

Typical buildings to be demolished

---







# Hazardous material abatement

---





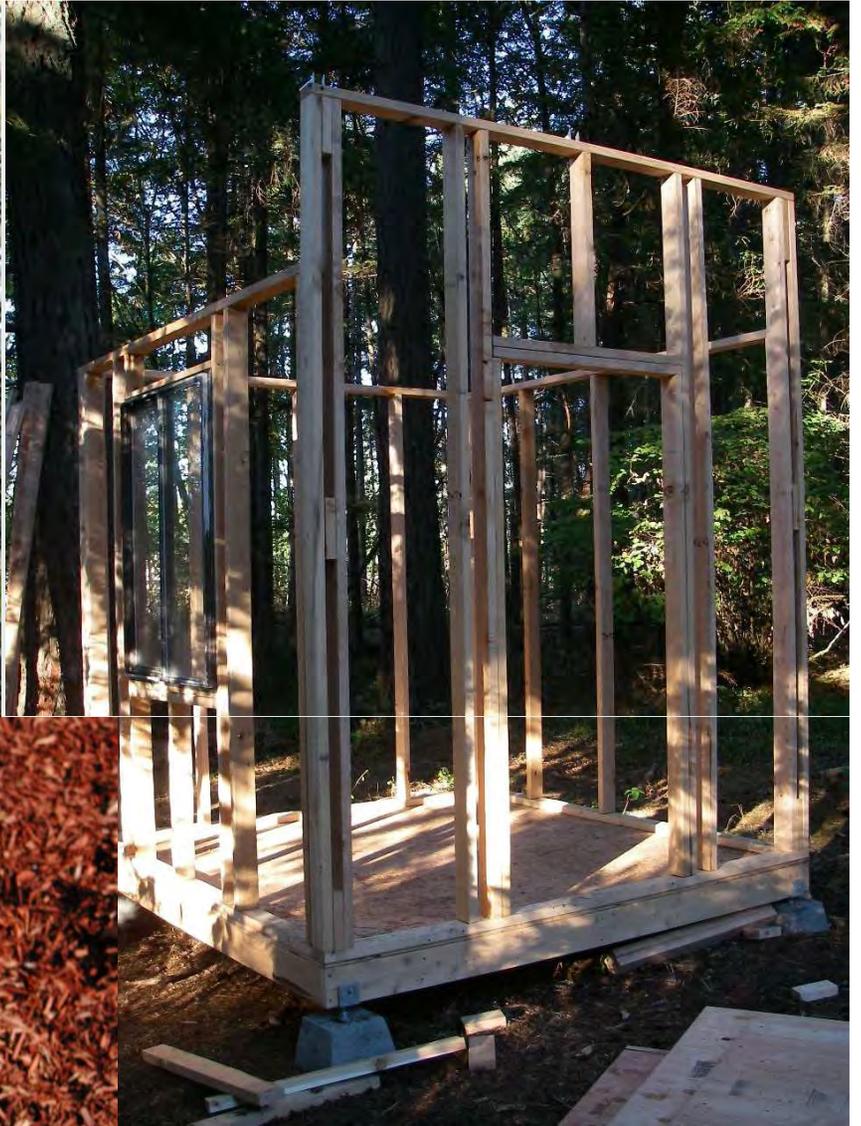
# Demolition





# Diversion





Diversion





Diversion

---



# Case Study Cautions

- Results are driven by local resources
- Require significant investment in researching local and installation resources
- Dedicated project champion/SME integral to success



# Budget Comparison

## ■ Trad. Demolition\*

- ▶ HazMat Survey
  - = \$1.00-\$2.00/sf
- ▶ HazMat Abatement
  - \$4.00-\$4.50/sf
- ▶ Fac. Removal
  - \$8.00-\$9.50/sf

## ■ Total (FY08)

\$13/sf - \$16/sf

\* Pacific NW Region

## ■ Demo w/ Waste Diversion

- ▶ HazMat Survey
  - = \$1.50/sf
- ▶ HazMat Abatement
  - \$4.00/sf
- ▶ Fac. Removal
  - \$8.70/sf

## ■ Total (FY08)

\$14.20/sf



# Schedule Comparison

- Trad. Demolition\*
  - ▶ Abatement=6-8 days
  - ▶ Other=2-4 days
  - ▶ Demo=1-2 days
- Total=9-14 days
- Battle Sim Project
  - ▶ Abatement=6-8 days
  - ▶ Other=2-4 days
  - ▶ Demo=2-3 days
- Total=10-15 days

\* Pacific NW Region



# Hybrid Demolition Success

- 138,758 sq. ft JBLM buildings removed using hybrid demo/deconstruction techniques
- 94% diversion of Non-hazardous C&D debris from landfill (including hog fuel and daily cover)
- 77% diversion of Non-hazardous C&D debris from landfill (not including hog fuel and daily cover)
- No change orders/contract modifications
- Within schedule, within budget
- Installation commitment to provide resources



# Execution Approach

## 0. Assumptions

- ▶ Hazardous waste is abated prior to diversion

## 1. Confirm installation resources

- ▶ Stockpile space: “Soils or spoils” piles
- ▶ Composting
- ▶ Materials reuse (Example: crushed gravel)
- ▶ Scale house and other required infrastructure
- ▶ Staffing and equipment
- ▶ Onsite soldier training needs (Example: Berms at ranges, use of ply-wood for training structures)



# Execution Approach (cont.)

## 2. Research and identify commercial resources

- ▶ Recycle facilities
- ▶ Reuse facilities and organizations
- ▶ Hog fuel and daily cover locations

## 3. Identify execution strategy

- ▶ Combined with MILCON
- ▶ Separate from MILCON
- ▶ Huntsville



# Execution Approach (cont.)

4. Review existing acquisition tools and identify acquisition strategy
  - ▶ Standalone contract
  - ▶ Task order to MATOC or IDIQ
  - ▶ Performance based or prescriptive (specifications)
  
5. Consider contractor pre and post award training needs
  - ▶ Connect contractor with local resources
  - ▶ Connect contractor with installation resources and processes



# Critical Decisions

- Definition of diversion
  - ▶ Anything that does not go to landfill
    - Hog fuel = diversion or beneficial use?
    - Landfill daily cover = diversion or beneficial use?
  
- Materials included in diversion calculations
  - ▶ Concrete?
  - ▶ Steel, metal studs?
  - ▶ Land clearing debris?

