

## CHAPTER 12.

# CULTURAL RESOURCES

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### 12.1 INTRODUCTION

This chapter contains a discussion of the potential environmental consequences associated with implementation of the alternatives within the region of influence for cultural resources. For a description of the affected environment, refer to the respective chapter of Volume 2 (Marine Corps Relocation – Guam). The locations described in that Volume include the region of influence for the aircraft carrier berthing component of the proposed action (Apra Harbor), and the chapters are presented in the same order as the resource areas contained in this Volume.

### 12.2 ENVIRONMENTAL CONSEQUENCES

#### 12.2.1 Approach to Analysis

##### 12.2.1.1 Methodology

The methodology for identifying, evaluating, and mitigating impacts to cultural resources (archaeological, architectural, and traditional cultural properties) has been established through federal laws and regulations including the National Historical Preservation Act (NHPA) and the Archaeological Resource Protection Act (ARPA).

A significant resource is a cultural resource eligible for or listed on the National Register of Historic Places (NRHP). A project affects a significant resource when it alters the resource's characteristics, including relevant features of its environment or use that qualify it as significant according to NRHP criteria. Adverse effects may include the following: physical destruction, damage, or alteration of all or part of the resource; alteration of the character of the surrounding environment that contributes to the resource's qualifications for the NRHP; introduction of visual, audible, or atmospheric elements that are out of character with the resource; neglect of the resource resulting in its deterioration or destruction; and transfer, lease, or sale of the property without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historical significance (36 Code of Federal Regulations [CFR] 800.5(a) (2)).

Analysis of potential impacts to cultural resources considers both direct and indirect impacts. Direct impacts are those that may occur during the construction phase of the project. They may be the result of increased noise or ground disturbing activities involving construction, modification, or the use and maintenance of facilities. Indirect impacts are those that may occur as a result of the completed project such as increased vehicular or pedestrian traffic in the vicinity of the resource that may lead to vandalism or increased erosion. Vandalism is considered to be a significant impact because it damages the integrity of the site, which is the major determinant of NRHP-eligibility. The evidence left in archaeological sites is finite and cannot renew itself once it has been disturbed. For this reason, federal activities that open areas up to the public or that involve personnel traveling through an area may have an adverse effect if vandalism occurs to NRHP-eligible or listed resources in the vicinity.

##### 12.2.1.2 Determination of Significance

A historic property is a property that is eligible for or listed on the NRHP. For cultural resources a significant adverse impact is one that disturbs the integrity of a historic property. If a project disturbs the

characteristics that make the property eligible for or listed on the NRHP, then it is also considered to be a significant adverse impact.

The Integrated Cultural Resources Management Plan (ICRMP) for Navy property in Guam has established Standard Operating Procedures (SOPs) for protecting known NRHP-eligible or listed cultural resources; procedures for managing the inadvertent discovery of archaeological resources, inadvertent discovery of human remains, and inadvertent disturbance to historic properties; and distributing permits for archaeological investigations (Tomonari-Tuggle et al. 2005). In addition, agreements on limitations to training have been made as part of the Mariana Islands Training Range Complex Environmental Impact Statement Programmatic Agreement Areas and would be incorporated into any project descriptions; limited or no training stipulations at Apra Harbor are presented in Figure 12.2-1 of Volume 2.

As part of the Section 106 consultation process for this Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS), a Programmatic Agreement (PA) for all military training activities, construction, and operation proposed under the proposed action that includes additional potential mitigation measures and procedures is being prepared. Current signatories to this PA are: the Department of Defense (DoD) (Joint Region Marianas; DoD Representative Guam, Commonwealth of the Northern Mariana Islands [CNMI], Federated States of Micronesia, and Republic of Palau; Marines; Navy; Army; Air Force), other federal agencies (United States [U.S.] Environmental Protection Agency [USEPA], Advisory Council for Historic Preservation [ACHP], the National Park Service [NPS]), and local government agencies (Guam Historic Preservation Officer [HPO], CNMI). The signed PA will be incorporated into the Final EIS/OEIS. Stipulations in the PA include the following:

- The DoD would ensure that the identification and evaluation of historic properties within the area of potential effect is completed for the project prior to the initiation of any part of the project with the potential to impact historic properties.
- For areas or properties that have not been inventoried for historic properties, the DoD would record surface sites and, when possible, areas would also be archaeologically sampled for subsurface sites when easily obtainable (i.e., without having to demolish existing facilities or infrastructure).
- Archaeological probability maps have been generated for all current DoD installations on the Island of Guam. For all other areas and islands impacted by the project, archaeological probability maps would be generated that predict the probability of encountering subsurface cultural resources in three categories (no/low, medium, and high). These maps would be compiled using previous archaeological investigations, maps, interviews, and ethnohistoric accounts, and in consultation with the HPOs and the NPS.
- No to Low Probability areas contain no surface sites and include reclaimed fill lands or heavily disturbed areas. No to Low Probability areas are also areas that have been previously tested and were found not to contain subsurface archaeological resources based on known social practices or history of the area.
- Medium Probability areas have not been surveyed and may have the potential to contain sites (surface and/or subsurface), or are areas that contain no surface sites.
- High Probability areas contain known surface and/or subsurface sites or are areas where old maps, documents, or legends indicate former villages, towns, or other types of similar activity.

- Any properties not evaluated would be assessed for NRHP eligibility. These historic properties would be incorporated into existing ICRMPs as they are revised or updated, or if a new ICRMP is developed in consultation with the appropriate HPOs.

Any updates to the existing geographical information system (GIS) cultural resource layers, such as shape files showing the locations of known archaeological sites and buildings and structures, would be shared with the appropriate HPO or NPS (if a property is associated with a National Historic Landmark (NHL) in accordance with 36 CFR 800.11(c)). The HPOs and the NPS recognize that these layers may contain sensitive information and would not disseminate or make them available to the public without obtaining permission of the appropriate agency whose jurisdiction that historic property is under. Maps of all areas with archaeological potential and sensitivity for the presence of NRHP-eligible or listed resources would be appended to the PA. No further review under Section 106 is required for areas designated as no to low probability areas. Potential mitigation measures for medium and high probability areas are stipulated as follows:

- For High Probability Areas, sites would be avoided if possible. If sites are impacted, a mitigation plan would be developed and reviewed by the appropriate HPO and then data recovery excavations would take place.
- Medium Probability Areas would be subject to monitoring or testing. Prior to any disturbance or excavation, work plans would be developed and reviewed by the appropriate HPO.

In recognition of the significance that many historic properties within the footprint of the Joint Guam/CNMI Build Up has to various cultural groups, the DoD would generally look favorably on affording access to archaeological sites to individuals and organizations that attach significance to these historic properties where security requirements are not prohibitive. The PA also provides stipulations for treatment in case of emergency discoveries, the review process, and report requirements. The SOPs in the current Regional ICRMP would be updated and would be attached to the PA. Although probability maps would be generated based on the likelihood of archaeological resources, treatment of known architectural resources and traditional cultural properties as a result of the proposed action would also be stipulated in the PA.

#### 12.2.1.3 Issues Identified during Public Scoping Process

The following analysis focuses on possible impacts to cultural resources: archaeological, architectural, and traditional cultural properties that could be affected by the proposal. As part of the analysis, concerns relating to cultural resources that were mentioned by the public, including regulatory stakeholders, during scoping meetings were addressed. These include:

- Access to cultural sites and traditional coastal resource collection areas
- Construction impacts to cultural resources
- Thorough and adequate data collection
- Public participation in the planning process relating to cultural resources

### 12.2.2 Alternative 1 Polaris Point (Preferred Alternative)

#### 12.2.2.1 Onshore

Onshore activities associated with Alternative 1 Polaris Point (referred to as Alternative 1) include construction of a wharf/staging area with ground disturbance of approximately 5.8 acres (ac) (2.3 hectares [ha]), a Morale, Welfare, and Recreation (MWR) area of 2.4 acres (1 ha), security structures including a 50 foot (ft) [15 m] watch tower, and various buildings including Port Operations, substation, water

treatment facilities, and a pump station. As part of the project, four existing structures (Buildings 4407 [lifeguard tower, built 1969], 4408 [cabana, built 1972], 4409 [cabana, built 1972], and an existing guard tower) would be demolished. A 300 ft [91 m] roadway would be demolished and replaced with a new access road to connect Polaris Point Drive to the staging area. Figure 12.2-1 provides a summary of the proposed project location in relation to the archaeological probability areas.

