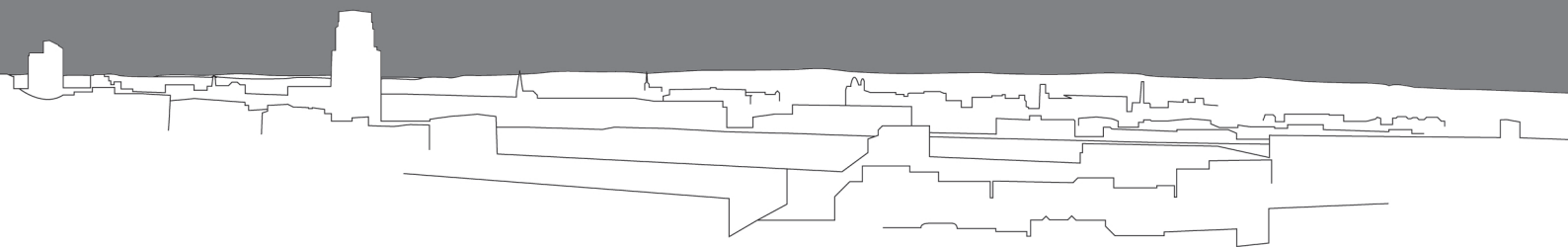


# A CULTURALIST MANIFESTO

the role of the architect, architecture, and place in the 21st century economy



*A CULTURALIST MANIFESTO:  
THE ROLE OF THE ARCHITECT, ARCHITECTURE, AND PLACE IN  
THE 21ST CENTURY ECONOMY*

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“Ideas are our commodity.”

William Saunders, *Commodification and Spectacle in Architecture*

“Struggling to keep some sense of moral authority intact, many architects criticize the commodification of architecture as spectacle and the design of the built environment becoming an intrinsic part of contemporary consumer culture.”

Anna Klingmann, *Brandscapes*

# introduction

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## 1.01 abstract

Society is sculpted by the information it is fed. A particular society's habits are a direct product of an education and value system and what has been internalized from those systems. Architecture is a direct appearance of this information-feeding, and in this instance, "architecture" can be defined to encompass the physical manifestations of social and economic viewpoints. Accordingly, architects are informers of a particular viewpoint; that is, architects are the visual communicators of a society's value system. So what can we conclude from the modern built environment and patterns of development in a particular place? What can be said about how architects respond to the cultural conditioning which they undergo in everyday life and with the skills and thought-processes that are a product of their formal education? How do architects inform the society, as the wider audience, of a political, economic, or social strategies and methods, and how do we do this as a place-based design problem?

The context within which I am examining is Grand Rapids, Michigan. Grand Rapids, as a post-industrial city in a post-industrial state and region, has taken many efforts to "re-invent", "re-identify", and "re-brand" itself in the past 30 years. These efforts ride on the contingencies of economic revitalization and diversification, as well as shifting a culture and knowledge-base. With its rich history of furniture design and manufacture, due to inherent natural conditions and entrepreneurial spirit, Grand Rapids established itself as the center of the furniture-manufacturing industry. This continues to be true today with the presence of Steelcase, Herman Miller, and Haworth. Furthermore, the culture of the place, as it has developed, has fostered

a philanthropic spirit that has infused the city and its residents with the capital needed to support this transformative economy. This transformation of place has a direct relationship with the local people.

The history of design in Grand Rapids begins with the furniture manufacturers and continues to modern multi-disciplinary design firms. Design, as a platform for innovation and economic strategy, is critical for the advancement of post-industrial cities into new-age economies and it has the potential to distinguish “place” in an ever-increasing global culture. This thesis sets out to explore the role that design, as an industry, a catalyst, and a culture, plays in Grand Rapids, as well as the potential for further harnessing the design-prowess of the region to strategically shift a culture and economy. Through the coordinated collaboration of politicians, business leaders, and educators within different design professionals, Grand Rapids and West Michigan can position itself as a diversified economic hub with a distinguished culture and sense of place. How does architecture respond to this, and how does an architectural insertion position itself as an advocate for design-thinking?

□

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## 1.02 thesis paper

“Creativity is like a new currency that is more sophisticated and powerful than finance capital, which is one-dimensional and narrow”.

This is America in 2010. As a nation founded by immigrants seeking to establish themselves and their lives, we hold strong to the ideals of individualism; I control my future and I make my own decisions. This fierce individualism is blatant in our cultural attitudes and practices, with obvious architectonic implications. The automobile and its network of land-consuming roadways: transport for me. The subdivision: my separated neighborhood. The big house: enough space for me. What modern suburban America lacks is distinct community identities, a product of “we”- thinking. Suburbanization is a phenomenon that has radically shifted the American psyche over the last half-century. This sprawling no-place condition, engulfing so much of the American landscape, has sterilized the tapestry of social, economic, geographic, and architectonic variables that define place and community. John Rowland, in *Urban Design Futures*, notes that “an increasing number of families adopt a peripatetic lifestyle where they shop in town B... live in town C...go out for an evening in town D... and commute to work in city A”. No-place Ohio begins to look like no-place Arizona, with the common thread being a standardized architecture of safety and predictability. This has come at the expense of many of America’s urban centers, where traditional urbanism (architecture, urban design, landscape, and social living) was particular to the place. Furthermore, this issue of suburbanization is not purely the result of a lacking architectonic response. Rather, policy-making, business practices, and cultural lifestyle

trends have perpetuated the proliferation of this no-place condition.

Place recognition. This is a multi-sensory, phenomenological experience that is at the root of architectural design. How we define a place is part of our understanding of how we define ourselves and our position within community. Humans are attracted to places with a distinguishable “vibe”. Place brings comfort, and each place “communicates messages – functional, symbolic, and persuasive – to people as they move about.”

In response to the cultural trending that defines the sprawling American city, we, as a society, have begun to recognize the importance of place-making, place marketing, and place distinction. This is something people desire; the feeling of being a part of a community. Many cities have taken efforts to identify alongside an image, label, or brand, often responsive to a local cultural condition and contingent upon the ideals of economic development and attracting residents and investors. “Place marketing when viewed in relation to architecture can treat the city as an entity to be physically transformed in order to enhance its image and, through a strategic restructuring of the urban fabric, to simulate the birth of new initiatives.” Modern place-making often times synthesizes cultural and economic needs.

Beginning in the late 1980s, there began an understanding among leaders in formerly industrialized economies that major shifts were occurring in how these industrial-based economies were structured, and that they would not return to the same levels of production. Many factors are

attributed to this and vary from place-to-place, but what remains common is the need for a redefinition of economy, and resulting, a redefinition of image for a place. These efforts have occurred both in the American context and internationally, particularly Western Europe. The result is often a resurgent city center that becomes a magnet for young professionals, investors, and those seeking creative innovation. This economic transformation requires a creative base, and it often times harnesses the role of the multi-disciplinary designer to strategically leverage his creative capital. What distinguishes these “creative city” initiatives from past urban development is the infrastructure they require: both the “hard” infrastructure that is traditionally thought of (building projects, transportation, iconic architecture, etc.) and “soft” infrastructure, which are the networks of people meeting and exchanging ideas, working collectively with an array of professionals, to establish creative solutions. The soft infrastructure is the “overall mental infrastructure and mindset of the city” and is encouraged through place-making and urban design that promotes this type of culture.

While identifying “what makes a place”, architects, designers, and all involved parties have to be aware of who they are targeting in this modern game of lifestyle consumption. Investments are made not only on the basis of practicality, but also tactfully: who will this investment attract? How will they be identified and recognized? Globally, different cities have taken different approaches. London, Paris, Sydney, New York – these place have obvious physical landmarks; the visual signal for place identification. In the United Kingdom, Birmingham has used consumption, in the form of a

shopping mall, to define the city; an architectonic object that shimmers, attracts, and confidently boasts “you are in Birmingham”. Locating itself adjacent to the main train station in the city center, it is often the first image visitors see, offering a visual cue to place.

Other cities have taken more foundational approaches at transforming an identity and place through not only the hard infrastructures, but complex soft infrastructures that lay the foundation for a more sound economic and cultural success. Glasgow, Scotland is a major post-industrial European city that has promoted creativity and design to transform its image, economy, and culture. The city embarked on a literal branding campaign in the mid-1980s, “Glasgow’s Miles Better”, that led the efforts for “one of the biggest urban ground-shifts in history.” Building on historical design institutes and traditions, ranging from Charles Rennie Mackintosh’s Glasgow School of Art to Kelvingrove Royal Gallery, Glasgow created a local network of business, institutions, and key community players. Perhaps most influential, local leaders established The Lighthouse, “Scotland’s Centre for Architecture, Design, and the City”, as an authority and promoter for design and creative thinking. This has been pivotal as a catalyst in policy-making and business-decision strategies. Glasgow has also hosted a myriad of events promoting themselves, their local culture, and welcoming international recognition. Most recently, the city has employed high design, in the form of architecture, to create iconic images of the “new” Glasgow. These places (museums, infrastructure, and entertainment centers) send the visual signal of a design and image-consciousness culture and provide the physi-

cal catalyst for redevelopment. Through its multi-faceted approach at promoting design and creativity, Glasgow has transformed its image, its attractiveness to investors, and its urban fabric.

This thesis explores the idea of place-making, in our modern era of “urban consumption”, as an economic development strategy and architectonic revelation with in the context of Grand Rapids, Michigan; in particular, the examination of business, political leadership, and institutional influence coalescing to promote a regional design-based agenda. Grand Rapids has a rich history of design-thinking and design-innovation that has been a major force in the development of the city and the culture of the place. Most notably, the furniture industry, and its strong ties to the region, gave the city a foundation for industry, growth, and culture. Today, leaders in Grand Rapids have recognized the design prowess of the region, in a business and institutional sense, and what this potentially offers in economic and community development. By recognizing these community assets, assessing the potential that exists between a network of institutions, and filling the gaps to create a formalized network of design advocates, Grand Rapids can position itself be a leader in recognizing the cultural and economic impact that “design” (as an industry and as a thought process) can have on the value of community and place-making.

#### Context

The history of Grand Rapids, and the development of the early industry, is very much tied into the local geography, natural resources, and people who settled the Grand River



valley. In 1827, Frenchman Louis Campau set up a trading post in the valley adjacent to existing Native American settlements. Campau was responsible for settling the area, on the east side of the river, that is today referred to as downtown Grand Rapids. Nearby, a competing fur-trading post, called Kent, established by businessmen Lucius and Lumen Jenison, was developing. Eventually, the village of Grand Rapids outgrew the village of Kent, and upon being chartered in 1850, the city on the Grand River was known as Grand Rapids, named for a series of limestone rapids that were at the time located downtown, lending to the unique geographic quality of this place.

The river played an important role in the early development of the city. Foremost, it served as a means of transportation, of goods and people, from the city to Lake Michigan, some 30 miles down the Grand River. As an early fur-trading and agricultural settlement, the fertile land in the Grand River valley was able to support a growing population and a growing industry. The Grand River and Grand Rapids were also strategically located at the southern end of Michigan's great pine forest (today, the Manistee National Forest). This was fuel for the growth of the fine and artistic furniture industry; a readily available supply of workable material, an easy means of transportation, and an entrepreneurial workforce. This industry began its dramatic growth period after the Civil War, and soon, furniture factories began springing up all over the city along the Grand River, transforming the former fur-trading post into a rapidly-industrializing settlement. By the American centennial in 1876, Grand Rapids was recognized as the leader in production of fine and artistic furniture, and at the

1890 census, 484 factories were recorded in the city.

Many of the furniture factories were located along the river north of the city center in a neighborhood called Belknap Lookout. This area was positioned uniquely at the foot of a series of limestone rapids, providing power to the furniture plants alongside the Grand River, and was sandwiched between the river and a steep bluff to the east. Eventually, the limestone was removed from the river for building purposes, and in 1849, the 6th Street dam was constructed, providing more power to the growing factory district. The factories thrived and clustered because of their close proximity to downtown commercial activity, and a wealthier residential community began to take shape on the adjacent bluff, known as Belknap Hill. Residents lived and worked in this neighborhood, next to the factories, and in close proximity to their ethnic church communities.

Gradually, the furniture factories and companies moved out of the city center and into surrounding suburban communities, a trend that accelerated alongside post-WWII suburbanization. Decentralization and suburbanization not only displaced the industry in the city core, but it also displaced the communities of immigrants and residents. The neighborhood that was once prominently pointed to as the center for furniture activity in Grand Rapids, Monroe North, began to face economic decline and disinvestment. This was accelerated by urban renewal in the 1960s, as the construction of freeways in the city center cut-off the Monroe North neighborhood from the residential neighborhoods on the west side of the river and the downtown area to the south.

The Monroe North, today, exists as an emerging mixed-use residential, commercial, industrial, and entertainment neighborhood on the fringe of the downtown core. Recent investments have included the development of continuous green space and a river recreation trail on the east side of the river, the conversion of former factories into mixed-use residential and commercial loft space, upgraded streetscapes and landscaping, and new construction in the form of multi-story residential buildings and modern office spaces. Along with the prospect for a proposed streetcar line connecting the neighborhood with the downtown area and its agency to the growing Grand Rapids Medical Mile (a cluster of high-technology biomedical firms and institutions), the Monroe North is poised to grow as a revitalized live-work neighborhood.

#### Situation

Grand Rapids is located in Michigan, the state with, arguably, the most disinvested industrial base (automotive manufacturing) in the United States. What this means is that Grand Rapids is automatically associated with the labels of “rustbelt economy” and “industrial decline”. This is, however, not true, as Grand Rapids has strategically set-up and maintained a more diversified economic base and has tactfully set the stage for a transition into a 21st century economy. Grand Rapids has established its brand identity, and its brand is unique to the place. “It is vital for places to adopt a market perspective, establish a strategic vision, and communicate their competitive advantages along with a distinctive image in order to make potential investors aware of their inherent attributes, incentives, and

features.”

That being said, one of Grand Rapids’ best kept secrets is the power of the design industry and the impact, as well as potential impacts, design and design-thinking has on the city. When I speak of design, I am not referencing solely the big 3 office furniture manufacturers (Steelcase, Herman Miller, and Haworth). Rather, design comes from all industries, and design has the potential to impact all areas of our day-to-day lives. In Grand Rapids, outside of the major office furniture manufacturers, major corporations have the potential to advocate, leverage, and capitalize on the power of design. Amway, Meijer, and Spartan Stores are retailers and product manufacturer. Gentex manufactures fire-protection devices and automotive supplies. Wolverine World Wide designs and manufactures footwear. Universal Forest Products produces paper and wood-based items. These are major economic players who have impact on the Grand Rapids business, political, environmental, social, and cultural (and so on) landscapes. Design-thinking and influence can have an impact on the way they operate. □

"Design, stripped to its essence, can be defined as the human nature to shape and make our environment in ways without precedent in nature, to serve our needs and give meaning to our lives."

Daniel H. Pink, *A Whole New Mind*

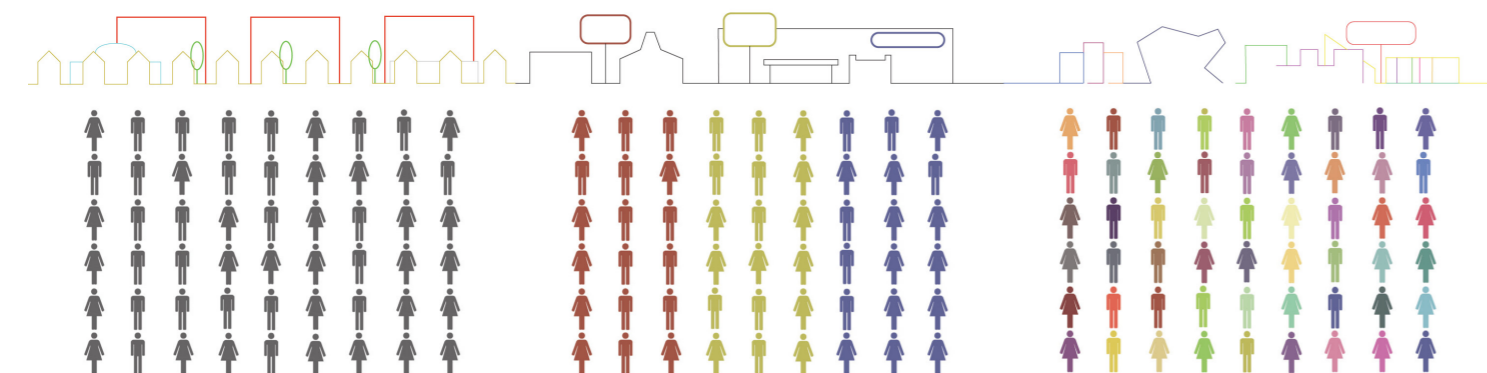
"Because architecture is an event, it is always contingent. Architecture is thus a form of communication conditioned to occur without rules – it is a communication with the other, who, by definition, does not follow the same set of rules."

Jeremy Till, *Architecture Depends*

circumstance

“All cities communicate message - functional, symbolic, and persuasive - to people as they move about.”

Robert Venturi, *Learning from Las Vegas*



**Above** A conceptual diagram showing the progression of “urban consumption” - the physical development of cities as it relates to market conditions - through modern American history. At the beginning of 20th century, at the height of the industrial revolution, physical spaces were developed according to utility, with scales being regulated by a pre auto-dependence and limited mobility. Following World War II and at the height of a shifting population to the suburbs, the spatial and physical manifestation of space was regulated by standardized laws and ordinances, creating a condition of convenience and predictability. Most recently, the idea of ‘place-making’ has shifted towards the unique, with each place (town, city, metropolitan area, state, etc.) marketing itself and its assets to a target market. This, in turn, has led to a city concerned with aesthetic value and appearance, where lifestyles are sought and space and architecture develop accordingly.

## 2.01 site selection

Site considerations began with the central idea of finding a place (thinking about place in macro and micro contexts) that has a definitive projected image. Image is everything, or so it seems in today’s world of “place consumption”. Image is tied into our social and economic culture. People have come to hold images of each place in their mind. Thus, places, as beings, and people are careful in crafting an image, hoping to yield an expected return on investment and increase their competitiveness in an expanding world of high-mobility.

The de-industrialized condition of the American Rustbelt is a reality that has left the people, and especially local leaders, of these affected places to think strategically about how to deal with the depressed economy. Many have failed to proactively think creatively in attracting new industries, but in some instances, attracting new industries is not the end-all solution. Industrialized economies were accompanied by industrialized cultures. Architecturally, this equated to large, expansive factory spaces located along transportation routes (waterways, rail, and later, highways). The period of growth, very much concentrated in the early and mid-20th century, led to a further physical “industrial” typology. This was an era before the post-World War II suburbanization boom. Cities were developed more densely, while many neighborhoods and communities organized around these industrial facilities. Manufacturing and an industrial economy effectively produced a solid middle-class, □



1 City through zoning



2 City through space



3 City lifestyle reconfiguration

## Grand Rapids, Michigan, USA

Furniture City  
River City

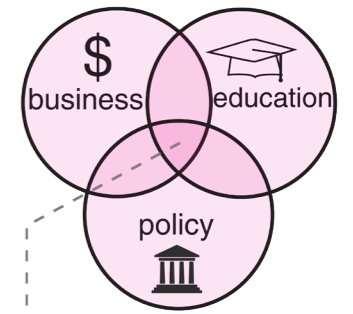
**Below** “Aerial view of downtown Grand Rapids in 1966. The influence of the automobile, the interstate highway system, and urban renewal is evident, but many of the historic buildings remain standing.”



## 2.02 identity mapping

Mapping is a tool used to identify abstracted physical patterns in a city, identify characteristics that may not be noticeable from physical experiences, and display a deliberate set of information. Mapping exercises, in this case, were used as a method to gain a greater understanding of the spatial conditions and relationships, both natural and built space, in the center of Grand Rapids and the adjacent neighborhoods. The following have offered me some insight into programmatic and architectonic conclusions.

