

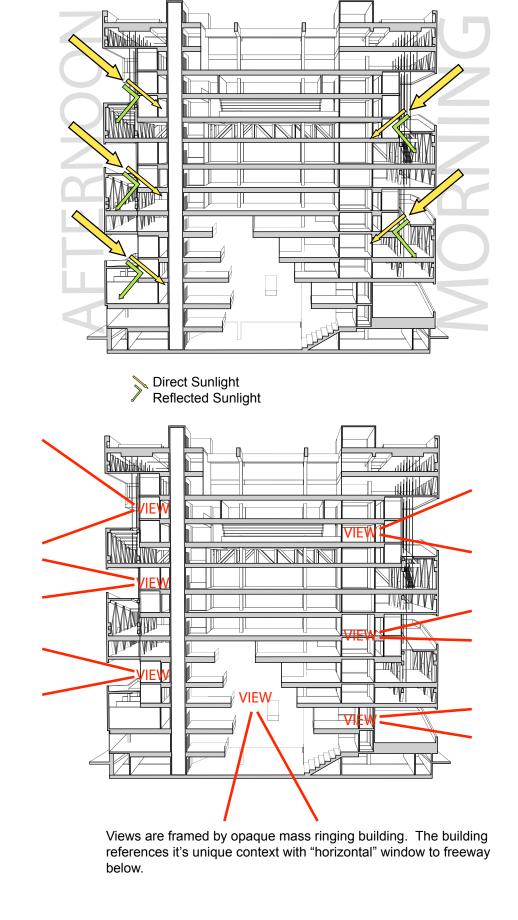
East-West section highlights organic form cutting through the heart of the building. The basic organization of the building is revealed.

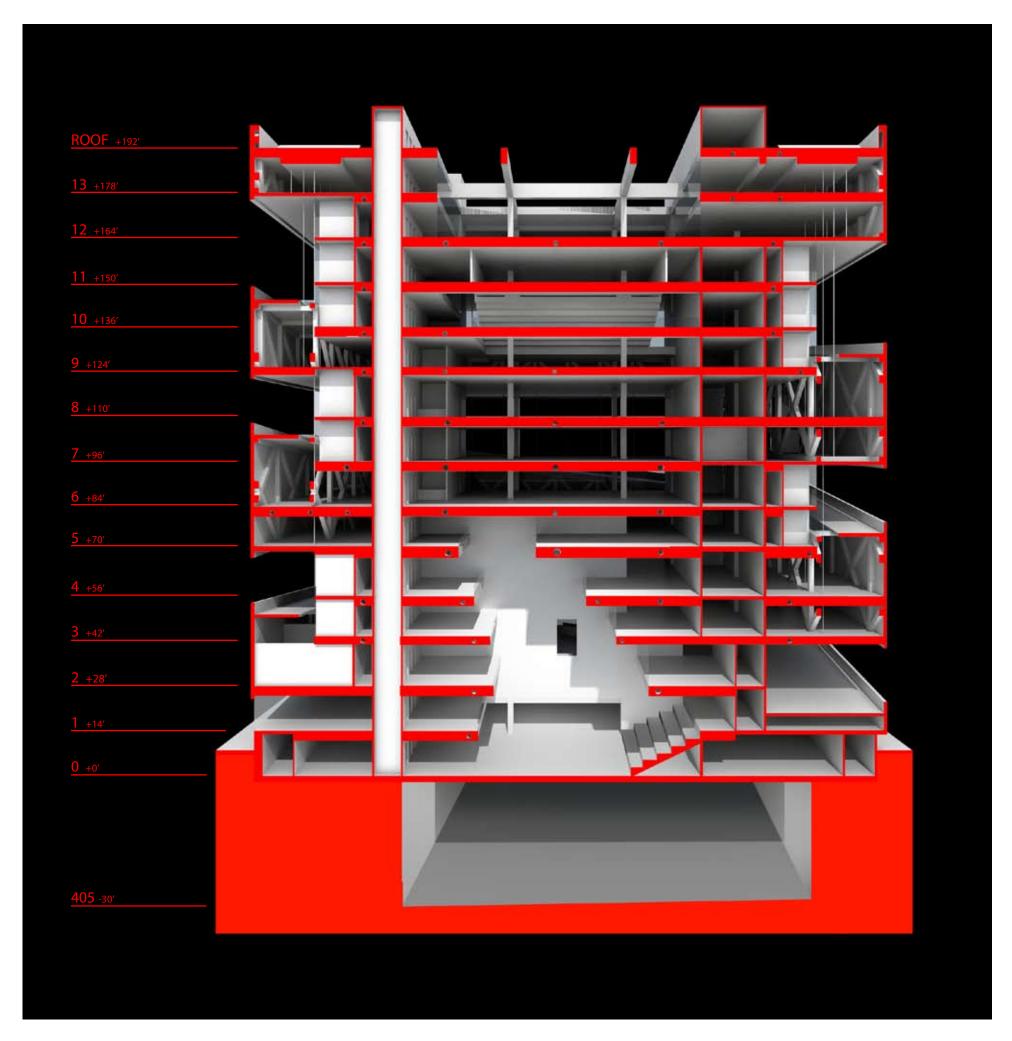
- Mechanical space that flanks the central public realm. Each mechanical space is linked with a access to the street, as well as
- vertical shafts in each of the four corner cores. Bike storage is available off the Yamhill Street entrance.
- Retail Space off Morrison Street (+13' from the Yamhill level). One large retail space occupies the SW corner of the building. On the north side, 4 retail spaces line the street. Community meeting rooms line the west side of the building (7).
- D Children's Collection
- Lower Atrium visually connects north and south entrances of the building to the library on the 5th floor.
- Administration spans two floors.
- Closed stacks only accessible to staff.
- Main floor of publicly-accessed portion of the library (first floor of
- upper atrium. Stacks (Public-access)
- Central Stacks Internet
- M Staff-Accessed
- Information Desk Individual study and small conference rooms
- Ο Stacks beyond
- Q Auditorium beyond Outdoor terrace

