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Healthy Placemaking - Revitalizing Springfield's Medical District

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An aerial photograph of Springfield's Medical District, showing a dense urban area with numerous buildings, streets, and green spaces. The image is overlaid with a semi-transparent blue gradient on the right side.

Revitalizing Springfield's Medical District

HEALTHY PLACE MAKING

Allyson Fairweather • Tor Gagnon • Tianyi Guan • James Mealey • Gwendolyn Stoll • Peter Wackernagel

*UMass Amherst Design Center in Springfield
Department of Landscape Architecture & Regional Planning
In Collaboration with the City of Springfield Office of Planning and Economic Development
Graduate Urban Design Studio Spring 2019 - Professors: Michael DiPasquale and Frank Slegers*

LA&RP
Landscape Architecture
& Regional Planning

The Department of Landscape Architecture and Regional Planning at UMass Amherst celebrates another successful year of partnership with the Office of Planning and Economic Development of the City of Springfield. This Graduate Urban Design Studio is coordinated and sponsored through an agreement between the City of Springfield and the UMass Amherst Design Center in Springfield.

This book presents the research and designs of the 2019 Masters of Landscape Architecture Urban Design Studio in the Department of Landscape Architecture and Regional Planning at the University of Massachusetts Amherst. The focus of the studio was Springfield's developing medical district.

We extend our gratitude to the City of Springfield, especially mayor Dominic Sarno and Principal Planner Scott Hanson, for their continued partnership and generous financial contributions. Additionally, we are extremely grateful to the community members whose feedback was invaluable to the success of our designs. We would also like to thank the UMass Department of Landscape Architecture and Regional Planning for their support.

Finally, we thank our inquisitive and enthusiastic students for the work they produced throughout the semester. We hope the ideas laid out in this book will be useful in future planning endeavors and we are specially thankful to our student Gwendolyn Stoll who created it with care and passion.

Frank Slegers, Associate Director, UMass Amherst Design Center in Springfield, Associate Professor & Michael DiPasquale, Executive Director, UMass Amherst Design Center in Springfield, Assistant Professor UMass Extension

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**Our goal is to propose
a new vision for the
North End Medical District
as an exemplary model of
healthy place-making.**

What is Healthy Place-Making?

We believe healthy placemaking is a creative process that generates an interconnected mixture of amenities that activate the public realm, creating a livelihood that builds upon sense of place. Urban design strategies consider the ecological relationship between people and the environment in order to provide design interventions that improve the mental, physical, social, and economic wellbeing of inhabitants. Contextually rooted in the history of the area, new and adapted development illustrates environmentally responsible initiatives.

Design Objectives

1. Enhance the Sense of Place

When Wason Manufacturing Company dominated the landscape of Springfield's North End, the area manifested a strong sense of place. After a period of disinvestment, natural disaster, and construction of suburban office parks, the area lost much of its original character. Our designs aim to reinstall a vibrant sense of place into the medical district.

2. Provide a Balance of Amenities

The urban renewal plan that emerged from 1970s planning practices created a void of mixed amenities in the area. Our goals focus on reintroducing a variety of amenities into the urban fabric to activate the street life while also stimulating the local economy.

3. Increase Connections

The construction of interstate-91, the flood wall, and the railroad has resulted in the isolation of the neighborhood. Zoning and Urban renewal further separated the project area. In our designs, we are focused on enhancing existing connections and find new ones where they are lacking.

4. Green Infrastructure for Public Health

Green infrastructure and public health are intrinsically linked. In order to design healthy spaces, we use green infrastructure as a framework: stormwater management, tree canopy, impervious surface cover, and public open space.



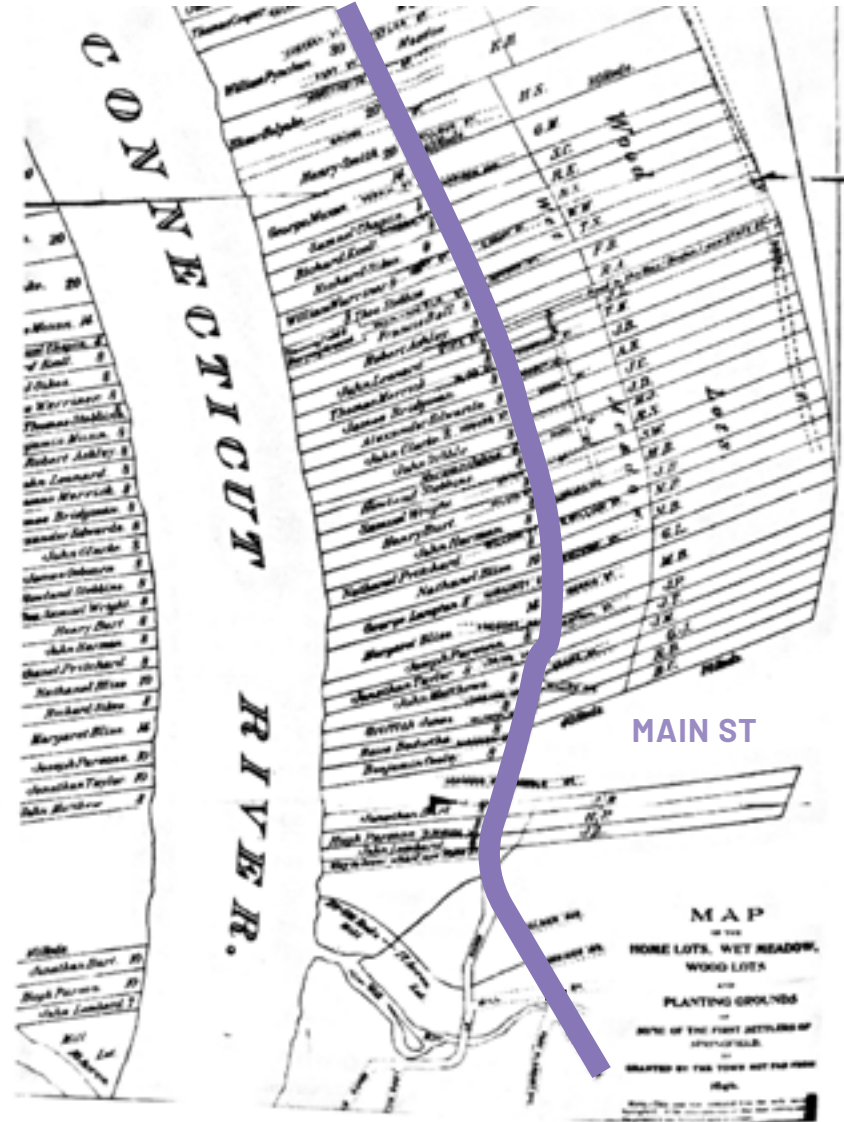


Healthy places celebrate a strong *sense of place*.

Historic Context of the North End

Early Settlements

1640 When people first settled this area, the economy was driven by farming, fur-trapping, and trading. They laid out linear plots radiating from the Connecticut River, with agricultural use determined by proximity to the water. Home lots closest to river, then wet meadow, followed by wood lots. Remnants of this settlement pattern still remains on our site today.



Urban Beginnings

1830 Around the turn of the 19th century, downtown Springfield began to urbanize. The North End was still undeveloped at this time. The name "Plain Field" fits the character of the landscape, which was made up mostly of "meadow land with a few farms", according to the SRA History of Brightwood.



Brightwood Origins

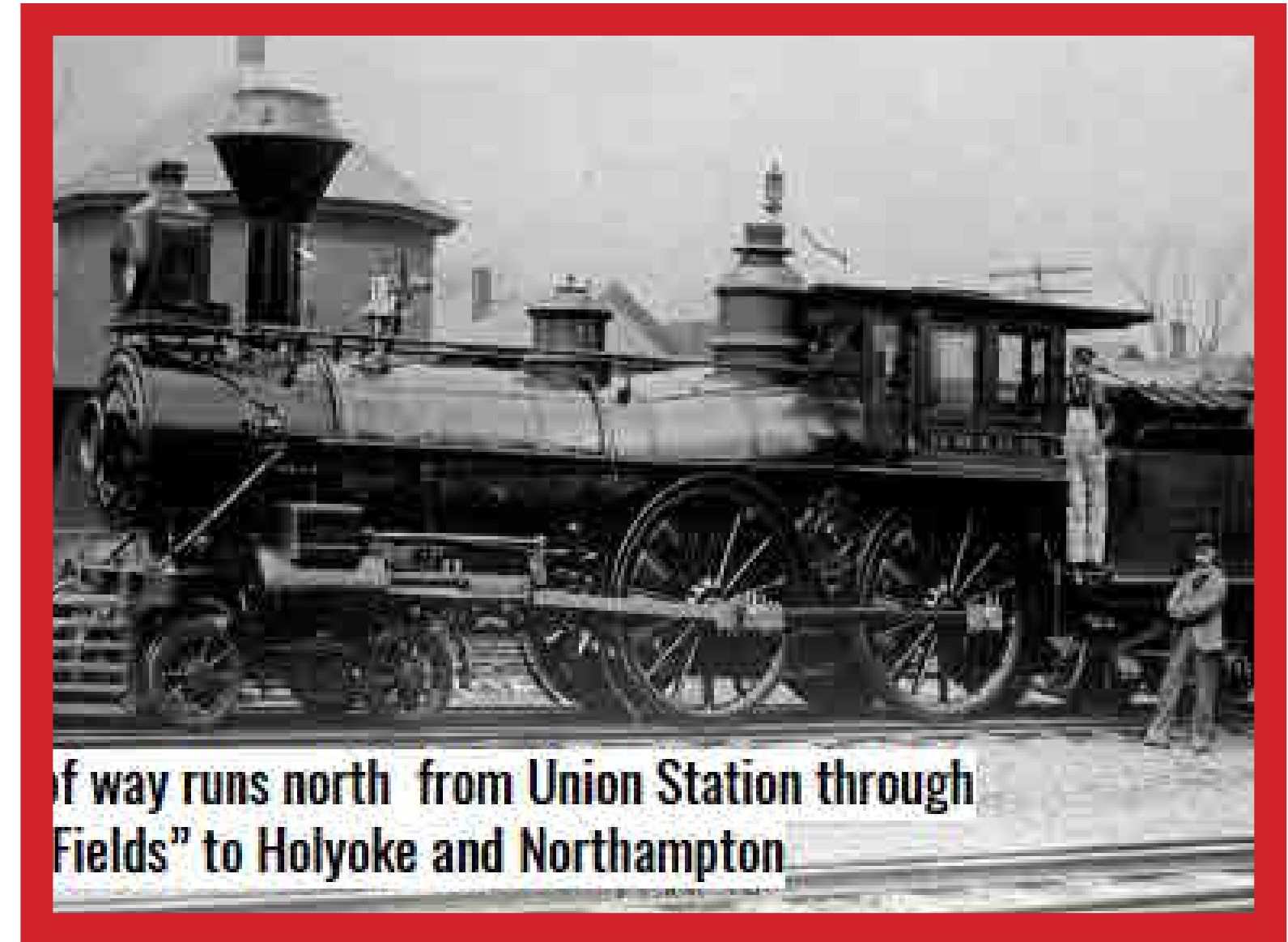
1830 J G Holland, a successful poet from Belchertown, built his private estate on the outskirts of downtown Springfield. The estate was named "Brightwood" due to its brightly painted wooden exterior. This name eventually translated to the entire neighborhood, and is the namesake for the area.



Courtesy: Springfield Preservation Trust

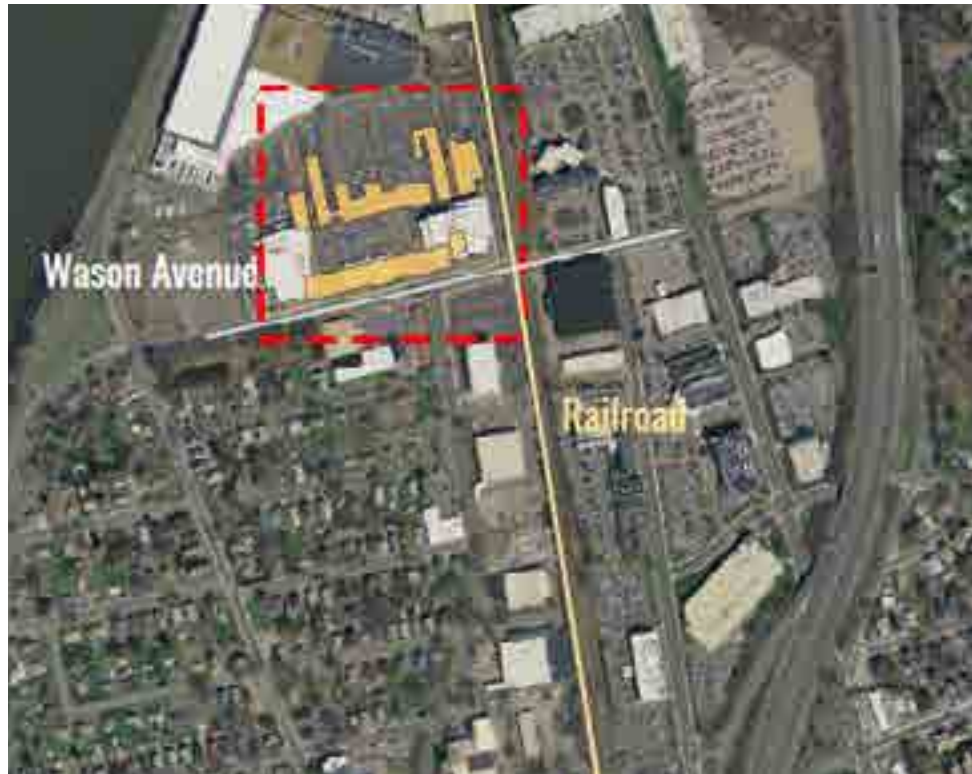
Railroad Construction

1845 - 1932 The construction of the railroad drastically changed the character of the North End. The map shows that the right of way ran north from Union Station, through "Plain Fields" to Holyoke and Northampton. It physically separated the neighborhood of Brightwood and what is today the medical district, but it also improved connections on a regional scale, bringing in new businesses.

