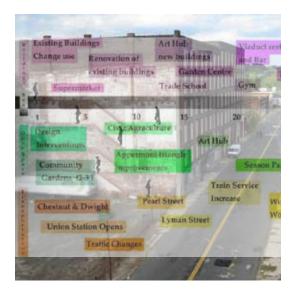
## UMass Amherst Design Center Department of Landscape Architecture & Regional Planning

# Springfield`s Upper Lyman Warehouse District Visions for Revitalization

Urban Design Studio Fall 2011 Frank Sleegers, Assistant Professor MLA, DIPL.- Landschaftsarchitekt Elizabeth Thompson, Lecturer MLA, Landscape Architect









Edited:
Henry Hess, Ben Greene, Christopher Johnson and Frank Sleegers
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## Acknowledgements

The Department of Landscape Architecture and Regional Planning and the UMass Urban Design Center was excited to work with the Office of Planning and Economic Development and the downtown community of Springfield in the fall of 2010.

Our public presentations had again a tremendous participation from the downtonw community. The envisioning workshop at the TD Bank North helped us to investigate what people like and dislike, what they like to improve and strengthen and to develop our design objectives in the forgotten Upper Lyman District. We hope that we contributed with our research and creative work to support these efforts. We also hope that the proposals of this design studio can help to build on the great assets that this district has and bring it to everybody's attention. We think that we could intensify a conversation between the businesses, residents, the museums, and the planning officials. Partnerships and collaboration without boundaries are necessary to revitalize this City. Since the beginning of our Design Studios in 2008 we could reach out to over 600 people in Springfield. The founding of the Design Center could reinforce this service of active engagement. The work of the Senior Urban Design Studio 2010 describes a comprehensive and process-oriented strategy with various facets, which is documented in this report.

We would like to thank the Springfield Department of Planning & Economic Development for their support and effort in coordinating this studio. We specially thank Scott Hanson for his untiring enthusiasm and great cooperation on this project.

We thank Michael Tully from the Springfield Parks Department for his useful input and engagement.

We thank also the Director of the UMass Amherst Design Center Michael DiPasquale for helping us to organize and run the envisioning workshop and exhibiting our work in Springfield.

We are thankful to the faculty of the Department of Landscape Architecture and Regional Planning for participating and contributing their valuable comments during our studio reviews.

We thank all the students in this Urban Design Studio for their great work, passion, and dedication to develop creative ideas for the Springfield.

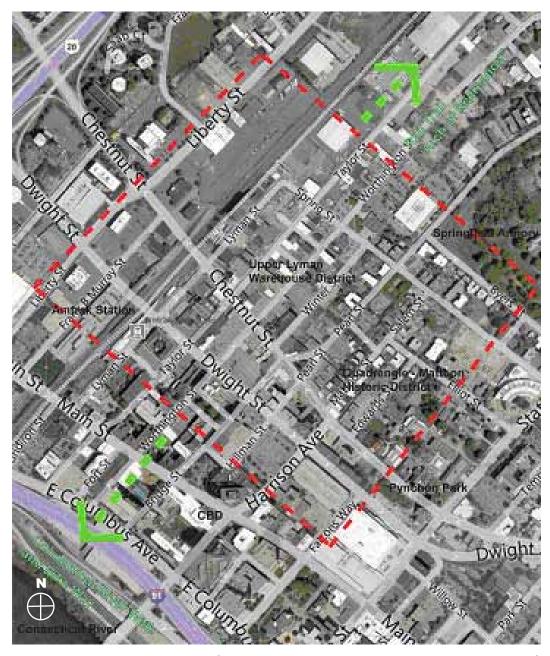
Special thanks to Ben Green, Chris Johnson and Henry Hess for their great help in editing this report and our Teaching Assistant Xiao Zhou for helping the students in their design work day and night.

We hope our Senior Urban Design Studio could contribute to start a new process in the Upper Lyman District for its revitalization a great experience.

Frank Sleegers and Elizabeth Thompson, Amherst, May 2011

#### 1.0 Studio Project Area

The Upper Lyman Warehouse District is located in downtown Springfield and is part of the Metro Center neighborhood. The western edge is defined by the City arteries of Dwight and Chestnut Street, to the north it is defined by the viaduct of the Amtrak Railroad arches, to the east it is partially defined by the Springfield Armory property. Taylor and Worthington Street expand the study area to connect to the proposed rail trail at Armory Street. To the south our project area is defined by the Quadrangle - Mattoon Street Historic District. The recent ULI Downtown's Report from July 2007 and the Zimmerman/Volk report on residential market are important frameworks for this studio. Currently only 6000 people live in downtown (Census 2000). Our studio expands on these recommendations with a strong focus on the physical environment. We will develop design proposals that improve open space quality and built urban form as legible design interventions.



The Upper Lyman Warehouse District north of the Central Business District in Downtown Springfield.

#### 2. 0 Studio Project Goals

The primary goal of the project is to develop a staged vision to revitalize and rediscover the Upper Lyman Warehouse District and to improve livability in the heart of downtown Springfield for employers, employees, residents, and visitors. Improved connectivity and sense of place will be keys to attaining this goal. This approach balances the three dimensions of sustainability:

- Environmental protection
- Economic growth
- Social and cultural development

#### 2. 1 Physical Design Objectives

- 1. Develop a phased vision plan for the built and unbuilt environment that generates public discussion and sets the groundwork for further planning efforts.
- 2. Propose land uses in our project area that could serve visitors, residents, employees, and employers. Propose zoning regulations and creative incentives that encourage mixed land use on architecturally-defined street edges. Use strategies such as adaptive reuse for significant historic buildings, urban infill that shares urban infrastructure. Respond to the prevalent housing market in downtown Springfield that offers little owner occupied and market rate housing. New housing typologies should be mixed to attract diverse clientele to accommodate different styles of life, create a robust mix and support the vibrancy of the city. Propose retail that attracts people to stay in downtown. 3. Create a pedestrian and bicycle oriented circulation system as sidewalks, pathways, trails, boulevards that tie into a nodal system of pocket parks, parks, plazas, cemeteries, forests, and recreational fields. For our area it is necessary to establish or improve connections to the rail trail Arch of Recreation, the Connecticut River Walk and Bike Way, the downtown central business district, the revitalized Union Station, the Quadrangle Museums, and the Springfield Armory. Create visible gateways to the Upper Lyman Warehouse District that create a positive sense of arrival and departure.
- 4. Reduce the impact of impervious surfaces and pursue strategies to reduce storm water runoff from roofs, sidewalks, streets. Create a system that makes the efforts of decentralized stormwater visible in the landscape and become part of the larger open space system. Include strategies that could transform our area on a short-term basis and foster shaping a community. Art performances, temporary art, urban agriculture, specific programming can help identify and shape places. Create new ideas for urban entertainment day and night.
- 5. Create specific typologies for the streets in our area: city arteries, connecting neighborhood streets, and neighborhood roads. Utilize design tools that make the streetscapes a visual experience through principles such as repetition, sequence, rhythm. Merge the function of the automobile with pedestrians and bicyclists.

#### 3.0. Learning Objectives - Urban Design Studio as Public Service

The project will begin with a visioning workshop, conducted in order to engage community members in the shaping of project goals and objectives. Groups of students and representatives of the project area will work together to identify attributes and challenges in the Upper Lyman Warehouse District and to conceive design ideas, culminating in the development of alternative vision statements that will guide and inform specific design proposals in our studio. Studio work will include in-depth study, analysis and assessment of the project area through on-site exploration and observation, interviews, sketching, institutional document research, historic research, and analysis of aerial photographs. Specific case studies will create a reference to support design proposals. Final design concepts and a vision plan will be presented to the UMass community, to the Downtown Springfield community, and City planning officials. The design drawings will also be exhibited in the UMASS Amherst Design Center at Court Square, to further stimulate discussion within the community and to demonstrate a UMass presence in Springfield.

#### 3.1 Learning Objectives

The following elements are analyzed and assessed to understand the design problem. Challenges and opportunities are identified and conclude the investigation. The design proposals reflect a comprehensive understanding of the area and address the findings of the conclusions in a compelling and unifying design idea.

- 1. Survey stakeholders within the community. Observations, collages, and sketches.
- 2. Existing land use, activities, zoning, cultural milieu, power map of political structures and community dynamics
- 3. Open space system
- 4. Street network and hierarchy, trails
- 5. Natural systems: topography, water, street trees and vegetation
- 6. Urban grain and structure
- 7. Public transportation network

#### 3.1.1 Survey and Observations

- Conduct face-to-face interviews and collect data through the visioning workshop to develop an
  understanding of the social and political structure of the project area and the project's social context.
  Record on-site observations and sketch first impressions to make an initial intuitive assessment of the
  project area. Map day and night activities.
- Translate your findings with diagrams and articulate challenges and opportunities on a map.