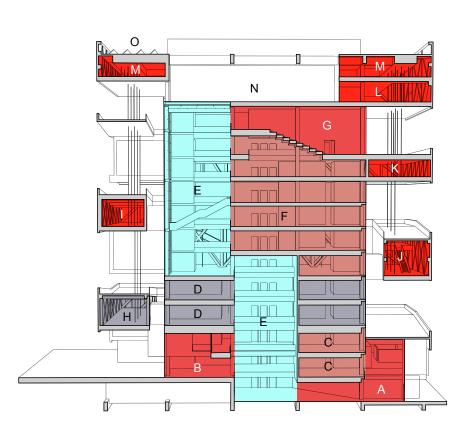
Mechanical

Non-fiction







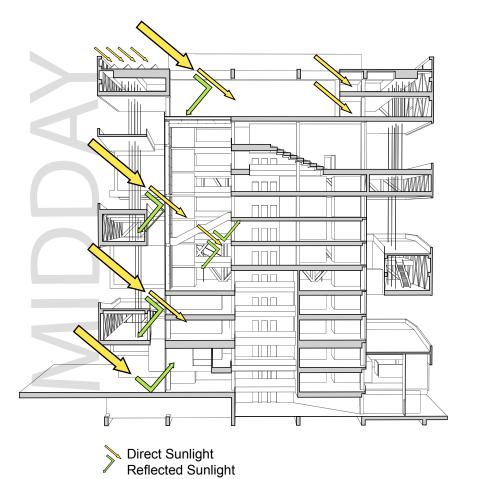


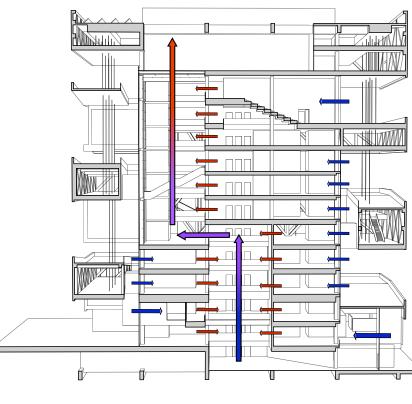
North-South section reveals a south-facing atrium with brings daylight deep into the building. Opaque surfaces are minimized on the south side to reveal the atrium space to as much direct solar gain as possible. Upper and Lower atriums are interlocked providing visual connections, transmission of light deep into building, and opportunities to create a significant stack effect for ventilation purposes.

- Α Yamhill Street entrance in center of block (north side of building).
- Bike storage on this floor. Morrison Street Entrance. Exterior: opens up to southern plaza. Interior: Double-height space for exhibition and access to specific
- building spaces. Children's Collection
- Administrative Levels. Closed to public. Lower atrium providing visual connections between spaces. Intent is to connect first floor of building with first floor of the library (on the 5th floor of building). Allows visual connection between public and staff-only floors.
- Heart of library containing central stacks, general stacks, reading rooms, public computers, meeting rooms, and coffee shops.
- 200 seat auditorium. Stacks (Stack-access)
- Stacks (Public-access) Vertical connection seen in public-access stacks.
- Rare Book Collection Restaurant beyond
- M Non-fiction Outdoor terrace: Terminus of exterior path and access to rooftop
- Ν Solar Panel array on roof.

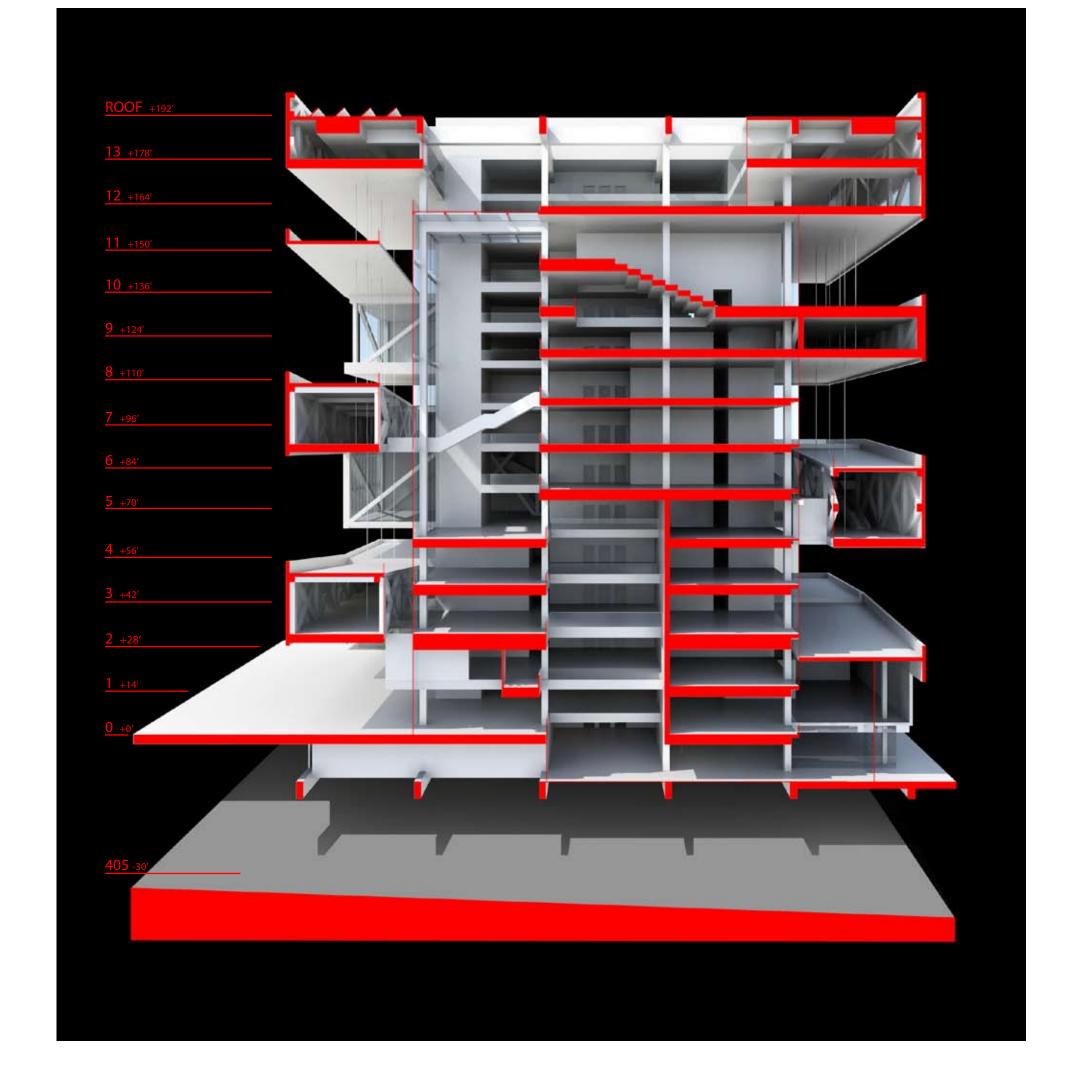
WEST-FACING SECTION

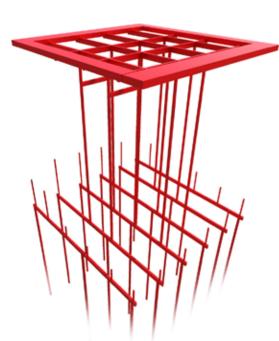




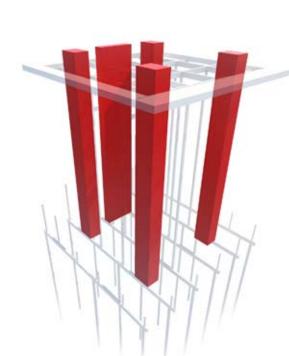


Natural Ventilation Strategies Utilized. Atriums act as exhaust plenums for individual floors, vented out of the top of the building. Stacks ringing the building are conditioned to maintain appropriate humidity conditions for books.

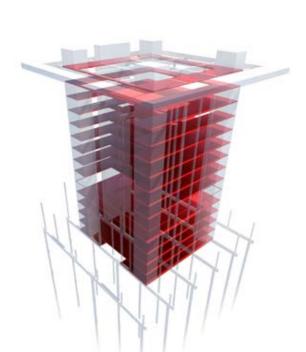




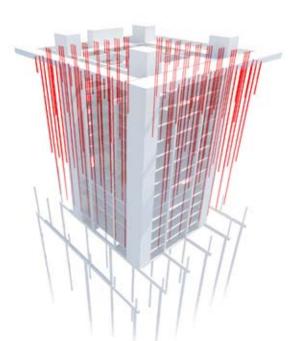
1 Girders resting on piles spaced at 30' O.C. span the 405. Columns rise up through the building carrying a 4-way cantilevered beam which in turn will be gravity-loaded.