Significant “hard” investments and construction has occurred in downtown Grand Rapids during the past decade. These investments include large marquee projects (over \$20 million) as well as many projects between the \$5-\$20 million range. Collectively, the investments build off the synergy created by each other. Certain projects aim at transforming Grand Rapids as an entertainment destination (convention center, art museum), while others aim at building a more diversified economic base (medical buildings, university buildings). Complimenting these are projects transforming Grand Rapids into a city whose core is active at all hours, through the multi-programming of space in the center city (residential, office and retail, transit, and cultural). □

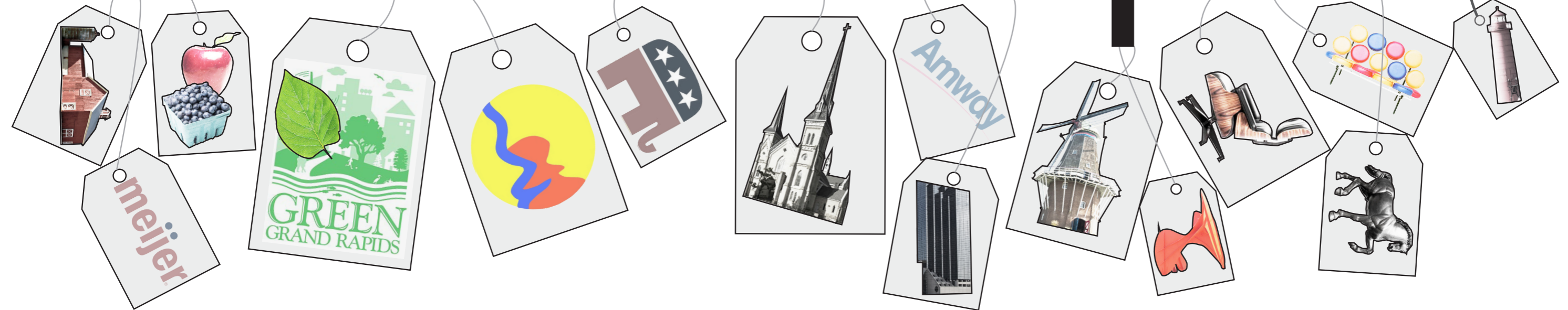


### Design

- “design-centric region”
- “design innovation”
- “design thinking”
- “design network”

Below What are the identities associated with Grand Rapids? Are these mere tags concerned with the obvious or superficial qualities, or are they indications of deeper cultural value? This collage is a play on the idea of 'labeling' Grand Rapids.

# Grand Rapids





**Identified Stakeholders:**  
determined by scope of regional economic impact  
*Business*

1. **Wolverine World Wide**  
footwear design and manufacture
2. **Meijer**  
regional retailer
3. **Universal Forest Products**  
wood-based construction materials
4. **Amway**  
personal product selling and manufacture
5. **Steelcase**  
office furniture design and manufacture
6. **Spartan Stores**  
regional grocery chain
7. **Gentex Corporation**  
high-tech automotive products
8. **Herman Miller**  
office furniture design and manufacture
9. **Haworth**  
office furniture design and manufacture

*Education*

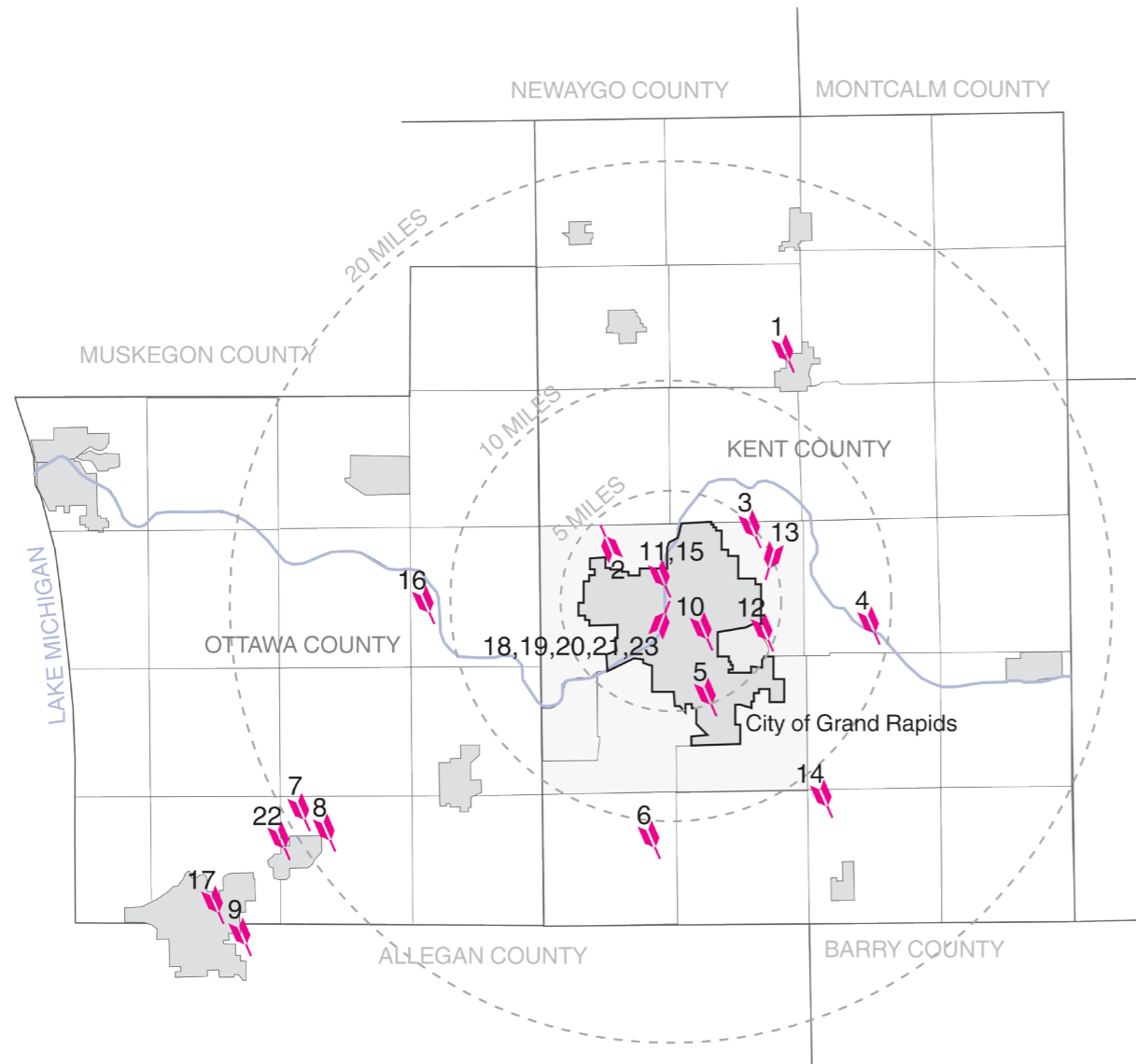
10. **Aquinas College**  
liberal arts college, religious affiliation
11. **Kendall College of Art & Design**  
visual arts college
12. **Calvin College**  
liberal arts college, religious affiliation
13. **Cornerstone University**  
liberal arts college, religious affiliation
14. **Davenport University**  
vocational school
15. **Grand Rapids Community College**
16. **Grand Valley State University**
17. **Hope College**  
liberal arts college, religious affiliation

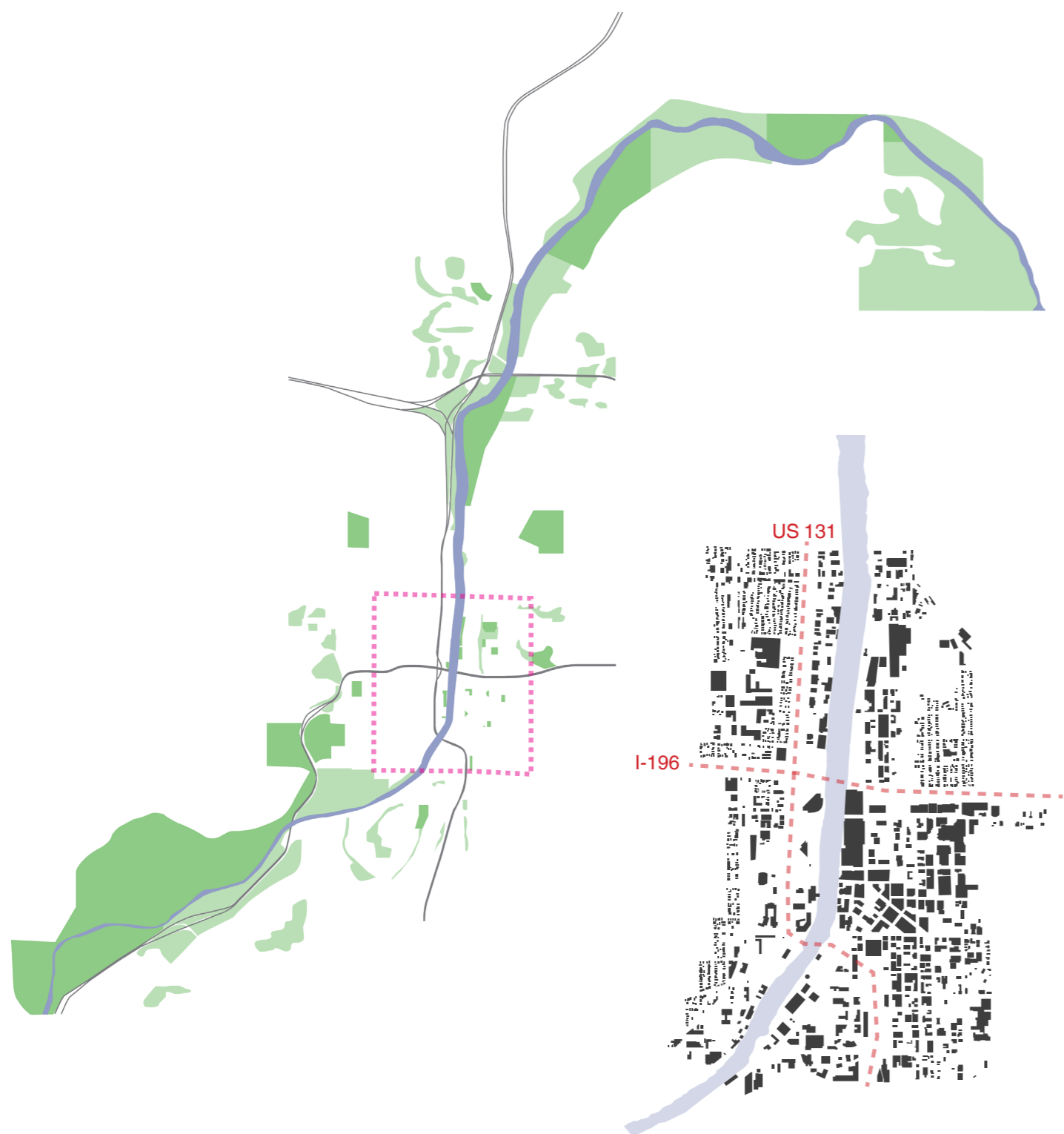
*Policy*

18. **City of Grand Rapids**
19. **State of Michigan**
20. **Grand Rapids Metropolitan Council**  
quasi regional government authority
21. **The Right Place**  
western Michigan economic development agency
22. **Lakeshore Advantage**  
western Michigan economic development agency
23. **Design West Michigan**  
design-focused economic development agency

**Left Top** Proximity of Grand Rapids to other major metropolitan areas in the Great Lakes region. Place identification and place relationships exist within different hierarchies: metropolitan, state, regional, and national. The role of Grand Rapids in a national context will not be the same as the role and identity of the city in smaller spheres, including the greater Great Lakes region and the state of Michigan.

**Left Below** Map of Kent and Ottawa counties, metropolitan Grand Rapids, showing the location of potential regional stakeholders. The geographic location of these institutions offers assets and challenges, and their individual cultures add to the layers of regionalism.





The Grand Rapids city center continues to densify with infill development, ranging from large-scale projects filling entire blocks, as well as multiple blocks (entertainment, cultural, and civic centers), to smaller-scaled projects, which work to fill the gaps in the urban blocks. Much of Grand Rapids' pre-urban renewal fabric is intact, and the center boasts a collection of historic and modern architecture. Surface parking lots are concentrated south of downtown, near the Van Andel Arena, west of the river, around Grand Valley State University, and north along the river. There are a few surface lots that still inhabit the central core.

Urban renewal in Grand Rapids resulted in the construction of interstate freeways (I-96, I-196, and US 131) and the clearing of historic building stock for large-scale, mega-block civic improvements (most notably the Civic Center and the Monroe Mall, today's Rosa Parks Circle). The figure-ground diagram displays the effects of the freeways on the city center and its connection to adjacent neighborhoods, as well as the resulting block sizes and public spaces that replaced the older building stock. Although urban renewal robbed the city of some of its original urbanity, much has been preserved, and the center is still a walkable, pleasantly dense environment.

In an effort to increase investment in the city center, the Rapid, Grand Rapids' local transit authority, has plans for streetcar lines, with the hope of spurring transit-oriented development along the route. The first of these is the Monroe Avenue line, connecting the entertainment area to the south with the central core and Monroe North neighborhoods, with a future extension planned further north, and the Fulton Street line, connecting both sides of the river.

□

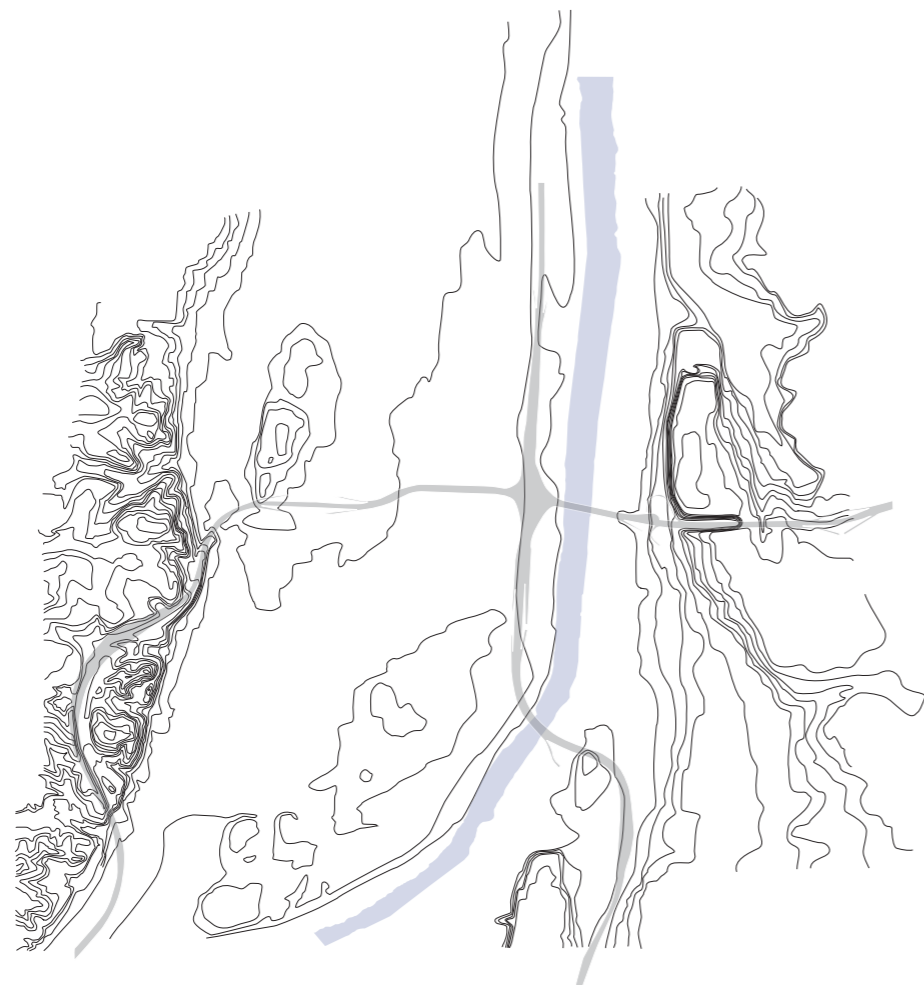
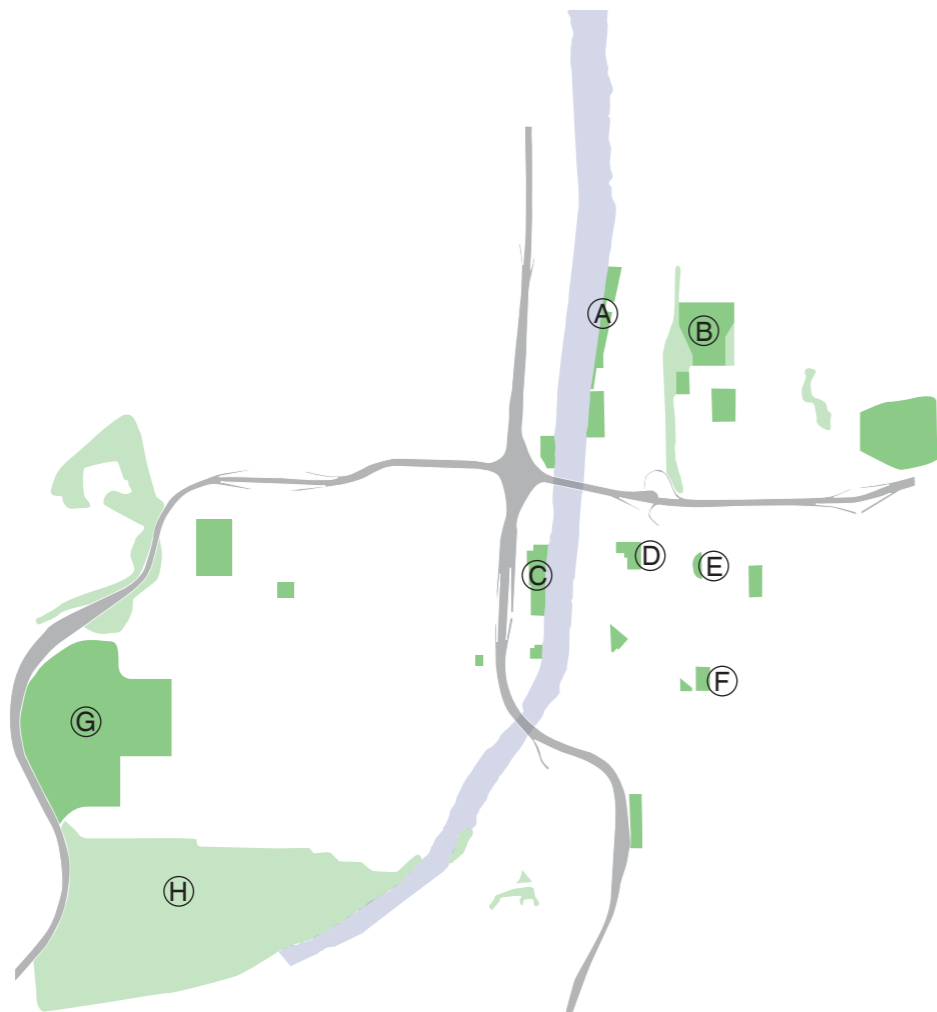


**Left** Green space and transportation in the Grand River Valley with highlighted city center in pink; Grand Rapids figure-ground diagram (bottom right) and transportation system.

**Above** La Grande Vitesse sculpture sits in Vandenburg Plaza, a vast concrete space most commonly devoid of activity, and a product of post-WWII urban renewal.



- A. 6th Street Park
- B. Belknap Park
- C. Ah-Nab-Awen Park
- D. Vandenburg Civic Plaza
- E. Crescent Park
- F. Veteran's Memorial Park
- G. John Ball Park and Zoo
- H. old Butterworth landfill
- developed green space
- undeveloped green space



Apart from the physically-constructed environment, the urban form of Grand Rapids is very much related to the natural environment: green space, naturalized space, the Grand River, and the city's topography and local ecology. From its early days as a fur-trading settlement, relying on the Grand River for transportation, energy, and resources (water, limestone) to the modern development of center city green space and the continued re-sculpting of the city's topography, the natural environment is an important component of place identity and has is a major lifestyle factor for city residents.

Green space in Grand Rapids includes formalized spaces (groomed parks and urban plazas) and naturalized spaces (woodland, wetland, flood plain, and prairie). Scales range from the small - pocket parks in the city center (Veteran's Memorial, Rosa Parks Circle), linear riverfront parks (Ah-Nab-Awen, 6th Street Bridge) - to the large - zoological park (John Ball), the abandoned Butterworth landfill southwest of the center, and Belknap Park atop the bluff just east of the Grand River. These green spaces, collectively, provide a network of breathing space for residents to enjoy. Furthermore, they work cohesively to create a network of unique spaces in the center city. For example, Belknap and Crescent parks are positioned to have unique views of the cityscape, Ah-Nab-Awen and 6th Street parks provide community access to the river, and the old Butterworth landfill is a bicycle link to the Kent trails bicycle path system, which connects to larger county, regional, and state-wide trail systems. □



Left Grand Rapids green space (top) and topography (bottom).

