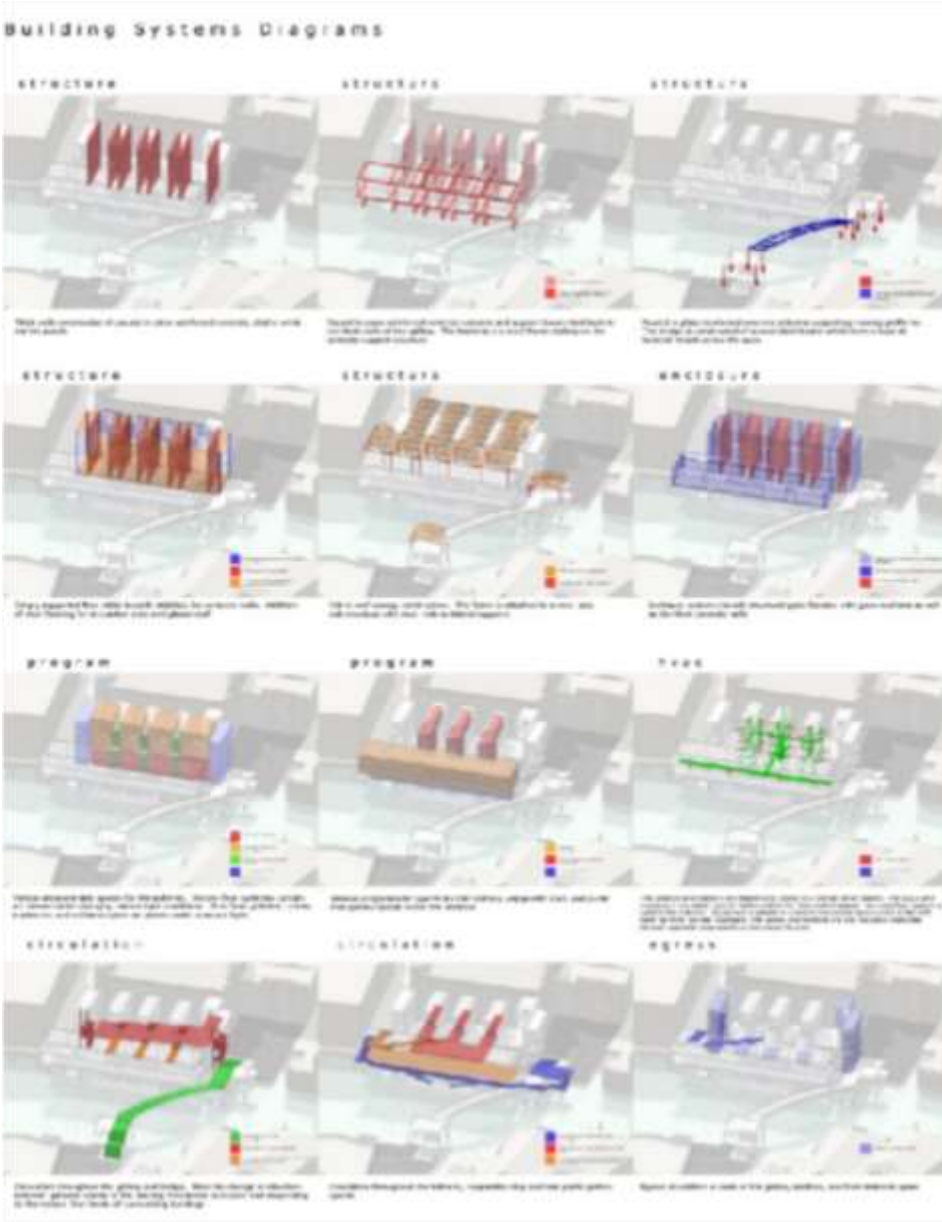
Results per Life Cycle Stage CONCRETE



-Life Cycle Analysis comparison between CLT + Concrete shows: the amount of carbon sequestered in the Product stage of material development, as well as the proportionally large effect of the end of life of CLT (it either is burned or decays unless reused or recycled).



### Comparable Architectural and Building Systems 3D Diagrams:





## Building Systems

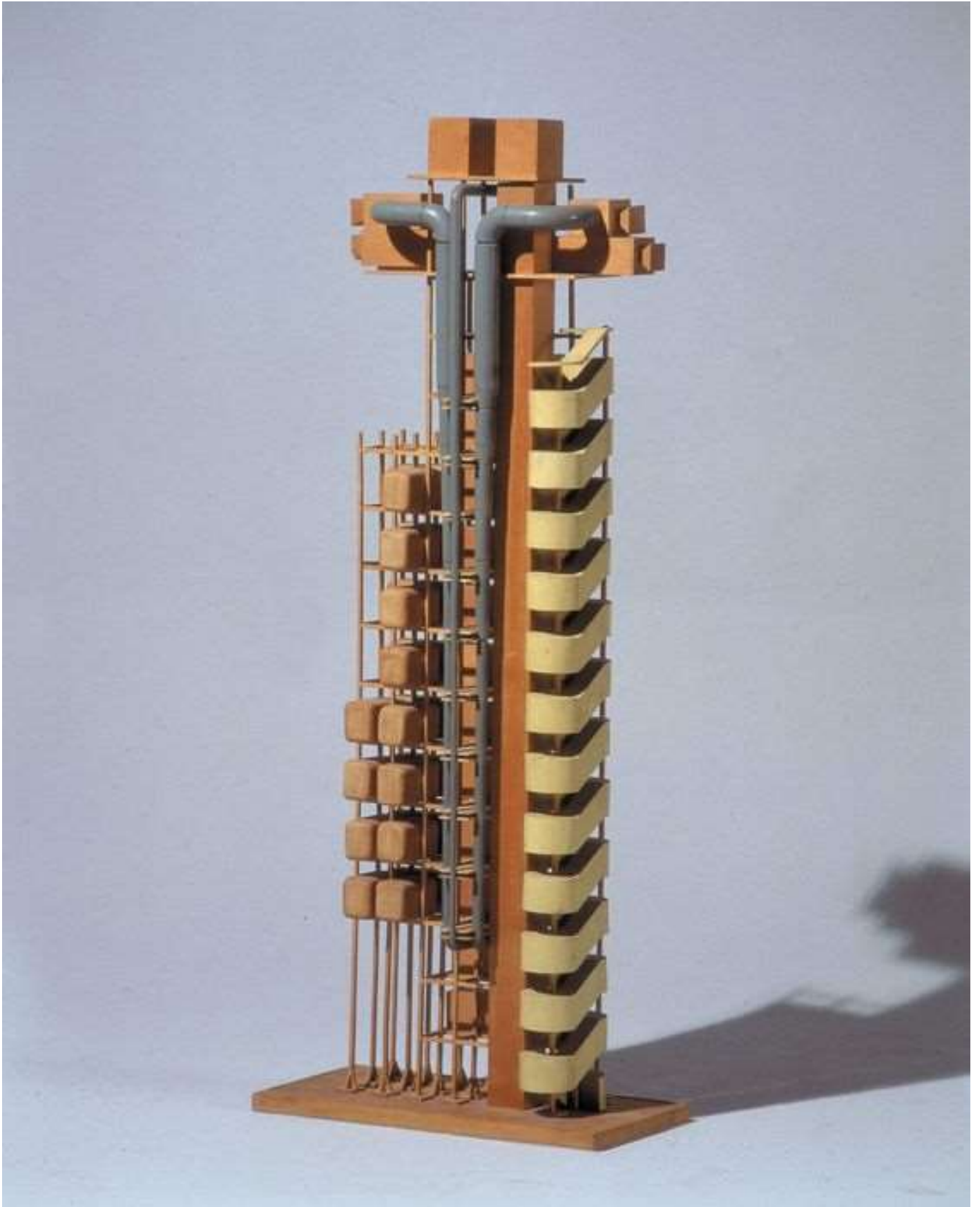


## HVAC Systems



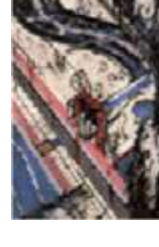
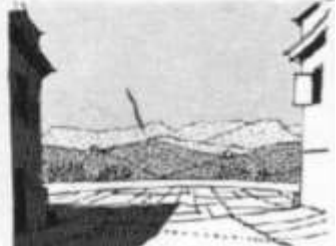
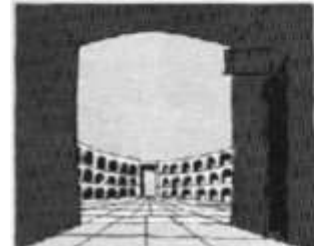
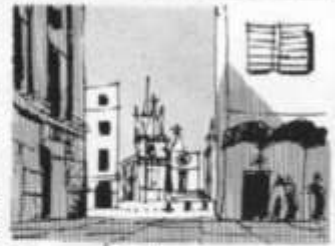


HVAC Systems



Egress, Public Circulation and HVAC Systems

**Serial Views:** Series of Exterior and Interior Sequence taken from eye level.



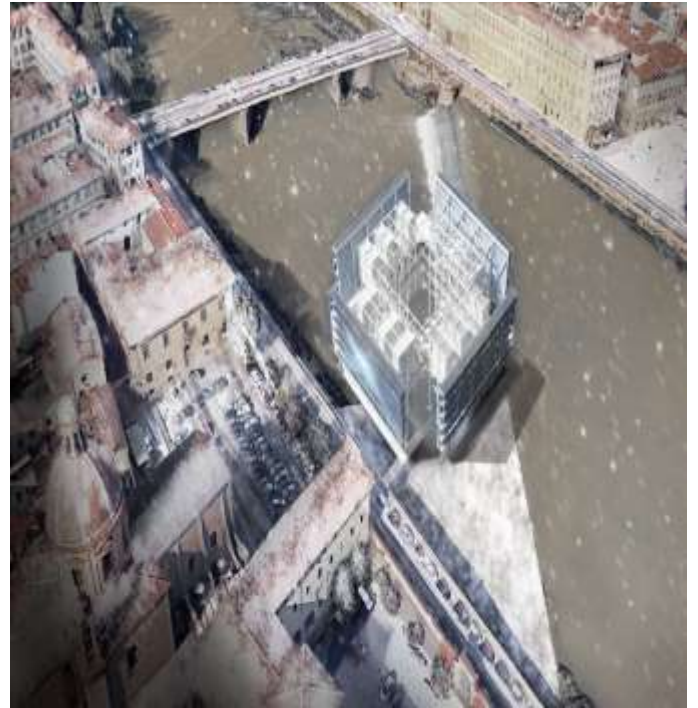


**Contextual Views:** Design superimposed on photographs of the context, from eye level and above.







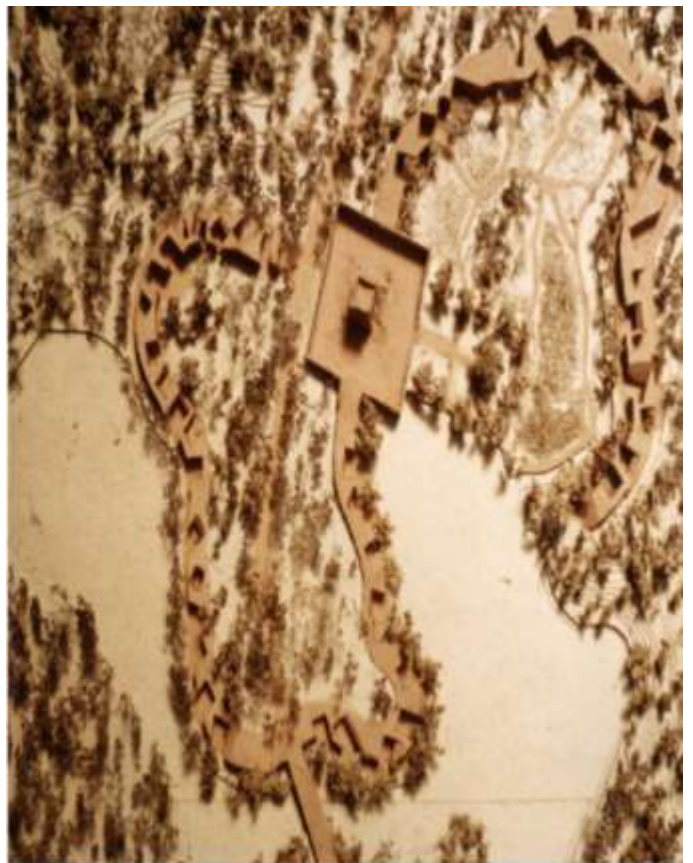
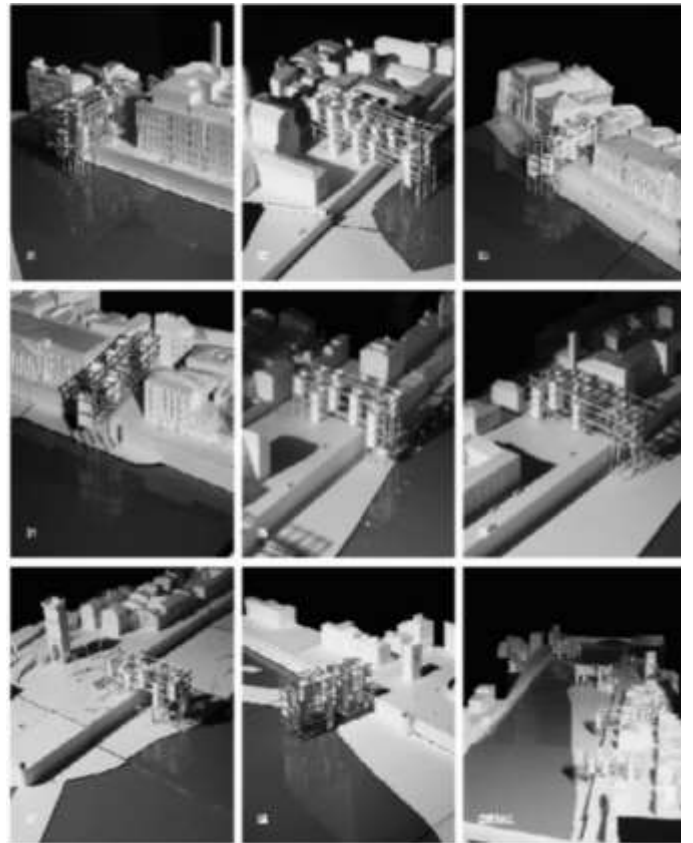


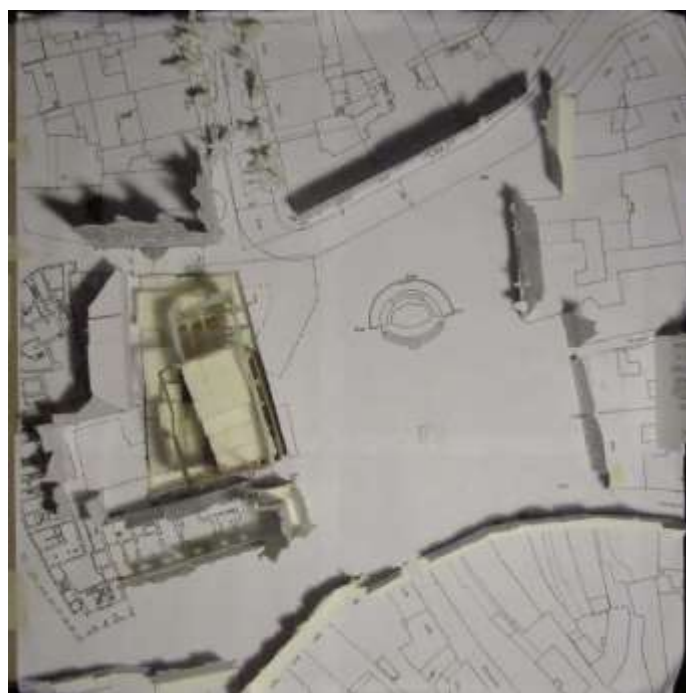




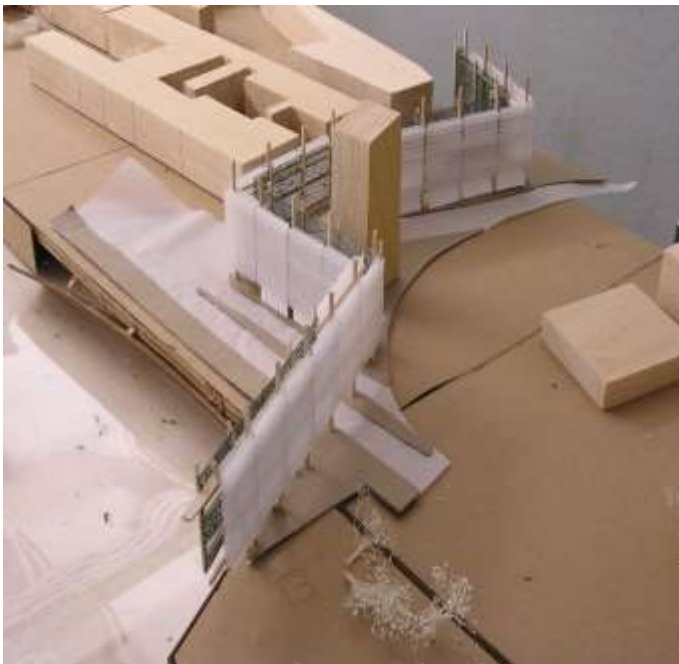
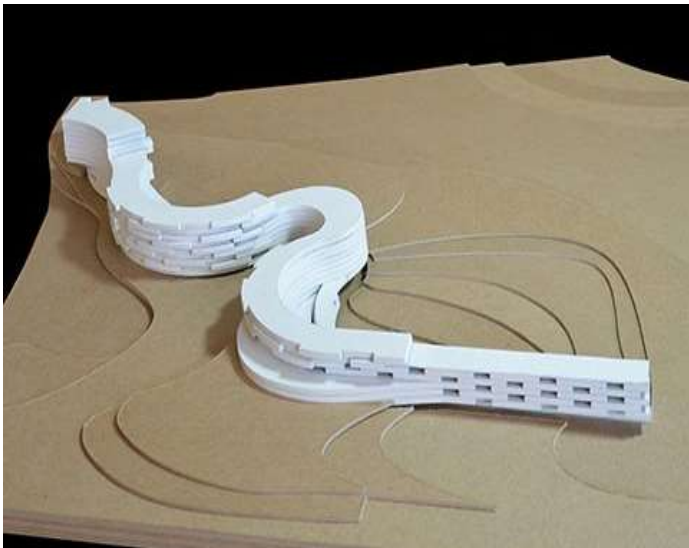