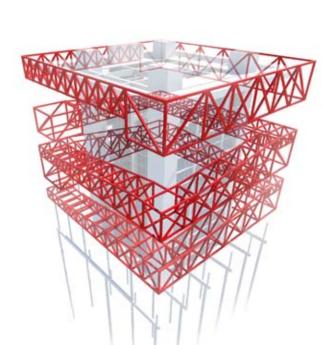
2 Cores provide the lateral stability needed to give the form its rigidity.



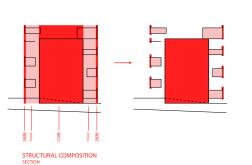
3 Floor plates acts as structural diaphragms, transferring lateral loads out to the cores.

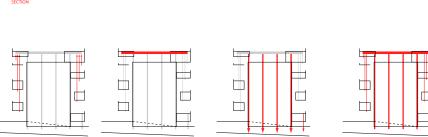


4 Three sets of cables on each side of the building hang transferring gravity load and relieving the perimeter of the building of columns, supporting the visual concept of the built form.



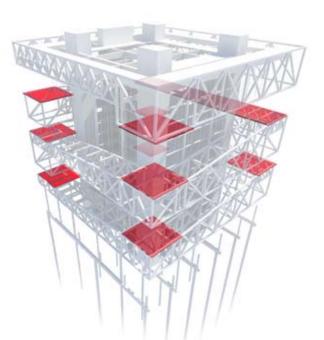
5 The opaque portion of the building containing the book stacks and associated pedestrian ramps are contained within a steel "cage" structure hanging on cables.



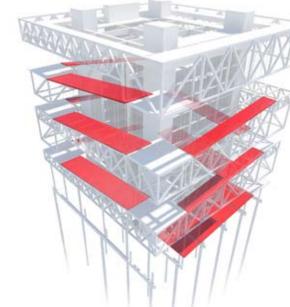


This building is thought of being similar to a living being, with a core skeleton, layers of sinuous tissue, and outer, protective skin.

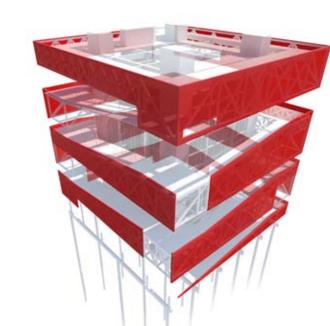




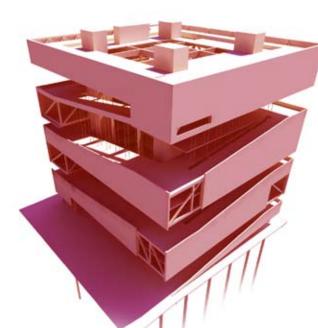
6 Landings at the corners of the building provide the lateral connection between the steel cage system and the cores of the building.



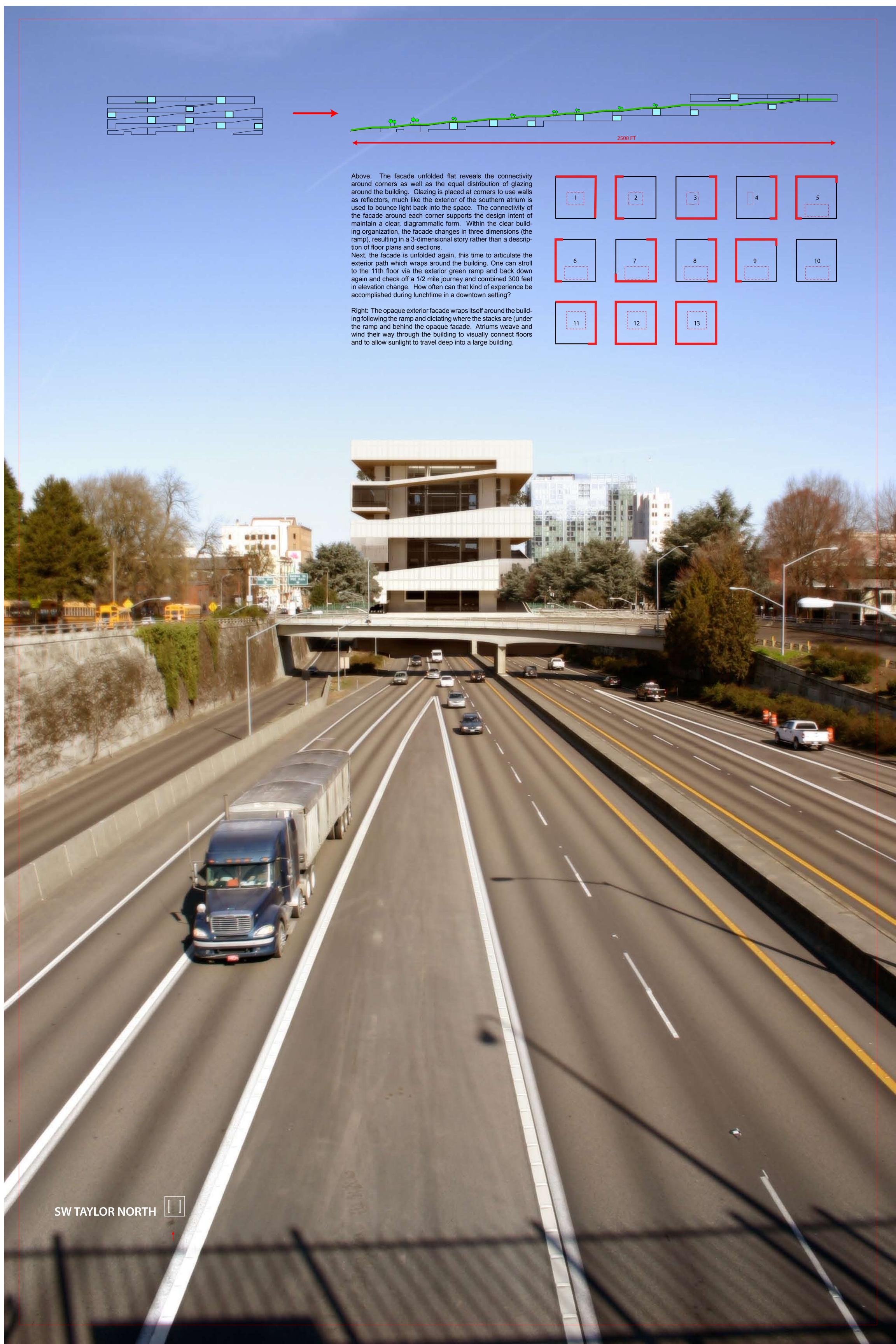
7 Ramps act as roofs for the stacks contained within the steel cage system, as well give the system added rigidity.