#### 3.1.2 Intervention as a process – oriented Strategy

- Choose a place or a sequence of places and design a temporary intervention in our area to spark
  a dialogue between place and people. All forms of interventions can be explored such as visual and
  performing arts, dance, theater, happenings, gardening, sports etc.
- Describe this intervention with powerful narrative and visual material.

#### 3.1.3 Cultural Milieu, Land Use, Zoning

- Analyze the cultural milieu, including population trends, age, ethnic background, poverty, education, work force, stakeholders, formal/informal power structure.
- Analyze existing land uses and develop a robust mixed-use land use pattern that envisions future development with respect to the cultural milieu.
- Describe the specific uses of buildings. Identify the names of businesses, institutions, and organizations associated with particular buildings.
- Propose new land uses, explain why, and propose new zoning as a planning tool.

#### 3.1.4 Open Space System

- Describe, analyze and assess the open space system of the project area and how it relates to the city context. Distinguish between nodal and corridor elements of the system. In a coherent open space network, the nodal open spaces are connected by open space corridors.
  - Nodal elements include: Public parks and plazas, cemeteries, public and school playgrounds, forested areas. Corridor elements include: Sidewalks, pathways, recreational and bike trails.
- Identify missing links and connections. Observe accessibility during different hours of the day and night.
- Create a hierarchy of open space nodes, and create a hierarchy of open space corridors.
- Identify areas where the pedestrian system conflicts with or is in harmony with the vehicular system. Look carefully at whether and how pedestrian movement is facilitated.

#### 3.1.5 Street Network and Hierarchy, Parking

- Analyze the street system: City Arteries connect neighborhoods and cities to one another. They are the primary connections. Neighborhood Streets are secondary connections. They are important links within a neighborhood and create a permeable network.
  - Neighborhood Roads are tertiary connections.
- Design legible gateways for the heart of downtown
   Propose potential green streets that could reinforce the open space system, e.g. as planted boulevards. and/or green infrastructure.
- Create a conceptual proposal for a renewed open space system.

#### 3.1.6 Natural Systems: Topography, Water, Vegetation

- Analyze and assess the topography of our project area.
- Analyze sewage and storm water systems of the area.
- Analyze and assess permeable and impermeable surfaces.
- Analyze and assess existing trees including street trees.
- Increase infiltration in your design proposals, identify areas for street tree planting, create a universal design.

#### 3.1.7 Urban Grain and Structure

- Analyze and assess the urban grain of our project area in figure-ground drawings. Understand how urban grain reflects land use. Identify empty lots.
- Analyze and assess general ownership of residential areas: owner occupied vs. renter occupied.
- Develop proposals for improving the urban grain. Explore alternatives in figure-ground drawings. Use case studies of successful neighborhood urban grain/figure-ground to support your design ideas.

#### 3.1.8 Transportation Network: Private Vehicular and Public Transportation

- Assess and evaluate the transportation network, including parking, bus lines and bus stops, trains.
- Understand the transportation network and how it relates to existing land uses, including open space. Where do people live, where do they work, where do they go to school, where do they go out? How do they get there?
- Propose alternatives to improve public transportation.

#### Assets and Cultural Attractions

Springfield has many attributes and attractions that are important to the City's historical culture, such as the historic Mattoon Street within our neighborhood. This residential street with market rate row houses have been restored in the last 20 years and could be a model for bringing residents back to downtown. The Quadrangle Museums are in close vicinity and attract visitors from the City, the region and beyond. Other landmarks in the City of Springfield are widely recognized, such as the Basketball Hall of Fame, the historic Armory and the Massachusetts Mutual Center that hosts mayor concerts and sports events.



Springfield Armory



Museums of Springfield History



The Discovery Tour map showing areas of interest in downtown Springfield, as well as major attractions. Our project area close by.



Dr. Suess memorial fountain.



Basketball Hall of Fame

#### Street Network:

The Lyman district is not heavily impacted by the major north-south street corridors of Chestnut and Dwight Street. All the streets show neglect and are not pedestrian friendly. Bicycle lanes and street trees are missing.

In this design studio we want to change the aesthetic quality of the streets in the Upper Lyman Warehouse District and turn them into walkable and bicycle friendly green arteries.



**Primary Arteries** 

Secondary Streets

Neighborhood Roads

Railroad



Chestnut Street



Worthington Street



Mattoon Street



Lyman Street

The project area is not dissected heavily by major street corridors but the aesthetic quality of the streetscape in the Lyman District is poor. The elevated railroad tracks to the northwest are creating a strong barrier.

#### **Public Transportation:**

The Pioneer Valley Transit Authority (PVTA) is the major provider of transportation in downtown Springfield. Although the system is fairly quick system and runs every 20-40 minutes, it has short hours. The hours of the PVTA are 6:00AM - 10:00PM during the weekdays and on weekends they work a reduced schedule of 6:00AM - 6:00 PM. Not all of the buses run on Sundays. Many people living and working in the downtown also like to "play" downtown. The reduced schedule on weekends does not allow for easy public transportation after 10:00PM. Many theaters, clubs and Mass Mutual Center events have shows and activities running much later than 10:00PM. The reduced bus schedule does not allow for a pedestrian friendly city and it leads to an increase of cars that are driven downtown.

Springfield is a bustling, robust city and prolonged hours of the PVTA bus schedules would help people of Springfield to work, play and live in downtown Springfield in a more eco-friendly and safe environment. Providing longer hours for buses will take cars off the roads of downtown Springfield, which will not only help the environment but will also create a safer and more pedestrian friendly downtown.

Another opportunity is the projected restoration of the Union Station on Liberty Street and the expanded train service to New York and Vermont within the next three years. Our area is only five walking minutes from the train station and the core of downtown.





Bus Stop



Train Line



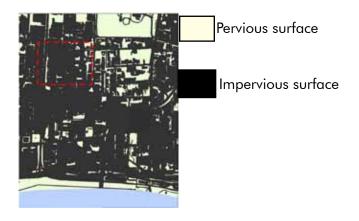
All major streets are connected by bus routes in downtown. The buses run frequently during the daytime but service during the weekends and later than 7 pm is very limited.

Parking and Impervious Surfaces:

Springfield has numerous places to park, from parking garages and lots to on-street parking. The downtown of Springfield occupies about 250 acres and of that, 40 acres is devoted to parking. Much of the parking in downtown is accommodated on impervious surfaces. This does not allow the water to percolate back into the ground. Much of the water in the downtown is piped off the street into sewers and out to the river. The water carries pollutants such as gasoline, oil, anti-freeze, salt and dirt. These are harmful to the aquatic life of the Connecticut River.

A major part of the design studio is to reduce these large quantities of impervious surfaces, and replace them with pervious and vegetated surfaces that will allow the water to infiltrate into the ground where many harmful pollutants can be filtered out.





Parking Garages

Parking Lots

On Street Parking

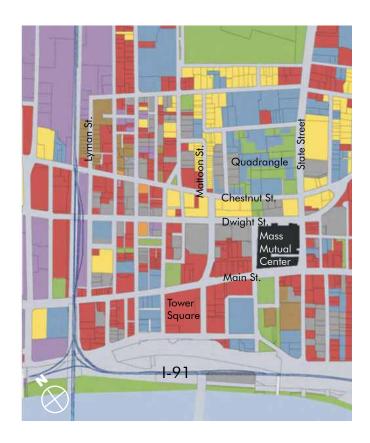


Springfield currently has plenty of parking in the downtown area . A majority of parking is in parking lots.

#### Land Use

The land use in downtown Springfield does not follow any distinct patterns. Taylor and Worthington Street offer commercial services such as auto-related businesses. These are small businesses and could be integrated in future design proposals because they are important places to work. Main Street has an abundance of commercial businesses running along it, but this is one of the few places with a continuous land use pattern. One area of downtown that has a distinct residential land use is the Mattoon Street. Another area that stands out is the area around the Quadrangle museums close by. This little district mixes representative buildings with well maintained public open spaces. Other streets such as Dwight Street are dominated by parking lots and garages with some commercial businesses mixed in. The majority of the land uses in the downtown is spread out and seemingly random. The Upper Lyman Warehouse District has an abundance of empty lots and buildings - some of them still with a usable historic substance. Towards the northeast of our area the land use is mainly industrial with many large buildings and parking lots. In the Lyman District as well as the rest of the downtown, there is no large supermarket available to residents living in the area. Only little areas have mixed land uses.