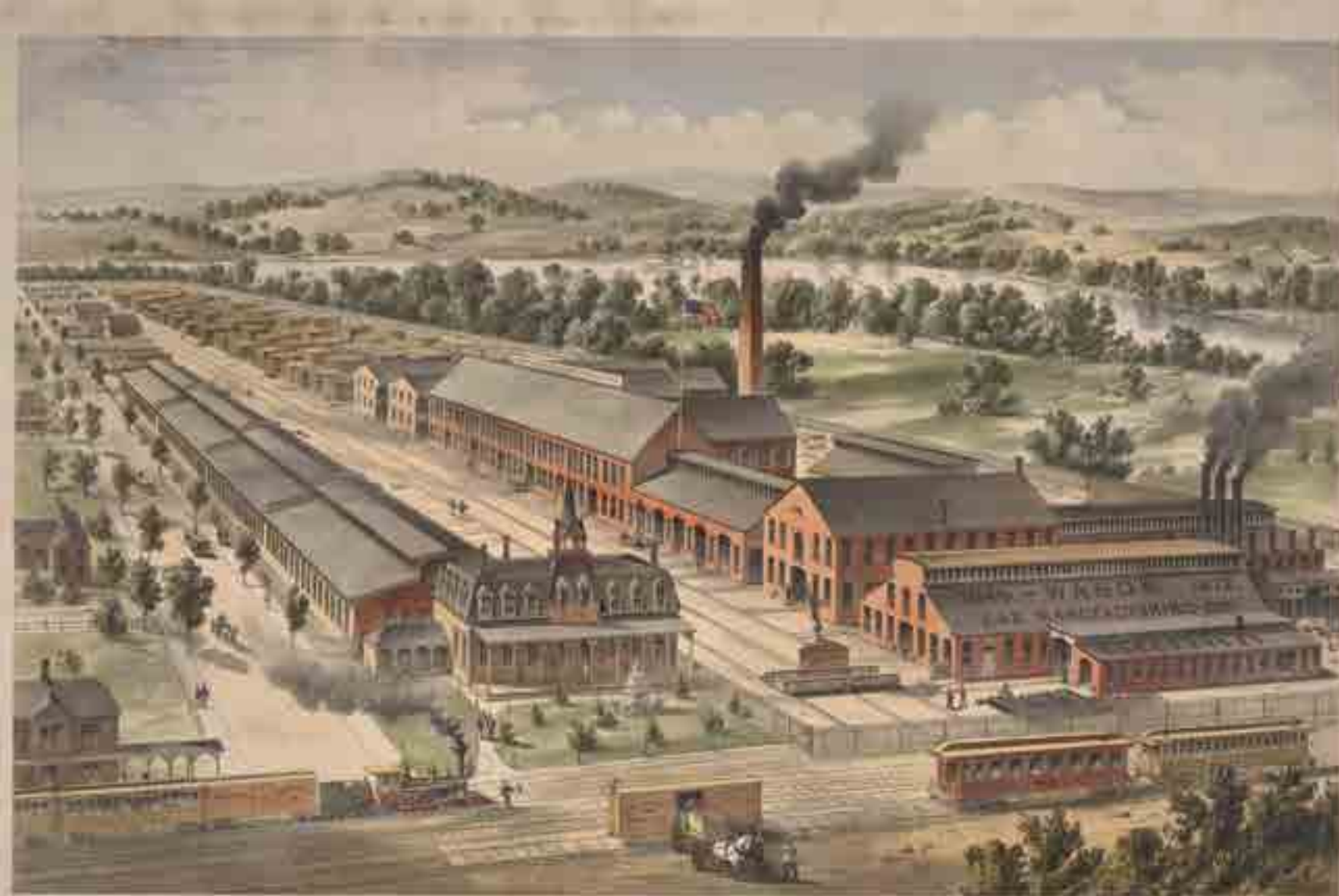


Wason Manufacturing

1873 Wason Manufacturing Company purchased 16.5 acres from the City of Springfield to relocate their factory to Brightwood. The rail car company was extremely prolific - production capacity was 33% better than their greater than competitors, and due to their location, cars could be brought out of barns, dropped on tracks, delivered anywhere in country.



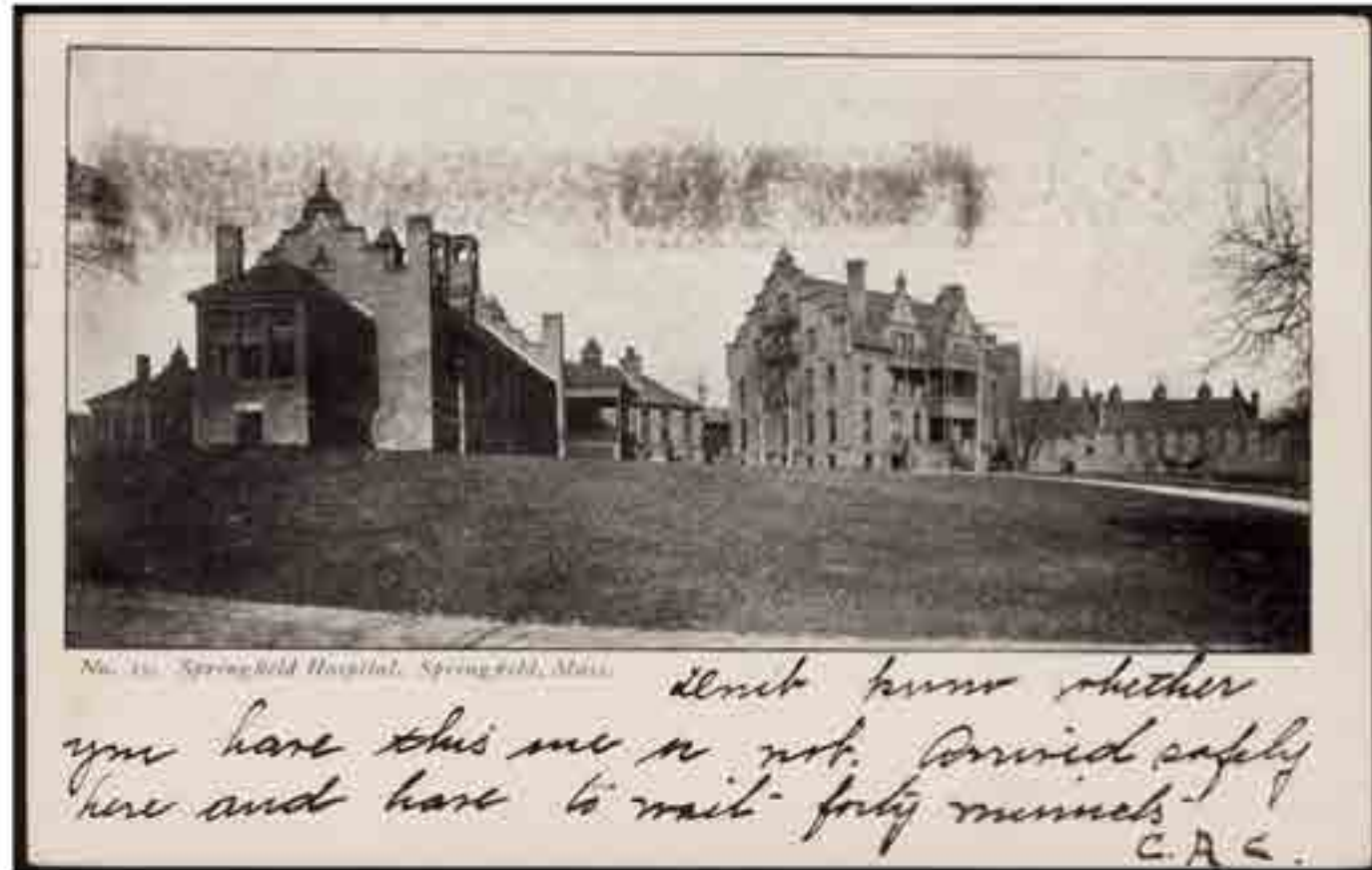
Built for Berkshire Street Railway Company
By **WASON MFG. CO.**
Builders of RAILWAY CARS and TRUCKS of All Descriptions
SPRINGFIELD - MASSACHUSETTS



WASON MANUFACTURING COMPANY of SPRINGFIELD, MASS.
RAILWAY CAR BUILDERS,
CAR WHEELS AND GENERAL RAILWAY WORK.

Medical District Beginnings

1870 Around the time of the railroad construction, Springfield Hospital was built. It is the beginning of a large medical district north of downtown Springfield.



Prosperity

1900 - 1930 The prosperity of the Brightwood neighborhood corresponds with the success of Wason Manufacturing Company. The business spurred major economic growth for the city and developed the Brightwood neighborhood for people who worked for the manufacturing company.



*"No manufactory in Springfield
has become more world-famed;
and none has, during the past 20 years,
handled more money."*

- SRA Handbook of Springfield

Connecticut River Flood

1936 The flood was a harbinger for the preceding unfortunate events that unfolded in Brightwood. The natural disaster destroyed many homes along the Connecticut River, and even after the water had drained, massive piles of debris plagued the neighborhood for months to come. Wason Manufacturing Company moves out of Brightwood, and residential and industrial growth stops. Shortly thereafter, the City of Springfield begins drafting an urban renewal plan that will bring about many significant changes in the site.



2



Healthy places are **balanced**.

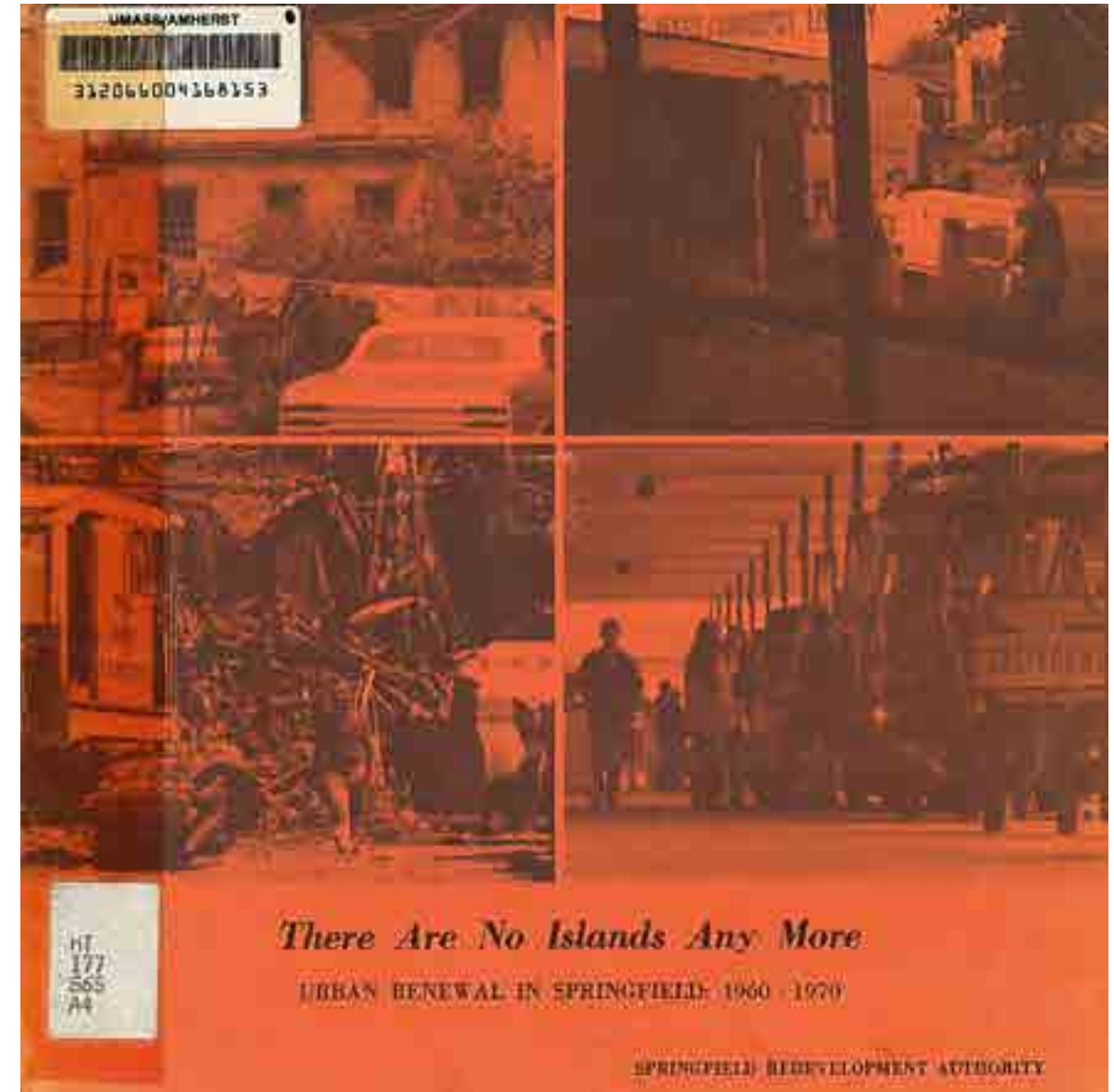
Patterns of Development & Current Conditions

Urban Renewal

1968 Following the aftermath of the flood, the City of Springfield adopted an Urban Renewal plan for Brightwood. The goal was to “stabilize the population by providing a nucleus of good housing, attractive recreational areas, and convenient shopping centers”. Ironically, this new zoning plan demolished much of the existing housing and amenities in the Brightwood neighborhood, and instead paved way for new industrial uses that would eventually turn into the Medical District. The text below is an excerpt from the Urban Renewal Plan.

Brightwood is an area in between. Its history is that of a neighborhood sliding towards becoming a slum, but its promise is of a neighborhood in which families will be eager to live and raise their children.

Courtesy of UMass Dubois Library

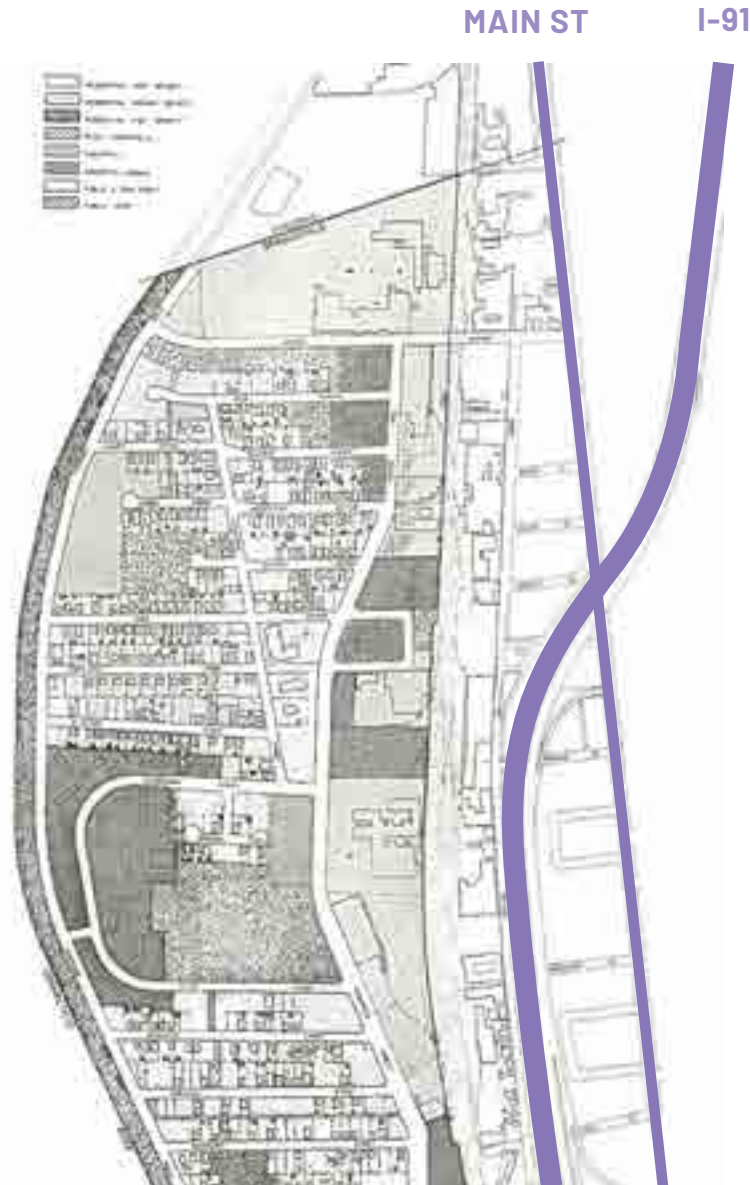


Urban Renewal

This zoning plan is taken from the City of Springfield's Urban Renewal Plan. The larger shaded areas all represent lots that were cleared and rezoned.

The historic bird's eye view on the right shows "Riverview Apartments" just after construction.

These 344 housing units as high rise apartments were part of the City's attempts to urbanize this area in the 1960's. The image also shows a number of vacant lots that had been cleared to make way for new development.