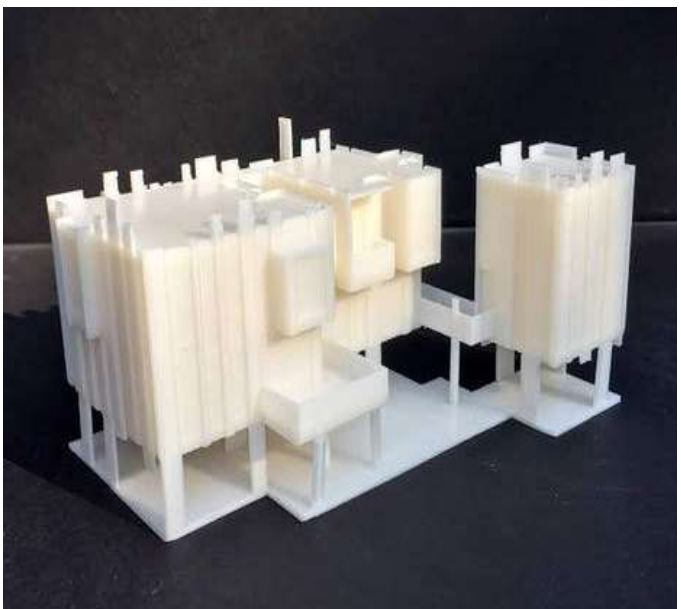
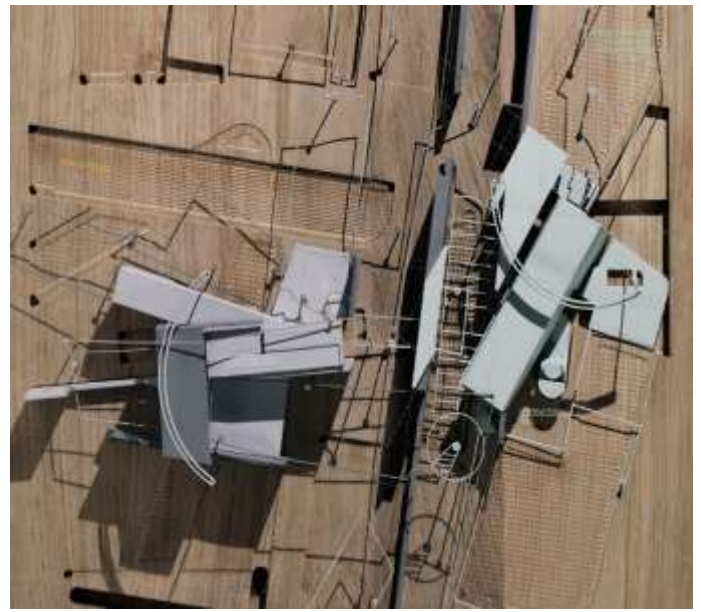
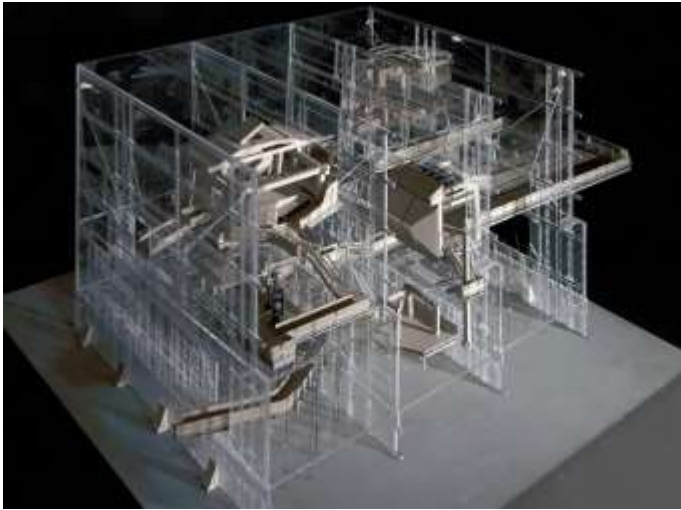
**Physical Models:** Conceptual Design, Schematic Design, Design Development & Final Review



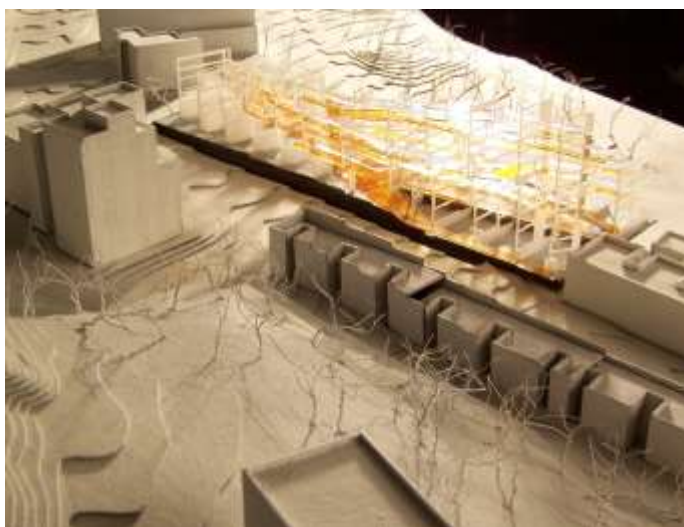
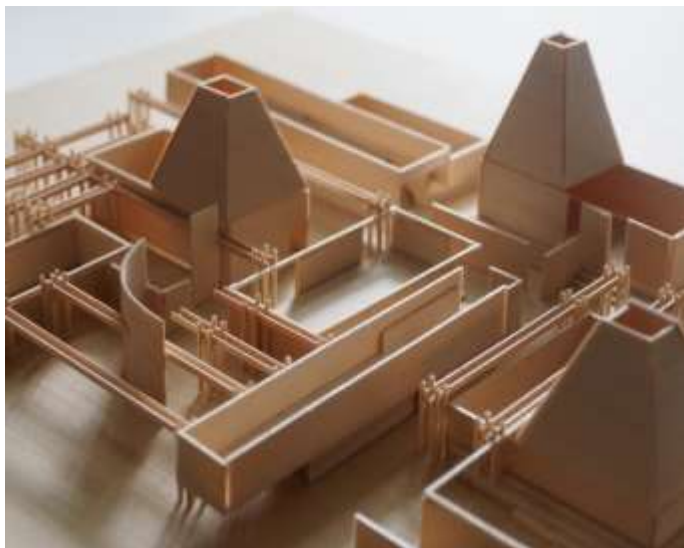






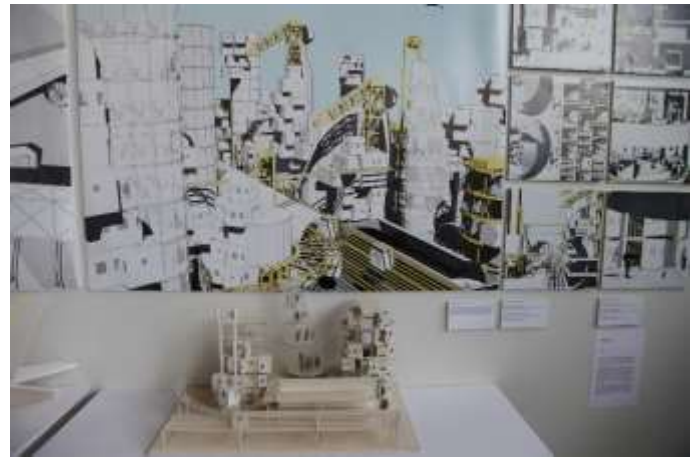








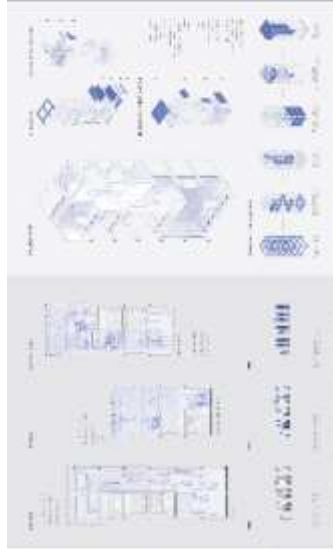
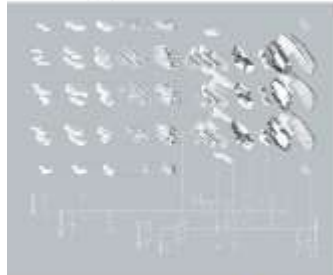
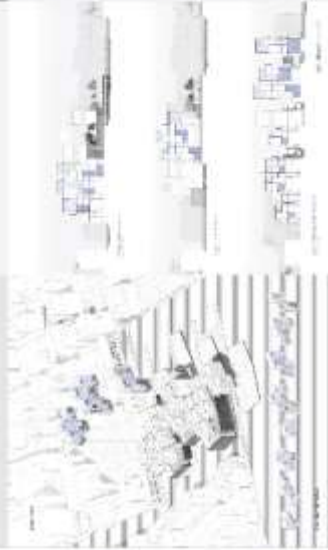
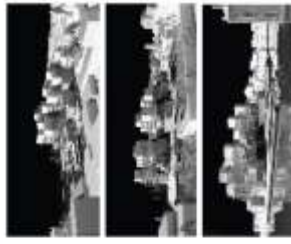
**Final Review:** Poster, Digital Display & Physical Models



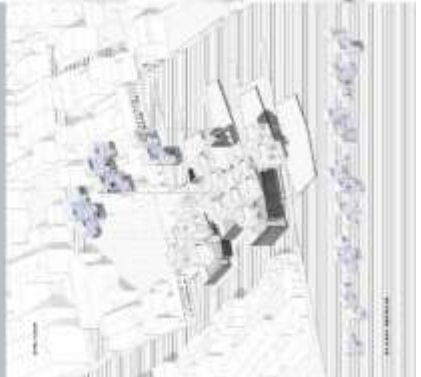
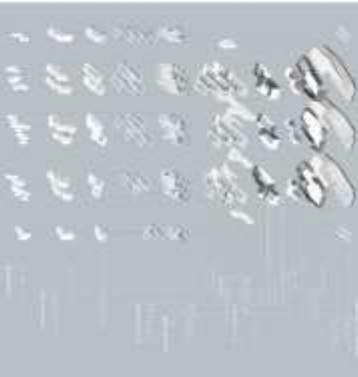
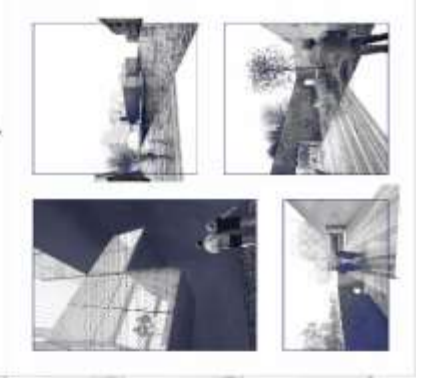
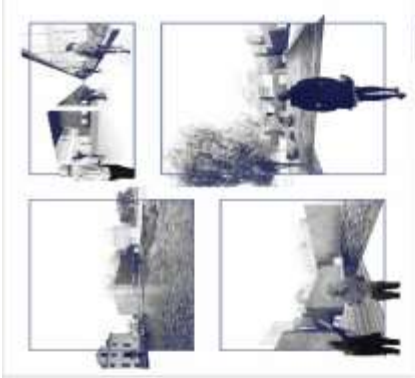
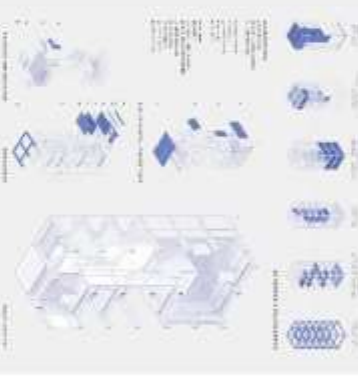
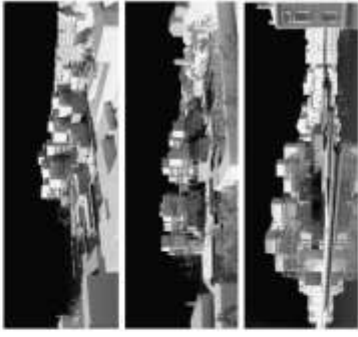