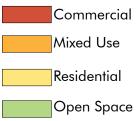
For our urban design studio the focus will be on creating more market rate housing, mixed use buildings for living and working and programs for the vacant lots on Lyman Street. Furthermore, it is important to propose a supermarket in the Lyman District for downtown Springfield.

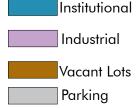


Land use of downtown Springfield and the Upper Lyman Warehouse District.











Lyman St.



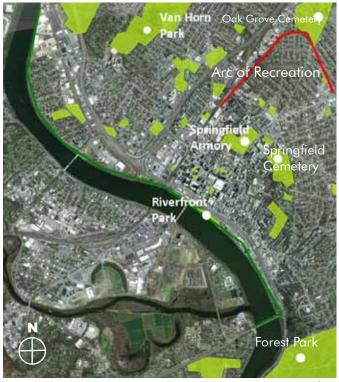
Mass Mutual Center



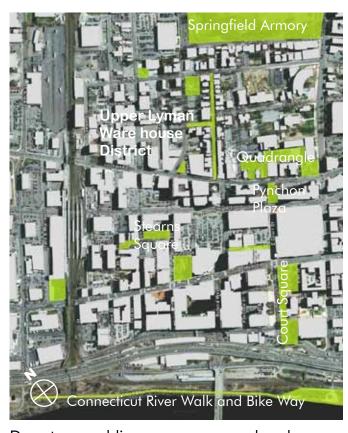
Quadrangle

Parks and Public Open Space:

Springfield is one of the greenest cities in the country with over 42 parks. Currently the parks are disconnected and many of the public green spaces are not very accessible e.g. the Armory Park has no entrances on Spring Street. Springfield has started to take initiative by re-opening Pynchon Park on East Court Street. The planned Arc of Recreation runs past the Upper Lyman Warehouse District and could provide a great opportunity to connect to the Mc Knight neighborhood and Mason Square at State Street. Many of the vacant lots in the Lyman District have the potential to create a green new district for housing, working and recreation. Another important asset for Downtown Springfield is the vicinity to the Connecticut River. The abandoned railroad tracks of the railroad corridor could become one of the direct connections to the riverfront and the Connecticut River Walk and Bike Way.



Public open space in the larger downtown area of Springfield.



Downtown public green spaces and parks.



Pynchon Plaza



Apremont Triangle



River Front Park



Dr. Suess Memorial



Stearn Square



Steigers Park

#### Urban Grain:

The urban grain of downtown Springfield and our project area specifically is dominated by vacant lots. Some of the vacant buildings provides opportunities for adaptive reuses. Vacant lots also provide opportunities to raise the quality of public open space. Infill with new buildings could strengthen the street corridors and make better use of a very attractive location close to downtown.

An important objective of the design studio is to apply infill strategies that would enhance both the quality of open space stronger spatial definition and to program vacant buildings in a sensitive way to successful businesses.

#### Building mass study model and proposed infill:



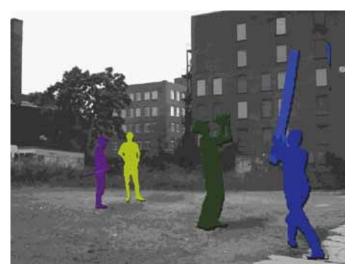
The building mass of our area is fragmented and creates opportunities for infill and open space.



This proposal reinforces the strong street network and re-introduces residential and mixed uses.

Site Responsive Art Interventions:

In the first phase of our studio we proposed a series of short term design interventions. These are ideas that can be used to occupy vacant lots and make use of underutilized space. This could be a field of experimentation for local artists to change the culture of downtown and draw more attention to the Lyman District. The interventions are can be realized with limited funds and can be temporary.



Silhouettes of former factory workers echo the industrial history of the area - Julie Goodwin.



The traces of a former building are reinforced through site specific wall paintings - Chris Johnson.



A mural on the railroad viaduct tells a story about the unique industrial past of Springfield. -

#### Community Participation - Envisioning Workshop

After one week of analysis and brief design interventions we took our information to Springfield and held an envisioning workshop to the public. The work shop was held in the TD Bank North conference room downtown. The workshop was well attended by residents and other stakeholders who came to speak and articulated their passion for the Lyman District.. After a brief presentation we split into smaller groups to speak one on one with the residents and stakeholders of Springfield. In these small groups we handed out pens and markers for the stakeholders to use in order to help us better understand the potentials of the area and the features considered challenging in the upper Lyman Warehouse District.









#### Challenges:

- Vacancies invite undesirable activities
- Perception of the District unsafe
- Bad sidewalks are unfriendly for pedestrians

#### Potentials:

- Live/work spaces for artists
- Market rate housing projects
- Commercial and entertainment
- Structurally sound buildings used for shops and apartments
- Turn empty spaces into markets
- Take down some of the fences to make connections
- Introduce art and local businesses
- Retail and vendors could bring people to the district
- Create district as a destination
- Revitalize vacant lots

At the end of the workshop we culminated our efforts to create a program for the project that directly related to the needs and wants of the community. The community wants to create connections to the downtown, create pocket parks in the vacant lots, get rid of excess surface parking, propose a supermarket for the residents of the area, and bring in public art created by local artists. In summary, the people of Springfield want to introduce more market rate housing and create connections to other parts of town and other greenspaces. Springfield should be a place where can work, play and live in downtown.

#### Team Work:



Roots of Springfield

Jane Alexanderr, Tanya Chesnell, Sage Sluter

20-27



In the Loop: Anchoring Springfield's Identity Matt Bent, Michael Brescia, Christopher Johnson

28-39



Tuning Up Springfield Julie Goodwin, Henry Hess, Phil Morrison

40-49



Mixtrict Andre Belperron, Nick Betts, James Rebello

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The Art Corner Ryan Kemmerich, Wes Lomax, Nick Mastroianni

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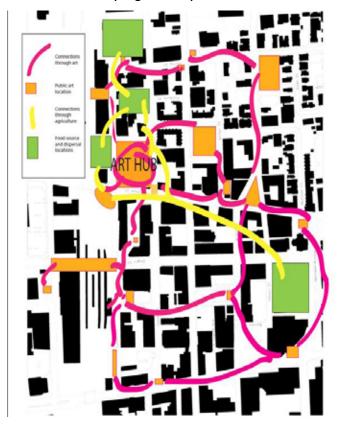


Community Gateway Anthony Brow, Will Bunker, Carl McCrae

62-67

Roots of Springfield - Jane Alexanderr, Tanya Chesnell, Sage Sluter

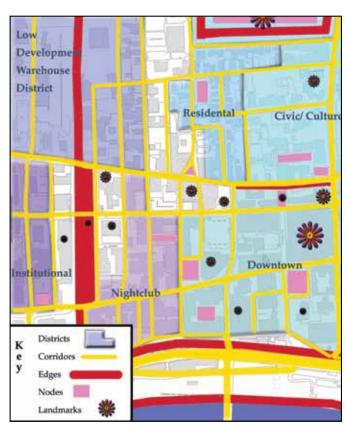
The connections between art locations form a web that ties in the majority of the Roots District, creating a universal identity for the entire area. The connections through agriculture are also shown in the web as well as agriculture-based artwork. Food sources such as crop fields, and community gardens are located in the Roots District as well as where the food is sold and consumed. This also creates an overlying identity for the entire area.



Goals and Objectives

- Bring culture to the area through art and agriculture.
- Create connections to Downtown and significant open spaces, Arc of Recreation with green streets and bicycle ways.
- Calm the traffic through the district to create a better pedestrian relationship with cars.
- Establish a supermarket within walking distance of downtown.
- Utilize and preserve of existing buildings and vacant lots.
- Create a gateway from the train station to downtown.
- Design small park systems to be used at all times of day display loop systems of public art.