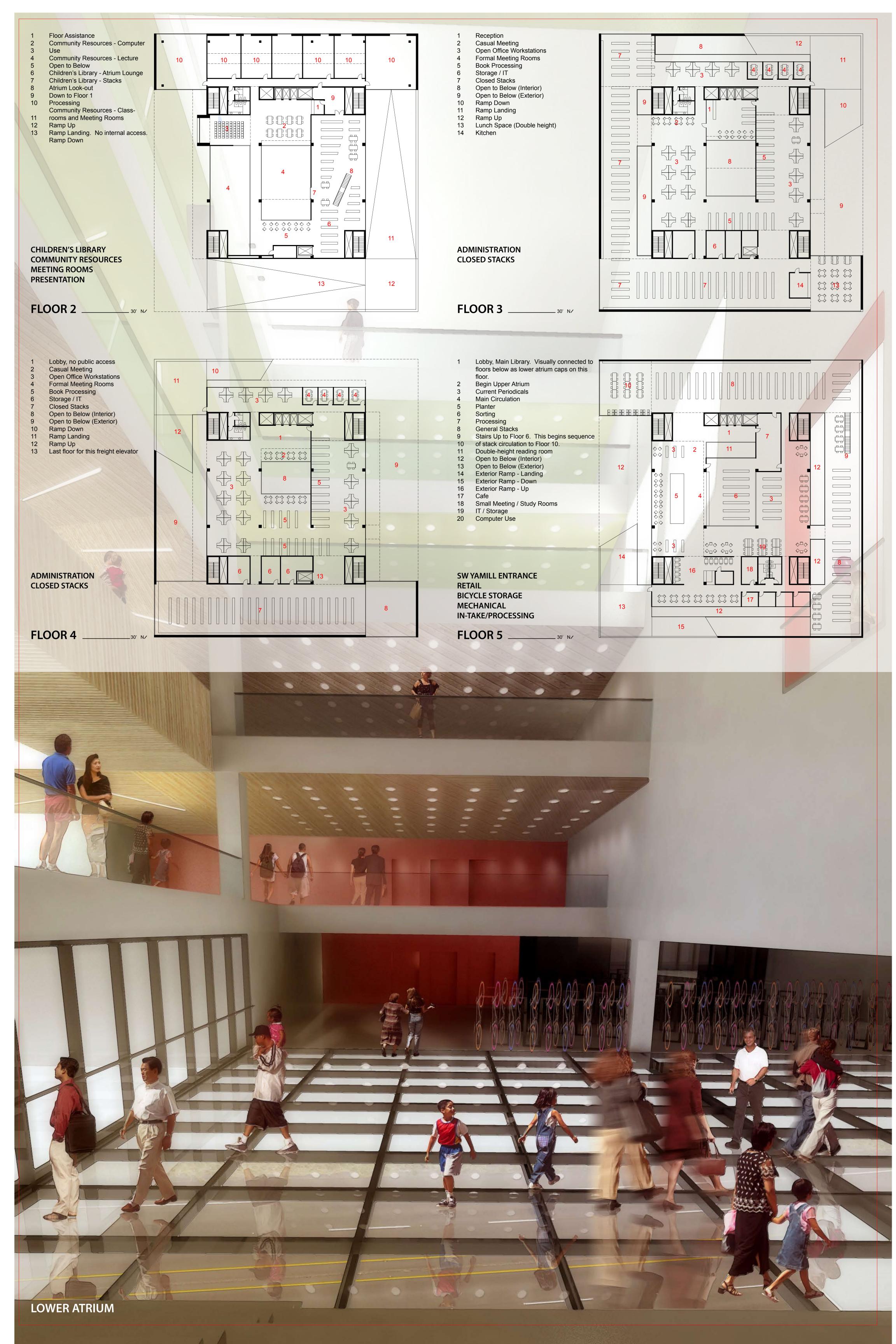


8 Ramps act as roofs for the stacks contained within the steel cage system, as well give the system added rigidity.



8 Composite form.



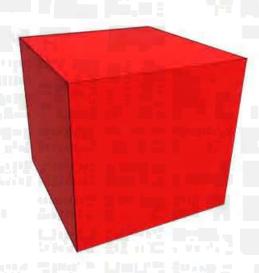








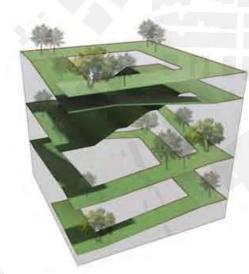




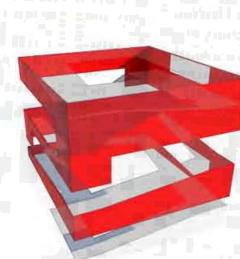
The Idea



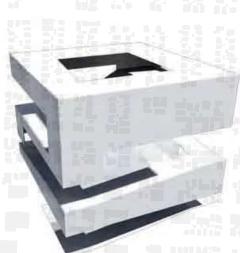
Way Up



Way Up (With Benefits

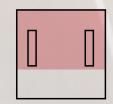


Clad

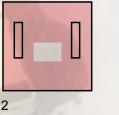


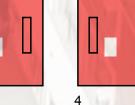












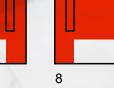




lines and break the building up onto horizontal layers.



functions both internally and for the public. Ascension to the 10th floor offers an uphill trek 1/4 mile long in one direction. Opportunities exist for entering the building off of the path on major floors. From an interior perspective, the ramps provide protection from direct solar gain into the space that houses the library's stacks. The ramps also help the building relate to it's context as the edges of the ramps create automatic regulating