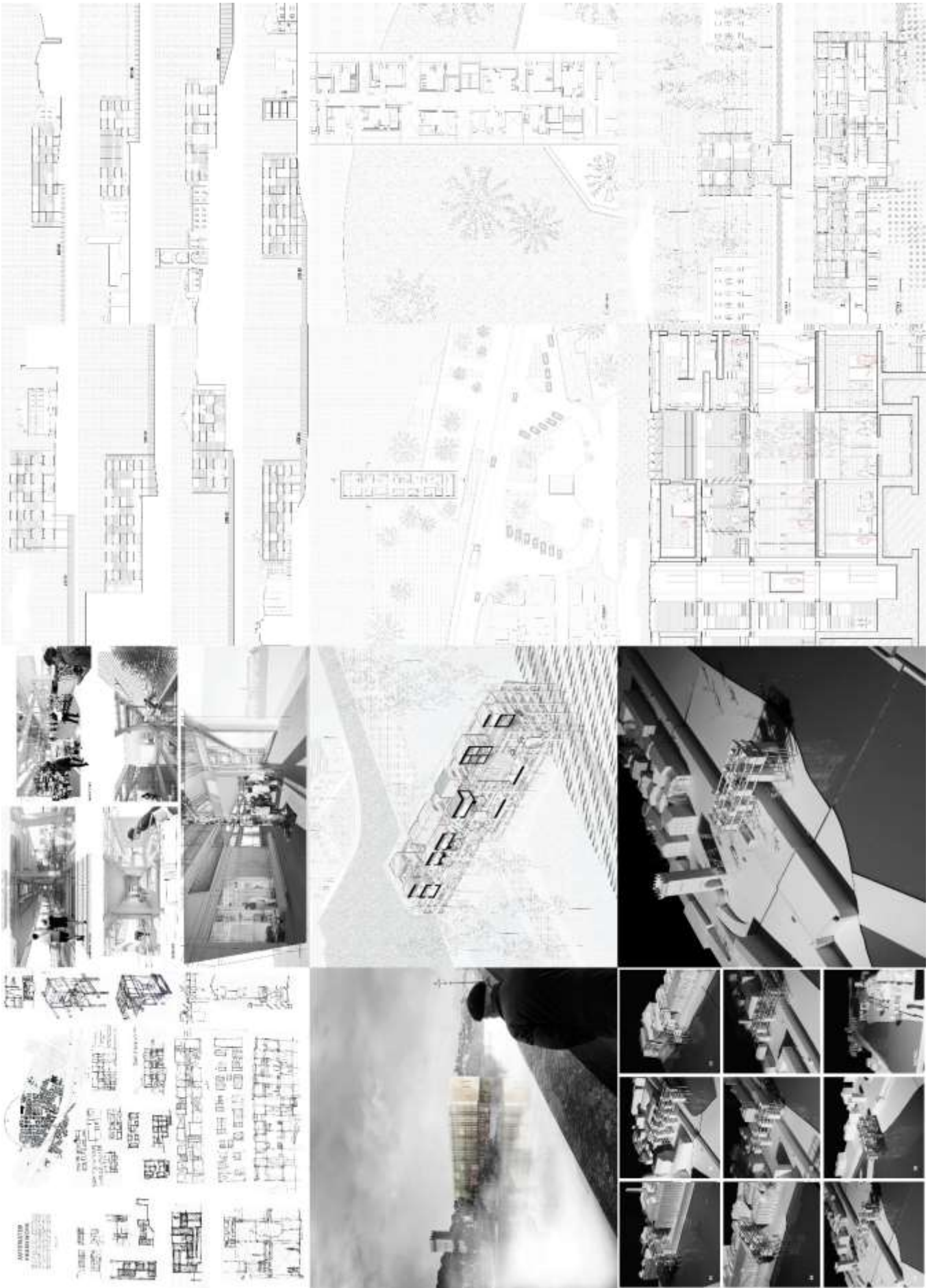
## Final Presentation: Printed Posters



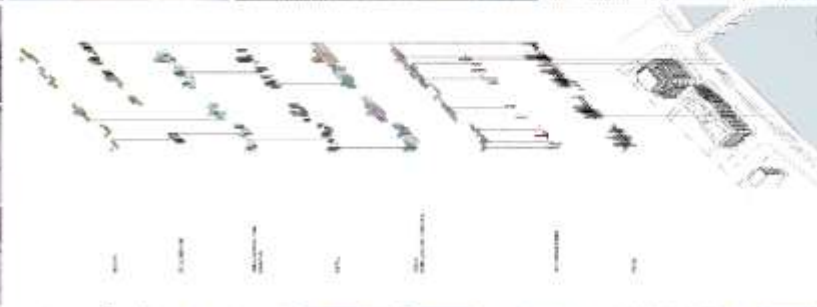
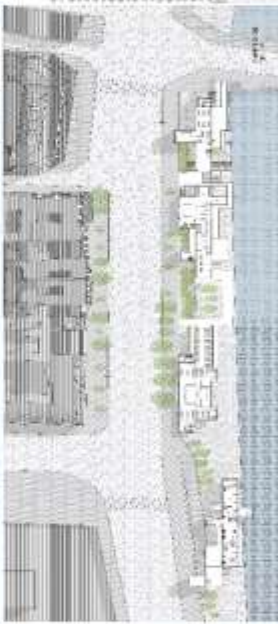
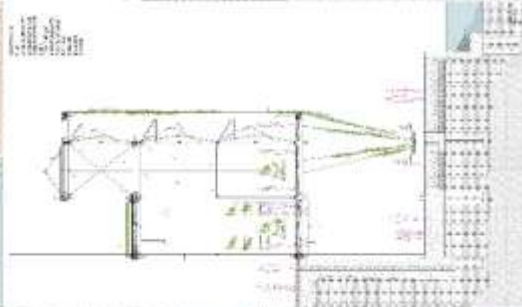
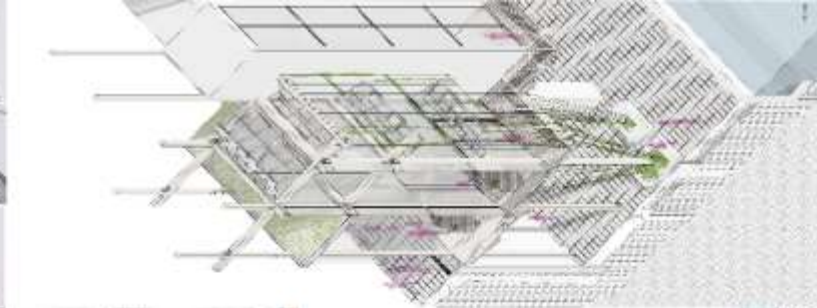












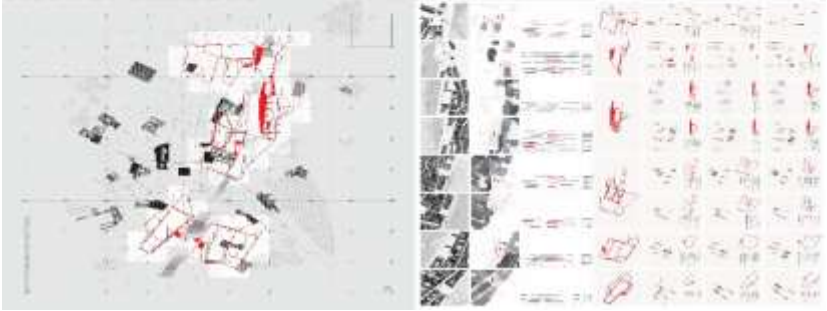
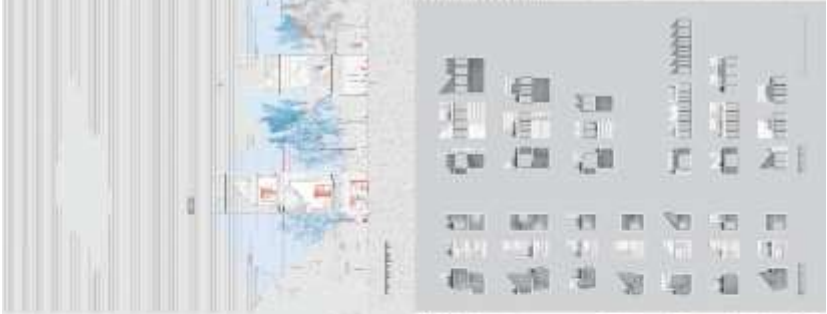
# **QUE-EXCERPTS** **AND ADVANTAGE**

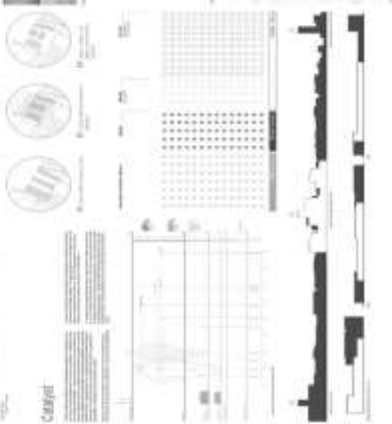
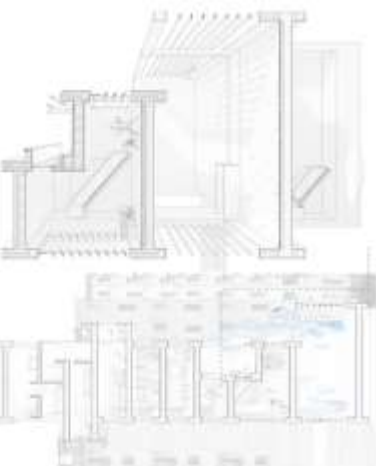
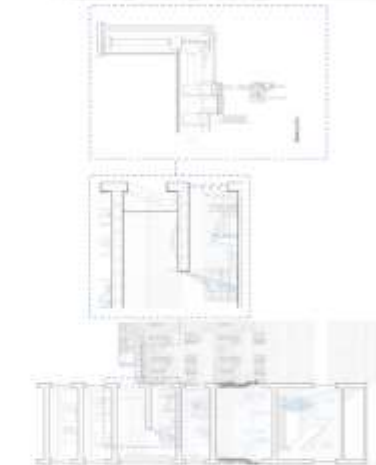
The project is a multi-phase development that includes a mix of residential, commercial, and public spaces. The design is based on a series of principles that guide the development of the project. The first principle is the need to create a vibrant, walkable community. The second principle is the need to preserve and enhance the natural environment. The third principle is the need to create a sense of place and identity. The fourth principle is the need to create a sense of community and belonging. The fifth principle is the need to create a sense of safety and security. The sixth principle is the need to create a sense of pride and ownership. The seventh principle is the need to create a sense of responsibility and stewardship. The eighth principle is the need to create a sense of hope and optimism. The ninth principle is the need to create a sense of joy and happiness. The tenth principle is the need to create a sense of peace and harmony.



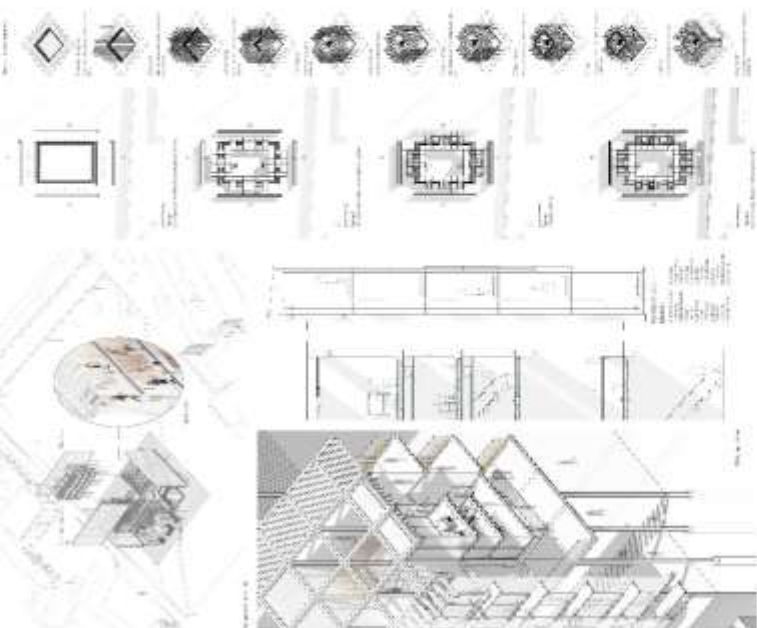
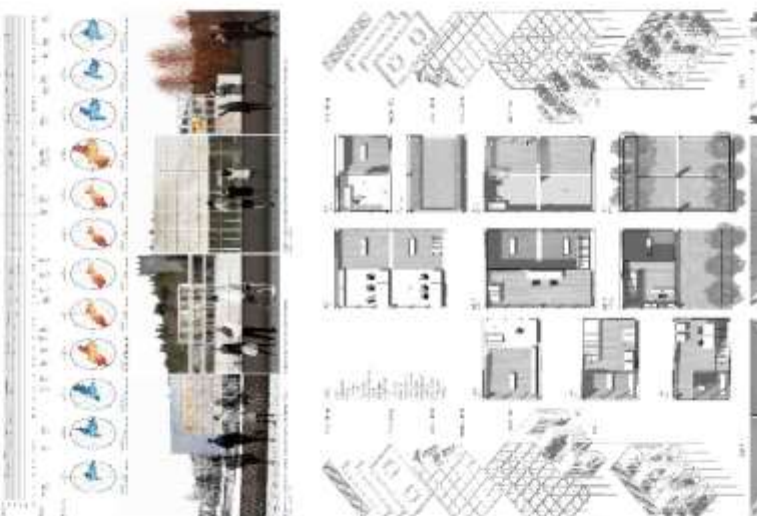
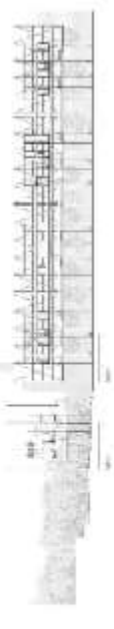
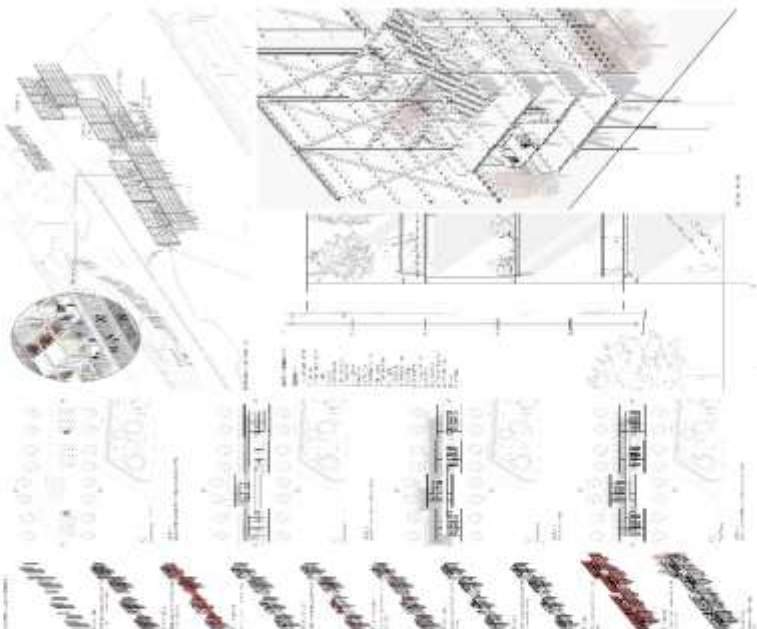




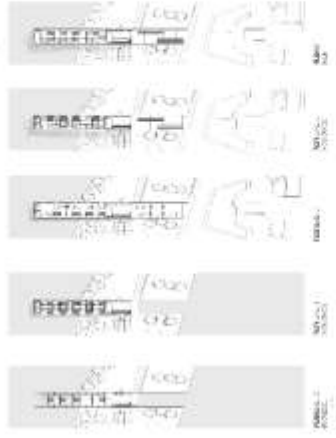








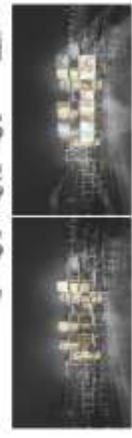
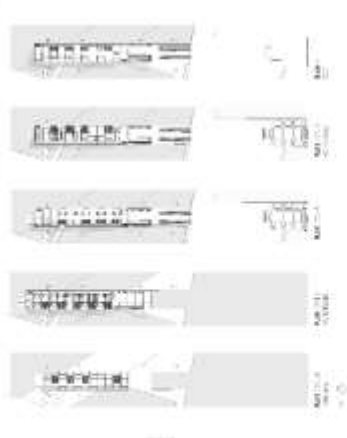
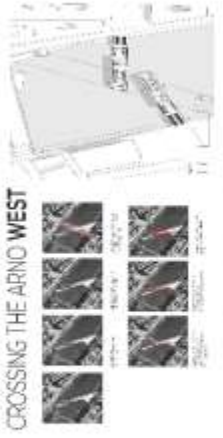
## CROSSING THE ARNO EAST



Architectural drawings for 'Crossing the Arno East'.



