leveraging the arena
transforming downtown with development and public spaces

urban design community redevelopment studio
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university of wisconsin-milwaukee | school of architecture and urban planning
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Synopsis

WESTOWN COMMONS I Sean Mroczkowski 05
LIVE BLOCK ON 4TH I Keith Grabanski 08
AQUAURBAN I Michael Baster 14
HIGHLAND HILL I Wei Pan 20
LIGHTING THE DISTRICT I Emily Newton 26
DEVELOPING DENSITY I Devon Pohlan 32
RENEW PERE MARQUETTE I Katelyn Menuge 38
BRIDGEVIEW HEIGHTS I Nicholas Bruckner 42
MAKING CONNECTIONS I Mariana Guerreiro 46
HIGHLIGHTING HIGHLAND I Jassim Falihno 50
PLAY, LIVE, WORK I Steven Husby 56
CITY LIGHT BOARDWALK I Benjamin Vorblab 60
LINKING HIGHLAND I Matthew TeBeest 64
HIGHLIGHTING HIGHLAND I Jassim Falihno 68
TURNER PLAZA I Andrew Carlson 72
Acknowledgements 74
Synopsis  
How do we redevelop the city for the next generation? Vibrant public spaces, efficient buildings, alternative transportation, and mixed-use neighborhoods. The Urban Design, Community Redevelopment studio explored how to leverage the arena investment, create value for downtown, and transform the entertainment district.

Solutions envision great places to live, play, and work for all ages. Residential choices provide opportunities for people to live west of the river and activate the neighborhood 24/7. Entertainment venues, cafes, and restaurants attract residents, employees, and visitors. Offices allow residents to walk to work, as well as bring people to the area. Great public spaces create memorable images, engage people, embrace our culture, and develop the iconic downtown Milwaukee deserves. The future is about more than sports, it is about utilizing a mix of uses, architecture, and landscape to transform an area with blank walls and parking lots, into a vibrant, walkable district.

Carolyn Esswein, AICP, CNU-A

Site and Context  
The proposed arena district redevelopment fits within twelve blocks of Westown in Milwaukee and expands in some student proposals to surrounding blocks. The site is defined as Juneau Avenue to the north, Kilbourn Avenue to the south, Milwaukee River on the east, and 6th Street on the west.
There is easy access from both I-43 and I-794 and pedestrian access from the east side of the river via all of the east/west running roads: Juneau Avenue, Highland Avenue, State Street, and Kilbourn Avenue.

The BMO Harris Bradley Center currently occupies two city blocks, between 4th and 6th Streets and Juneau and Highland Avenues. The Arena is slated to be
demolished following the completion of a new arena one block north of the current location.

Four of the twelve blocks include housing, with the majority of current uses being entertainment venues, restaurants, and support uses. The site is diverse in the population served, as it holds both the BMO Harris Arena and the University of Wisconsin-Milwaukee Panther Arena. Additionally, it services the Milwaukee Area Technical College with a large parking garage and is home to one of Milwaukee’s historical treasures, Turner Hall. Various restaurants and retail outlets line the historical and small-scale Old World 3rd Street. The scale and style of Old World 3rd Street contrasts new additions to the site, such as the sleek Moderne which towers over the site with more than thirty floors. The diversity of building types and businesses, and the unique programming that comes with an arena, were key factors for design consideration. The Milwaukee River provides an environmental amenity and is an extension of Pere Marquette Park, but is not easily visible from ground level from other properties.

Program
The program was flexible, with priorities being well-designed public spaces, mixed-use developments, residential units, a walkable neighborhood, and response to the proposed arena design as shown in preliminary renderings by Populous. The goal was to propose a vibrant district where people will want to live, work, and socialize, and serve as a destination within downtown Milwaukee. Programming also extended into the streets, as designs were required to integrate and highlight the inclusion of the new Milwaukee streetcar, which is projected to run north/south along 4th Street, affecting future access to the site. The streetcar moved into its final design phase in spring 2015 and is expected to be under construction by spring 2016.

