

Developing a Typology and Historic Context to Inform DoD Management Solutions: Utilitarian and Prefabricated Buildings on Military Installations (1945–1991)

Project # 15-783

Background:

Utilitarian buildings are those which have designs dictated by function and practicality rather than aesthetics; they are not defined by use or typology. They are commonly prefabricated or otherwise standardized. Utilitarian building history originated in the United States (US) during the California Gold Rush, which caused a need for temporary, easily constructable housing. By the start of the 20th century, steel manufacturers were marketing metal prefabricated buildings, typically to the agricultural and oil industries. The use of prefabricated metal structures by the US military began during World War I. Prefabricated structures constructed of metal, wood, and concrete block quickly became vital for supporting US military missions, as they were adaptable and could be quickly and easily constructed with minimal manpower at nearly any location worldwide. Due to their widespread use by the Department of Defense (DoD) during the 20th century, more than 14,000 utilitarian buildings will be reaching 50 years of age between 2020 and 2041. As such, the Cultural Resources Team at the US Army Corps of Engineers Engineering Research Development Center, Construction Engineering Research Laboratory (ERDC-CERL) conducted research to provide evidence for a programmatic alternative to the National Historic Preservation Act (NHPA)'s Section 106 process for utilitarian buildings between the DoD and the Advisory Council on Historic Preservation (ACHP).

Objective:

This project documents utilitarian buildings constructed as prefabricated temporary and semipermanent buildings (1946–1991) to enhance the management of these DoD resources and reduce costs associated with Determinations of Eligibility for the National Register of Historic Places (NHRP) conducted during NHPA Section 106 and Section 110 processes.

Summary of Approach:

Research into utilitarian buildings began with a review of the DoD Real Property database, which found 28,668 metal, wood, and concrete block utilitarian buildings classified as temporary, permanent, and semi-permanent construction.

ERDC-CERL wrote a historic context regarding the origins of utilitarian building types and construction methodologies. Initial research identified six different types of installations to provide data for a baseline level of detail and enable the analysis of historical and physical detail that could serve as recommendations for future programmatic approaches. To survey physical resources related to the construction of utilitarian buildings, ERDC-CERL personnel visited one Naval installation, two Marine Corps installations, two Army installations, and one Air Force installation.

Benefit:

Historic research and review of DoD utilitarian buildings revealed no direct associations between the design and manufacture of utilitarian buildings and any particular conflict that the DoD participated in between 1946 and 1991. Due to the lack of direct association between the designs of utilitarian buildings and national events, as well as their lack of identifiable features for the assessment of integrity, utilitarian buildings cannot be adequately assessed for integrity and cannot be categorized into historic periods. Therefore, they are not significant for the NRHP under Criterion A for association with events that have made a significant contribution to the broad patterns of history.

Due to the large numbers of utilitarian buildings that will be reaching 50 years of age from 1970 through 1991 (greater than 14,000), this report recommends that there is enough commonality of utilitarian uses and construction types for DoD to consider development of a programmatic alternative to Section 106 for utilitarian buildings with the ACHP.

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