SPRINGFIELD’S “X” – FROM CROSSROADS TO CENTER

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Agrillo, Joseph A.; Chesbro, Theodore D.; Brown, Nic M.; Black, William Cody; Corey, Patrick W.; Ford, Krystal A.; French, Jay M.; Jardin, Alexander; Lee, Da Hee; Puza, Henry C.; Regnier, Sean J.; Richard, Charles M.; Ross, David William; Sanborn, Stephan; Sim, Julia Rose; Holt, Thomas F.; Anderson, Bryan; Brown, Samuel; Disharoon, Richard; Fang, Andrew; Kamins, Dan; Lord, Colin; Nicol, John; O’Grady-Howard, Tricia; Riley, Brett; and Verville, Jennifer, “SPRINGFIELD’S “X” – FROM CROSSROADS TO CENTER” (2014). Landscape Architecture & Regional Planning Studio and Student Research and Creative Activity. 33.  
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Springfield’s “X” - From Crossroads to Center

Joe Agrillo • Bryan Anderson • Bill Black • Nic Brown • Sam Brown • Ted Chesbro • Pat Corey • Richard Disharoon • Andrew Fang • Krystal Ford • Dan Kamins • Jay French • Collin Lord • Tom Holt • John Nicol • Alex Jardin • Tricia O’Grady • Dahee Lee • Brett Riley • Henry Puza • Steve Sanborn • Sean Regnier • Chuck Richard • David Ross • Julia Sim • Jennifer Verville
“Springfield’s “X” - From Crossroads to Center” received the Boston Society of Landscape Architects Honor Award 2014

From the jury comments: “Complete package of exploration, programmatic installation, analysis and unique gateway. Precedent research and preliminary workshop is impressive. Sculptural aspect is intriguing.”
“Springfield has a great network of Open space to impress, with its outstanding housing stock, the beauty of the Connecticut River, and the city’s wonderful network of parks—including its crown jewel, the 735-acre Forest Park. The many local parks provide recreation, while the tree-lined streets and intact architectural features make for many beautiful and desirable neighborhoods….”

ULI (Urban Land Institute) Panel Report from September 2006
Introduction

The following report summarizes the results of a design process that took over eight months from the late summer of 2012 to the winter of 2014 and engaged residents and stakeholders of the Forest Park Neighborhood, in conjunction with planning officials from the Springfield Office of Planning and Economic Development. The work was accomplished within the framework of two Senior Urban Design Studios that are part of our Landscape Architecture Program. This community service learning strategy has as its main goal the revitalization of the City of Springfield, Massachusetts. The project also brings students and the community together in a supportive and constructive atmosphere of reciprocal learning. The proposals empower the community to realize a vision to create a paradigm shift in the city.

The focus area is the neighborhood surrounding the “X”—the intersection of three major street arteries. Our study contains a diverse catalogue of strategies to make the Forest Park Neighborhood a better place to live, work, and recreate while also creating a vibrant pedestrian friendly center at the point where the most important streets meet. Through rerouting the traffic patterns around the “X” the number of pedestrian crossings is increased and bikeability and walkability is enhanced. Other opportunities are created: places for local neighborhood commerce, new places for arts and culture, and housing located in close proximity to the “X” and the area’s greatest jewel: FOREST PARK - one of the most attractive parks in New England.

The goal of the studios was to shape this vision for the “X” and the Forest Park Neighborhood and create a vibrant center that becomes a destination for residents and travelers alike with space to congregate, shop, eat, and work. The designs show a diverse palette of ideas that can help reshape the existing public open space as a place for people. The measures proposed for the neighborhood include developing a neighborhood-wide system of green infrastructure along street medians and parks, enhancing pedestrian connections along Forest Park, and identifying new housing opportunities.

Art plays a role in the design of public street furniture and showcases the identity of the neighborhood and their people. Places like the BING ARTS CENTER deserve even more support to become the leading cultural center for arts and performances in the city. Underutilized assets like the abandoned HIGHLAND DIVISION RAIL LINE can shape a green network as an alternative mode of transportation. The design proposals call for a healthy, creative, walkable and bikeable environment.

To some people the imaginative plans presented by the studio could be characterized as “pie in the sky thinking”. We think the opposite. We think change comes with visions and ideas. They pave the way for a creative mind-set full of possibility and optimism that will change and transform place. Our mission as urban designers is to feed and nurture your enthusiasm for the place where you live by providing powerful images of an attractive and vital urban landscape.

Frank Sleegers,
Assistant Professor
Department of Landscape Architecture and Regional Planning
University of Massachusetts Amherst
Study Area

Project area
The Forest Park neighborhood begins one mile south of the Central Business District and is the second largest of the city's seventeen neighborhoods. It contains 2,103 acres of land, 41% of which is conservation or park land. Its boundaries are the Mill River and Watershops Pond to the north; Longmeadow to the south; the Connecticut River to the west; the now abandoned Highland Division Railroad to the east. Forest Park is the most prominent park in Springfield and with 735 acres one of the largest municipal parks in the United States. It is a most active park that is situated on a high glacial terrace overlooking the River. Neighborhoods like Forest Park and Longmeadow are abutting a park that also attracts people from all over Springfield.

The larger project area: Forest Park with the main street arteries in Springfield, MA (aerial from google earth, 2014).

Study Format, Goals and Objectives

The goal of the studios was to shape this vision for the “X” and the Forest Park Neighborhood: Becoming a place that becomes a destination for residents and travelers alike with space to congregate, shop, eat, and work. The proposals aim to empower the community to realize that vision to create a paradigm shift in the city. The designs encourage walking, bicycling and serving neighborhood services.

The neighborhood is famous for their affluent and beautiful historic homes and the Forest Park - one of America’s largest urban parks. While these are iconic assets of the neighborhood it is overlooked that this neighborhood of around 24,000 inhabitants is quite diverse with a broad range of different incomes. Another fact is that the community is missing an urban space that feels like a great place to be and that feels like the heart of the Forest Park neighborhood. The location that contains the most potential for this demand is the intersection of three mayor city arteries in the neighborhood – Sumner Avenue, Belmont Avenue, and Dickinson Street – called the “X”. Today, the “X” has minimal visual appeal, it is dominated by heavy traffic and crossing Sumner Avenue is dangerous for pedestrians. There is no space to rest and gather. Some commercial venues along the streets are either auto-oriented - for example Taco Bell, Dunkin Donuts, TD Drive-in bank, Gas Station - or low-budget locations. Some of the unique assets in close vicinity to the “X” such as long-time established restaurants or a local bakery are an exception but are hard to find for strangers. There is a plenty of parking in the area but navigation and orientation is confusing. Furthermore, the connections to Forest Park are weak.

The challenges around the area of the “X” have been even covered by the public media. By “22 News” it has been named one the “meanest” streets in Western Massachusetts. http://www.wswl.com/news/mean-streets/wswl_local_mean_streets_the_x_in_springfield_200921280013

The 2012 Senior Urban Design Studio developed first ideas to improve pedestrian connections from the “X” to Forest Park. The studio focused on the main arteries in the Forest Park neighborhood and came up with some innovative design proposals. One most convincing proposal was delivered by BSLA 2013 graduates Joe Agrillo and Charles Richard. They proposed a simple rerouting of Belmont Avenue to turn a three-street intersection into a regular two-street intersection of Sumner Avenue and Dickinson Street. This strategy not only solved the traffic problem but created new opportunities to shape an urban plaza to gather and congregate but also new opportunities for local businesses to grow and transform an intersection into a vibrant urban place. The proposal was presented in the spring of 2013 to the Forest Park community and got an overwhelming response from residents, small entrepreneurs and community activists. The studio 2013 adapted the alternative traffic proposal and develop it further to a higher level of precision and applicability. The program elements were developed in a visioning workshop with the community. The design responds to the concerns and ideas of the community.

