From Contaminated Blighted Abandoned Marina to Luxury Waterfront Residential Community
A Brownfield Redevelopment Case Study

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Introduction

Is Full Scale Remediation Always Required for a Brownfield Site?
What are the benefits of the Brownfields Program?

Financial Incentives
  - Already Discussed

Regulatory Incentives
  - “Work Together” attitude
  - Local regulatory and government officials support (back on tax roles)
  - Community support for revitalization
  - Risk-Based Corrective Action (RBCA) is new normal
Who Benefits

- Developer
- Community
- Local Economy
- Taxing Authority (property taxes, sales taxes)
- Employment
- Regulatory Authorities
The Project

BROADSTONE RIVERHOUSE
Jacksonville, Florida
Location on the St. Johns River in downtown
CASE STUDY

The Team

- Alliance Realty Partners (Developer)
- Florida Department of Environmental Protection (FDEP)
- City of Jacksonville
- NOVA (Contamination Assessment, Remediation Design, Remediation Oversight/Management, Closure Monitoring)
- ERS (Remediation Contractor)
- Akerman LLP (Legal)
CASE STUDY

The Process

- Developer Identifies Site
- Phase I ESA
- Contamination Assessment
- Remediation Design
- Construction
- Site Remediation
- Completion/Occupancy
- PARM
- Closure
The Timeline

- Phase I ESA 8/2015
- BSRA 12/2015
- Contamination Assessment 12/2015-4/2016
- Remedial Action Plan 10/2016
- Remediation 7/2016-11/2016
- PARM 1/2017-1/2018
- Cleanup Closure 3/2018 (projected)
- Construction 12/2016-12/2018
CASE STUDY

- The Beginning
CASE STUDY

Contamination Assessment
Contamination Assessment

Contamination Consisted of:

- Wide-spread soil contamination, PAH, TRPH, lead and arsenic
- Limited groundwater contamination (VOC)
Remedial Action Plan

Objective: Eliminate human exposure and environmental risk with least amount of economic impact

Contaminated Soils:
- Excavate areas of soil contamination and remove soils of highest concentrations from site for disposal (some Pb failed TCLP and thus were classified as hazardous waste)
- Excavate all soils where surface cover will not be placed long term (e.g., garden areas)
- Move minimally contaminated soils (metals) to areas where impermeable cover will be placed (building slab, parking areas)
- Excavate and remove areas with PAH contamination due to vapor concerns
- In areas of permanent cover, leave in place metals-contaminated soils

Groundwater:
- Deed restrict site for no groundwater use

Closure:
- Deed restriction to identify contaminated areas, restrict groundwater use, require engineering controls
- Engineering controls to consist of perpetual impermeable cover
CASE STUDY

- Remediation

FIGURE 12 - SOIL EXCAVATION PLAN
BROADSTONE RIVER HOUSE
Prudential Drive, Jacksonville, Duval County, Florida

DATE: 08/01/2019
NOVA PROJECT NO.: 107063015073.002
CASE STUDY

- Remediation
  - Breaking Ground for Remediation Excavation

Riverhouse 08-18-16
Remediaion

Excavated Debris
CASE STUDY
CASE STUDY

- The Numbers
  - 769 Tons of D-008 (lead) Hazardous Waste Soils to AES in Kentucky
  - 10,921 Tons of Non-Hazardous Waste Soils to Chesser Landfill, Georgia
  - 703 Tons of Asphalt for Recycling
  - 798 Tons of Concrete for Recycling
  - 4,778 gallons of groundwater sent to treatment facility in Jacksonville
CASE STUDY

12/22/16

Riverhouse

ALLIANCE RESIDENTIAL COMPANY

NOVA
CASE STUDY

- Construction Progress
CASE STUDY
CASE STUDY

2/17/17

NOVA
CASE STUDY

9/18/17

Riverhouse
CASE STUDY

11/16/17

Riverhouse
CASE STUDY

- The Finished Product
CONCLUSIONS

- The Brownfields Redevelopment Program is an excellent tool for taking blighted properties to useable community-friendly projects
- Multiple Winners on Every Project
  - Local Community
  - Developers
  - Investors
  - Employees
  - Government
  - Development Team Members
  - Taxpayers