Process
Students approached the redevelopment design in two phases. The first phase was at the master-plan level where emphasis was placed on massing, building footprint, and general programming for the full twelve block area. Students were encouraged to integrate design ideas and influences from Mary Miss, a New York-based artist who specializes in using cities as living laboratories and encourages small and large scale sustainable interventions to be incorporated in city design and education. Miss sat in on early design critiques to give preliminary advice. Following a larger review with professional architects, planners, and city staff planners, students moved into the second phase which focused on refining the master plan and designing a public space within their schemes.

The design process was iterative, with reviews held approximately every two weeks. Precedent studies and pertinent design information was gathered and presented by urban planning graduate student, Julee Mitchell. Students were encouraged to use Mitchell’s research as well as their own explorations and include them as part of their presentations. Examples of building typologies, responsible water harvesting systems, and public art installations were commonly chosen.

The midterm presentations were held at the School of Architecture and Urban Planning building atrium on Tuesday, April 7, 2015. Final presentations were held in the atrium of the BMO Harris Bradley Center on Tuesday, May 12, 2015. Twelve students presented their projects to members of the city and other critics. Following the primary presentations, all fifteen students displayed their work during an Open House for local developers, property owners, design professionals, and stakeholders. Eight of the student proposals were exhibited at Gallery Night and Day, July 24-25, 2015 as part of a three-month exhibit at the University of Wisconsin-Milwaukee SARUP Mobile Design Box at the North End.
The new housing complex surrounds a large interior courtyard that has meandering paths and multiple monuments and statues depicting the Milwaukee Bucks history. The residential complex is the heart of the new development and houses students from University of Wisconsin-Milwaukee, Marquette University, Milwaukee School of Engineering, Milwaukee Area Technical College, and Milwaukee Institute of Art and Design. While each school has their own, singular building, the courtyard serves as a public place to hold impromptu meetings or games of Frisbee.

The space is centrally located for students and the public alike, as it opens onto all four adjacent streets and has easy access to the streetcar running along 4th Street. The 1,750 units available in the complex would hold over 3,000 students, drastically increasing the density of the area and creating a stable market for amenities like bars, restaurants, and retail outlets. Both those who live in Westown Commons and those visiting the district have easy access to transit via the new streetcar.
from top:
public basketball courts in front of new arena
looking south down 4th Street
central patio in residence hall courtyard
opposite:
history and achievement monument in courtyard off 4th Street
A diagonal pathway starting at Pere Marquette Park and terminating at the new arena is the organizing scheme for new development. The path creates a visual connection to the river, and joins the river to the arena. The path leads pedestrians through a series of public spaces varying in scale, including a corner parkway and a new live block area on the corner of 4th and State Streets.

The live block is covered to allow use throughout the year. The large screen can be used to broadcast Bucks games or other sporting events, and in the summer could show any number of images, such as highlights of performances at the new arena or artists at Pere Marquette Park. After passing through the live block, pedestrians can also enjoy a hillside park via a new pedestrian bridge that spans the center of 4th Street. This scheme of covered and uncovered spaces combined with different light sources and scales of development is designed to be used year-round and enhance the currently lacking link between the Milwaukee River and the Bucks arena. In turn, this will help the new arena connect to the rest of downtown.
opposite: public park at the corner of Highland Ave. and 4th Street
right: site plan highlighting new diagonal path connection from Pere Marquette Park to the arena
opposite from top:
site section of park off Highland Avenue
public plaza at State Street and Old World 3rd Street
new pedestrian bridge spanning 4th Street
right: street view of new pedestrian bridge
AQUAURBAN | Michael Blaeser

AquaUrban is developed around the premise that water is the lifeblood of Milwaukee. It is the driving component of the design in the form of a stormwater feature and water management strategies. The new system links rooftops to cisterns, which subsidize local water needs, before moving through the canals that support local ecological life. Water, along with the newly added pedestrian bridge linking the 4th Street parking garage to the new development south of Highland Avenue, are the primary wayfinding tools on site.

