

Overcoming Impediments To Brownfield Redevelopment: Two Case Studies In Buffalo, New York

Presented by:

Daniel E. Riker, P.G. (Malcolm Pirnie, Inc.)

Additional Authors:

Peter Cammarata (Erie County Industrial Development Agency)

Christopher Pawenski (Erie County Dept. of Env. & Planning)

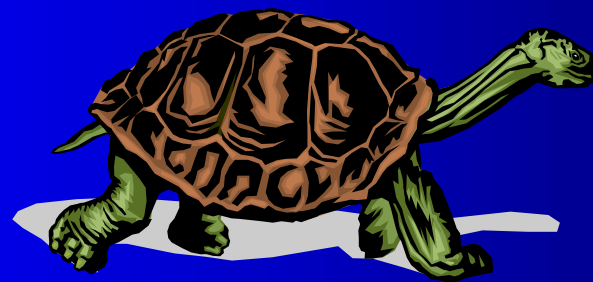
Kent McManus, P.E., DEE (Malcolm Pirnie, Inc.)

Impediments To Redevelopment

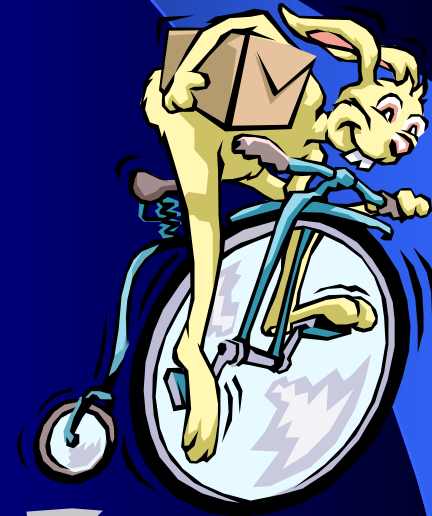
- Funding



- Project Speed



Cleanup



Developer



Hanna
Furnace

Truscon

Funding - Hanna Furnace Site



Hanna Furnace Site



Subparcel 1 – Railyard

Actions

- **Site Investigation: 1999**
- **Supplemental Investigation: 2000**
- **Remedial Action Work Plan: 2001 through 2002**

Funding Sources

- **Buffalo Economic Renaissance Corporation (BERC)**
- **Development Downtown, Inc. (DDI)**
- **City of Buffalo**

Subparcel 2 – Manufacturing

Actions

- Initial Investigation: 2002
- Remedial Investigation: 2002
- Remedial Action Work Plan: 2002-2003
- Demolition: 2002-2003

Funding Sources

- BEREC, DDI and City of Buffalo
- Erie County
- Empire State Development - ReBuild Now - NY

Subparcel 3 - Canal

Actions

- Initial Investigation: 2002
- Remedial Investigation: 2002
- Canal Investigation: 2002
- Remedial Action Work Plan: 2002 -2003

Funding Sources

- New York State Environmental Quality Bond Act
- U.S. Army Corps of Engineers

Subparcel 4 – Fill Area

Actions

- Test Pit Program: 2002
- Fence Installation: 2003

Funding Sources

- U.S. Environmental Protection Agency
- City of Buffalo



Overall Site Redevelopment

Actions

- Transportation/Utility Planning: 2003
- Petroleum-impacted Soil Remediation: Pending
- Cover Material Placement: Pending
- Transportation/Utility Construction: Pending

Funding Sources

- New York State Department of Transportation - Intermodal Transportation Program
- U.S. Environmental Protection Agency
- Erie County Water Authority B.U.D.

