Brownfield Boat Tour

Pittsburgh

April 15, 2009

Sponsored by the Engineers' Society of Western Pennsylvania

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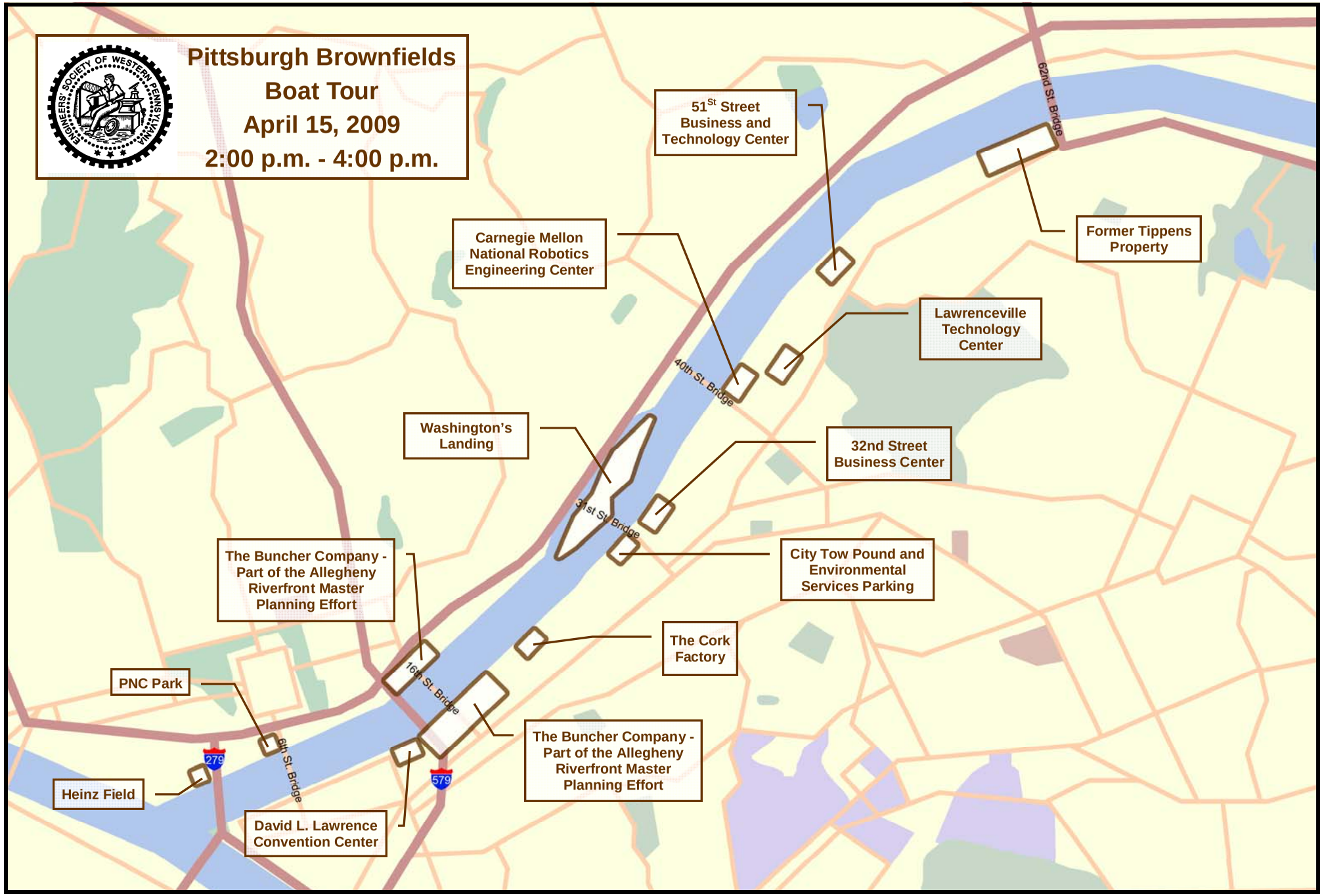

Pittsburgh Brownfields
Boat Tour
April 15, 2009
2:00 p.m. - 4:00 p.m.
51st Street Business and Technology Center
62nd St. Bridge
Former Tippens Property
Carnegie Mellon National Robotics Engineering Center
Lawrenceville Technology Center
40th St. Bridge
Washington's Landing
32nd Street Business Center
31st St. Bridge
The Buncher Company - Part of the Allegheny Riverfront Master Planning Effort
City Tow Pound and Environmental Services Parking
The Cork Factory
16th St. Bridge
PNC Park
6th St. Bridge
279
579
Heinz Field
The Buncher Company - Part of the Allegheny Riverfront Master Planning Effort
David L. Lawrence Convention Center

Heinz Field

Heinz Field is a 65,000 seat football facility that is home to the Pittsburgh Steelers and the University of Pittsburgh Panthers.

