

The Pilot Deconstruction Report

The Pilot Deconstruction Project was a community effort to determine the value of the materials contained in the buildings at the former Fort Ord.

The term "deconstruction" has come to mean disassembling of buildings so that component parts may be reused. Reusing building materials, recycling unusable materials, reducing deposits in the area landfills, and creating employment opportunities were important goals of the Fort Ord Deconstruction Project

PDP Report

The closure of the Fort Ord Military Reservation (Fort Ord) in 1994 left more than 28,000 acres and over 7,000 buildings to be reprogrammed for civilian integration or modified under reuse. A significant number (1200 +/-) of the remaining structures do not meet civilian building code requirements and contain remnant hazardous materials that require abatement. In order to make way for the economic reuse program of the former Fort Ord property, these substandard facilities must be removed.

The PDP's goal has been to reduce impacts associated with removing over 1,200 obsolete WWII era structures from the former Fort Ord by research, cost saving practices in reuse, relocation, deconstruction (salvage), recycling. Research included identifying changes in regulations, market conditions, economics, and public opinion that may be beneficial or impede building removal. In addition, the project also identified business opportunities associated with building removal and began training contractors and local residents in building removal practices as program objectives.

THE FORA "Hierarchy of Building Reuse" developed directly from the field experience, market studies and industry input, prioritizes the most efficient reuse of obsolete buildings focusing on the concepts that will produce the most savings:

1. Renovation and reuse in place
2. Relocation and renovation
3. Deconstruction and reuse of building materials
4. Mechanical demolition with aggressive recycling

The Pilot Project's "hands on" experience extends to market research for salvaged materials and the requirements for salvage crews working on Lead Based Paint (LBP) covered buildings. Comparative LBP removal technologies and updates to the Army's hazardous material surveys have been performed on representative buildings. A detailed report of the Deconstruction Project has been produced and has been used by other deconstruction projects across the nation.

The effects of changing LBP regulations on labor, materials sales, site clean-up and removal techniques is a major continuing concern. The Pilot Deconstruction Project, in conjunction with the Monterey Bay Regional Air Pollution Control District, has facilitated Inter-Agency LBP Meetings to coordinate the efforts of all regulatory agencies that will be concerned with the building removal and disposal of building materials. This was a major activity of the 1999-2000 fiscal year.

These meetings have been ground breaking and are expected to continue in 2001 under the Building Removal Program, with regulatory agencies and land developers working together to identify and eliminate potential problem spots, streamline testing and sampling protocols that will service multiple agencies needs and provide added environmental protection.

The efforts of the Pilot Deconstruction Project has been coordinated with Congressman Sam Farr's office, the US EPA, the USDA Forest Products Lab, the Department of Toxic Substance Control, the Regional Water Quality Control Board, local jurisdictions, and private industry in an effort to create a decisive program for environmentally sensitive removal and disposal of buildings that impede a sustainable reuse of the former Fort Ord.

1997 Activities

Identified one building from each type to offer comparative data

Field Surveys augmented the existing US Army, and local regulatory agency guidance in mitigating hazardous materials

Crew members trained as Lead Workers, (asbestos work restricted to certified contractor).

Technical support Group formed, composed of representatives from Construction, Regulatory Agencies, and the Salvage Industry to advise and guide the project.

Implementation began in April, 1998 with four representative buildings. Three more were relocated; and one concrete building was disassembled.

Contaminate free materials offered at a public sale; contaminated materials stockpiled for future research.

Over one thousand pieces of deconstructed structural members re-graded and shipped by the USDA to their Forest Products Lab for engineering strength testing.

Developed an internet web-site in the summer of 1997, maintained as a means of service to other bases and outreach to the public. Access figures show that use is regular and repetitive.

1998 Activities

After completing the deconstruction work in 1997 the PDP staff analyzed the information and lessons learned and compiled a strategic list of next steps; as follows:

Maintain PDP work in: Salvaged material cost/value determination; Identifying Deconstruction Contractors; Community outreach assistance;

Update the existing Hazardous Material information for the former Fort Ord buildings, particularly asbestos and lead, compile a library of all the Federal, State and Local regulations pertaining to asbestos and lead.

Estimating salvaged material costs and values (for materials salvaged during 1997)

Seeking and identifying and pre-qualifying deconstruction contractors to work at Fort Ord in the impending building removal process.