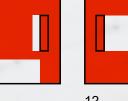


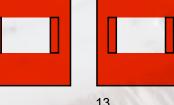






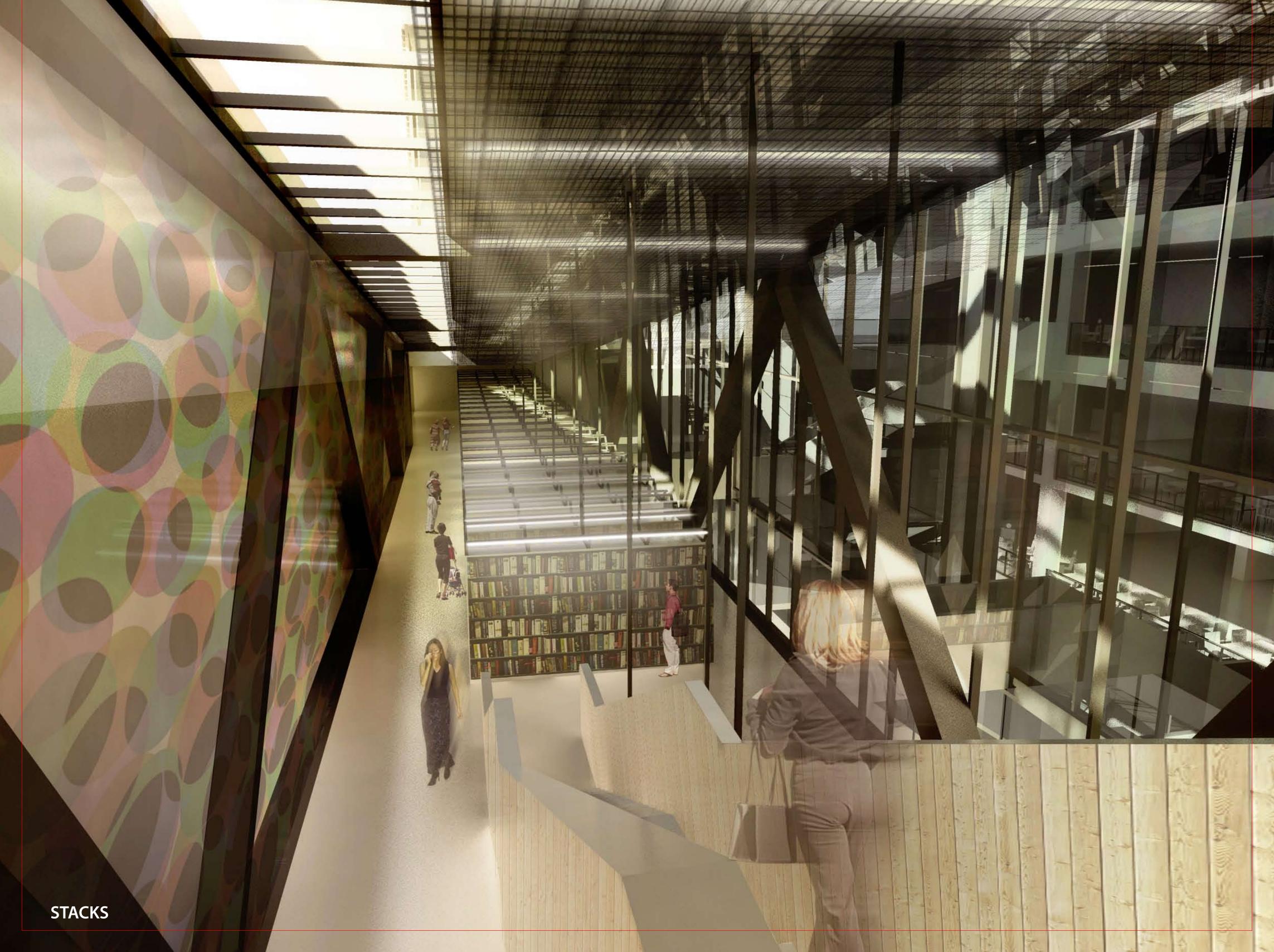
SW 13th North





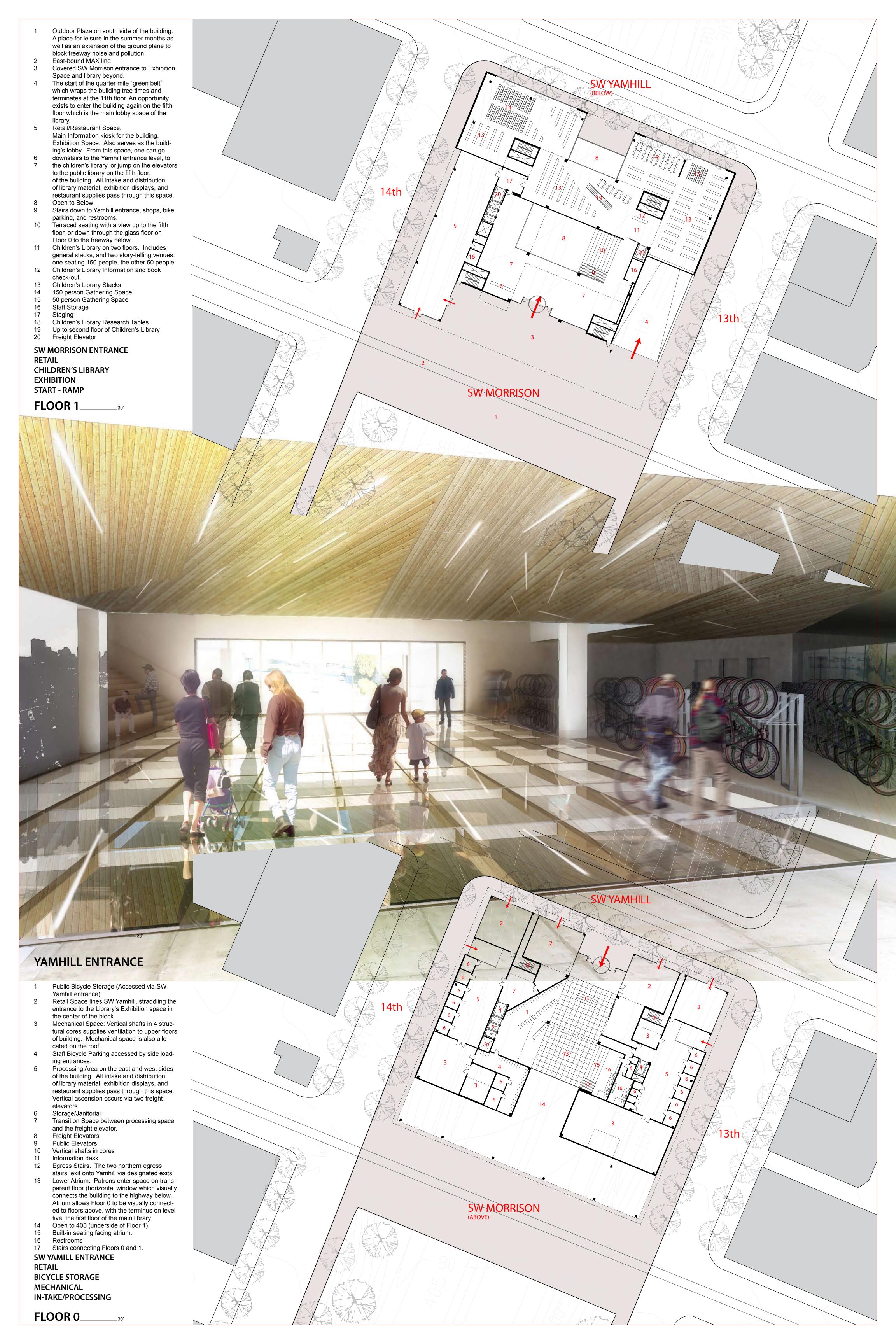
SPATIAL COMPOSITION

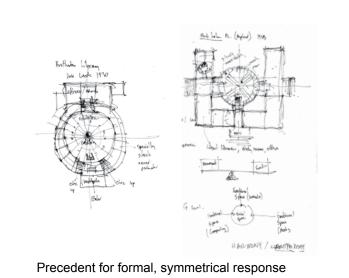


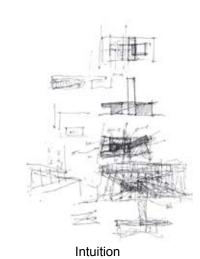


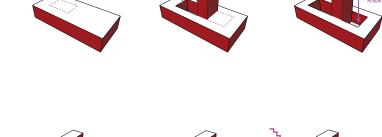




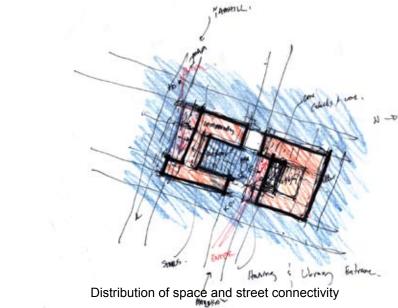


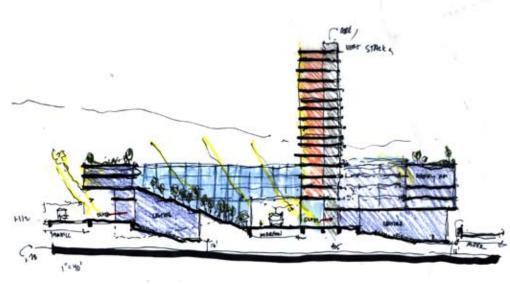






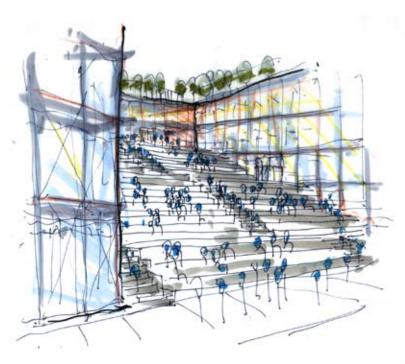
Hierarchy and framework of massing organization