Fans enter at the river side through the South Plaza to the 40,000 square foot Coca-Cola Great Hall. Once inside they can enjoy a variety of entertainment and concession options. The Coca-Cola Great Hall also features:

- 6 interactive display columns showcase team memorabilia, facts & figures, and games
- 10 graphic murals depict great Steelers
- 2 murals depict great Panthers
- 5 Lombardi Trophy Column Displays commemorating each of the Steeler's six Super Bowl victories
- Steelers Hall of Fame

There are three club lounges at Heinz Field which are located on the east sideline, west sideline and the northern end zone. The two sideline club lounges are each designed as three-story atriums with a bar, beverage kiosks, specialty food stands, and a video wall. These lounges can be converted into banquet space for private gatherings.

In addition to Steelers and Panthers games, the venue also hosts other sporting events such as high school football games, soccer games, festivals, and concerts.

Key Facts

Architect:	HOK Sport
Construction Manager:	Mascaro Construction and Huber, Hunt, and Nichols
Facility Manager:	Pittsburgh Steelers
Development Cost:	$264 million
Total Square Footage:	1.49 million square feet
Total Number of Seats:	65,060
Club Seating:	7,300
Luxury Suites:	129
Construction Start:	June 18, 1999
First Game:	August 25, 2001 versus Detroit Lions

PNC Park

Rated as the nation's #1 ballpark in 2006 by ESPN's Jim Caple (June 28, 2006), PNC Park is home of the Pittsburgh Pirates. This classically styled 38,500-seat facility provides an intimate setting along the banks of the Allegheny River and offers a dramatic view of Pittsburgh's downtown skyline.

PNC Park is easily accessed by pedestrians via the Roberto Clemente Bridge, which is closed to vehicular traffic before and after games. The Gateway Clipper fleet shuttles fans from Station Square to the North Shore, and on-site parking is available.

Constructed of steel, stone and glass, PNC Park is adorned with mountain laurels, Pennsylvania's state flower, which are planted just beyond center field. The facility measures two-tiers in height, with a continuous lower grandstand. A 400-seat Field Club is located directly behind home plate. Sixty-nine suites are located on a separate level just above the lower grandstand, and 2,500 club seats overlook the facility's close-to-the-field second tier.

Fan amenities include party suites, glassed-in lounges, a picnic area and party decks, which also provide excellent views of the field and easy access for wheelchair patrons.

Key Facts

Architect:	HOK Sport & Astorino and Associates
Construction Manager:	Dick Construction and Barton Malow
Facility Manager:	Pittsburgh Pirates
Development Cost:	$216 million
Total Square Footage:	970,000 square feet
Total Number of Seats:	38,496
Club Seating:	2,500
Construction Start:	April 14, 1999
First Game:	April 9, 2001 versus Cincinnati Reds

David L. Lawrence Convention Center

The David L. Lawrence Convention Center is an exceptional facility which draws many visitors from around the country. Architect Rafael Vinoly designed a building tailored to the City of Pittsburgh with features which balance both aesthetic quality and operational efficiency.

The Convention Center graces the City skyline with a design inspired by the great bridges of Pittsburgh. It is the first convention center in the United States built with a strong commitment to environmental principles such as natural lighting and ventilation, water reclamation and recycling.

Pittsburgh's Convention Center is the first and largest environmentally friendly building of its kind. In November 2003, the facility received a Gold LEED Certification from the United States Green Building Council (USBGC) and became the largest green building in the United States. The building currently is ranked as the sixth largest green building in the U.S (Source: USGBC). The Convention Center remains the largest green convention center in the country.

Pittsburgh is one of the “greenest” cities in the nation. When the Convention Center was first built, Pittsburgh had four LEED projects totaling over 2.4 million square feet. The Convention Center comprised nearly 60% of the city's total green buildings.