Construction of I-91

1972 Another part of the Urban Renewal strategy from the late 1960s was to lead the planned I-91 highway through the North End. The goal was to make the neighborhood more accessible to vehicular traffic. While this is the case, it also abruptly intercepted the fine grid street network that existed from when the neighborhood was developed as worker housing for Wason Manufacturing Company. In the images below, you can see how the bermed highway created a strong physical barrier. The impact of the I-91 corridor has been a challenge for pedestrian and social connectivity until today,



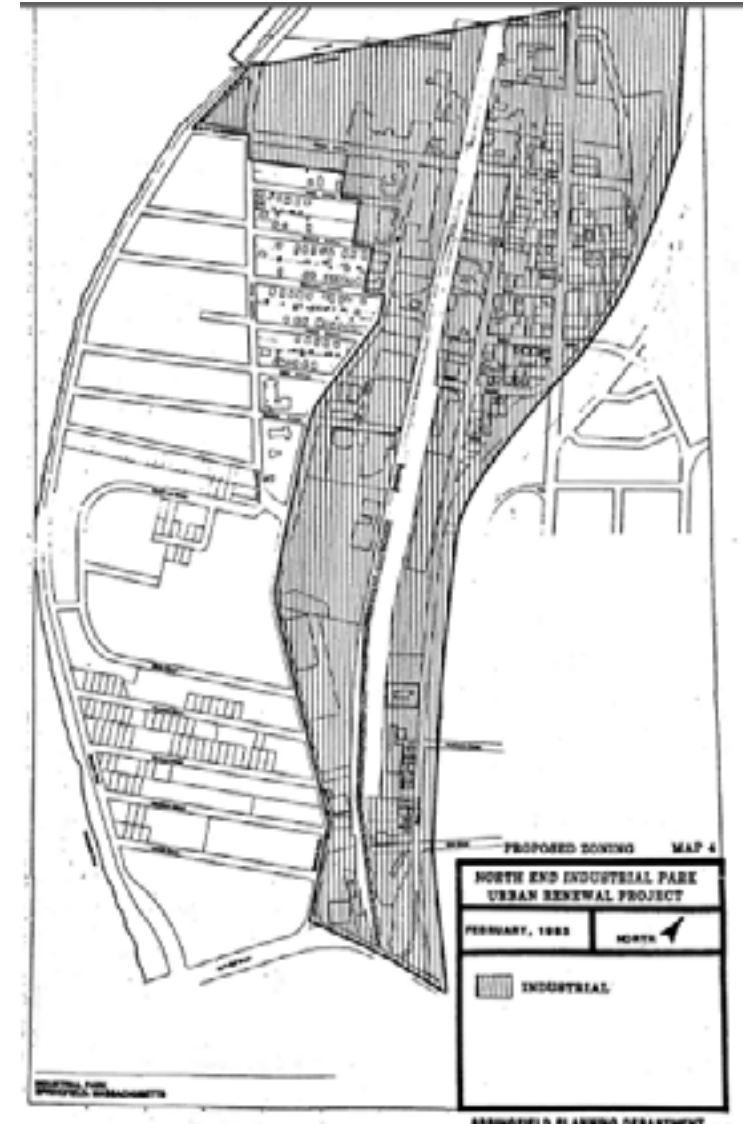
pre-construction of I-91



post-construction of I-91

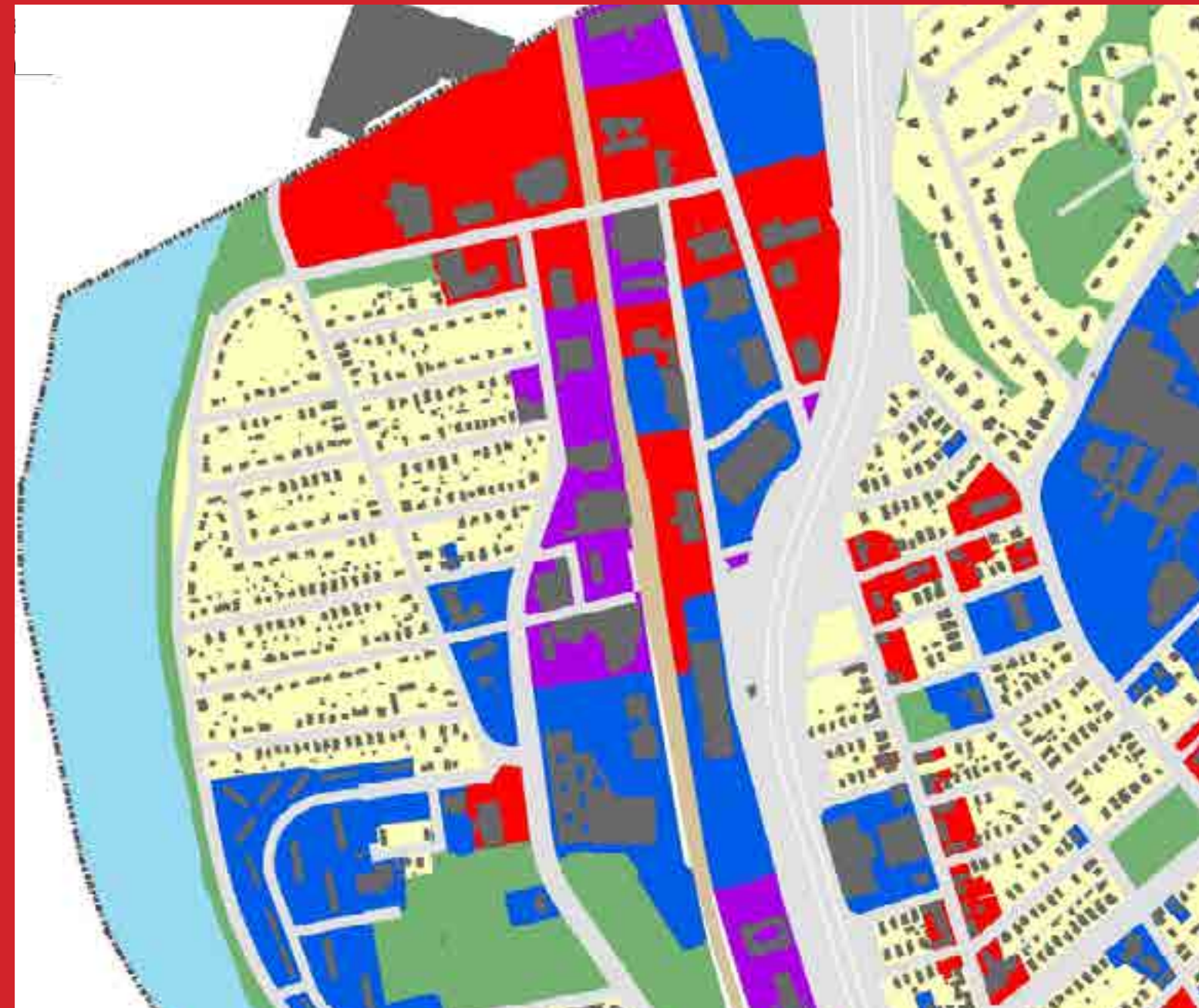
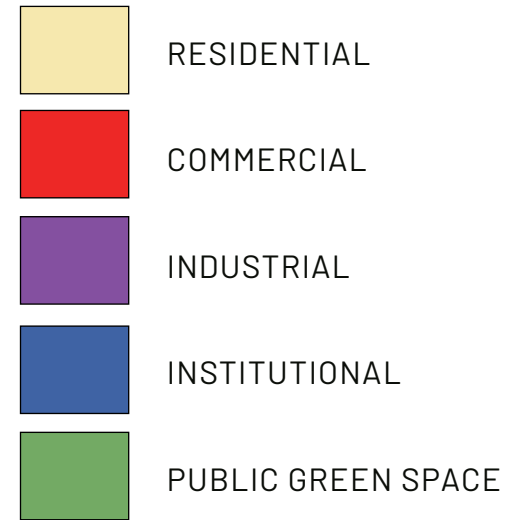
Zoning Changes

1983 By this time, the Brightwood neighborhood had seen significant shifts in land use. A new zoning plan developed in the 80s focused on creating an industrial and commercial strip along main street. This essentially isolated the Brightwood community from the Memorial Square and Atwater Terrace neighborhoods. This zoning plan set the precedent for the present day zoning.



Land Use

Although the zoning plan denotes our project area as strictly residential and industrial, the land uses tells a different story. Our area encompasses many schools, religious institutions, and medical services and businesses. Although it is not currently zoned for amenities such as restaurants, groceries stores, community centers, or pharmacies, it is clear that there is a great need for them. Our new plans focus on rezoning of the medical district to allow for new land uses that foster mixed and overlapping uses.



Changes in the Urban Fabric

The changes in land use have brought about changes in the urban grain as well. The images below demonstrate how Brightwood started as a sparsely populated company town, then developed into a dense and walkable industrial neighborhood. Compared to the industry that preceded it, the industrial buildings today are of a much larger scale and are not mixed with smaller-scaled buildings.



1882: COMPANY TOWN



1920: INDUSTRIAL NEIGHBORHOOD

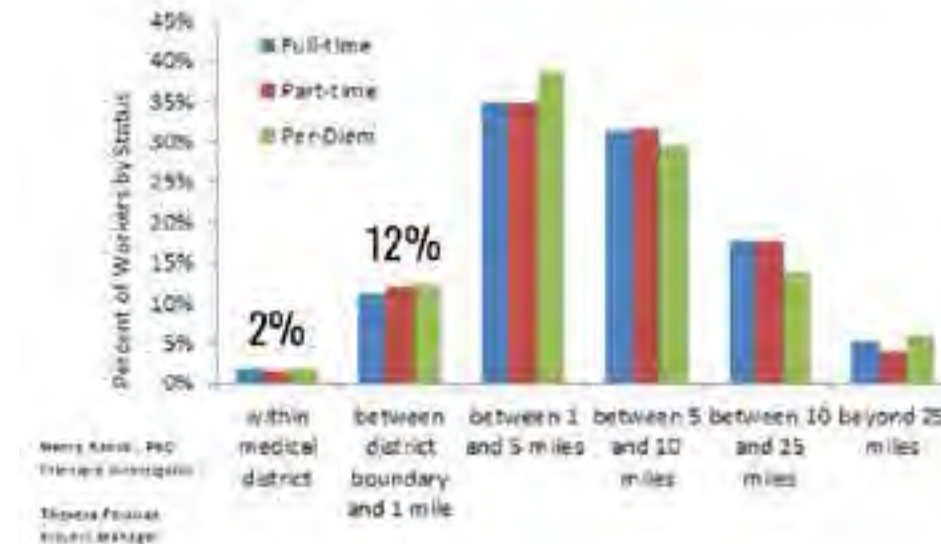


2019: INDUSTRIAL NEIGHBORHOOD

Brightwood & Medical District Relationship

Historically, the neighborhood of Brightwood was populated with employees of the local industries. Today, this is not the case. Dr. Henri Renski conducted a survey in 2011 that showed that less than 2% of the medical district employees live in Brightwood. In fact, the more money employees made, the farther away from Brightwood they live. One leading factor is that Brightwood doesn't provide the appropriate mix of housing for this demographic. Part of our design strategy is balancing homes and amenities to attract more employees to the area.

Percent of full-time/part-time/per diem workers by distance between place of residence and the Medical District





*Healthy places create & enhance **connections**.*

Site Connections & Street Analysis

Current Connections

This bird's eye view shows Wason Avenue as the only connection from east to west into the residential areas of Brightwood. This street crosses a series of other streets that connect to the south. The image also illustrates how the railroad tracks and highway are limiting pedestrian connectivity in our project area.



Current Connections

This bird's eye view shows the relationship of Brightwood to the Connecticut River and the industrial area along the railroad tracks. The edges of residential uses are clearly defined by physical edges - such as the industrial buildings along Fisk Avenue and the Connecticut River. Plainfield Street is an important collector and central spine for the residential area.



Current Connections

This bird's eye view illustrates the limited connections between Baystate Medical Center and the medical district on the western side of the highway. One of the major challenges of this studio is to strengthening the relationship between these two important industries and districts.



Current Connections

This view from the south illustrates how Brightwood's and Memorial Square's residential areas are separated by highway, railroad and other streets. One existing pedestrian tunnel and one proposed tunnel (shown in blue) represent efforts made by the city to facilitate connections from west to east.



Street Character

Main Street



- Heavy automobile traffic
- No street parking
- Large building setbacks 20-40'

- Bike lanes on road in both directions, no buffer
- Few mature street trees
- Large parking lots

Birnie Avenue

Street Character



- Moderate automobile traffic
- No bike lanes
- Street parking on both sides

- Parking with large setbacks from sidewalks
- Street trees do not buffer pedestrians from street

Street Character

Wason Avenue



- Moderate automobile traffic
- Truck route
- Bike lanes on both sides of road

- No street parking
- Medical office buildings with 30-50' setbacks
- No street trees

Riverside Road



- Moderate automobile traffic
- No street parking
- 6' flood wall runs along western edge

- Street is separated from bike way
- Moderate tree canopy
- Only 2 entrances to bike path on our site

Street Character

Street Character

Plainfield Street



- Moderate automobile traffic
- Street parking
- No street trees

- Mostly residential development
- Bus route with many stops
- Common pedestrian route

Fisk avenue



- Moderate automobile traffic
- Heavy truck traffic
- No street parking

- Wide street buffer with some street trees
- Separates residential and industrial uses
- Services schools in the south

Street Character

Connectivity Infrastructure

The highway construction proved to be a massive obstacle for east-to-west movement on our area. The highway was built on berms, rather than set on pillars, so it is only crossable at certain locations. Interviewed residents stated that there are occasions when people even walk across the highway. The City has made multiple efforts to help bridge this barrier, both past, present, and future. The section below begins at the flood wall of the Connecticut River in the west and ends at Memorial Square in the east. The section illustrates the physical barrier of the raised highway.



PAST At one point in time, the City of Springfield constructed a bridge over the railroad to help restore some of the east-to-west connections. For unknown reasons, the bridge has since been removed. Reconstructing a similar bridge present day would be a challenging feat, since the bridge needs to be tall enough to accommodate a double decker rail car, and the slope would have to be gentle enough to accommodate ADA accessibility. For these reasons, the city has chosen to develop underground connections instead.

Connectivity infrastructure

PRESENT There is currently one pedestrian underpass on our site that connects the schools between Main Street, Birnie Avenue, and Fisk Avenue. The underpass is not open 24/7, and is mainly used by students. A connection open at all times of day should be a priority.



Connectivity Infrastructure

FUTURE This pedestrian underpass is currently under construction. This location was chosen because of its proximity to the expanding school district. It is important to consider more locations for future underpasses to improve east-to-west connectivity.