The proposals intend to direct new planning and design strategies for this great location in Springfield. The work builds on and expands earlier urban design studios: in 2011 the Senior Urban Design Studio designed proposals to connect the Connecticut Riverfront to Forest Park; the 2008 Senior Urban Design Studio created a vision for portions of the abandoned Highland Division Rail Line: The Arc of Recreation.
In 1835, Springfield was a well established town. "The X" already exists as an intersection of Sumner Avenue and Bel-
mont Ave (Source Springfield Museums).

The actual park land known as Forest Park was established in 1884 by Springfield local O.H. Greenleaf who donated
64 acres. Eventually through similar donations, Forest Park grew to its current size of 735 acres. The historic postcards
display past us and character. The zoo is still popular today (Source Springfield Museums).

Comparison between historic photos in the early 1900’s and current photos taken in the fall of 2012. On the left inter-
sections of Sumner Ave and Magnolia Terrace; on the right Sumner Ave and Forest Park Ave. Over 100 years ago the
most prominent form of transportation were New England Street Carriages. At this time the neighborhood’s distinctive
terraces were already in place. The Park itself became the identity of the neighborhood. It was the location of many
events, and where many of the people of Springfield went to socialize.

Historical postcard of the “X” in the early 1900’s. View of Sumner and Belmont Avenue auing west. Carriage tracks
were placed in the middle of Sumner Ave. In the center of the “X” was a fountain for horses.
The demographics of Forest Park neighborhood are comparable to that of a town. The median household income ranges from $21,000 to $62,000 (2008). We find a mix of ethnic groups in the neighborhood. Forest Park has diverse cultural assets, many churches, and very active neighborhood organizations. The Park holds a very well attended, all-year farmers market every Tuesday (see upper right).

Close to the “X” we find several benches that have been installed as public art projects and that create a sense of identity. These kind of projects are more the exception than the rule and should be expanded.

Public buses serve the neighborhood well. While buses service the major street arteries and connect to Downtown and the medical districts in the north of the City, they do not run late at night, and sparsely on the weekend. The whole neighborhood has TWO bus shelters (red circles). Major stops should be provided with bus shelters to increase ridership for this environmentally friendly means of transportation (aerial from google earth, 2014).

Around the “X” we find an abundance of parking (red) that is underutilized and hard to find. The area lacks a way finding system that directs to parking and the major business and service destinations around the “X”. There is also a lack of seating opportunities and bike racks. These should be installed to promote walking and biking. The depicted bike rack is installed on Sumner Ave.
Forest Park has many large water bodies and serves the whole region for pleasure and recreation.

The Connecticut River has 56 Combined Sewer Overflows (CSO's) and 4 Waste Water Treatment Plants in the Pioneer Valley, as illustrated in the image on the left. The above watershed map shows five different watersheds in the Forest Park Neighborhood. Application of green infrastructure such as infiltration swales reduces the number of events that discharges polluted stormwater directly into the River and cleanses rainwater from the streets.

Riverfront Park and the Connecticut River Walk and Bikeway is part of the larger citywide open space network.

Forest Park has an area of 735 ha and is located in the south of Springfield. The major street arteries such as Sumner Avenue and Belmont Avenue should connect to the planned recreational trail on the abandoned former Highland Division Rail Line in the east, the Mill River to the south, and the Connecticut River Walk and Bikeway to the west. None of the streets have bike lanes. Accessibility to Forest Park is poor and prioritizes the automobile. More entrances for pedestrians and bicyclists are needed to connect it better to the residents in the neighborhood.

The edges to Forest Park are very different in character. Some display a generous urban park, some have more the character of wilderness and are less accessible. The edges surrounding the "X" need more care and attention to invite people and increase the perception of accessibility and safety.
Zoning and Land Use

Current zoning around the “X”. The core area - mainly along the street arteries - is zoned for “General Businesses” (Main Street Businesses with residential allowed) surrounded with “Urban Residential” (Single- and Two-Family Dwellings). We do not find “Low Density Residential” (Single-Family Dwellings) zoned areas in close vicinity to the “X”. In the core we find a Zoning overlay district with detailed regulations to protect and advance the visual character.

A “Zoning Overlay District” regulates the setbacks, promotes indirect lighting for businesses as seen above, regular street tree plantings, awnings and windows for shop to enhance the visual appearance around the “X”. This district was established in 1999.

Another regulated district in the neighborhood is the “Forest Park Historic District. It protects the character of the houses and streets.

Existing land use in the images above are color coded into residential (yellow), commercial (red), Institutional (blue), and public open space (green). The Forest Park neighborhood has predominantly residential land uses with commercial activity occurring along the neighborhoods main arteries - mostly retail and some health services. Institutional land use includes libraries, civic buildings, and religious institutions. The Forest Park is the dominant public open space not only for the adjacent neighborhoods but also for the City of Springfield and the adjacent towns and cities. Its size of 735 acres is comparable to that of Central Park in Manhattan and one of the biggest public parks in the country. Existing land use and zoning districts largely coincide. Potential conflicts between existing land uses - residential and businesses - occur at the edge of the Senior Housing area at Lenox Street. The majority of the studio proposals encourage more residential uses along the Park and the Senior Housing area to build on the great potential of the Park.
Street System and Proposal to Reroute Traffic around the “X”

Sumner Avenue, Belmont Avenue, and Dickinson Street are major street arteries (in red) that meet in a six-road intersection. Cliftwood Street is designed as a small residential street but has heavy traffic because it is recommended as a route to get around the “X”. This traffic on this narrow street depreciates the value of the Park’s edge. Many accidents occur around the intersections because navigation is confusing.

The 2012 studio has developed a proposal to reroute traffic. The general concept is to transform the three-street intersection into a two-street intersection (Sumner and Dickinson). This allows for two additional pedestrian crossings and reduces the design speed of Sumner Avenue. It also shapes new opportunities around public open space and neighborhood commerce around the “X”. These opportunities were explored in both urban design studios.

Street Arteries, Safety, Character and Dimensions

The driving lanes of Sumner are over dimensioned. A reduction to DOT standard of 12 feet per lane could accommodate parking lanes and/or bicycle lanes/pedestrian crossings with stop light. Lighting at night is poor.

The parking and driving lanes of Belmont Avenue could be narrowed to accommodate other uses and make crossing the street easier.

Dickinson Street is the narrowest out of the three arteries. Possibilities to introduce more plantings along the wider sidewalks should be studied.

Ormond is a relatively narrow street. In the case of rerouting, conflicts with residential land uses on the eastern edge are expected. A one-way solution northbound should be studied.
Public Engagement with Residents and Stakeholders

In both studios we held several community design workshops and design presentations to engage the residents, community stakeholders, and planning officials. We held two final gallery exhibitions at the BING ART CENTER on Sumner Ave, 1700 feet from to the “X” intersection. We also held one informal meeting with the Forest Park Neighborhood Association in the spring of 2013. Public interest was strong and we were pleased to have over 40 people attending the final presentation on December 6, 2013. The studio was also invited to attend major events in the community such as the yearly “Christmas Tree” lighting at the “X”. The community stakeholders expressed interest in continuing to work with us in the future. Following are the major concerns and suggestions that were discussed during the conversation with residents. A selection of representative letters can be found at the end of this report (pages 102-103).