#### Construction

The proposed construction would occur in an onshore area that is composed of fill material and does not contain NRHP-eligible or listed archaeological resources. Overall, this area is considered to be a No to Low Probability area. None of the buildings to be demolished are eligible for or listed on the NRHP. No traditional cultural properties are known from this area.

#### Operation

Because no NRHP-eligible or listed archaeological sites, architectural properties, or traditional cultural properties occur in the Area of Potential Affect (APE), no impacts would result from onshore operations associated with Alternative 1.

#### 12.2.2.2 Offshore

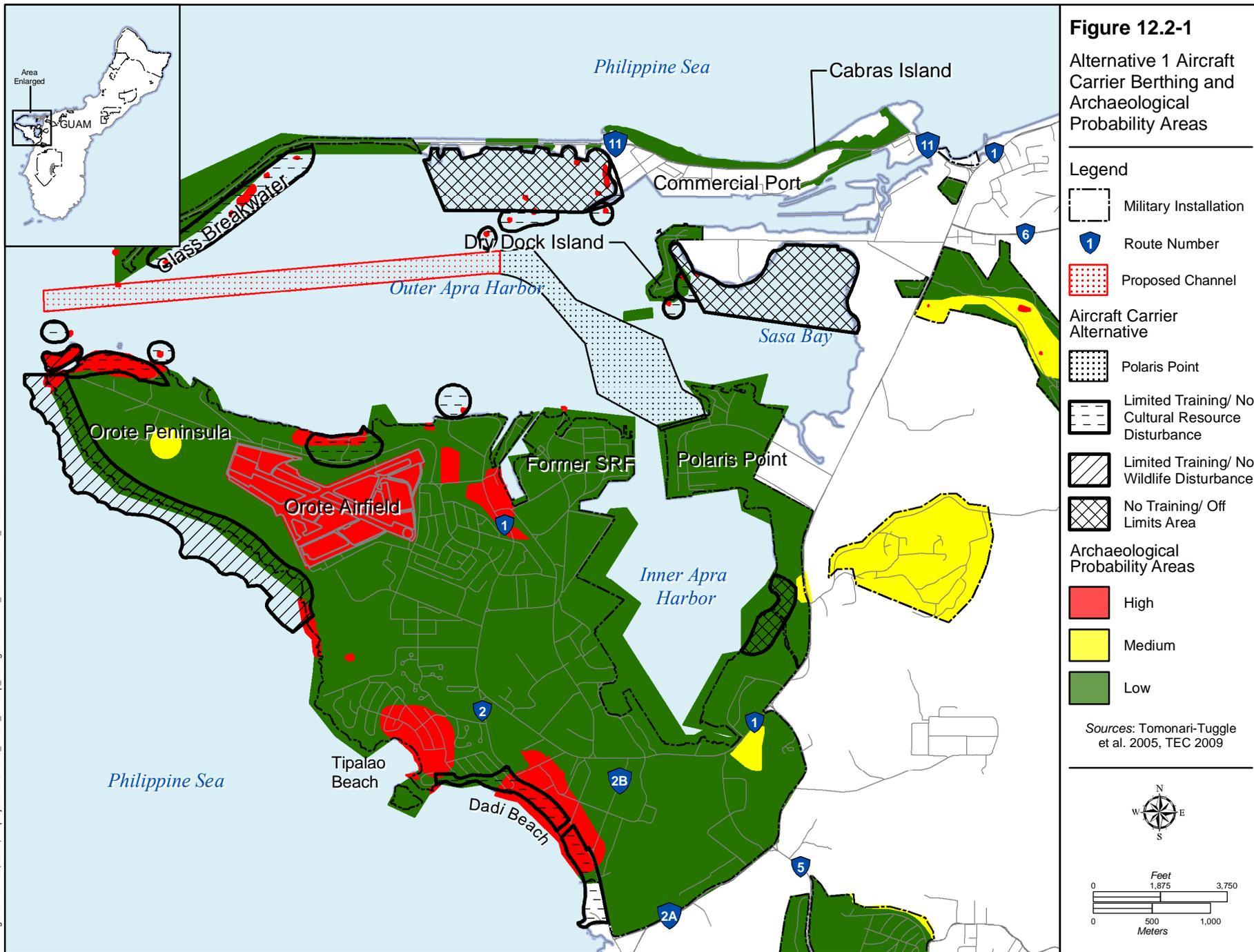
Offshore activities associated with Alternative 1 include dredging of the berthing area, the turning basin, and the channel bend; construction of a wharf at Polaris Point; and the operations associated with the berthing of the aircraft carrier.