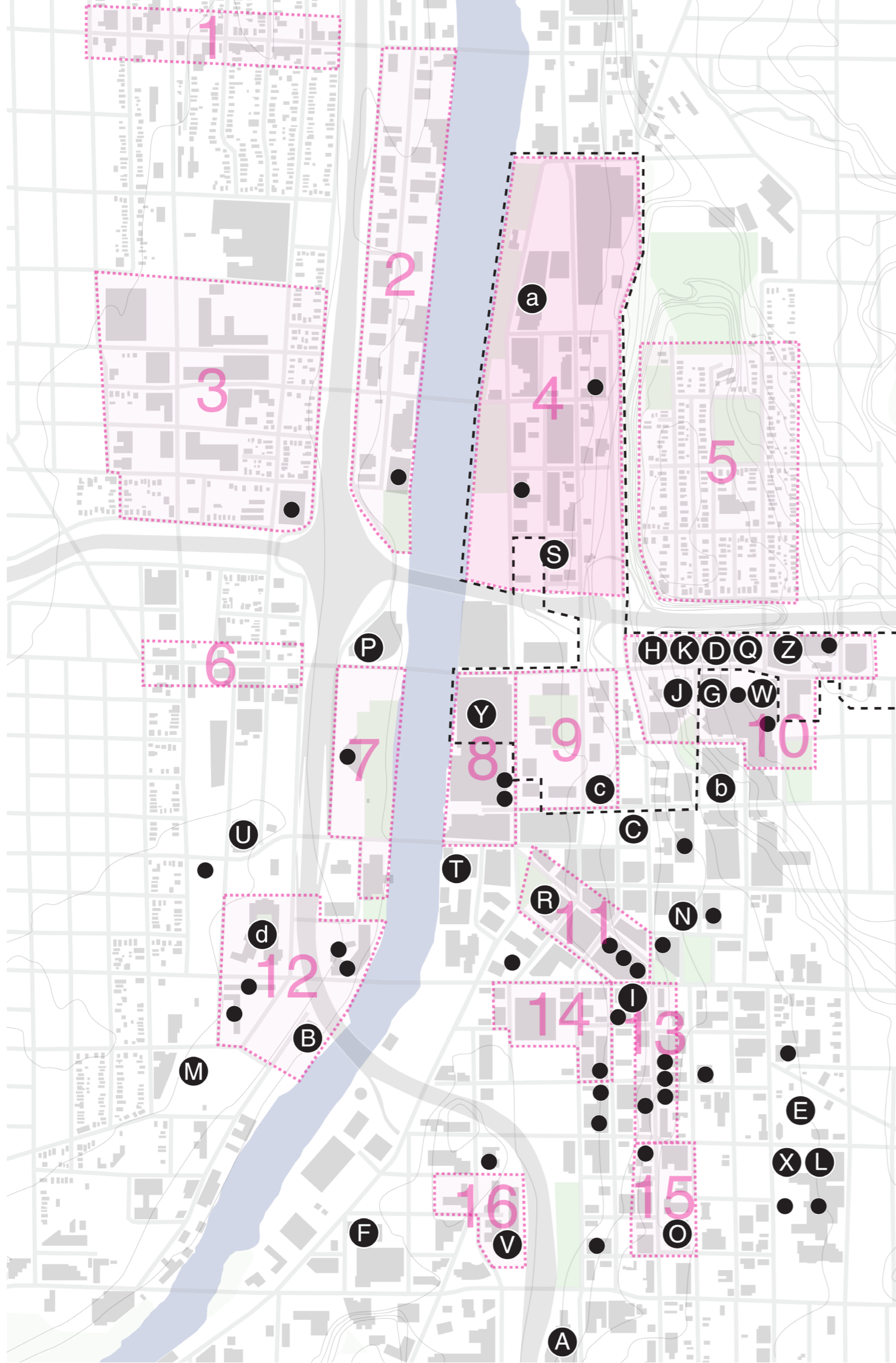
Below Top The 6th Street dam becomes a community focal point and adjacent green space is provided to promote its use and access to the river.

Below Bottom Belknap Park, on the bluffs to the east of the river, showcases the city's topography.

**Below** Crescent Park, adjacent to the Medical Mile, provides panoramic vistas of the city center. Its recent redevelopment was funded by the Van Andel Institute, on the right, making it unique because of the partnerships between government and private industry officials. Crescent park is a recent example of successful public-private partnerships that are transforming the city.



Left Grand Rapids Identity Territories and Recent Investments



**Existing Identity Territories**

1. West Leonard Business District
2. West Grand / Monroe North
3. West Grand
4. Monroe North
5. Belknap Lookout
6. Bridge Street
7. Ah-Nab-Awen Park
8. DeVos Place / Performance Hall
9. Vandenburg (Calder) Plaza
10. Michigan Street Medical Mile
11. Monroe Center
12. Grand Valley State University
13. Division Avenue North
14. Ionia Street / Van Andel Arena
15. Division Avenue South
16. Rapid Central Station / Grandville Avenue

**Anchor Investments**

- A. Grand Rapids urban market
- B. GVSU Seidman College of Business
- C. Kendall College of Art and Design
- D. 35 Michigan Street
- E. Health Park Central
- F. The Rapid Operations Facility
- G. Helen DeVos Children's Hospital
- H. MSU College of Human Medicine
- I. UICA Gallery on Fulton
- J. Van Andel Institute phase II
- K. 25 Michigan Street
- L. St. Mary's Hauenstein Center
- M. Bicycle Factory
- N. The Fitzgerald
- O. Cathedral Square
- P. Riverhouse
- Q. Lemmon-Holton Cancer Pavilion
- R. Grand Rapids Art Museum
- S. Icon on Bond
- T. JW Marriott Hotel
- U. David D. Hunting YMCA
- V. The Rapid Central Transit Station
- W. Spectrum Health Meijer Heart Center
- X. St. Mary's Lacks Cancer Center
- Y. DeVos Place Convention Center
- Z. GVSU Health Professions Building
- a. The Boardwalk
- b. GRCC Natural Sciences Building
- c. Kent County Courthouse
- d. GVSU Richard DeVos Center

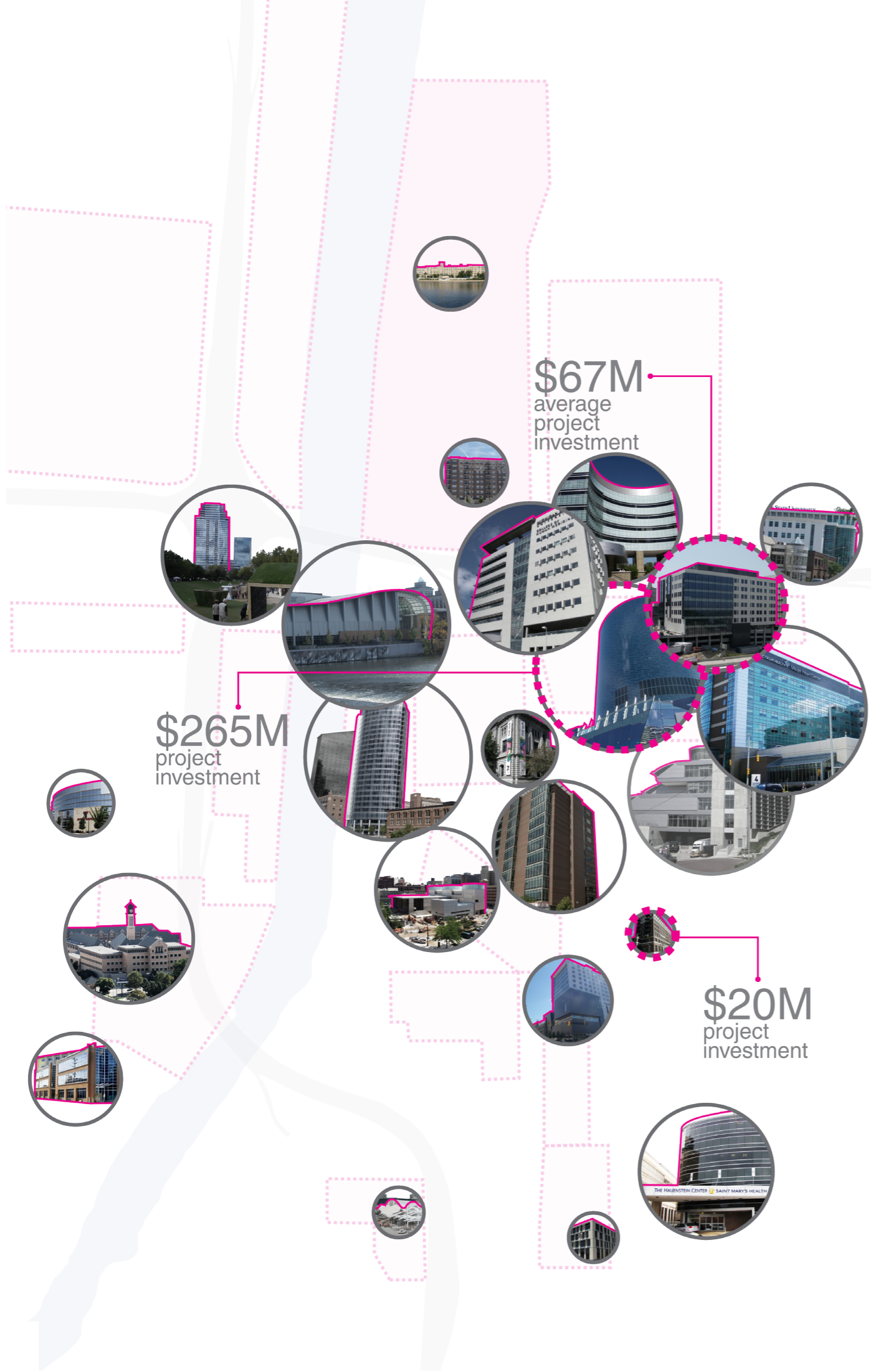
**SmartZone**

- + technology park
- + research-oriented
- + business incubation
- + skill-clustering
- + public / private link

**KEY**

- SmartZone
- A construction project > \$20 M
- new construction project \$5M - \$20 M
- identity territory



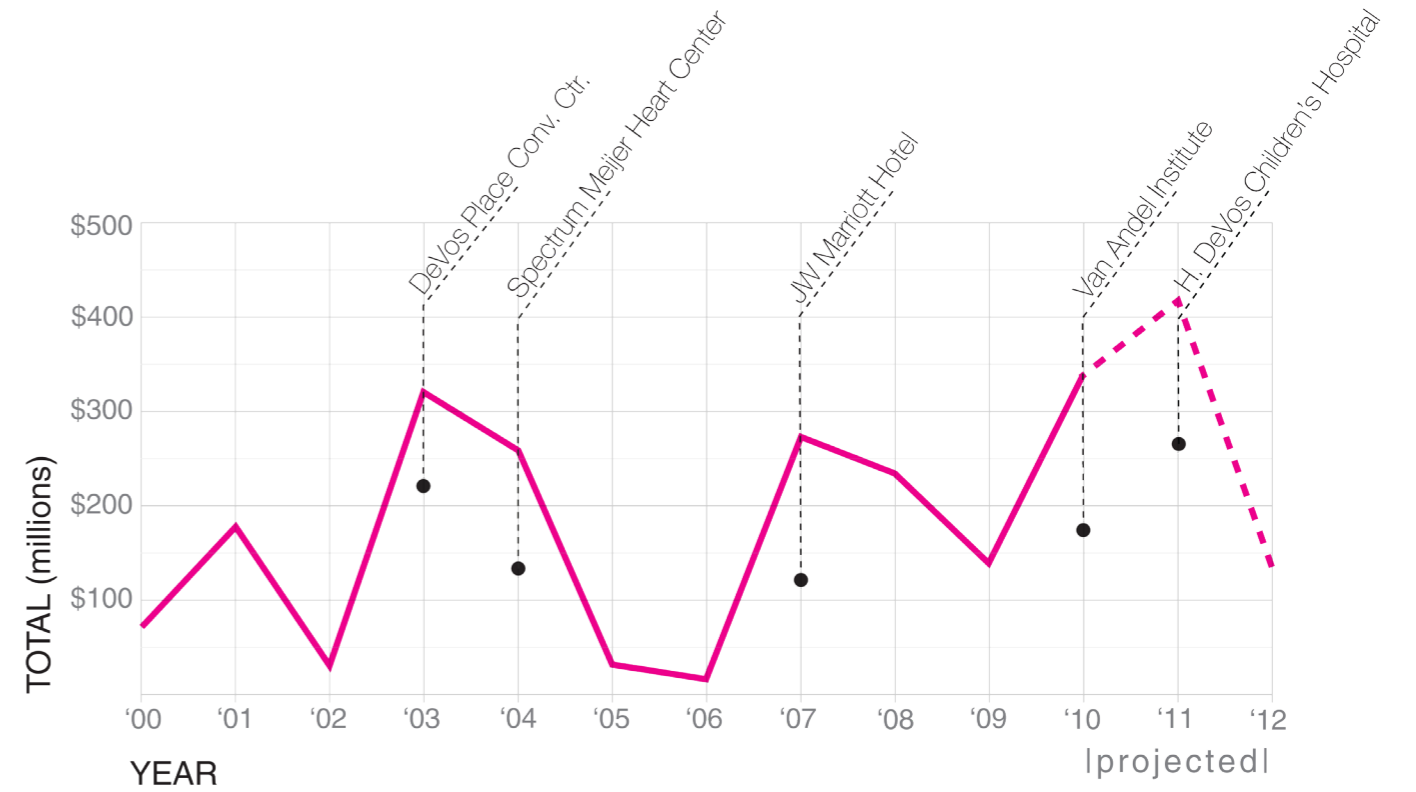


Left Recent Investment Geographic Dispersal - scaled to project size

**Typological Project Totals**

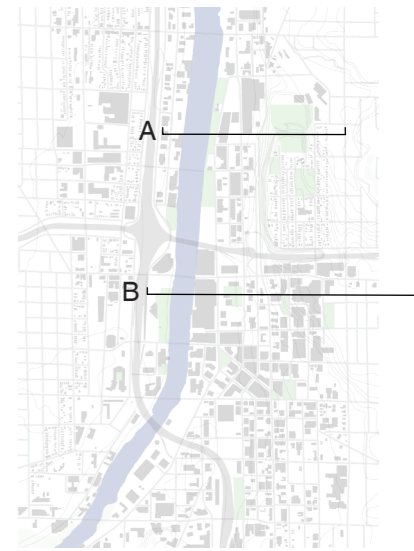
Individual range \$20M - \$265M

Health Care	<b>\$910 M</b>
Civic and Culture	<b>\$626.4 M</b>
Education	<b>\$306.5 M</b>
Residential	<b>\$181 M</b>



Above Total building investment (projects >\$5 million) in Grand Rapids, 2000 - 2012 (projected)  
Source: Rapid Growth Media.

**Below** Landscape section cuts illustrating the variation in scale, density, and development patterns between Monroe North (top, section A) and the City Center (bottom, section B). These relationships were critical in understanding the potential iconic implications the proposed architecture could have in the Monroe North, as well as how each neighborhood's scale affects its identity.



## Monroe North neighborhood

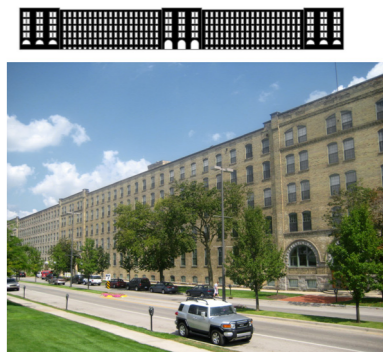
**Below** “A view from Sixth Street hill. The dam on the Grand River was built in 1849. C.C. Comstock’s Tub and Pail Company is on the left. The Sixth Street bridge has not yet been built.”



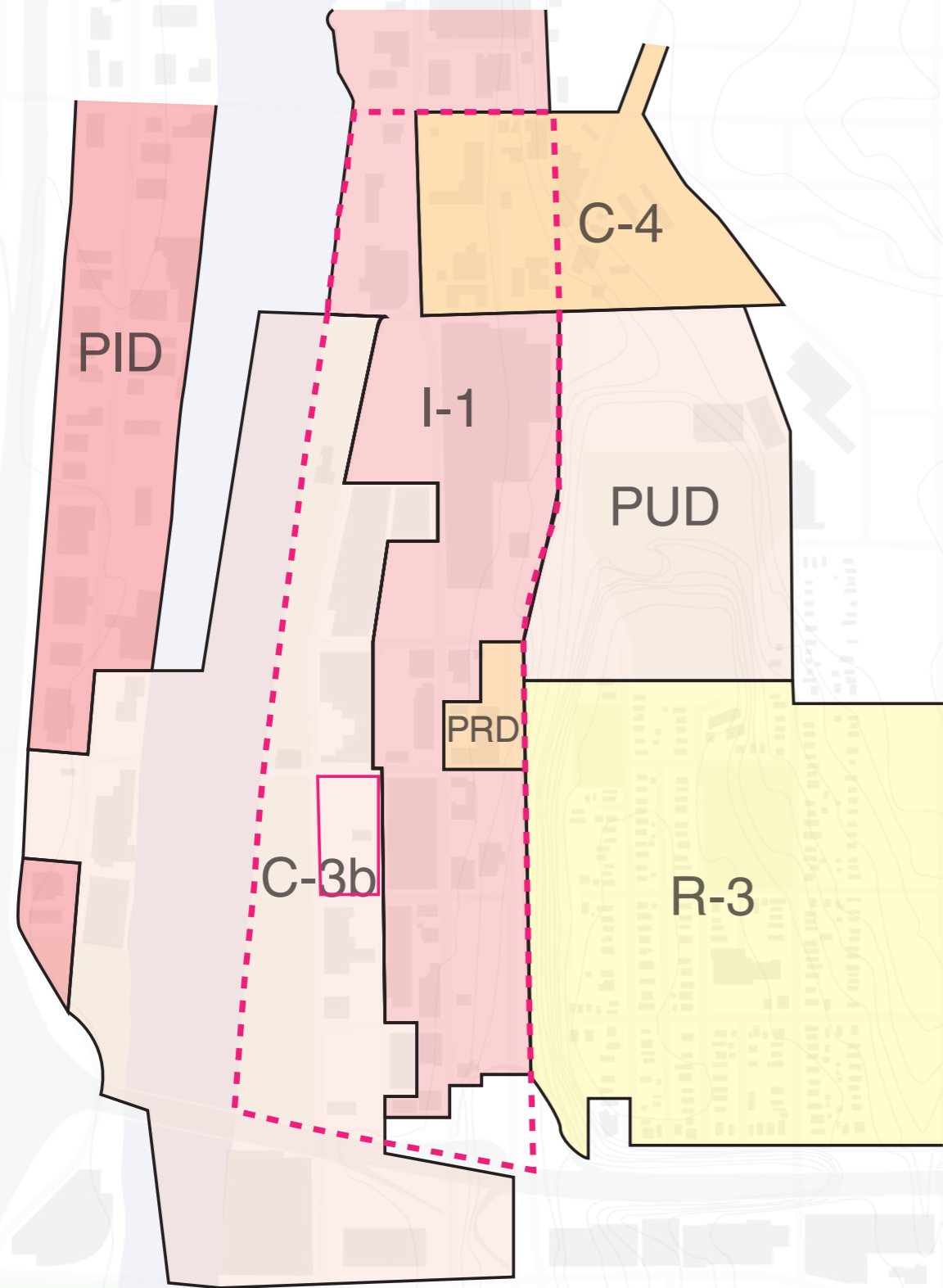
## 2.03 site mapping

The center of the furniture manufacturing industry in Grand Rapids was the Monroe North neighborhood, just north of the city center, in close proximity to merchants and tapping the Grand River as a source for machine power. This neighborhood, being wedged between the river and Belknap Hill, a prominent residential location for the city's professionals, had its origins as a mixed-use district with residences and factories coexisting within the traditional grid of the Grand Rapids urban fabric. Major factories lined the riverfront, while smaller-scaled houses and commercial establishments encroached upon Belknap Hill. The main north-south street through the neighborhood was Canal Street, running along the riverfront, and 6th Street, with the construction of the 6th Street bridge, connected Monroe North with the neighborhoods on the west side of the river.

Today, much of the historic furniture production has moved outside the city and into the suburbs. The Monroe North is now becoming an increasingly mixed-use urban neighborhood. Many of the former furniture factories (right) are being transformed into live/work loft space. New high-density residential buildings have been constructed in the neighborhood, and desirable class-A office space has been bringing a white-collar working crowd into the neighborhood. Resultingly, Monroe North will continue to see more dense infill, further transforming the neighborhood into a residential and business district just outside the city center. □







Current zoning in the Monroe North neighborhood puts emphasis on the expansion of industry and warehouse facilities away from the riverfront. Targeted industry is primarily light and high-tech manufacturing, which taps into the resources of the medical research and development along Michigan Street. This industry-type typically requires large shed-like facilities with scales ranging from entire blocks to smaller, multi-facility blocks.

