

Allegheny Riverfront Park

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Above: Views of the lower tier of the park; Left: Allegheny Riverfront Park, looking West
credit: MVVA,
<http://www.mvvainc.com>

Like many major cities in the last century, Pittsburgh lined its integral waterways with a series of high traffic road and highways, effectively cutting the city's residents off from a major recreational and ecological resource. In 1994, the Pittsburgh Cultural Trust commissioned Landscape Architects Michael Van Valkenburgh Associates as well as artists Anne Hamilton and Michael Mercil to create a riverfront park bordering Pittsburgh's Downtown Cultural District at the confluence of the Allegheny and Monongahela rivers.

Michael Van Valkenburgh Associates [MVVA] sought to transform the city's relationship to the water with the Allegheny Riverfront Park design, using hostile residual, linear sites left stranded by highways. MVVA used the original concept first put forth by Fredrick Law Olmsted in 1911, which proposed two linear strips of public land along the Allegheny and Monongahela River. The new terraced, linear park was sited on a 100' X 4000' foot tract of landfill hemmed in by the Allegheny River to the north, Fort Wayne Railroad Bridge to the East, Pittsburgh's downtown to the South, and Point State Park to the West.

The primary programmatic goals of the park required MVVA to connect the city to the riverfront as well entice residential development in the adjacent downtown. Crucial challenges the designers contended with included a 25 foot sectional grade change from the river to the city, two roadways [one of which is a four lane highway] running through the center of the park. Moreover, the confluence of the Allegheny and Monongahela rivers at the Western edge required that the park remain flexible to the possibility of significant seasonal flooding.



"It's about a mediation of the city and the river rather than making a hard edge as it was before."
—Laurie Hawkinson



ALLEGHENY RIVERFRONT PARK OVERVIEW

CLIENT

Pittsburgh Cultural Trust

DESIGNERS

Michael van Valkenburgh Associates, Ann Hamilton, Michael Mercil

SITE SPECS

100 X 4000 ft. of terraced, linear park [two tiers, above + below]

SITE BOUNDARIES AND CONTEXT

The Allegheny River Bounds the Park on the North edge, Pittsburgh's Downtown is to the South, Fort Wayne Railroad Bridge to the East, and Point State Park the Park at the Western Edge.

PROGRAM

- + Connect the city to the riverfront
- + Entice residential development in the adjacent downtown

CHALLENGES

- + 25 foot sectional grade change from river to city
- + Two roadways [one four lane highway] run through the center of the park
- + Confluence of two rivers: The Allegheny + Monongahela
- + Possibility of significant seasonal flooding [up to twenty feet above the river's mean pool level]

DESIGN ELEMENTS [RIGHT + | +]

- + Two characteristically different levels— upper and lower—connected by a series of ramps and walkways
- + Upper level designed with “ordered edges and sections” to provide a coherent transition from urban streetscape [above] to riverfront [below].
- + Upper level tier is tips the site up, orienting experiences to the river and way from the adjacent street
- + The 15 foot lower level has a more “irregular” naturalistic edge that is cantilevered to jut 16 feet out over the river's bank.
- + Materials and landscaping selections based on resilience to floodwater
- + Vegetated buffer wall from highway traffic transect upper and lower terraces
- + Planting design is “heavily landscaped” to create a canopy dominated by red maple, birch and sycamore.

ECO-TECHNICAL DETAILS [RIGHT +]

- + Planned for a 100 year flood line [see image]
- + Flood resistant concrete imprinted with wetland grasses [lower tier]
- + Flood resistant detailing
- + Bluestone mined from Latrobe, Pennsylvania quarry
- + Reuse of on-site industrial coal slag to create a state of the art soil composition that addresses stabilization and promotes drainage

EXTENSIONS

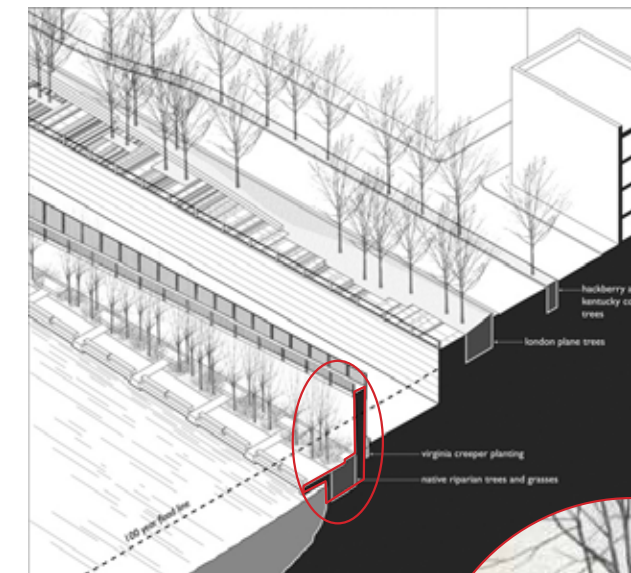
- + MVVA will design park extensions East to the convention center and West to Point State Park



Top to Bottom: Railing and vegetated wall details, Upper level promenade with monolithic Bluestone paving; ramp meets lower level with lush vegetation