#### Construction

Thirty-one known locations of shipwreck sites and submerged objects are located in Outer Apra Harbor. These include 29 shipwrecks consisting of fishing boats, yachts, barges, tugboats, landing craft utility vessels, British passenger ships, World War II (WWII) Japanese freighters or transport ships, and two plane wrecks with a total of three planes (Navy 2007). None of these resources are located adjacent to Polaris Point or within the area of the proposed turning basin or entrance channel. Because none of these resources are located within the APE, dredging and construction would not have a direct adverse impact on submerged resources. Overall, this area is considered to be a No to Low Probability area. Because best management practices would be implemented to reduce sedimentation from dredging (see Volume 7), it is not likely to indirectly impact submerged resources in the vicinity.

#### Operation

No traditional cultural properties are located within Outer Apra Harbor; therefore, none would be adversely impacted by offshore activities including indirect impacts due to restricted access associated with the aircraft carrier berthing. Because of a lack of NRHP-eligible or listed resources within the APE, vessel traffic would not have a direct adverse impact on submerged resources.



### 12.2.2.3 Summary of Alternative 1 Impacts

Table 12.2-1 summarizes the potential impacts of each component of the proposed action.

**Table 12.2-1. Summary of Alternative 1 Impacts**

<i>Area</i>	<i>Project Activities</i>	<i>Project Specific Impacts</i>
<b>Apra Harbor</b>		
Onshore	Construction	No impacts to NRHP-eligible or listed archaeological or architectural resources or traditional cultural properties
	Operation	No impacts to NRHP-eligible or listed archaeological or architectural resources or traditional cultural properties
Offshore	Construction	No impacts to NRHP-eligible or listed archaeological or architectural resources or traditional cultural properties
	Operation	No impacts to NRHP-eligible or listed archaeological or architectural resources or traditional cultural properties

Therefore, Alternative 1 would result in no significant impacts to archaeological, architectural, or submerged resources or objects or traditional cultural properties in the onshore or offshore areas.

### 12.2.2.4 Alternative 1 Potential Mitigation Measures

In accordance with the PA under Section 106, because the potential for impacts in the construction area is low, no potential mitigation measures or further review under Section 106 are required for archaeology.

## 12.2.3 Alternative 2 Former Ship Repair Facility (SRF)

### 12.2.3.1 Onshore

Onshore activities associated with Alternative 2 Former SRF (referred to as Alternative 2) include construction of a wharf/staging area with ground disturbance of approximately 6 ac (2.4 ha), a MWR area of 4 ac (1.6 ha), and various buildings including Port Operations, substation, water treatment facilities, and a pump station. As part of the project, nine existing structures (93-1 [built 1944], 2004 [built 1991], 2005 [NEEACT Shop, built 1944], 2006 [administrative office, built 1944], 2009 [general storage, built 1993], 2013 [built 1944], 2014 [temporary hazardous waste storage, built 1991], 2108 [office, built 1964], and 2072 [built 1987]) would be demolished. A 600 ft [183 m] portion of E Street would be demolished and replaced south of the staging area (Tomanari-Tuggle et al. 2005).