• Traffic is overwhelming, particularly at the “X”
• Improve pedestrian, bicycle, and vehicular safety, day and night
• Desire for a walkable town center and the need to create a destination
• Increase local businesses instead of chain businesses
• Invite commuters to stop at neighborhood shops and restaurants
• More and better connections to Forest Park
• Better pedestrian connection from the “X” to the Farmer’s market in the Park
• Utilize the old railway as a walking/bike trail
• Bus routes are underutilized
• The proposed expansion of Dunkin Donuts at the “X” is challenging for walkability and will create more confusion of vehicular traffic
• Sidewalks on Sumner Avenue need to be lighted better at night

In general, the design proposals were praised by the community. Also, many useful comments were received which will require more discussion and clarification. For example, one resident expressed concerns about adding more pedestrian entrances to the park because they could attract undesired activities while other residents explicitly asked for more entrances. We believe that the creation of formal entry gateways into the park as proposed in the designs differ largely from the existing conditions and would help improve the appearance and perception. Some residents were also concerned about safety for the senior housing community adjacent to Cliffwood Street. Access to this community is controlled by fences today and will be in the future. Lockable gates could be a relatively easy way to improve walkable connections from the housing community to the “X”.

Critical comments from the residents and stakeholders in response to the presented designs came also in respect to Ormond Street. The higher traffic volume would change the character of this street significantly. Possible scenarios to address this concern include making Ormond Street a one-way street from Belmont Avenue to Sumner Avenue, widening the streets, relocation of residential uses and replacement with commercial uses, or use of the large parking area for through traffic.

Overall is the students work meant to be a catalyst for sparking new ideas, creative solutions, and most importantly community conversation.

Photos from the various public meetings over a time span of more than a year demonstrate the enthusiasm and interest of the public.
Radiating Movement through the Forest Park Neighborhood
Dan Kamins • John Nicol • Brett Riley

The “X” - A Destination and Place to Live
Bryan Anderson • Samuel Brown • Richard Disharoon

Diversity for Culture and Commerce from the “X” to the Bing
Joe Agrillo • Chuck Richard • Julia Sim

Shaping and Connecting Places
Bill Black • Sean Regnier • David Ross

Healthy Living and Working Around the “X”
Ted Chesbro • Henry Puza • Da Hee

Sumner Avenue: The Green Artery of the Neighborhood
Nic Brown • Pat Corey • Jay French

From the Bing Arts Center to the Rail Trail -
Krystal Ford • Tom Holt

Stormwater Infiltration as an Artistic Intervention on Urban Streets
Alexander Jardin
This proposal provides the “X” with an identity. A series of street-crossing overhead sculptural gateways accompany visitors when they approach the “X”. These structures continuously grow as they get closer to the center until they reach their peak at the point where the three arteries intersect. These structures serve for practical uses, such as street lighting, pedestrian lighting, and artistic uses - because of the structures are pieces of art are a place for art displays. The center of the Forest Park neighborhood is a place to focus on art, whether its art displays, stores, or events. Art unites all the different cultures in the area. This theme is molded into a series of three spaces at the “X” accompanied by a series of shops and restaurants that focus on celebrating the diversity at the “X”. Another goal is creating a connection from the “X” to Forest Park. This is achieved by creating a sculpture walk that leads from Dickinson Street into Forest Park. This again is a place where the people in the community can display their artistic skills. The vision is to create a place where the community can get involved and shape the space they live in to show who they are, through art and culture. This team proposal focuses on three plaza spaces that were created through the re-routing of vehicular traffic, and the edge along the senior housing on Cliftwood Street. This edge is the entrance into Forest Park. The other three spaces focus on supporting local businesses while it is important to preserving an existing large oak tree at the corner of Sumner and Belmont Avenue. One focus area are the two spaces created between Belmont Avenue and Sumner Avenue. The space closer to the Dickinson Street traffic light is focused on the local businesses that are already existing. The space to the west of this is focused on proposed retail center which would have a bottom floor of commercial and local business opportunities while the second floor could hold market-rate apartments. This strategy will create a diverse, mixed use center for the “X”.

These red sculptural structures define a leitmotif for the public spaces around the “X”. One of the main ideas was to bring people from around the “X” into it by implementing aesthetically pleasing structures that are both eye-catching and functional. The spaces have smaller structures because of the scale and also give off light at night. The section, for example, observes the characteristics and the importance of the structures in creating a safe and attractive space during the day and night. The structures also create an edge to the space and create a sort of faux-ceiling.

The design responses to the community’s need for better lighting as well as improving safety in general. The creative use of sculptural lighting will improve the aesthetics of the “X” area while providing pedestrian and vehicle level lighting.
Solar panels are proposed on the top future residential buildings. The energy collected from these panels feeds into the sculptural lighting.

Goals, objectives, and program elements to reshape the neighborhood around the “X”.

Goals:
• Enliven the “X” through contemporary art
• Create safer human experience
• Strengthen Springfield’s connection to the “X”

Objectives:
• Improve lighting and traffic control with sculptural gateways and imaginative lighting
• Draw people in to the “X” through local artists and school children
• Redesign streets to sustain multiple methods of transportation - “Complete Streets”; create “Complete Streets” on the major roads for multiple ways of accessing the “X”
• Art/Sculpture Walk connecting The X - Forest Park
• Narrowing roads to slow traffic
• Minimize destruction of existing buildings instead propose infill and renovation
• Create green connections through street plantings and terraces.
These spaces are created on either side of Dickinson Ave. The sculptural lighting structures create an edge and ceiling to the spaces while also providing lighting at night and contemporary art which is highlighted through accent lighting at night.

The paths radiate outward from the small retail center entrance on the corner of Belmont and Sumner Avenue. These radiating paths are intersected by a circular secondary path which takes you around the perimeter of the central space. These paths are defined by wide granite seating walls which give pedestrians using the area somewhere to relax outside of the proposed shopping plaza.

This three dimensional typology represents Sumner Avenue at the intersection of Cliftwood Street. Brick safety buffers are added so that pedestrians feel much safer while waiting for crossing the street. Biofiltration swales collect and filter runoff water from the road and surrounding buildings. The structures light the crosswalks, paths and road for the drivers. To increase density it is proposed to add a second floor to the existing buildings. The upper levels could be use for residential apartments for a more diverse mixed use center.
One of the community concerns for the corner of Sumner Avenue and Belmont Avenue is the existing large Oak. The citizens of Springfield wanted to preserve the tree because it had a lot of sentimental value to them. As a result, a space was designed around the tree; the new circular gathering space provides possibilities to sit on the granite benches facing towards the tree. This space is a plaza for people, having lunch on a nice day, or meet with other people in the “X”.

The Oak tree is a landmark at the “X”. The proposed space becomes a destination to meet other people.

Section of the proposed gathering space around the existing Oak tree.

Section of the proposed gathering space around the existing Oak tree at night.
Dickinson St. is a very busy street with many cars and pedestrians. At the corner of Cliftwood Street it is not recognizable that Forest Park is close by - there is a lack of entrance qualities. Therefore it is proposed to create a gateway design that uses a structural element as bold letters: “FOREST PARK”. These structural elements are repeated on the edge of the park behind a curving bench. These letters raise attention to the existence of Forest Park and create a sense of place.

Oversized public art is displayed at the entrances and on the edge of Forest Park.

Going down Cliftwood Street people can discover other sculptures created by local artists and take a rest on the long bench. People will be encouraged to get off the path and interact with the sculptures, perhaps even paint on it. This walk along Cliftwood Street will not only create an access point but an experience.

An undulating bench marks entrance situations to Forest Park.
A New Identity for the "X": Light and Public Art - Andrew Fang • Colin Lord • Stephen Sanborn

Public art creates a legible gateway into Forest Park. Cliftwood Street is proposed to become a one-way street with a bicycling lane and a parking lane. The redesigned edge of the Park attracts new investment for market-rate housing as infill development and renovation of existing housing stock.