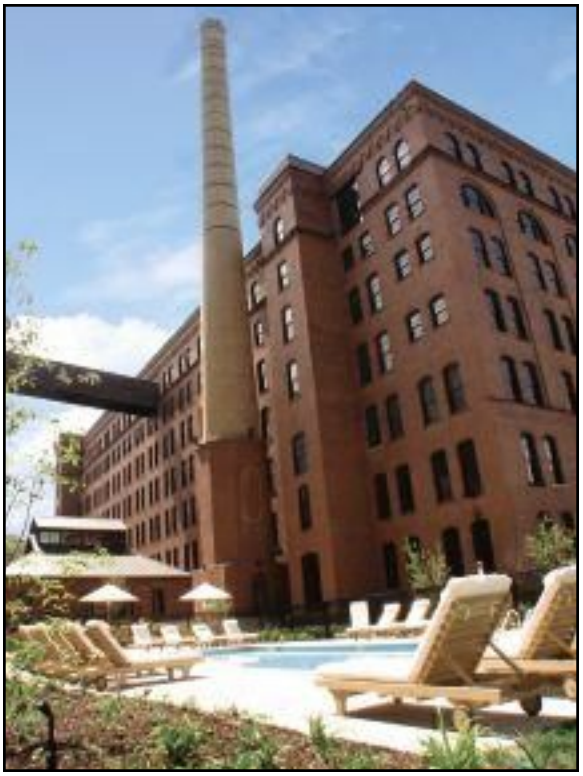
No other convention center in the country incorporates so many green technologies. The Convention Center's unique building features include:

- Natural lighting
- Natural ventilation
- Water reclamation
- Comprehensive recycling program
- Sustainable site, materials, and resources
- Indoor environmental quality

Key Facts

Architect:	Rafael Vinoly Architects, P.C.
Construction Manager:	Turner Construction/P. J. Dick/ATS
Facility Manager:	SMG
Development Cost:	$373 million
Total Square Footage:	1,450,000 square feet
Total Exhibition Space:	330,0000 square feet
Column Free, Main Hall:	250,000 square feet
Secondary Hall:	80,000 square feet
Meeting Room:	51
Exhibit Halls:	5
Lecture Halls (250 seat):	2
Ballroom:	31,610 square feet
Kitchen Facility:	12,000 square feet
Parking Garage:	715 spaces
Loading Docks:	37 - 4,500 square feet

The Cork Factory



The Armstrong Cork Factory Site is a parcel of land approximately 4 acres in size located along Smallman Street between 23rd and 24th Streets in the Strip District section of the City of Pittsburgh. The Site is comprised of 2 parcels. One parcel was originally used by Thomas Armstrong as a two-man cork-cutting shop in 1860. By 1864, Armstrong was shipping corks "from a big new factory on a Pittsburgh riverbank." The core of the current factory building was constructed between 1864 and 1905. The office tower was constructed some time before 1927. The second parcel is the former location of the Walker Donley & Brothers Pork Packing plant (on the northern half of the parcel) and the William Fisher Engine Foundry and Machine Works to the south. Armstrong Cork vacated the complex in 1971, and in 1975 a salvage company removed the machinery and elevator equipment. The factory building was used for warehousing in the 1980s and subsequently abandoned. Other buildings used on the second parcel were razed in the 1990s and the property was used as a parking lot for several years.

Based upon environmental investigations conducted at the Site in the early 2000s, it was determined that asbestos-containing material and lead based-paint were present throughout the buildings on the Site. In addition, surface soils contained petroleum and coal combustion materials from prior industrial operations. Deeper soils and groundwater were also investigated and found to be impacted by historic releases of hydrocarbons. Underground storage tanks that previously contained petroleum were also discovered to have been abandoned at the Site.

The Pennsylvania Department of Environmental Protection recognized the Site as a "Special Industrial Area" as defined under Pennsylvania's Land Recycling and Environmental Remediation Standards Act, or Act 2. In accordance with Act 2 procedures for SIA areas, a real estate development company, Big River Development, L.P. executed a Consent Order and Agreement on December 22, 2004 with the PADEP. The COA established Big River's remedial obligations for the Site in accordance with a Baseline Environmental Report and work plans approved by PADEP under Act 2. Big River agreed to remove and properly dispose of asbestos-containing materials and abandoned storage tanks and to mitigate potential hazards posed by lead-based paint. In addition, Big River agreed to cap all soils at the Site that exceeded Act 2 residential standards, prohibit the use of groundwater beneath the Site and record appropriate deed restrictions. Big River completed all of this work several years ago. Engineering and institutional controls have been put in place and are being maintained in accordance with a Post Remediation Care Plan for the Site.