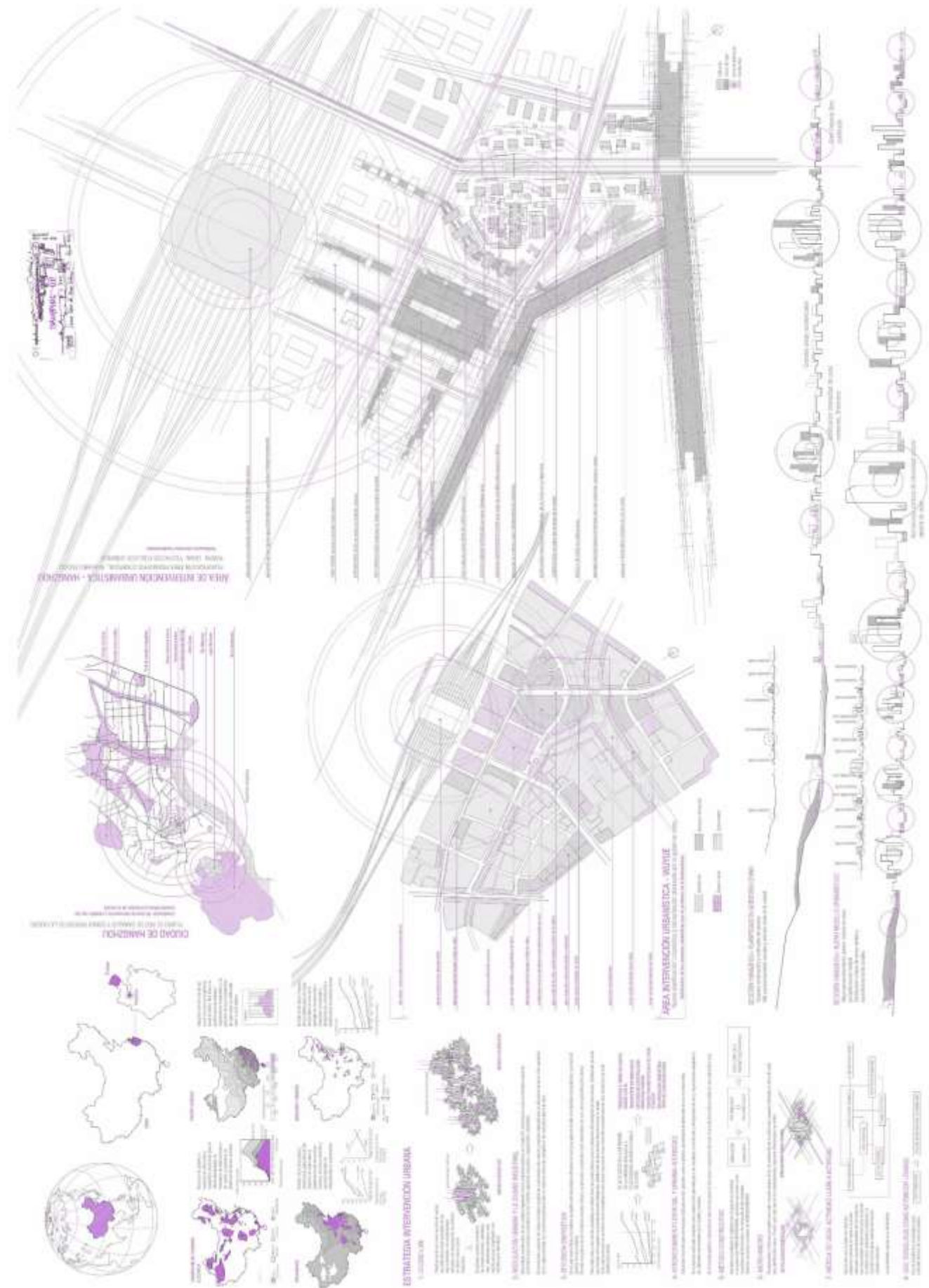
## CROSSING THE ARNO WEST







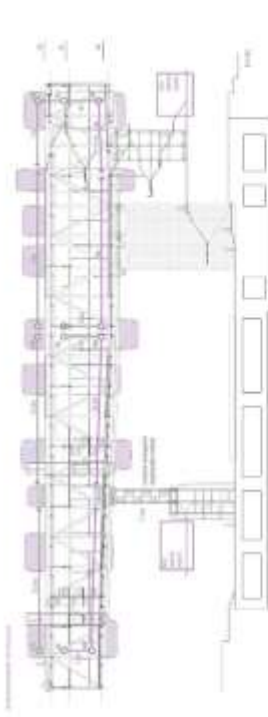
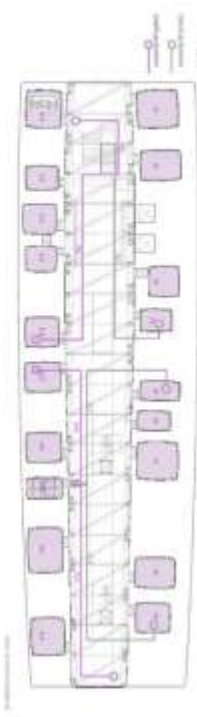
**Presentation:** Examples of Sample Boards





**000000**

**Figure 1** illustrates the experimental setup. The subjects were seated in a comfortable position, and the head was stabilized using a custom-built device. The subjects were instructed to maintain a neutral head position throughout the experiment. The subjects were then exposed to a series of visual stimuli, which were presented on a computer monitor. The stimuli consisted of a sequence of images showing the head in different positions, which were used to determine the head position at the time of the accident. The subjects were then asked to provide a verbal report of the head position at the time of the accident. The results of the experiment are presented in Table 1.



INTERNATIONAL JOURNAL OF

the authors' knowledge, no other studies have examined the effects of a single session of a group-based, non-physical, self-management program on the health of people with chronic low back pain. The authors are aware of only one other study that examined the effects of a group-based self-management program on the health of people with chronic low back pain. This study was a 12-week, randomized, controlled trial that compared the effects of a group-based self-management program with a control group. The results of this study showed that the group-based self-management program had a significant positive effect on the health of people with chronic low back pain.



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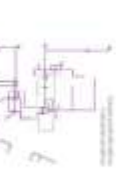


Diagram illustrating the structure of a cell, showing a nucleus and a vacuole.



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2010



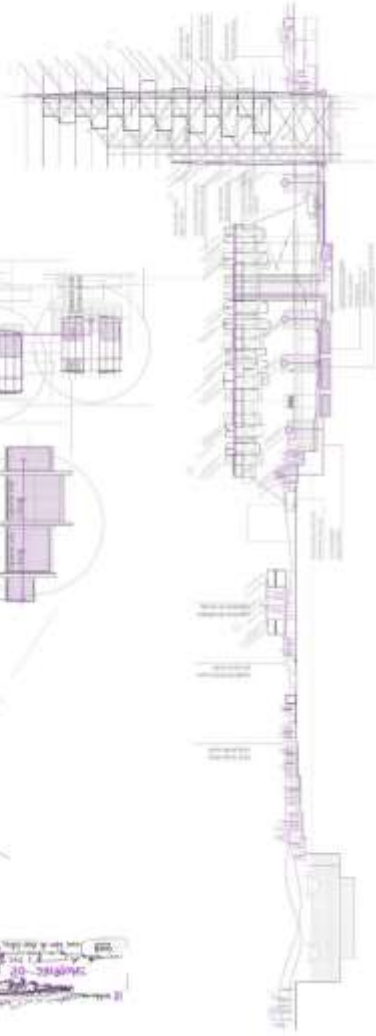
Journal of Management Education 35(1)



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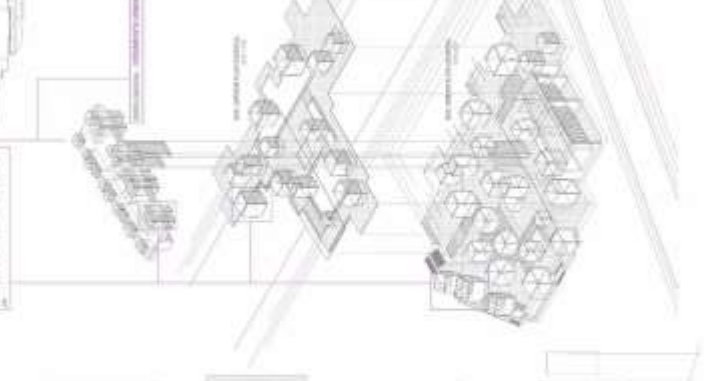
**ÁREA FINANCIERO COMERCIAL Y ESPACIO PÚBLICO**  
 El área financiera comercial y espacio público se define por la presencia de edificios de gran altura, que albergan oficinas, bancos, centros comerciales y espacios públicos.

**OTR**  
 OTRAS ÁREAS DE INTERÉS

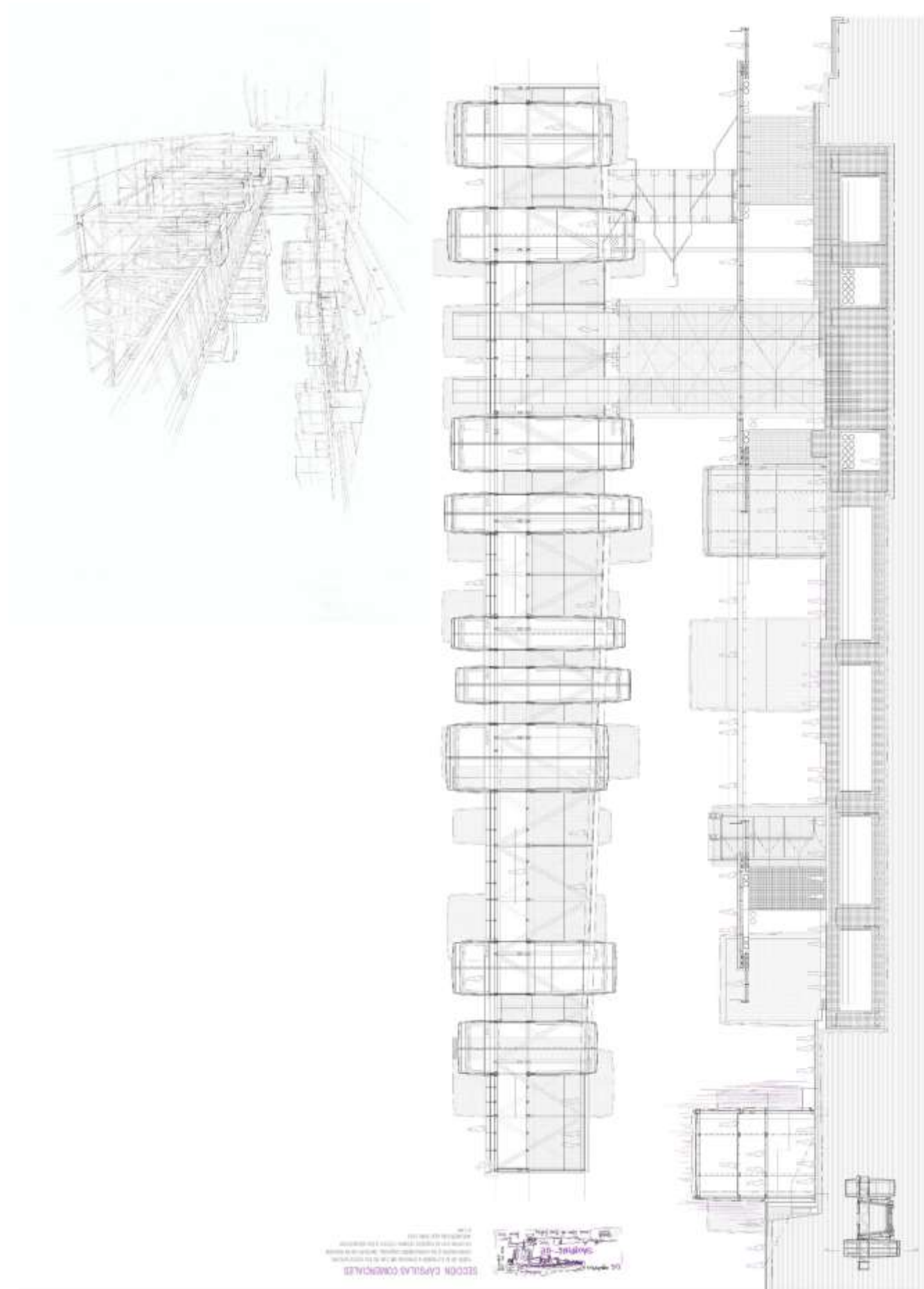


**CONCEPTOS DE CREACIÓN DE ÁREAS FINANCIERO COMERCIAL Y ESPACIO PÚBLICO**  
 PARA LA ORGANIZACIÓN DEL TERRITORIO Y LA INTEGRACIÓN DEL ESPACIO PÚBLICO EN EL URBANISMO.

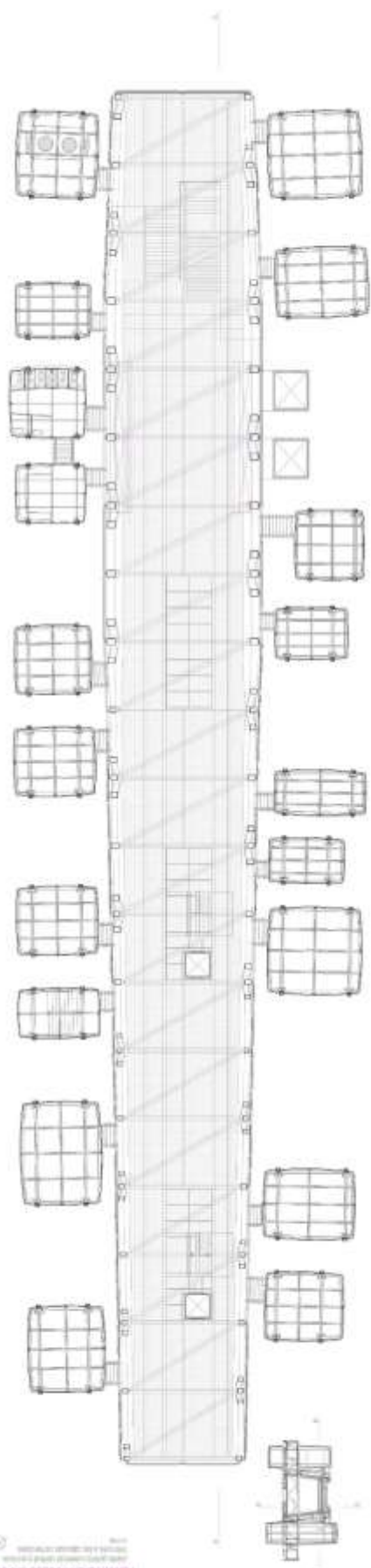
1. **CONCEPTOS DE CREACIÓN DE ÁREAS FINANCIERO COMERCIAL Y ESPACIO PÚBLICO**  
 El concepto de creación de áreas financieras comerciales y espacio público se define por la presencia de edificios de gran altura, que albergan oficinas, bancos, centros comerciales y espacios públicos.
2. **CONCEPTOS DE CREACIÓN DE ÁREAS FINANCIERO COMERCIAL Y ESPACIO PÚBLICO**  
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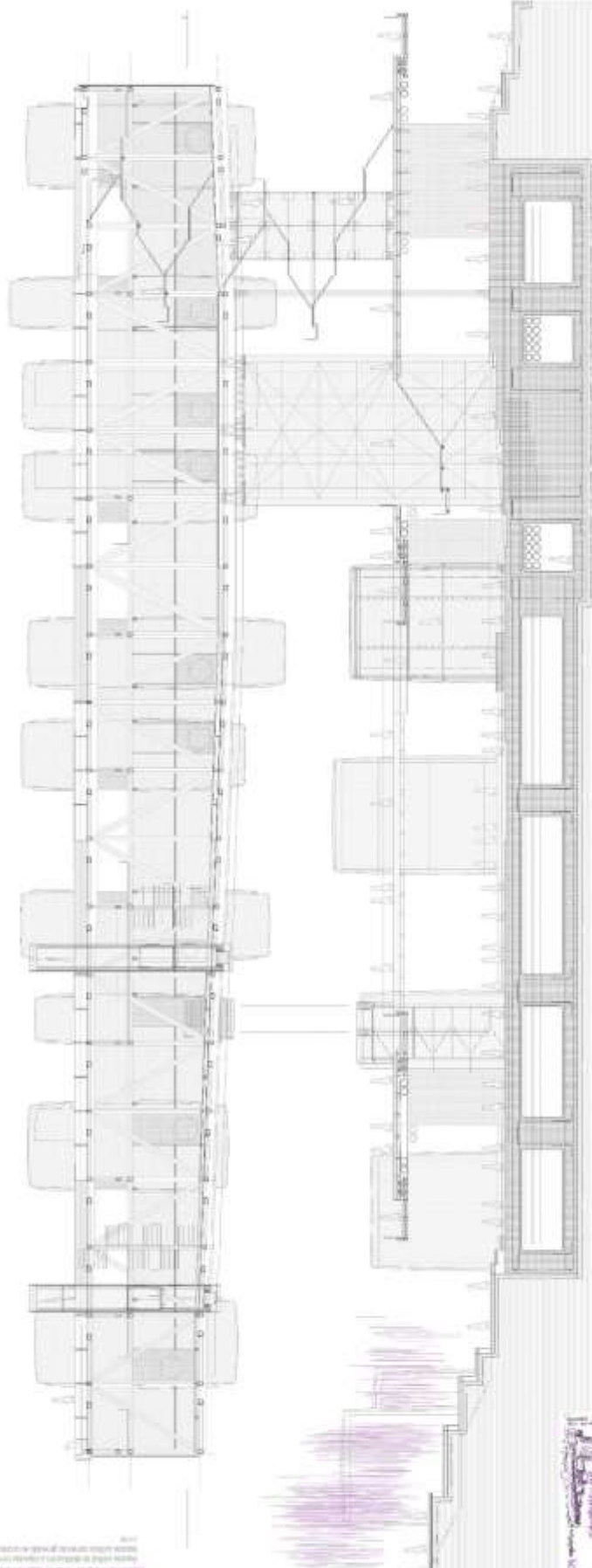