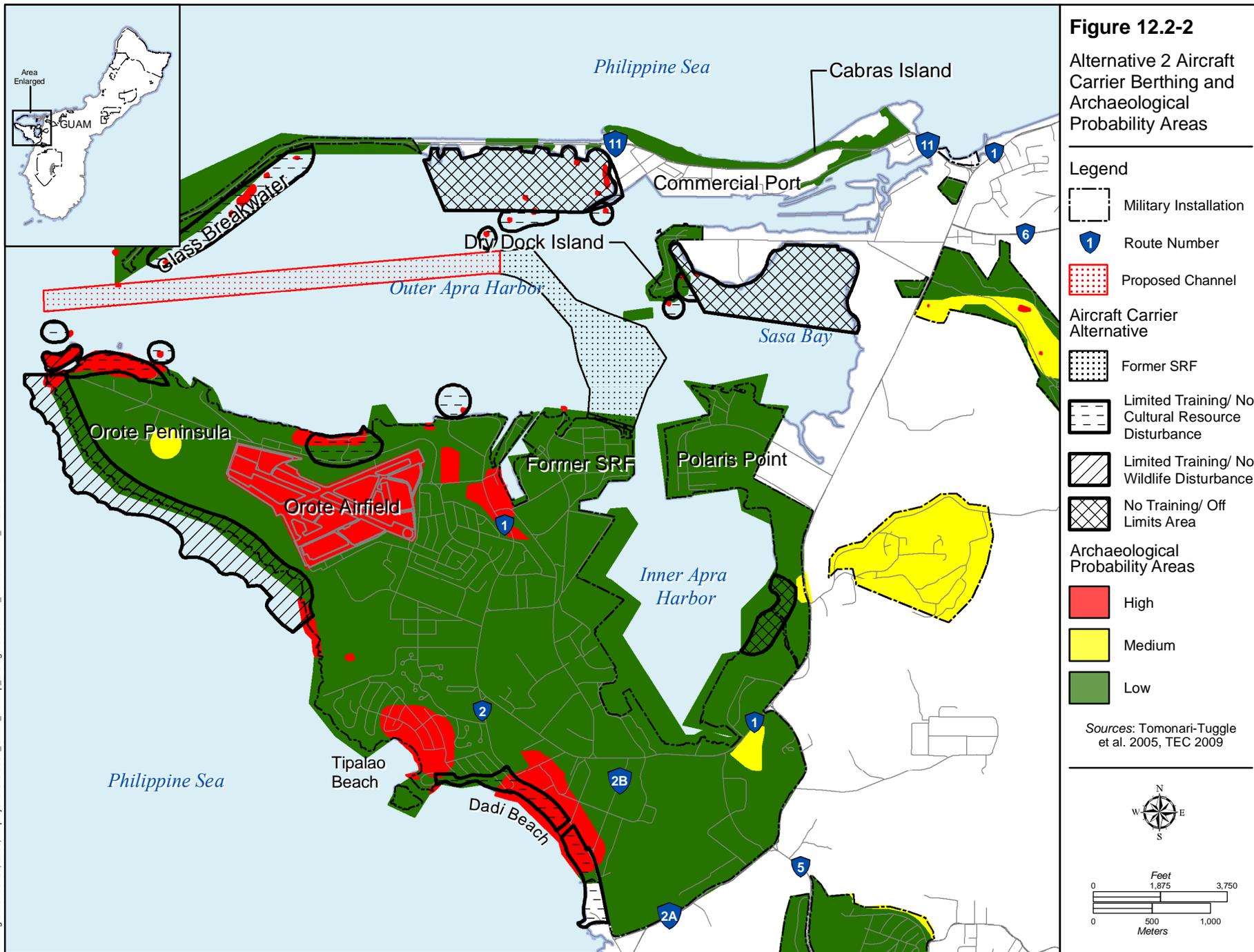
Refer to Table 12.2-2 for a summary of the potential impacts of each component of the alternative. Figure 12.2-2 provides a summary of the proposed project location in relation to the archaeological probability areas.

#### Construction

The proposed construction would occur in an onshore area that is composed of fill material and does not contain NRHP-eligible or listed cultural resources. Similar to the Polaris Point area, this area is considered to be a No to Low Probability area. None of the buildings to be demolished are eligible for or listed on the NRHP. No traditional cultural properties are known from this area.

#### Operation

Since no NRHP-eligible or listed archaeological sites, or traditional cultural properties occur in the APE, no impacts would result from onshore operations associated with Alternative 2.



