

**Mothball Plan
And Existing Conditions Survey
For
Fort Ord, East Garrison
Monterey, California**



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I. Introduction

The following Mothball Plan and Existing Conditions Survey is based upon recommendations outlined in the National Park Service Preservation Brief #31 *Mothballing Historic Buildings*, written by Sharon C. Parks. This report addresses the three main categories outlined in the Preservation Brief: *Documentation, Stabilization, and Mothballing*.

This report pertains to a select number of buildings at Fort Ord's East Garrison. The buildings include six of the Mess Halls, eight Warehouses, the Rod and Gun Club, two Latrines, the Exchange Branch Building (northeast of the Warehouses), two Officers Latrines, two Officers Mess Halls, and a concrete building located between the two Officers Mess Halls.



Figure 1: Master Plan of Fort Ord East Garrison. Structures designated for mothballing are highlighted in purple.

II. Documentation

A. Past Documentation Efforts

Fort Ord is documented in a Historic Resource Survey entitled *Fort Ord, East Garrison*, prepared by Architectural Resources Group in September 2003. The Historic Resource Survey includes the following information:

- Site Description,
- Deactivation of Fort Ord,
- Map Showing Building Numbers,
- Regulations and Criteria Evaluation,
- Historic Contexts,
- Summary of Past Correspondence Regarding Property Transfer and NR District,
- Determination of Eligibility, and
- Potential Nation Register/California Register District Map.

Guidelines for the rehabilitation of Fort Ord's East Garrison buildings entitled, *Guidelines for Rehabilitation of the Buildings at the East Garrison, Fort Ord, Monterey County, California*, was prepared by Architectural Resources Group in March 2004. This document includes the following information:

- Planning Background,
- East Garrison Project Description,
- Purpose of the East Garrison Guideline,
- The Secretary of the Interior's Standards for Rehabilitation,
- Guidelines for Rehabilitating Historic Buildings,
- Background of the East Garrison,
- Building Descriptions/Character Defining Features, and
- Guidelines for the Rehabilitation of the Concrete Buildings at the East Garrison.

B. Existing Condition Survey

The condition of the exterior and interior building elements are discussed in both documents referred to above. Since it has only been one year since the last conditions survey was performed, no review of the survey was needed at this time. The following are descriptions of common East Garrison building materials and elements.

1. Exterior

Concrete

All of the concrete buildings at the East Garrison are cast-in-place reinforced concrete. Some exterior or concrete walls (such as those at the warehouses) bear the impression of the wooden forms used during construction, but most are coated with stucco. This finish

contributes to the building's Spanish Revival style. Stucco also serves to prevent water damage to the underlying concrete. This is a key reason to ensure maintenance of the stucco.

Environmental factors, inferior materials, poor workmanship, inherent design defects, and inadequate maintenance can cause concrete deterioration. However, environmental factors are a principal source of concrete deterioration. As a porous material, concrete absorbs water. Moisture penetration moves soluble salts and atmospheric pollutants into the body of the concrete and will initiate corrosion of the metal reinforcing bars. Once initiated, corrosion continues unless completely deprived of moisture and oxygen. Corrosion products formed on embedded steel produce tremendous expansive forces, which cause severe cracks and spalls in the concrete, and can lead to complete loss of bond between the reinforcing bars and concrete, and to separation of the concrete into planes (a process called delamination). One of the principal causes of stucco deterioration on the East Garrison buildings is the splash back of rainwater off sidewalks surrounding the Mess Halls onto the walls of the exterior building.

Stucco

All buildings of concrete construction within the East Garrison are covered with a layer of stucco, with the exception of the Warehouses. Most stucco at the East Garrison was applied with a smooth trowel finish directly over the reinforced-concrete walls. Although the stucco is nonstructural, it offers an additional coating to help weatherproof the concrete.