The Site, now known as the "Cork Factory", is presently used for residential purposes, and includes 297 high end loft residences. Site features include 35 floor plans of 1, 2, and 3 bedroom lofts as well as a fitness center, business center, pool, hot tub and fire pit, dog park and marina. The Site also has 47,000 sq. ft. of retail, including a restaurant and lounge "Cioppino", specialty market "il marcato" and grocery store that specializes in organics "Right by Nature" as well as a 427-space public parking garage. The Cork Factory is a Historic Landmark and is recognized by local leaders as a very successful Act 2 redevelopment project that has been helping to encourage residential development within the City of Pittsburgh. The Cork Factory leased its units 12 months ahead of projection and is now fully occupied.

32nd Street Business Center

Located in the Strip District section of the City of Pittsburgh, the 32nd Street Business Center is comprised of approximately 97,000 square feet of flex space in two adjacent structures.

The site, which contains approximately 6.72 acres, was formerly owned by various industrial entities, the most recent of which was the Lectromelt and Pennsylvania Engineering Company. The Lectromelt facility was used for the design and manufacturing of electric arc furnaces for the steel industry. The operations at the plant reportedly ceased in 1990. After remaining vacant for nearly eight years, the property was purchased by the Urban Redevelopment Authority and the numerous structures on site were demolished. Although a significant portion of the environmental liabilities were eliminated with the structures themselves, a comprehensive remediation plan was developed for the contaminated soil and groundwater that remained from many years of industrial use.

The vacant site was purchased by the 32nd Street Business Center Partnership, L.P. in 1998 and under the supervision of the Pennsylvania Department of Environmental Protection, the remediation process began in accordance with the Pennsylvania Land Recycling and Environmental Remediation Standards Act (Act 2). The Final Letter of Approval was received from the PADEP in June 2001.

Washington’s Landing

Project Overview

By the 1960s Herr's Island was in a state of deterioration and abandonment. In response, the City and Urban Redevelopment Authority of Pittsburgh initiated a series of planning and site preparation actions to prepare for the reclamation of this unique land resource and sought funding for the implementation of these activities. With these foundation blocks in place, the URA and the City prepared for future development through preparation of a redevelopment plan in October 1983.

The URA subsequently acquired all of the land and demolished structures which, along with the construction and signalization of a new bridge and access ramp to the island and a spine road with underground utilities on the island, paved the way for private development.

The entire project area was rezoned from industrial to Specially Planned District (SPD). Development within the SPD must meet design guidelines and standards provided in the Preliminary Land Development Plan prepared for the project area. The SPD allows for the orderly, planned development of a mixed-use project such as this to ensure property owners that a certain standard for development will be followed by all developers.

An additional traffic study was completed in May 1987, which indicated that traffic generated from 200,000-square-feet office space equivalent could be developed on the island without further major capital investment in the highway system. A housing study, also completed in May 1987, illustrated the economic feasibility of marketrate housing on the island.

Role of the URA

The URA and the City are responsible for the implementation of the Redevelopment Plan, to insure the Plan's goals and objectives are met. The URA was responsible for land assembly, demolition, and site improvement activities, including public infrastructure, parks, and development of other public spaces pursuant to the Plan. The URA also approves all land disposition contracts and development proposals.

Project Benefits

Washington's Landing is the mixed-use development on the 42-acre Herr's Island located on the western bank of the Allegheny River, approximately two miles from Pittsburgh's Golden Triangle. The Washington's Landing project involves the revitalization of this once blighted island into a high-quality, multi-use development, encompassing a full-service marina, market-rate housing, office/research and development/light industrial uses, a rowing center, and a public park. The development was undertaken pursuant to a Redevelopment Plan adopted by Pittsburgh's City Council in October 1983. The Plan regulates development to accentuate the island's natural assets, including the waterfront areas and the secluded views of the downtown skyline. Each development parcel is situated and designed to take best advantage of the island's natural assets. A network of riverfront trails connects the public open spaces and other park facilities. Pedestrian circulation is encouraged through attractive streetscaping and access to the water at entrances located at building sites.

Carnegie Mellon National Robotics Engineering Center

The National Robotics Engineering Center (NREC) opened on July 29, 1996 as an operating unit within Carnegie Mellon' University's Robotics Institute (RI). Based at an off-campus location in Pittsburgh's Lawrenceville neighborhood near the CMU campus, NREC *(pronounced "en-rec")* resides in a renovated, 100-year-old warehouse on a reclaimed industrial brownfields site that previously was home to several suppliers of equipment for the steel industry.

