ACTIVE DESIGN GUIDELINES

BRIDGES SUBMISSION:
• Case Study
• Publication
• Exhibition

Bridges at 11th
4557 11TH AVENUE NE
SEATTLE, WASHINGTON
**Meeting Organization**

Fall 2011 Greater University District Chamber of Commerce (GUCC)
1/10/12 Roosevelt Neighbors Alliance (RNA)
5/8/12 City University Community Advisory Committee (CUCAC)
6/4/12 University of Washington Architectural Commission

**Brief Summary**

Conceptually named Bridges in honor of the site along 11th Avenue, the project is envisioned as the backbone of a newly developing transit-oriented residential neighborhood.

The housing development is the culmination of a decades-old goal of the UW and Children’s to provide housing in the University District - a goal repeatedly articulated in the University District neighborhood plan – that will be specifically targeted to employees, as well as be available to the general public. Bridges fulfills Children’s commitment for replacement housing in conjunction with its current hospital expansion and will include an affordable set-aside for 20 years, well beyond the Seattle’s Multi-Family Tax Exemption program.

Security Properties will utilize art, design, open spaces, environment and collaboration to create a building that will be home to many and become an asset to the Roosevelt and University District neighborhoods.

At the core of the goals for Bridges is to create a diverse, vibrant community within its walls and connected to its immediate neighborhood through the integrated design of:

- Enlivened Street Edges
- New through-block open spaces
- Incorporated art elements
- Iconic architecture
- Urban Ecology
- Landscape

Number of Residential Units
Approximately 184 units will be provided.

Number of Parking Spaces
Approximately 127 underground parking spaces will be provided along with approximately 15-20 additional new street parking spaces.

Amount of Commercial/Retail Space
The preferred scheme anticipates approximately 1,375 square feet of retail space.

**Stakeholders and Community Organizations**

Community based design is central to the philosophy of Security Properties and GGLO.

The Bridges team has met with numerous local stakeholder groups over the course of the design process. This has been done on a voluntary basis in the interest of bringing about the project solution. Community organizations that the project team have worked with are:

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Organization</th>
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<tr>
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**Project Team**

Security Properties (SP) is a Seattle based top-50 owner and manager of apartment buildings in the US and one of the largest owners and managers of affordable housing. SP’s development activities are focused on creating unique, art-filled buildings that enhance great neighborhoods.

In 2004 they completed the funky/flashy Epicenter, giving Fremont a center to the Center of the Universe, and in 2010 finished the serene, Danish-modern, Ballard on the Park, in honor of Ballard’s Nordic heritage. The SP team includes:

- University of Washington Development team member, involved in every aspect of the project.
- Seattle Children’s Development team member, involved in every aspect of the project.
- GGLO The award-winning Seattle integrated design firm providing architecture and landscape architecture.

"In a really good way this does not look like a typically multifamily building."

- Daniel Friedman
  UW Architecture Commission
  Dean and Professor, College of Built Environments

"The team should be congratulated."

- Stephen Kieran
  UW Architecture Commission
  founding partner of KieranTimberlake
BRIDGES is located in the heart of the University District in Seattle. The site selection for BRIDGES was driven by the priorities of the University of Washington and Seattle Children’s Hospital, both major area employers; they wanted their workforce housing within walking and biking distance of their institutions.

In addition, BRIDGES is in proximity to many opportunities for physical activity, including biking, walking, and water sports. Consistent with Active Design goals, the focus of planning was to maximize access to these opportunities and encourage bouts of walking and biking at both a regional and neighborhood level.
Slope & Tree Canopy
The site slopes upward from the southern property line to the northern property line with 4.5% grade. It flattens out as it reaches NE 47th St. The site slope will need to be addressed as the site is accessed from the right of way.

Existing tree cover and landscape areas near the site are minimal and sidewalks are often narrower than current SDOT standards. Existing street trees have been topped over time, with inconsistency of species and locations.

Wind & Light
The site lies on predominantly a north/south axis which allows for full sun exposure on the east and the west facades throughout the year. Solar exposure is typical for greater Seattle region; predominantly overcast/cloudy skies with intermittent rainfall for much of the year except June through October. Daylight hours are long in summer and short in winter. Sunrise and sunset are north of the horizon in the summer and south of the horizon in the winter with higher sun angles in the summer.

