Final

Phase I Environmental Baseline Survey

Yap International Airport Improvement Project
State of Yap, Federated States of Micronesia



February 26, 2026

PREPARED FOR:

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Executive Summary

The Department of the Air Force (DAF) plans to enhance infrastructure and operate facilities at Yap International Airport (IAP) in support of military readiness activities that would involve support personnel and various types of aircraft. Airfield improvements would enhance capabilities for supporting aircraft diversions, humanitarian assistance, and other contingencies fulfilling United States of America (U.S.) national security objectives and defense obligations to the Federated States of Micronesia (FSM).

The Phase I Environmental Baseline Survey (EBS) documents the current condition of real property, which consists of approximately 826 acres, including the Yap International Airport (YIP) and adjacent land within the proposed project area to be acquired, transferred, leased, sold, or otherwise conveyed. The survey area falls under the responsibility of the Pacific Air Forces and the U.S. Pacific Fleet. The Commander of Joint Region Marianas is also involved in this project.

The Phase I EBS was conducted pursuant to provisions in accordance with Air Force Instruction (AFI) 32-7020 and the applicable provisions of ASTM International D6008-22, *Standard Practice for Conducting Environmental Baseline Surveys*, the use of the term "hazardous substance," as used herein, refers to Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) hazardous substances as listed in 40 Code of Federal Regulations 302.4 and provides information necessary to support real property disposal or conveyance in accordance with 41 Code of Federal Regulations 102-75.

This EBS will be used by the DAF to:

- Identify potential environmental concerns associated with the survey area.
- Assess potential health and safety risks identified in the survey area and determine what actions are necessary to protect human health and the environment.
- Identify data gaps concerning environmental contamination.
- Support decisions for an environmental suitability decision document and aid in determining deed/lease restriction(s).

E.1. Property Identification

Yap is located in western Micronesia, approximately 560 miles (900 kilometers) east of the southern Philippines and north of New Guinea. The main islands (Yap or Marbaq, Maap, Gagil-Tamil, and Rumung) are connected by narrow waterways and eight smaller inlets, which share a common coral reef and 134 outer atolls. Yap is a remote independent nation under a Compact of Free Association with the U.S. The survey area includes approximately 826 acres of land, including the Yap IAP and surrounding land.

The survey area was divided into eight survey zones to minimize survey area overlap by environmental, cultural, and natural resources survey teams. A visual survey of the 93-acre area along Port Road was not surveyed as part of the EBS but instead was conducted as a Windshield Survey attached to this document.

Developed areas within the survey areas were designated into twenty Areas of Concern (AOCs), including residential zones, vehicle storage, water treatment facilities, and various commercial establishments as follows:

1. Undeveloped Area, Zones 1 through 7: This area consists of approximately 206 acres, largely outside of the proposed disturbance footprint.
2. Village Residences, Zones 1 through 7: This area consists of residential areas observed from a distance due to privacy and cultural concerns.
3. Vehicle Storage/Residence, Site Number (No.) 1-1: This area is located northwest of the Yap IAP within Zone 1.
4. Water Treatment Facility, Site No. 1-2: This area is located northeast of a large pond within Zone 1.
5. Family Corner Store, Site No. 2-1: Located south of the approach end of Runway 7 within Zone 2.
6. Aircraft Rescue and Fire-Fighting (ARFF) Burn Pit, Site No. 3-1: Located west of the ARFF station but on the edge of Zone 3.
7. 7-D Car Rental, Site No. 4-1: Located northeast of the GPCC, Inc. Facility within Zone 4 southeast of the airport.
8. GPCC, Inc. Facility, Site No. 4-2: Located directly east of the departure end of runway 7 within Zone 4.
9. A.J. Bake Shop, Site No. 4-3: Located south of the departure end of Runway 7 within Zone 4.
10. Runways and Taxiways, Site No. 8-1: Located in the central portion of the survey area within Zone 8.
11. ARFF Station, Site No. 8-2: Located on the south side and slightly west of the mid-point of the runway.
12. National Oceanic and Atmospheric Administration Station, Site No. 8-3: Located between the ARFF Station and Terminal Building.
13. Ground Service Equipment / Maintenance, Site No. 8-4: Located in the northeast portion of the apron area.
14. Pacific Mission Aviation Hangar, Apron, Storage, and Housing, Site No. 8-5: Located to the southwest of the Terminal Building.
15. “Old” Emergency Generator Buildings, Site No. 8-6: Located across from the entrance road.
16. “New” Emergency Generator Building, Site No. 8-7: Located adjacent to the building within a fenced-in area.
17. Administration Building, Site No. 8-8: Located west of the Terminal Building.
18. Terminal Building and Apron, Site No. 8-9: Located at the southern edge of the apron.
19. Health Center/Quarantine Facility, Site No. 8-10: Located to the southwest of the Terminal Building parking area.
20. Fuel Farm, Site No. 8-11: Located at the southeast corner of the apron. It is also identified as the Yap Aviation Depot.