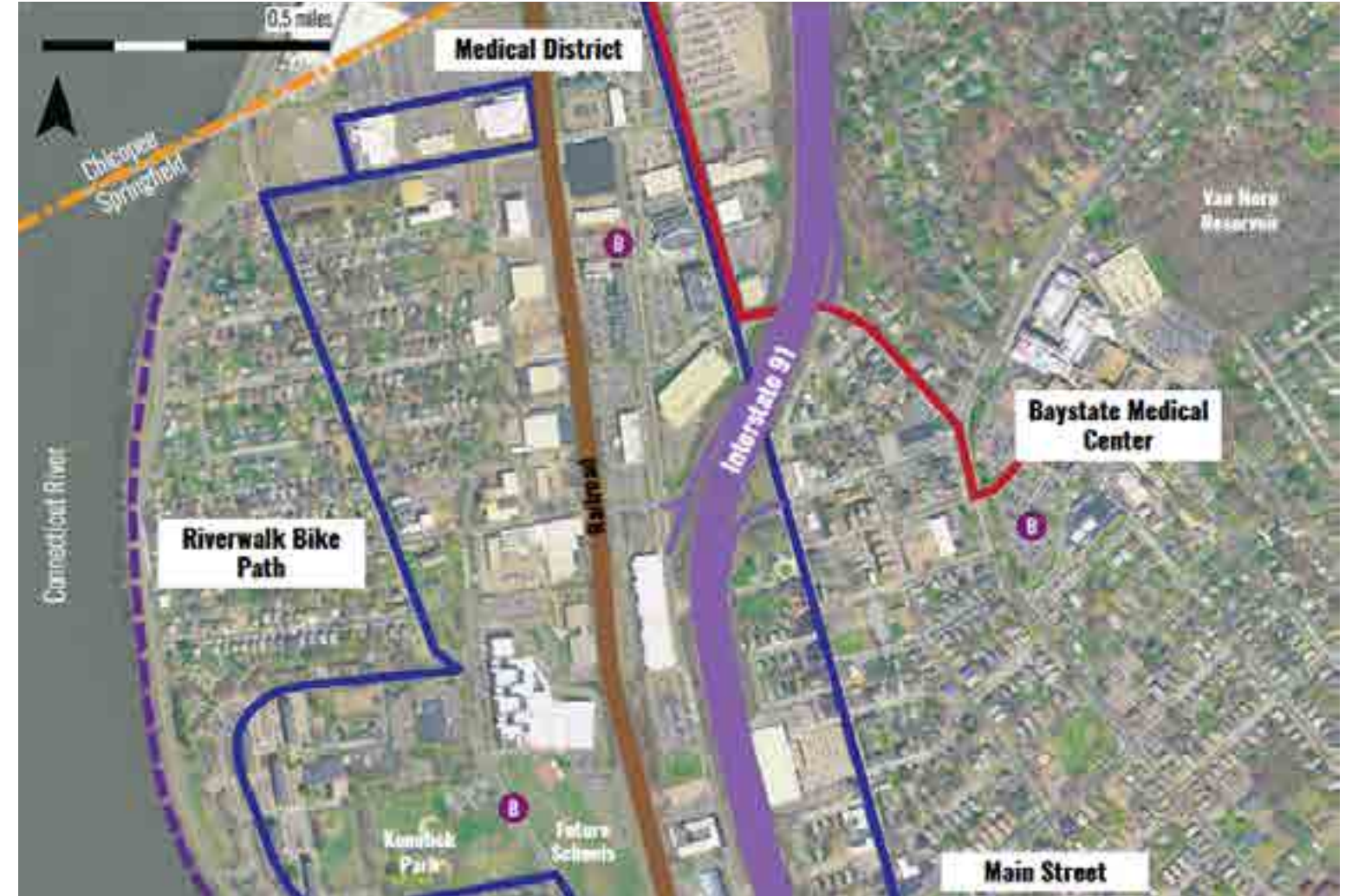


Vehicular Circulation



The medical district has a large quantity of surface parking lots and focused on accommodating the automobile. In the medical district, there is a lack of mid-block connections from east to west.

Public Transportation



Our project area is serviced sufficiently with public transportation. Adding bus shelters would improve user experience and encourage people using more public transportation.



Healthy places provide opportunities for activity and well-being.

Public Health

Demographics



HOME OWNERSHIP

Home ownership in Brightwood is 17%, which is second lowest to Memorial Square (10%). Both of these neighborhoods are included in our study area. When proposing new amenities and housing opportunities, it is important to consider that residents are at risk of being displaced.



VEHICLE OWNERSHIP

Our research shows that 48% - almost half - of Brightwood residents do not own a car. Compared to the rest of Springfield, this area has a disproportionately low car ownership and suffers from a lack of on site connections. Therefore, pedestrian connectivity and walkability are important features of our proposed designs.



ASTHMA

23% of Brightwood residents suffer from asthma. This high number shows the need for improved air quality and healthier living in the North End. In our designs, the boundaries of industrial and residential must be carefully considered to minimize the negative effects of industry on the surrounding communities.

Demographics

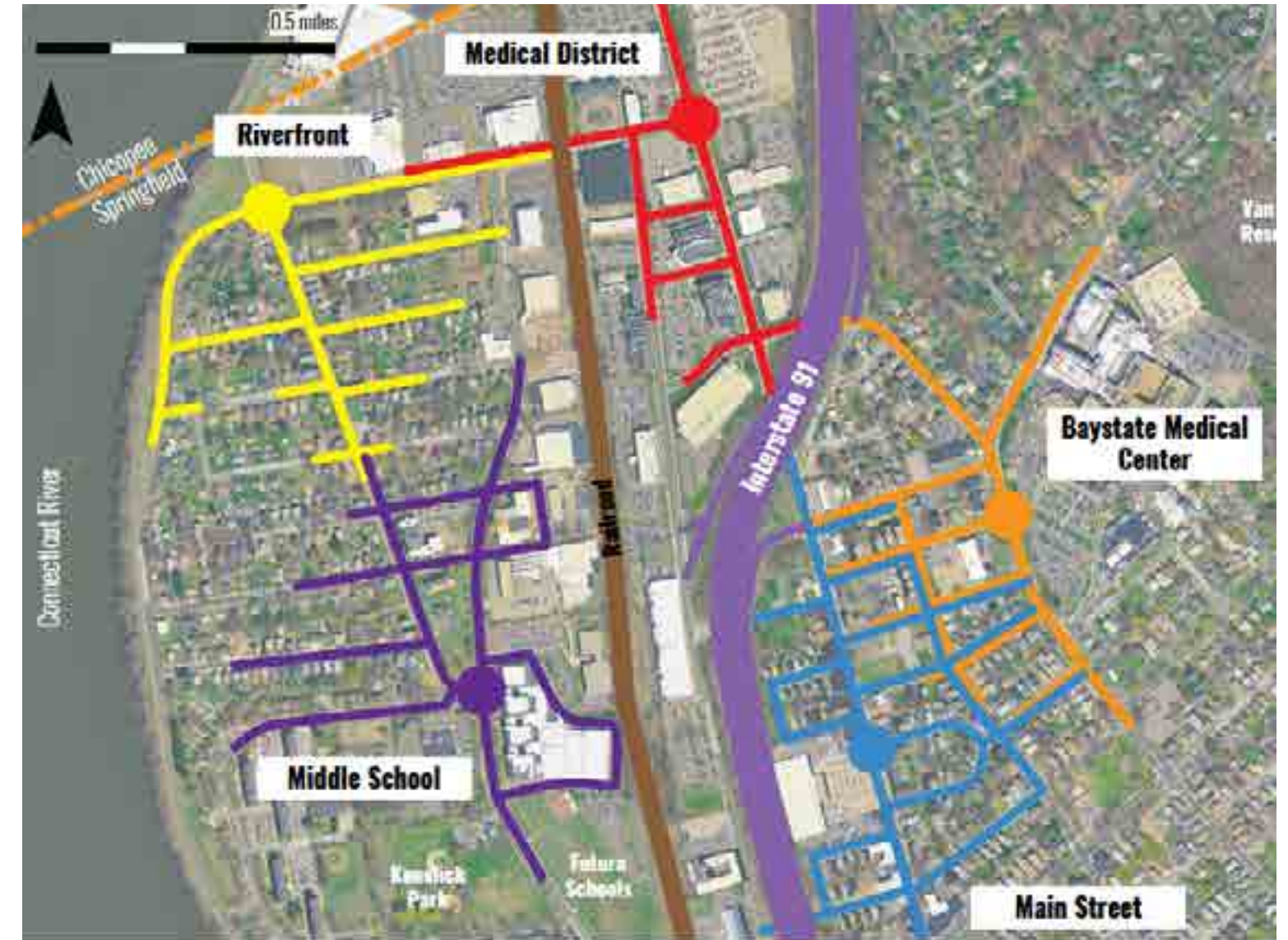


OBESITY

Poor connectivity of the pedestrian network and high asthma rates are also reflected in the 40% obesity rate in our project area. As designers of healthy neighborhoods we have to create more opportunities for people to lead healthy lives. Primary objectives are: improving the pedestrian experience and connections, creating more places for outdoor recreation and playing, and building access to healthy food and other amenities in the North End.

Walkability

The Brightwood neighborhood is quite walkable, despite the disconnected pedestrian network that resulted from a period of urban renewal. The map displays the distances that are walkable in 5 minutes. The major attractions and destinations are very close to one another. In just 15 minutes, for example, you can get from Main Street to the Riverfront. A good framework for a walkable neighborhood exists, while the streetscape for those connections need significant improvements to make pedestrian travel a desirable mode of transportation.



Public Open Space Network

The Connecticut River Walk and Bikeway defines the western edge of our project area and connects to downtown Springfield. Our project area has two parks. In the south, Kenefick Park and the recreational public schools offer places to exercise and play outside. In the north, there is small park underneath the canopy of old trees that serves as a dog park and a small gathering spot for cookouts. There is no public green space on the river's edge that takes advantage of the great views. While the River Walk and Bikeway accommodates bicycles, the other parks need to be more connected through walkable and bicycle-friendly streets and improved connections across the railroad and I-91 to become part of a larger open space network.



KENEFICK PARK

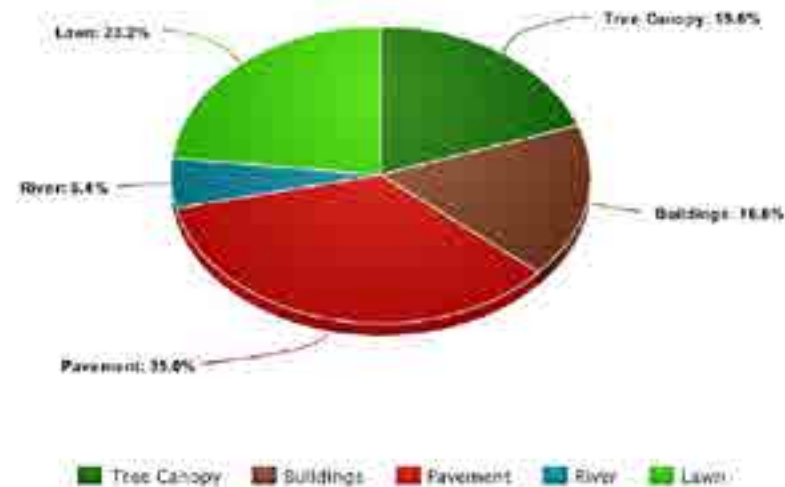


WASON & RIVERSIDE



Tree Canopy

Tree canopy is an important aspect of public health. Trees provide necessary air filtration, which is especially important in an area like Brightwood that suffers from extreme rates of asthma. Increased tree canopy also increases the amount of water that can be absorbed on-site, another important aspect for this site due to the outdated stormwater systems. The tree canopy in Brightwood is rather robust on the older streets, but could use infill on the newer streets. The medical district, on the other hand, has gone through extensive development in recent years and therefore has smaller trees. The extent of asphalt has also prevented extensive plantings in the area. The images on the right illustrate a typical view of each area.



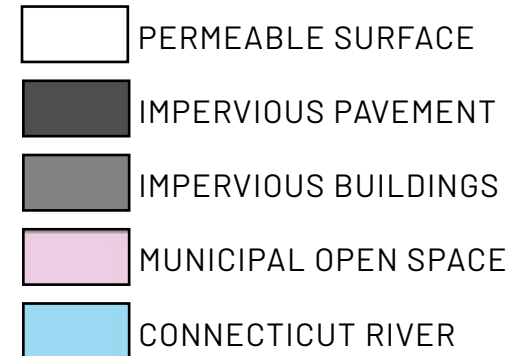
Brightwood - Laurel Street facing west to the River



Medical District - Parking Lot adjacent to Wason Avenue

Impervious Surfaces & Stormwater

Due to the nature of medical districts, our area contains a large amount of vast asphalt parking lots. These impervious surfaces contribute to a high quantity of stormwater runoff, while also hastening peak flow times and leading to slower drainage. The City of Springfield uses overflow drains in this area (CSO's), which means that stormwater in excess of the systems capacity will be rerouted to drain into the Connecticut River. Not only is this damaging the environment, but also puts a burden to the City of Springfield. The City has to pay a fine for pollution in these events. A switch to non-overflow drains is expensive, so it is important to use landscape features and green infrastructure to help offset the amount of stormwater produced from the medical district.



Studio Process

Developing a Design Program

One of the first tasks we undertook was developing a design program. While the city of Springfield identified some basic needs, most of the programmatic elements were derived from community member input at stakeholder meetings. From our stakeholder meetings, we developed the following program:

Residential Units (100 min)
Hotel (150 room min)
Medical Office Space

Child Care
Public Open Space
Retail

Café and Restaurants
Deli/Grocery
Daily Services



Mitigating a Variety of User Groups

Meetings with diverse stakeholders led to a better understanding of assets, challenges and goals from different perspectives. Listening to their ideas was influential for developing the design program.

City of Springfield

Client

- Information about current projects
- Vision for long-term planning
- Challenged sites and areas need an “asset-based” approach
- Ideas about economic & cultural development

New North Citizens Council

Residents

- Request for a wider variety of amenities within the community
- Expressed concerns of safety regarding east-to-west connections across railroad
- Proposed visions on what an ideal relationship to the medical district looks like

Baystate Medical Center

Businesses

- Creating a landscape that reflects the medical district's goals of health
- Desire for simplified navigation within the medical district
- Proximity of parking to buildings is crucial in medical practice

It is important to note that the concerns of residents go beyond our ability to really know and understand. The group of stakeholders cannot be representative, while it was beneficial for the class to respond to their comments through our design process. There is a need to address the needs of a diverse population and include equity into our thinking. Other influential components for understanding area and people were regularly area visits, on-site sketching and observations.

Fabos Greenway Conference

Midway through the semester, we had the opportunity to present our progress at the Fabos Greenway Conference poster session, where we received useful feedback from professionals in the field.



Design Teams

DESTINATION WASON RIVERSIDE

Alyson Fairweather & James Mealey

HEALTHY SPACES FOR HEALTHY PEOPLE

Gwendolyn Stoll & Peter Wackernagel

BRIGHTWOOD'S MEDICAL EDGE

Taurean Krupa-Gagnon & Tianyi Guan





HEALTHY SPACES, HEALTHY PEOPLE

Gwendolyn Stoll • Peter Wackernagel

Across the country, the medical industry is growing. In the places where medical uses are concentrated, a new kind of city is emerging: one that offers green public spaces amidst medical buildings. Medical cities often take the shape of a campus, comprised of many different facilities offering a full-spectrum of medical services, from in-patient to health and wellness. Owing their figurative urban design ideas to modernist designers, these cities place new medical buildings in park-like settings. Although it is an old idea, the belief that fresh air, trees, and herbs are appropriate for healing is an inspiration in the design

of these medical cities. In these new cities, the quality of the spaces surrounding the medical buildings are as important as the buildings themselves.

One of the problems identified with Springfield's North End is the fragmentation of existing neighborhoods into spatially disconnected pieces. A once unifying street grid has been interrupted by a series of strong North to South connections, including a rail line, an interstate highway, and a series of urban renewal redevelopments that used the superblock as its basic unit.