Civic, Commercial & Cultural Institutions
Multiple civic, commercial and cultural institutions are within a 5 minute walk of the site, which has a WalkScore of 100 (a “walker’s paradise”); errands do not require a vehicle.

1. Seattle Public Library
2. University Playground
3. 7 Gables Movie Theater
4. Trader Joes Grocery
5. Sundance Movie Theater
6. Hotel Deca
7. University District Community Center
8. U District Farmer’s Market
9. Heart of ‘The Ave’ 45th and University
10. UW Bookstore
Elements Reflecting Active Design Strategies

- Direct Street Entries
- Linear Open Space
- Stair Connection
- Street Connectivity
- Stair Connection
- Street Connectivity
Elements Reflecting Active Design Strategies
Building Circulation Reflecting Active Design Strategies
Mews as Public Plaza

Objective:
“Create public spaces such as plazas that are easily accessible to pedestrians and bicyclists. Design plazas to support recreational activities, where space allows.

A public plaza is a publicly accessible space that excludes cars and promotes walking by providing pedestrians with a safe, comfortable space to gather, play, or simply watch things go by.”

2.5 Public Plazas

- [ ] Create attractive plaza spaces that are well-maintained.
- [ ] Design plazas to include features such as trees, vegetation, lighting, drinking fountains, and both movable and fixed seating.
- [ ] Locate public plazas along popular pedestrian streets.
- [ ] Locate plazas near transit stops.
- [ ] Make plazas accessible to bicyclists.
- [ ] Connect plazas to bicycle routes and provide bicycle parking nearby.
- [ ] In general, create plazas that are level with the sidewalk so that they are clearly visible to pedestrians and safely connected to the street.
- [ ] Design plazas that allow for diverse functions.

Plazas can accommodate physical activities like dance and volleyball, passive activities like sitting and chess, and cultural events such as concerts, exhibits, and historical celebrations. Plazas can also provide space for café style seating and farmers’ markets. When programming plazas, consider the needs of users with varying mobility levels.

- [ ] Design plazas to accommodate use in a variety of weather conditions.
- [ ] Seek partnerships with community groups to maintain and program plazas.
Increasing Street Connectivity & Permeability: Breaking up the Block

2.7 Street Connectivity

Objective:
“Encouraging walking by maintaining a network of interconnected streets and sidewalks. In recent studies, higher street connectivity—as measured by small block sizes, for example—has been associated with increased pedestrianism.”

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>✨ In large-scale developments, design well-connected streets with sidewalks and keep block sizes relatively small.</td>
</tr>
<tr>
<td>Try to provide pedestrians with the most direct possible routes between destinations and with a choice of routes. Avoid long, continuous blocks.</td>
</tr>
<tr>
<td>Where current connectivity of the sidewalks and streets on a building site is poor, provide pedestrian paths through existing blocks to increase the area’s walkability.</td>
</tr>
<tr>
<td>Consider pedestrian paths and crossings that form a grid with intersections every 200-300 ft.</td>
</tr>
<tr>
<td>Avoid creating pedestrian over- and underpasses that force walkers to change levels.</td>
</tr>
<tr>
<td>Maintain dedicated pedestrian and bicycle paths on dead-end streets to provide access even where cars cannot pass.</td>
</tr>
<tr>
<td>Minimize addition of mid-block vehicular curb cuts on streets with heavy foot traffic.</td>
</tr>
<tr>
<td>Design vehicular driveways and ramps to minimize contact between cars and pedestrians.</td>
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</tbody>
</table>

Permeable Building Massings: Breaks up the large-scale development into smaller-scale segments between 90 ft and 200 ft.

Existing Vehicular Curb Cuts to be Removed: Improves pedestrian safety and increases walkability of street.

Mews (Pedestrian Pathway): Connects street and alley with a pedestrian and bicycle-friendly plaza and landscaping.

Through-Block Connection: Connects street and alley with a 25ft wide surface open to bicycles, vehicles and pedestrians.
Designing the Sidewalk, Mews and Through-Block Connection to Encourage Walking

Objective: “Encourage walking through the design of pedestrian pathways and sidewalks. Giving streets a human scale and sense of enclosure can encourage physical activity. In New York, pedestrian pathways include city streets, paved walkways through multi-block developments, and paved park paths.”