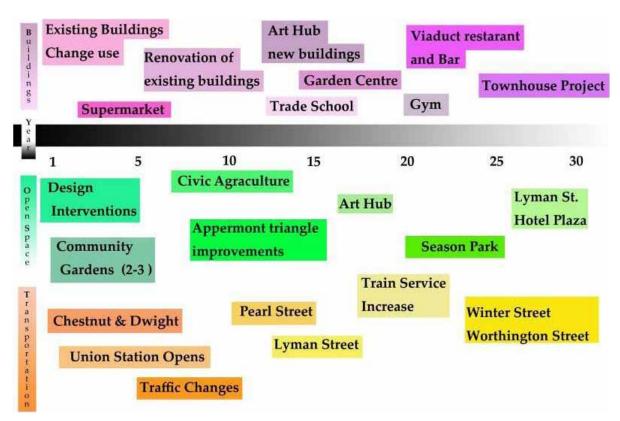
The Kevin Lynch Diagram and method for analysis was used in this design process to illustrate the disconnection and problems with the area.

#### Open Space

The proposed green spaces are suggested to be connected to existing green spaces such as the Armory, and the Quadrangle through Dwight, Chestnut, State, Taylor, Pearl, and Main Streets. Other green streets will provide connections between proposed green spaces. Bicycle lanes along Spring, Taylor, Main, Dwight, Chestnut and State Streets will provide bicycle connections to the arc of recreation and the Connecticut River Bicycle Trail.

The bicycle trail will connect to the Arc of Recreation through the large proposed civic agriculture green space. The proposed and existing green spaces will be connected not only through the main roads, but also through Lyman, Taylor, Upper Worthington, Winter, Pearl, and Frank B. Murray Street.





The phasing plan is organized over the next thirty years in the areas of Buildings, Open Space, and Transportation. This ensures that development is occurring across all sectors simultaneously, to create a cohesive neighborhood.

#### The Art Hub - Jane Alexanderr

The Art Hub is the source of art activities in the Roots District. Lyman Street, Taylor Street, Chestnut Street and Fairbanks Place as a proposed green street define the focus area. The green space in the center is open to the public and is accessible from Chestnut, Lyman, and Fairbanks via alley's of trees. The block contains both new and proposed buildings which are intended to serve as artists' lofts and galleries.

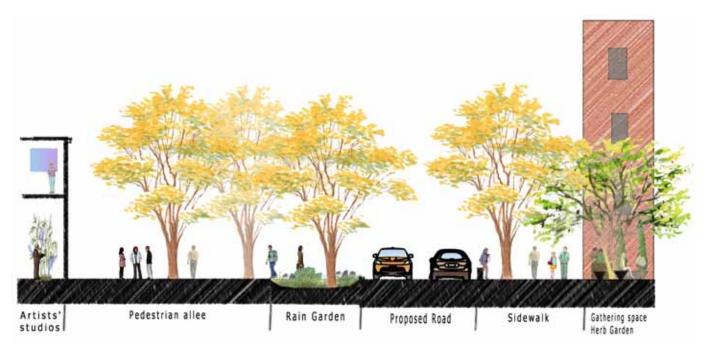
The block contains both new and proposed buildings which are intended to serve as artists' lofts and galleries.

This green space is geared especially toward artists. Serialized outdoor workshop spaces line the perimeter of the park. Artists can rent these spaces for a place to work outside or a demonstration site. This enables the public to observe them, and perhaps even purchase the artwork. A walkway and seating wall define an interior lawn area. Most of which has been left open and free of trees in order to accommodate large

installations, performances, and community activities.



The Arts Hub in the Lyman district mixes existing activities with new ones and defines the exceptional qualities of the district..



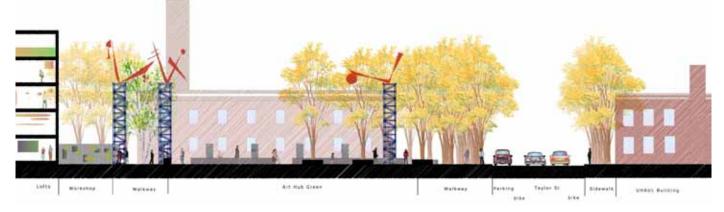
Funfairbank Place is transformed into a green street with a allee of trees as a promenade and a linear infiltration swale to catch runoff.



Serialized outdoor workshop spaces line the perimeter of the park.



Art installation as a gateway to the art hub and roots district.

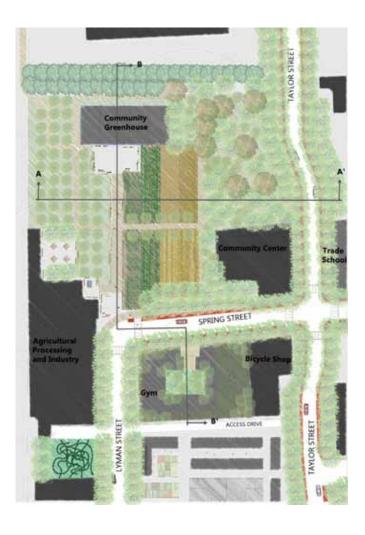


Section through the central green space for artists. The sculpures are inspired by Alexander Calder.

#### Roots District: Civic Agriculture - Tanya Chesnell

This area is the anchor for the civic agriculture theme in the Roots District. The community greenhouse at the end of Lyman Street is a focal point of the view from the train station. It is approached by the pedestrian corridor extending from Lyman Street. This central pedestrian corridor is defined through the use of staggered espalier trees, which allow for nestled resting spots with benches along the journey.

The pedestrian corridor begins and ends with a spatial experience that welcomes visitors to the beginning of the pedestrian journey of civic agriculture, and then welcomes them at the greenhouse. Across the pedestrian corridor, woven branches extending off the espalier trees provide a perforated and staggered option of shade for walkers and bikers. A secondary linear pathway runs across the crops and through the orchard into a cafe space outside of two small shops located to the west of the civic agriculture site. This pathway is defined with an alley of fruit trees. Another secondary pathway runs parallel to the main pathway, skirting the side of the community center and following the edge of the forest gardening woodland and heading around the building to meet up with a bike path connection that enters the greenhouse entry courtyard.





Planting Buffer

Community Greenhouse and Courtyard

Main Civic Agricultural Pedestrian Way



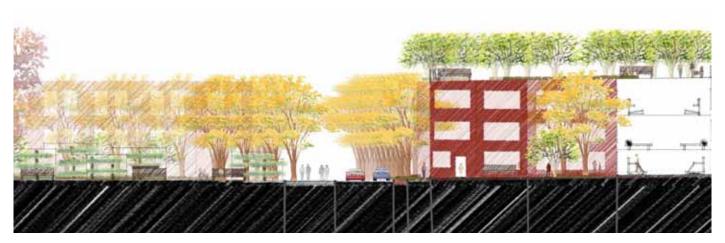
Fruit Tree Orchard

Community Greenhouse

Forest Gardening/ Architectural Ecosystem







Main Civic Agriculture Pedestrian Way

Spring Street

Gym

#### Union Station - Sage Sluter

The Union Station is essential to bringing people into the Roots District as well as downtown. It is very possible this is the first view people will have of Springfield. The station has two entrances one at the front and one at the back, accessed through a tunnel. Accordingly, there are two gathering spaces at either entrance. At the front entrance to the train station, Frank B. Murray Road has been pushed out away from the building to give space for an entrance plaza. The arc of the road resulted in a radial design of the rain shelter structures, the benches and the trees. This design helps guide people to the front. The Architecture of the Union Station is dominated by the vertical elements. The Lombard Poplar trees accent this vertical element. In the front centre of the plaza a gateway is created to signify the front entrance.

#### Back Entrance of Union Station Section and Perspective

Back Entrance of the Station is activated by a small gathering space adjacent to the State Building with a water wall feature separating it from the parking lot. The abutting space next to the entrance of the train station is a solid wall, to break up its monotony a small shop and restaurant is carved out of the wall. This restaurant will be combined with an unused ticket station at the top of the wall; from here there will be viewing of the water wall while dining.

The Dwight Street tunnel that goes under the train lines is relatively long and dark, like a cave. Playing with this idea, constructed stalagmites and stalactites will run the length of the tunnel separating the pedestrians from the vehicles. The current artwork on the walls of the tunnel will remain. These mirrors of dancing people will reflect and the lights color further enhancing the experience. The inspiration of this came from the current stalactites forming under the bridge on Main Street and from Peter Walker and his design of the Monumental Stones in Circular Park in Nishi Harima, Japan



The northern entrance of Union Station welcomes visitors to Springfield.