Master Plan

- SINGLE FAMILY RESIDENTIAL
- MULTI FAMILY RESIDENTIAL
- COMMERCIAL WITH RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- INSTITUTIONAL
- PUBLIC OPEN SPACE



Master Plan Development

Green Network

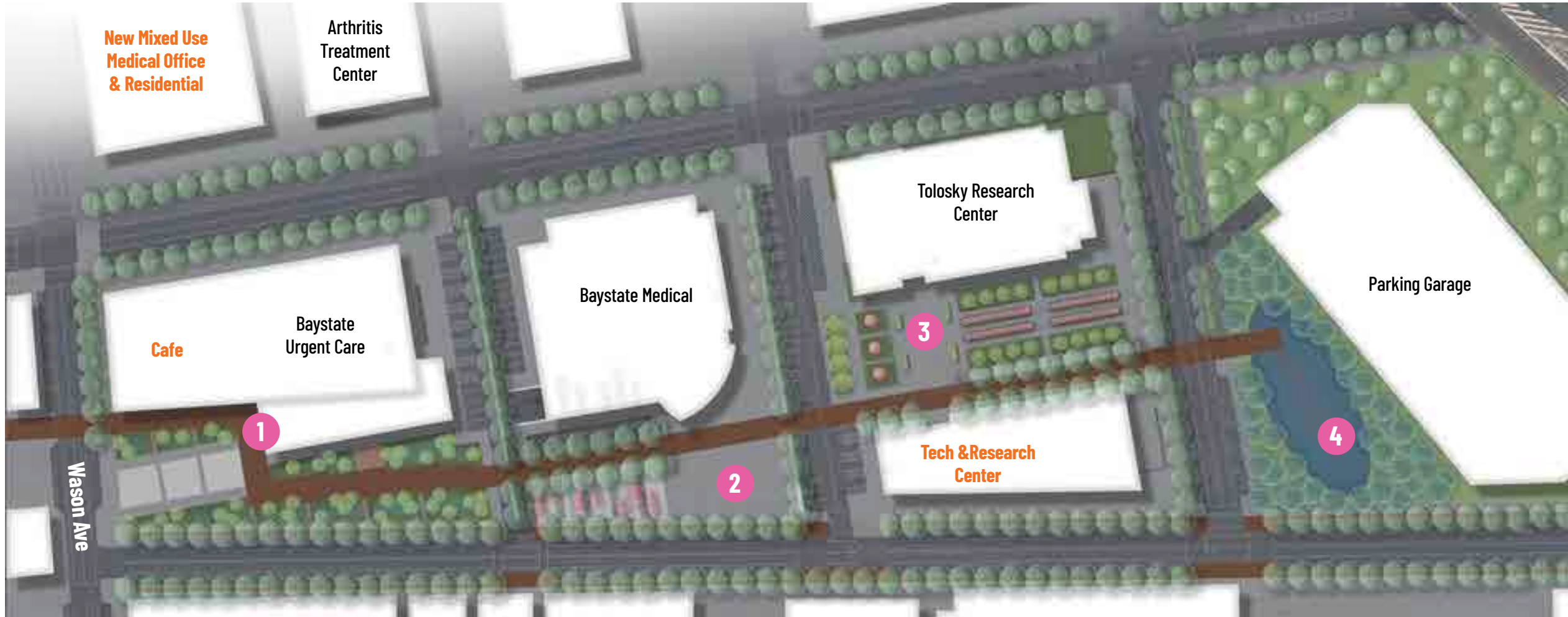


In the Medical District, a major public green space could serve not just medical workers and consumers, but also the residents of the neighborhood. The series of squares and gardens along the axis of our design could serve as common ground for these different populations.

Smart Growth



To become a model of a successful city, medical districts need to draw users with more than just medical services. A mix of retail, commercial, residential, and related industries such as research and technology, are crucial in boosting economic activity and turning a few hospitals into a medical city. As the region's largest hospital and employer, Baystate is positioned to develop the medical district into a wellness-oriented, mixed-use neighborhood, which would stimulate activity in the area. Our design aims to provide a framework for Springfield's medical district to grow into a vibrant medical city that promotes healthy activities for a diverse range of users.



Medical Campus Core

More than the actual medical services received, it is these spaces – the way that they unify the district, and the experience of being in them – that we hope will leave the firmest impressions on the minds of visitors and neighborhood residents.

- 1 Rain Garden Pocket Park
- 2 Shared Space Plaza
- 3 Healing Gardens & Courtyard
- 4 Constructed Wetland



Building a Medical Campus

1 Increase Density

New medical buildings will be constructed in the SW and NE corners of the core. This will ensure the growth of the medical industry, and, in the new spaces between, create a series of outdoor spaces.



2 Establish Pedestrian Network

Using a “Complete Streets” strategy, parallel parking, a buffer planted with trees, and green stormwater management will bring pedestrian life back to the surrounding streets.



3 Activate Streets

Parking is removed from behind the core medical buildings and a pedestrian axis is established between the parking garage on the south and Wasen Street on the north.

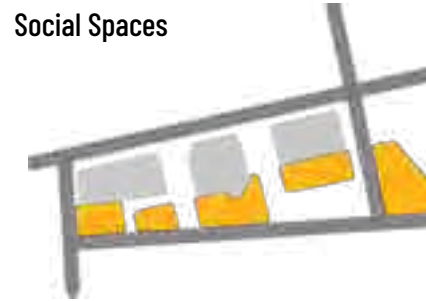


Building Healthy Spaces

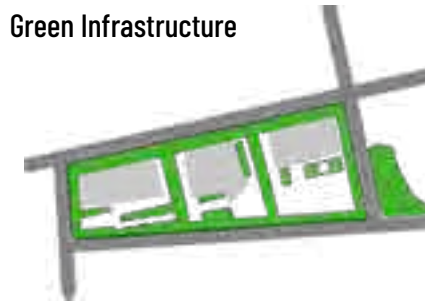
Pedestrian Axis



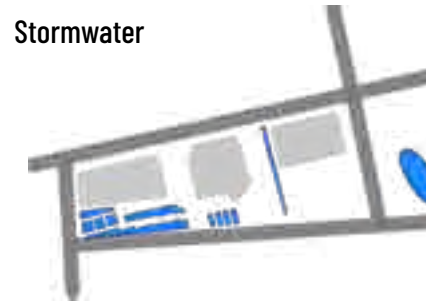
Social Spaces



Green Infrastructure



Stormwater



Our design implements a central pedestrian axis that passes through various types of gathering spaces. This creates a more walkable environment and stimulates interactions between all user groups.

Environmental health and human health go hand in hand. Our design creates a series of green infrastructure interventions to remediate stormwater and clean the air.



One of the largest challenges of the area was balancing the need for parking and the need for a stronger pedestrian network. By adding street parking, we were able to relocate much of the parking from within the lots. The redesign creates more accessible spaces closer to the buildings, provides clearer paths for emergency vehicle access, and allows for a more legible pedestrian circulation.

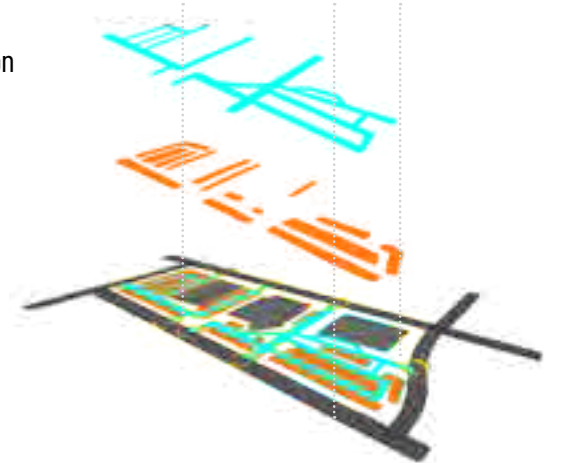
Creating a Pedestrian Axis

EXISTING

existing vehicular circulation

existing parking

existing entrances

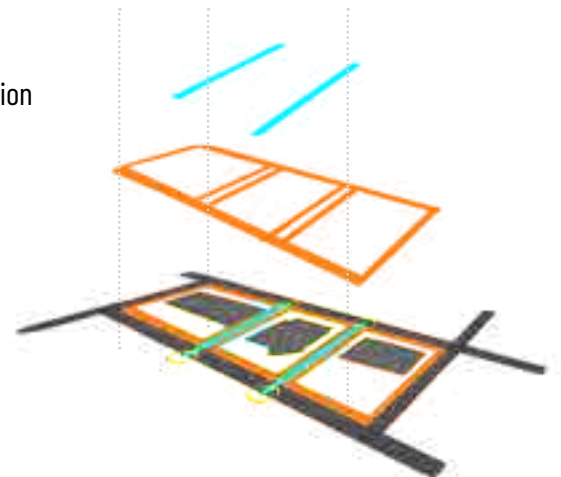


PROPOSED

proposed vehicular Circulation

proposed parking

proposed entrances



Pocket Park at the Intersection of Main, Birnie, & Wason

The pedestrian axis begins at the intersection of Main, Birnie, and Wason. The pocket park serves as a place for the community to come together, and is also the beginning of a new extensive green infrastructure network. One of the challenges of this site is a vast amount of impermeable surface. Rain gardens along the pedestrian axis allow stormwater to infiltrate and provide people with healing benefits of interacting with water.



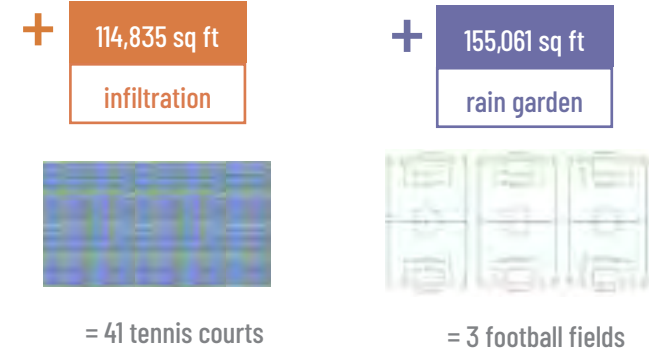
Community members and patients will frequent this park, located next to the Medical Campus' new cafe and bus stop. Rain Gardens allow for stormwater infiltration and Trellis structures support a variety of aromatic climbing plants.

Shared Space Plaza



The large central plaza adopts a model of shared space - pedestrians and vehicles can move freely. This facilitates pick up / drop off and emergency vehicle access, while still allowing pedestrians to make use of the space when the medical offices are not open.

Constructed Wetland

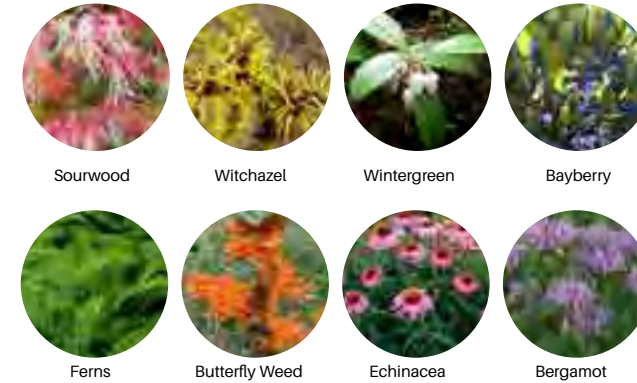


After passing through the pocket park, the pedestrian axis opens up to a large, shared flexible space plaza that the community was previously lacking. Stormwater infiltrates here through permeable paving. In the event of a larger storms, excess water is directed towards the large constructed wetland at the end of the pedestrian axis, that is shown below.



Healing Garden & Courtyard

The pedestrian axis continues through the healing garden and courtyard, located in between the existing Tolosky Research Center and a proposed Innovation Lab. Fresh air, trees, and herbs are appropriate for healing and they are an inspiration in the design of medical cities. In our design, the quality of the spaces surrounding the medical buildings are as important as the buildings themselves.



"...a healing garden needs to provide a multi-sensory experience with colourful flowers, varying shades and textures of green, the sights and sounds of water, elements that attract birds and butterflies, fragrances, and ornamental grasses which move with the slightest breeze."

- Clare Cooper Marcus





BRIGHTWOOD'S MEDICAL EDGE

Tianyi Guan • Taurean Krupa-Gagnon

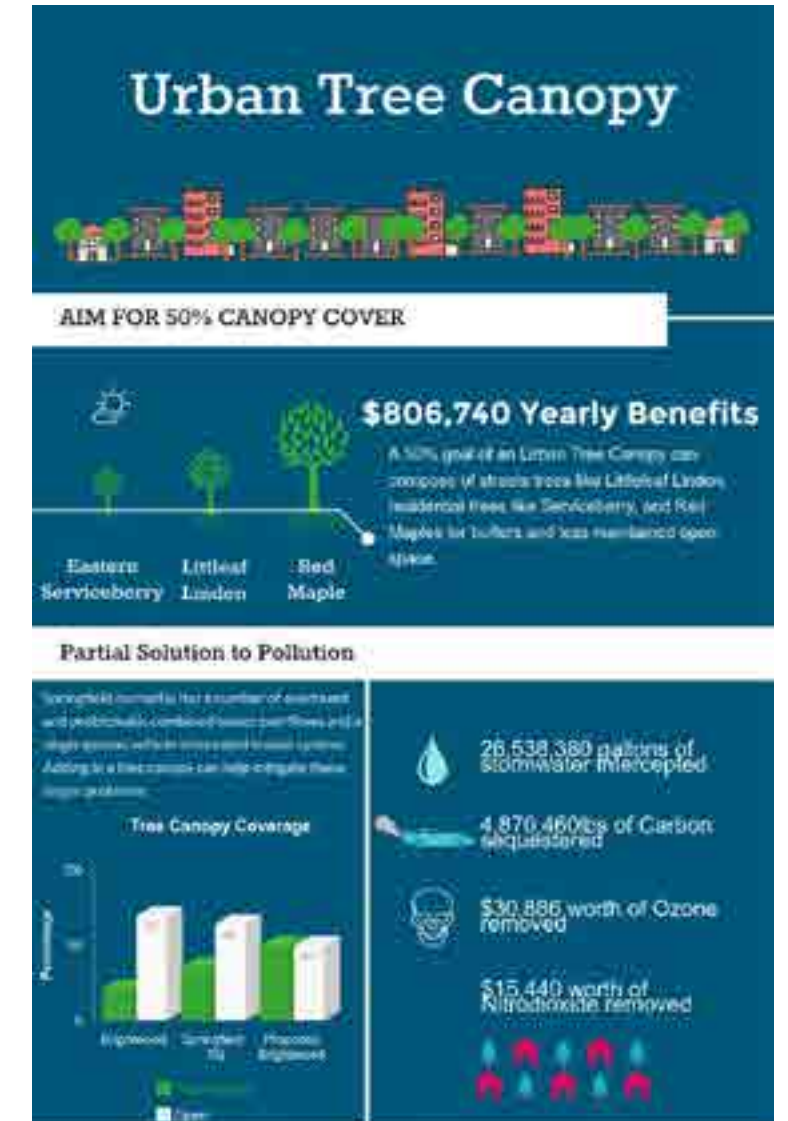
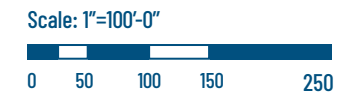


Employees of the medical field and Brightwood's residents come together in a mixed use development that uses placemaking interventions to create a healthier, stronger community.