The elevation of the new bridge and its changing topography allow for a series of terraced urban spaces overlooking the arena and main gathering area for large events and Milwaukee Bucks games. Pedestrians can also enjoy a unique set of interactive light beacons. The beacons are visible throughout the site and serve as another wayfinding device. The lights can also be used to display functional information or be used purely for entertainment purposes. They anchor the new diagonal path crossing in front of the arena and can be seen from all locations on the site.
site plan of new development linking residential and entertainment uses to the arena plaza

opposite from top:
site section highlighting light beacon and covered escalator

site section showing underground parking and new pedestrian bridge
from top: aerial view of area development
stormwater management diagram
opposite: new streetcar and bridge along 4th Street
HIGHLAND HILL  | Wei Pan

Highland Hill is a residential and commercial complex which provides a new, exciting destination for downtown Milwaukee. With a central park serving as the focal point of the site, Highland Hill strives to be both sustainable and educational by combining rainwater harvesting with a prominent water feature. The water flow can be seen and monitored by visitors to the park and will spark conversation about water management.

The buildings on site are formed like hills with prominent slopes that allow for specific sunlight penetration onto the park. The buildings help to create a sense of enclosure and privacy with the assistance of the new arena to the north. The ground floor of all of the new development is open to the public and flows into the park, creating dynamic gateways and vistas to the new arena.

The terraces allow for personal outdoor space with balconies on almost every unit overlooking the park. This visibility helps to encourage safety and a strong sense of community.
opposite: interior courtyard circulation
near: site plan
6th Street
below: site section cutting through the public park
opposite: view of new plaza from upper-level window
The driving forces of this design were people, performance, and light. People are brought to the site with 825 new residential units varying from micro-apartments to spacious condos. Amenities like a grocery store, doctor’s offices, and retail spaces were included to allow residents to live and stay within the community. Performance is introduced with a series of spaces of varying sizes and permanence. The venues start at Pere Marquette Park and move diagonally through the space toward the new arena. Light is present throughout all of the design, including strips in all new benches, a large LED screen that re-faces the existing 4th Street parking garage, and interactive light poles that line the sunken park adjacent to Turner Hall and those that face 4th Street in front of the new arena.

The light, performance spaces, and all ground materials are designed in a linear fashion that permeates into the building facades, both breaking down and linking the different scales of such an expansive space. The module, though, subtle, helps to link the smaller scale of Old World 3rd Street with the new, larger development.
opposite: sunken park south of Turner Hall on 4th Street
right: proposed site plan
below: site section through parking garage, hotel, 4th Street and sailpin park

opposite: night activity in the plaza in front of the new arena
DEVELOPING DENSITY  |  Denis Pohlman

Bring more residents, bring more employees, bring more visitors...bring more investment to the Westown neighborhood. More than 1,400 new residential units are proposed to provide 24/7 activity and customers for the local businesses. More than 300,000 square feet of retail is proposed along 4th Street to create a vibrant street experience for residents and visitors to the area. With the influx of housing units, the retail will flourish in the neighborhood, particularly because there are options for every age and income level from a variety of bars and restaurants to inexpensive and boutique commercial spaces.

4th Street is enhanced with pedestrian plazas, street car stops, landscaping, and sustainable materials. Lighting provides an exciting night atmosphere on a quiet night, as well as game night. It also runs along the street to highlight new stops to the streetcar, which is protected by a series of trees. Seating is integrating throughout the improved corridor to invite people to rest, watch, or meet friends and enjoy the new entertainment options.
opposite: site plan
right: mixed-use entertainment zone off 4th St. north of Highland Ave.
Activating the streets and bringing a new life to Pere Marquette Park were the two primary goals in this design. All proposed new development has a lively, active ground floor. This rule was applied regardless of building size or height, which were both kept relatively low in order to respond to Old World 3rd Street while creating a comfortable sense of enclosure.