Relationship development with streets, freeways, sidewalks and natural advantages







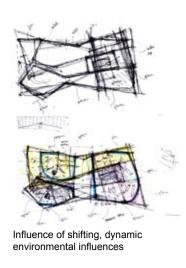
Initial investigations looked at incorporating more than one Portland city block into the program. In the first two concepts, I investigated mixing public and private usages and how these spaces interact. The proposed solution followed a simple diagram. The full site was imagined as having a large mass over it, with pockets carved out and rotated to create vertical space and to get light deep into the building complex. Auditorium spaces dig into the ground creating a relationship with the freeway below. The library, being the public space, occupied most all of the low flat form, with a large outdoor seating area facing Yamhill. This allowed daylight to penetrate into the building surrounding it. Outdoor space on the south side of building is intended to be an open plaza, bathed in sunlight in the summer month. The overhanging building provides shelter to the actual entrance of the building. The private function of this building would be the housing element which rises up from Yamhill. On three sides of the point tower, housing wraps a "core" of closed

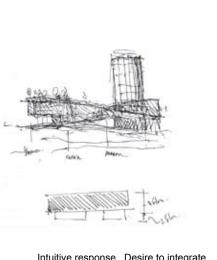
stacks and typical circulation and utility shafts.

Feedback on this idea led to the idea of experimenting with solutions that bring the mass down to the ground plane and reduce the "massiveness" of the built form.

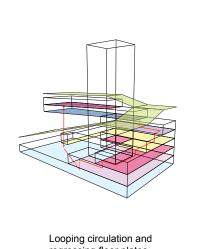
Also, other contextual responses were recommended.

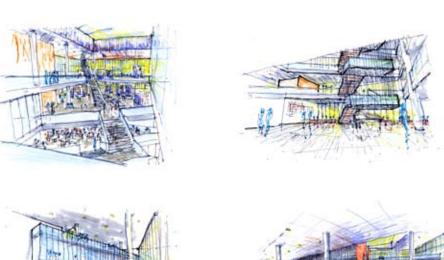
CONCEPTUAL INVESTIGATION A





landscape into tectonic language









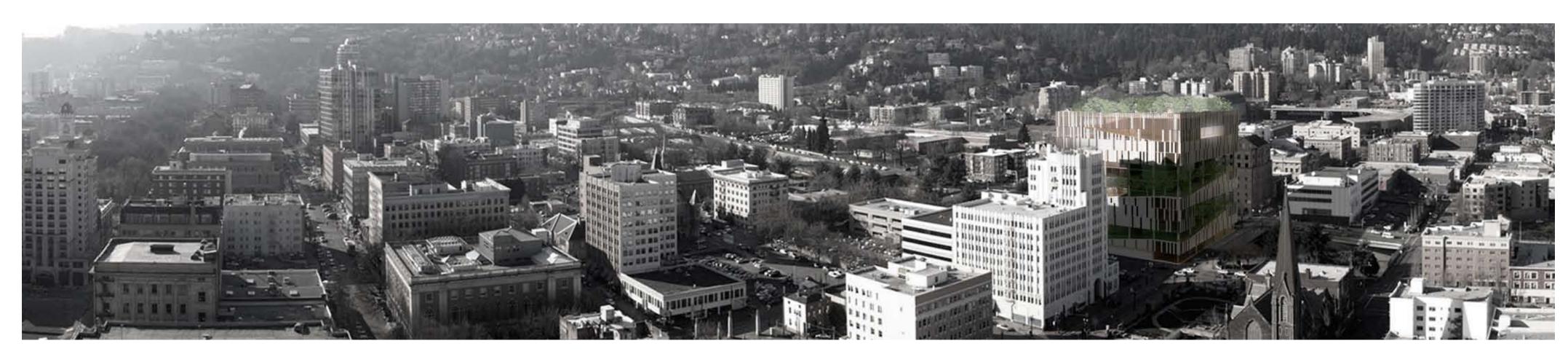




This set of investigations took the original concept and applied a "contextual filter" relating the form to the sloping site and the freeway below. As the highway under the building follows an arc, the building similarly responds with a curing form. In addition, one side of the building was brought down to the ground, creating a ramp that sweeps around the building and terminates after completing a 180 degree, climbing path. It was imagined this path would be green space enjoyed by both the general public and the residents of the residential tower in the center of the site. The interior of the library followed the sweeping, climbing form, building from one floor to six floors at it's highest point.

Feedback on this concept was focused around the sheer size of the building and it's appropriateness to Portland. The complexity of dual programs was in question and recommended that one program be followed.

CONCEPTUAL INVESTIGATION B











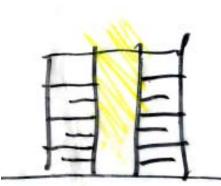
Taking the ideas investigated so far, this scheme progressed on founded ideas. Instead of two blocks being occupied, the building condensed to one site. The second function of housing above the library was dropped to focus on the library. This iteration incorporated a ramp system as introduced in the previous concept however smaller in width and wrapping the building 2.5 times. This ramp supported the interior function as well as it minimized the amount of direct sunlight penetrating into the space, a situation encouraged in libraries. Stacks were imagined occupying the space under the ramps, as the facade under the ramps was imagined to be highly opaque. The main circulation through the space was a central stair that travelled up eight floors. The ramp on the outside of the building terminated on tghe 9th floor, which became 3 floors of stairs. This formed the ceiling to a large auditorium.

In refining this concept, it because important to bring clarity to the section diagram of this building as it is the section that 2-dimensionally explains the building. The notion of wayfinding is important in this building and must be part of the architecture. One should be able to get off the elevator or stairs and know where they are. This led to the need for a clear organization to the building and a central piece that offers a means to orient one's self.