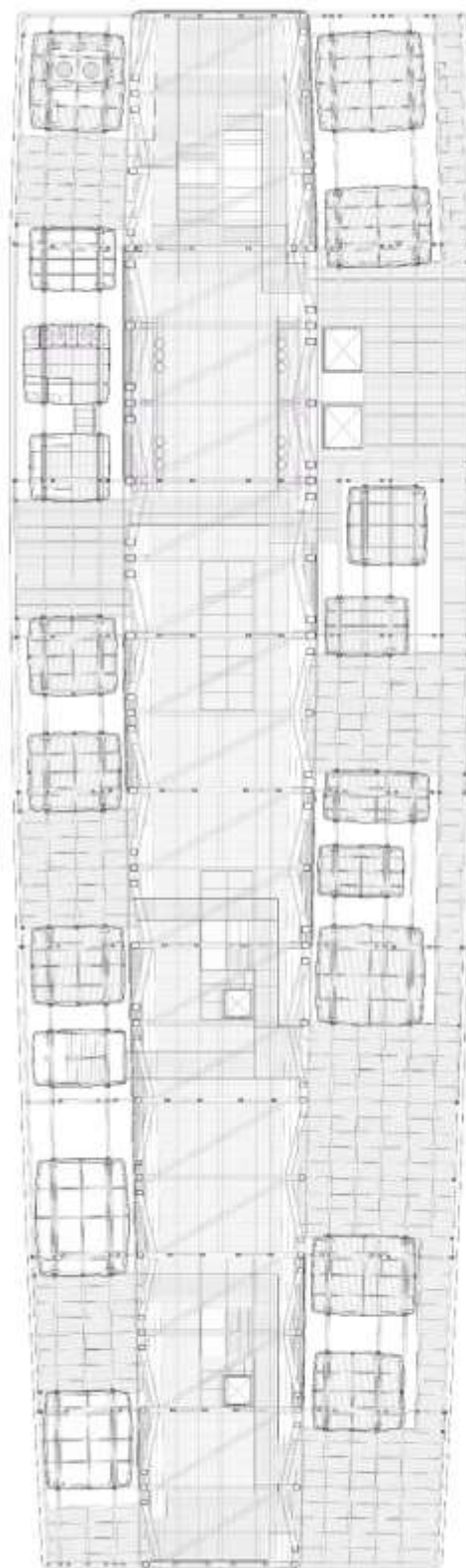
PLANTA SUA ACCESO CAPSULA



SECCION CENTRAL, SALIDA COMERCIAL



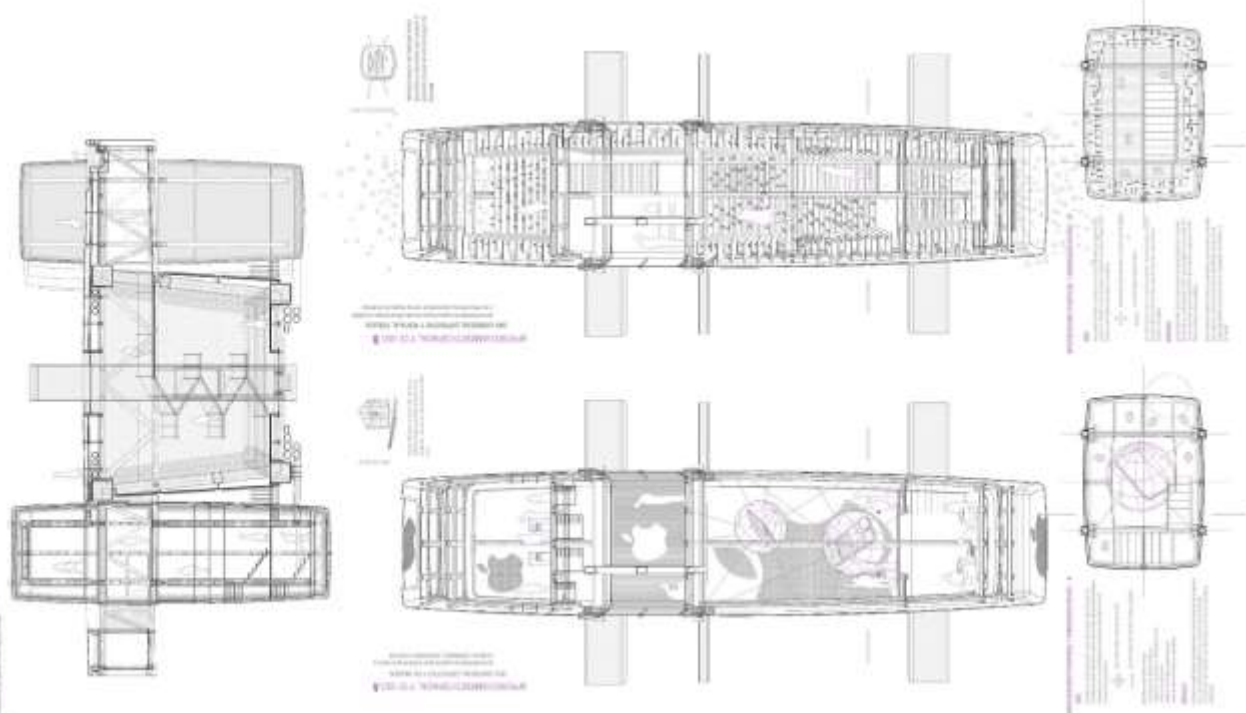
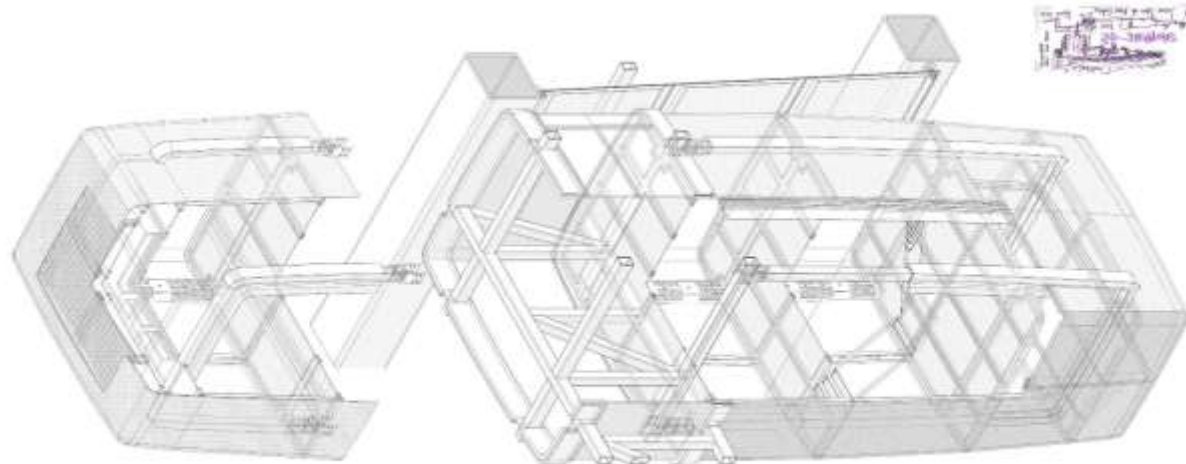




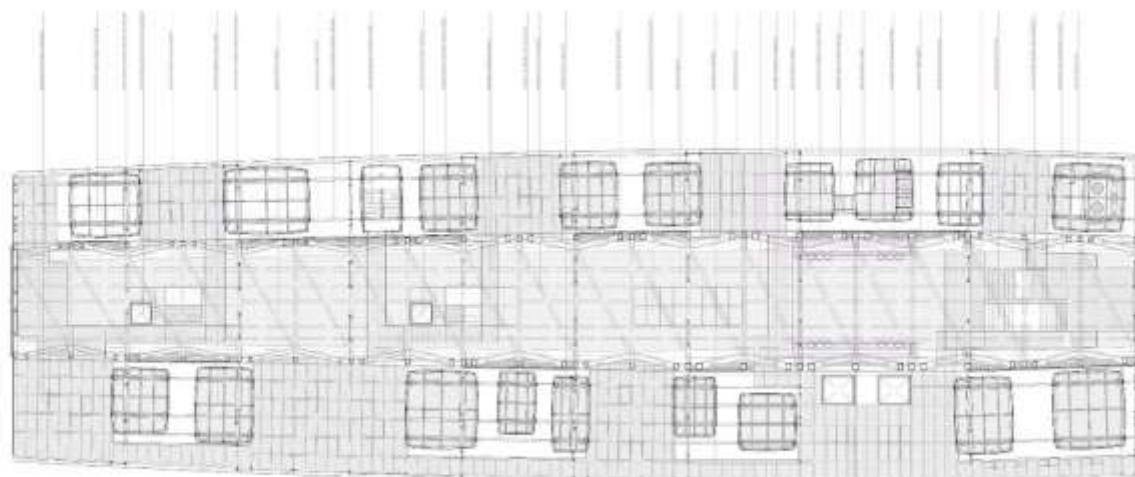
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WOOD FRAMEWORK DETAIL CONSTRUCTION



WOOD FRAMEWORK DETAIL CONSTRUCTION





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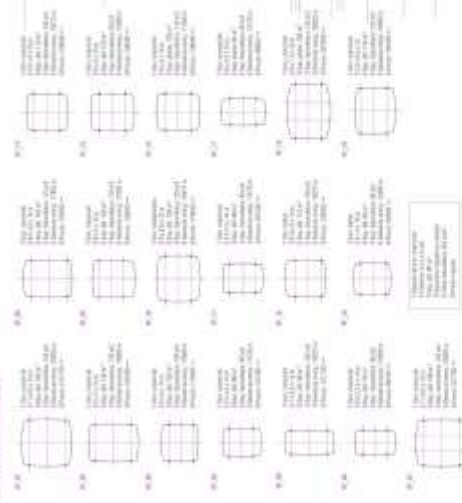
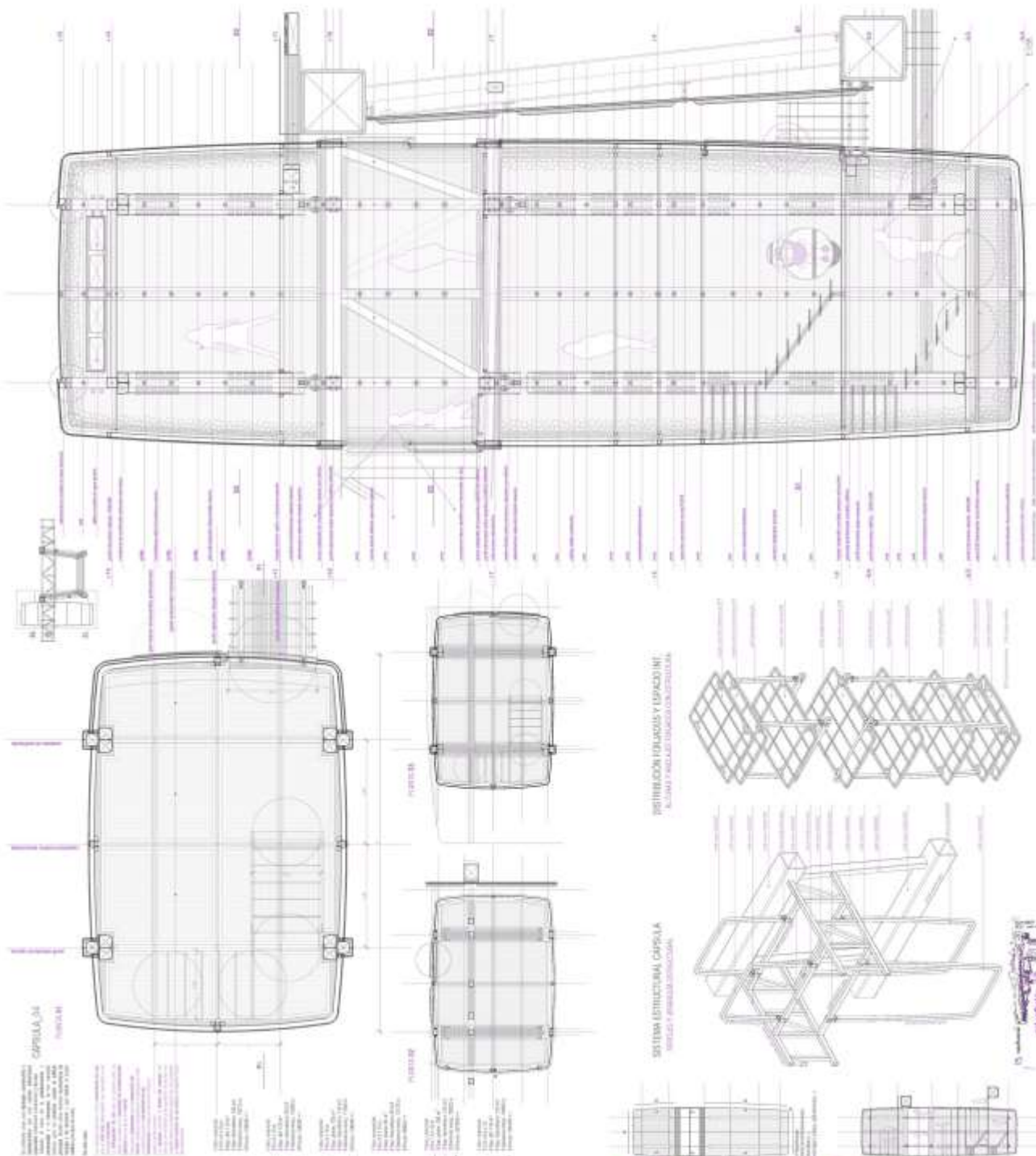
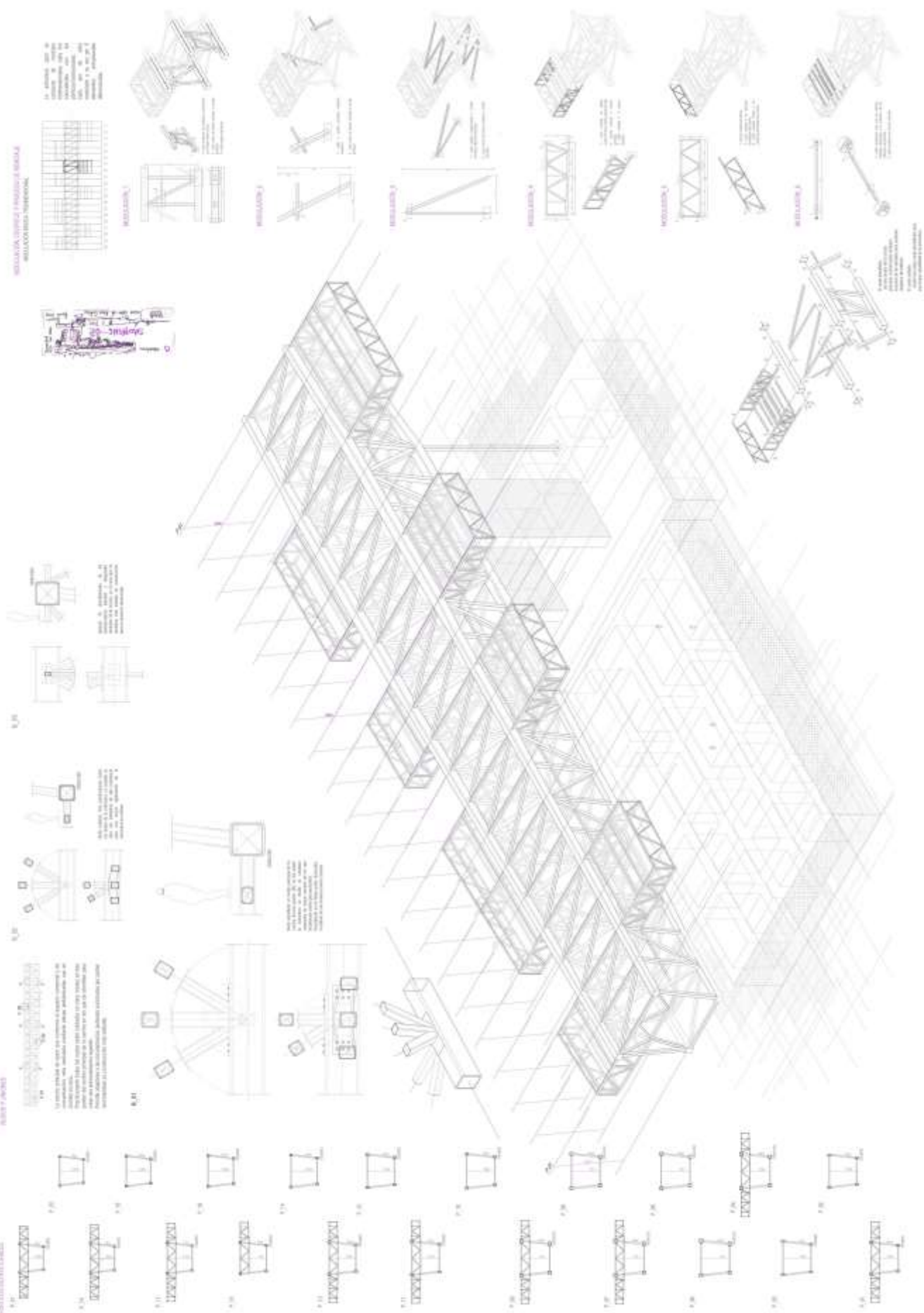