Stucco failure is caused by the breakdown of its water-shedding capacity and the ultimate deterioration of the supporting structure. Poor original materials and techniques, incompatible building materials with different expansion rates, structural settlement, seismic movement, and biological growth can also cause cracking or adhesion failure between the stucco and its backing, or between individual stucco layers. Lack of proper maintenance increases the likelihood of problems that can lead to the breakdown of the stucco skin. It is possible to repair cracks or breaks in a stucco coating.

Tile Roofs

The roof system of any building is its protective covering. The maintenance of roof elements is a significant factor in ensuring the condition of the building. All of the concrete buildings at the East Garrison are covered by gable roofs clad in red clay tile. The gabled roofs are a distinctive unifying feature of the concrete buildings at the East Garrison. They represent the uniformity of WPA-constructed Army buildings. Some building types have single gables while others have intersecting gables. All are gently pitched and covered in red clay tiles with exposed ends along the eaves. It does not appear that the roofs have been substantially altered. The red clay tile is original, and the installation of new mechanical equipment (e.g. vent pipes, antennae's, and wiring) has been minimal. Although some tile is missing, in general, the roofs are in good condition.

Wood

The buildings in consideration for this report are of concrete construction, however, wood elements, such as exposed rafter ends, windows, doors, and porch posts exist in all of the structures. Measures to ensure the maintenance of these wood elements should be taken into consideration.

Moisture in combination with other influences, such as insects, and fungi, weakens the structure and is the main cause of wood deterioration. Paint is the most effective means of waterproofing a wood surface; the majority of wood at the East Garrison has been painted.

Windows

There are a few window types, with minor variations, in use at the East Garrison. Wood double-hung windows are the primary type, with one-over-one, two-over-two, three-over-three, and six-over-six lite sash. The fenestration is generally regular and symmetrical.

As one of the few parts of a building serving as both an interior and an exterior feature, windows are significant to the character of a building. Some window sash replacement has occurred at the East Garrison, primarily evident in the change from multi-lite, small paned windows to single-paned sashes. None of the original windows have been replaced with aluminum windows. Many of the windows are covered with chain link fencing and plywood panels (some with vents).

Entrances and Porches

Three buildings at the East Garrison have porches; they are: Buildings 14, 91, and 124. Due to the relative simplicity of the buildings at the East Garrison, the porches are significant in defining the overall character of the buildings. The porches are one-story and span the length of the primary elevations. The porches are simple in design and construction, with shed roofs supported by wood posts, and concrete floors.

2. Interior

The building interiors have general debris. The walls and floors of many of the buildings are covered with flaking paint. There are a number of droppings of dead birds and rodents. Office chairs, file cabinets and other related office equipment is scattered throughout many of the buildings.

Many of the buildings at the East Garrison have open floor plans, particularly the Mess Halls and Warehouses. Regularly spaced rafters and windows give these large open spaces order and regularity. Mess Halls and Latrines are divided into two identical (or mirrored) interior plans. These divisions clearly communicate the use of the buildings by two companies or groups of soldiers. Some of the interiors of the buildings have been remodeled. Most of these partitions are outside the period of significance and are poorly constructed of cheap materials that have not aged well.

Overall, the buildings have a lack of ornamentation. However, simplicity does not imply a lack of significance. Original finishes and spaces, albeit simple, may be highly significant.

Mess Hall

Fireplaces

The Mess Halls have a fireplace centrally located on the exterior wall of each wing, amounting to a total of two fireplaces per structure. On the interior these fireplace hearths are made of stone with a wood mantel. On the whole the fireplaces are in good condition. They are a key element of the interior significance of the Mess Halls.

Kitchen Appliances

A majority of the Mess Hall kitchens have remnants of the previously existent commercial kitchens still intact. Metal countertops, sinks, as well as a variety of appliance (ovens, refrigerators, and lights) can be found in various Mess Hall kitchens. Many of these kitchens have suffered from vandalism, and the appliances are in poor condition.

