

Naval Facilities Engineering Command, Pacific 258 Makalapa Drive, Suite 100 Pearl Harbor, Hawaii 96860-3134

MILITARY RELOCATION TO GUAM AND CNMI PROGRAMMATIC AGREEMENT (PA) MEMO

	N 7
Project: Tumon-Maui Well Rehabilitation	Date: May 2, 2011
Project Location: Tumon, Guam	Prepared By: EV23PJC

PROJECT DESCRIPTION:

Rehabilitation of the Tumon-Maui Well is a project that was identified after preparation of the Final EIS (FEIS) for the military relocation to Guam and Tinian and Appendix E of the PA. In accordance with Stipulation I.E. of the PA, it is a new project associated with the Guam and Commonwealth of Northern Mariana Islands (CNMI) Military Relocation (the Undertaking).

This project proposes design and construction (rehabilitation) of a water well facility including existing site and building repairs/improvements, and new energy-efficient mechanical and electrical equipment to an Air Force owned property to the west edge of Marine Corps Drive (Route 1) in Tumon on the island of Guam. The project includes design and construction support facilities, which include a treatment facility to remove known contaminants and ensure compliance with pertinent U.S. and Guam EPA Safe Drinking Water Quality Standards/Requirements, and piping installation for water distribution.

The project aims to provide a fully functional and energy efficient well water supply facility, which can provide an additional drinking water supply (900 gallons per minute or 1.3 million gallons per day) for use by the U.S. Department of Defense. This supply is targeted to serve the central area of Guam, where demands from workforce housing and induced growth is expected to be concentrated. The Tumon-Maui Well has a history of volatile organic compound contamination and installation of a granular activated carbon treatment system may be necessary to produce water that meets all applicable drinking water standards and requirements.

Tumon is located in northwestern Guam, west of Route 1 and south of Northwest Field at Andersen Air Force Base.

The Tumon area of potential effect (APE) is situated on the limestone plateau above the western cliffs of northern Guam. The plateau, which rises from 120 to 150 m (ca. 400 to 500 feet) above mean sea level (amsl), is relatively flat, although there are localized raised and depressed areas caused by differential solution of the limestone

1 This PA Memo is required by Stipulation IV of the PA as a means for interested members of the public to provide comments on the identification and evaluation of historic properties. Stipulation IV.E.1.b. of the PA requires the DoD to take into account comments received within 45 days of the date of the delivery of this PA memo to the SHPO and public notification via the CRI website.

bedrock below the soil layer.

The total APE for the Tumon-Maui Well Rehabilitation is 24.2 acres (see Figure 1).

IDENTIFICATION OF HISTORIC PROPERTIES:

Scope of DoD Identification Efforts

The Tumon-Maui Well was included in the following documentation of cultural and/or historic resources conducted prior to the Marine Relocation Environmental Impact Statement (EIS) by the DoD beginning in 2007:

2003 Final Integrated Cultural Resource Management Plan for Andersen Air Force Base, Guam, 2003 Update. Prepared for Earth Tec Global Environmental, U.S. Air Force Center for Environmental Excellence and 36 CES/CEVN, Andersen AFB, Guam. Contract F41624-00-D-8023, Task Order 0077. International Archaeological Research Associates, Inc., Honolulu.

Yoklavich, Ann K., John L. Craib, and Patricia Drolet

1996 Final Report: Cultural Resource Management Overview Survey, Andersen Air Force Base, Mariana Islands, Territory of Guam. Prepared for Department of the Navy, Naval Facilities Engineering Command, Pearl Harbor, Hawaii 96860-7300. Contract N62742-91-D-0507, Delivery Order No. 0005. Ogden Environmental and Energy Services Co., Inc. Honolulu.

Based on existing information regarding the post-WWII, late 1940s date of construction and its unique construction method and design, which "involved excavating a large pump room and long slanting access tunnel, a significant engineering feat" (Yoklavich, Craib and Drolet 1996), the Tumon-Maui Well is considered an historic property.

As stated in *Groundwater Resources of Guam: Occurrence and Development* by John F. Mink (1976, 1991), "upon recapture of Guam by American troops, many wells were drilled throughout the island in an attempt to solve the water supply problem. Experts were invited to Guam to assess the ground water resources and their potential developability. A team from Hawaii...recommended Maui Shafts (infiltration galleries) because they had proven successful on the islands of Oahu and Maui, Hawaii, though at great cost compared to wells."

"The first Maui well at Tumon (USGS no. 80) was driven at the base of the limestone scarp one half mile inland of the bay. The infiltration tunnel is 1000 ft. long and has an invert of -2.5 ft." In *Hydrology of Guam: Geology and Hydrology of Guam, Mariana Islands* (Porter E. Ward, Stuart H. Hoffard and Dan A. Davis: 1965), it was noted that the well had been in almost continuous use since 1947.

No additional historic properties are located within the project APE.

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PRELIMINARY DOD DETERMINATION OF ELIGIBILITY:

Pending input from consulting parties and the public, with exception of the aboveground buildings added to the well site in recent years, the DoD believes that the well is eligible for listing on the National Register of Historic Places under Criteria C (for its distinctive construction characteristics) and D (for its potential to yield information important to prehistory or history).

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