Remediation and Redevelopment at the Former Fort Devens, Massachusetts, USA
Acknowledgements

- Robert Simeone, U.S. Army BRAC Office
- Ron Ostrowski, MassDevelopment
- Lynne Welsh, MA DEP
- U.S. EPA Region I
  » Bill Brandon
  » Carol Keating
  » Jim Byrne
- U.S. Army Corps of Engineers, New England District
- Harding Lawson Associates, Stone & Webster Engineering and Weston Solutions
Former Fort Devens Site Description

- 9,280 acres divided into North, South and Main Posts
- Located in the towns of Ayer, Shirley, Lancaster and Harvard, MA
- Established in 1917 for training soldiers in the New England area
- Peak population during WWII of 65,000
- Operated as an Army base for over 70 years
December 1989 – Fort Devens listed on the National Priority List (Superfund Site)

July 1991 – North and Main Posts were slated for closure and South Post for realignment under the Defense Base Realignment and Closure Act (BRAC)

March 1996 – Fort Devens closed; remaining Army properties assimilated by the Devens Reserve Forces Training Area

Closure Impacts – 7,500 jobs lost; $260 M in annual wages lost; $455 M in lost business annually
Devens Reserve Forces Training Area (DRFTA)
Environmental Conditions at Fort Devens

- 324 sites identified for environmental evaluation, including:
  - 69 Former Storage Tanks
  - 60 Maintenance & Waste Accumulation Areas
  - 48 Spill Sites
  - 18 Former Fueling Stations
  - 7 Electrical Transformer Leaks

- Over 300 Sites addressed in 21 Records of Decision and 113 No Further Action Decision Documents (signed by Army, EPA and State)
Environmental Conditions at Fort Devens (cont.)

- Contamination of soil and groundwater at numerous areas throughout the site
- Contaminants of Concern include:
  - Arsenic
  - PCBs
  - PAHs
  - Tetrachloroethylene
  - Unexploded Ordinance (UXO)
  - Petroleum/Fuels/Oils
Environmental Conditions at Fort Devens (cont.)

- Environmental remediation projects include:
  - Removal of Soil Contaminated by Fuel and Oil, Pesticides, Chlorinated Solvents, Etc.
  - Removal and Recycling of Construction Debris
  - Landfill waste consolidation
  - In-Situ Treatment via Reduction of Chlorinated Solvents in Groundwater
  - Restoration of Wetlands
  - Long-Term Monitoring of Groundwater
  - Groundwater Pump and Treat
Former Fort Devens Reuse and Redevelopment Planning

◆ In 1991, Fort Devens slated for realignment and closure - reuse planning begins

◆ In 1994, the State of Massachusetts passes legislation:
  - Creating the Devens Regional Enterprise Zone;
  - Establishing the Devens Enterprise Commission – public agency responsible for permitting redevelopment projects – one stop permitting guaranteed in 75 days;
  - Empowering MassDevelopment, a quasi-public Redevelopment agency, to oversee redevelopment planning and implementation;
  - Authorizing MassDevelopment to issue bonds and to borrow up to $200 million to redevelop the site; and
  - Establishing incentives to stimulate private sector redevelopment.
Devens Reuse Plan

- MassDevelopment worked with the public and town representatives and, in 1994, the Devens Reuse Plan was prepared.
- The Reuse Plan focused on sustainability, protecting existing natural ecosystems and working within the confines of known environmental conditions.
- Devens Reuse Plan
- The Reuse Plan provided critical future use decisions up front which facilitated remediation of contaminated sites.
Devens By-Laws

- In 1994, the Devens By-Laws were issued.
- The By-Laws built upon the sustainability goals of the Reuse Plan.
- The principles of sustainability were woven into the By-Laws through:
  - Zoning, density, dimensional requirements;
  - Floodplain, water resource, historic district, signage and wetland protection provisions.
Status of Property Transfer

- 5182 Acres Retained; 345 Main, 4,837 South Post
- 32 Properties Transferred for Reuse – Total 3,920 Acres
  - 2,840 Acres to MassDevelopment
  - 222 Acres to Federal Bureau of Prisons
  - 836 Acres to U.S. Fish & Wildlife Service
  - 22 Acres to Job Corps
- 5 Property Transfers Pending, 150 Acres
  - Shepley Hill Landfill – 118 Acres
  - Certification of Remedy Required for Remainder
American Superconductor

Anheuser Busch

Red Tail Golf Course

C&S Wholesale Grocers

Former Fort Devens – Case Studies

- Landfill Consolidation Project
- Devens Housing Areas
Devens Consolidation Landfill

- Consolidated waste and contaminated soils from six landfill/dump sites into a New “State-of-the-Art” landfill
- All six remediation sites were characterized, remediated and restored to pre-disposal conditions and impacted wetlands restored
- Over 300,000 CY of waste disposed in New Landfill
- Over 100,000 CY of material disposed/reused off-site
- Approximately $25 M completion cost
- [Landfill Consolidation Figures](#)
FIGURE 10
CONCEPTUAL DEBRIS SCREENING FLOW CHART
DEVENS, MA
Harding Lawson Associates
Redevelopment/Risk/Other Drivers for Landfill Consolidation Project

- Former landfill areas available for unrestricted redevelopment = Redevelopment Driver
- Potential impacts from AOC40 to the Patton Drinking Water Well (within 600 feet of well) = Redevelopment/Human Health Driver
- Potential impacts/expansion limitations from AOC9 to the Devens Wastewater Treatment Filter Beds = Redevelopment Driver
- Potential impacts to the Nashua River watershed from AOC9, AOC11, SA12 = Ecosystem Driver
- Community acceptance
Devens Housing Areas

- Location of former military housing slated for redevelopment of new housing or commercial redevelopment (Reuse Plan)
- Property transferred to MassDevelopment from the Army in 1996
- During demolition of old housing, MassDevelopment identified pesticide and asbestos contamination
- During evaluation of pesticide/asbestos contamination, PCBs and arsenic contamination identified – Army brought back in
- Supplemental site investigation led to the identification of some of the former housing areas as historical munitions training areas = potential for unexploded ordinance (UXO)
Devens Housing Areas (cont.)

- Market demands for housing led MassDevelopment to propose future housing development for all former housing areas = change to proposed reuse = more diligent characterization effort
- Soils contaminated with pesticides, asbestos, and PCBs being excavated and disposed – pesticide contaminated soils being evaluated for reuse for landfill regrading
- MassDevelopment sharing in costs to remediate areas slated for commercial redevelopment to residential standards
- MassDevelopment took responsibility for UXO survey and clearance
Devens - The Future “Downtown”
The Future is here......New Hotel
........New Conference Center
......New Office Building
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