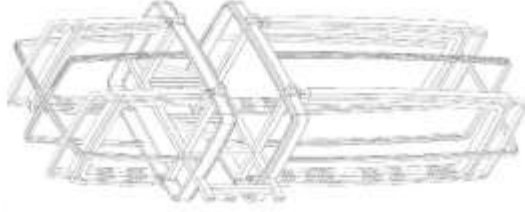
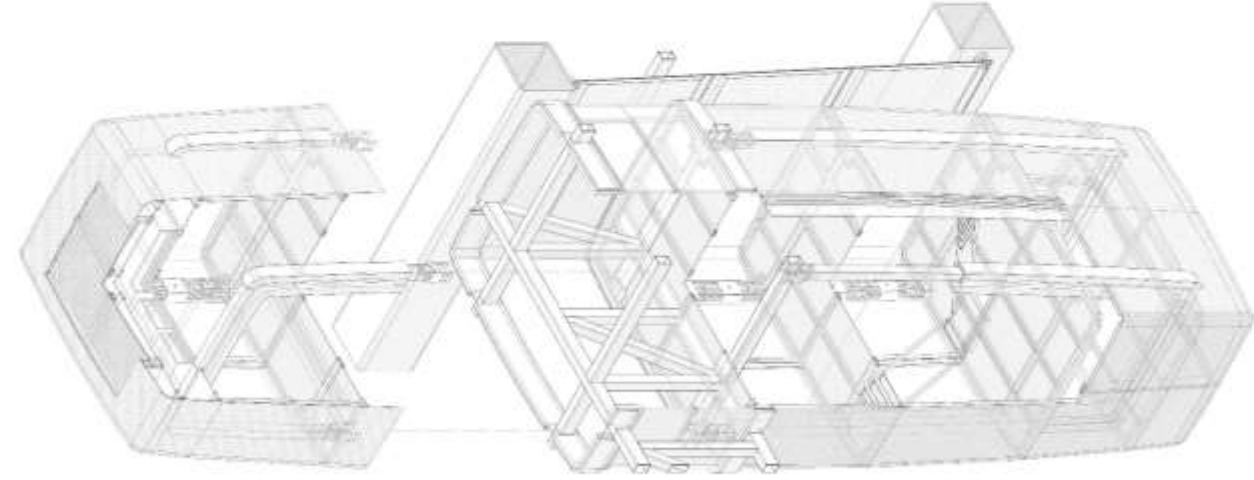
Figure 10.10 illustrates the construction of a ship's hull from a plan view, showing the progression from a basic outline to a detailed structure with internal stiffeners and bulkheads.

A 3D exploded view of a mechanical assembly. The components are numbered 1 through 14. The assembly consists of a base plate (1), a central vertical support (2), a horizontal support (3), a top plate (4), and various fasteners including screws (5, 6, 7, 8, 9, 10, 11, 12, 13) and a bolt (14). The components are shown in their relative positions as they would be assembled.

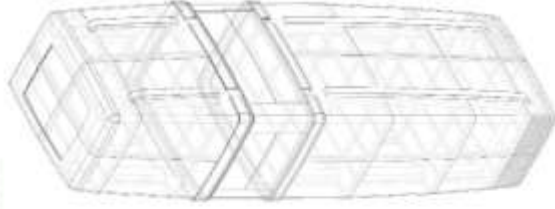








STRUKTUR BANGUNAN



STRUKTUR BANGUNAN

ZONA LIFTING CAPSULA

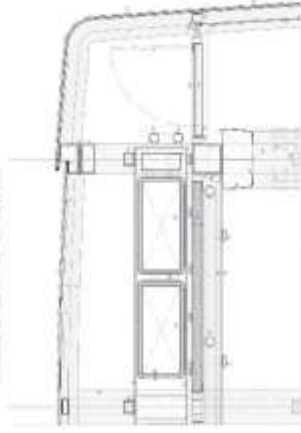
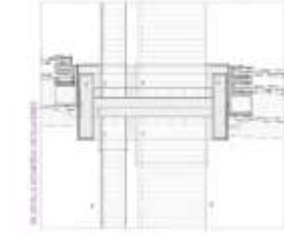


Diagrama ini menunjukkan detail struktur dari zona lifting kapsula. Struktur ini terdiri dari beberapa elemen utama, termasuk kolom, balok, dan sistem penyangga lainnya yang mendukung pergerakan kapsula. Detail ini menunjukkan bagaimana berbagai material dan sistem mekanis diintegrasikan untuk memastikan operasi yang aman dan efisien.

Detail ini menunjukkan bagaimana berbagai material dan sistem mekanis diintegrasikan untuk memastikan operasi yang aman dan efisien. Diagrama ini menunjukkan detail struktur dari zona lifting kapsula, termasuk kolom, balok, dan sistem penyangga lainnya yang mendukung pergerakan kapsula.

Diagrama ini menunjukkan detail struktur dari zona lifting kapsula. Struktur ini terdiri dari beberapa elemen utama, termasuk kolom, balok, dan sistem penyangga lainnya yang mendukung pergerakan kapsula. Detail ini menunjukkan bagaimana berbagai material dan sistem mekanis diintegrasikan untuk memastikan operasi yang aman dan efisien.

STRUKTUR BANGUNAN



STRUKTUR BANGUNAN

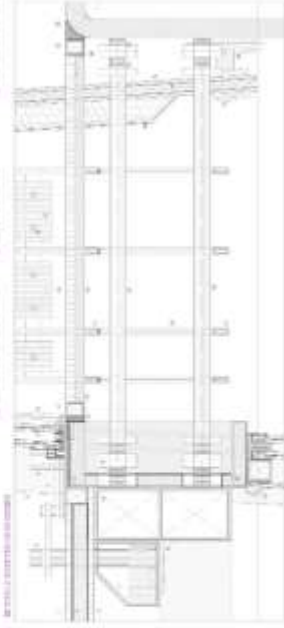
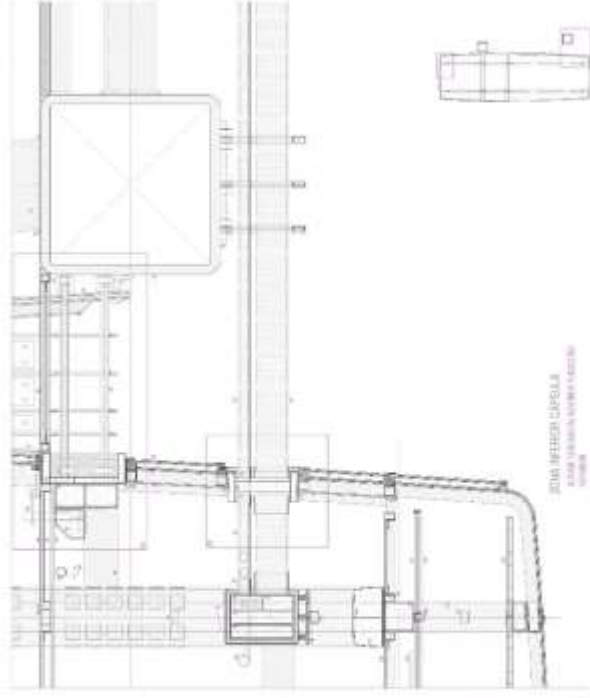
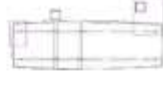


Diagrama ini menunjukkan detail struktur dari zona lifting kapsula. Struktur ini terdiri dari beberapa elemen utama, termasuk kolom, balok, dan sistem penyangga lainnya yang mendukung pergerakan kapsula. Detail ini menunjukkan bagaimana berbagai material dan sistem mekanis diintegrasikan untuk memastikan operasi yang aman dan efisien.

STRUKTUR BANGUNAN



STRUKTUR BANGUNAN





## Physical Models:

### A. Conceptual Design Model:



- Each student is to construct a physical site model at  $1/32" = 1'-0"$  scale.
- The base of the model must be the Google Earth aerial view, printed accurately to the  $1/32" = 1'-0"$  scale.
- The model should have "stage set" facades on "blocks" which match the size of the surrounding buildings, on all three sides that enclose the site.
- Provide properly scaled human figures.

### B. Schematic Design through Final Review Models in Studio Section Site Model:



- Physical model at  $1/16" = 1'-0"$ .
- The studio section's Schematic and Final Review site model includes the surrounding buildings, landscaping, reflective lagoon and canal surfaces, and people in and around the site, all in monochromatic colors.

# Chelsea Craft Guild, New York, N.Y.

## Criteria: Advanced Studio II & Synthesis Seminar

New Jersey School of Architecture / HCAD / NJIT

Spring 2025

John Cays, Victoria Diskina, Peter Dumbadze, Cleveland Harp, Vera Parlac, Duncan Reid, Marc Rosenbaum, Dincer Savaskan, Stephen Zdepski (Coordinator)

## Advanced Studio II Criteria and References:

### 1. Architectural History and Theory:

a. How architecturally sophisticated and significant are the conceptual and theoretical intentions of the proposed design?

b. How difficult, (i.e. how much risk) does the design concept engage?

c. How does the design's concept and technical development relate to contemporary architectural thought and praxis?

In what ways is the proposed design an extension of contemporary architectural theory(s)?

d. Overall, does the design, and its relationships between concept, context, program and technology, illustrate a level of sophistication and rigor appropriate to a "capstone" Advanced Studio within a professional degree in architecture?

e. How does the design illustrate the development of contemporary architecture which appropriately responds the dynamics of architecture including; seasonal variation, changes in weather and time of day, enhancing, completing and relating to the unique characteristics of its specific site and its context?

f. How does the design illustrate the development of contemporary architecture, which appropriately responds to the specific details, requirements and characteristics of the functional program, both the interior and exterior spaces?

g. How does the design illustrate the development of contemporary architecture, which appropriately integrates and synthesizes building technologies and systems, energy and sustainability performance, and materials / products selections?

h. How does the design illustrate the development of contemporary architecture whose aesthetic and experiential characteristics relate to the visual context, environmental performance and are aesthetically sophisticated?

i. Will the proposed architecture be valued over time as it represents Architecture within its time and place?

### References:

#### The Language of Architecture, Simitch and Warke

<https://ebookcentral-proquest-com.libdb.njit.edu:8443/lib/njit/detail.action?docID=3399961>

#### Analyzing Architecture, Simon Unwin

[https://www.amazon.com/Unwin-Student-Pack-Analysing-Architecture/dp/041571916X/ref=sr\\_1\\_1?dchild=1&keywords=analyzing+architecture&qid=1590078042&sr=8-1](https://www.amazon.com/Unwin-Student-Pack-Analysing-Architecture/dp/041571916X/ref=sr_1_1?dchild=1&keywords=analyzing+architecture&qid=1590078042&sr=8-1)

#### Architecture Principia, Borden and Andrews

<https://www.amazon.com/Architecture-Principia-Architectural-Principles-Material/dp/0131579657>

#### Design Analysis, Leupen, Grade, Korng

[https://primo-njit-edu.libdb.njit.edu:8443/discovery/fulldisplay?context=PC&vid=01NJIT\\_INST:NJIT&search\\_scope=MyInst\\_and\\_CI&tab=Everything&docid=hathi\\_trustmdp.39015041534507](https://primo-njit-edu.libdb.njit.edu:8443/discovery/fulldisplay?context=PC&vid=01NJIT_INST:NJIT&search_scope=MyInst_and_CI&tab=Everything&docid=hathi_trustmdp.39015041534507)

**Twenty Buildings Every Architect Should Understand, Simon Unwin**

<https://ebookcentral-proquest-com.libdb.njit.edu:8443/lib/njit/detail.action?docID=488050>

**Complexity and Contradiction in Architecture, Robert Venturi**

[https://assets.moma.org/d/pdfs/W1siZilsjlwMTkvMDcvMDEvOHl4MnI1aW1qcV9XZWJTYW1wbGVfQ29tcGxleGl0eV9Wb2xfMWwFuZDIucGRmIl1d/WebSample\\_Complexity\\_Vol\\_1and2pdf?sha=de7bd6b30f97ab4e](https://assets.moma.org/d/pdfs/W1siZilsjlwMTkvMDcvMDEvOHl4MnI1aW1qcV9XZWJTYW1wbGVfQ29tcGxleGl0eV9Wb2xfMWwFuZDIucGRmIl1d/WebSample_Complexity_Vol_1and2pdf?sha=de7bd6b30f97ab4e)

**Theoretical Anxiety and Design Strategies, Rafael Moneo**

[https://www.amazon.com/Theoretical-Anxiety-Strategies-Contemporary-Architects/dp/0262134438/ref=sr\\_1\\_1?dchild=1&keywords=theoretical+anxiety+moneo&qid=1590080081&s=books&sr=1-1](https://www.amazon.com/Theoretical-Anxiety-Strategies-Contemporary-Architects/dp/0262134438/ref=sr_1_1?dchild=1&keywords=theoretical+anxiety+moneo&qid=1590080081&s=books&sr=1-1)

**Points and Lines: Diagrams and Projects for the City, Stan Allen**

<https://www.amazon.com/Points-Lines-Diagrams-Projects-City/dp/1568981554>

**Forming and Centering, Kenneth Moffett**

[https://www.amazon.com/Forming-Centering-Foundational-Aspects-Architectural-ebook/dp/B01NAHYP16/ref=sr\\_1\\_1?dchild=1&keywords=Forming+and+Centering%2C+Kenneth+Moffett&qid=1590080215&s=books&sr=1-1](https://www.amazon.com/Forming-Centering-Foundational-Aspects-Architectural-ebook/dp/B01NAHYP16/ref=sr_1_1?dchild=1&keywords=Forming+and+Centering%2C+Kenneth+Moffett&qid=1590080215&s=books&sr=1-1)

**Theories and Manifestoes of Contemporary Architecture, Charles Jencks and Karl Kropf (eds.)**

[https://monoskop.org/images/d/d0/Jencks\\_Charles\\_Kropf\\_Karl\\_eds\\_Theories\\_and\\_Manifestoes\\_of\\_Contemporary\\_Architecture.pdf](https://monoskop.org/images/d/d0/Jencks_Charles_Kropf_Karl_eds_Theories_and_Manifestoes_of_Contemporary_Architecture.pdf)

**A Pattern Language, Christopher Alexander**

<https://archive.org/details/patternlanguage00chri/mode/2up>

**S M L XL, OMA / Rem Koolhaas**

[https://www.amazon.com/S-M-XL-Rem-Koolhaas/dp/1885254865/ref=sr\\_1\\_1?dchild=1&keywords=S+M+L+XL%2C+OMA+%2F+Rem+Koolhaas&qid=1590081063&s=books&sr=1-1](https://www.amazon.com/S-M-XL-Rem-Koolhaas/dp/1885254865/ref=sr_1_1?dchild=1&keywords=S+M+L+XL%2C+OMA+%2F+Rem+Koolhaas&qid=1590081063&s=books&sr=1-1)

**Contagious Architecture: Computation, Aesthetics, and Space, Luciana Parisi,**

<https://archive.org/details/ContagiousArchitectureComputationAestheticsAndSpace>

**Studies in Tectonic Culture, Kenneth Frampton**

<https://archive.org/details/studiesintectoni0000fram>

**The Conscience of the Eye, Richard Sennett**

<https://bibliodiarq.files.wordpress.com/2014/09/sennett-r-the-conscience-of-the-eye.pdf>

**Collage City, Colin Rowe and Fred Koetter**

[https://monoskop.org/images/2/23/Rowe\\_Colin\\_Koetter\\_Fred\\_Collage\\_City\\_1978.pdf](https://monoskop.org/images/2/23/Rowe_Colin_Koetter_Fred_Collage_City_1978.pdf)

## 2. Aesthetics and Architectural Design:

- a. Is there a consensus that the proposed design is "Architecture?"
- b. Is the design process and proposed project intend clearly legible, and illustrating rigorous conceptual thinking?
- c. Is the design well proportioned to its program and context, sophisticated in its selection of materials, textures and colors?
- d. Does the design illustrate and apply a sensitive understanding of human and contextual scale?
- e. Does the design illustrate appropriate architectural concepts and ordering systems, beyond simply functional relationships or abstract geometric forms such as: Abstract-Contextual Patterns, Heavy-Light, Mono-Multi-Type, Singular-Linearity-Network, Order-Disorder, Picturesque, Formal, Nodal, and Composite?
- f. Does the proposed design express and has a logical relationship to the nature of its materials?
- g. Does it illustrate a purposeful set of visual experiences including natural light and shadow, variations in mood or settings, variations in scale and experience?