Summary of Funding

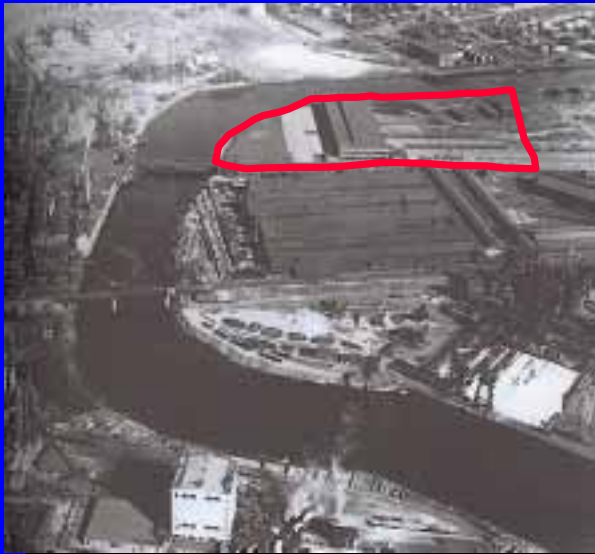
Initial Funding - \$2.5 Million

- BERCC
- DDI
- City of Buffalo

Subsequent Funding - \$5.0 Million

- Erie County
- Empire State Development Corporation
- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- NYS Environmental Quality Bond Act
- NYS Department of Transportation

Project Speed - Truscon



- Size: 50 acres
- Use: Steel mill operations – 80 yrs
- 1991 – Purchased by City of Buffalo
- 20-year old spill of No. 6 fuel oil
- 3-year, \$2 million cleanup planned

Partnership Formed

- Developer became interested in the property
- To address developer's needs, the City of Buffalo, BEREC, and LTV Steel formed a partnership
- Partnership worked closely with the NYSDEC with a common vision and common goals

Revised Remedial Approach

- Excavation and off-site bioremediation
- Site prepared for development in 18 months
- Actual cost ~ \$900,000



Remedial Approach Allowed Contaminated Site To Be Fast-Tracked For Site Redevelopment

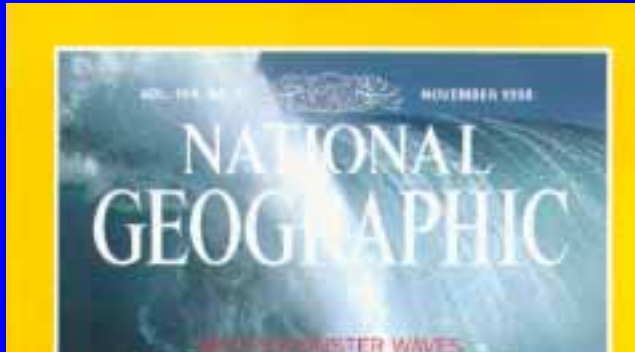
- August 1996 – Supplemental Soil Sampling
- MPI negotiated remedial approach in 2 months
- November 1996 – Soil moved to adjacent property and excavation backfilled
- January-April 1997 – MPI conducted bench-scale biotreatability study
- June 1997-October 1998 – Full-scale bioremediation (26,000 cy of soil on 8-acre biopad)
- August 1997 – Construction of hydroponic tomato greenhouse (March 1998 – First crop picked)

Success!

- City of Buffalo and BEREC closed the \$22 M deal with developer
- Hydroponic tomato facility built on schedule
- First major parcel redeveloped in South Buffalo



Newsworthy



Polishing Up the Rust Belt in Old Buffalo

Abandoned by industry, as many as 450,000 hazardous sites, dubbed brownfields by the EPA, blight U.S. cities. Contamination, real or suspected, thwarts redevelopment. With state and federal funding Buffalo, New York, has tackled three dozen brownfield sites. A demolished paint company (above) is on the renewal list, and golfers already tee off from a driving range nearby. Where sparks flew in a Republic Steel complex, an 18-acre greenhouse produces some seven million pounds of hydroponic tomatoes a year.

Brewerfield's "Farm" produces first crop

Bearing fruit

THE ENVIRONMENTAL ECONOMIST

...of the more than 100,000 tomato plants at the Village Farm Greenhouse in Buffalo, New York, built on a abandoned industrial land. At right, another site prepared for industry.

...of the more than 100,000 tomato plants at the Village Farm Greenhouse in Buffalo, New York, built on a abandoned industrial land. At right, another site prepared for industry.

...of the more than 100,000 tomato plants at the Village Farm Greenhouse in Buffalo, New York, built on a abandoned industrial land. At right, another site prepared for industry.