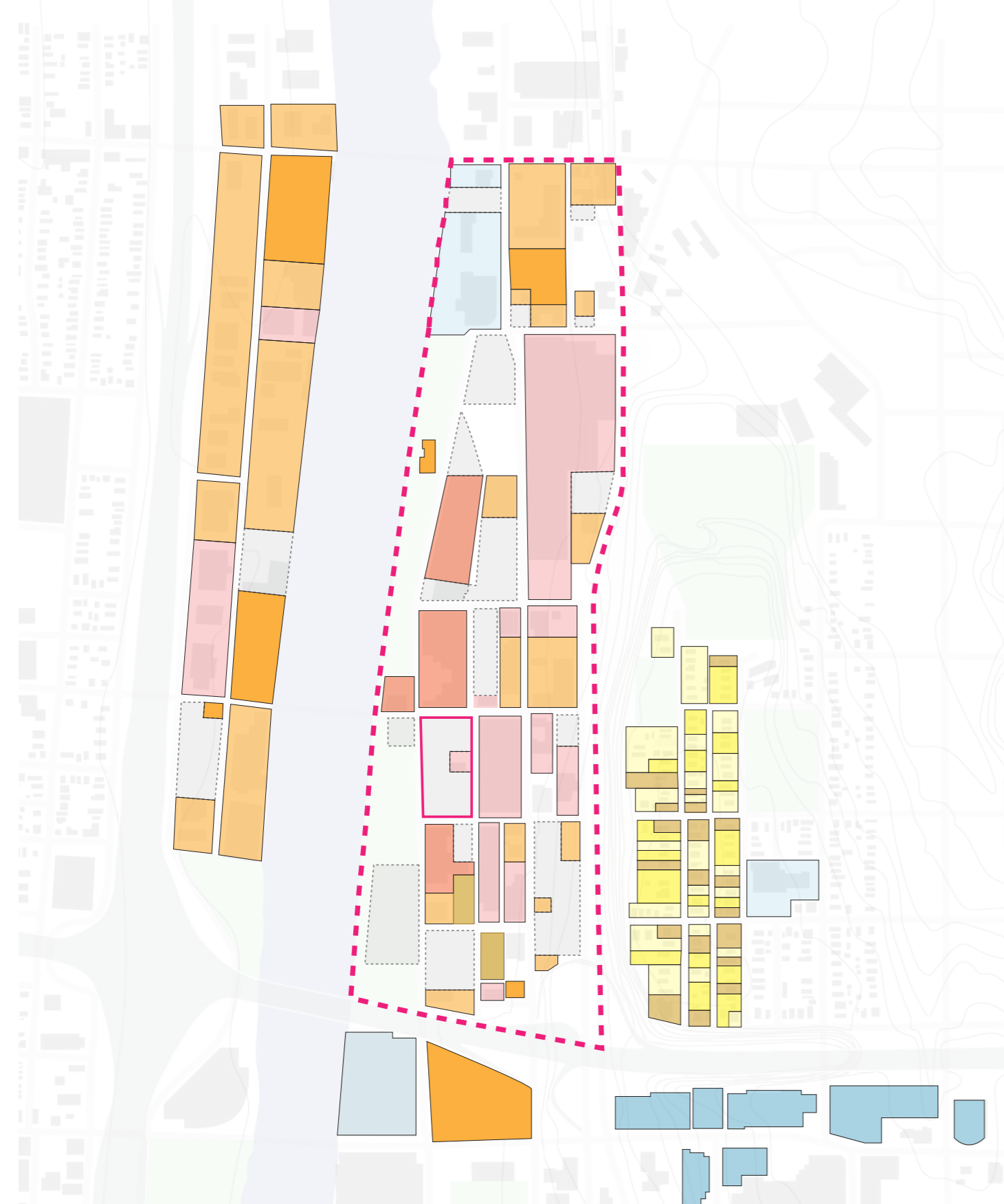
The riverfront is zoned as a City Center Service District, which is essentially a functioning extension of the mixed-use nature of the city center. Capitalizing on the Grand River and adjacent greenspace, this zoning type encourages mixed use residential and commercial properties that will help further develop Monroe North into a walkable urban neighborhood.

Zoning areas adjacent to Monroe North include the mixed-use residential Belknap Hill, which is primarily single-family housing, a neighborhood commercial center along Plainfield and Leonard streets, and cohesively-planned industrial facilities along the west bank of the river. □

- C-3b City Center Service District
  - C-4 Heavy Commercial
  - I-1 Light Industrial
  - PRD Planned Redevelopment District
  - PID Planned Industrial District
  - R-3 Low-Density Multiple Family
  - Project site
  - Monroe North boundary
- 0.125 mile
- ⊕ N

# EXISTING ZONING

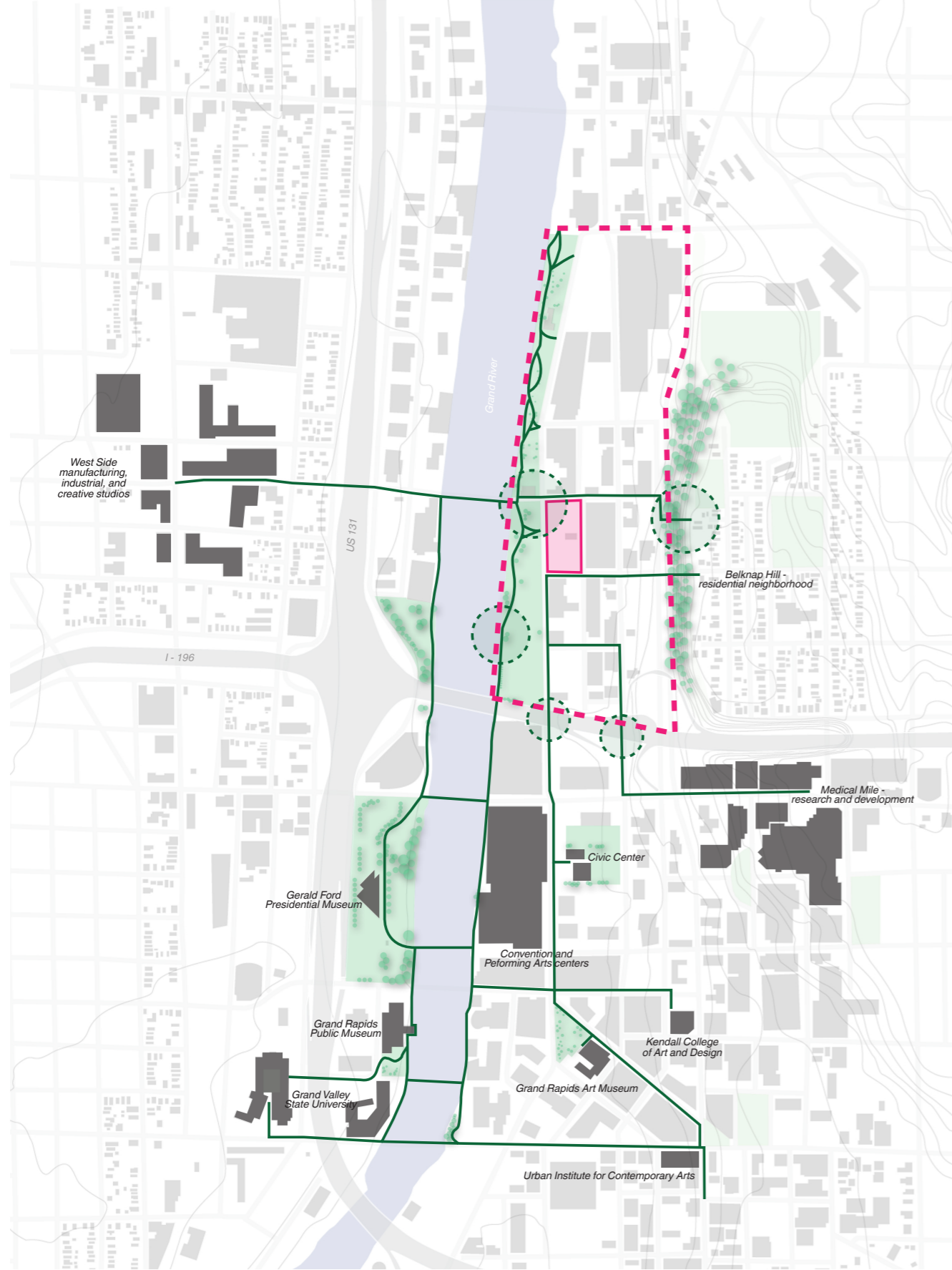




# EXISTING LAND USE

Land use in the Monroe North neighborhood has evolved to encompass a wider-range of uses than strictly manufacturing and industry. Most recently, development traditionally associated with the city center has been constructed in Monroe North, including high-density residential complexes and Class A office space. This compliments the existing large and small-scale manufacturing, small commercial and retail establishments, and many loft conversions with residential components. The historic fabric of the neighborhood has been kept intact with limited superblocks.

Areas adjacent to Monroe North include the Belknap Hill neighborhood, a typically low-density residential neighborhood, the West Grand riverfront, home to commercial and industrial facilities, and the medical research-concentrated Michigan Street hill. □

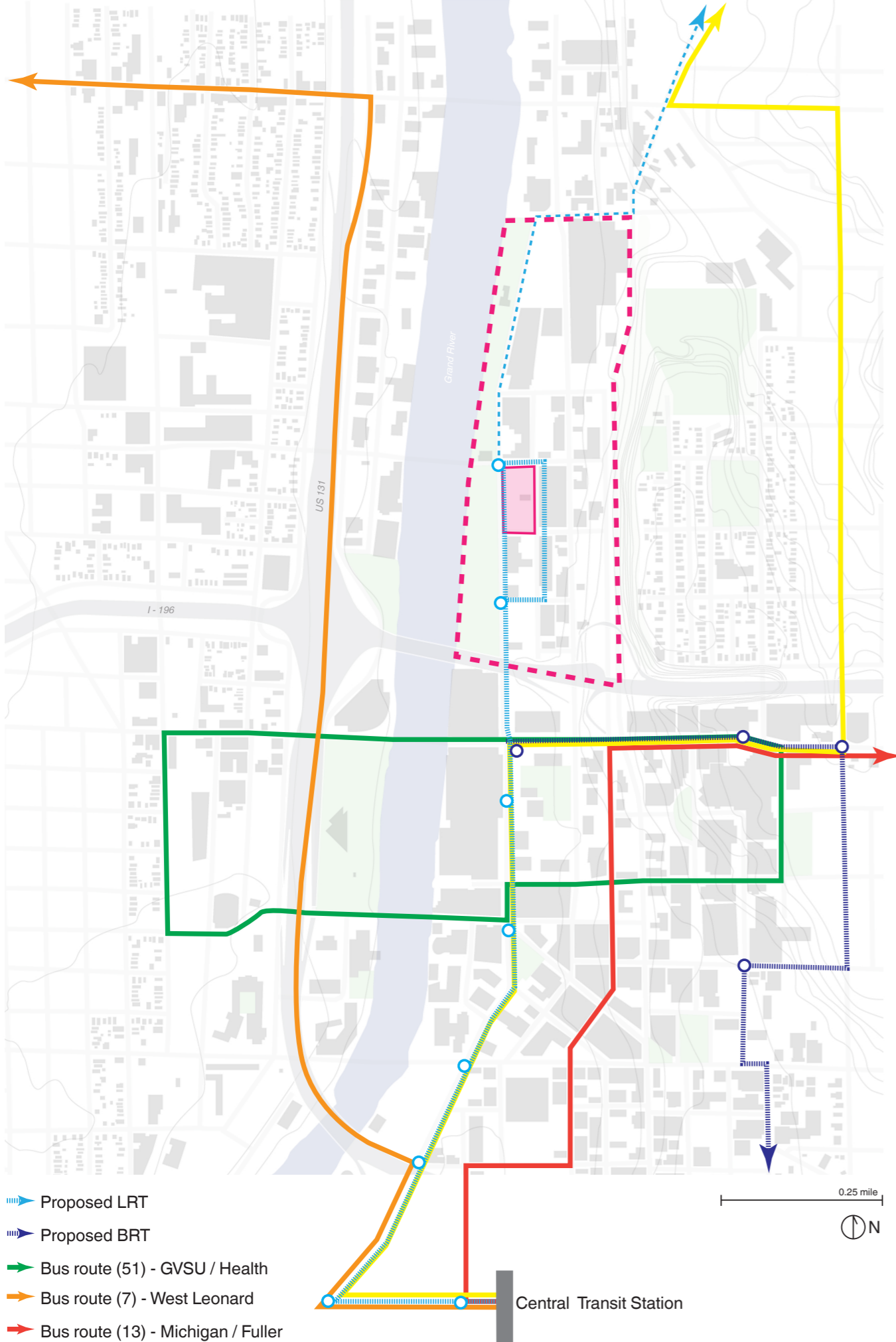


With its adjacency to the city center, residential and industrial neighborhoods, and green space along the riverfront, the Monroe North neighborhood's urban location provides easy walking accessibility to critical public and private institutions, facilities, and businesses.

Existing pedestrian pathways exist along the riverfront, linking the green space and institutions that line the river, including the Ford Presidential Museum, Grand Valley State University, and the convention and performing arts centers. Furthermore, pedestrian links could be enhanced with connections to the Medical Mile along Michigan Street, existing industrial incubation space on the west side of the river, and the Civic Center, Grand Rapids Art Museum, Kendall College, and the Urban Institute of Contemporary Arts, all in the city center. Pedestrian connections also exist through stairways to the Belknap Hill neighborhood.

These connections can be enhanced through specialized paving schemes, enhanced landscaping, and designated signage. These pedestrian connections are critical to creating a dynamic landscape where people and ideas can intermingle and exchange without the restrictions of auto-dependency. □

# PEDESTRIAN CONNECTIONS



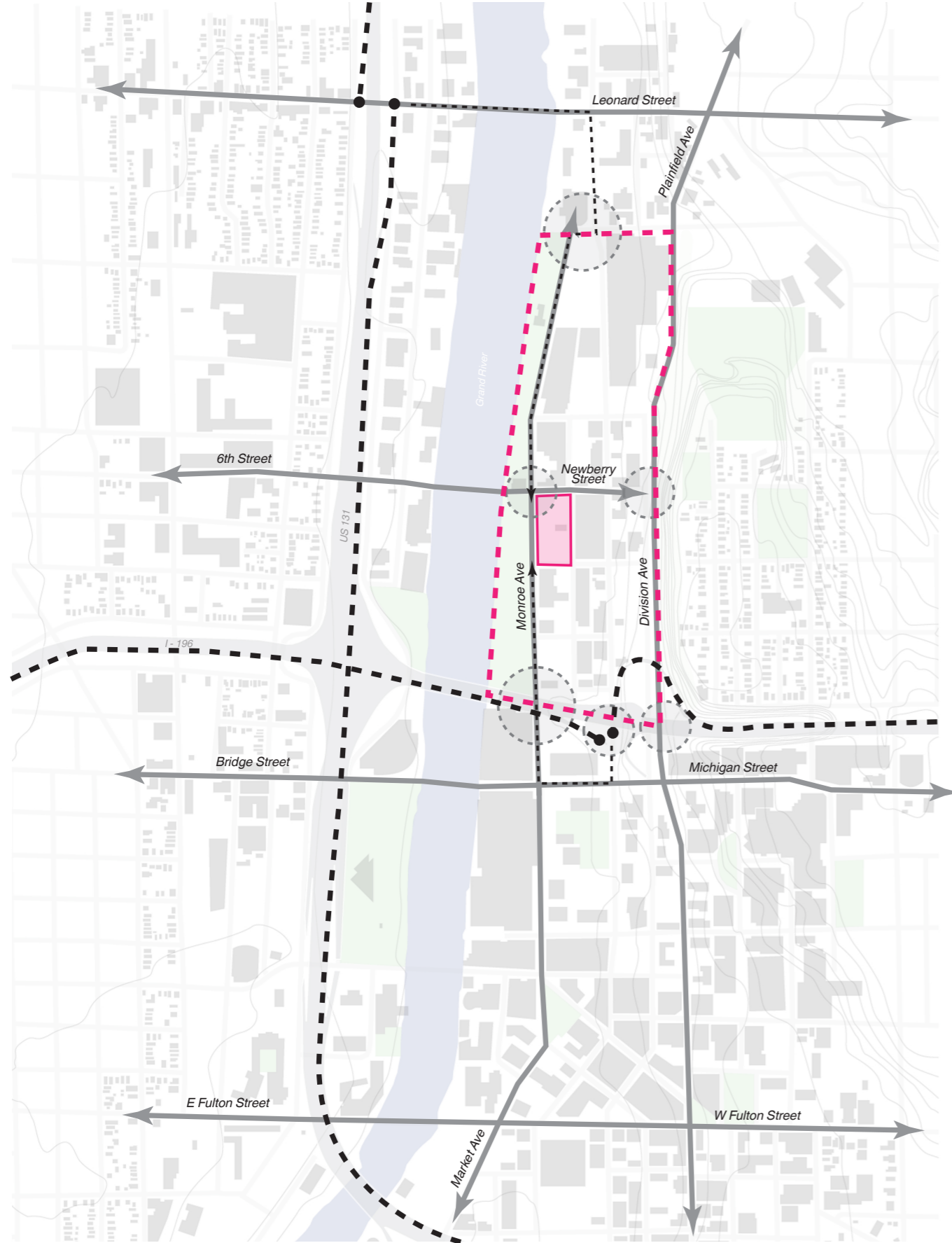
- Proposed LRT
- Proposed BRT
- Bus route (51) - GVSU / Health
- Bus route (7) - West Leonard
- Bus route (13) - Michigan / Fuller
- Bus route (11) - Plainfield
- Monroe North boundary
- Project site

# PUBLIC TRANSIT

While promoting a more dense mixed-use neighborhood, the availability of public transit becomes crucial. Currently, the Monroe North neighborhood is not serviced directly by any bus lines. Several lines service the edge of the district, but the expansion of bus service to the neighborhood would provide residents quicker access to other areas of the city and metropolitan area.

The most exciting transit opportunities are with two proposed projects: the first phase of a city center streetcar line and a bus rapid transit (BRT) line, connecting the city to southern suburbs. The proposed BRT line, with a station just south of Monroe North on Monroe Avenue, with provided speeded bus service from the central transit station along Division Avenue to suburban Kentwood. The proposed streetcar line would run directly through the heart of Monroe North and connect the neighborhood to other areas of the city center and link with the central transit station.

Both of these projects anticipate an influx of transit-oriented development along the lines and concentrate near the proposed stops. For Monroe North, this equates to increased densities and mixed-uses of residential and commercial functions along the proposed route. □



- Freeway traffic - exit ramp to site
- > Freeway-to-site route
- Primary arterial road
- ⊠ Critical district entry points
- ⋯ Monroe North boundary
- Project site



The Monroe North neighborhood is easily accessible by car to the regional freeway network and major arterial roads.

Monroe Avenue and Division Avenue connect the neighborhood with the city center to the south and residential and commercial districts to the north. 6th Street and the bridge over the Grand River connect to the west side of the city. Interstates 196 and US 131 can be accessed through ramps near to the Monroe North neighborhood. These freeways also provide high-visibility to motorists as they make their way through the city. □

# AUTOMOBILE ACCESS

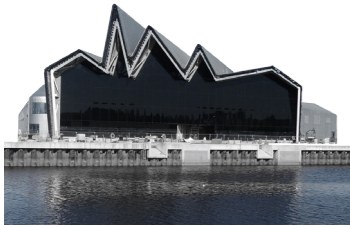
“To use a spoon to get food to one’s mouth is still, of course, the fulfillment of a function, through the use of an artifact that allows and promotes that function; yet to say that it ‘promotes’ the function indicates that the artifact serves a communicative function as well: *it communicates the function to be fulfilled.*”

Uberto Eco, *Function and Sign:  
The Semiotics of Architecture*

precedent studies

“Design is fundamental to the continuous development of Glasgow as a city. Glasgow has changed to reflect different economic circumstances, and this legacy of innovation and celebration is visible in its built heritage.”