Library, Phillips Exeter Academy Exeter, New Hampshire Realised 1972 Louis Kahn

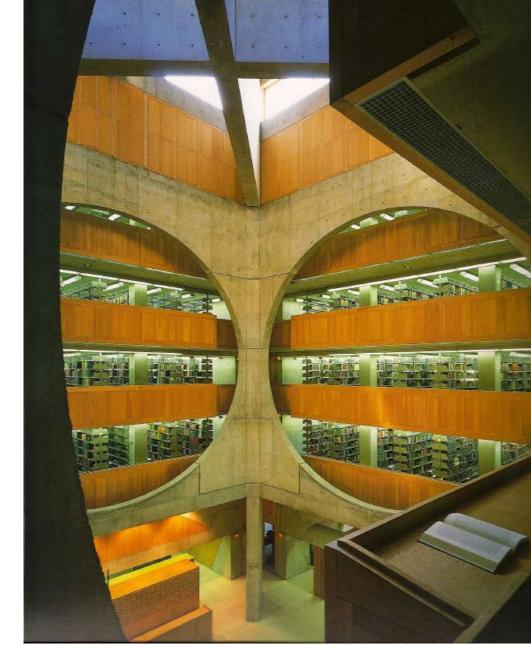






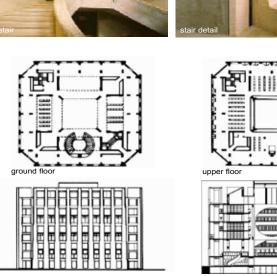
"Elemental in its contemporary directness and built also with the sense and durability of the great monuments of history is the Library at Philips Exeter Academy. In the spirit of the grand, classical tradition of the focal organizing space, the reading room is a central hall encircled by balconies containing the stacks and study alcoves. It is a space diagonally overlooked through giant circular openings in the interior screen walls that define the central area. In keeping with the campus tradition, the exterior of the building is a repetition of brick piers, wider as they approach the ground where the book loads are greater, cut back at all four corners to subtly articulate the building's exterior square form. The perimeter study carrels are illuminated from windows above the reader's eye level; smaller windows at eye level afford views to the campus or conversely can be closed by a sliding wooden shutter for privacy and concentration. There is contact with and building upon origins in both the library and the [Kimbell] museum. They span time as an architecture of basic fact and of progression as we move onward, aware of both where we have come form and

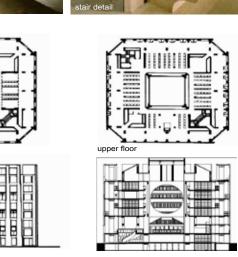
where we are."

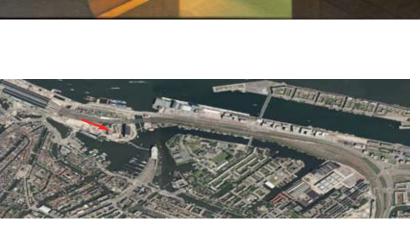












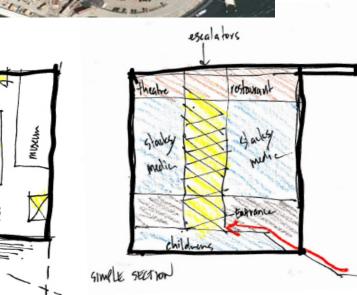


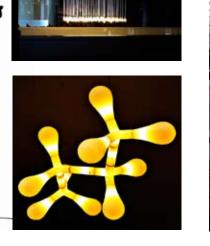


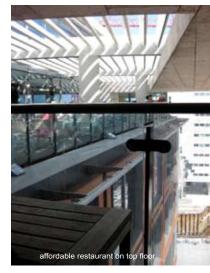
Openbare Bibliotheek Amsterdam

Oosterdoksstraat 110 Amsterdam, NL Realised 2007

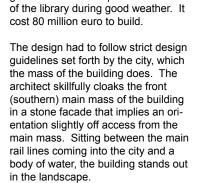
Jo Coenen, Architect







GLOWND PLAN Opened on 070707, the Amsterdam Public Library became Europe's largest library. It has a floor surface of 28,500 m2, spread over 10 floors, 1200 places to sit, of which 600 with Internet-connected computers and a staff of 200 people. Also included are an auditorium, an exposition room, the Library Museum, the Gerard Reve Museum and 2000 parking spaces for bicycles. On the seventh



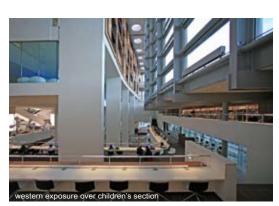
floor is a V&D La Place self-service restaurant with a south-facing terrace. There is a coffee shop on the ground level which spills out in front







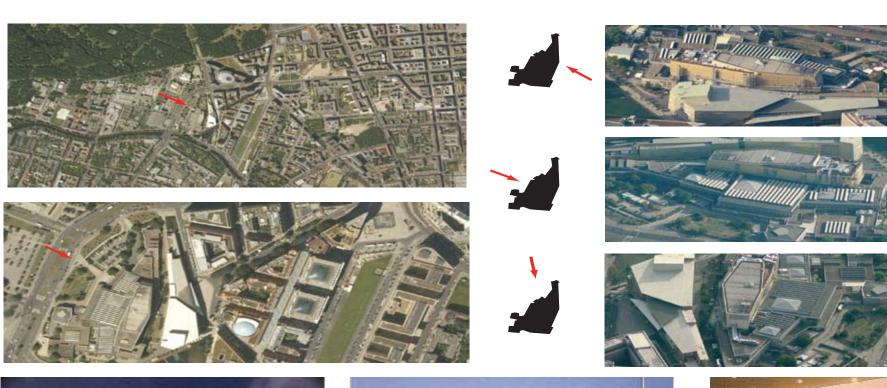


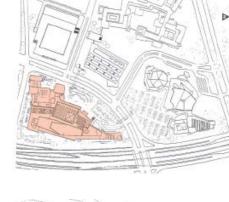




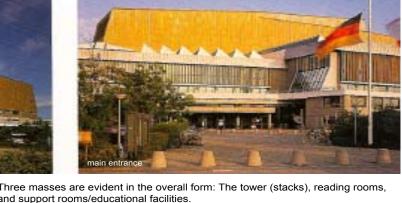


Staatsbibliothek zu Berlin Potsdamer Strasse 33 Berlin, Germany Realised 1979 Hans Scharoun, Architect

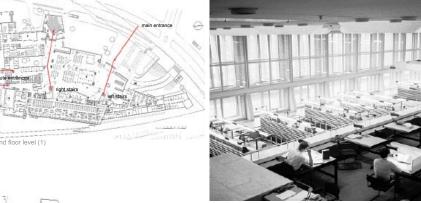


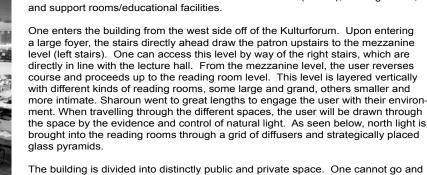






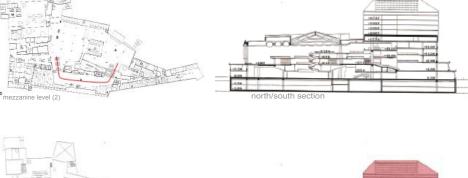






seek out a book themselves. Unlike other libraries, books from the stacks are avail-



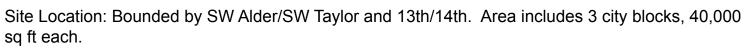




able upon request from staff.







Zoned Central Residential (RX), with a design overlay.

The RX zone is a high density multi-dwelling zone which allows the highest density of dwelling units of the residential zones. Density is not regulated by a maximum number of units per acre. Rather, the maximum size of buildings and intensity of use are regulated by floor area ratio (FAR) limits and other site development standards. Generally the density will be 100 or more units per acre. Allowed housing developments are characterized by a very high percentage of building coverage. The major types of new housing development will be medium and high rise apartments and condominiums, often with allowed retail, institutional, or other service oriented uses. Generally, RX zones will be located near the center of the city where transit is readily available and where commercial and employment opportunities are nearby. RX zones will usually be applied in combination with the Central City plan district (The City of Portland Bureau of Planning and Sustainability).