It's not only the textures and surfaces, but where these walkways are and there relationships to the river—which is all about a natural phenomenon. Indeed, its pieces feel like they are elements, not only beside the river, but in it.”
—William L. Rawn

+ SECTION 25' grade change + cantilever



+ TEXTURES



Clockwise from middle: Architecture Journal, 1987; MVVA, <http://www.mvvainc.com>



+ LOWER CANTILEVERED EDGE at mean river level

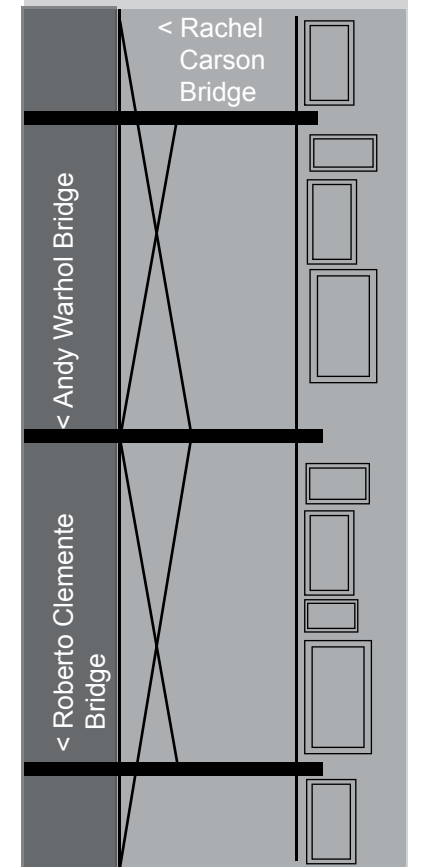


+ SEASONAL FLOODING of lower park level

Allegheny Riverfront Park

Basic circulation diagram [drawn by students] of Allegheny Riverfront Park

Access to park is provided from smaller ramps from the bridges to the lower level and along the riverfront



Michael Van Valkenburgh's design "strengthens the park users' awareness of the river in all its stages." —Project for Public Spaces

OVERVIEW

POSITIVES

- + Dynamic uses
- + Flexible design
- + Transitional access to river from cityscape
- + Details create a unique sense of place



- + Abundant seating
- + Diverse user accessibility
- + Width of promenades encourage person to person interactions
- + Turn environmental challenge into an asset
- + Direct access to water

NEGATIVES

- + Lack of use in winter
- + Seasonal maintenance [high pressure hoses installed after design]



- + Refuge areas
- + Seasonal vine wall [right]

Personal Evaluation

We believe the park to be a success, as proven by the city of Pittsburgh's decision to extend the park both East and West, creating a continuous recreational network along the riverfront. The dynamic design provides a broad range of experiential qualities [high/low, urban/wild, hard/soft] and creatively engages the twenty foot annual flood surges. However, it seems as though the park is wanting for visitors [see photo left] in the cold winter months during the ice flows. Perhaps MVVA could have provided more refuge areas or perhaps made the dramatic ice flows and flood surges an event to be celebrated. The vine wall, which serves as an auditory and visual buffer from expressway traffic is also seasonal [see photo] and thus lacks functionality during the brutal winter months when protection is most needed. Perhaps MVVA could have incorporated other elements [such as light or sound] that are not seasonal to protect park users and orient the experience away from traffic. While the Seattle Waterfront is more susceptible to tidal fluctuations, the basic flexibility of MVVA's design provides a plausible framework for dealing with climatic changes.



+ SEASONAL LIMITATIONS of the vine wall

People for Public Space Evaluation

PPS supports this park as a successful space because it promotes healthy circulation, linking downtown to the river's edge. It is well used by joggers, bikers, dog walkers and boaters. MVVA's design promotes multi-modal accessibility along the once uninhabited rivers edge and "strengthens the park users' awareness of the river in all its stages." Moreover, pavement details [bluestone paving and wetland grass imprinted concrete] offers a sense of place and transition from the upper level urban park to the lower level riverfront. The promenade width accommodates various users in the busy summer time months, while still encouraging interactions between people as they pass one another or admire docked boats.

Resources

Source Books in Landscape Architecture. Amidon, Jane. ed. Michael Van Valkenburgh and Associates: Allegheny Riverfront Park. Princeton Architectural Press, 2005.

"Progressive Architecture Awards: Allegheny Riverfront Park" Architecture January, 1997: 92-93. Print.

Gleeson, Rachel. "Allegheny Riverfront Park" Accessed online 10.7.10 http://www.pps.org/great_public_spaces/one?public_place_id=603

Michael Van Valkenburgh and Associates. <http://www.mvvainc.com/index.php#/PROJECTS/7/14/>

Image sources

Blue stone detail. Posted March 17, 2005. Accessed 10.09.10 <http://www.flickr.com/photos/shane613/864831815/>

Seasonal change of the riverfront. Posted: February, 2003. Accessed 10.10.10 <http://www.flickr.com/photos/13620802@N08/3361772498/>

Detailed Section Cut of Lower Ramp. "Progressive Architecture Awards: Allegheny Riverfront Park" Architecture. January, 1997: p. 93. Print.

All other images:

Michael Van Valkenburgh and Associates Inc. website. <http://www.mvvainc.com/index.php#/PROJECTS/7/14/> Accessed 10.7.10