2.9 Designing Pedestrian Pathways

- Create a buffer to separate pedestrians from moving vehicles using street furniture, trees, and other sidewalk infrastructure.
- Provide seating, drinking fountains, restrooms, and other infrastructure that support increased frequency and duration of walking.
- Provide exterior lighting along streets and outdoor paths.
- Include trees to provide shade and visual interest on streets and sidewalks.
- Make sidewalk widths consistent with their use.
- Provide for enhanced pedestrian crossings both at mid-block and at intersections.
- Construct curb extensions along sections of the sidewalk that tend to attract greater pedestrian congestion.
- When designing large urban-scale developments, create on-site pathways as extensions to public sidewalks.
- Create or orient paths and sidewalks toward interesting views.
- Provide marked, measured walking paths on sites as part of a wayfinding system targeted to pedestrians and bicyclists.
- Support physical activity among people with disabilities by making streets and paths universally accessible.

Sidewalk is improved with a planted buffer, street trees, bike parking, and seamless integration with the public plaza/pedestrian pathway in the Mews space.

NE 47th St

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Night & Day
Exterior lighting, landscaping, retail and residential activity all contribute to creating a safe and vibrant pedestrian experience during daylight and evening hours on the sidewalk, and in the Mews, alley and through-block connection.
2.10 Programming Streetscapes

- ![Checkmark] Incorporate temporary and permanent public art installations into the streetscape to provide a more attractive and engaging environment.

- ![Checkmark] Organize pedestrian-oriented programs, such as charity walks and vehicular street closures, that make wide avenues available for walking and bicycling.

- ![Checkmark] Increase the number of outdoor cafes to enhance street activity.

**Objective:**
“Encourage walking by creating attractive and engaging street environments that can accommodate artwork and events.”

**Public Art Integration at residential entries along south side of Through-Block Connection**

**Public Art Integration in Mews at base of walls facing street and alley; Outdoor Cafe in Mews**

**Public Art Integration at residential lobby entrance**

**Public Art Integration at residential lobby entrance**
Objective:
“Increase stair use by locating a highly visible and appealing stair within the building’s orientation areas and points of decision.”

3.2 Stair Location and Visibility

<table>
<thead>
<tr>
<th>Checklist</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>✩</td>
<td>Locate stairs near the building’s entrance.</td>
</tr>
<tr>
<td></td>
<td>Research indicates that stairs located within 25 feet of an entrance and encountered prior to the elevator are more likely to be used for everyday travel.</td>
</tr>
<tr>
<td>✩</td>
<td>Locate a stair targeted for everyday use near the elevator.</td>
</tr>
<tr>
<td>✩</td>
<td>Locate an appealing, visible stair directly on the building’s principal paths of travel.</td>
</tr>
<tr>
<td>✩</td>
<td>Design stairs to be more visible. Consider:</td>
</tr>
<tr>
<td></td>
<td>a. Fire-rated glass enclosures instead of traditional opaque enclosures</td>
</tr>
<tr>
<td></td>
<td>b. Open stairs between two or more floors with either the same or associated tenancies</td>
</tr>
</tbody>
</table>

Related to Other Active Design Guidelines:
The location and visibility of stairs as a mechanism for increasing activity within a building seem to be the primary focus of guideline 3.2, but stair location and visibility can also have a positive impact on the exterior of a building, particularly when accessible directly from the sidewalk as demonstrated in this design.
Appealing and Supportive Walking Routes

Objective:
“Increase the frequency and duration of recreational and task-oriented walking by providing an appealing environment and experience along paths of travel.”

3.8 Appealing and Supportive Walking Routes

<table>
<thead>
<tr>
<th>Guideline</th>
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<tr>
<td>Provide visually appealing environments along paths of travel.</td>
<td>Incorporate interesting views along paths of travel within a building.</td>
</tr>
<tr>
<td>Provide daylighting along paths of travel.</td>
<td>Provide supportive infrastructure along walking routes.</td>
</tr>
<tr>
<td>Provide supportive infrastructure along walking routes.</td>
<td>Provide information about walking routes within and around the building.</td>
</tr>
<tr>
<td>Consider providing incremental distance markers so that people can judge the amount of walking they’ve done.</td>
<td></td>
</tr>
</tbody>
</table>

Related to Other Active Design Guidelines:
The placement of building program and extensive use of the roof as an open public space also fulfills elements of 3.7 Building Programming. In some instances, the quickest and best way between apartments is through the roof landscapes. This will activate the roof spaces and make the movement through the building more interesting, encouraging personal interactions.
The Fitness Room on the ground floor has views of the outdoors on two walls. It is easily accessible from two stair ways.