## References:

### **A Language of Contemporary Architecture: An Index of Topology and Typology, Luna and Yim, Routledge**

An Architecture Notebook, Simon Unwin Spon Press

Analyzing Architecture, Simon Unwin; Spon Press

Analyzing: The Universal Language of Place-Making: Simon Unwin, Routledge

### **Anchoring, Steven Holl**

Architectural Composition; Rob Krier, Rizzoli

### **Atmospheres, Zumthor**

Compositions in Architecture: Don Hanlon, Wiley,

Design and Analysis, Bernard Leupen; Christoph Grafe;

Form and Centering: Moffett, Emerald Publishing

Informal (Architecture) Cecil Balmond, Prestel Publishing

Language of Space and Form: James Eckler, Wiley

Material Precedent; Gail Peter Borden, Wiley

### **Points and Lines: Diagrams and Projects for the City, Stan Allen**

Precedents in Architecture: Roger H. Clark; Wiley Paperback

### **S M L XL, OMA / Rem Koolhaas**

Studies in Tectonic Culture, Kenneth Frampton

### **Ten Canonical Buildings 1950-2000; Peter Eisenman, Rizzoli**

### **The Architecture of Diagrams: Andrew Chaplin**

### **Threshold Spaces: Till Berger**

The Eyes of the Skin, Juhani Pallasmaa

### **The Poetics of Space, Gaston Bachelard**

### **Theoretical Anxiety and Design Strategies, Rafael Moneo**

Theories and Manifestoes of Contemporary Architecture, Charles Jencks and Karl Kropf (eds.)

### **Thinking Architecture, Peter Zumthor**

<https://archive.org/details/peter-zumthor-thinking-architecture-birkhauser-architecture-2006>

## 3. Process and Representation:

a. Has the design process developed a series of designs that successfully relate the specific characteristics of the project (site, program, etc.) and the topics of the design studies?

b. Has there been rigorous design inquiry, including the development of alternative design strategies related to a well-formulated design concept and set of architectural values?

c. Does the Final Review fully and accurately illustrate the conceptual, contextual, programmatic, aesthetic and technical aspects of the design proposal?

d. Does the Final Review include the required range of architectural drawings, images, diagrams, statements to illustrate and explain the proposed design in its surrounding context, technically, as experienced by its occupants, and illustrated at many scales?

e. Does the Final Review tell the "story" of the design, why it has taken the form and architectural characteristics that distinguishes it from other design proposals?

f. Is the Final Review well designed and organized maximizing the relationships between drawings and the varied elements of the presentation?

g. Does the Final Review accurately illustrate the architectural characteristics of the proposed design, through the control of modeling and rendering systems?

h. Is the Final Review complete and graphically clear, including accurate, professional quality 2D plans, building-site sections, and building-site elevations, in the context of the site?

## References:

An Architecture Notebook, Simon Unwin Spon Press

**Diagramming the Big Idea: Balmer and Swisher**

Precedents in Architecture: Roger H. Clark; Wiley

**The Architecture of Diagrams: Andrew Chaplin**

Threshold Spaces: Till Berger

Basics of Model Building, Alexander Schilling

[https://primo-njit-edu.libdb.njit.edu:8443/discovery/fulldisplay?context=L&vid=01NJIT\\_INST:NJIT&search\\_scope=MyInst\\_and\\_CI&isFrbr=true&tab=Everything&docid=alma991359573405196](https://primo-njit-edu.libdb.njit.edu:8443/discovery/fulldisplay?context=L&vid=01NJIT_INST:NJIT&search_scope=MyInst_and_CI&isFrbr=true&tab=Everything&docid=alma991359573405196)

Drawing from the Model, Frank Melendez

[https://primo-njit-edu.libdb.njit.edu:8443/discovery/fulldisplay?context=L&vid=01NJIT\\_INST:NJIT&search\\_scope=MyInst\\_and\\_CI&tab=Everything&docid=alma995097068505196](https://primo-njit-edu.libdb.njit.edu:8443/discovery/fulldisplay?context=L&vid=01NJIT_INST:NJIT&search_scope=MyInst_and_CI&tab=Everything&docid=alma995097068505196)

Architectural Representation: Greenstreet and Shields Architectural Drawing, David Dernie

[https://primo-njit-edu.libdb.njit.edu:8443/discovery/fulldisplay?context=L&vid=01NJIT\\_INST:NJIT&search\\_scope=MyInst\\_and\\_CI&isFrbr=true&tab=Everything&docid=alma995065852005196](https://primo-njit-edu.libdb.njit.edu:8443/discovery/fulldisplay?context=L&vid=01NJIT_INST:NJIT&search_scope=MyInst_and_CI&isFrbr=true&tab=Everything&docid=alma995065852005196)

## Advanced Studio II and NAAB Criteria and References:

### 4. Site Conditions:

***Pedestrian and Vehicular Movement, Topographic Conditions including Steep Slopes, Protection of Environmentally Critical Areas, Integration of Surrounding Architectural, Urban and Landscape Contexts, Functions of Adjoining Buildings and Neighborhoods, Historical and Cultural Context, Seasonal Conditions and Comfort, Diurnal Variation and Seasonal Variations in Weather, Solar Access and Shading, Seasonal and Diurnal Prevailing Winds,***

***Municipal Zoning Regulations: Yard Setbacks, Maximum Impervious Coverage, Maximum Building Coverage, Maximum Floor Area Ratios, Maximum Building Height and Stories, Protection Requirements for Wetlands and Water Courses, Land Use and Planning Requirements and Historical District Requirements.***

a. Does the design comply with project zoning and land use policies such as setbacks, maximum height, maximum floor area ratios, maximum lot coverage, maximum impervious coverage, etc.?

b. How does the design respond to the character of the surrounding physical contexts including: relationship to existing buildings architectural characteristics and functions, topography, natural landscape, principal views, scale, pedestrian and vehicular movement systems, etc.?

c. How does the design respond to environmental conditions of the site including solar orientation, seasonal variation, variations in weather, sunlight, exterior temperature and humidity, wind, precipitation, etc.?

d. In what ways does the proposed design respond to differences in orientation, relationship to urban and/or natural landscapes, sunrise-sunset, significant views and panoramas, below grade, at grade, above grade and rooftop activities and characteristics, pedestrian paths and access? And, are the exterior facades of the proposed architectural designed to respond to these differences?

- e. Overall, is the proposed design an appropriate and skillful addition to the existing landscape and/or urban context?
- f. Does the design integrate the Site Conditions research requirements and conditions into the design proposal?

## References:

Architecture Site Analysis Guide - Data Collection to Presentation ([firstinarchitecture.co.uk](http://firstinarchitecture.co.uk))

Design of Cities: Edmond Bacon

Design with Nature, Ian McHarg

Great Public Squares: Gatje, Norton

**Site Analysis**, Edward T. White, Architectural Media Site Planning; Kevin Lynch, MIT

Squares: Urban Spaces in Europe: Sophie Wolfrum, Birkhauser

Sun, Wind & Light: Brown & DeKay

Urban Design: Street and Square, Architectural Press <https://archive.org/details/designwithnature00mcha/mode/2up>

Urban Space: Rob Krier, Rizzoli

**Climate Consultant 6 Software** <https://www.sbse.org/resources/climate-consultant>

**ClimateStudio v1.9** Installer <https://drive.google.com/file/d/1UhIKKHrbwIQWpYLiME5KMHo0oOKtMklr/view?usp=sharing>

## 5. Environmental Impact:

***Minimum Carbon Footprint, Use of Sustainable Materials, Water Conservation, Application of Renewable Energy Sources.***

- a. Does the proposed design demonstrate an understanding of sustainability in its selection and use of materials or systems?
- b. Does the design have an overall positive effect on the natural and built environment?
- c. Based upon a measurable analysis of the exterior envelope of the design, illustrate and prove: the design and technical improvements comparable their global warming impact, ozone depletion effect, smog formation contribution, use of non-renewable verses renewable energy demand for the building enclosure system?

## References:

**An Environmental Life Cycle Approach to Design; John Cays, Springer.**

**Athena Impact Estimator for Buildings** <https://calculatelca.com/software/impact-estimator/overview/>

<https://www.buildingtransparency.org/en/> <http://www.buildcarbonneutral.org/>

**Kaleidoscope** <https://www.payette.com/kaleidoscope/>

**RHINO AND REVIT:** <https://www.cove.tools/education-resources>

**RHINO:** <https://www.solemma.com/climatestudio> License: EDU\_NJIT:1x769y3pwwihixtr

**REVIT: Tally for Revit** <https://kierantimberlake.com/page/tally>

<https://choosetally.com/download/>

<https://choosetally.com/tutorials/>

**One Click LCA** <https://academy.oneclicklca.com/courses/building-life-cycle-assessment-onboarding-edu-users>

AutoDesk Forma



## 6. User Requirements:

***Relationship between Functions, and Isolation of Functions, both interior and exterior, Clarity of Way-Finding, Specific Requirements of Each Functional Type, Accommodating of a Diverse Range of Occupants including variation in age and health, Requirements for Privacy, Acoustical and/or Visual Isolation, Safety, Comfort .***

- a. Does the design accomplish the functional needs of the client, and various groups of users?
- b. Are the rooms and spaces designed to include finish materials, interior design elements such as furnishings, and designed for the technical and architectural characteristics for each of the specified functions?
- c. Does the design include service spaces, mechanical spaces, service access required for the functioning of the building?
- d. Are public areas and the circulation systems logical, clearly understood by the occupants, and overall part of the architectural concept and form?
- e. Are the rooms and spaces appropriately sized and proportioned, fitting the needs of the functional program, and overall the architectural concept and form?
- f. Are the various interior and exterior functions of the building appropriately related, interconnected, or isolated?
- g. Is the design successful in accommodating the needs of various users such as: visitor, employee, owner, neighbor, child, senior citizen, or passersby?
- h. Does the design integrate the User Requirements research into the design proposal?

## References:

**A Pattern Language**, Christopher Alexander

**Neufert Architects' Data**, Ernst and Peter Neufert. **Wiley-Blackwell**,

Problem Seeking. An Architectural Programming Primer, William M. Pena and Steven A. Parshall (HOK). Wiley, 2012.

**Timesaver Standards for Architectural Design Data**, Donald Watson

**Timesaver Standards for Building Types**, Joseph De Chiara

**Architectural Graphic Standards**, AIA, Dennis Gall, Nina M Giglio

**The Architectural Studio Companion**, Edward Allen & Joseph Iano

## 7. Regulatory Requirements:

***Occupancy Classification, Mixed Use Requirements, Required Type of Construction, Allowable Maximum Floor Areas, Maximum Building Height and Number of Stories, Site Determined Building Area Modifications, Building Separation Requirements, Atrium Requirements, Fire and Smoke Barriers, Prescriptive Fire Ratings of Building Construction, Fire Smoke and Sprinkler System Requirements, Restroom Requirements and Stair Design.***

- a. Has the design addressed the requirements of various occupancy types, construction types, and limitations to building dimensions, number of stories and floor areas?
- b. Do mezzanine spaces meet the requirements of the IBC?
- c. Does the design accommodate fire safety, including fire rated materials based upon the function class, maximum floor areas, heights and number of stories of the proposed design?
- d. Are the various portions of the building appropriately fireproofed?
- e. Are the various exterior elements of the building appropriately thermally insulated, and acoustically designed for sound transmission?
- f. Does each room or space have natural light as required by the IBC?
- g. Does the daylighting design enhance each functional space under all solar conditions and functional uses?
- h. Does each room or space have natural ventilation or fresh air as required, and as is appropriate to each function?
- i. Is there proof of accurate and complete integration of the Regulatory Requirements research requirements into the

design proposal?

## References:

**IBC 2021:** <https://codes.iccsafe.org/content/IBC2021P1>

Applying the Building Code: Step-By-Step Guidance for Design and Building Professionals, Geren, Wiley Pub.  
<http://ebookcentral.proquest.com.libdb.njit.edu:8888/lib/njit/detail.action?docID=6790678>

**2021 Building Codes Illustrated, Francis Ching**

<http://ebookcentral.proquest.com.libdb.njit.edu:8888/lib/njit/detail.action?docID=6790678>

2021 International Building Code Illustrated Handbook: Douglas Thornburg, McGraw Hill.

<https://www-accessengineeringlibrary-com.libdb.njit.edu:8443/content/book/9781264270118>

<https://www.buildingcode.blog/>

**IBC Occupant Load Calculator 2021**

<https://www.buildingcode.blog/ibc-occupant-load-calculator.html>

**Plumbing Fixture Calculator**

<https://www.buildingcode.blog/plumbing-fixture-calculator.html>

**High Rise Requirements**

[https://www.buildingcode.blog/uploads/1/2/9/9/129929641/building\\_code\\_blog\\_-\\_high\\_rise\\_cheatsheet.pdf](https://www.buildingcode.blog/uploads/1/2/9/9/129929641/building_code_blog_-_high_rise_cheatsheet.pdf)

2024 IBC Fire and Smoke Damper Requirements

[https://www.buildingcode.blog/uploads/1/2/9/9/129929641/2024\\_ibc\\_fire\\_and\\_smoke\\_damper\\_cheatsheet\\_rev\\_2-8-2024.pdf](https://www.buildingcode.blog/uploads/1/2/9/9/129929641/2024_ibc_fire_and_smoke_damper_cheatsheet_rev_2-8-2024.pdf)

**IBC Fire Wall / Exterior Wall Intersection Tool**

<https://www.buildingcode.blog/fire-wall-exterior-wall-intersection-tool.html>

**IBC Allowable Height and Area Calculator**

<https://www.buildingcode.blog/allowable-height-area-calculator-non-separated-mixed-occupancy-37216.html>

**IBC Calculated Fire Resistance for Wood Walls**

<https://www.buildingcode.blog/calculated-fire-resistance-for-wood-walls-37216.html>

Average Grade Plane Calculator

<https://www.buildingcode.blog/averagegradeplanecalculator.html>

See Google Drive tutorial videos.

## 8. Accessible Design:

***Ramp Slopes and Safety Areas, Wheel Chair Access, Minimum Turning Circles and Maneuvering Clearances, Doors and Doorway Requirements, Refuge Area Requirements, Accessible Restroom Design, Elevator and Platform Lift Requirements, Accessible Routes, Equivalency of Design and Accessibility.***

a. Does the circulation system (path of travel) within the building meet general ADA requirements including ramps widths, maximum ramp pitches and landings, access to elevators, stair, exit stair, elevator refuge areas, accessible seating and toilet room facilities, wheel chair accessibility?

b. Are restrooms designed to meet the ADA requirements?

c. Does the design provide the required accessible routes?

d. Is there proof of accurate and complete integration of the Accessible Design Regulatory Requirements research requirements into the design proposal?

## References:

### 2010 ADA Standards for Accessible Design

ADA In Details: Janis Kent, Wiley

**2021 Building Codes Illustrated**, Francis Ching

<http://ebookcentral.proquest.com.libdb.njit.edu:8888/lib/njit/detail.action?docID=6790678>

2021 International Building Code Illustrated Handbook: Douglas Thornburg, McGraw Hill.

<https://www-accessengineeringlibrary-com.libdb.njit.edu:8443/content/book/9781264270118>

<https://www.access-board.gov/ada/guides/>

<https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/guide-to-the-ada-standards>

See Google Drive tutorial videos.