Station - Entrance Downtown



Entrance from the train station to Downtown



Hotel

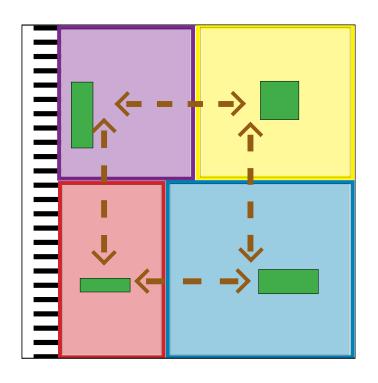
Stalagmites and stalactites in the Tunnel of Dwight Street

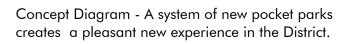


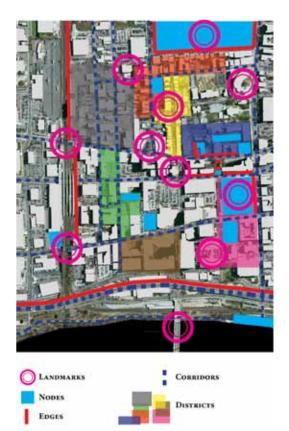
Union Station Main Entrance Plaza

In the Loop: Anchoring Springfield's Identity - Matt Bent, Michael Brescia, Christopher Johnson

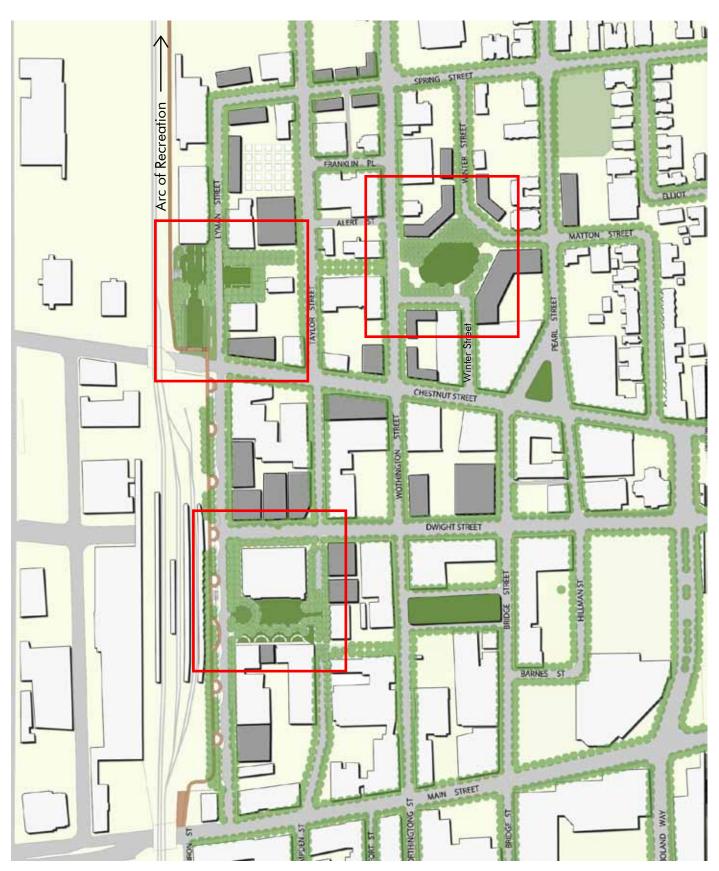
After careful study using the Kevin Lynch analysis, the group was able to define several existing districts within downtown Springfield. Along with the commercial and civic districts closer to the Connecticut River along Main Street, there is also a strong residential district in the area around Mattoon Street and Salem Street., as well as a strong existing entertainment district located around Worthington Street. In the upper Lyman Warehouse District, there was a strong lack of identity caused by wide variety of building types and uses as combined with a lack of regular activity. This area was deemed the "Gray District" because in a way it is like a blank slate, with no strong current identity, but it has great opportunities for improvement. Among several of these opportunities to bring life to the Upper Lyman Warehouse District are the Arc of Recreation to the northeast, Union Station to the immediate southwest, and the Mattoon Street neighborhood, a very successful residential area to the southeast. Other assets in the immediate area are the Museum Quadrangle, a small cultural hub and major attraction; the Springfield Armory, a significant historical site and green space; and the many old industrial buildings with historical architecture that have fallen into a state of disuse, but are structurally sound and readily available for adaptive reuse.







Lynch Analysis



Master Plan

#### The Residential Court - Matt Bent -

A large underused parking lot located between Worthington Street and Winter Street is replaced by an active public park that defines a new neighborhood and connects it to the rest of downtown Springfield. The residential park uses Mattoon Street as a model to create two new one-way residential streets by cutting off and redirecting Winter Street. The idea behind the pedestrian-only connection that Mattoon Street shares with Salem Street is expanded upon here to form a large public park. Edges are defined by landform accented with arching seating walls, and planted with creeping liriope and honey locusts. The central ellipse is a large multi-use lawn space lined with American elm trees. The park is lined with new row houses and apartments, which not only gives the area a comfortable and safe residential feel, but also gives residents a sense of ownership over the park, providing opportunities for community involvement in park events and even basic maintenance. During major rainfall events stormwater will infiltrate from the adjacent streets to reduce peak outflows.



Sectional perspective showing the relationship between units, parking and open space. People can come from surrounding neighborhoods and gather in this vegetated green space that also collect rainwater.



A new public park and market rate row houses create new qualities in the Lyman District.



#### Transformation - Christopher Johnson

The Upper Lyman Warehouse district has a strong historical presence of agricultural roots as well as beautiful brick industrial buildings. An important open space in this area is tucked between the Amtrak line, an old industrial building, Lyman Street, and Chestnut Street in an old abandoned parking lot. This space acts as a key link between the "Residential" open space to the east and the "Movement" space to the south. This design has used agricultural lines that cut through the space represented by aluminum structures, vines, cut-out planting beds, and benches. Transformation can be seen in the design in three key design features. Native plants and a modern steel structure rise from old, tired asphalt; abandoned rail lines become a recreational trail and bikeway; and an unsightly brick facade becomes a work of art.



An abandoned parking lot on the corner of Lyman Street and Chestnut Street is transformed into an open space with vegetated walls.



Public temporary art is the first step to transform and enlive the District.



Old and new create a fruitful symbiosis in the District.

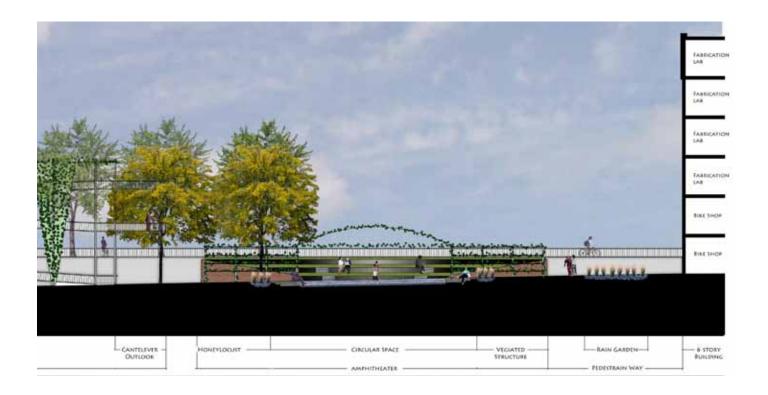
## Transformation - Christopher Johnson



A steel urban structure defines the western edge of an abandoned parking lot and frames an amphitheater which is tucked into the existing retaining wall.



An outdoor market surrounds a small recessed amphitheater while a steel structure creates backdrop to a larger raised amphitheater to allow for small gatherings or performances(right).





## Kaynor Plaza - Michael Brescia

In order to turn this anchor point into a more prominent open space, Kaynor Street was converted into a pedestrian plaza and greenway connecting the back entrance of Union Station to the Entertainment district via Duryea Way. Thus a key aspect of the design for this area is the relocation of the train station entrance to be in line with the rest of Kaynor Plaza as well as constructing a larger and more prominent façade. Although technically it is the back entrance to the station, it functions as the primary entrance to Downtown. Kaynor Plaza is an arrival plaza outside of the train station entrance where pedestrians could wait and watch street performers or simply enjoy a nice day. There is also a large open space facing a stage where outdoor musical performances could be executed, as well as an intersection plaza where pedestrian paths coming from Duryea Way and Taylor Street converge. To better connect the area with the Entertainment district new retail will be establish along Kaynor Plaza inside existing and proposed architecture including a restaurant, music club, as well as a coffee shop/visitors center, with outdoor café seating as well. In accordance with the theme of "travel" a major element to the design of Kaynor Plaza is the large clock tower that serves as the backdrop to the arrival plaza as well as the outdoor stage, and a visual focal point throughout the entire area.



Kaynor Plaza becomes a plaza that is activated by new shops and restaurants. Outdoor seating will serve the public and private businesses.