E.2. Site History and Operations

During World War II, Yap served as a Japanese air base and underwent bombardment by U.S. forces. Post-war, the U.S. did not rehabilitate the existing airfield but instead constructed a new airport, completed between 1978 and 1982. Yap IAP is a certified international airport with regular flights from Guam and Palau, surrounded by residential and commercial developments.

E.3. Proposed Future Use

The Yap IAP is anticipated to continue operating at the site with some improvements to provide facilities to train for and increase capabilities for supporting periodic aircraft diversions, humanitarian assistance/disaster relief efforts, and other contingencies.

E.4. Factors Evaluated

The Phase I EBS was conducted by evaluating the environmental condition of property (ECOP) based on the review of available relevant information and records from Federal, regulatory agency, state, and local government studies and records, and visual site inspection (VSI).

The following data gaps were identified during the Phase I EBS:

- Federal, Tribal, State, and local government records were not, for the most part, readily available for review. Standard record search resources typically used to identify potential areas/practices of concern were not available. This data failure is not expected to represent a significant data gap because the island has not undergone significant development since WWII, and many of the existing land uses have remained unchanged since the 1950s and 1960s.
- Title, deed, or other real property records are not maintained by the Yap Government; customary practices and oral agreements are heavily relied upon for land transfer and use. Therefore, ownership records and property maps were not available for review. It is anticipated that an extensive process of public outreach, property ownership identification, surveying, negotiation, purchase, and potential relocation will likely be required.
- Diplomatic obstacles prevented distribution of the EBS questionnaire, limiting access to required information. This is a significant data gap considering that few historical and/or environmental documents were available.
- The absence of written historical documents resulted in heavy reliance on oral information obtained from facility and site representatives. This information is not readily verifiable through visual observations nor can it be corroborated by existing documentation. It is possible that relevant facts were concealed, withheld, or not fully disclosed by the facility and site representatives interviewed during this survey.
- A local guide assisted with interviews of owner/occupants during the VSI to alleviate the language barrier and . However, miscommunication in translation and interpretation may have occurred. In addition, language barriers may have discouraged some of the local residents from participating in the survey.

- Inaccessible areas were encountered mainly outside the proposed disturbance footprint during the non-intrusive EBS VSI, due to heavy vegetation, steep slopes, explosive remnants of war (ERW) concerns, or for cultural or archaeological items of potential concern. In addition, one area east of the airport was actively being cleared with heavy equipment, presenting a safety hazard for field workers. In several instances, locked doors were encountered, resulting in portions of structures and/or facilities being inaccessible due to missing or lost keys or unknown respective points of contact for the facility. Such instances include the interior portion of the Water Treatment Facility, shipping containers by the ARFF Burn Pit and within the 7-D Car Rental site, the interior portions of the Health Center/Quarantine Facility, the FSM Telecommunications area within the Terminal Building, and a small structure believed to house an emergency generator south of the "Old" Emergency Generator Buildings. Vital FSM Petroleum Corporation was unresponsive to multiple requests for access to the Fuel Farm while the field team was present. The EBS VSI covered 620 acres of the 826-acre survey area. This data failure is anticipated to represent a significant data gap as it encompasses a large percentage of the survey area outside of the Yap IAP proposed disturbed area.

E.5. Property Categorization

Classification of the seven standard ECOP area types is according to statutory requirements for (1) the identification of uncontaminated property within the provisions of the Community Environmental Response Facilitation Act of 1992 and (2) for designating parcels of Department of Defense installations as being suitable or unsuitable for transfer by deed within the provisions of CERCLA Section (§) 120(h)(3)(B)(I). The standard ECOP area categories are described in ASTM D5746-98, *Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities*. Standard ECOP area categories are ranked in order of their suitability for transfer, with Category 1 through 4 being suitable for transfer by deed and Category 5 through 6 being unsuitable for transfer by deed until legal concurrence is obtained from AF/JAOE-FSC (Environmental Law Field Support Center) and SAF/GCN (Air Force Office of General Counsel [Installations, Energy and Environment Division]) prior to proceeding with the transaction. Areas classified as Category 7 are either unevaluated or require further evaluation in order to classify them as one of the other ECOP area types.