## 9. Life Safety Systems:

***Exit Access, Exit Access Maximum Travel Distances, Aisle Minimum Widths and Combined Widths (Corridors & Stairs), Min and Max Separation of Exits within a Space and Building, Maximum Dead Ended Exit Distances and Widths, Number of Required Exits, Maximum Common Exit Path Distances, Means of Egress Minimum Widths and Egress Minimum Widths by Capacity, Corridor Continuity, Horizontal Exits, Exit Discharge, Egress Court, Exit Lobby Restrictions, Required Door Widths and Swing Directions, Direct Exit Paths, Elevator and Escalators Requirements,***

- a. Illustrate and prove by measurement in the final proposed design all primary life safety requirements listed above.
- b. Does the building ensure safe egress to exit discharge from all occupied interior and exterior portions of the building?
- c. Is there proof of accurate and complete integration of the Life Safety Systems research requirements into the design proposal?

## References:

**2021 Building Codes Illustrated**, Francis Ching

<http://ebookcentral.proquest.com.libdb.njit.edu:8888/lib/njit/detail.action?docID=6790678>

2021 International Building Code Illustrated Handbook: Douglas Thornburg, McGraw Hill.

<https://www-accessengineeringlibrary-com.libdb.njit.edu:8443/content/book/9781264270118>

**Revit:Travel Path Tool:**

**<https://blogs.autodesk.com/revit/2020/02/18/revits-path-of-travel-tool-makes-for-quick-and-easy-egress/> IBC 2021;**

<https://codes.iccsafe.org/content/document/759>

See Google Drive tutorial videos.

## 10. Structural Systems:

***Criteria and Architectural Design of Foundations, Primary and Secondary Structural Systems, Load Bearing Walls and Columns, Girders, Beams, Floor and Roof Slabs, Lateral Stability, Deflection Limitations of Structural Elements, Maximum Slenderness Ratios of Structural Members and Systems, Accommodation of Required Wind, Snow, Live and***



### ***Dead Loads, Continuity of Load Paths to Subsoil.***

- a. Does the structural system serve the design intent and concept?
- b. What are the requirement minimum Live, Dead and Wind Loads for the various functions?
- c. What are the required maximum deflections of all structural components?
- d. Illustrate how the design provides lateral stability for the structure in all directions?
- e. Is the choice of the structural form and materials consistent with other characteristics of the architecture?
- f. Do structural system elements working logically as a system?
- g. Is the basic structural performance of the building proven through one of the following?
  - 1) Calculation of typical elements including foundations, load bearing walls, columns, girders, beams, slabs, frames while assuring minimum deflection requirements and lateral stability.
  - 2) by comparison to similar structural precedents, explain the logic of your structural systems behavior?
- h. Are the structural systems and members appropriately proportioned to all structural forces and spans?
- i. Are the structural systems and member design consistent with the performance of the specific materials selected?
- j. Is the structural system integrated with mechanical and other building systems?
- k. Does the structural system support and integrated with the building enclosure system?
- l. Are the vertical and lateral structural forces (loads) of the building effectively transferred to foundations and subgrade, through logical load paths?
- m. Does the design adequately address basic lateral foundation forces and subsoil conditions?
- n. Does the design integrate the Structural Systems research into the design proposal?

### **References:**

Manual of Structural Design, Eberhard Moller, Edition Detail, 2022.

**Model Perspectives:** Cruvellier, Sandaker and Dimcheff

Structure in Nature is a Strategy for Design: Peter Pearce

Structure Systems, Heino Engel,

**The Architectural Studio Companion:** Edward Allen & Joseph Iano

**The Structural Basis of Architecture:** Sandaker, Eggen and Cruvellier

[https://primo-njit-du.libdb.njit.edu:8443/discovery/fulldisplay?context=L&vid=01NJIT\\_INST:NJIT&search\\_scope=MyInst\\_and\\_CI&isFrbr=true&tab=Everything&docid=alma995077961405196](https://primo-njit-du.libdb.njit.edu:8443/discovery/fulldisplay?context=L&vid=01NJIT_INST:NJIT&search_scope=MyInst_and_CI&isFrbr=true&tab=Everything&docid=alma995077961405196)

DartmouthX-The engineering of Structures Around Us

<https://www.youtube.com/channel/UCTzQ-ZNy1DrKhchVBmPwU-Q>

<https://www.masterseries.com/products/powerpad-student-edition#tab-4>

STRUCALC <https://strucalc.com/>

Email the [sales@thevitruviusproject.com](mailto:sales@thevitruviusproject.com) with your current student ID and request a student license.

StruCalc 2.7.5

<https://strucalc.s3.us-west-2.amazonaws.com/StruCalc-Setup.exe>

email: [archstudent@njit.edu](mailto:archstudent@njit.edu)

password: strucalc

## **11. Environmental Control Systems:**

***Selection and Architectural Design of Heating, Cooling and Ventilation Systems, HVAC System and Distribution***

### ***Systems, Natural and Artificial Ventilation, Fresh Air Requirements.***

- a. In what way does the mechanical systems enhance the design intent and concept?
- b. Are all spaces appropriately natural and artificially lit, heated, cooled and ventilated by natural and/or artificial means?
- c. Are the selection and general design of the mechanical systems appropriate to the function, architectural concept and form?
- d. Is the primary and secondary distribution systems logical and integrated into each occupied space.
- e. Are design and technology strategies integrated to create a sustainable proposal, including passive and active systems?

### **References:**

Studies in Tectonic Culture, Kenneth Frampton

**Modern Construction Envelopes**, Andrew Watts

**Mechanical and Electrical Equipment for Buildings: Grondzik, Kwok, Stein, Reynolds**  
<https://ebookcentral-proquest-com.libdb.njit.edu:8443/lib/njit/detail.action?docID=468540>

[https://www.engineeringtoolbox.com/duct-velocity-d\\_928.html](https://www.engineeringtoolbox.com/duct-velocity-d_928.html)

The Architectural Studio Companion, Edward Allen & Joseph Iano  
[https://primo-njit-du.libdb.njit.edu:8443/discovery/fulldisplay?context=L&vid=01NJIT\\_INST:NJIT&search\\_scope=MyInstitution&tab=LibraryCatalog&docid=alma995065821405196](https://primo-njit-du.libdb.njit.edu:8443/discovery/fulldisplay?context=L&vid=01NJIT_INST:NJIT&search_scope=MyInstitution&tab=LibraryCatalog&docid=alma995065821405196)

Constructing Architecture, Deplazes  
<https://archive.org/details/DeplazesConstructingArchitecture/page/n1/mode/2up>

**Modern Construction Case Studies**, Andrew Watts

[https://primo.njit.edu/discovery/fulldisplay?context=L&vid=01NJIT\\_INST:NJIT&search\\_scope=DN\\_and\\_CI&isFrbr=true&tab=Everything&docid=alma995070973505196](https://primo.njit.edu/discovery/fulldisplay?context=L&vid=01NJIT_INST:NJIT&search_scope=DN_and_CI&isFrbr=true&tab=Everything&docid=alma995070973505196)

**Modern Construction Handbook**, Andrew Watts

[https://primo-njit-du.libdb.njit.edu:8443/discovery/fulldisplay?context=PC&vid=01NJIT\\_INST:NJIT&search\\_scope=MyInst\\_and\\_CI&tab=Everything&docid=pq\\_ebook\\_centralEBC1575519](https://primo-njit-du.libdb.njit.edu:8443/discovery/fulldisplay?context=PC&vid=01NJIT_INST:NJIT&search_scope=MyInst_and_CI&tab=Everything&docid=pq_ebook_centralEBC1575519)

Geothermal Heat Pump: <https://www.nordicghp.com/commercial-heat-pumps/> (81 ton)

**Detail Magazine** / Detail Inspiration via HCAD Library website

<https://archive.org/details/studiesintectoni0000fram>

<https://transmaterial.net/>

## **12. Building Envelope Systems and Assemblies:**

***Selection and Design of Building Envelope Systems, Thermal Insulation and Bridging Standards, Material and Product Selection, Fire Rating of Assemblies, Water and Moisture Protection, Sound Transmission and Acoustical Control, Integration of Mechanical Systems, and Solar Control.***

- a. Does the building envelope illustrate the design concept and form, visually enhancing the design intent?
- b. Is the building envelope appropriate to its context, including the surrounding buildings and natural landscape?
- c. Is the building envelope appropriate to its climate, seasonal variation, weather conditions, solar access and shading?
- d. Is the building envelope system waterproofed, appropriately insulated and fireproofed to meet the basic IBC

requirements?

- e. Is the building envelope logical, functional and stable?
- f. Is building envelope illustrated with specific and appropriate materials, assemblies and systems, at level of detail associated with the scale 1 1/2" = 1'-0", including vertical dimensions, materials labels, from foundation to sky?
- g. Does the building design and detailing illustrate a basic knowledge of the construction assembly process?
- h. Does the design illustrate the selection of specific construction materials, products and assemblies that are consistent to and enhance the design's technical performance, architectural concept and intent?
- i. Does the design illustrate a knowledge and suitable development of technical and design precedents?
- j. Overall, is the enclosure system sophisticated in concept, function and relationship to the physical and environmental context, esthetics and construction?

## References:

**Detail Magazine / Detail Inspiration via HCAD Library website/**

**The Architectural Studio Companion, Edward Allen & Joseph Iano**

**Constructing Architecture, Deplazes**

<https://archive.org/details/DeplazesConstructingArchitecture/page/n1/mode/2up>

Studies in Tectonic Culture, Kenneth Frampton <https://archive.org/details/studiesintectoni0000fram>

**Modern Construction Case Studies, Andrew Watts**

[https://primo.njit.edu/discovery/fulldisplay?context=L&vid=01NJIT\\_INST:NJIT&search\\_scope=DN\\_and\\_CI&isFrbr=true&tab=Everything&docid=alma995070973505196](https://primo.njit.edu/discovery/fulldisplay?context=L&vid=01NJIT_INST:NJIT&search_scope=DN_and_CI&isFrbr=true&tab=Everything&docid=alma995070973505196)

Modern Construction Handbook, Andrew Watts

[https://primo-njit-du.libdb.njit.edu:8443/discovery/fulldisplay?context=PC&vid=01NJIT\\_INST:NJIT&search\\_scope=MyInst\\_and\\_CI&tab=Everything&docid=pq\\_ebook\\_centralEBC1575519](https://primo-njit-du.libdb.njit.edu:8443/discovery/fulldisplay?context=PC&vid=01NJIT_INST:NJIT&search_scope=MyInst_and_CI&tab=Everything&docid=pq_ebook_centralEBC1575519)

Introducing Architectural Tectonics: Edward Ford Modern Construction Envelopes, Andrew Watts

<https://transmaterial.net/>

**Rhino Inside Revit:**

<https://www.rhino3d.com/inside/revit/1.0/>

[https://www.youtube.com/watch?v=x\\_MU3vO1\\_II](https://www.youtube.com/watch?v=x_MU3vO1_II)

<https://www.youtube.com/watch?v=DVzsSyxTQS0>

<https://www.youtube.com/@balkanarchitect>

## 13. Building Performance:

***Annual Maximum Energy Consumption Requirements (ASHRAE 90.1 compliance and Architecture 2030 target), Maximum Glazing Ratio Requirements, Day-lighting, Solar Shading, Natural Ventilation, Natural Cooling, Building Insulation-Thermal Mass, Building Color, Form and Orientation, Response to Diurnal and Annual climate and weather conditions, Alternative Energy Systems.***

- a. Are there illustrations and proof, using measurable analysis, that the design minimizes the energy consumption of the project, while maintain thermal and visual comfort?
- b. How does the annual building energy use compare to the average energy use of a similar building functions and locations?



- c. Does the design minimize the use of energy consuming systems through the accurate design of solar control devices by orientation, use of natural ventilation, integration of day lighting and use of alternative energy sources, as may be appropriate to each building function?
- d. Are the non-critical environmentally controlled spaces cooled through natural ventilation?
- e. Does the design comply with the ASHRAE 90.1 maximum annual energy use standard?
- f. How closely does the design comply with the Architecture 2030 Energy Standard?
- g. What design and technical changes were most influential in accomplishing minimum energy consumption?
- h. Does the design provide sufficient levels and uniformity of daylight as appropriate?
- j. Does the design prevent inappropriate levels of visual glare?
- j. Are there illustrations and proof of the preliminary and final energy analysis data, illustrating relative importance of the design and technical changes of the design?

## References:

**Sun, Wind & Light:** Brown & DeKay

[https://primo-njit-edu.libdb.njit.edu:8443/discovery/fulldisplay?context=L&vid=01NJIT\\_INST:NJIT&search\\_Sustainable](https://primo-njit-edu.libdb.njit.edu:8443/discovery/fulldisplay?context=L&vid=01NJIT_INST:NJIT&search_Sustainable)

Rhinoceros / Honeybee: <https://www.ladybug.tools/honeybee.html>

Sketchup or Rhino / Sefaira: <https://www.sketchup.com/products/sefaira>

Rhino & Revit / Cove Tools: <https://www.cove.tools/education-resources>

**Revit / Insight:** <https://www.autodesk.com/products/insight/overview>

<https://blogs.autodesk.com/revit/2021/07/06/autodesk-insight-webinar-series/>

2030 Palette: <http://www.2030palette.org/building/>

Zero Tool: <https://www.zerotool.org/zerotool/>

Zero Code: <https://www.zero-code.org/energy-calculator/>

CBECs: <https://www.eia.gov/consumption/commercial/data/2018/>

Photovoltaic Energy Systems: PVWatts - NREL

[www.wbdg.org/design-objectives/sustainable](http://www.wbdg.org/design-objectives/sustainable)

Typologies of Daylighting: <https://www.archdaily.com/787734/10-typologies-of-daylighting-from-expressive-dynamic-patterns-to-diffuse-light>

Climate Scout: <https://www.callisonrtkl.com/climate-scout-intro/>

<https://www.sbse.org/resources/climate-consultant>

Climate Studio v1.9 Installer: [https://urldefense.com/v3/\\_\\_https://solemma.us14.list-manage.com/track/click?u=0bb7072dcf582b174e27a4181&id=dd44b65097&e=74f8f9f642\\_\\_;!!DLa72PTfQgg!JhHiz7Ulxizowjo rTQqoWxmIjDJoWNw9xpINithpYAI35bVC\\_prWAukaW5soq-yyirjZudmyntXIHTSIzu0xj80\\$](https://urldefense.com/v3/__https://solemma.us14.list-manage.com/track/click?u=0bb7072dcf582b174e27a4181&id=dd44b65097&e=74f8f9f642__;!!DLa72PTfQgg!JhHiz7Ulxizowjo rTQqoWxmIjDJoWNw9xpINithpYAI35bVC_prWAukaW5soq-yyirjZudmyntXIHTSIzu0xj80$)

Climate Studio: License Key: EDU\_NJIT1:UAHQU10EIQVU:94

Climate Studio Software Documentation: [https://urldefense.com/v3/\\_\\_https://solemma.us14.list-manage.com/track/click?u=0bb7072dcf582b174e27a4181&id=4ba6cc32d4&e=74f8f9f642\\_\\_;!!DLa72PTfQgg!JhHiz7Ulxizowjo rTQqoWxmIjDJoWNw9xpINithpYAI35bVC\\_prWAukaW5soq-yyirjZudmyntXIHTSIMbfgdfo\\$](https://urldefense.com/v3/__https://solemma.us14.list-manage.com/track/click?u=0bb7072dcf582b174e27a4181&id=4ba6cc32d4&e=74f8f9f642__;!!DLa72PTfQgg!JhHiz7Ulxizowjo rTQqoWxmIjDJoWNw9xpINithpYAI35bVC_prWAukaW5soq-yyirjZudmyntXIHTSIMbfgdfo$)

Learn Climate Studio: [https://urldefense.com/v3/\\_\\_https://solemma.us14.list-manage.com/track/click?u=0bb7072dcf582b174e27a4181&id=1e2bd4ad75&e=74f8f9f642\\_\\_;!!DLa72PTfQgg!JhHiz7Ulxizowjo rTQqoWxmIjDJoWNw9xpINithpYAI35bVC\\_prWAukaW5soq-yyirjZudmyntXIHTSIY5b4vJ0\\$](https://urldefense.com/v3/__https://solemma.us14.list-manage.com/track/click?u=0bb7072dcf582b174e27a4181&id=1e2bd4ad75&e=74f8f9f642__;!!DLa72PTfQgg!JhHiz7Ulxizowjo rTQqoWxmIjDJoWNw9xpINithpYAI35bVC_prWAukaW5soq-yyirjZudmyntXIHTSIY5b4vJ0$)