The edge of the forest can be used for a mix of spontaneous and planned public art. Undulating landform creates a distinct edge to screen out the existing residential buildings.

Entrance situation at the corner of Dickinson Street and Cliftwood Street.
Making the ‘X’ the Heart of Forest Park - Tricia O’Grady-Howard • Jennifer Verville

Forest Park’s six-way intersection is transformed into the heart of the neighborhood. It becomes a vibrant destination with great restaurants and food diversity that will entice people to stop as they pass through. The diversity of the restaurants reflects the diversity of the neighborhood’s cultures. The “X” has a lot of amenities to offer for both residents and visitors, alongside the variety of restaurants. There is shopping, a variety of small businesses, self-defense and dance classes, health centers, and the Bing Arts Center which showcases local art, theater, and community events. To highlight all these amenities, and in particular the restaurants which would be a major draw for commuters on their way home from work, a sign system the so-called “ICON-NECT” is created.

ICON-NECT is a system of signs on lamp posts along the three major traffic arteries which lead in and out of the “X” in order to direct attention to the neighborhoods amenities. This system addresses one of the many concerns the community members had expressed at the community meeting on September 17, 2013. They want passing daily commuters stop and interact with local businesses. This system would not only attract the attention of vehicles, but pedestrians and bicyclists as well.

Other concerns are addressed in this proposed design is a traffic re-route, additions and improvements of crosswalks and traffic lights, connections to Forest Park, creation of a walk-able and bike-able center through the use of complete street model. A complete street is allowing for vehicular traffic to coexist with bicycle lane, followed by a tree or planting strip between that to create a safe pedestrian walk-way. Our design objectives are: Promote pedestrian walkability and bikeability through out the neighborhood; safety and traffic control; central gathering spaces; highlight food diversity; structural signage to alert to local amenities.

An innovative ICON-NECT SYSTEM is proposed on major traffic routes to direct attention to neighborhood amenities. This system is attached to the lamp posts marked in red.
A Gateway Park on the elbow of Cliftwood Street is proposed to create a solid connection from the “X” to Forest Park. This Gateway park, it is proposed to Place a small park here will benefit the neighborhoods health and culture. With a large seating space and benches along the lower path, it will allow for a place to stop after shopping, a place to meet and gather with people, and also will on-site water infiltration. A wide, trellis-covered pathway along the lower end of the park facilitates the movements of both pedestrians and bicyclists on and off of the boardwalk into Forest Park. The main gateways into Forest Park are marked by distinctive domed pergolas at the end of Clifton and Lenox Street. The Senior Housing Community will have their own personal gateway through the fence separating their property from the proposed gateway park.

Making the ‘X’ the Heart of Forest Park - Tricia O’Grady-Howard • Jennifer Verville

Section across Sumner Avenue along Parkwood Street facing east. Sumner Avenue is designed as a complete, pedestrian- and bicycle-friendly street.

Gateway pergolas create legible entrance situations on the cul-de-sac streets from Sumner Avenue.
Making the ‘X’ the Heart of Forest Park - Tricia O’Grady-Howard • Jennifer Verville

With the proposed re-route of Belmont Avenue, public open space was created in the heart of the “X”. This plaza “Belmont Plaza” has a proposed restaurant, ten-foot wide walkways, and circular nodal spaces that are ideal for strolling, gathering, and relaxing and are complimentary to the local surrounding businesses. Three-foot high turf berms with bluestone seating walls are a proposed design typology for Belmont Plaza and other new plazas. They create a place to sit and enjoy the afternoon while having a bite to eat from a local restaurant.

View from Belmont Plaza facing east: Belmont Plaza references Forest Park with extensive tree plantings. It is an urban forest right in the heart of the “X”. The blooming rain gardens along the sidewalks add color and texture that is visible from the street. INCON-NECT informs drivers about parking and dining opportunities.

Inviting view of Belmont Plaza from Sumner Avenue. The hard architectural lines of the buildings are softened by the canopy of the high-pruned trees while still remaining visible from the street. Grass berms add vertical color and soft texture to an area that is dominated by hardscapes.

A new restaurant adds vibrancy and life to the ‘X’ center as well as an additional point of destination.
Views from Belmont Plaza facing East: The new plaza and restaurant areas offer ample lighting providing access and safety into the night making the "X" a more walkable and vivid community.

Section of continuous views from Belmont Avenue and Belmont Plaza looking north. The existing restaurants and businesses are landmarks that blend with the new plaza and provide a sense of place to this area. Additional street trees and lighting define the sidewalk from the vehicular traffic on Belmont Avenue.

Three-foot high berms with seating areas add a place for pedestrians to stop and rest along the way. Rain gardens throughout the plaza and roadside add infiltration of surface water and perennial garden views. The pathways through the plaza create access from Sumner Avenue to existing businesses and parking.
Radiating Movement through the Forest Park Neighborhood creates a center with adequate green space to allow pedestrians and other travelers to come to rest. With strong edges that create distinct definition to space, visitors can move easily through the center and to their destinations. The greenway creates a corridor with native species that connects the recreational green space of the park to the captivating heart of the Forest Park Neighborhood. By taking the characteristics that make Forest Park unique and bringing them all together, this design unifies the ‘X’.

Aerial perspective of the main urban plaza. On-street parking and a bus stop provide easy access.

Proposed master plan for the ‘X’ at Forest Park. Urban plazas encourage pedestrians to stop. A system of bioswales lead them towards the greenway at the edge of Forest Park.

Section facing east cutting across Sumner St. and into the main urban plaza.
Section cutting lengthwise through the plaza facing north. Benches define spaces and allow visitors to stop and enjoy the center.

Sal’s Cafe with an additional second floor. Other local businesses add mixed use. Vegetated swales capture street runoff.
Section looking northeast into the entrance of the park on Sumner Avenue. It is proposed to increase the number of multi-story buildings to increase density and give the place a more urban feeling. Rooftop gardens reduce heat island effects and create a new image of ecological transformation in the neighborhood.

Looking east along the greenway of Forest Park. It is possible to engage the park on different levels. The terraced, parallel pathways at different heights respond to the unique, steep topography at the edge of the park.

Visitors are welcomed to the greenway with a trail map. A wooden viewing platform allows for prospective views into Forest Park and the ravine. A series of smaller gathering nodes at the edge of Forest Park are proposed where the smaller roads from Sumner Avenue intersect with the greenway.
The “X” - A Destination and Place to Live - Bryan Anderson • Samuel Brown • Richard Disharoon

Goals, objectives, and program elements to reshape the neighborhood around the “X”

Summer Avenue and major arteries:
• Create safer and more walkable streets.
• Improve pedestrian comfort by planting trees along sidewalks.
• Create complete streets that allow for convenient and comfortable travel for all modes of transportation (walking, driving, bike riding).
• Increase lighting, crosswalks, and adding traffic signals where necessary.

The “X”:
• Change the “X” into a destination rather than a cut-through.
• Create traffic patterns to allow for a more pedestrian-friendly neighborhood center.
• Design gathering spaces in the heart of the X that are enjoyable and that complement local businesses.

Forest Park:
• Create a strong connection to nearby Forest Park
• Design pedestrian-friendly corridors to and within the Park.
• Increase awareness of residents and visitors of their proximity to the Park.
• Make Cliftwood Street safer for increased pedestrian activity to and from the park with raised crosswalks and reduced vehicular activity.

Section along Summer Street facing the new neighborhood square at the “X”.

Master Plan: Proposed infill development in dark grey.

Parking pocket behind Sal’s Bakery with porous paving and trees in infiltration planters.
At the intersection of Sumner Avenue and Belmont Avenue buildings have windows that face the street. There are opportunities to add a second or third storey to enhance the sense of street edge and create higher densities on the footprint of existing buildings.
Master Plan for new market-rate housing as infill at the edge of Forest Park.