III. Stabilization

Mothballing a structure controls the long-term deterioration of the building while it is unoccupied. This process also stabilizes the building and protects the structure from fire, vandalism, and sudden loss. An effort to achieve a successful mothballing requires securing the structure from unwanted entry and providing adequate ventilation. Periodic maintenance of the structure while in the mothball state ensures the success and maintenance of the building's condition. For direction on appropriate repairs to specific materials not mentioned in the Mothball Plan, see the *Guidelines for Rehabilitation of the Buildings at the East Garrison, Fort Ord, Monterey County, California*.

- All structures must be rid of debris.
- Remove all pigeon droppings and other animal waste.
- Remove all remaining office equipment, furniture, etc.
- Remove all remaining kitchen appliances.
- All windows and doors must be boarded.
- Any paint that is in poor condition must be removed and subsequently be re-painted.
- All brush around the buildings must be maintained to prevent water damage as well as rodent infestation.

A. Structural Stabilization

The buildings are currently in stable structural condition.

B. Controlling Pests

Entrances into the structures have been boarded in an effort to limit the infestation of pests. However, there are droppings of birds and pests inside the buildings, indicating the past mothballing efforts are not adequate or are in need of repair.

C. Securing the Exterior Envelope from Moisture

In addition to boarding the doors and windows to secure entries, there has been minimal effort to secure the structures from moisture.

D. Securing the Building from Vandals, Break-ins, and Natural Disasters

Buildings at the East Garrison have a number of measures in place that secure the buildings from vandals and break-ins.

- A chain link fence surrounds the East Garrison, limiting entrance into the site.
- A metal bar crosses the only main entrance drive to the East Garrison.
- Exterior doors are secured with plywood panels.
- Most windows are covered with plywood on the buildings' exteriors.
- Many windows are covered with wire mesh screening on the buildings' exteriors.

E. Providing Adequate Ventilation to the Interior

There have been very minimal measures taken to ensure that there is adequate ventilation to some of the buildings' interiors. Some of the plywood coverings on windows are equipped with vents.

F. Securing Mechanical Systems and Utilities

Currently all mechanical systems and utilities are not in service to buildings at the East Garrison.

IV. Mothball Plan for the East Garrison Buildings

A. Mothballing Measures

The following plan lists all measures required to ensure proper mothballing of Fort Ord East Garrison buildings in compliances with *Preservation Brief # 31*. Some of these measures are currently in place and are noted.

Moisture

1. Review condition of roof; install temporary roofing material at all opening locations to prevent water infiltration into the building interior.
2. Clean all gutters and leaders and ensure that gutters and leaders are functioning properly.
3. Secure all doors and windows.

Pests

1. Use proper methods to remove all birds, droppings and carcasses from buildings' interiors.

Housekeeping

1. Remove all debris from building interior. This includes furniture, office equipment, and kitchen appliances. Follow proper precautions of material removal in regards to lead based paint and asbestos.
2. Broom clean all floors.
3. Document, catalog, and store for safekeeping historic elements that have been removed from their original location. This includes trim, doors, and windows.
4. Establish a building file. Record all activities pertaining to mothball plan and maintain copies in building file.

Security

1. Install smoke detectors in several locations throughout the buildings.
2. Secure all doors and windows.
3. A security guard will check the buildings once a week and maintain an inspection log. Security will report any problems, and repairs will be made immediately.
4. Notify police and fire department that the building is being mothballed.

Utilities

1. Ensure utilities remain off. (Currently all utilities are off.)

Ventilation

1. Take current moisture content reading for interior wood elements. Record baseline moisture readings for use in future monitoring.
2. Maintain interior temperature above dew line.

B. Maintenance Schedule for Mothball Plan

Daily

1. Maintain security fence.

Weekly

1. Check the buildings for damage and maintain an inspection log. Report any problems.
2. Check all doors and windows.
3. Repair vandalism damage as it occurs

3 Months

1. Walk through entire interior of each building, check for pest intrusion and other changed conditions.
2. Inspect vents in windows for proper function, clean screens.
3. Take moisture reading of wood elements. Compare to baseline readings. Note significant changes to moisture levels within the building.

6 Months

1. Check condition of gutters and leaders and ensure proper function.

Annually

1. Check condition of buildings and repair any damage.