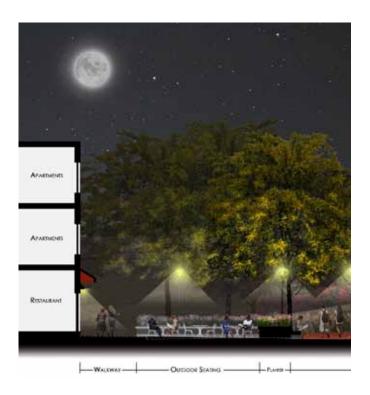


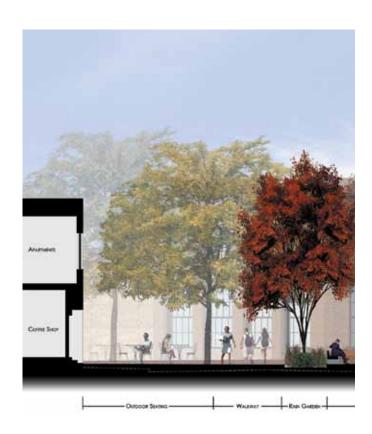
Kaynor Plaza will give commuters and pedestrians and easy way to get to and from the train station while at the same time providing a place to stop and rest and enjoy the local shops and nature



The purposed plaza acts as a place for people to come and gather bringing a new identity to the area.

# Kaynor Plaza - Michael Brescia







Even at night, Kaynor Plaza will still be a bustling node of activity

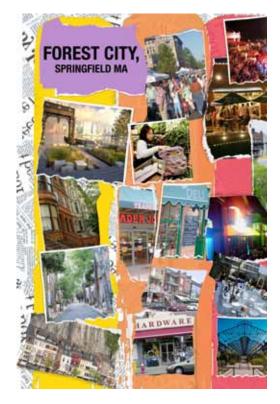


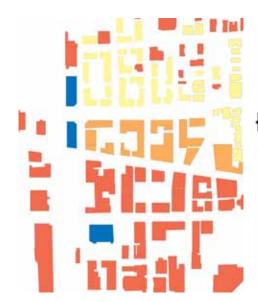
The reconstruction and realignment of the new train station back entrance will bring new life to Lyman St. near Kaynor Plaza

## Tuning Up Springfield - Julie Goodwin, Henry Hess, Phil Morrison

"Tuning Up" Springfield restores the Upper Lyman Warehouse District to its former bustling industrial glory. Drawing inspiration from historic architecture and locomotive past, the design encompasses the city's industrial past. The revitalization will encourage current workers of Springfield to live within the downtown. The appeal for the new labor force of local artists comes from the many connections made to the existing cultural assets in the area while maintaining and remembering Lyman's industrial past. Our goals and objectives are:

- Create connections in Lyman district to downtown through the Arc of Recreation and the Quadrangle.
- Create gallery space and incentives for artists
- A trade school for metal works and jewelry making
- Provide essential retail: grocery and hardware.
- Involve the community: farmers markets, sidewalk sales
- Create distinct district zoning: multi-family residential, restaurants and retail.
- Encourage nightlife: bars and evening events.









Proposed Land Uses: More residential land uses are proposed in the northern District area.

Urban infill reinforces the existing street network and make use of existing infrastructure. Proposed new parks reinforce connections from east to west and mitigate different uses.



Master Plan: The proposed system of public parks organizes the Upper Lyman District without compromising the existing urban fabric. It also provides the amenity a new park in an area that is underserviced with green.

## Commuter Commons - Henry Hess

Commuter Commons are located near the Downtown entrance of the renovated railroad station and serve as a place for commuters to wait for the train and for residents to recreate. Businesses directly surrounding the site can hold large outdoor events in the open space, and smaller groups can stop and gather in the cafe spaces provided. The design takes it inspiration from the old switch tracks of railroads. This helps to create a direct connection from the back of the train station to the green space that is caddy corner to the station. The site tries to take advantage of the surrounding buildings by collecting the rain water and allowing it to permeate back into the soil through permeable pavers and plant life. The statue to the right side of the commons celebrates rain water with plants and misting that can cool people off on a hot day. The water for the structure comes from the A/C units of the surrounding buildings.





The diagonal path that cuts through the park separates the lower west side of the park from the enclosed east side. The planting on either side of the walkway is a rain garden that allows water to percolate into the ground instead of becoming run off.



Commuter Commons was once a parking lot between the buildings. The proposed park will provide many opportunities for the people of Springfield. The section above is looking at Pioneer Brew Pub. The large space can be used for outdoor events for the surrounding businesses.



The east side of the park is meant to be more intimate with smaller spaces to gather.

### Palette Park - Julie Goodwin

Palette Park is a linear connection from Mattoon Street to the Arc of Recreation bicycle path. The park also acts as a buffer between the residential district and the commercial district to the south. The park is inspired by the historic automotive past and the remnants of the automotive industry. The park is unified by a system of paths: a public arcade that runs along the commercial store fronts of the south and a more private residential path that spans the residential row houses to the north. In addition to the corridor that curves and ramps up and down throughout the site, there is also a four foot grade change in each space. For the purposes of this studio there are two spaces that have been focused on in detail.





Master Plan of Palette Park. The plan highlights the amphitheater and the open space for recreation and other outdoor activities.



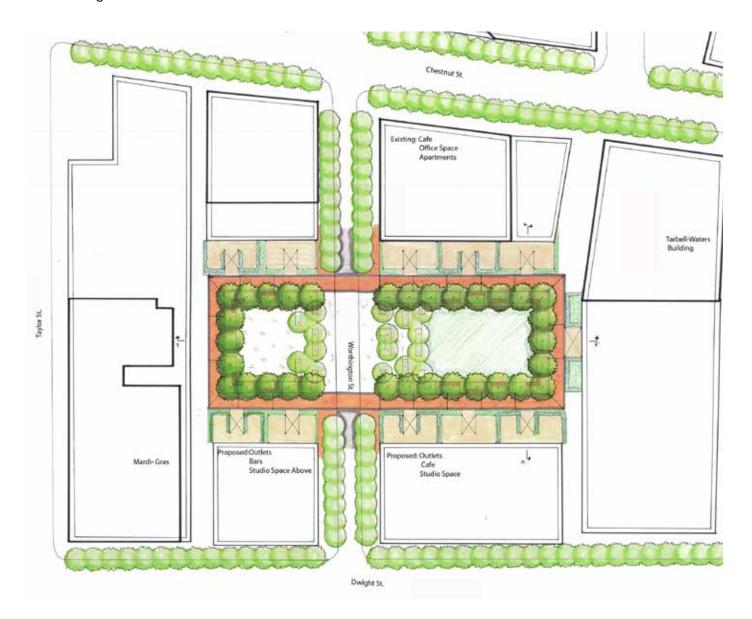
The section above shows the relationship of the amphitheater to the residential side and the business side of the park. The residents are provided with their own private space in front of the row houses, allowing for more privacy along the row houses.



A night scene perspective showing the uses of the park for families and other residents of Springfield. The amphitheater is used for sitting and watching late night movies.

### Turn Table Plaza - Phil Morrison

Turn Table Plaza is a proposed retail area. Based off the design of a railroad turn table, the plaza will house many retail stores and be a hub for the night life of Springfield. Turn Table Plaza narrows Worthington Street and closes it to vehicular traffic during the weekend nights (8pm-2am) in order to keep vehicular and pedestrian access separate. Each store or bar has an outdoor area for people to move to when it is nice outside. Each outdoor area has rain gardens that will help the water remain on the site and not become run off. Turn Table Plaza has a large open space in the middle for events such as concerts and promotional deals that the surrounding businesses can hold.



Master Plan for Turn Table Plaza.



Small outdoor areas accommodate different uses throughout day and night.







Park at night time: The area is well lit and is a safe 24 hours a day.

#### Mixtrict - Andre Belperron, Nick Betts, James Rebello

The Upper Lyman District is an area located in the city of Springfield, Massachusetts. The area was once known for its industrial nature has deteriorated in recent years and is in need of stimulation to draw residents and consumers back to the area. While it is hard to believe today that many of the abandoned buildings were once home to successful businesses, long time residents of the area reminisce fondly about the commerce that used to take place in the area- from meat packaging facilities and fresh produce vendors to small clothing and jewelry boutiques.

Despite the dire appearance of the situation, the Upper Lyman District is poised for improvements. With real estate readily available, the area is ready for revitalization to once again become a destination and vital part of Springfield.