### 12.2.3.2 Offshore

Offshore activities would be the same as for Alternative 1. No NRHP-eligible or listed submerged resources or objects or traditional cultural properties would be adversely impacted either directly or indirectly by the implementation of Alternative 2.

#### Construction

Impacts would not differ from those of Alternative 1.

#### Operation

Impacts would not differ from those of Alternative 1.

### 12.2.3.3 Summary of Alternative 2 Impacts

Table 12.2-2 summarizes Alternative 2 impacts.

**Table 12.2-2. Summary of Alternative 2 Impacts**

<i>Area</i>	<i>Project Activities</i>	<i>Project Specific Impacts</i>
<b>Apra Harbor</b>		
Onshore	Construction	No impacts to NRHP-eligible or listed archaeological or architectural resources or traditional cultural properties
	Operation	No impacts to NRHP-eligible or listed archaeological or architectural resources or traditional cultural properties
Offshore	Construction	No impacts to NRHP-eligible or listed archaeological or architectural resources or traditional cultural properties
	Operation	No impacts to NRHP-eligible or listed archaeological or architectural resources or traditional cultural properties

Therefore, Alternative 2 would result in no significant impacts to archaeological, architectural or submerged resources or objects, or traditional cultural properties in the onshore or offshore areas.

### 12.2.3.4 Alternative 2 Potential Mitigation Measures

In accordance with the PA under Section 106, the potential for impacts in the construction area is low; no potential mitigation measures or further review under Section 106 are required for archaeology.

### 12.2.4 No-Action Alternative

Under the no-action alternative, no construction, dredging, or operation associated with the aircraft carrier berthing would occur. Existing operations at Polaris Point, as a military training and recreational facility, and the Former SRF, as a commercial ship repair facility, would continue. Therefore, the no-action alternative would not have significant impacts to cultural resources.

### 12.2.5 Summary of Impacts

Table 12.2-3 summarizes the impacts. A text summary is provided below.

**Table 12.2-3. Summary of Impacts**

<i>Alternative 1</i>	<i>Alternative 2</i>	<i>No-Action Alternative</i>
<b>Archaeological Resources</b>		
NI <ul style="list-style-type: none"> <li>No adverse impacts to NRHP-eligible or listed archaeological resources</li> </ul>	NI <ul style="list-style-type: none"> <li>No adverse impacts to NRHP-eligible or listed archaeological resources</li> </ul>	NI <ul style="list-style-type: none"> <li>No adverse impacts to NRHP-eligible or listed archaeological resources</li> </ul>
<b>Architectural Resources</b>		
NI <ul style="list-style-type: none"> <li>No adverse impacts to NRHP-eligible or listed architectural resources</li> </ul>	NI <ul style="list-style-type: none"> <li>No adverse impacts to NRHP-eligible or listed architectural resources</li> </ul>	NI <ul style="list-style-type: none"> <li>No adverse impacts to NRHP-eligible or listed architectural resources</li> </ul>
<b>Submerged Resources</b>		
NI <ul style="list-style-type: none"> <li>No adverse impacts to NRHP-eligible or listed submerged resources or objects</li> </ul>	NI <ul style="list-style-type: none"> <li>No adverse impacts to NRHP-eligible or listed submerged resources or objects</li> </ul>	NI <ul style="list-style-type: none"> <li>No adverse impacts to NRHP-eligible or listed submerged resources or objects</li> </ul>
<b>Traditional Cultural Properties</b>		
NI <ul style="list-style-type: none"> <li>No adverse impacts to NRHP-eligible or listed traditional cultural properties</li> </ul>	NI <ul style="list-style-type: none"> <li>No adverse impacts to NRHP-eligible or listed traditional cultural properties</li> </ul>	NI <ul style="list-style-type: none"> <li>No adverse impacts to NRHP-eligible or listed traditional cultural properties</li> </ul>

*Legend:* SI = Significant impact, SI-M = Significant impact mitigable to less than significant, LSI = Less than significant impact, NI = No impact, BI = Beneficial impact

No NRHP-eligible or listed archaeological sites, architectural resources, submerged resources or objects, or traditional cultural properties would be significantly impacted by either Alternative 1 or Alternative 2.

### 12.2.6 Summary of Potential Mitigation Measures

There are no necessary mitigation measures associated with this action.

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