NREC was the brainchild of Whittaker, director of the RI's Field Robotics Center (FRC). In 1994, he and other FRC scientists agreed that mobile robotics technology had matured sufficiently to enable commercial applications in markets such as agriculture, construction, mining and electric/gas utilities. With a strong focus on applied research, they developed projects in collaboration with NASA and large companies such as John Deere, Toro Corporation, Consol, Joy Mining, New Holland, and Ford; collectives such as the American Nursery and Landscape Association, and NY Gas; and smaller companies such as Ultrastrip Systems.

Commercial Technology Transfer on the Upswing

After completion of the NASA cost share contract in 2001, NREC worked with existing clients to commercialize robotics technology and expand into new commercial markets. NREC developed systems for robotic paint stripping, and underground coal mine belt inspection are in daily use and generating revenue for their sponsors. Technology from two health care-related projects transferred to their sponsors – one reduces the bottleneck in drug discovery for central nervous system disorders, the other provides a faster and more accurate way to calculate the pose of patients just prior to radiotherapy of cancer tumors.

Removing People from Harm's Way

The U.S. Department of Defense has made large investments in developing and maturing unmanned ground vehicle (UGV) technology. Recent military conflicts have demonstrated how UGVs can remove American military personnel from harm's way. In 2000, NREC leadership decided to pursue UGV development programs because they fit squarely within NREC's core competency of developing outdoor mobile robots and they were excited about their force protection potential.

As UGV technology matured, the US Army through its Future Combat System (FCS) and the US Marines made a major commitment to maturing unmanned ground and air platforms with System Development and Demonstration (SDD) programs. SDD programs are the means by which the Department of Defense (DoD) matures technology from laboratory quality to pre-production quality – a close fit with NREC's mission. They also present new challenges in system design, engineering and integration, process control, program and subcontractor management, field testing support, and safety assurance that provide an extremely valuable perspective for an applied research organization. NREC supported General Dynamics Robotics System's successful capture of the Autonomous Navigation System (2003) program and led a team in partnership with BAE Systems to win the TUGV Tactical Unmanned Ground Vehicle (2005) program.

Where We Are Today

Today, NREC thrives as home to more than 100 of the world's leading robotics experts conducting applied research and development on more than two dozen innovative projects, many of which have been licensed for commercialization and are being deployed successfully in real-world applications.

Lawrenceville Technology Center

RIDC
regional industrial development corporation

425 Sixth Avenue, Suite 500
Pittsburgh, PA 15219-1822
(412) 471-3939
www.ridc.org

Lawrenceville Technology Center

Funding

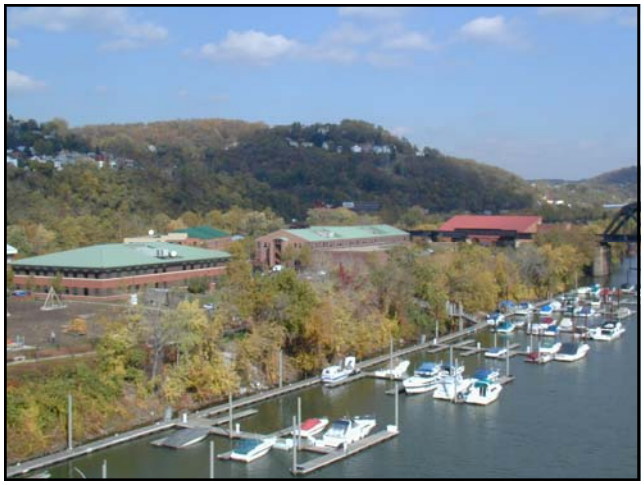
RIDC received $4 million in BOS funds for the development of the Lawrenceville Technology Center in Pittsburgh. The 14-acre, former Heppenstall Steel Company site contains 20 buildings. RIDC developed the area to attract small and mid-size growth companies in the areas of research and design, as well as manufacturing and engineering. The money was used for demolition, construction, environmental cleanup and road development at the site. The project is expected to create 100 new jobs.

Site Remediation & Demolition

In 2007, RIDC contracted with ASE Environmental Inc. and J. Eslich Construction and Equipment Corp. to perform asbestos abatement and building demolition over nearly 10 acres of the Lawrenceville Technology Center site. The project entails complete asbestos abatement and demolition of all buildings except the “Blue Building.” Those buildings being demolished will be abated prior to demolition in accordance with Allegheny County Health Department guidelines.

RIDC
regional industrial development corporation

51St Street Business & Technology Center



Located in the Lawrenceville section of the City of Pittsburgh, the 51st Street Business & Technology Center is comprised of two 53,000-square-foot Class "A" Flex buildings. Constructed in 2002, the twin buildings were designed as “flex” buildings to allow for office, showroom, warehouse, research and development and light industrial use. This flexibility also supports maximum use of existing space with virtually no loss factor for common areas, structures or penetrations.