Cliftwood Street will be designed as a pedestrian-friendly street. Section facing Sumner Avenue.

Section across Cliftwood Street and the proposed residential buildings at Cliftwood Court.
Diversity for Culture and Commerce from the “X” to the Bing - Joe Agrillo • Chuck Richard • Julia Sim

The team goal for the Forest Park neighborhood is to create a diverse cultural core that is a vibrant and unique area for pedestrians, residents, and commuters to participate in local culture. To accomplish this we divided the “X” area into three zones; the neighborhood core, cultural core, and commercial core. In the neighborhood core improving traffic and pedestrian conditions were paramount. In order to create a friendlier place for pedestrians and clarify the “X” for vehicles we rerouted Belmont Avenue onto Sumner Avenue and away from the “X” intersection. Belmont Avenue now intersects with Sumner Avenue a couple hundred feet on either side of the “X” intersection. This change allows for the existing portion of Belmont Avenue between the “X” and the new access roads to Sumner Avenue to be converted to pedestrian spaces. Pushing Belmont away from the “X” creates one large, but traditional four way intersection with two subordinate three way T-intersections on either side. The existing “X” intersection is a confusing three-way intersection. For example all lights turn red for only one pedestrian walk signal. The proposed changes would allow for two additional pedestrian walk signals on Sumner Avenue and additional lights for vehicular traffic that may allow for additional traffic control. Possible are scenarios for simultaneous “green” phases for pedestrians and vehicles at different places. The high volume of vehicular traffic would be able to flow continuously without pedestrian interruption. The addition of the two subordinate lights would provide two addition safe pedestrian crossings points at the “X” intersection. The diagram above shows incoming traffic to the “X” is shown with blue lines, and outgoing traffic lanes are shown in red.

This focus area, located at the “X”, works to develop a place for people and business by creating a small sustainable urban type plaza. The design is based on a series of bands running perpendicular to Sumner Ave, doing so to allow views and moment into the space. These bands pull the green infrastructure of Forest Park into the “X”, in an urban way. Developing an urban fabric and rhythm in the design, this proposal works with the existing business structure, and helps to activate the area. The addition of three new buildings will also help with business activation by bringing more diversity in local business culture. This design can be thought of as a extended front porch for the businesses and street life. There are three different plays of the bands that add interest and functionality within the space. The bands make seating walls, and wood capped benches, flat areas to mimic a green ground plane and allow infiltration, and detention basins to collect and store rainwater in an attractive way. This variation creates a diversity of spaces working with the layout of the banding and cutouts created to make more intimate gathering spaces. The overall design creates a place to interact with the street and businesses with the ability to allow directed views and movement in and out.

A major part of the proposal is to move Belmont Avenue, thus creating a open space at the “X”, which is deemed as a pedestrian zone and business area. By moving Belmont Avenue to Sumner Avenue at points before and after the “X”, the intersection changes from a congested three-street to a free flowing two-street intersection.

The addition of street tree plantings, designated parking, and changes in pavement will work to make the “X” a safer place for people. These visual changes will alert drivers that this is a place for people.
Section along Sumner Avenue facing north. In the foreground planting beds that facilitates stormwater infiltration. In the background a mix of existing businesses such as Sal’s bakery and proposed new venues for retail and restaurants.

The scheme also allows for adding office and residential uses on the upper floors - some of them added on existing one-storey buildings that overlook the newly created urban plaza.

Section crossing the new urban plaza facing west. In the background Sumner Avenue with a central median and additional bicycling lanes on either side. In the center a proposed building that defines the new plaza to the west and offers opportunities for outdoor eating and small retail.

To the right a pedestrian corridor on former Belmont Avenue. This is also serving as emergency, and temporary loading lane during off-business hours.
Diversity for Culture and Commerce from the “X” to the Bing - Joe Agrillo • Chuck Richard • Julia Sim

This focus area is between the “X” intersection and Ormond Street. With Belmont Avenue rerouted to Sumner Avenue via Ormond Street there are many possibilities to redesign southern Belmont Avenue. It is proposed to create a one-way parking road leading away from the “X” with an adjacent bioretention stormwater management system. The stormwater management system (displayed below) is a series of connected planters that intercept stormwater from the CVS parking lot and create a linear path along the previous northwest bound lane of Belmont Avenue. A four-feet wide subsurface channel connects each planter with a pervious grate that runs through an alley of red maple and black tupelo.

The planters have gaps where pedestrians can pass-by and access the other side of the narrow parking street. These gaps are wide enough for street vendors; there are enough spaces to hold a market. Proposed landscape lights in the planters illuminate the tree trunks and underside of the canopy creating an interesting and safe path for pedestrians at night. The existing auto parts store has been converted to a brew pub with outdoor dining. An extension of the planter system extends north to Sumner Avenue and encloses the outdoor dining space. To the southwest a connection has been made to Forest Park. The existing buildings on the southern block have been connected and extended to the sidewalk edge in order to create pedestrian friendly environment and comply with the overlay zoning district at the “X” intersection.

Spatial concept of the southern portion of Belmont Avenue. Only one-way traffic is allowed from Sumner Avenue. Pedestrian connectivity is enhanced from Sumner to Dickinson Street

Grading and Drainage: Belmont Avenue is planned to become a pedestrian- and bicycle-friendly green artery with dense tree planting and infiltration.

The new street condition along the one way portion of Belmont Avenue. The connected rainwater collection planters run the length of the one way. The X is on the left and the section moves towards CVS.
Section across Dickinson Avenue: The condition of each avenue is different. Dickinson remains a two-way street with one lane in each direction.

Diversity for Culture and Commerce from the “X” to the Bing - Joe Agrillo • Chuck Richard • Julia Sim

Detail section through rainwater collection planter. This section shows the outdoor seating outside the brew pub between Belmont Ave on the left and Sumner Ave on the right. Connected rainwater collection planters intercept stormwater runoff and infiltrate it into the ground. This system of planters will allow for the trees to thrive and create a forested urban environment.

Belmont Avenue Cafe Belmont Street

Section across Dickinson Avenue: The condition of each avenue is different. Dickinson remains a two-way street with one lane in each direction.

Brew Pub Summer Avenue East Summer Avenue West Subway

Belmont becomes a one-lane street leading south. Sumner Ave remains a two-way street with two lanes in each direction. The lanes are narrowed to accommodate a terrace that divides east and west bound traffic.
Diversity for Culture and Commerce from the “X” to the Bing - Joe Agrillo • Chuck Richard • Julia Sim

This focus area was built around the Creative Core. The area surrounding the Bing has been shaped into an artistic center for the Forest Park neighborhood. The block previously used for a few small businesses including a laundry mat, a gas station, and a plumbing supply store, has been transformed into a piece of Art itself. Before the site was devoid of walkways and gathering spaces makes it a place unlikely to visit by residents unless headed to the “Bing”. Having been deprived of pedestrian use the main focus is to bring people in.

The “Bing” a vital part of the Art Core. Creating axis’ both along the alley and through the building, the idea is to pull people into the space from afar. These axis’ incorporates both the interior and the exterior of the building, creating an all encompassing design which allow for seamless integration throughout. A large outdoor gathering space is central to the design. It is surrounded by built planes which are pulled up from the ground creating surfaces to gather or just view as sculpture.

Surrounding this block there have been improvements on street scape unification within the Art core and Forest Park neighborhood, including bioretention along sidewalks, terraces in the streets, and all over tree planting. As well as additions to on-street parking.

The end result is an area where people can visit for the purpose of dining, seeing a show, visiting a gallery or to relax outdoors. It will be easily accessible for pedestrians, and drivers, and will become an active core within the neighborhood.