Liz Cameron, Lord Provost of Glasgow



### 1. Riverside Museum

- + design catalyst - transforming River Clyde corridor into 21st century living and working environments
- + high-profile “image to attract investors and visitors”
- + architect: Zaha Hadid

### 2. Kelvingrove Gallery and Art Museum

- + houses one of Europe’s greatest public art collections
- + historic anchor to the city’s university district and the larger Kelvingrove Park and gardens
- + free admission showcases Scottish natural and cultural history



### 3. Glasgow School of Art

- + designed by renowned Scottish architect and designer Charles Rennie Mackintosh; has a rich design history
- + influential in the education of Scottish designers, offering design degrees at multiple levels



### 4. The Lighthouse

- + “Scotland’s National Centre for Architecture, Design, and the City”
- + Promotes national architecture and design policy
- + Authority for design and creative industries in Glasgow; coordinator of collective efforts



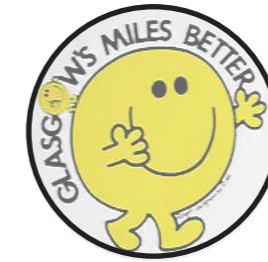
## Glasgow, Scotland, UK

European City of Culture  
International Design Festival  
UK’s City of Architecture and Design

## 3.01 urban network precedent

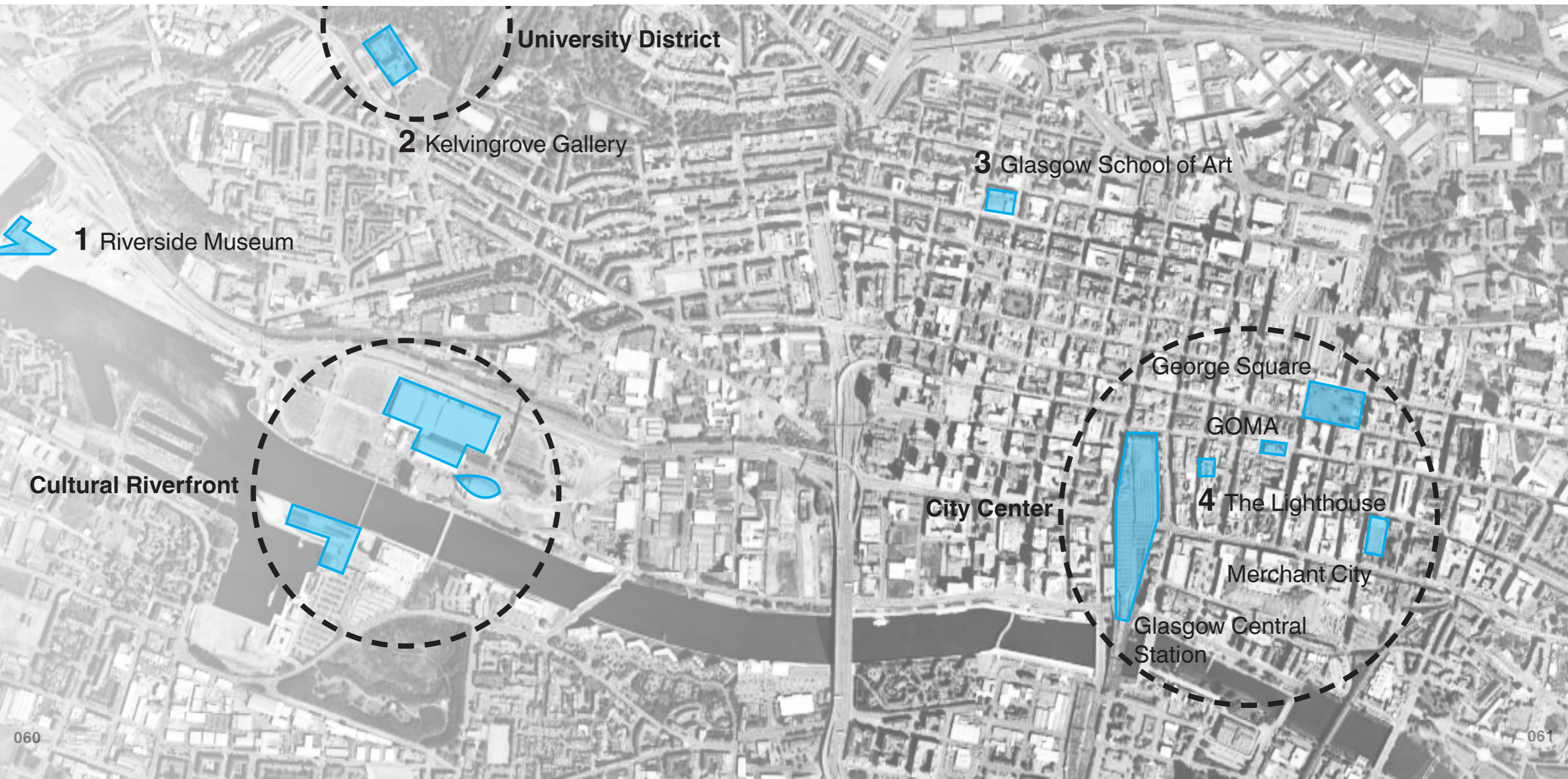
Glasgow, Scotland has had a similar fate in the last half century as many American Rustbelt cities. Like its peers, Glasgow’s growth came from heavy industry: shipbuilding, manufacturing, and steel. Much like cities in the United States, Glasgow developed quickly in this pre-suburbanization era, and the result is a dense city center surrounded by dense residential neighborhoods. Furthermore, the River Clyde, Glasgow’s connector to the sea, was fully capitalized on as an industrial mechanism, rather than a quality of life factor, leaving the riverside devoid of activity and polluted.

Until the 1980s, Glasgow continued to suffer from declining industry. The turning point came when civic leaders recognized that the way Glaswegians conducted business and industry could not continue, if the city wanted to reverse decline and become a more sustainable, attractive place. Steps to combat this declining image and reality included a media-based branding campaign, a reclamation of the riverfront, the construction of iconic and catalytic architecture in distressed areas, and the harnessing of local cultural and historic institutions to promote Glasgow as a unique and culturally-rich place. Lastly, The Lighthouse, an agency promoting design and its impacts on the greater community, became the produce of civic leaders looking to enhance creative industry and thinking in Glasgow. Today, The Lighthouse is as much an economic development tool and political tool as it is tourist attraction, highlighting Scottish design, and it continues to transform Glasgow’s 21st century economy. □



Left Logo from the internationally renowned "Glasgow's Miles Better" marketing campaign.

Below Aerial image of Glasgow. Key network areas, including historic and modern institutions, operate as a collective unit to instigate economic development.



“Since half of our brain is dedicated to the visual system, it would be a mistake to ignore the power of the icon, which has been pervasive throughout history as a marketing tool signifying greater cultural, political, and economic aspirations.”  
Anna Klingmann, *Brandscapes*

## Guggenheim Bilbao Museum

(1997)

Bilbao, Spain

architect: Frank Gehry

**Guggenheim Bilbao** has exceeded its economic expectations:

+ Year 1 (1997):

1.36 million visitors (500,000 project)

€160 million in revenue (€84 million government investment)

**Guggenheim Bilbao** has spurred the new development of:

+ Conference center (architects Federico Soriano and Dolores Palacios)

+ Metro line (architect Norman Foster)

+ Airport terminal

+ Pedestrian bridge (architect Santiago Calatrava)

+ Office tower

+ Riverbank master plan (architect Cesar Pelli)

**Below** Guggenheim Bilbao's titanium massing is an instantly-recognizable landmark in the urban fabric of the center city.



## 3.02 architecture and strategy precedent

Bilbao, on the northern coast in Spain's Basque region, was, until recently, regarded as Spain's equivalent to an American rustbelt city; industrial disinvestment and economic decline had left the city in need of reinvention and in need of a new identity. This identity was sought, by forward-thinking civic leaders, in the form of an iconic monument on the scale of Paris and the Eiffel Tower or Sydney and the Opera House; something instantly recognizable that identified a complexity of efforts aimed at economic transformation.

Bilbainos chose to harness the power of “starchitect” Frank Gehry in the provocative design for a new cultural icon. Furthermore, the city approached a world-reknowned cultural institution, the Guggenheim museum collection, to operate the facility. Together, the design (Gehry) and program (Guggenheim) meshed into a beautiful expression of place and value. The sexy image of the Guggenheim gave the Bilbainos something to be proud of; a psychological boost after decades of industrial decline.

The Guggenheim Bilbao has become the image of Bilbao, and when referencing “the Bilbao”, the museum and city become one entity. Its formal composition has provided Bilbao with a brand equity that has led to further investment in the city, with other high-design architect joining Gehry in the design strategy of reinventing and reinvesting Bilbao through architecture. □

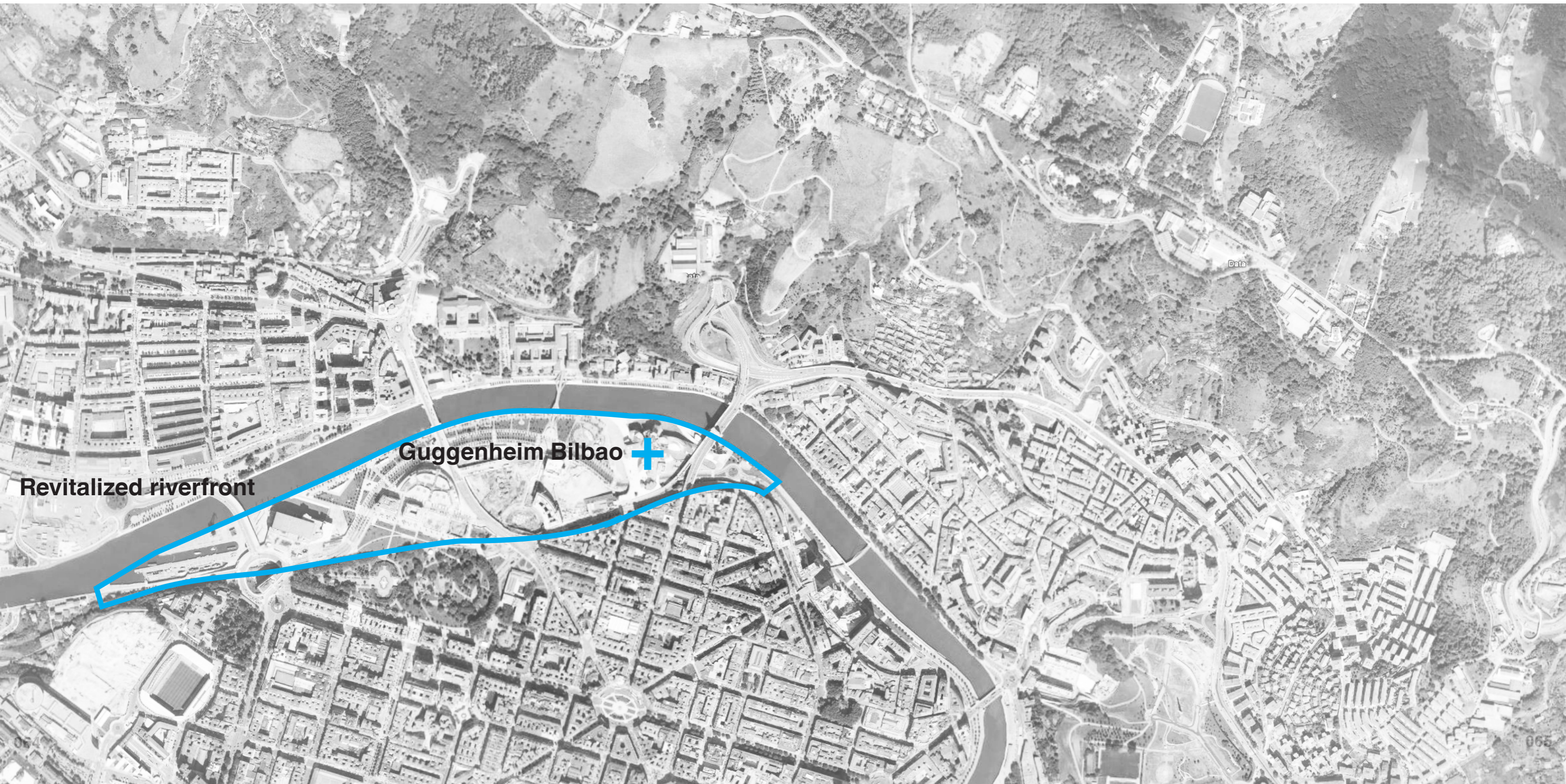


**Above Top** The Bilbao becomes a focal point for many corridors in the city center.

**Above Bottom** An outlined area of the Bilbao cityscape, showing the extents of the revitalized riverfront.



Below Aerial image of Bilbao. The Guggenheim is at a confluence of Bilbao's natural and constructed urban form and becomes a pivotal point in the urban redevelopment.



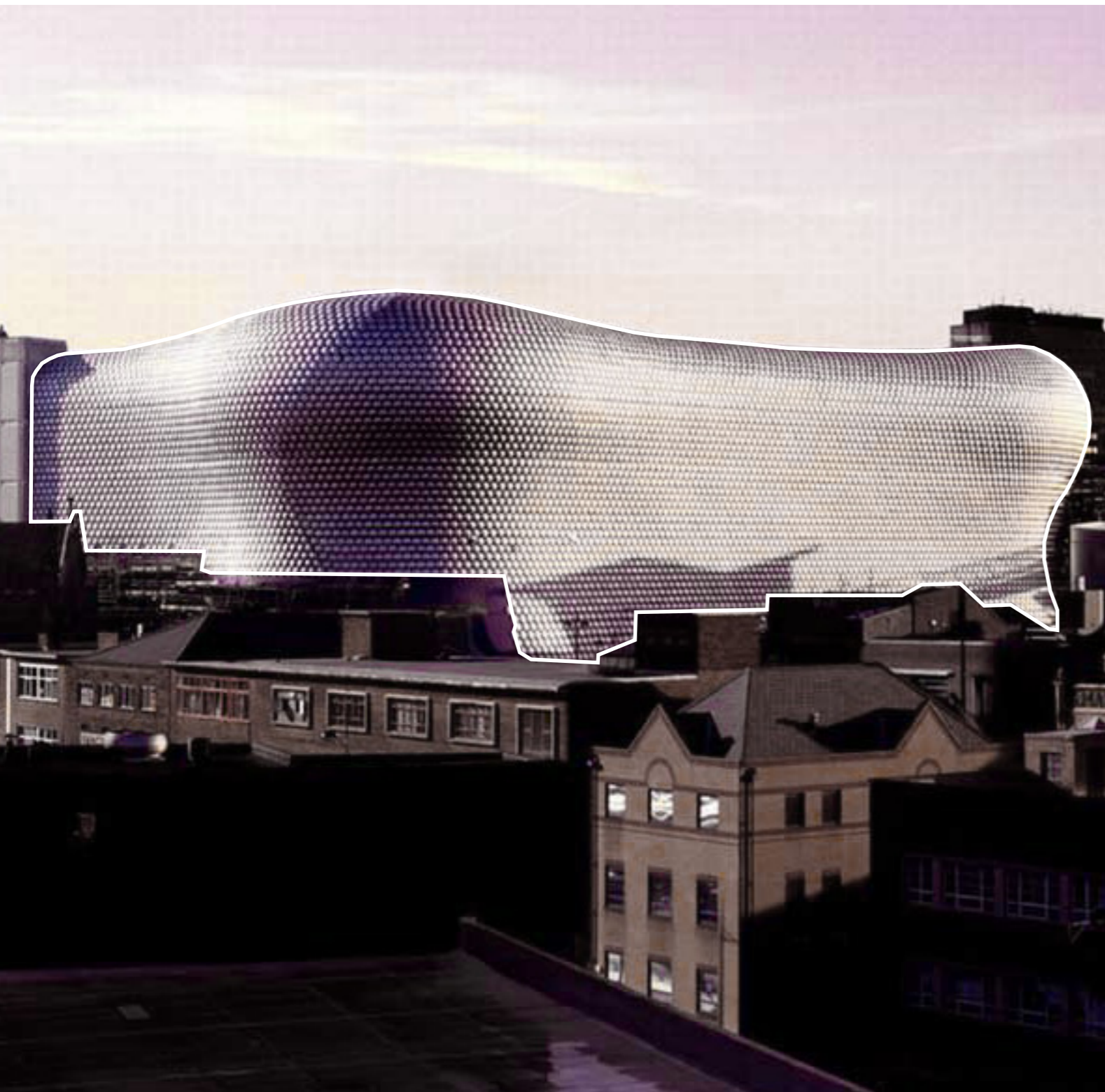
“The shopping centre itself says the building is an ‘iconic symbol’ that represents Birmingham - a sexy new structure fit for a city with ambitions.”  
BBC News

## Selfridges Department Store

(2003)

Birmingham, UK

architect: Future Systems



## 3.03 architecture and strategy precedent

Selfridges is a large, upscale department store with locations in a few of the United Kingdom's most lucrative markets. It's location in Birmingham, Britain's second largest city and a city on the resurgence from an industrial past, presented a unique opportunity: to announce an economic revitalization of the city through an architectural brand. Selfridges, as a retail anchor and an urban icon, was the catalyst project that aimed to help revitalize the Bull Ring, a former vibrant shopping in the Birmingham city center.

The city of Birmingham was looking for much more than a well-designed retail anchor. They were looking for an architectural brand identity that would help stimulate economic investment. Architects Future Systems devised a scheme that rethought the department store in not only form but also in function, as an iconic social space (Future Systems).

“The fluidity of shape recalls the fall of fabric or the soft lines of a body, rises from the ground and gently billows outwards before being drawn in at a kind of waistline. It then curves out again and over to form the roof, in one continuous movement. The skin is made up of thousands of aluminum discs, creating a fine, lustrous grain like the scales of a snake or the sequins of a Paco Rabanne dress. In sunlight it shimmers, reflecting minute changes in weather conditions and taking on the colours, light and shapes of people and things passing by - an animate and breathing form. The interior is planned around a dramatic roof lit atrium criss-crossed by a white cat's cradle of sculpted escalators and a smaller but equally powerful atrium.” □



Above The facade of Selfridges employs futuristic materials to a fluid, non-conforming shape that sets the structure apart from the existing urban forms of the Birmingham city center.

**Michigan Street Medical Mile**  
(2003)  
Grand Rapids, Michigan, USA

3.04<sup>district</sup>  
precedent

**Below** Panorama of Michigan Street, Grand Rapids, MI. Public and private investments aim to transform a fringe city center neighborhood into a medical industry hub.



Below The Spectrum Health Helen DeVos Children's Hospital is a \$265,000,000 private investment and an iconic architectural piece on the Medical Mile.



The Michigan Street Medical Mile (also referred to as Healthcare Hill, Medical Hill, and Pill Hill), is a public and private initiative that aims to transform a section of Michigan Street, on the fringe of downtown Grand Rapids, into a hub for healthcare treatment, research, and education. Through high-design architecture, world-reknowned institutions, and significant infrastructure improvements, the goal is to generate new economic activity. Beginning in the late 1990s, political and business leaders recognized that in order for the region to stay economically healthy and competitive, it must diversify from traditional manufacturing sectors. Building on one of the nation's largest healthcare systems, Spectrum Health, and the philanthropist-sponsored cancer research institute, Van Andel Institute, the Michigan Street hill became ground zero for an economic transformation, as well as a physical landscape transformation.

Private investment included the Van Andel Institute, an internationally-recognized cancer research center, Spectrum Health's Meijer Heart Center and Helen DeVos Children's Hospital, both receiving substantial funding from the local philanthropic community, and spin-off medical office and research space. Two universities, Grand Valley State University and Michigan State University, expanded their medical programs with the addition of two institutional buildings. Lastly, infrastructure upgrades, including new streetscaping, a privately funded revitalization of the adjacent Crescent Park, and talk of new mass transit lines, complimented private development efforts.

These investments have led to increasing spin-off development and services, and have helped Grand Rapids diversify its economy and brand itself as a center for medical treatment, research, and education. □



“There was something magical about how ArtPrize saturated the city with more than 1,200 pieces of new art and galvanized public conversation.”  
Detroit Free Press

**ArtPrize**  
(2009, 2010)  
Grand Rapids, Michigan, USA

**Below** La Grande Vitesse, the civic symbol of Grand Rapids' 1960s urban renewal and its commitment to art and culture.



### 3.05<sup>event</sup> precedent

Art Prize competition, in Grand Rapids, Michigan, USA, is a radical one-of-a-kind event aimed at encouraging social interaction in an urban context, increasing awareness and conversation of artwork, and leveraging media exposure and publicity to gain national and international recognition. The initiative of local philanthropist Rick DeVos, Art Prize, in its second year, has become an event that hosting the works of 1,713 artists from 44 states and 21 countries at a collection of 192 venues around the city center of Grand Rapids.

The premise behind the project is that democratic processes are the determining factor as to the “winner” of Art Prize, with first place being awarded \$250,000, and the top ten finishers receiving cash prizes. With the art pieces installed around the city, and venues hosting individual or multiple artists, visitors are encouraged to see as many of the entries and vote, via text message, for their favorites.

External benefits to this event are numerous, extending beyond the local economic level to include national and international recognition. Businesses, residents, and visitors become, for a nearly three-week period, immersed in the artful experience of the urban environment. Art Prize can be summarized as a collaborative effort that brings philanthropic business leaders, community members, art, and visitors together in the promotion of interaction of people and appreciation for the city. □



**Above** Interactive art outside of the Children's Museum (top), landscape art in a public park on the riverfront (middle), full-scale art in the civic center.

Below Mapping of art prize installation venues, downtown Grand Rapids.

**ArtPrize 2010**  
192 venues  
1,713 artists  
38,501 votes  
>200,000 visitors

“The Hub” - ArtPrize command center

venue  
0.25 mile



**Steelcase, Inc.**  
Grand Rapids, Michigan, USA

**Steelcase®**  
brand family  
office  
live/work  
healthcare  
media  
materials



Above Steelcase University Education and design facility.