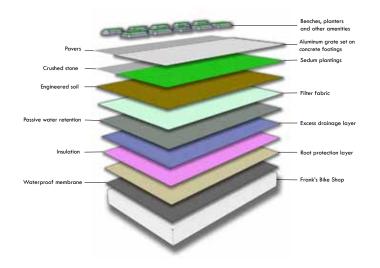


Master Plan

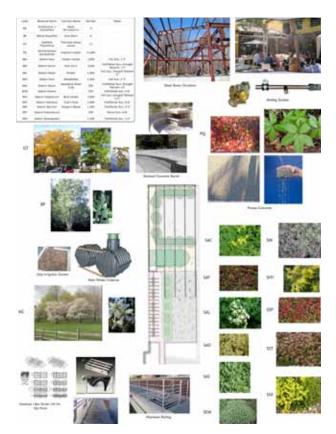
Our proposal for the Lyman Warehouse District seeks to promote a diverse area of uses to attract consumers and future residents. Our idea is to create a new central park that will become both a vital destination and iconic place. The park is a node in the new east-west corridor between Mattoon Street and the Arc of Recreation adjacent to the rail tracks. There it culminates in a multipurpose pocket park connecting the street level with the trail in higher elevation. A third node was designed at the entrance of the revitalized train station to downtown to create a gateway



Parks and tree planted streets reinforce the new open space system.



One of the most significant design elements is the construction of the green roofs. In addition to creating a usable space on the roof, an innovative planting system allows for storm water to be collected and stored while still allow full access. An aluminum grate is placed several inches above sedum plantings. These sedums use the rain water as it falls and the layers of the roof allow for some storage for future use. Any excess water, along with the water from the paved surface of the building, is collected in a series of cisterns below the birches. This system not only keeps all of the storm water on site but by reusing it in the irrigation system it eliminates the need for city water to water the trees.

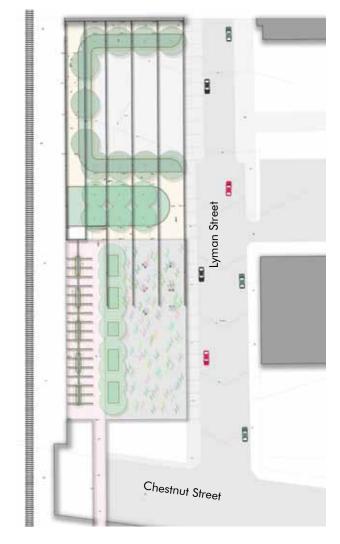


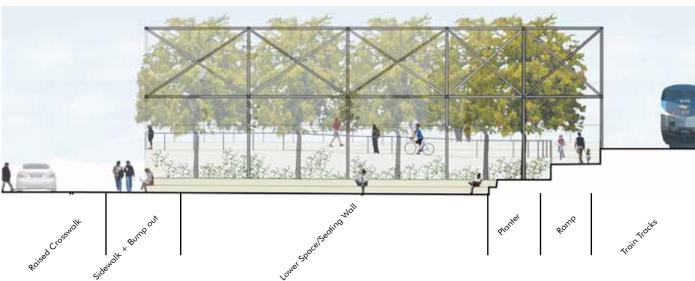
Material Palette

In addition to the roof materials, close attention was paid to the other material selections. The tree varieties were selected to withstand the conditions in the planters- the gray birches especially because their short life span can coincide with maintenance on the cisterns below. The aluminum grating has a 'no-slip' finish to keep the roof safe.

## Bike Trail Connection - Andre Belperron

This area serves as a connection point between the green network system in the Lyman Mixtrict and the larger Arc of Recreation bike trail. In order for a bike trail connection to be made along the existing train tracks, the first challenge was finding a handicap accessible way to get people to the elevated tracks that are approximately twelve feet about street level. This was accomplished by a ramp system that wraps around a lower street level space and leads to a green roof atop the new bike shop below. The green roof serves as a "train station" by providing people with an area to watch passing trains before continuing on to the bike trail. A steel structure protrudes from the ground and the existing building as if it is the remaining skeleton of an old building. The relationship to the structure changes as people move from the lower space up the ramp and get closer to the joints and ceiling of the structure.





The train station inspired seating system wraps around the perimeter of the space providing ample seating. In addition to the cover of the structure and Honey Locusts a misting system is mounted to the structure to help lower the temperature of the space.



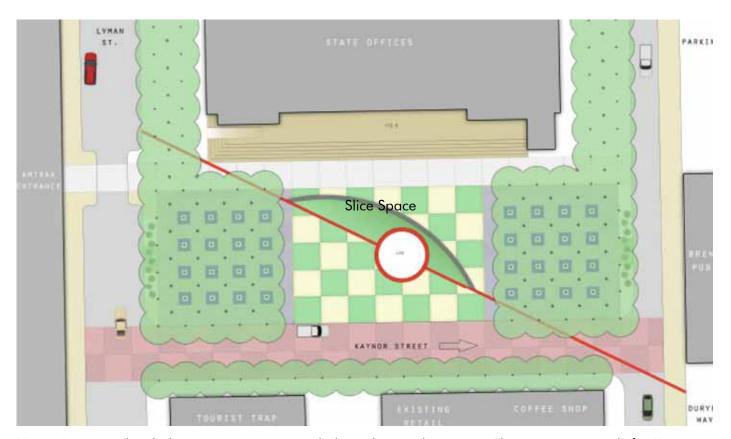
A food vendor on the green roof provides refreshments to visitors. Tables with moveable chairs allow for people to move about and arrange the tables as they desire.



The open space on the roof is separated from the major corridor by trees and planters. This area allows for seating and other flexible uses such as public or private events or art installations.

# The Amtrak Courtyard- Nick Betts

Using bold geometry and vibrant colors the Amtrak Courtyard is the start of the Upper Lyman area. Located outside of the rear Amtrak entrance the courtyard serves as a gateway into Springfield. The central 'slice' along with the red line running through the entire courtyard is the multiple function feature of the courtyard, acting as a central focus art piece as well as a visually directing element design of the Amtrak courtyard was a basis on one of Peter Walker's design of the Sony Center in Berlin. The rectilinear bench formation wraps around all the trees represent a colorful rhythm through the space.



Honey Locust orchard plantings create a central plaza close to the station. The paving materials for Kaynor Street are suitable for vehicles but encourage and express pedestrian walkability.



Honey Locusts and architecture draw edges to the central space and the 'slice' space acts as a central focal point.



The Pioneer Valley Pub in the background acts defines the courtyard. At night the grid of trees will be underlit from within the blue benches, underside of the canopies giving a new dimension to the night.

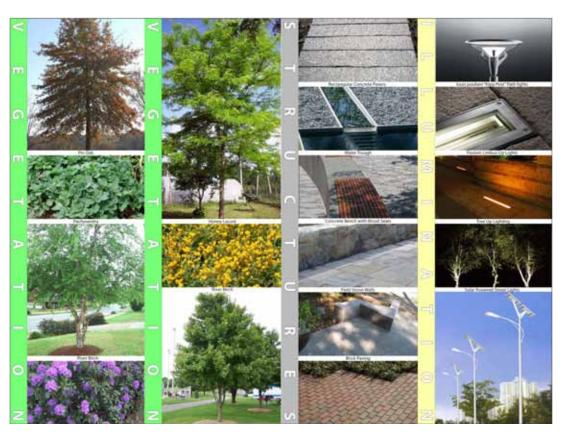
# The Art Corner - Ryan Kemmerich, Wes Lomax, Nick Mastroianni

Our vision for Springfield's Art Corner is to liven the Lyman Street area by creating an arts and entertainment community supported by surrounding green connections, such as the Taylor Recreation Trail and the Mattoon Green Way. This open space system connects to the Arc of Recreation, the Connecticut River, and the Quadrangle museums.



Material palette for the Grand Promenade.

**Short Time Interventions** 



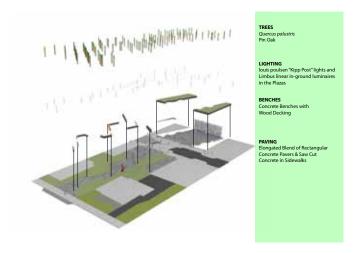
Material Palette



Master Plan

## The Grand Promenade - Ryan Kemmerich

This Grand Promenade is the finale to the Mattoon Green Way. Walking from Taylor Street, the encroaching Pin Oaks create a majestic ceiling overhead. Benches create scoop spaces for people to pause and take in the surroundings. At the west end a elegant water feature that collects rain water and allows it to flow down a sequence of shallow pools.