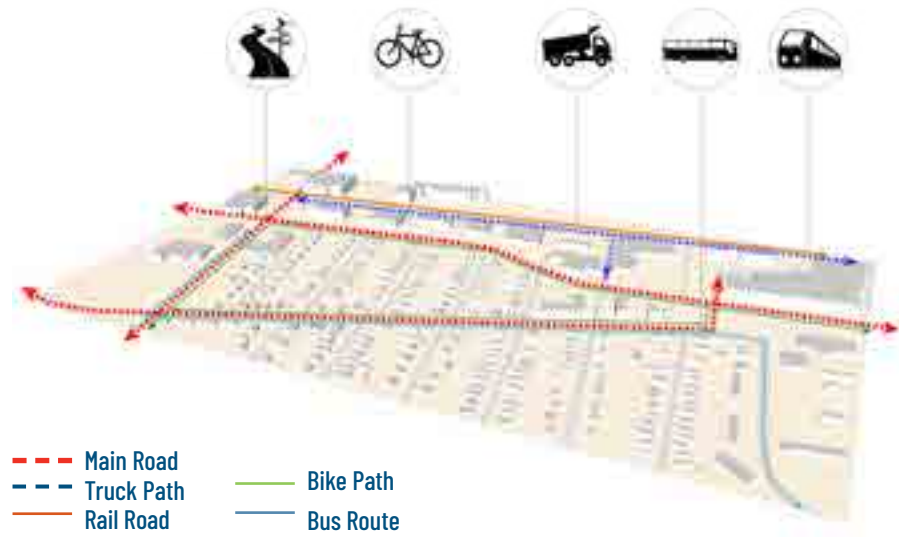
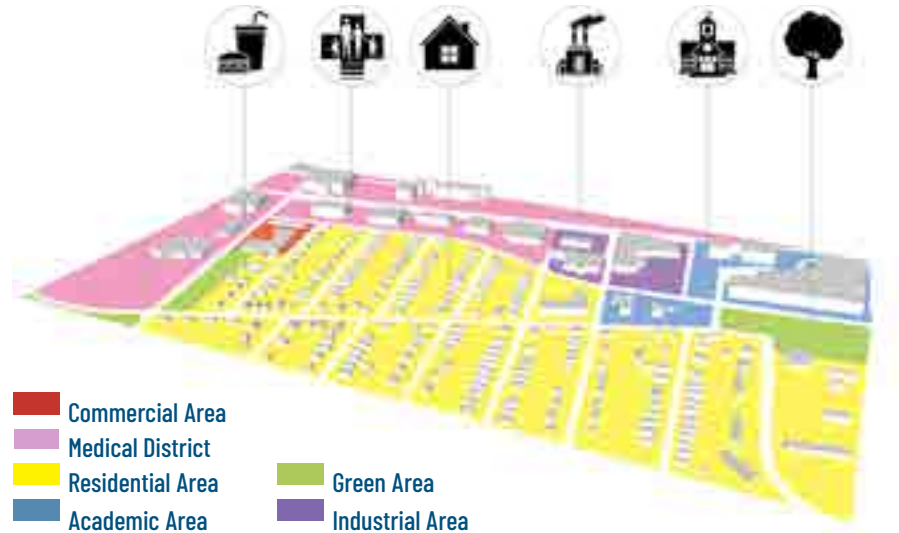
Objectives:

- Provide amenities for that have been expressed through community input
- Provide recreational space for the medical community
- Increase environmental services with Green Infrastructure
- Increase housing options
- Reuse concepts for vacancies and underutilized spaces
- Implement complete street designs

- New Building
- Existing Building
- Public Green Space
- Parking Lot
- Connecticut River
- Baystate Hospital Center
- Parking Garage
- School
- Library
- Kenefick Park



Focus Area - Fisk Ave

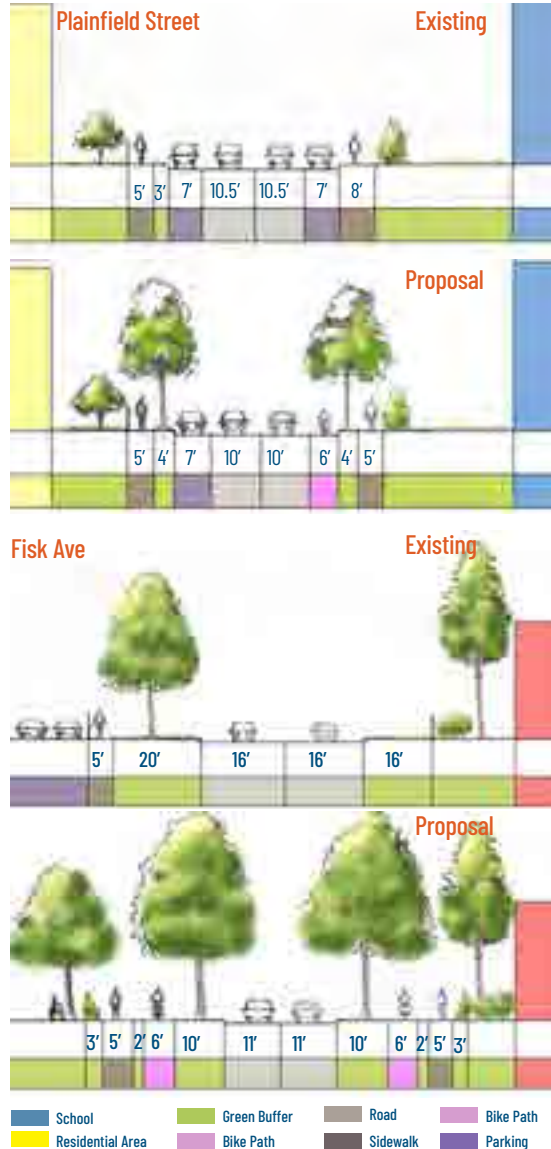


Brightwood's Medical Edge

Traveling from the east from Main Street onto Wason Avenue. The corner of Wason Avenue and Fisk Avenue is the northeastern gateway that aims to address community needs. Redesigned complete streets of Wason, Fisk, and Plainfield provide walking, biking, and mass transit corridors throughout the neighborhood. Fisk is the main corridor into this new proposed redevelopment from disturbing old industry into a new medical industry. This offers open space, food, education programming, family doctors, office spaces, and family retail. Parking is located behind these infill developments.



Street Section



- Add brick strip for biking
- Add green buffer and street trees
- Parallel parking on one side



- Narrow travel lanes for Fisk Ave
- Add brick strip and sidewalk with green buffer
- Add green buffer at the edge of the sidewalk and street trees.

Phasing

- Realign Plainfield Street.
- Demolish industrial buildings in the residential areas for new residences.
- Reuse vacant industrial building to expand new medical center.
- Reuse vacant school for residential uses.
- Infill along medical center on Fisk
- Plant street trees on Fisk, Wason and Plainfield.

- Reuse industrial building for new commercial center.
- Infill houses on vacant lots.
- Translocate Brightwood health care center to new medical center.
- Add public park between the Fisk and Plainfield.

- More infill at the new medical center .
- Finish the green way system from the Riverfront area to the Kenefick Park along the Wason Ave and Fisk Ave.



1 - 5 Years



5 - 10 Years



10 - 15 Years

Brightwood Plaza



Brightwood Plaza is the northern gateway from the medical center into the residential area of Brightwood on the corner of Wason and Fisk Avenues. Here at the edge of two major nodes of Brightwood, the plaza aims to bring people together and adds necessary neighborhood amenities as expressed by the community. The street corner currently is a construction trade industrial site. By reusing the footprints of the existing buildings the urban grain is preserved but the corner is transformed from a dead, encroaching space into one providing services, interactions, and an active street corner.

Brightwood's Medical Edge

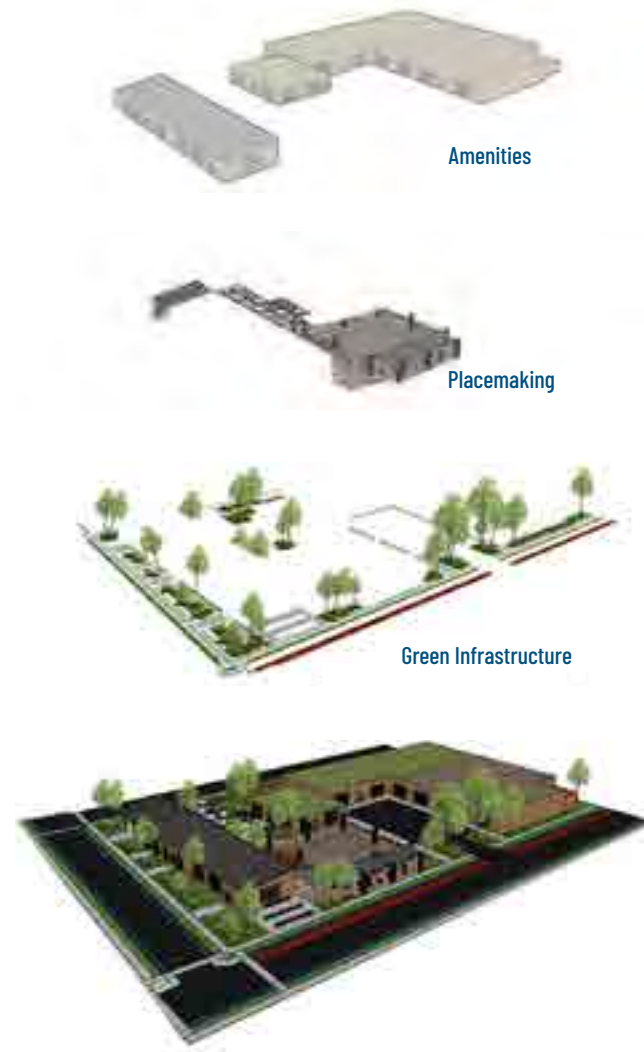
Objectives:

- Reclaim the corner of Wason Avenue and Fisk Avenue and turn it into a gateway experience for the neighborhood
- Add needed neighborhood amenities such as pharmacy, grocers, cafés, and recreational space
- Increase interaction between the medical community and the residents of Brightwood
- Provide flexible open space that can hold events day or night
- Increase green infrastructure on site
- Add character that represents the community and site history



Plaza during salsa night

Brightwood Plaza



Amenities

Placemaking

Green Infrastructure



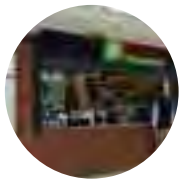
Food Market and Pharmacy



Incubator Spaces



Restaurant



Small Seasonal Destination



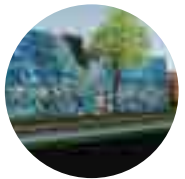
Markets and Ped. Walkways



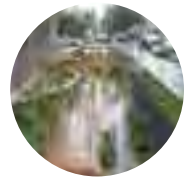
Flexible Open Space



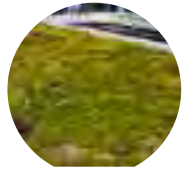
Beams and Trusses



Murals for Masking



Bioswales



Green Roofs



Complete Streets



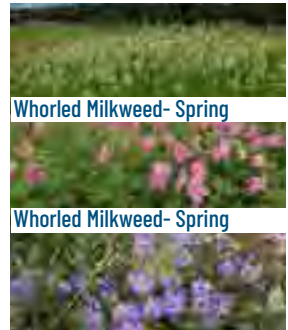
Climate Resilient Plantings

Structure



Sassafras

Seasonal

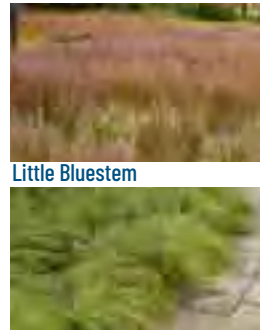


Whorled Milkweed- Spring

Whorled Milkweed- Spring

Aromatic Asters -Fall

Groundcover



Little Bluestem

Prairie Dropseed

Brightwood's Medical Edge

At the corner of Wason and Fisk, this design aims to enliven the corner and reclaim it for people rather than cars and trucks. Complete streets on Fisk and Wason allow for multi-modal transit such as buses, bikes, and walkers to and from the medical center and/or the residential area. The plaza is edged with a variety of different seating options such as benches between the parking lot and plaza, movable outdoor furniture under a set of shade sails on Wason, more private bistro tables by the cafés and incubator spaces, and larger tables under the pavilion by the seasonal snack shop on the corner of Hyde and Fisk. To enhance the industrial character of the space, the plaza is lined with box trusses where lighting and sound can be attached for events, steel beams run along the middle of the market alleyway from Hyde Street into the plaza. Murals are painted along the longer building on Hyde Avenue. Signage is painted or hung at key pedestrian entryways.



Note: Rendering does not show all street trees proposed in the design



Wason Complete Street



Succession Vegetation



Box Truss Structure



Steel Sculptural Beams



Market Alley



Hyde St. Complete Street

Brightwood Plaza



Plaza is bordered by box trusses.



Overhead view of the buildings and open space.



The alleyway with proposed painted beams running down the middle.



The corner of Hyde and Fisk Avenues is the assumed pedestrian entryway onto the site and should be a place geared for residential use. That includes incubator spaces, possible markets, meeting places, and also a place for fun and relaxing. A seasonal snack shop draws people onto this corner and creates a more active commercial edge while also allowing for a place to escape the weather.

Greenway for Fisk Avenue



Scale: 1"=50'-0"
0 25 50 75 125

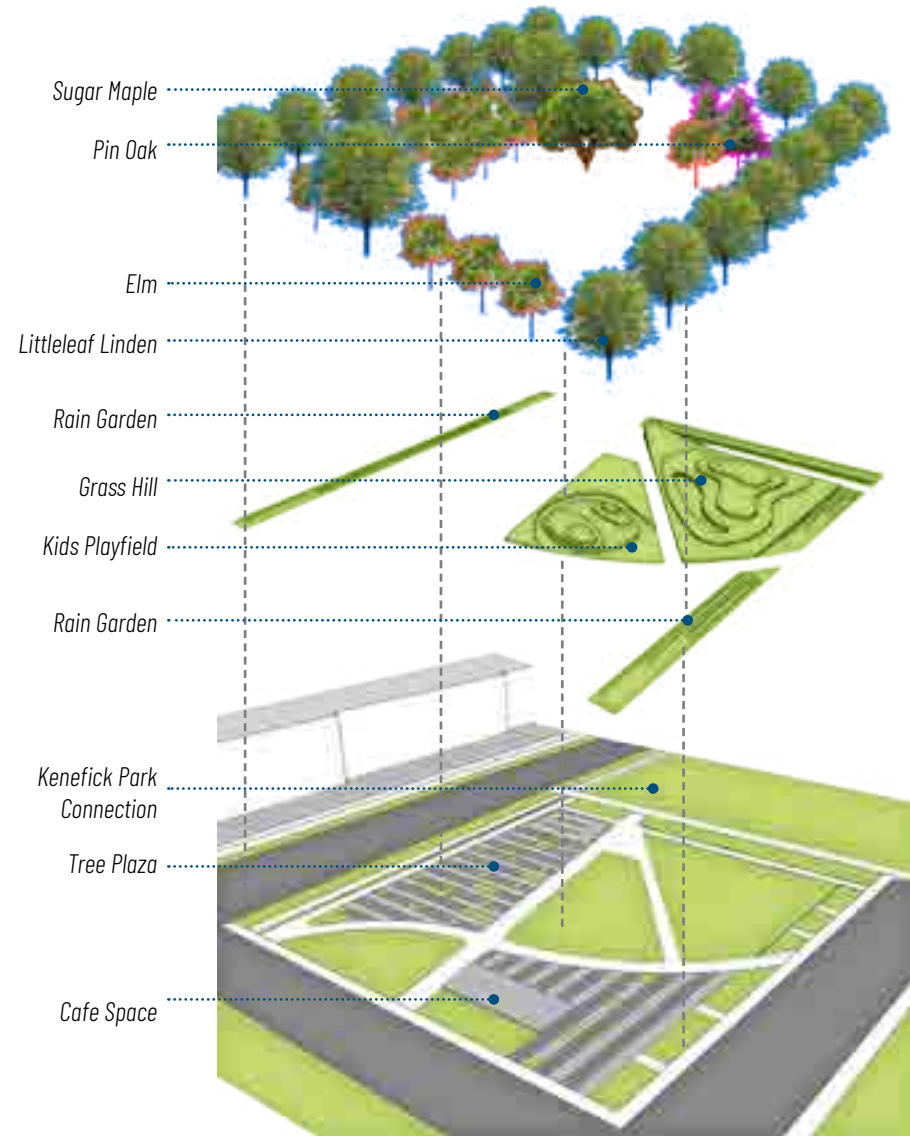
- 1 New Residential Building
- 2 Church Green Space
- 3 Plainfield Plaza
- 4 Green Connection to Kenefick Park
- 5 Library

A park-like landscape will determine the area between Plainfield Street and Fisk Avenue. . creates a greenway from Wason Avenue to Kenefick Park. Plainfield Street will be realigned to create a public park and plaza at the terminus of Sanderson Street. The Brightwood health care center will be translocated to Fisk Avenue and become part of a new medical center. The translocation allows Kenefick Park to be extended along Plainfield Street. The old school will be reused for residential uses and include 50 units and have 80 outdoor parking spots.