The Design Overlay Zone promotes the conservation, enhancement, and continued vitality of areas of the City with special scenic, architectural, or cultural value. This is achieved through the creation of design districts and applying the Design Overlay Zone as part of community planning projects, development of design guidelines for each district, and by requiring design review or compliance with the Community Design Standards. In addition, design review or compliance with the Community Design Standards ensures that certain types of infill development will be compatible with the neighborhood and enhance the area (The City of Portland Bureau of Planning and Sustainability).

Zoning variance would be applied for by submitting project as a planned development for design and conditional use review, since this area is currently zoned residential and new construction of another function is being proposed. The building usage would fall under the city's "institutional" category.

Multi-Dwelling Zones 1/16/09 Chapter 33.120 Title 33, Planning and Zoning **RX** Regulations:

There are no density limitations.

Parks and open space are allowed under RX zoning.

Maximum Building Height: 100 feet.

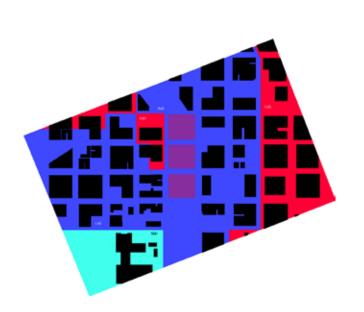
Maximum FAR: 4 to 1.

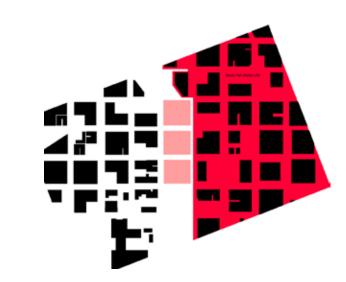
1 block used: Allowable area: 160,000 sq ft. 2 blocks used: Allowable area: 320,000 sq ft. 3 blocks used: Allowable area: 480,000 sq ft.

Maximum Site Coverage: 100%.

Minimum Setback: None.

Maximum Setback: 20 feet.





zoning (see associated description)

urban renewal areas

Height Reqt Quantity

Total Area

Multi-Dwelling Zones 1/16/09 Chapter 33.120 Title 33, Planning and Zoning Institutional Uses

Minimum Site Area for Institutional Use: 10,000 sq. ft.

Maximum Floor Area Ratio [2] 2 to 1

Maximum Height [3] 75 ft. Minimum Building Setbacks [2] 1 ft. back for every 2 ft. of bldg. height, but in no

case less than 10 ft. Maximum Building Coverage [2] 70% of site area

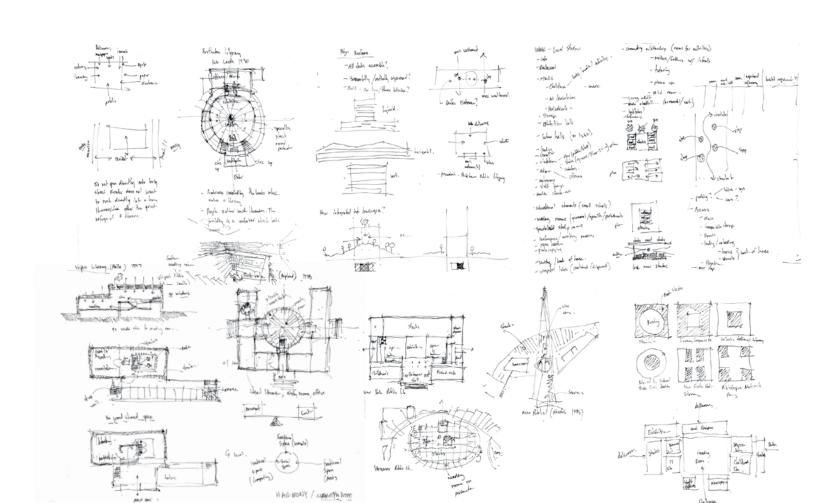
Minimum Landscaped Area [2,4] 20% of site area Buffering from Abutting Residential Zone [5] 10 ft. to L3 standard Buffering Across a Street from a Residential Zone [5] 10 ft. to L1 standard

Ajacencies

ZONING

			11000110110			
Libraries						
NW Regional Library	Indirect	Stacks	No	1	20000	20000
Media Library	Indirect	Stacks	No	1		20000
iviedia Library	munect	A/V Rooms	INO	1	20000	20000
No. of the second	1	Computers			25000	25000
Non-Fiction	Indirect	Stacks	No	1	35000	35000
Children's Library	Indirect	Children Stacks	Double	1		16000
Young Adult Library	Indirect	Adult Stacks	No	1	20000	20000
		A/V Rooms				
		Media Library				
		Computers				
					Libraries Total	111000
Other Libraries						
Periodicals	Edge, Minimal	Stacks, Main Circ	No	1		2500
Newspaper	Edge, Minimal	Stacks, Main Circ	No	1	2500	2500
					Other Total	5000
Halls/Rooms						
Exhibition	No	Main Circulation	Double	1	7000	7000
	-	Loading				, 550
Lecture Halls		Main Circulation	Double	2	4500	9000
Medium-sized Conference	Edge, Minimal	Circulation	No	1	6500	6500
Small-sized Conference	<u> </u>					
	Edge, Minimal	Circulation	No	40	400	16000
General Reading Rooms	Edge/Top	Stacks	Mixed	2	4000	8000
Specific Reading Rooms	Edge/Top	Stacks	No	5	2000	10000
Community Rooms	Edge/Top	Main Circulation	Mixed	6		3600
A/V Rooms	No	Media Library	No	12	300	3600
		Young Adult				
Donation Center	No	Main Circulation	No	1	1500	1500
					Halls Total	65200
Dispersed Space						
Book Circulation	No	Stacks Main Circulation	No	1	2000	2000
Computors	No	Dispersed	No	1	5000	5000
Computers		*		1		
Restrooms (M/W)	No	Main Circulation	No	8	800	6400
Copy Rooms	No	Main Circulation	No	4	200 Dispersed Tot	800 1420 0
					Dispersed for	14200
Commercial						
Café (s)	Edge	Main Entry	No	3	1500	4500
Restaurant	Edge/Top	Main Circulation	Mixed	1	10000	10000
					Comm Total	14500
Staff						
Administration	Edge		No	1	15000	15000
Training Rooms	Edge	Admin	No	8		3200
Inter-Loan Division	No	Admin	No	1	1000	1000
Staff Lounge		Admin				1000
_	Edge		No	1		
Sorting	No	Loading	No	1		3000
Receivables	No	Loading	No	1		1500
Book Loading	No	Exterior	No	1		1500
Food/Bev Loading	No	Exterior	No	1		1000
Exhibition Loading	No	Exterior	No	1		1500
					Staff Total	28700
					Subtotal	238600
Circulation	Mixed		Mixed		.5 x Sub	119300
Storage/Shafts	No		No	1	.1 x Sub	23860
					Building Total	381760

PROGRAM



PRECEDENT ANALYSIS