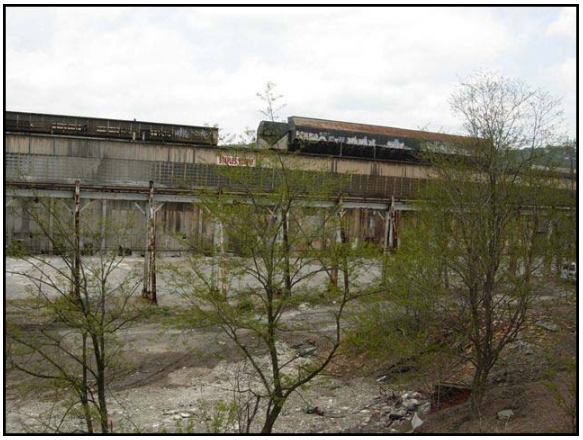
The site, which contains approximately 9.16 acres, is a large portion of the former Shiffler Plant location. Historic operations at the plant reportedly involved the manufacture of galvanized steel electrical transmission towers from a period between the early 1900s to approximately 1984. The process of steel galvanization involves a sulfuric acid “pickling” process, as well as a molten zinc bath. Although no major hazardous waste products were generated by the process, trace elements of hazardous materials were discovered in the soil and ground water that required remediation and monitoring. The types of hazardous substances detected on the site included heavy metals, volatile organic compounds, and semi-volatile compounds, including lead, zinc, bromomethane, methyl chloride, benzene, tetrachloroethene, trichloroethene, and naphthalene.

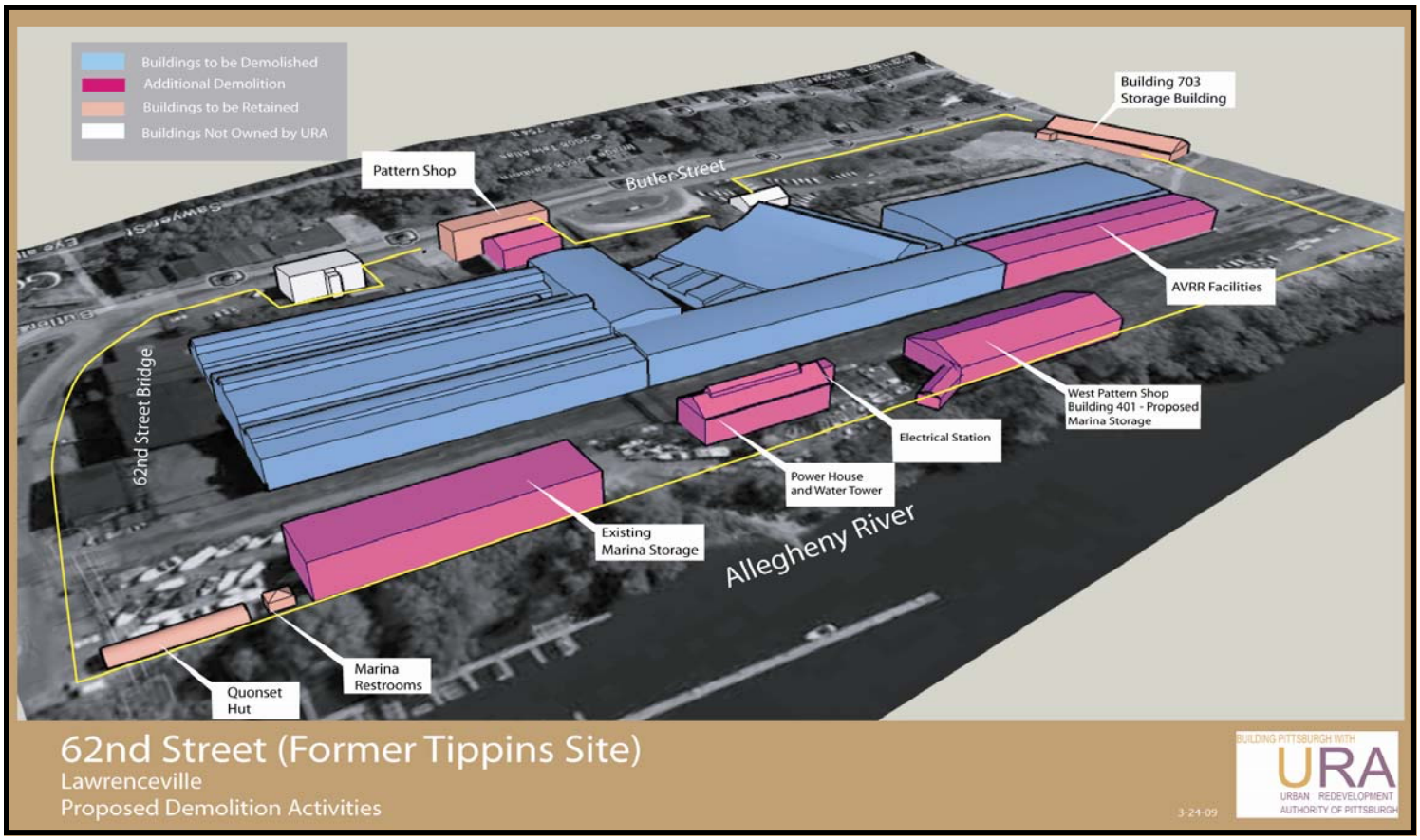
The vacant site was purchased by The Rubinoff Company in 2002 and under the supervision of the Pennsylvania Department of Environmental Protection (PADEP), the remediation process began in accordance with the Pennsylvania Land Recycling and Environmental Remediation Standards Act (Act 2). The Final Letter of Approval was received from the PADEP in June 2008.