Above Corporate Development Center "...designed to encourage communication and creativity."



Above Global Headquarters Corporate work and laboratory space.

Above Steelcase, known for office furniture, has expanded its product line to include residential, medical, and collaborative working environments.

3.06<sup>corporate</sup> precedent

Steelcase, Inc. is a microcosm of the state of corporate business in metropolitan Grand Rapids and West Michigan, and the potential that corporate business offers in the building of a creative and design-centered culture.

Steelcase's current global headquarters are located suburban Kentwood, with manufacturing centers and a second large-scale corporate center located a few miles away. This suburban-campus setting makes it difficult for workers to be in a dynamic, active environment that promotes free-thinking outside of the office and interaction with the surrounding community. Employees are regulated to their building, or their office, while movement between these must either be done by car or by walking through environments that are unfriendly to pedestrians.

In order to promote and innovate and forward-thinking workforce, employees must be inspired and engage in thought and conversation with others. My thought are that Steelcase, along with the other major corporations in metropolitan Grand Rapids with suburban campus-like settings, could building upon the synergy of the city center and have a portion of their operations there. Obviously, not all can be done in dense urban environments. However, the creative knowledge workers could greatly benefit in an environment where resources are more readily available, energy and activity is abounding, and fellow colleagues, competitors, and mentors are in walking distance and easily accessible for problem-solving and brainstorming.

Below Aerial image of Steelcase's global headquarters. Corporate facilities are shaded blue, while the entire manufacturing campus is outlined. The location in suburban Kentwood is accessible to major local infrastructure and is five miles from the city center.

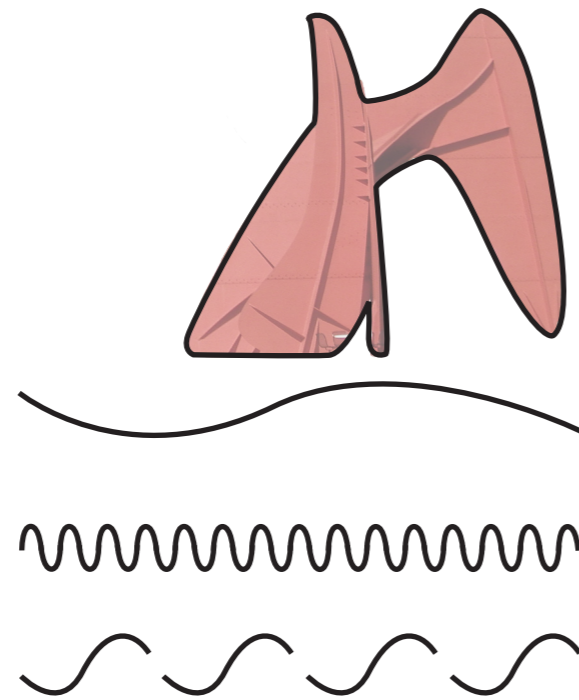




“Since its dedication on June 14, 1969, the Calder, as it is popularly called, has been adopted as the symbol of a dynamic, progressive city.”

## Grand River "wave" motif

Grand Rapids, Michigan, USA



## 3.07<sup>architecture</sup> anti-precedent

Perhaps the most iconic example of this typological anti-precedent was designed by Jorn Utzon, the Sydney Opera House, an evoking image of the city and the country of Australia. Shape-based iconic architecture taking cues from natural environments has also been popularized in Grand Rapids, beginning dedication of Alexander Calder's *La Grande Vitesse* sculpture (left, top) following urban renewal in the 1960s. This sculpture, its organic lines and abstract shape, was evoking the emotion of the Grand River, for which Grand Rapids was built upon, and it soon became the symbol of the city, adorning street signs, posters, and business emblems.

Most recently, the completion of the DeVos Place Convention Center (left, bottom) has taken this gesture to a new level. Its siting on the riverfront was transferred to the design of the structure's roof, says the design architects. This led into an era of other wave-inspired projects, large and small, in the city, including the canopy at the Gerald Ford International Airport (right, top), a rooftop addition to the Windquest Building (right, middle), and a street-level screen at the Helen DeVos Children's Hospital (right, bottom).

This architectural gesture has been overlaid in the city. The contextual nature of the Grand River does not deserve to have a visual place in the design (as a designed wave), rather, the implications of the river and the context will inform the design at a more phenomenological and less stylistic levels. □



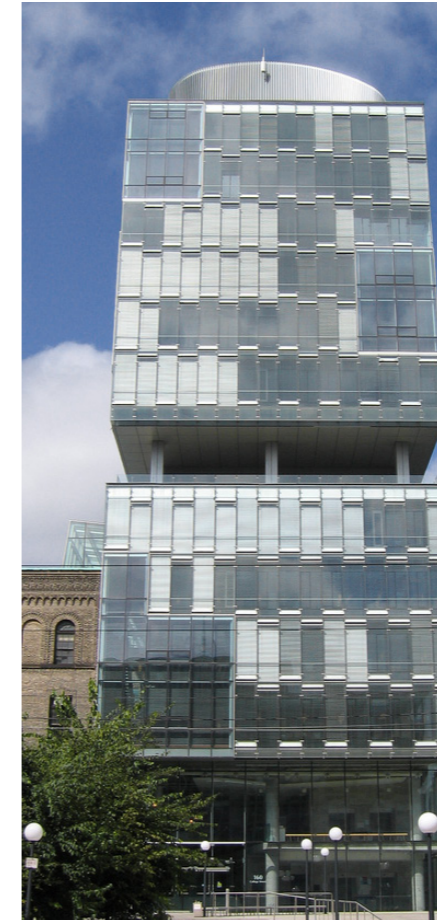
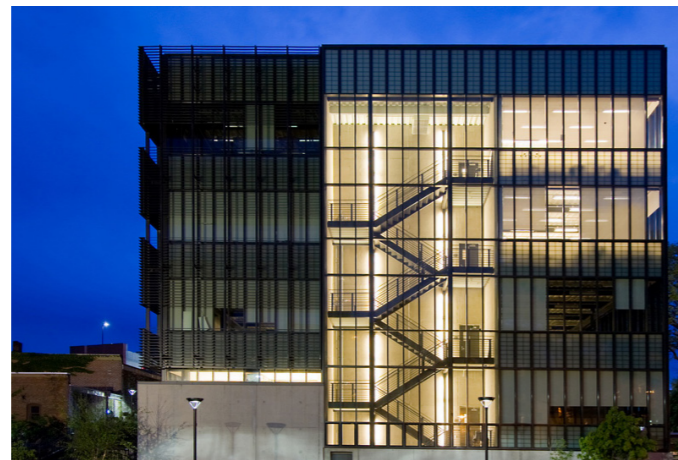
## 3.08 conceptual architecture precedents

### Right: Almere Public Library, Netherlands

As a center-piece to a redesigned waterfront district, the library functions more than a place to store and read books. It creates a central hub for activity, with retail components and interactive space on the interior and through its design of exterior space. Furthermore, its transparent facade at street level and industrial materiality elsewhere nods to the industrial environment of the former shipbuilding center, while lending visual interest and activity to this urban environment.



Right: Yale Sculpture Building Natural light and strategic shading were paramount in the design of this KieranTimberlake building. As an object, the Yale Sculpture Building is a visual icon whose presence asserts itself as a modern piece of art on the historic Yale campus. Functionally, the building allows for enjoyable light-filled spaces for faculty and students to work in.



Left: Terrence Donnelly Centre for Cellular and Biomolecular Research The Donnelly Centre, in Toronto, Canada, utilizes smart technologies and strategic space-programming to create a pleasant working environment that creates minimal strain on the building's HVAC system. A double-skin facade, operable window ventilation, stack ventilation, and individually-controlled shading devices allow for premium thermal and light control. Lab space is located to the east, for minimum light disturbance during occupied times, circulation is to the west, and offices to the south, taking advantage of the abundant natural light.



Left: Laban Centre for Dance and Movement, London This center, in an industrial London district, became an example of the space desired for light industrial in the Monroe North district. Its playful facade references the industrial character of the neighborhood and also the creative activities of the interior, and its minimal fenestration and large, clear-span spaces allow for the type of function space required for a mix of activities.

“To think of design as ‘problem-solving’ is to use a rather dead metaphor for a lively process and to forget that design is not so much a matter of adjusting to the status quo as of realizing new possibilities and discovering our reactions to them.”

Jeremy Till, *Architecture Depends*

“By building an open-ended, relationship-oriented culture that fosters sensitivity, understanding, and a creative questioning of the status quo, an architecture informed by market and place encompasses a larger social and cultural context through dialogue, both internally and externally.”

Anna Klingmann, *Brandscapes*

“Symbol dominates space.”

Robert Venturi, *Learning from Las Vegas*

architecture

# WEST MICHIGAN DESIGN LABORATORY



lab.o.ra.to.ry: *noun*, a place providing opportunity for experimentation, observation, or practice in a field of study

educate.collaborate.instigate.

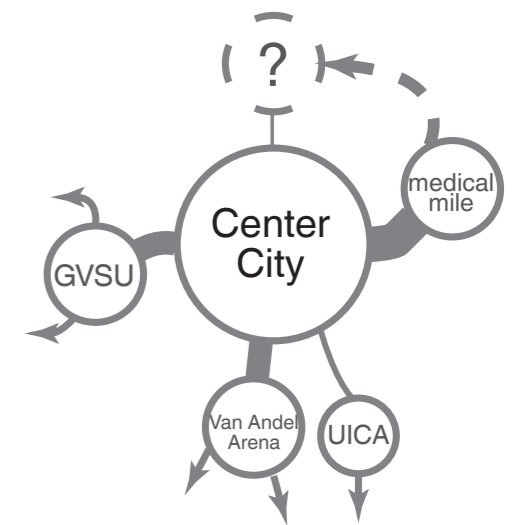
## 4.01 proposal

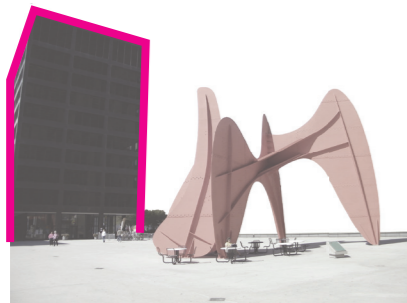
The proposal resulting from my research had several, overlapping goals with one purpose: increasing the quality of life in Grand Rapids. My response was to:

1. Create an image, highly-visible in the city, of the design culture in Grand Rapids and its position in the community;
2. House the necessary functional spaces that became the platform for design-based discussion in the city, and to launch design as an innovative approach to processes throughout the metropolitan area;
3. Become a catalyst and resource center in the Monroe North neighborhood, further leveraging the district as an entrepreneurial center.

The resulting program aimed to create an institution, an icon, in the city that explored all of these thoughts. The architecture was to be innovative and project the image of the exchange of ideas I wanted to promote. Furthermore, it's an exploration in political and business processes, their willingness to interact with each other for the greater good, and establishing a dialogue for moving the city forward.

The resulting program included space for Kendall College of Art and Design, offices for Design West Michigan, corporate office space, and entrepreneurial work spaces. Collectively, these elements came together to formulate the West Michigan Design Laboratory, a facility that promotes design discussion, design innovation, and the participation of all individuals to position our lives and our city for future cultural and economic success. □





**Left** As a living organism in the city, the West Michigan Design Laboratory cannot sustain itself as a single being. Rather, it harnesses the synergy from the local community to bring about greater change. In particular, the WMDL's partnerships with local government authorities and complimentary creative institutions and businesses (left) will increase knowledge-sharing and make greater change possible.

The city and state governments, as the authors of policy, have a critical role in substantiating lawful change in the community. The Urban Institute for Contemporary Arts has a unique position in that its existing role with the creative community has positioned itself to be a catalyst for the larger economy, as well as a neighborhood-growth catalyst. Lastly, the GRid70 project has many similar initiatives with business innovation and collaboration, although at a smaller scale.

**Right** Conceptual diagram showing the West Michigan Design Laboratory as a "container" for the processes and people that inhabit the space. Below are the three main elements of the programmed space.

## City + State

GOVERNMENT AND EDUCATION



## UICA

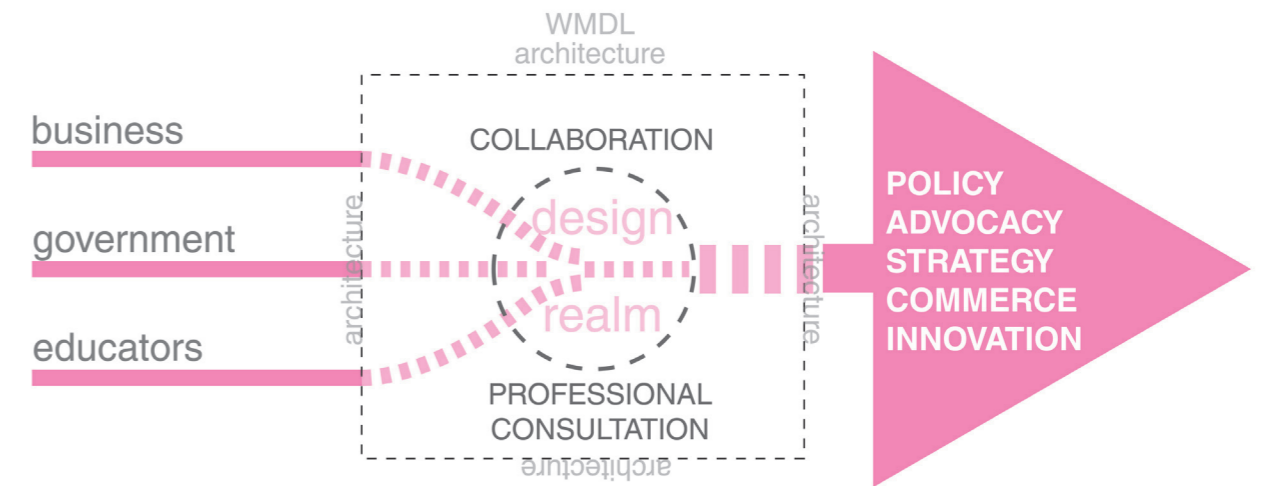
URBAN INST. FOR CONTPRY. ARTS



## GRid70

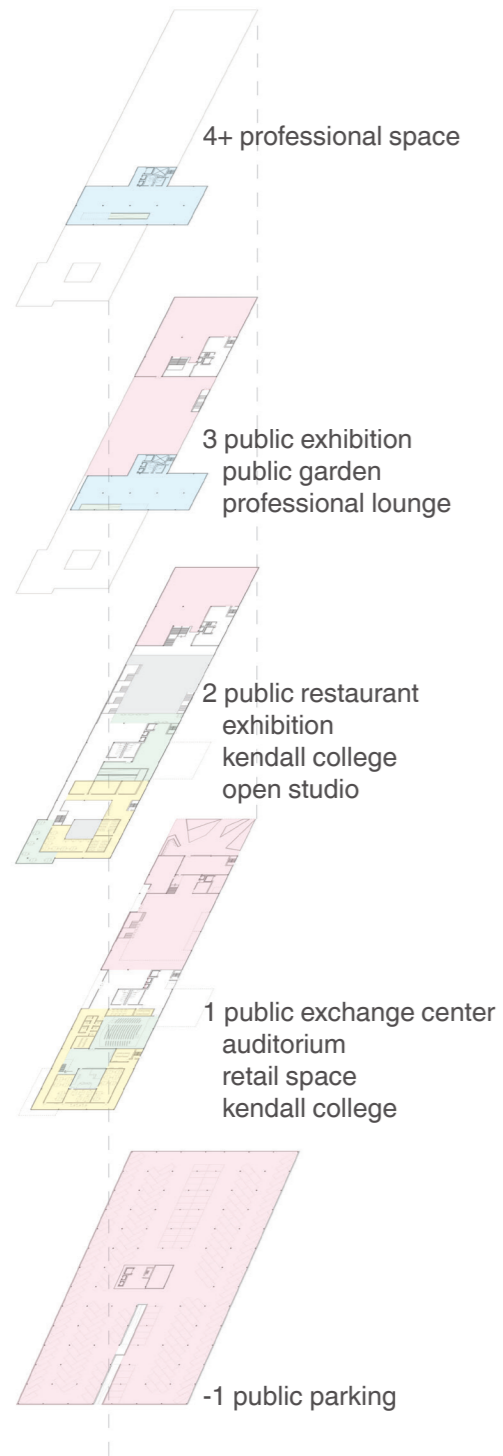
GRAND RAPIDS INNOVATION AND DESIGN  
AT 70 IONIA

PROCESS:



PROGRAMMED FUNCTIONAL SPACE:

- ① **PUBLIC EXCHANGE CENTER**
- ② **KENDALL COLLEGE OF ART AND DESIGN**  
academic studios and classroom space  
architecture studios
- ③ **PROFESSIONAL LAB / STUDIO / OFFICE**  
start-up incubator space  
corporate space



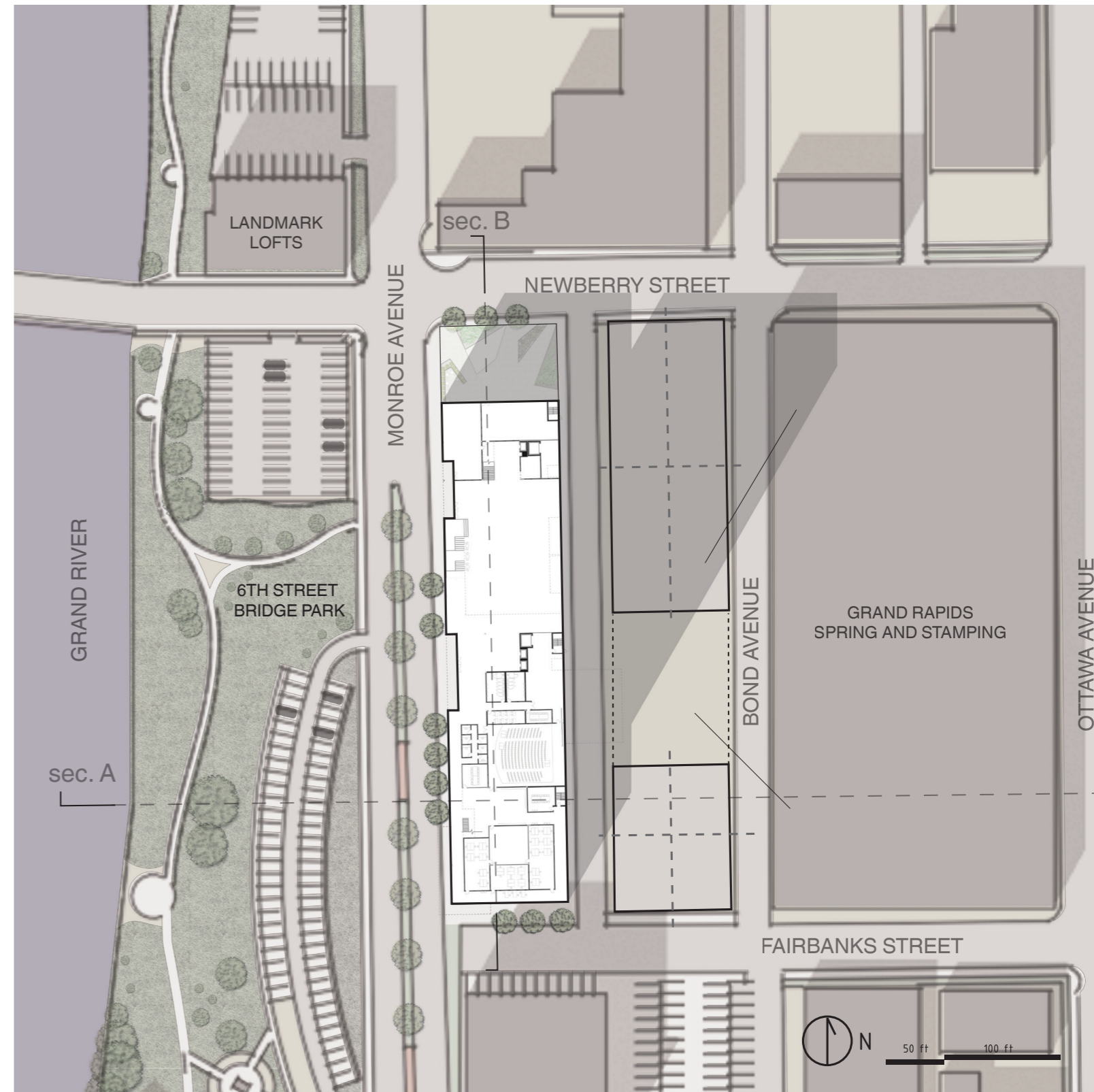
**Below: site plan** The West Michigan Design Laboratory becomes more than a beacon and catalyst in the Monroe North neighborhood. Adhering to the fabric of the local grid, the WMDL facility becomes a successful example of urban infill as an architecture that integrates into the neighborhood and provides needed amenities.