Perspective looking west to the waterfall and the plaza on Lyman Street.



The waterfall collects rainwater from surrounding rooftops and recirculates it to flows over a grid of paddles that offers a unique visual experience. It is the terminus of the Grand Promenade.





# The Grand Promenade - Ryan Kemmerich



Entrance of the Grand Promenade from Taylor Street.



Looking east up the Grand Promenade.



Perspective looking east to the Matton Green Way.

# Public Art and Green Infrastructure on the Mattoon Greenway - Nick Mastroianni

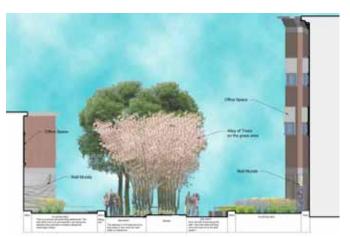


Art and green infrastructure enhance liveability in the Upper Lyman District. Urban runoff is collected in stormwater planters or swales, hardscape surfaces are permeable and local artists that will live in the district diplay art in the public.





Raised crosswalk and bike lanes prioritize pedestrians and bicyclistson the Greenway.



Art murals along the Mattoon Greenway display local art and enliven the local art scene.



Taylor Street will be narrowed to 11 ft to slow down traffic to create a pedestrian and bicycle - friendly environment. Bicyle lanes will be marked on the street and runoff will be collected in stormwater swales.

### Central Park - Wes Lomax

The big idea behind this central park between Worthington and Winter Streets is to provide a large, open-aired gathering space to serve as park; public and private. The main space is defined by lines of trees following hard architectural lines, as well as landform and seating walls. The outdoor cafe and seating area on the east side creates a prospective overlook for the park. The row houses help to define the west side of the park and provide enclosures for private gardens. This particular space is aimed at attracting people from Mattoon Street and the Lyman Street district, providing a simple greenspace amidst a busy city setting.





Coffee shop and large open lawn area sit along a pathway and bermed landform.





A large open space is separated from the connecting path and outdoor eating area by defining landforms.

## Community Gateway - Anthony Brow, Will Bunker, Carl McCrae

### Goals and Objectives

- Embrace and preserve the history of the area
- Introduce an arts district
- Intertwine the rail trail throughout the city
- Stimulate local economy
- Utilize new Union Station to raise real estate market and business
- Introduce local grocery store to Lyman area
- Create area for community gardens
- Promote and strengthen identities
- Create cultural awareness

Findings From Public Workshop Helped to Define Program Elements:

- Lyman Street needs to be made into a destination.
- A supermarket within walking distances of downtown is needed.
- There's a lack of support for family businesses and a growing number of franchise businesses.
   Reconfiguration of streets should be considered to create more versatile circulation, while also making streets safer for pedestrian users.
- Community gardens would be a fast, inexpensive way to enliven vacant lots.



Green spaces, new proposed green streets, and the hierarchy of the streets in the Upper Lyman District.



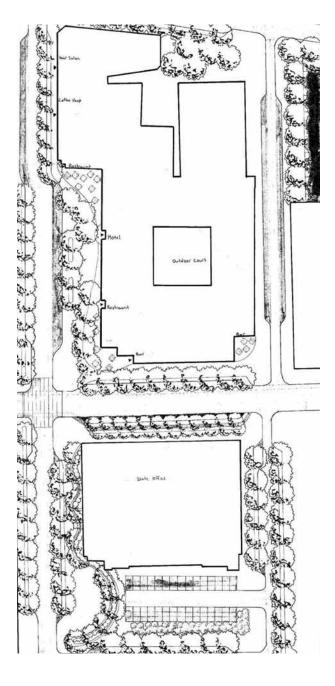
We propose to establish the Upper Lyman District as a mixed use area

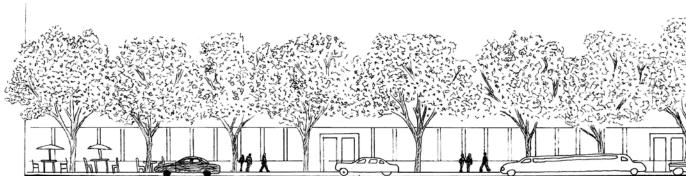


Our urban grain studies explored low, medium, and high density in downtown Springfield. As part of the master plan, new buildings have been proposed. The scale of these buildings responds to the current urban grain. These buildings have been added in order to further define the streets and open spaces of the district.

# Union Station Gateway - Anthony Brow

The concept for Union Station Gateway was to create a more pedestrian oriented streetscape. The undulating pattern of the Connecticut River was an inspiration in the design to shape circulation and spaces. The building to the north provides the area with hotel and conference rooms on its top floors and has restaurants and bars on the first. The buildings are used to accommodate Union Station users and help attract more people to the area.





The hotel and conference center on Lyman Street takes advantage of the renovation of Union Station and will enliven the street with activities at 24 hours a day.



The restaurants located on the first floor of the hotel provide outdoor eating spaces which help liven the streetscape.



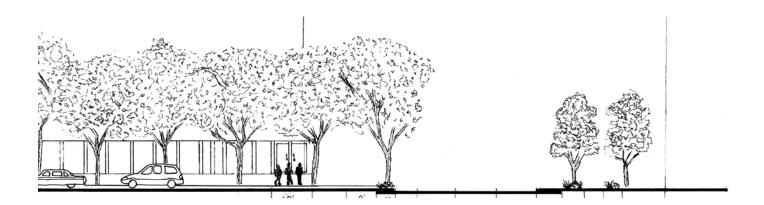
On the west side of the State Office building are smaller, more intimate seating areas for people waiting for trains or taxis. The landform behind the benches create a comfortable feeling for users and plants native to the Connecticut River



The hotel plaza is open to the large outdoor eating area adjacent to the street and makes the streetscape more vibrant.

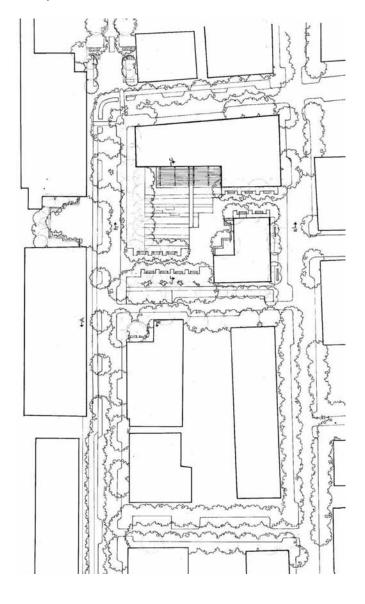


A large gathering space is located directly across the street from Union Station's secondary entrance. The space includes a large seating wall for people waiting for buses and trains. It also includes a planting to screen out the State Office parking lot.

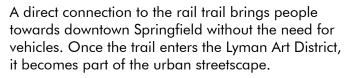


## Lyman Street Community Gardens - Community Gateway - Will Bunker

This area of the Lyman Art District is designed to incorporate residential areas with large community spaces. The center piece of this neighborhood is the community gardens and community center which will draw the surrounding communities together. A gateway adjacent to the rail trail creates a connection at the end of Lyman street, allowing residents of Springfield access to the Lyman Art district and community gardens.

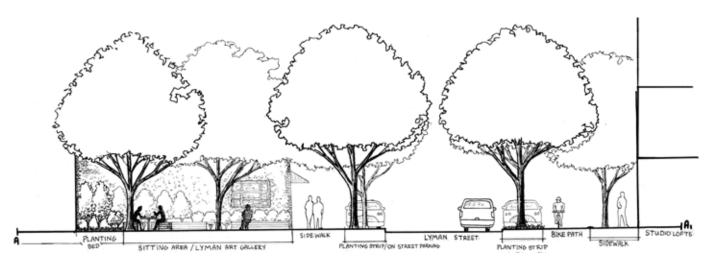








Unused space between buildings on Lyman street are turned into pocket parks which not only add to aesthetics to the area but provide opportunities to showcase community art.



Lyman Street is redeveloped into a mixed residential community. Pocket parks are constructed in previously unused spaces providing more outdoor rooms for new residents to the area. Street trees add to the aesthetics of the area and larger sidewalks create a more comfortable pedestrian environment.



The community gardens are located between Lyman and Taylor street with direct access from both streets and the community center. A greenhouse is proposed to meet the needs of the gardens. Set back from the street with a strong edge of Red Maples, the gardens create an alternate experience to the busy streets of Springfield.

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