To increase activity around the park, commercial spaces and an art gallery fill the ground floors and have continuous cornice lines that wrap around the new mixed-use developments to create a more defined and cohesive edge around the park. Within Pere Marquette Park there are new programmed, yet flexible spaces to attract visitors. There is a new terrace with space for tables, farmer’s markets, and food trucks. There are also interactive areas, including an outdoor gym and a splash pad for younger visitors or families. Many of these activities highlight the production of kinetic energy, and can be used as catalysts for installations about sustainable energy forms, similar to those done by artist Mary Miss.
food truck on 4th Street
just off Pere Marquette
Park opposite art gallery

Pere Marquette Park from
east of the Milwaukee
River, art gallery
illuminated
The proposed location and design of the new arena were slightly altered in this scheme to create a grand pedestrian plaza full of movement and year-round activity. The newly developed block between Juneau Avenue and State Street includes multi-story mixed-use buildings, a covered atrium area, and open space filled with public art installations.

The new plaza can be accessed off 4th Street and creates a gateway to the area from the Highland Avenue pedestrian bridge. Highland Avenue is closed between 4th and 5th Streets, with focus shifted to pedestrian traffic and the new streetcar running along 4th Street. Some vehicles, such as food trucks, have access to the site if they promote business and help to create a destination in the arena atrium space.

New development extends south toward Pere Marquette Park where a new 25-story tower and several residential units were added to highlight the park and its activities. The programming in that area is mixed-use to promote an influx of foot traffic.
Increasing housing was the main goal of Bridgeview Heights. With more than 1.8 million square feet of residential space, holding more than 2,000 units, the new development will bring the buying power needed to support a successful entertainment district. The housing is spread throughout the site, with a large portion located just to the south of the new arena.

Development was also carefully planned to surround Pere Marquette Park. The new mid-rise, mixed-use buildings create a lively backdrop for the park and their ground-floor commercial activities help to keep pedestrians moving throughout the site. The scale of the buildings are stepped back at upper levels to respect the lower scale of Old World 3rd Street while increasing the height in response to the adjacent newer construction.

The new arena will serve as an anchor on the north end of the site and help to make the change in scale feel more appropriate and comfortable for pedestrians. It is the primary catalyst for future development of Bridgeview Heights.
opposite view of Pere Marquette Park looking toward the Highland Avenue pedestrian bridge
crossing Kilbourn Ave. to access Pere Marquette Park

opposite: looking down 4th Street from pedestrian bridge
MAKING CONNECTIONS | Mariana Guerreiro

This project seeks to make connections through the expansive site between Pere Marquette Park and the new arena with a series of designed green spaces. The main focus is to create different types and scales of entertainment areas from Kilbourn Avenue all the way up to Juneau Avenue. By crossing the State Street bridge, pedestrians will see the first public space—a playground with orange abstract objects, where children can play while surrounded by trees.

Trees are also used abundantly along the north side of State Street; the sidewalks are double-loaded with trees, protecting pedestrians from the traffic and from the sun light, creating a strong sense of enclosure. The next open space is surrounded by a residential area, including public art which would hopefully be commissioned by a local artist. In the green space, people can sit and read a book or enjoy a cup of coffee from one of the new retail locations. A bike share station is located at the end of State Street. This project is an opportunity to activate this street, bring more pedestrian activity, and incorporate trees and colorful objects.
from top: playscape park along State Street
aerial perspective of courtyard off State Street
opposite: pedestrian pathway along State Street facing west
The design of the seven public spaces are focused on the five primary senses. The first park, located off Juneau Avenue and adjacent to the Milwaukee River, is based on sight with a series of glowing orbs meant to pull people from Water Street to the new development. The second park, located north of Kilbourn, in a new housing area is based on sound with water features and interactive instruments. A new tree grove located off Kilbourn Ave. in the hotel courtyard houses a grove of trees and fragrant flowers meant to stimulate the sense of smell.

Visitors to the site can also enjoy a series of bars and restaurants located in the lower levels of the hotel and residential units near the new arena and explore different tastes. A series of courtyards are created with the new development and filled with objects carefully constructed to be tactile, including a large pergola at the entrance of the residential courtyard. With over one million square feet of new residential space comprised of varying sized units and interactive features, the growth and density of the WestTown neighborhood will flourish.
proposed site plan
opposite from top: hotel grove in courtyard south of Highland Avenue
entertainment zone at the corner of Highland Avenue and 4th Street
Highland Avenue was the main focus of this scheme, which creates a boardwalk feeling along the street through the incorporation of trees, lights, and tactile materials. Concentrating on Highland was prioritized in an effort to promote more foot traffic from east of the Milwaukee River into the Westown neighborhood. An influx of new housing and retail space along Highland and State Street help to increase the density of the area and ensure there will be ample numbers of pedestrians throughout the day, especially along the boardwalk.