As is visible on the site plan, the building is stretched to the site boundaries. Along Newberry Street, a landscaped plaza is meant to function as a public space, a threshold between the park, street, and retail spaces, beneath the upper cantilver, as well as a space for a future transit stop. Cantilvering the building on the north end allows for the covered space and for unobstructed views of the river and park from further east in the neighborhood.

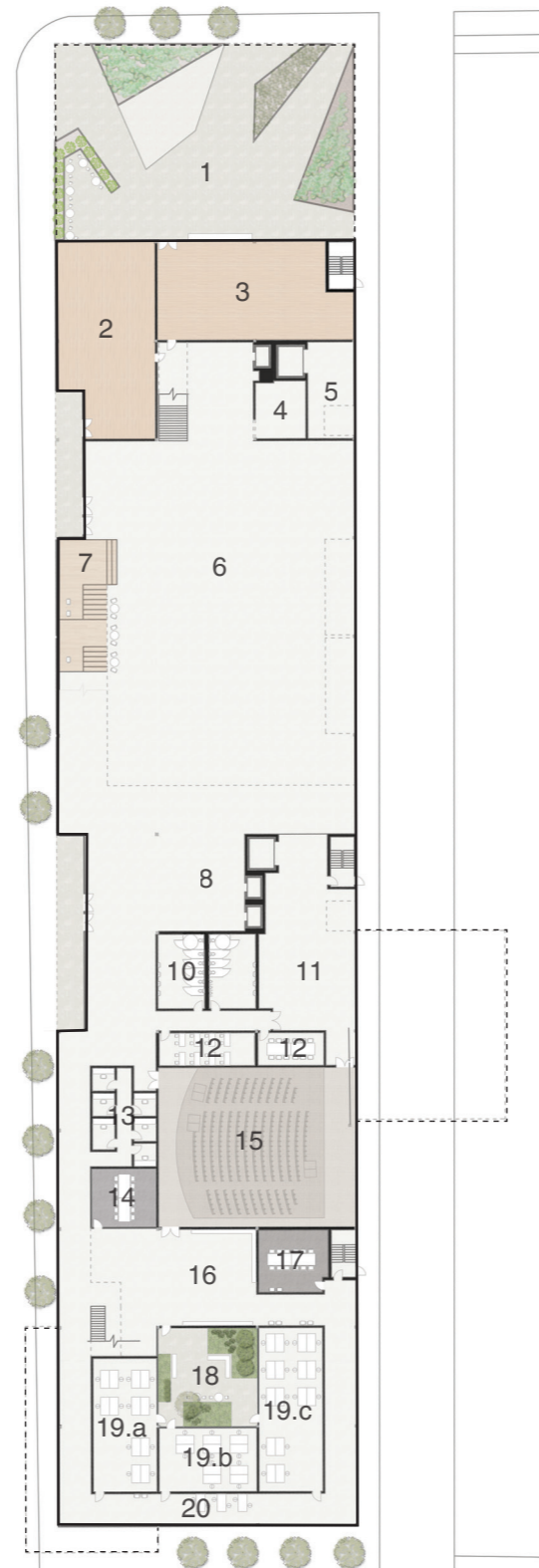
To the east and across the alley, proposed infill would be similar to existing shed structures in the neighborhood. These large spaces could be subdivided into smaller areas. These would be targeted to small creative operations, including advanced manufacturing, workshops, art space, performance space, and other initiatives with design-influenced processes. This 'low-fi' architecture compliments the high-profile condition of the Design Laboratory, and it provides a space to individuals who are beginning their entrepreneurial efforts.

**Left: programmatic stacking**

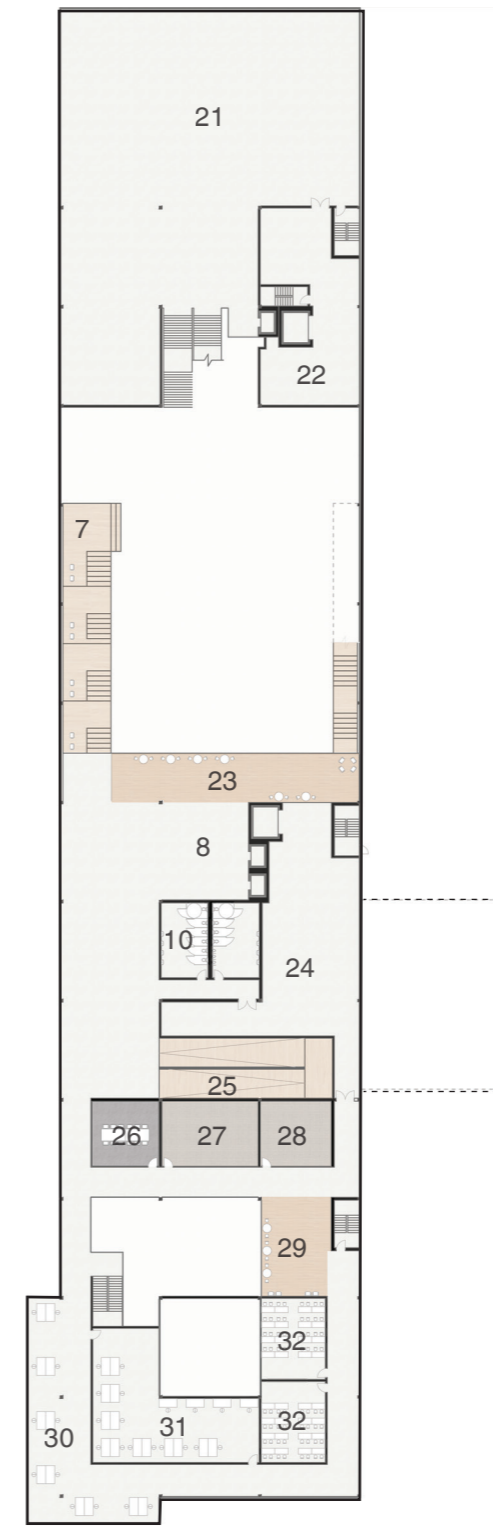
- student
- professional
- public
- cross-pollination



- 1 Outdoor plaza  
6600 ft.<sup>2</sup>
- 2 Retail space A  
2000 ft.<sup>2</sup>
- 3 Retail space B  
2030 ft.<sup>2</sup>
- 4 Coat check  
320 ft.<sup>2</sup>
- 5 Service / loading area  
510 ft.<sup>2</sup>
- 6 Exhibition space / "forum"  
11900 ft.<sup>2</sup>
- 7 Main stair  
1620 ft.<sup>2</sup>
- 8 Entrance lobby  
1890 ft.<sup>2</sup>
- 10 Bathrooms  
380 ft.<sup>2</sup> (x2)
- 11 Mechanical room / loading area  
1380 ft.<sup>2</sup>
- 12 Small lecture rooms  
350 ft.<sup>2</sup> (x2)
- 13 Private offices
- 14 Conference room A  
425 ft.<sup>2</sup>
- 15 Auditorium - 300 seats  
2950 ft.<sup>2</sup>
- 16 Central discussion space  
1500 ft.<sup>2</sup>
- 17 Conference room B  
475 ft.<sup>2</sup>
- 18 Outdoor courtyard  
1100 ft.<sup>2</sup>
- 19 Design studios  
a 950 ft.<sup>2</sup>  
b 700 ft.<sup>2</sup>  
c 1170 ft.<sup>2</sup>
- 20 Exhibition corridor / study space



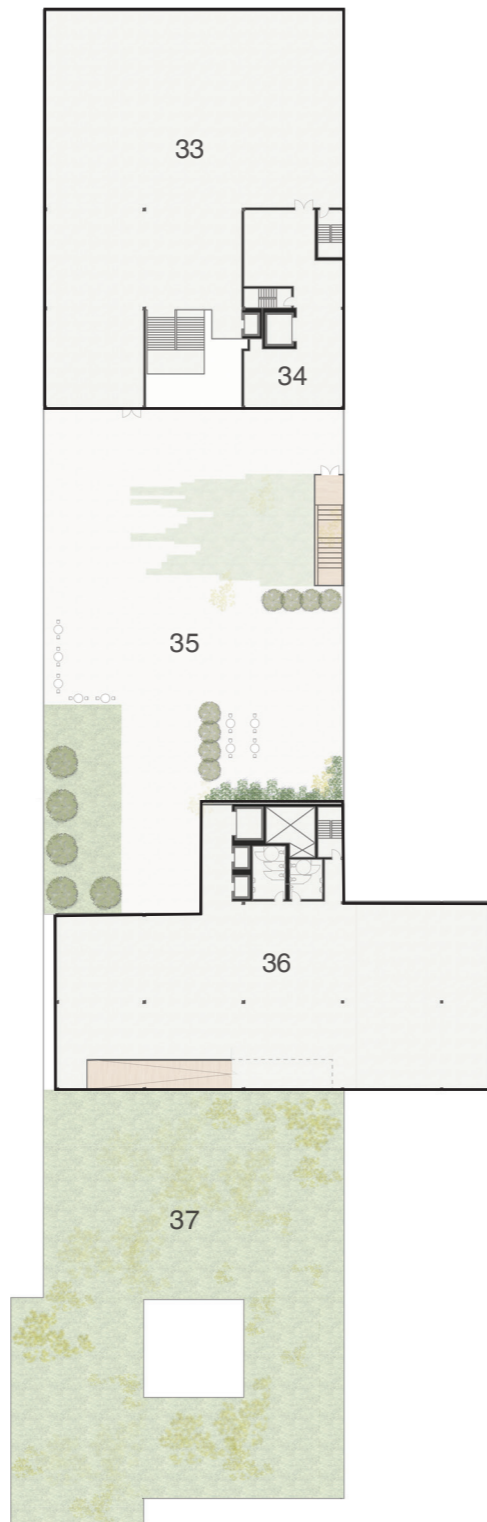
plan: level 1



plan: level 2

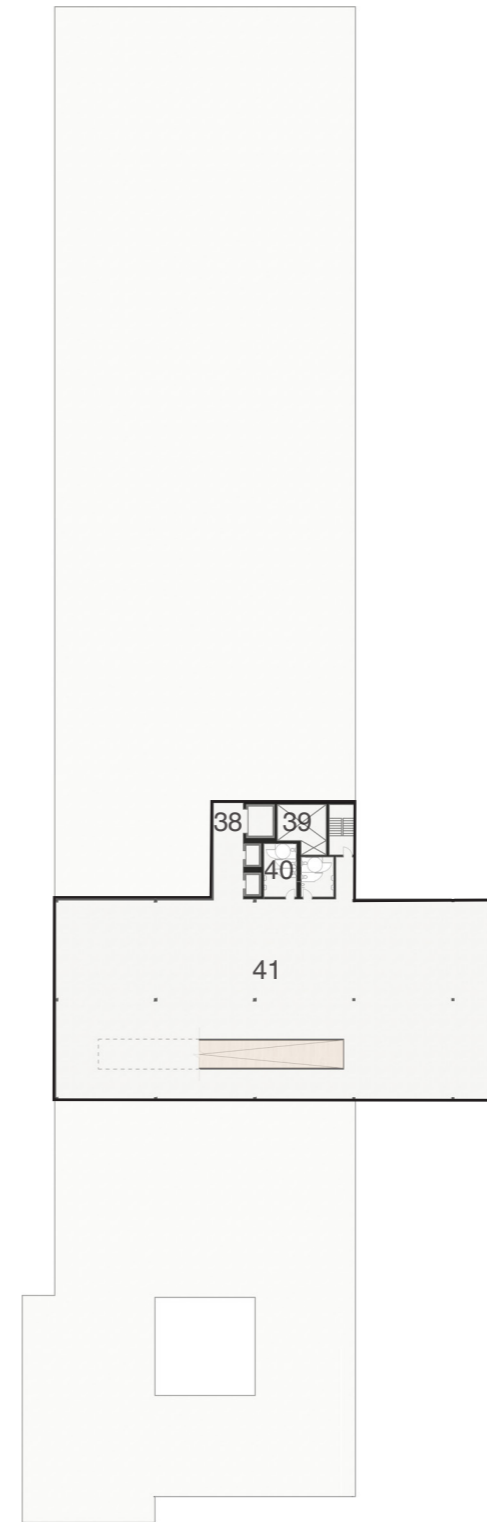
- 21 Restaurant / cafeteria  
9900 ft.<sup>2</sup>
- 22 Kitchen  
1800 ft.<sup>2</sup>
- 23 Lounge  
3900 ft.<sup>2</sup>
- 24 Workshop  
3575 ft.<sup>2</sup>
- 25 Ramp to garden level  
970 ft.<sup>2</sup>
- 26 Conference room  
480 ft.<sup>2</sup>
- 27 Technology / print lab  
700 ft.<sup>2</sup>
- 28 Materials lab  
500 ft.<sup>2</sup>
- 29 Lounge  
750 ft.<sup>2</sup>
- 30 Open studio  
2750 ft.<sup>2</sup>
- 31 Design studio d  
1700 ft.<sup>2</sup>
- 32 Lecture rooms  
475 ft.<sup>2</sup> (x2)

- 33 Gallery / banquet space  
9900 ft.<sup>2</sup>
- 34 Kitchen  
1800 ft.<sup>2</sup>
- 35 Roof gardens  
15000 ft.<sup>2</sup> (x2)
- 36 Garden level office  
10500 ft.<sup>2</sup> (x2)
- 37 Sedum room  
11200 ft.<sup>2</sup> (x2)



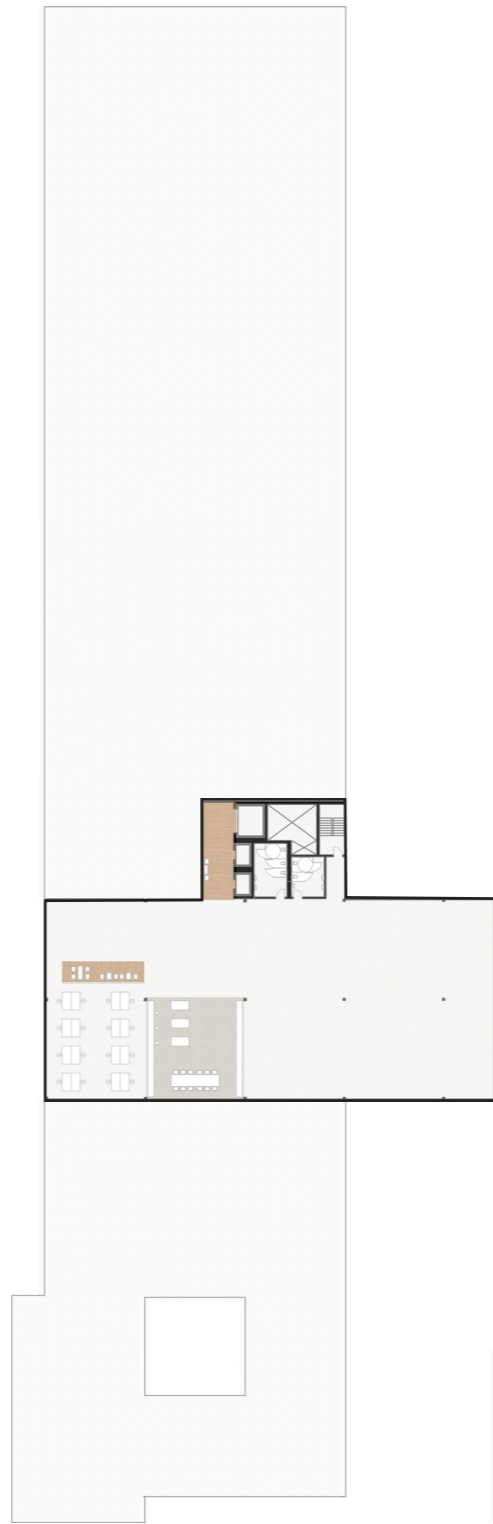
plan: level 3

- 38 Office lobby  
320 ft.<sup>2</sup>
- 39 Mechanical chases  
240 ft.<sup>2</sup>
- 40 Bathrooms  
345 ft.<sup>2</sup> (x2)
- 41 Typical office floor area  
8950 ft.<sup>2</sup> (x2)

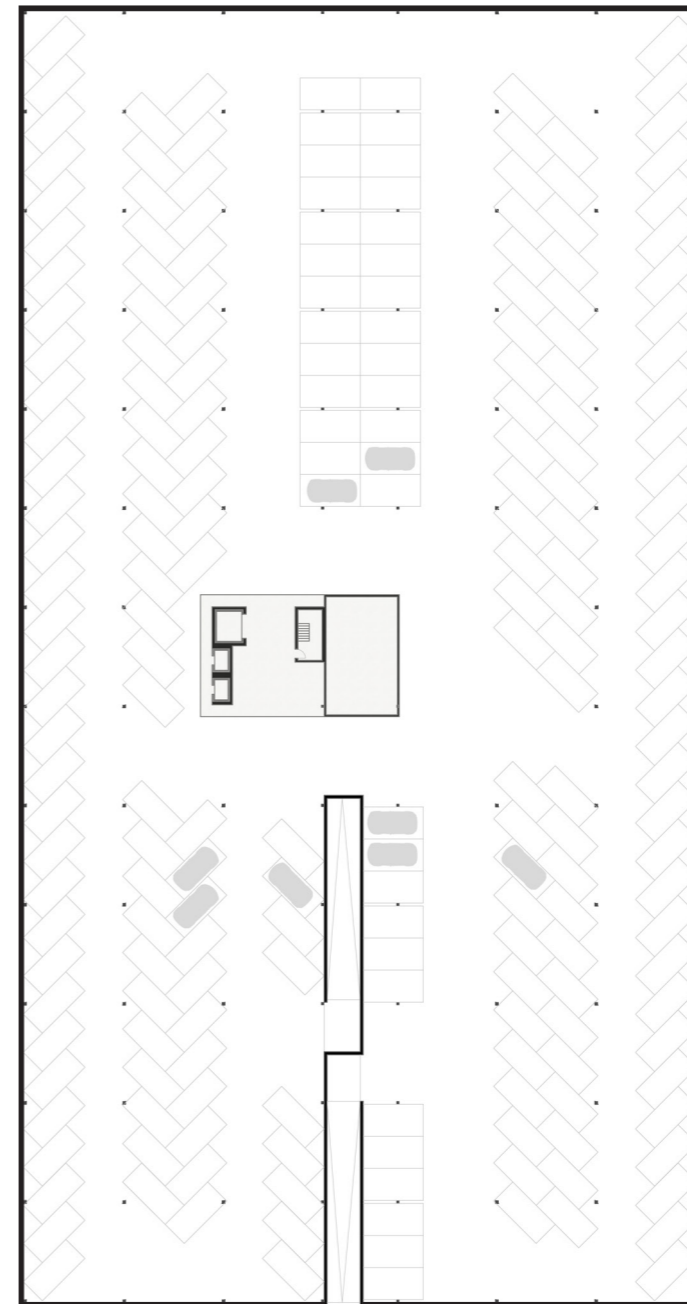


plan: level 4





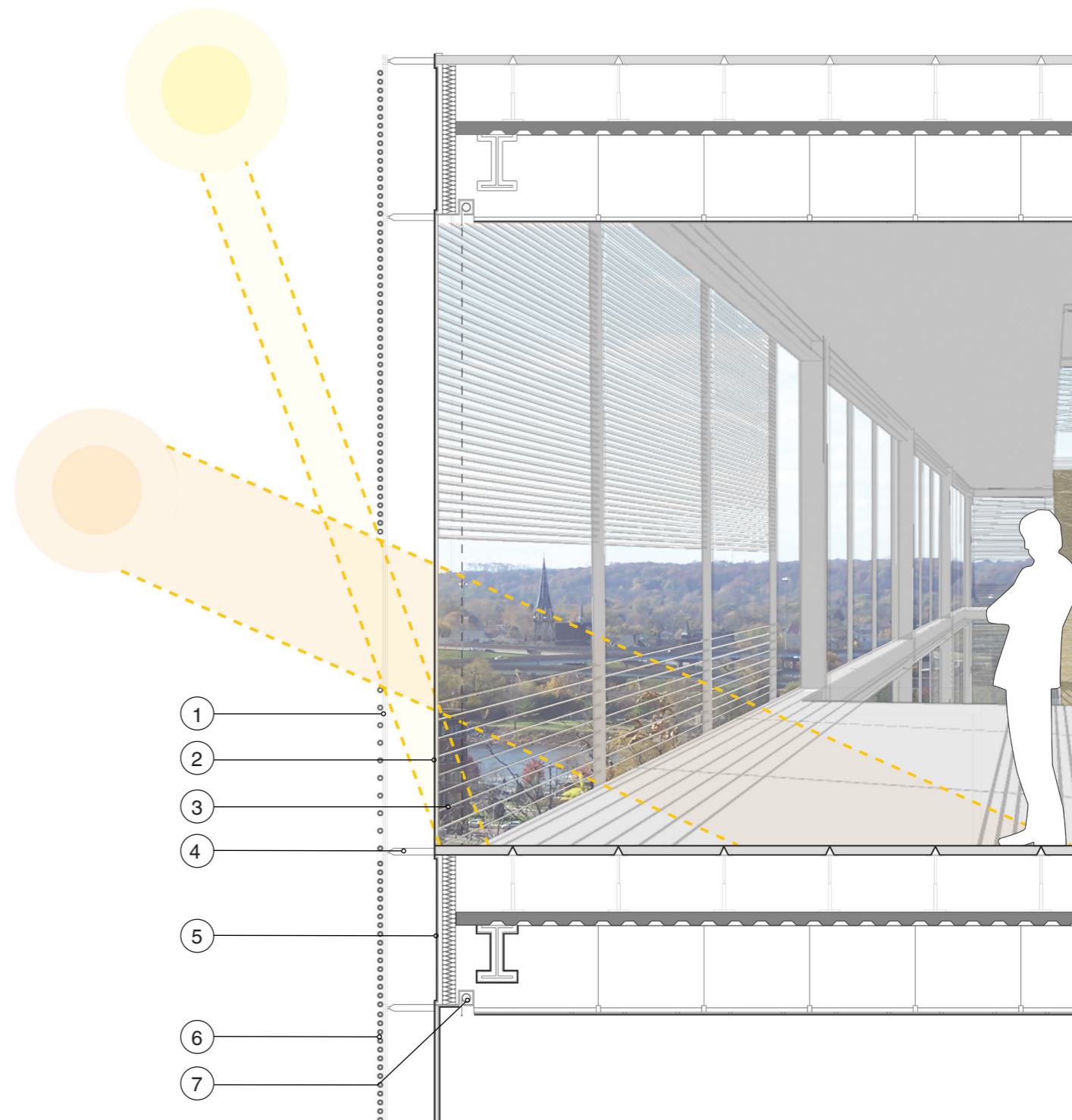
plan: level 5 (typical)