Former Tippens International

Key Facts

- The site is 21.74 acres, of which 10 acres were previously under roof
- Since the URA's acquisition, 30 buildings totaling approximately 400,000 square feet have been remediated of asbestos and subsequently demolished
- The plan for development of the site is underway but nothing has been confirmed
- Part of the Allegheny Riverfront Visioning Plan





BUILDING PITTSBURGH WITH
URA

Undeveloped Strip District land a focus of riverfront master plan

By Mark Belko, Pittsburgh Post-Gazette, November 02, 2008

For years, a prime Strip District riverfront parcel owned by the firm he heads has served as a parking lot for shoppers, revelers and commuters. But Mr. Balestrieri, the Buncher Co.'s chief executive officer and president, doesn't want it to stay that way much longer.

"I'm not a young man and I want to see it happen on my watch. From our standpoint, if the right project comes about, we're poised to go," he said.

The city is hoping so. It has singled out the Buncher property, stretching from 16th Street to 21st Street, bordering the Allegheny River on one side and Smallman Street on the other, as a "major focus" of a proposed master plan aimed at transforming the riverfront from Downtown to Highland Park.

Rob Stephany, executive director of the Urban Redevelopment Authority, which is seeking design teams to help craft the plan, sees the Buncher property as the "catalytic piece of the equation" for the entire six-mile stretch of proposed redevelopment.

"You've got essentially undeveloped property adjacent to Downtown, the cultural district, the convention center. There's probably not many people you would talk to who wouldn't acknowledge that what happens there sets the tone for what happens elsewhere," he said.

Mr. Balestrieri said Buncher is pleased the city is taking the lead in developing the master plan. It is keenly interested in developing its Strip District property, he said. But there could be a catch.

Terminal plans unknown

To be successful, any master plan, he said, must include the URA-owned produce terminal, an iconic 140,000-square-foot building that served as the city's shipping center for many years.

Part of Buncher's property runs behind the produce terminal to the riverfront. Mr. Balestrieri said the firm has rejected "numerous opportunities" to redevelop the property in the past because it did not know what would happen with the terminal.

"Until we know what the future of the produce terminal is, it's been challenging for us to decide whether to accept something back there," he said.

Mr. Stephany said the terminal would definitely be part of the master plan. The URA has been working with Neighbors in the Strip to lease about 12,000 to 14,000 square feet of the building to local retail vendors to fill vacancies beside the produce wholesalers. There also are plans for a demonstration kitchen, a stage area and classroom space.

Buncher in the past has expressed an interest in cutting the produce terminal into sections to connect at least part of the Strip's street grid into its property behind the building. But that plan has run afoul of some tenants and preservationists who see it as a Strip landmark.

Mr. Stephany said there may be an opportunity to open up part of the property in a way that wouldn't affect the wholesalers "if the master plan calls for that." Pittsburgh History & Landmarks Foundation would oppose any effort to cut up the building, President Arthur Ziegler said.

"I don't think you should take a building that is quite handsome architecturally, unique in its size and configuration, and a symbol of the history of the area and continuing in use, and cut it into pieces," he said.

Rather than chop up the terminal, designers could place pathways to the river on both sides of it, he said.