Night perspective facing east. An axis of sculptural lights are flowing into the “BING”.

Looking West, this section shows the new restaurant on the left and to the right the planes in relationship to the Lights.
Section facing north: The Bing is integrated with an existing alley. Sculptural lights define the main axis.

Alley to the east of the BING. Planes create a sculptural landscape of earth works. A surface water feature collects stormwater and turns ecology into a piece of art.

Diversity for Culture and Commerce from the “X” to the Bing - Joe Agrillo • Chuck Richard • Julia Sim
The primary goal for this design was to create a pedestrian friendly environment while sparking commercial growth throughout the community. We carried this out by forming spaces conducive to high commercial activity within pedestrian influenced regions as well as constructing a system of green spaces within the area. This system of spaces begins within Forest Park and radiates out through the center of our site and resolves at The Bing Arts Center. These spaces possess a general function to serve as gathering areas for residents and visitors to the neighborhood while supporting local businesses by catering to their needs, for example, seating in spaces juxtaposed to eateries. The spaces also provide a very important connection to the Farmer’s Market in the North East section of Forest Park. Modifications to architecture, both commercial and residential, have helped us shape interior space and strengthen the edge along the street. Various changes to the pedestrian sidewalk have allowed for bike paths and amenities such as seating walls and raised planters. In conclusion we created a linked series of spaces that tie together Forest Park and the neighborhood while implementing green infrastructure to enhance the pedestrian experience and promote commercial activity.

The goal of this focus area is to give a strong interior quality to the existing and proposed commercial buildings located within Cliftwood, Sumner, and Dickinson while at the same time providing an inviting pedestrian corridor to the proposed entrance of Forest Park. In order to achieve the interior quality that is desired I have added both office space and residential space to strengthen the street edge. A series of green spaces will be implemented within the focus area to create a reoccurring theme as well as provide open space for pedestrians. Roof gardens will also be implemented on two of the proposed buildings. These are not only sustainable but they provide outdoor gathering space for those who use the office space or live in the apartment buildings.

The new entrance to Forest Park will provide access for pedestrians and bicyclists who want to easily travel to the farmer’s market or the North Eastern part of the park. This pedestrian circulation that leads into the park includes a forested walk with wide paths and vegetative edges. In order to draw people into the park the sidewalk on Cliftwood Street has been widened allowing for seating walls, planters, and more pedestrians. This entrance to Forest Park is significant in our design because it is the first of several green spaces located across our site.
This area focuses on the large parking area adjacent to the CVS store and the TD bank. This area is a hinge piece to transition from the Bing to the Park. Through this proposal the neighborhood is integrated with the park through a forest-inspired planting scheme very close to the "X". This creates a network of spaces that create a friendly experience for pedestrians and promote commercial activity. The planted area also collects runoff from the adjacent parking spaces and the streets. In conclusion this planted oasis creates an attractive public space within the street blocks that links Forest Park with the whole neighborhood.

Focus area close to the "X" with existing land uses, public infrastructure, and traffic patterns.

Section from TD Bank on Sumner facing north. Entry situation coming from Sumner Avenue.
Section from TD Bank on Sumner facing east.

Section across Belmont Avenue facing west.
This focus area, located at the intersection of Sumner Ave and White Street, is designed to create a unique and iconic space to cater to the needs of the Bing Arts Center and the people of Springfield. With the Bing Arts Center as a landmark on the rise in the Forest Park Neighborhood, there is a need to open up the constricted space it occupies and allow the center to be visible to all those who pass by. Based on the fundamentals of a rectilinear grid, this design incorporates landform, walls, and vegetation, to produce a welcoming, functional, and artistic space.

The first step of this process was to eliminate the adjacent Sunoco Gas station that obstructs street views of the Bing. Doing so allows for a large urban space to act as a supporting area to the Bing Arts Center. In this space people can come to rest as well as gather in large number for such things as exhibition events.

Section facing west: The space between the Bing Arts Center and the new Cafe/Exhibition Center has been reconstructed to create an interactive corridor exhibition filled with outdoor exhibition walls of varying sizes. This space leads people into the main gathering core as well as providing a beautiful view for those inside the cafe.

The plumbing and heating store that previously occupied the northeastern part of the site is transformed into a cafe and additional Exhibition Center. The cafe will attract locals who may not typically visit the Arts Center while the Exhibition Center will provide an artistic support to the Cafe as well as additional floor and wall space for the Bing Arts Center.
Large earthen landform defines a gathering space in the entrance area of the new Bing Cafe and Exhibition Center. This statement of art provides an eye-grabbing feature to the site as well as functioning as a large gathering core for outdoor events held at the Bing.
Healthy Living and Working Around the “X” - Ted Chesbro • Henry Puza • Da Hee

This proposal seeks to focus on three aspects: Promoting healthy living through designing a bicycle and pedestrian-friendly community and establishing diverse opportunities to buy and grow food in a redesigned retail and commercial center; enhance urban ecology through green infrastructure in the form of an extensive stormwater infiltration network and green architectural walls; and creating new job opportunities in the commercial retail sector. From our site visits and community meetings we began to understand and study the context of the Forest Park neighborhood and selected three focus areas. The first one is the entrance to Forest Park; today it is an auto-oriented entrance and not suitable for pedestrians and bicyclists. The second area is located on the southern edge of the “X”; today this area is dominated by impervious parking areas and pedestrian crossings that are dangerous and uninviting. The third area is located at the intersection of Belmont Avenue and Oakland Street. This area has great opportunities for offering a more diverse palette of food-related retail; this area also has various possibilities for infill development to create a new commercial center in the neighborhood. The proposed development creates new local job opportunities.

Redesigning the Gateway to Forest Park - Da Hee Lee

The entrance to Forest Park becomes a legible gateway that promotes easy and safe access to the park for pedestrians and bicyclists. People can drop off their automobile at the “Car and Bike” share station and take the city-owned bicycles for a recreational ride in the neighborhood. The design is also centered around the existing historical building - we propose creating a visitor’s center that informs about the past of Forest Park while including new ideas such as green infrastructure and healthy food. An prominent example of green infrastructure is applied on Sumner Avenue - a street median terrace is added to calm traffic, provide stormwater infiltration opportunities, and beautify the character of a neglected streetscape.

Area plan of the three focus areas.

The new gateway to Forest Park promotes walking and bicycling, capitalizes on existing historic architecture and introduces green infrastructure as a system for a healthy environment.

Section facing east across Sumner Avenue and the new gateway to Forest Park.
Healthy Living and Working Around the “X” - Ted Chesbro • Henry Puza • Da Hee

The “X” is the main commercial area of the neighborhood. This design proposes new infill development along the edges of the major street arteries to provide more distinction and density. The example merges a couple of smaller commercial buildings into one large building. The new buildings offer a more diverse palette of services and commercial opportunities to attract residents and visitors alike. Green facades become a new trademark in the neighborhood that merges ecology and aesthetics. The existing large parking lots are reorganized. The improved layout provides the same number of lots while allowing for ample tree plantings at the edges, stormwater infiltration opportunities and screening for the adjacent residencies. The street crossing at Sumner Avenue/Belmont Avenue is improved through a series of sculptural planted gabion walls to provide more safety for pedestrians.

Redesigned parking lot between Cliftwood and Lenox Street. Linear green walls between Belmont and Sumner Avenue facilitate pedestrian movement across streets.

Street perspective of Lenox Street facing Forest Park. Windowless facades of commercial buildings are transformed with green, living walls.

Section facing west. Green gabion walls facilitate pedestrian movement and provide a sense of shelter from the busy streets.