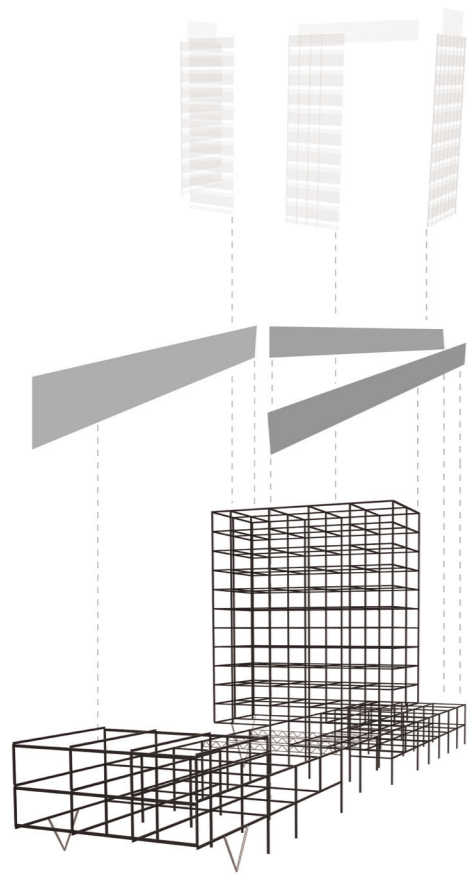


plan: level -1

**Right: wall section perspective** In determining the facade and shading system, providing natural light, as well as unobstructed views of the Grand River valley, were both prioritized to create an inspiring and comfortable working environment. The chosen system, having been used recently on other large-scale high-rise projects, utilizes hollow ceramic tubes. These tubes reflect light, do not completely obscure views, and offer shading based on their spacing.

1. Painted aluminum vertical strut
2. Insulating glass with low-e coating
3. Painted extruded-aluminum unit frame
4. Painted aluminum horizontal strut
5. Trespa panel
6. Glazed ceramic tubes with internal aluminum connections
7. Automated internal shade

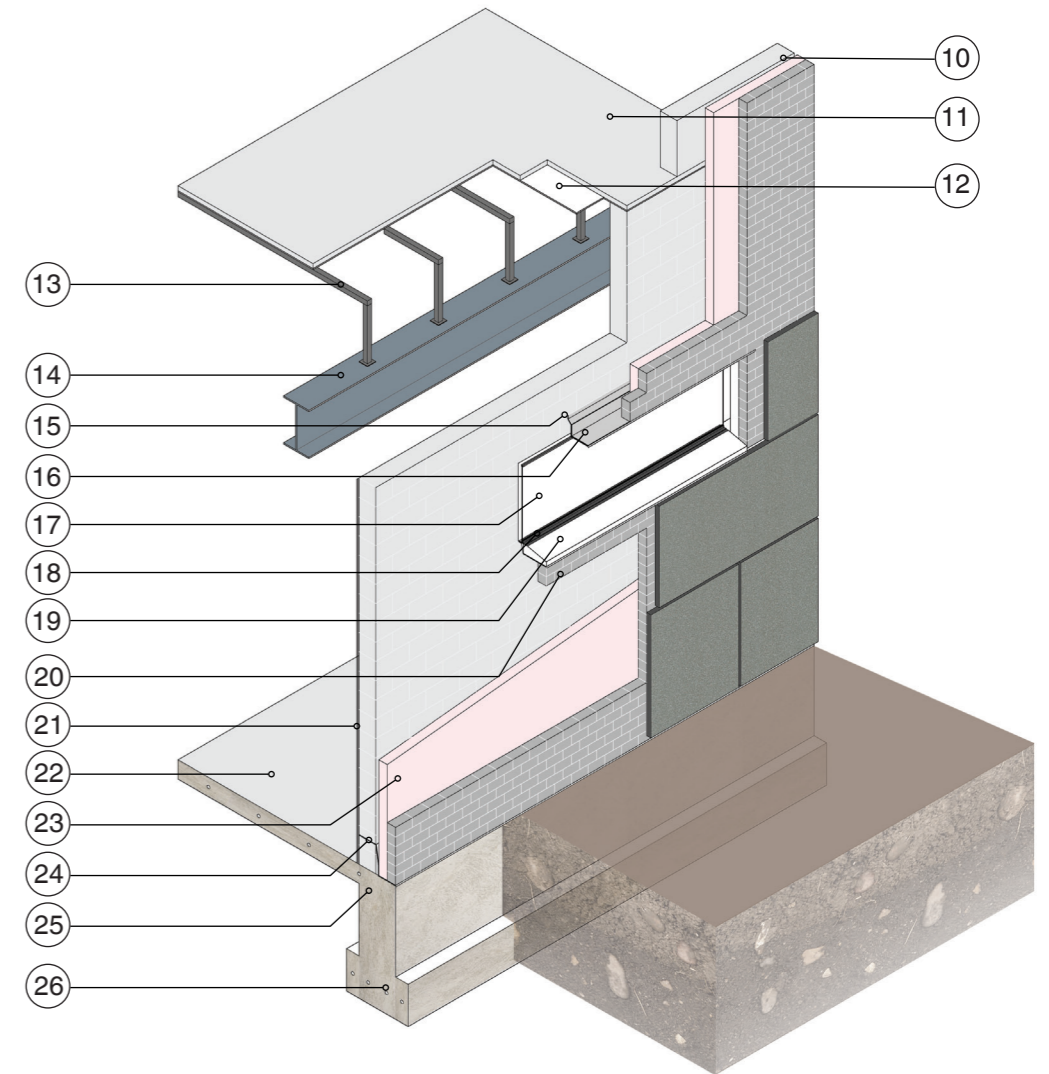
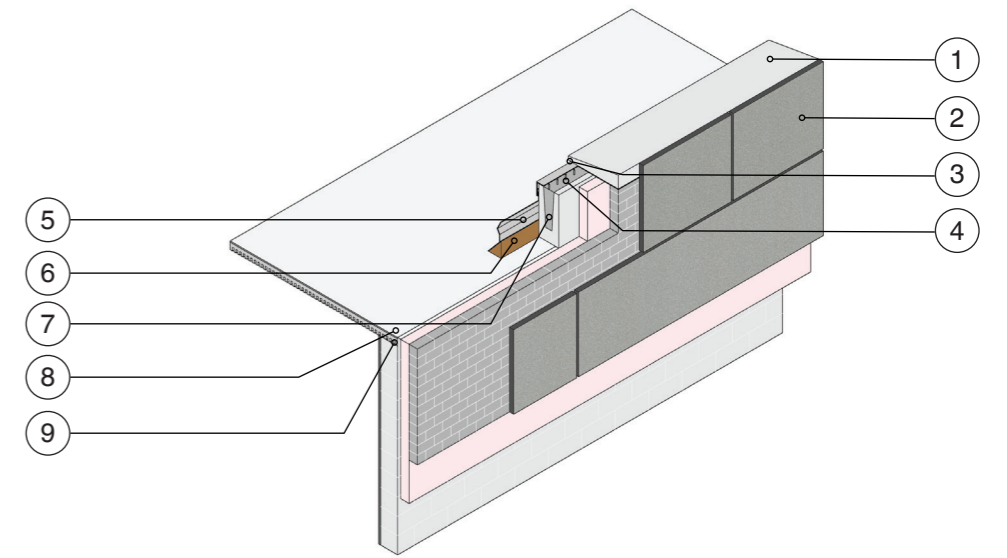




**Left: building components layering** including the ceramic-tube solar screen (top), Trespa panel cladding (middle), and post and beam light gauge steel construction (bottom).

**Right: Axonometric Wall Section** Where the building facade does not feature transparent glazing and solar screens, a double-wythe masonry wall clad in Trespa panels is used. The choice of Trespa material owes itself to fitting in, contextually, with the industrial Monroe North neighborhood, utilizing modern material qualities. Furthermore, this is easily applied to the lightweight steel post-and-beam construction of the structural frame.

- |                         |                           |
|-------------------------|---------------------------|
| 1. Stone coping         | 14. W12 x 22              |
| 2. Trespa cladding      | 15. Head flashing         |
| 3. Coping drip          | 16. Lintel - steel angle  |
| 4. Anchor bolts         | 17. Glazing               |
| 5. Coping flashing      | 18. Mullion system        |
| 6. Cant strip           | 19. Sloped sill           |
| 7. U-block + grout      | 20. Exterior brick wythe  |
| 8. Roofing membrane     | 21. Gypsum board          |
| 9. Metal decking        | 22. Slab on-grade         |
| 10. 1.5" air cavity     | 23. Rigid foam insulation |
| 11. Poured concrete     | 24. Flashing              |
| 12. Metal substrate     | 25. Foundation            |
| 13. Raised floor system | 26. Steel re-bar          |



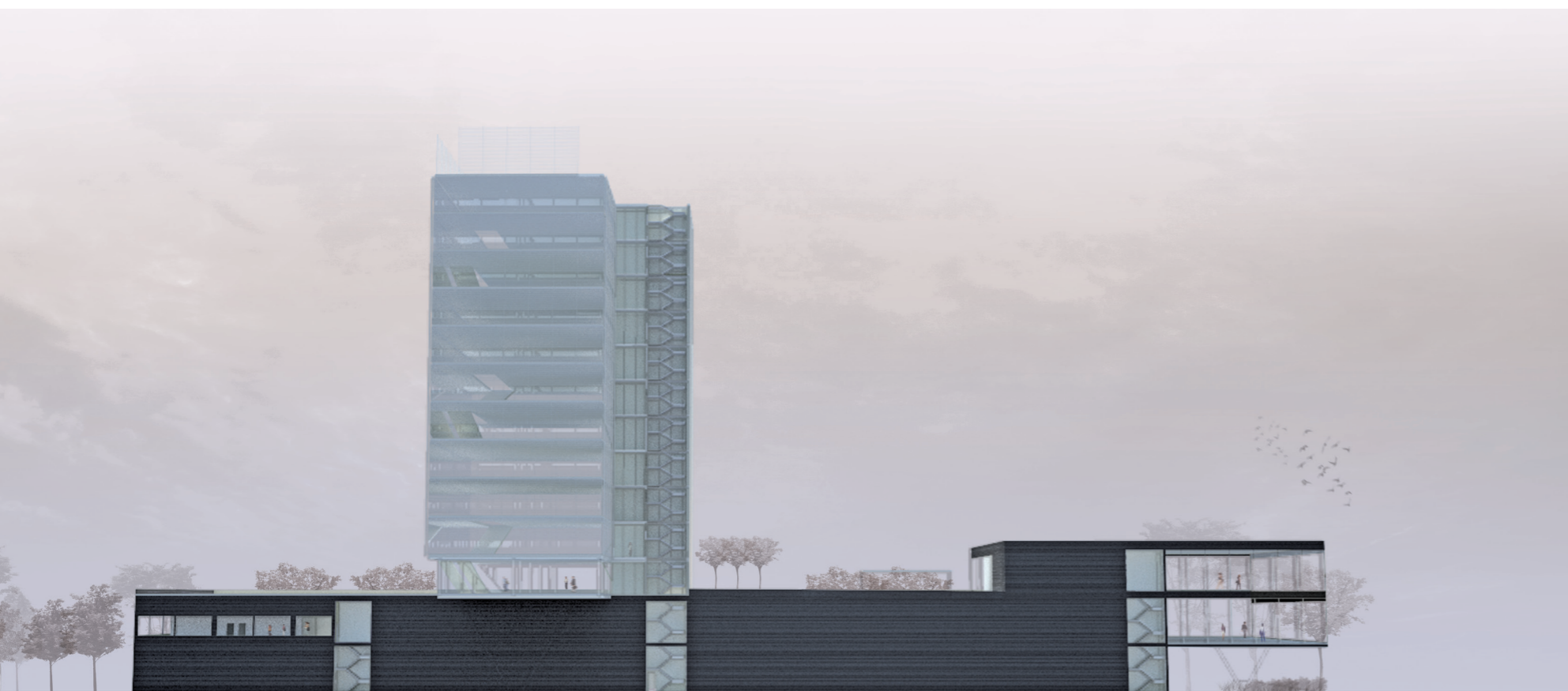
**Below: west elevation** condition rendered at dusk. Transparency at the ground level relates interior spaces to the streetfront and 6th Street Park. The fenestration and use of cladding at the second level creates a dynamic condition that relates to the activity of the neighborhood.



**Below: south elevation**, facing the city center, is extremely transparent, with the movement between the floors in the tower visually expressed in the facade. The ceramic-tube solar screen allows visibility as to the activity occurring inside, and the cantilevered studio on the second level allows complete visual penetration into the design studio space.



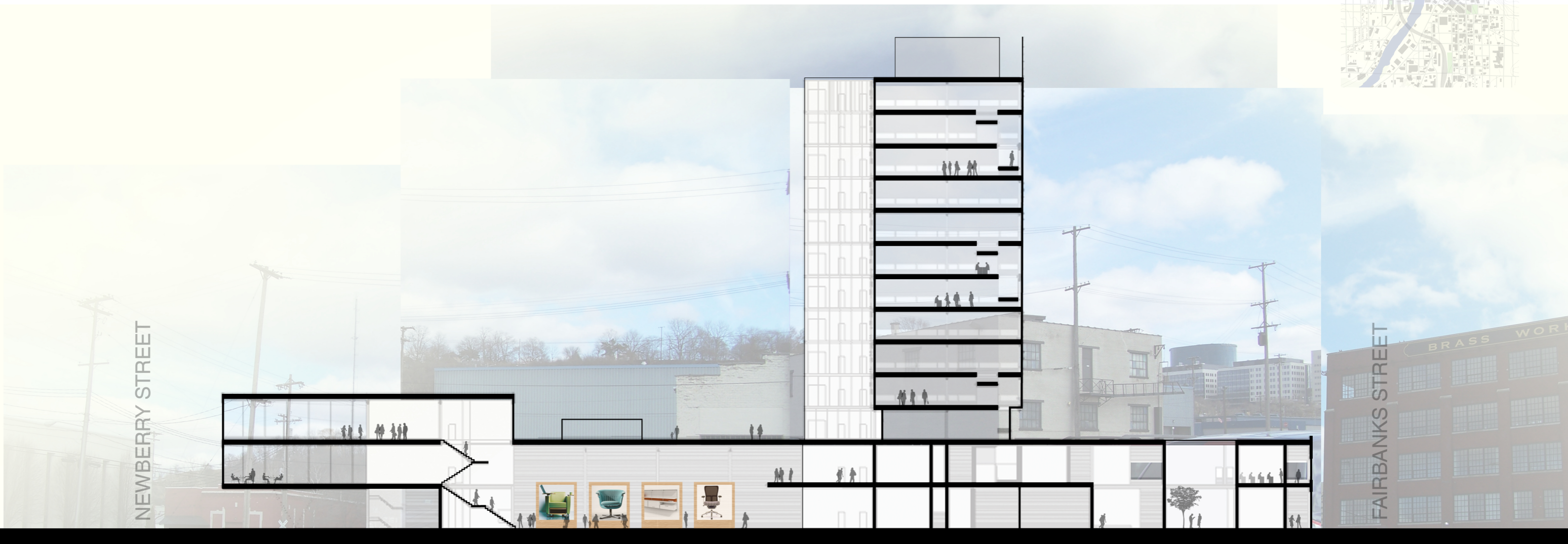
**Below: east elevation** rendered at dawn. Facing the alley, the facade expresses the utility function of the building - egress and transit, service and storage spaces (opacity), and privacy. The majority of the facade is clad in Trespa, with the stairs, laboratory space, and event space highlighted with transparency.

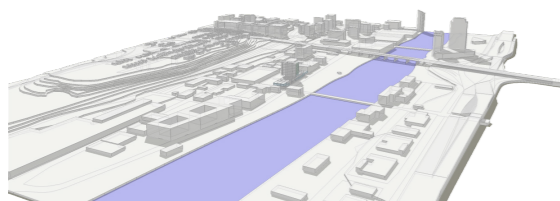


**Below: north elevation** Dominated by the public plaza and retail space at the ground level and the restaurant, banquet, and exhibition space on levels two and three, the north facade is primarily transparent, taking advantage of soft northern light and views of the park. The service core of the tower is opaque, standing in contrast to the lightness of the glass skin.

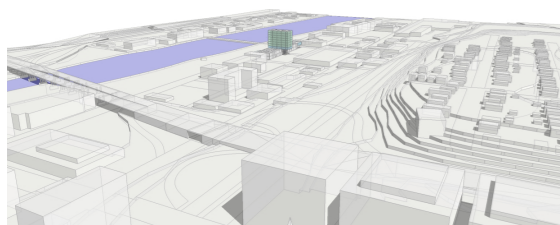


**Below: section, north - south** The first two levels are dominated by the large Forum space and stacked restaurant/exhibition spaces, as well as the smaller studio and private room spaces. The tower is unobstructed floor space connected by a ramping system, creating an atrium-type condition and allowing for easier movement.

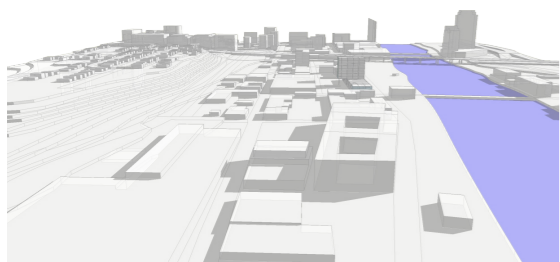




**Left** Aerial perspective renderings and massing studies.



**Below: site section, east - west** Landscape and building section, showing the WMDL's relationship to the topography of the site and the scale of existing buildings.

















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## 5.01 conclusion



“Just make it your own.” This was the advice given to me by my thesis advisor, John C Mueller, throughout the academic year. When I was struggling, when I was discouraged, when I was losing direction, John reminded me to “keep it my own”, and everything would be fine.

This thesis set out to explore architecture way beyond the realm of designing a building. Architecture and architects need to better integrate into everyday culture, perhaps helping transform the everyday culture we so often criticize. Architects cannot be regulated to the back-burner when important decisions are made. Rather, as a profession, architecture needs to re-assert itself as a socially-conscious and innovate field, where the dreams of great-thinkers become the realities of everyone.

For Grand Rapids and Michigan, the future lies in the willingness to take risk and challenge the status quo. If we fail to do so as a society, and if we fail to do so as individuals, we are destined for repeating the mistakes of the past.

The conclusion of this thesis is really the early explorations of life-long career interests. Whether as an architect, a politician, or a businessman, I hope to carry my passions and my belief in the power of people and the power of culture to help create effective change where I see needed. At the end of this year, this exploration has left me with answers and conclusions to many of the thoughts and ideas that have built up inside of me the past 23 years, but it also has left me with many questions that I will continue to seek answers to long after the completion of this project. □

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