The Bike Club is located adjacent to the Through-Block Connection to activate the space, as well as the sidewalk, and promotes bicycling by residents and neighbors. Bike parking is provided in integrated stalls adjacent to the sidewalk and seating area.

Objective:
“Provide building facilities that support recreational and transportation related exercise.”

### 3.9 Building Facilities that Support Exercise

- Include physical activity spaces in commercial workplaces and residential buildings.
- Locate physical activity spaces within centrally visible locations in the building.
- Provide views to the outdoors from physical activity rooms.
- Provide shower and locker room facilities.
- Provide secure, sheltered, and accessible bicycle storage, preferably on the ground floor.
- Provide information boards and signage about facilities, services, and groups related to physical activities.
- Design activity spaces to accommodate a building’s various occupant groups.
- Provide easily accessible drinking fountains throughout the building.

Related to Other Active Design Guidelines:

Bicycling facilities like the Bike Club, Through-Block Connection, Mews and Bicycle Racks along the sidewalk all help activate the streetscape and encourage bicycling, meeting the pedestrian and streetscape objectives of guidelines 2.9 and 2.10 through encouraging bicycling rather than only walking.

Other building facilities, like stairs accessible from the street-level, and a ground floor Fitness Room, further encourage recreational and transportation related exercise while activating the streetscape (see also guidelines 3.2 and 3.10).
3.10 Building Exteriors and Massing

Objective:
“Design building exteriors and massing that encourage physical activity. The exterior of a building may support physical activity indirectly, by animating a street and contributing to a human-scale, pedestrian-friendly urban environment, or directly—for example, through the inclusion of stairs or canopies that encourage walking.”

Design Response:
Directly: Stairs and canopies line the sidewalk, Mews, and Through-Block Connection to encourage walking. Building programming also directly activates the streetscape (see guideline 3.9).

Indirectly: Multiple residential entries, a permeable building massing, and attention to the transparency and variety in the building facade contribute to a human-scale, pedestrian-friendly and lively street (see also guideline 3.2).
SUGGESTIONS FOR FUTURE METRICS:
• Permeability
• Utilizing the Roof as Open Space
• Stair Activating Open Space
• Program Activating Street Front
Permeability

**Currently Referenced:**
Checklist 2.7 Street Connectivity as
- “design well-connected streets with sidewalks and keep block sizes relatively small”
- “avoid long continuous blocks”
- “provide paths through existing blocks to increase the area’s walkability”

Checklist 2.9 Designing Pedestrian Pathways
- “create on-site pathways as extensions to public sidewalks”

**Recommendation:**
Designing with a goal of block permeability is an easy early design decision and massing strategy that the architect & developer can control. It does not rely on cosmetic sitework the way that the street programming and design does, but arguably has a bigger impact on the experience of the space and walkability. Quantifying the benefits and specific strategies for permeability in the Active Design metrics will provide architects with more leverage in urban infill projects such as multi-family housing.

**Objective:**
A break in a large urban block provides greater connectivity between streets and creates places that encourage more walking. It also allows for more access to light and air in the building and a more varied street front.

**Proposed Metric: Urban Block Permeability**
- Create public urban blocks for greater street connectivity
- Smaller blocks that provide a break in the street wall for a varied and positive pedestrian experience
- Breaks in the urban block that provide more light and air for building users and pedestrians on the ground
- Street front permeability creates more circulation core to ground plane connections
Suggestions for Future Metrics: Utilizing the Roof as Open Space

Utilizing the Roof as Open Space

Currently Referenced:
Checklist 2.3 Parks, Open Spaces and Recreational Facilities
• “Design open spaces as part of large-scale developments”

Checklist 2.4 Children’s Play Area
• “Design courtyards, gardens, terraces and roofs that can serve as outdoor spaces for children’s play”