Section through parking lot between Lenox Street and Cliftwood Street facing west. Gabion walls are used as design element to facilitate pedestrian movement. Swales capture stormwater from the parking lot.

Section through parking lot facing north. The swales capture stormwater while ample tree plantings provide screening for the adjacent residencies and cool down temperatures during hot days.
At the intersection of Belmont Avenue and Oakland Street it is proposed to create a more diverse area for daily retail and small local businesses. Infill development adds to the existing footprint. A organized loop for parking is screened by buildings and open enough for easily navigating the area and separating the pedestrian from the vehicle. An urban tree nursery creates new job opportunities. It also creates a location for local food vendors.

The proposed nursery and fruit market creates new job opportunities in the area; furthermore possibilities to buy locally grown food are reinforced.

The nursery integrates spaces for local food vendors.

The nursery creates a temporary orchard.

Proposed nursery and fruit market.

Healthy Living and Working Around the “X” - Ted Chesbro • Henry Puza • Da Hee
The first focus area creates a new entrance to Forest Park on Sumner Avenue. There are no major constrictions bordering the street, such as commercial or residential buildings. Therefore it is possible to widen the road and introduce a bike lane and a street terrace with infiltration, as well as parallel on-street parking one the edge of the park. The parallel parking not only allows for easy access to the park, it sparks interest in passing traffic and signifies that there is an attraction in this area.

The current border of Forest Park is currently not well defined as an urban park - the edge is vegetated with non-transparent understory. In order to make the park a more recognizable attraction the edge is transformed into a more accessible and area. Gaining inspiration from the Champs Elysee in Paris, three paths along the edge of the path were created. Along with orchard like tree plantings, the paths create a grand border to the park. Storm water from Sumner Ave is infiltrated in a series of rain gardens along the paths and creates a pleasurable experience to the pedestrians. The design makes Forest Park a more desirable and accessible feature in the neighborhood for people to take advantage of all that it has to offer.

Area plan of the three focus areas.

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The storm water planters create an interactive experience for visitors of the park. Multiple rows of trees create a unique place for walking along the edge of a representative urban park.
The connection of the Forest Park into the area around the "X" is the main idea for this focus area. In order to make the park more accessible and legible to people in the area, many pedestrian only entrances were created, including ones at the end of Continental St., Parkwood St., and Cliftwood St.. These entrances all connect to the major bike path that circulates throughout the park. The primary focus for these streets was to improve their quality by introducing green infrastructure. The design calls for many trees lining the streets as well as infiltration basins to treat storm water runoff. These improvements will help make a green connection into the park.

Another main aspect of the design was to create a plaza/café area at the beginning of Parkwood St.. This area is intended to be a gathering area for people before entering the park or a resting area for people walking through the "X". In order to bring people here, we propose to move the bus stop close to the new plaza. This creates a more hospitable area for people waiting for the bus and people getting off the bus. A pergola over the bus stop creates a roof and well-needed shade during the hot summer months. Inside the plaza there are seating areas that are designed around the treatment of storm water. Water runoff from the building next to the plaza is collected by rain chains and lead into a series of runnels. These runnels lead into main rain gardens that are used as seating walls. These seating walls create individual places for people to gather. Trees in the plaza are located in the runnels and help treat the storm water.

Through gathering areas and green streets, the "X" is connected to the park, one of the best assets to the community. These areas and connections improve the quality and character of the neighborhood.

**Sumner Avenue: The Green Artery of the Neighborhood - Nic Brown • Pat Corey • Jay French**

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Through gathering areas and green streets, the "X" is connected to the park, one of the best assets to the community. These areas and connections improve the quality and character of the neighborhood.
This focus area, located at the "X" is designed to create green spaces for people’s to interaction with the "X". The area is in strong need for an improved pedestrian circulation system. Bike lanes are added on all major streets to connect the "X" to Forest Park. Additional open air dining areas around the "X" are proposed in a short, 130 feet long section of Belmont Avenue that we propose to close down for vehicular traffic. New trees and pervious surfaces reduce heat-island effects. Bioswales are proposed along each major street to allow for adequate infiltration.

The partial closing of Belmont Avenue allows space for another outdoor dining area. This encourages more visible outdoor activities around the "X". New places to eat are proposed to provide more choice for residents and guests. Bioswales are proposed to collect rainwater from the streets.
This proposal focuses on the eastern part of Sumner Avenue - from the Bing Arts Center to the intersection of Sumner Avenue with the abandoned Highland Division Rail Line. The main goal is to create a green network with a distinct character that connects the natural and cultural assets as well as the community of the Forest Park neighborhood. Therefore it is proposed to create a small park as an inviting, luscious and picturesque gateway to the future rail trail. This park will also house an outdoor performance space. The trail will connect to Longmeadow in the south and to the Arc of Recreation in the north. The green network will be complemented through design interventions including the use of terraces, street plantings, and general spatial improvements. An outdoor gallery space adjacent to the Bing Art Center will create a prelude for a series of smaller outdoor spaces. The Bing Arts Center is an important cultural asset. With this block it is proposed to add a mix of cultural and commercial venues to strengthen the character of Sumner Avenue, and enhance the quality of its experience.

Thus it is the goal of this design proposal to enhance the character of Forest Park by providing connections between cultural and natural assets while promoting green infrastructure such as increasing storm water infiltration sites. Furthermore it is important to improve the pedestrian connectivity and aesthetic experience while integrating new cultural assets. This design creates an open space system that connects natural and cultural assets; it reuses the rail trail for multi-use purposes and green connections within and beyond the neighborhood; it adds bike lanes that are possibly separated from pedestrian traffic; it narrows roads to slow down traffic speed; and it fosters a mix of land uses and outdoor performance and exhibition spaces.
The Bing Arts Center is a great cultural asset, not only for the neighborhood of Forest Park, but for the entire city of Springfield. Currently its neighbors are a mix of residential houses, and small businesses such as a plumbing supply. This proposal creates a mix of cultural/commercial hub in the area. Therefore it is proposed to convert the two residential units to the west of the Bing, and the two residential units directly across the street to the south to small businesses. In a long-term perspective it would be ideal to concentrate more culturally oriented uses around the Bing. Examples are a yoga studio, an upscale restaurant with rooftop dining, a music store, an arts and photography store, a spa, and a dance studio.

Some existing businesses around the Bing are already contributing to the cultural richness of the area such as local restaurants, and a pizza shop, as well as Blue Moon Coffee Roasters. Extra parking to accommodate shoppers and guests for the shows is proposed on the small property west of the Bing, as on-street parallel parking on Sumner Avenue, and on-street diagonal parking on Buckler Street. A conversion of Buckler Street into a one-way facilitates traffic for events. Furthermore, two outdoor gallery spaces, one between the Bing Arts Center and the proposed restaurant, the other one in the pedestrian corridor from Buckler Street create new possibilities to display art. Cultural activities will reach out to the public and permeate into the community.

Section facing east from Buckler Street to Sumner Avenue. This new pedestrian connection is designed as an open space art gallery. The art work is displayed with possibilities for illumination at night.

The sidewalk and the bike lanes on either side of Sumner Avenue will be illuminated at night to provide more safety.
A linear park is proposed on the abandoned rail line. This will enhance the character of Forest Park and preserve open space. Other benefits of utilizing this abandoned space are economical, cultural, and public health. It will accommodate a wide range of outdoor uses for active and passive recreation. It also fulfills ecological functions as the permeable surfaces allow for water infiltration. The next destination to the north is Watershops Pond; to the south it connects to Heritage Park in East Longmeadow. Where Sumner Avenue intersects with the railroad, a southern and a northern gateway to the trail are proposed. With respect to the historical heritage of the Forest Park Neighborhood, the tracks are still visible in the design, while allowing the use of a bike path with a parallel pedestrian walkway. Heading north the bike path splits as you hear towards a beautiful 150 foot open space encompassed by large Oaks and canopy trees. A path on the east connects to a large pergola that is constructed from the steel of the railroad tracks. Adjacent to the path under the pergola are places to rest and enjoy the view of the open space while having a sense of refuge underneath the structure. Smaller sitting areas are surrounded by groves of Magnolias.