The boardwalk, with its comfortable wooden seating, raised planters, and ample lights serves as the spine for the site from which multiple uses peel off, including new bars and restaurants, different shopping options, and access to the new arena for sports or other performances. The layout of the street is somewhat mirrored along 4th Street but is scaled back to allow room for the new streetcar and its necessary infrastructure. With these two streets serving as the axes, pedestrians can be comfortable as they move through the site.
opposite: sculpture in plaza at the corner of Highland and 4th Street
The redesigned Highland pedestrian bridge with its torquing design becomes the central link in connecting the new arena development to property east of the Milwaukee River. The path becomes Highland Avenue, which is open for vehicular traffic but stays centered on pedestrian use. Along the new path there is ample seating and access to a new bike share. As pedestrians continue to move south along Highland, they will encounter a designated space between 3rd and 4th Street has been allotted for farmer’s markets, food trucks, and light features, all meant to be engaging and slow people down as they move through the area. This public space terminates with a new restaurant that sits adjacent to the new arena, providing abundant outdoor seating and a rooftop deck to encourage people-watching. By focusing on the streetscape rather than the individual buildings, the design ensures ample care is given to the pedestrian in terms of scale, shade, light, and safety. As long as residents and visitors feel comfortable and active, they will continue to frequent the site, and the constant foot traffic will encourage a stronger neighborhood feeling.
proposed site plan
opposite: outdoor seating for a new restaurant on Highland Avenue
Highland is the most important pedestrian avenue in the new Westown development. With its connection over the Milwaukee River and the fact that it leads directly to the new arena, it has been highlighted in this scheme and broken down into various segments with different programmed uses. While all of Highland Avenue remains a roadway, portions of it, including the location directly south of the proposed arena, can be closed off when events are occurring to promote foot traffic and minimize the chance for vehicular interference.

New residential units have been placed along Highland and State Street to create an enclosed courtyard, which can be accessed off Highland Avenue or 4th Street. The ground surface of the courtyard and Highland both have pavers to differentiate them from the rest of the site and signify their use as pedestrian only, when desired. To close off the street during games or concerts, simple bollards would be used at the entrance to the street so people can enter and leave events safely and feel comfortable milling around the area.

**Public Spaces**

The courtyard is really a unique place where it’s created to serve the residential and the public. There are four ways where public can have access to the courtyard from north, south, east, or west. The courtyard breaks its space into semi-public and semi-private. As each building has 10 ft wide balcony for the residential to give them private space and isolated from the public if they want to be isolated, while the middle space is open to public and the trees around it can still create a semi-private room within.
The driving forces of this design are density and programmed public spaces. With the addition of approximately 825 new residential units of varying sizes, residents of different ages and income levels can all live on the site and enjoy the addition of Turner Hall Plaza. Performance is brought to the new Turner Plaza by renovating a building along State Street to include a restaurant and lounge. Doors open to the plaza during warm months, or during summer months, one can watch bands or other entertainers play through the glass. Pre-game events can spill into the new plaza and street, which are overlooked by the various residential, and mixed-use buildings. Public spaces are woven throughout the development and vary in scale - gardens, pedestrian pathways, outdoor dining, green walls, entertainment plazas, and rain gardens are all included and are accessible to pedestrians and visible to residents, creating an increased sense of safety and community. The district will be a destination for residents and visitors who enjoy live performances or simply want to gather with friends in a lively space.
public plaza and gardens off 4th Street next to Turner Hall

opposite performance space off 4th Street to the south of Turner Hall
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Urban design community redevelopment studio work on display at Mobile Design Box, 1551 North Water Street, Milwaukee

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