Checklist 3.7 Building Programming
• “Place functions such as community and recreational spaces, mailrooms, and management offices on an alternative floor or a pleasant walking distance from individual residences…”
• “Locate the building’s commonly used functions strategically to promote walking, standing, and wheelchair travel during the course of the day”
• “Design spaces and activities to encourage more personal communication between people within the building… spaces where people can gather and engage in productive, pleasant, and safe social interaction”

Checklist 3.8 Appealing and Supportive Walking Routes
• “Provide visually appealing environments... daylighting along paths of travel”

Recommendation:
In single building urban infill sites there is often an inability to incorporate ground level public open space in to the site plan. Occupying the roof with building program elements is an effective way to to provide outdoor open space for residents. Incorporating this amenity into the circulation path through the building also provides a destination and more interest to the route.

Objective:
Specifically identify roof landscapes for incorporation into interesting circulation paths through the building as well as a destination amenity that is connected to the stair cores.

Proposed Metric: Utilizing the Roof as Open Space

- Create outdoor public space on the roof for play, exercise, gathering, community events
- Using the roof as a destination program element for stair circulation
- Including the roof as part of a main circulation path through the building to add variety, light and fresh air to the walk.
Stair Activating Open Space

Currently Referenced:
Checklist 3.1 Designating Stairs for Everyday Use
• "Include a stair as an integral component of the main circulation system of the building"
• "Make stairs accessible to the public areas of the building..."

Checklist 3.2 Stair Location and Visibility
• "Locate stairs near the building's entrance"
• "Locate an appealing, visible stair directly on the building's principal path of travel."
• "Design stairs to be more visible, in order to encourage their everyday use"

Checklist 3.10 Building Exteriors and Massing
• "Provide multiple entries... along the street to help enliven the pedestrian environment"

Recommendation:
A stair accessed directly from the exterior public space is a way to increase safety and enliven the pedestrian environment. Similar to stoops on the ground level, a stair entrance provides direct, fast (and therefore appealing) vertical circulation while increasing the amount of traffic in a public space. More people means more "eyes on the street" and a safer, more pedestrian friendly environment.

Objective:
Locate stairs at the edges of buildings and opening into ground level public open space.

Proposed Metric: Stair Activating Open Space

- Stairs exiting on to exterior public spaces makes using the stair for vertical circulation a more direct route than using an elevator.
- Entering and exiting stairs onto the exterior public space provides more "eyes on the street" and makes for a safer public realm.
- Expressing stairs on the exterior of the building emphasizes the location of the main circulation in the building.
- For residential use a recommended stair to unit ratio is 35 units per stair. This expands opportunities to utilize stairs to and from dwellings, thus supporting greater connectivity.
Suggestions for Future Metrics: Program Activating Street Front

Program Activating Street Front

Currently Referenced:
Checklist 2.10 Programming Streetscapes
• “Increase the number of outdoor cafes to enhance street activity”

Checklist 3.7 Building Programming
• “Locate building functions to encourage brief bouts of walking or travel to commonly used amenities”
• “In mixed-use buildings, locate common functions in the lobby area to promote walking…”
• “In residential environments, place function such as community and recreational spaces, mailrooms, and management offices on an alternative floor or a pleasant walking distance from individual residences and building entrances, in order to encourage daily bouts of walking and stair climbing.”
• “When arranging a building’s programs, consider the capacities and ages of specific inhabitants”

Checklist 3.9 Building Facilities that Support Exercise
• “Provide views to the outdoors from physical activity rooms”
• “Provide secure, sheltered, and accessible bike storage, preferably on the ground floor”

Checklist 3.10 Building Exteriors and Massing
• “Provide multiple entrances and maximum transparency along the street to help enliven the pedestrian environment”

Recommendation:
Program placed on the street front increases activity and the feeling of community within the building while promoting the neighborhoods walkability and sense of place. Common amenities in multi-family infill projects are community rooms, gym facilities, mailrooms, leasing offices and a small amount of ground floor retail. Placing many of those amenities on the street frontage creates a more transparent and active street wall than if the spaces were occupied by ground floor units.

Objective:
Place common, transparent, public and semi-public amenities on the ground floor street front for a more consistent activation of the pedestrian experience.

Proposed Metric: Program Activating Street Front

Place building program elements and supporting uses such as stairs and lobbies along street frontages to support consistent activation, “eyes on the street”

Attempt to program the street front with amenities that provide activity at different times throughout the day and week