Make it blend

Becky Rodgers, executive director of Neighbors in the Strip, said whatever development occurs between 16th and 21st streets must "blend in" with the existing amenities.

"I think what gives the Strip its national appeal is that it is uncompromisingly authentic. It's home to more entrepreneurial, mom-and-pop-type businesses than most other neighborhoods. What can make it better and not take it down?" she said.

Of the six miles of riverfront targeted for redevelopment, the Strip probably has been the most studied. Four years ago, graduate students at Arizona State University won an Urban Land Institute competition by developing a master plan for the Buncher property.

It featured loft-style housing inspired by the Strip's warehouse buildings as well as retail and office space, all built around a fan-shaped plaza that connected with the riverfront. There was also a marina near the plaza and a proposed water taxi to link people to PNC Park and Heinz Field. It recommended that the produce terminal be converted to retail.

While the ULI analysis could be a "good jumping off point" for the Strip component of the master plan, Mr. Stephany said, the broader study area could prove to be just a bit more challenging.

Overall, the city has identified some 544 parcels in the study area, not exactly a recipe for consensus. And unlike SouthSide Works, the North Shore between PNC Park and Heinz Field, and the Pittsburgh Technology Center along Second Avenue, neither the city nor its agents control all of the land.

Still Mr. Stephany relishes the opportunity before him.

"Welcome to community development, right? I don't think the city needs to be reborn by having the city or one of its authorities controlling all the land," he said. "I think multiple stakeholders can share a vision and key stakeholders can start to implement it and get it going."

Building blocks

In some respects, turning vision into reality may not be as difficult as it would seem at first. One reason is that there are large tracts of land under the control of a handful of developers, and that land could serve as building blocks for the rest of the corridor.

Buncher, for instance, has control over the Strip District land and additional property upriver. The URA owns the 21.7-acre former Tippins International Inc. site in Lawrenceville. The Regional Industrial Development Corp. of Southwestern Pennsylvania is redeveloping the former Heppenstall steel mill adjacent to the Tippins site.

The city is marketing 14 acres in the Strip between 29th and 31st streets, now home to the tow pound and other buildings, for redevelopment. Chuck Hammel, president of the Pitt Ohio Express trucking company, controls about 27 acres of real estate in the master plan area and is co-owner of the Cork Factory residential development.

"There are a lot of significant things you can weave together to redefine this corridor," said state Sen. Jim Ferlo, D-Highland Park.

Mr. Hammel said he would like to move his company's operation from its location at 26th and 27th streets in the Strip to another site and develop housing along the river. His company is "very interested" in the Tippins site but was told by the URA it doesn't know what it will do with the property.

"If I had a place to move the trucking operation I would get serious about the plans and do something quickly," he said.

Mr. Hammel, however, believes the scope of the proposed city master plan is too broad and could inhibit development from taking hold quickly. He believes it should be broken into two segments, one from 11th Street to 36th Street, and another for property beyond.

"We can get a plan finished so that development can begin. I think it can be done a lot quicker if it were cut into pieces," he said.

Undeveloped Strip District land a focus of riverfront master plan

Aaron Stauber, principal and president of Rugby Realty, which owns property at the corner of 21st and Smallman streets in the Strip, welcomed the proposed master plan.

He said it could help developers tailor their projects to complement each other rather than stepping on each other's toes. A master plan done more than two decades ago to guide development in the city's cultural district has paid huge dividends, he said.

Mr. Stauber hopes to turn his Strip property into a 45,000-square-foot retail center that would feature a drugstore, perhaps a bank and some type of food service designed to complement other Strip retailers and restaurateurs.

Whether he would be open to other uses under a master plan "depends on where we are" with the proposed development, he said.

Reconnect to the river

Mr. Stephany conceded that implementing the master plan probably is a 20-year endeavor, but he added, "We'd love to see a lot of the tone established in that first decade."

One of Mr. Stephany's main goals in the planning is to see neighborhoods, cut off from the river by industrial development, reconnected to the waterfront as much as possible.

"I think our big general excitement about this is what happens to city neighborhoods if they're intimately connected to the rivers again," he said.

He also wants to make sure new development becomes not an island unto itself but an impetus to spur growth in the broader neighborhood, using the South Side and the SouthSide Works complex as an example.

Even if it takes 15 to 20 years, Mr. Ferlo sees nothing but promise in the master planning endeavor.

"It's exciting. It's the next area of big development for this administration and a lot of stakeholders," he said. "This can really be a signature project for Pittsburgh."