The trail accommodates pedestrians and bicyclists. On either side of the trail is a wide infiltration swale to collect runoff from adjacent properties and streets. The trail is surfaced with permeable asphalt.
Section facing north. The abandoned Highland Division Rail Line will be transformed into a trail connecting to the Arc of Recreation in the north and Longmeadow in the South.

Section through Sumner Avenue.

Section facing north. The abandoned Highland Division Rail Line will be transformed into a trail connecting to the Arc of Recreation in the north and Longmeadow in the South.
Stormwater Infiltration as an Artistic Intervention on Urban Streets - Alexander Jardin

Belmont Avenue in Springfield, Massachusetts was described as being the worst street in the Forest Park Neighborhood. The lower number houses to the west of the “X” have a far inferior quality compared to the houses on the eastern side; the commercial “X” district separates the two. During site visits Lower Belmont street (the western side) was littered with trash, smelled of sewage, and had virtually no sidewalk space. On the positive side most of the backyards had large trees that in certain spots canopied the streets. As the street curved and sloped down away from the neighborhood, west, the trees and the long 5% slope provided for an experience like no other in the city.

Belmont Avenue is located just north of Sumner Avenue, the street which provides access to the main entrance of Forest Park. Oddly enough the existence of Forest Park is not always apparent to people travelling around the neighborhood. Even driving past it, you may miss it. How do you make it apparent that this gem exists and reflect its character throughout the neighborhood it shares a name with?

While maintaining lower Belmont Avenue as a focus area, a design was conceived to not only make physical and visual connections to the city, but also to aid in water infiltration, in an almost entirely impervious environment, secondly collect trash preventing it from being spread over a larger area, making it easier to pick up and dispose, and thirdly provide for a more interesting and engaging sidewalk/street experience. Conceptually the forest is pulled from the park out into the streets, setting the conditions for vegetation and the cities urban elements to form a symbiotic relationship beneficial to the community as a whole. To achieve both the physical and visual connections/goals a relatively simple stormwater planter was designed and a brief program for its appropriate implementation was developed.

Stormwater Infiltration as an Artistic Intervention on Urban Streets - Alexander Jardin

The most western part of Belmont Avenue (lower Belmont) starts off with a lengthy incline before it flattens out and then transitions into a less residential and more commercial district. The hill on Belmont Avenue is unique for the Forest Park neighborhood which is relatively flat.

Concept. The large white void at the bottom of the picture is Forest Park. The green slowly grows out from the Park encompassing the whole neighborhood, just like moss growing on brick or pavement.

Green moss and algae spread on red brick.
To infiltrate water, collect trash, widen pedestrian pathways and provide for an interesting walk as well as connections to other green spaces, a series of stormwater planters was designed. On Belmont Avenue a swale would be placed every 40 feet on either side of the street. Each planter is planted with two trees in a gravel filled bed roughly 20 feet in length and 7 feet in width. The paving adjacent to each planter is constructed of permeable pavers and the planter extends under the sidewalk allowing for more root space. The gravel is retained by a steel grate which shape was inspired by the image of bark retaining the rings of a tree as you would see it on a sectioned log. Seriality and spacing of the planters are illustrated above. Black dashed lines represent 1’-0” contours and blue represents the flow of water.
Exemplary Transcripts of Public Voices

Letter 1
"I suggest that a future presentation spend a little time identifying the “problems” with objective evidence of the safety issues for pedestrian and vehicular accidents, congestion, and crime with some stats and traffic counts. Similarly, if there is potential to objectively describe the impacts as improved after the fix, and to anticipate some of the questions along those lines with some preparation for answers, that would be a good addition. In addition, some mention of the process required for implementing a plan. Specifically, the need for any zone changes, creation of urban renewal areas, land acquisition, financing, construction sequencing with a proposed timeline. I think many people need to hear how they can obtain information about proposed developments, and explained how they can/ will be involved in an open and transparent process.

As to the merits of the proposal, I would suggest showing a redesign with a widening of Ormond Street, and the addition of a component on the plans showing new housing units, to identify a space for relocation of the people who may be displaced by the taking of the six homes on that side of the street. Similarly, I would suggest showing how the Cumberland Farms could be relocated, and an explanation of the legal obligations for relocation when eminent domain is used.

As to the park, there is a need to address the security concerns as to the elderly housing complex, while still providing for improving park access. Perhaps relocating the fence 10 feet or so back, leaving space for a bike path. In addition, I would suggest obtaining and adding a map of forest park to the plans showing the paths/trails that would be linked in to the access points, thereby showing a more concrete representation of the amenities that are being connected (ponds, hiking trails, the pool, skating rink, tennis courts, green house- new botanical house is planned- dinosaur tracks, ball fields, playgrounds, picnic area, rose garden, stables, aquatic gardens, zoo, etc.).

May also want to include some mention of how the special reconfigurations provide opportunities for cultural/civic events (taste of the X, perhaps building on the variety of diverse cuisines - Italian, Jewish, Russian, Vietnamese, Jamaican, Hispanic). May want to consider some form of marketing/survey as to types of businesses that people want to see at the X (more restaurants? Shoe store? Book store? Clothing store? Hardware?)

…..I have thought a lot about “fixing” the issues and appreciate the opportunity to participate in a process to exchange information and ideas. Please let your students know how much I appreciated all of their efforts. I hope to get the chance to work with you in the future. Thanks again for all your efforts."

Letter 2
"...and I am grateful for your presentation both at UMASS and at the Bing. We want to make it clear that we are behind you 100% on your efforts to initiate change at the X. It is important that your students work product not be hidden away but be used as a tool to start a serious discussion on how to transform the X into the hub of Springfield’s finest restaurants welcoming everyone from miles around. The X needs change now. UMASS should be proud of the work your group has done with this project. Everyone was impressive. Please let us know how we can assist you and the students with this project as it is in our interest as area business and property owners to bring your project to the attention of others who are similarly situated."
References and Literature:

Previous studio work:

“Reconnecting People to Springfield’s Riverfront: from the South End to Forest Park”. UMASS Amherst Design Center, Urban Design Studio Fall 2011, LA 497 A

“Creating Livable Neighborhoods in Old Hill and Six Corners”. Spring 2011, Graduate Urban Design Studio, LA 604

“Springfield’s Upper Lyman Warehouse District Visions for Revitalization”. UMASS Amherst Design Center, Fall 2010, Senior Urban Design Studio, LA 497 A

“From the Quadrangle to the River”. Spring 2010, Graduate Urban Design Studio, LA 604A

“Making Connections – Envisioning Springfield’s North End”. Fall 2009, Senior Urban Design Studio, LA 497 A


“Designing The ARC OF RECREATION – The Railroad Corridor from Armory Street to State Street”. UMass, Fall 2008, Senior Urban Design Studio, LA 497 A

“Designing the Crossroads of Mason Square – Railroad Corridor meets State Street Corridor”. UMass, Spring 2008, Graduate Urban Design Studio, LA 604

Other Sources


Gehl, Jan, “Cities for People”, Island Press, 2010


Krier, Rob, Urban Space Rizzoli, New York, 1979

Larice, Michael, and Elizabeth McDonald, The Urban Design Reader, New York, Routledge, 2007


Rubenstein, Harvey, “Pedestrian Malls, Streetscapes and Urban Spaces”, Wiley, 1992