Plainfield Park Plaza

Plainfield Park Plaza is part of a greenway between Fisk Avenue and Plainfield Street. It provides an outdoor activity space for residents and users of the schools and the library. A place to eat, relax, meet and play. The Plainfield Park Plaza has undulating landform to relax and play and a tree-covered green plaza.



Brightwood's Medical Edge



View from the main entrance on Plainfield Street.

Plainfield Park Plaza is the gateway of the neighborhood and provides a sense of arrival for everybody.

Tree Plaza



Scale: 1"=8'
0 8 16 32 48

Sectional elevation facing east. In the center is a children's play-field that is dominated by undulating land form.



Scale: 1"=8'
0 8 16 32 48

Sectional elevation facing north. The place provides a diverse sense of enclosure and experiences.

Brightwood's Medical Edge



View from the Tree Plaza

The tree canopy of newly planted Elm tree in the tree plaza provides a protective canopy.



WASON TO THE RIVER

Allyson Fairweather • James Mealey

Master Plan



Wason Avenue and the Medical District

The western end of Wason Avenue is a pivot point between the Brightwood Neighborhood and Springfield's Medical District. Wason to the River will facilitate the growth of connections between these two otherwise isolated communities by providing a platform for shared experiences among residents, employees, and visitors. Urban design strategies will play an important role in weaving together an inclusive design that ultimately establishes a new area identity, one that promotes healthy lifestyles.

The new Riverside Park is a convergence point between visitors on the CT River Bikeway, residents of the neighborhood, and the Wason medical campus. Circulation through the park emphasizes connect-

ing all visitors to the river. A sweeping lawn and a generous plaza provide opportunity for flexible programming. The park serves as a stage for large gatherings and vibrant social activity. The design includes a 1.5 acre park and mixed-use residential building to include a cafe, shop, and services to meet the needs of the neighborhood. The first floor will house the retail and parking for residents, while the top floors will be a mixture of 1-3 bedroom apartments. The Riverside Park is complemented by Wason Public Garden, which provides space for gathering and relaxation at a smaller, more intimate scale. The garden is organized into a series of sequential outdoor rooms that create a variety of experiences for the user.



Focus Area Site Plan



FOCUS AREA SITE PLAN

F-30-0

Connecting to the Riverside

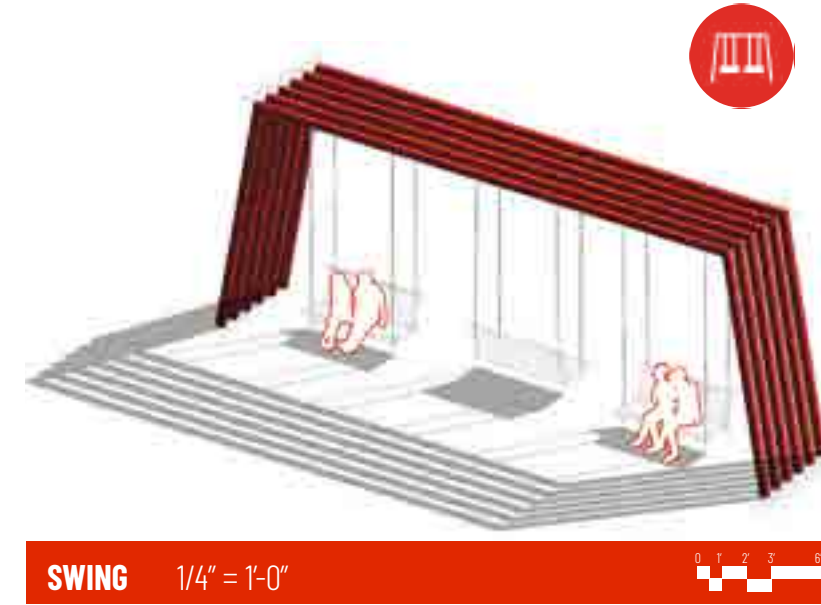
As the only continuous east/west corridor through the Medical District, Wason Avenue provides vital connections for pedestrians, bicycles, and automobiles. Its location immediately to the north of Brightwood means that it also serves as a boundary between the quiet residential neighborhood to the south and the large medical office buildings and parking lots to the north. However, its current condition as a wide, undifferentiated roadway with insufficient pedestrian and biking facilities does not adequately reflect its significance to the area. Wason to the River aims to change this by transforming the roadway into a true multi-modal thoroughfare and installing new public recreational landscapes along its route. This scheme envisions the western terminus of Wason Avenue as an expansive destination park with views of the Connecticut River and connections to the existing bike way. Across the street, on Wason Avenue's southern edge, an intimate public garden takes advantage of existing vegetation and landform to provide visitors with a retreat from the city.

Wason Riverside Park

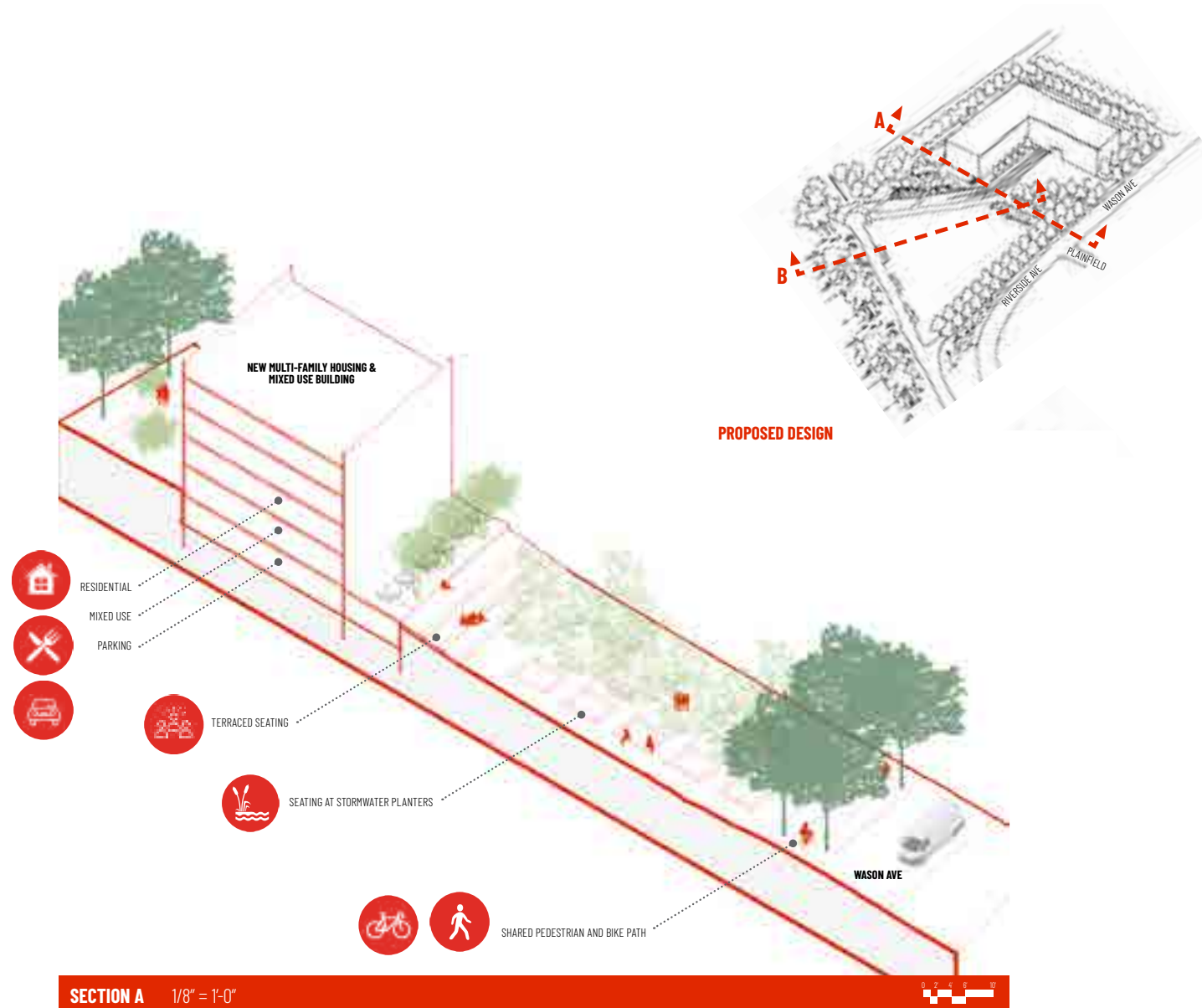


A Destination Amenity

Wason to the River is a place for living, working, playing, socializing, and learning how meaningful place-making can positively promote healthy community building. Creating attractive and engaging features will activate the park and create an enjoyable destination for all visitors.



CONNECTIONS	AMENITIES	ECOLOGY	SENSE OF PLACE
HEALTHY PLACE-MAKING IN THE MEDICAL DISTRICT CONNECTS RESIDENTS, MEDICAL EMPLOYEES, AND VISITORS.	HEALTHY PLACE-MAKING IN THE MEDICAL DISTRICT PROVIDES A VARIETY OF AMENITIES AND SERVICES FOR ALL.	HEALTHY PLACE-MAKING IN THE MEDICAL DISTRICT STRENGTHENS LOCAL NATURAL COMMUNITIES.	HEALTHY PLACE-MAKING IN THE MEDICAL DISTRICT ENHANCES THE UNIQUE CHARACTER OF THE AREA.
<ul style="list-style-type: none"> BIKE PEDESTRIAN PUBLIC TRANSIT AUTOMOBILE 	<ul style="list-style-type: none"> HOUSING GATHERING SPACES EVENT SPACE LOCAL BUSINESS FOOD RECREATION 	<ul style="list-style-type: none"> STORMWATER REMEDIATION OPEN GREEN SPACE PRESERVATION WILDLIFE HABITAT 	<ul style="list-style-type: none"> LANDMARK PUBLIC ARTS MEDICINAL PLANTINGS RIVERSIDE



PROPOSED DESIGN

SECTION A 1/8" = 1'-0"

- RESIDENTIAL
- MIXED USE
- PARKING
- TERRACED SEATING
- SEATING AT STORMWATER PLANTERS
- SHARED PEDESTRIAN AND BIKE PATH

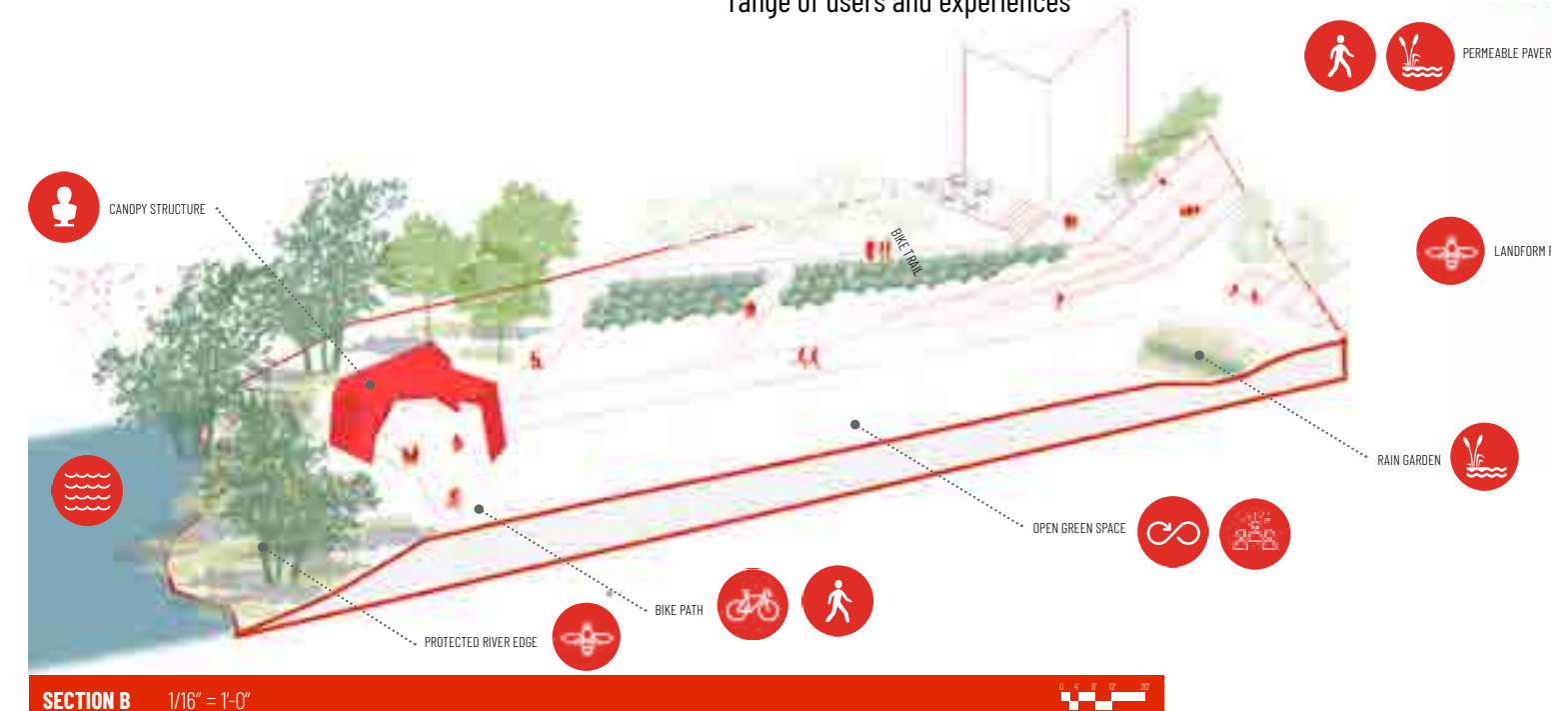


CANOPY STRUCTURE 1/8" = 1'-0"



Objectives:

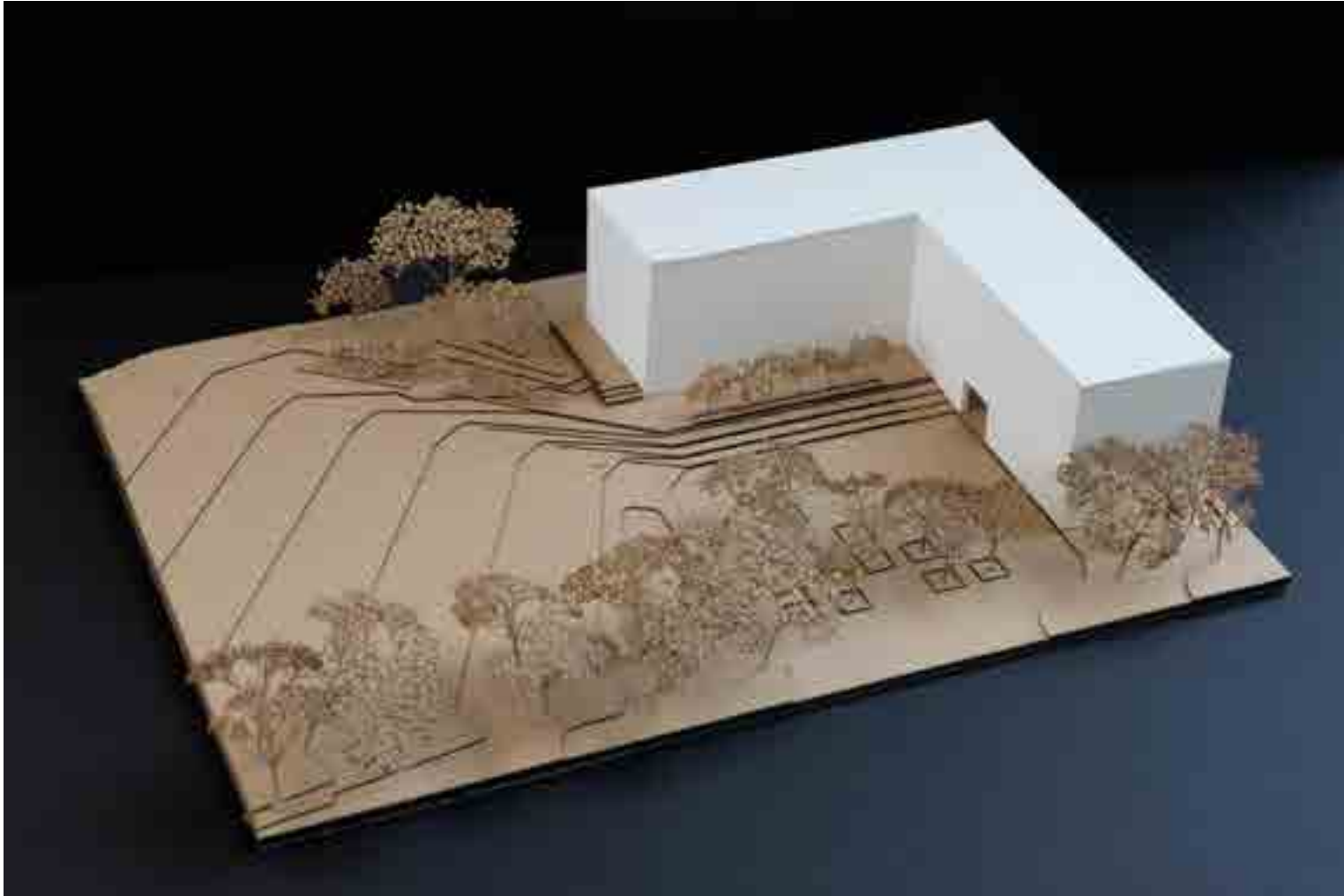
- Provide both small and large spaces for community events and social gathering
- Provide dedicated bike route connecting the CT River Bikeway to the heart of the medical district
- Provide amenities and services that are currently lacking, such as grocery shop, cafe, fitness center, and outdoor recreation
- Introduce green stormwater management strategies
- Transform a transient corridor into a destination that appeals to a broad range of users and experiences



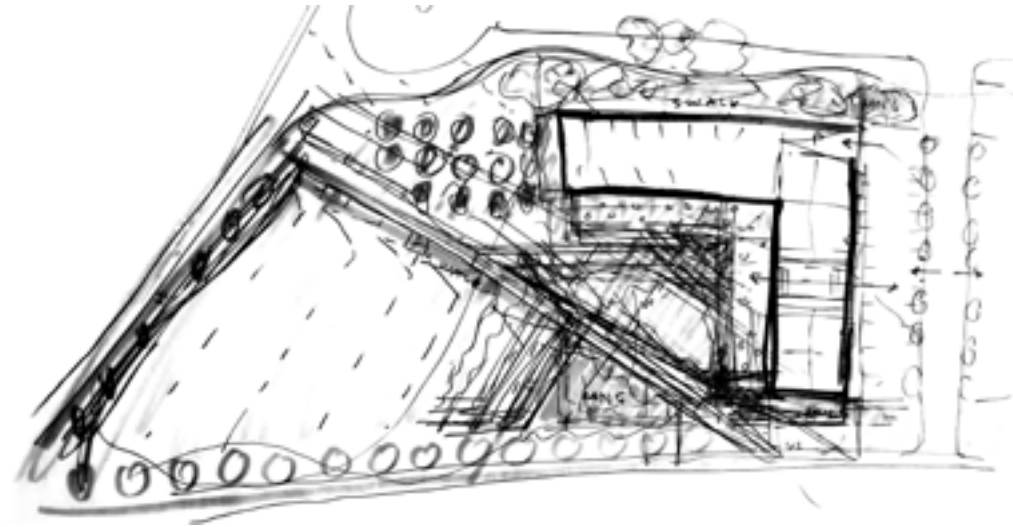
SECTION B 1/16" = 1'-0"

- CANOPY STRUCTURE
- BIKE PATH
- SHARED PEDESTRIAN AND BIKE PATH
- PROTECTED RIVER EDGE
- PERMEABLE PAVEMENT
- LANDFORM 1
- RAIN GARDEN
- OPEN GREEN SPACE

Wason Riverside Model



Design Process



Wason Garden



ECHINACEA PURPUREA



RUDBECKIA HIRTA



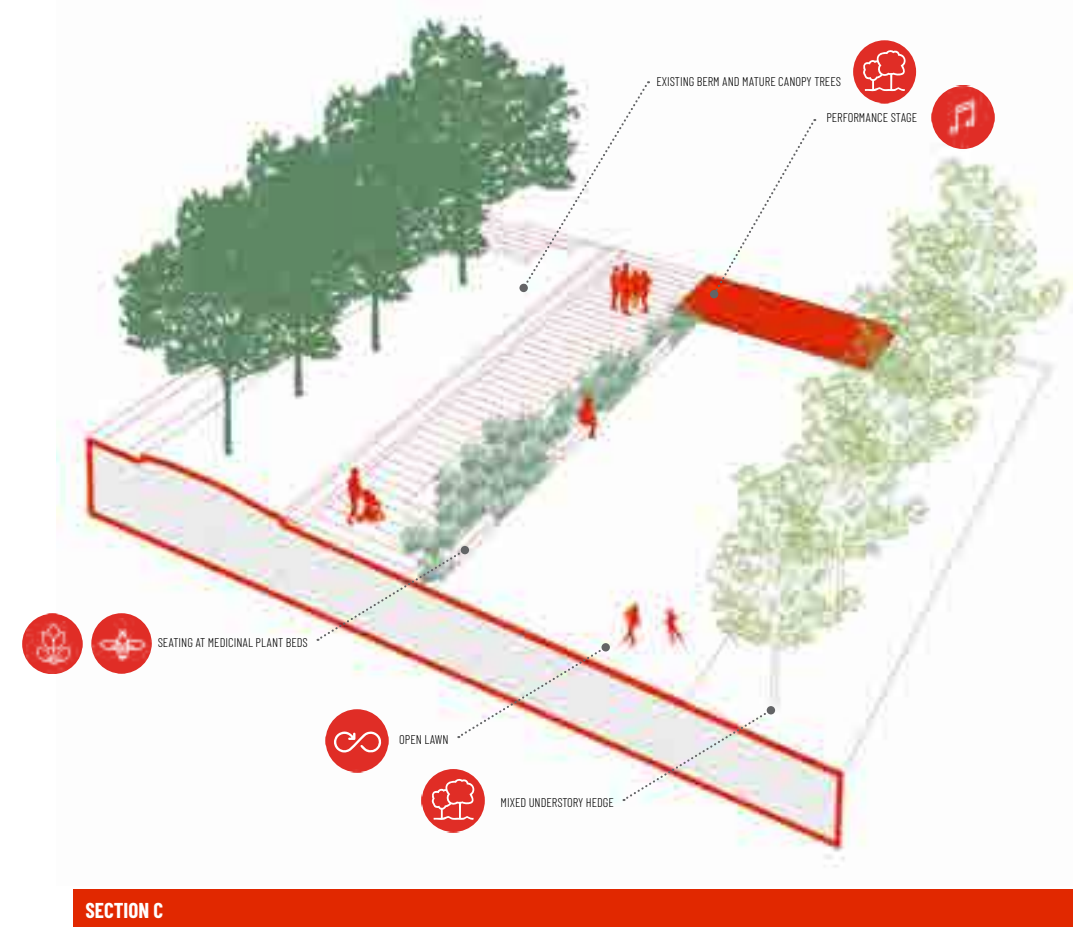
LIATRIS SPICATA



CHAMAEMELUM NOBILE

Nature as a Healing Tool

Wason Garden creates a restorative oasis for nearby residents, employees, and visitors by enhancing the existing assets of an undeveloped parcel of land lying on the border between Brightwood and the Medical District. These assets, including mature canopy trees and a low berm, shield the space from Wason Avenue, and enclose an intimate lawn area edged by permeable paving and a variety of seating options. Planting beds of flowering species with traditional medicinal uses further serve to define the space.

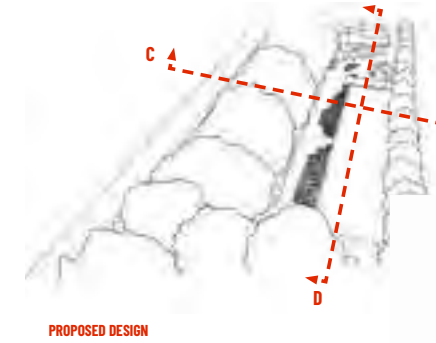


SECTION C

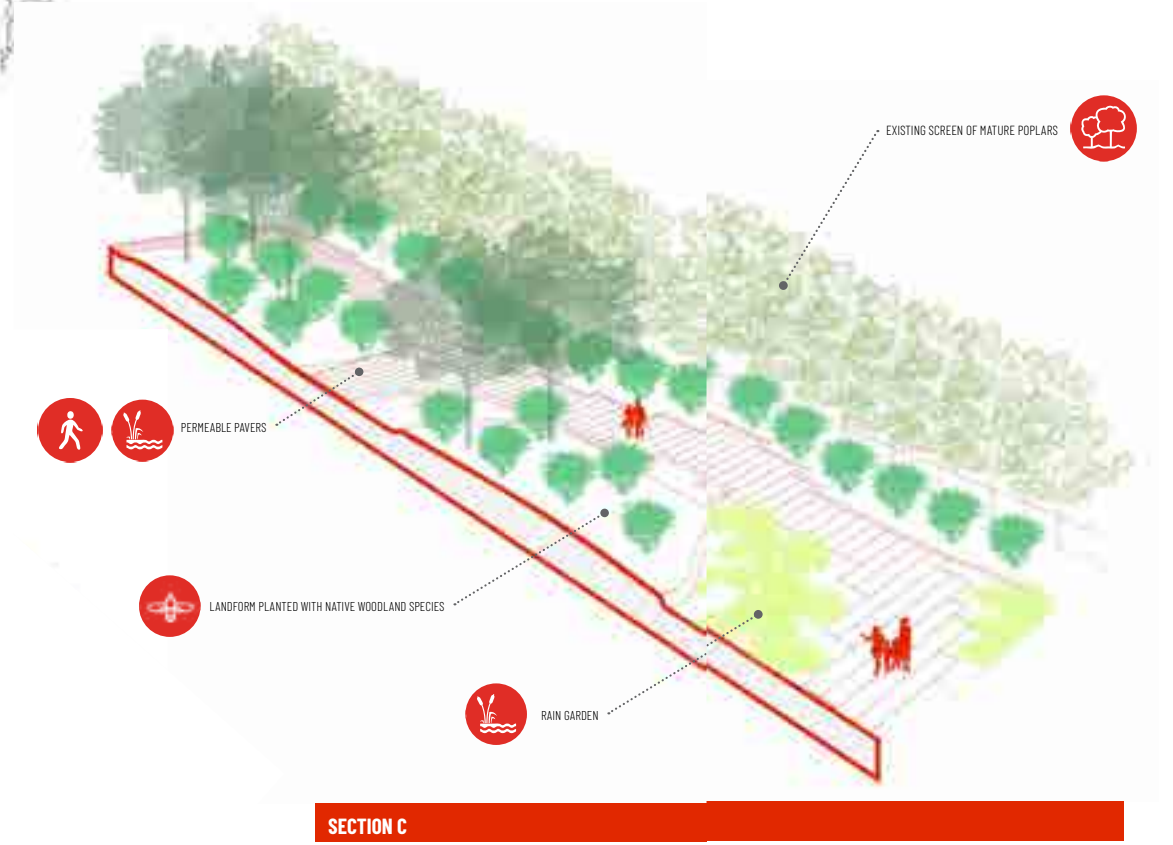
Wason Garden



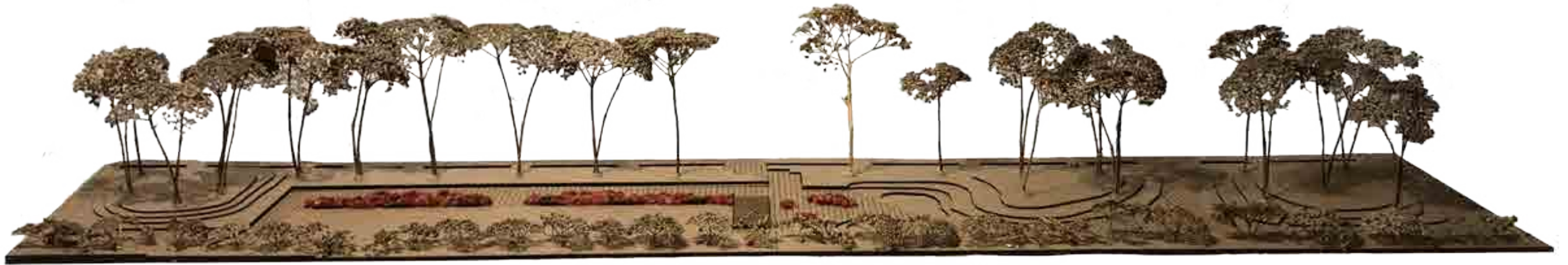
On the eastern portion of the site, native understory species, such as *Matteuccia struthiopteris* and *Viburnum dentatum*, complement existing mature oaks and maples to evoke a New England woodland while maintaining visibility to surrounding areas. A path of permeable concrete pavers winds through this woodland walk, connecting to Wason Avenue to the north, a new playground to the east, and a modest gathering space adjacent to the proposed lawn to the west.



PROPOSED DESIGN



SECTION C



Contact:

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Associate Director UMass Amherst Design Center

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Landscape Architecture
& Regional Planning

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