Community outreach and assistance, both on a local level and at-large, to assist others with reuse, relocation, deconstruction and recycling efforts.

1999 Activities

Updated hazardous material information in preparation for large scale building removal efforts.

Updated existing asbestos surveys to account for asbestos hidden to the previous non-deconstructive asbestos surveys.

Collected previously uninvestigated lead based paint data

Research asbestos and lead based paint regulations pertinent to the buildings at former Fort Ord.

Compiled an inventory of materials that could be salvaged from all the obsolete buildings at the former Fort Ord.

Maintain the PDP's efforts in Community outreach and assistance

Combine the efforts of local training providers and the research of the PDP to produce training specifically designed so that local labor can participate in the deconstruction opportunities at the former Fort Ord.

2000 Activities

Effective coordination between regulatory agencies, local jurisdictions, land developers, and FORA. In one instance, this group worked quickly and efficiently to assess developer Kaufman and Broad's (K&B) building removal needs and to develop a waste characterization sampling protocol that fit the needs of K&B's upcoming Hayes Park Development. The outcome was friendly and beneficial to all. K&B anticipates approximately 90% reuse and recycling of the materials from over 400 sub-standard housing units based on the 1997 work of the Pilot Deconstruction Project.

Establish the former Fort Ord Contractors Academy. The lack of proper training has prevented many local contractors, impacted by the closure of Fort Ord, from participating in opportunities emerging at the former Fort Ord. The Pilot Deconstruction Project Manager, worked with the FORA Community Contract Specialist and Hartnell Community College to create the Contractors Academy. The goal of the Academy is to train and assist emerging contracting firms so that they may successfully compete for contracts on the former Fort Ord. The Academy anticipates enrolling and graduating it's second class this Spring. The Association of General Contractor has presented FORA with an award for the Academy's leadership role in Construction Workforce Development.

Reuse of four military structures and assisted others to rehabilitate 194 housing units for civilian uses. By taking on the additional role of Leasing and Facilities Manager the Pilot Deconstruction Project Manager has been able to coordinate FORA's efforts to reuse many buildings at the former Fort Ord. The Pilot Deconstruction Project research shows that the best way to save resources and divert waste from landfills is to Reuse buildings in place. The leasing program has been established to accomplish this goal.

Offered Twenty Six Buildings to the general public for relocation and reuse. The Pilot Deconstruction Project created the bid documents and implemented program offering buildings that are slated for removal to make way for an upcoming road realignment on the former Fort Ord. The Pilot Deconstruction Project research shows that the second best way to save resources and divert waste from landfills is to relocate and reuse buildings.

Assist California State University, Monterey Bay (CSUMB) in feasibility studies to determine if materials salvaged from their obsolete buildings could be incorporated into their new construction and building rehabilitation projects. CSUMB is currently retrofitting hundreds of buildings and beginning construction on their first new structure. Because of the work of the Pilot Deconstruction

Project, FORA was approached by CSUMB for assistance. FORA's efforts are on-going.

Role of the Pilot Deconstruction Project in 2001.

The Pilot Deconstruction Project in 2001 will:

- Ø Provide information, contacts, and analysis's for the reuse or removal of buildings from the former Fort Ord.
- Ø Coordinate (with the Jurisdictions and Regulators) the collection of accurate Lead Based Paint (LPB) contamination data pertaining to the structures at the former Fort Ord. Coordination is required for Building Reuse and Removal needs, regulatory variances. safely maximizing waste diversion, developing standard protocols and procedures so that work can progress as quickly as possible.
- Ø Work with the Monterey Regional Waste Management District in applying for a variance to AB-939 that will exempt the Fort Ord building removal trash and prevent the City of Marina from accruing \$10,000 per day penalties.
- Ø Explore ways that similar large scale Building Removal projects minimize their landfill waste.
- Ø Explore technological advances that can assist in lowering the contamination level, volume, and cost to remove hazardous materials from the buildings at the former Fort Ord.
- Ø Work with development projects so that they and their contractors can quickly and accurately make economically feasible and environmentally friendly decisions concerning the removal of buildings at the former Fort Ord.
- Ø Find and modify standard building removal contract language so that it is legally defensible, encourages safe salvage/waste reduction efforts and provides enough time for building removal contractors to implement salvage/waste diversion practices.