E.6. Findings and Recommendations

A comprehensive evaluation was conducted in accordance with AFI 32-7020 and ASTM D6008-22, which included a VSI, historical research, and interviews with key personnel, leading to the identification of several potential environmental concerns:

- Hazardous Substances and Petroleum Products: Multiple AOCs within the survey area highlight risks from improperly stored hazardous materials, largely due to inadequate local waste management practices.
- ERW: Areas outside developed airport regions have a high probability of ERW, necessitating adherence to established safety protocols during subsequent field activities.
- WWII Aircraft Wreckage: The presence of WWII-era aircraft wreckage raises concerns about residual hazardous materials, including aviation fuel and possible environmental contaminants.

- ARFF Burn Pit: Environmental risks stem from the storage and burning of hazardous materials at the ARFF Burn Pit, with indications of possible contamination.
- Aqueous Film-Forming Foam (AFFF): The storage and use of AFFF containing perfluoroalkyl and poly-fluoroalkyl substances presents significant health and environmental risks, exacerbated by the host nation's emerging hazardous materials tracking systems.
- Improperly Stored Materials: Unlabeled and poorly maintained storage practices at the GPCC facility and many of the other AOCs within the project area have the potential to contaminate soil and water resources, necessitating further investigation.
- Potential Polychlorinated Bi-phenyls (PCB) Contamination: Transformers at various AOCs may contain PCBs, raising concerns about compliance with environmental standards if they are disturbed during construction activities.
- Lead-Based Paint (LBP) and Asbestos-Containing Materials (ACM): Potential hazards in existing buildings should be evaluated for LBP and ACM before any renovations or demolitions occur.
- Waste Management Practices: Historical reliance on communal dumping has potentially led to ongoing environmental hazards, despite some advancements in waste management.
- Water Quality Concerns: The local water supply currently fails to meet U.S. Environmental Protection Agency drinking water standards, but upgrades to water treatment facilities are expected to address these issues.
- Stormwater Runoff: Lack of filtration for stormwater runoff from the Yap IAP could be adversely impacting local mangrove habitats and surface waters.
- Cultural and Natural Resources: Surveys indicate the presence of potential historical sites and species of concern, warranting further investigation.

The survey area has been classified as Category 7, suggesting potential environmental liabilities that may require further assessment at the discretion of the DAF. Awareness of these environmental hazards is essential for future occupants to mitigate risks associated with undetected ERW and potential contamination.

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Section 1 Purpose of the Environmental Baseline Survey

1.1 Introduction

The Department of the Air Force (DAF) proposes to construct and operate facilities and infrastructure at the Yap International Airport (IAP) to conduct military readiness activities involving fighter, cargo, tanker, and miscellaneous aircraft and associated support personnel. The airfield improvements would provide facilities to train for and increase capabilities for supporting periodic aircraft diversions, humanitarian assistance/disaster relief efforts, and other contingencies. These upgrades are needed to allow United States of America (U.S.) military aircraft and personnel to improve the use of the Yap IAP to meet U.S. national security objectives and fulfill U.S. obligations to provide for the defense of the FSM per Title Three of the Compact of Free Association (CoFA) between the U.S. and the Federated States of Micronesia (FSM).

Yap is located in western Micronesia, approximately 560 miles (900 kilometers [km]) east of the southern Philippines and north of New Guinea, and comprises the main islands (Yap or Marbaq, Maap, Gagil-Tamil, and Rumung) connected through narrow waterways and eight smaller inlets sharing a common coral reef and 134 outer atolls, Map 1, included in Appendix B. The Yap IAP, also known by its International Civil Aviation Organization airport identifier code, PTYA, is located on the southern half of Yap Island, approximately 2 miles (3.2 km) southwest of Colonia, in the Government of the FSM.

The purpose of the Phase I Environmental Baseline Survey (EBS) was to document the current condition of real property within the environmental survey area proposed by the DAF to be acquired, transferred, leased, sold, or otherwise conveyed that encompasses the proposed project to improve the capabilities of the Yap IAP.

The Phase I EBS was conducted pursuant to provisions in accordance with Air Force Instruction (AFI) 32-7020 and the ASTM International (ASTM) D6008-22, *Standard Practice for Conducting Environmental Baseline Surveys* (ASTM 2022), the use of the term "hazardous substance," as used herein, refers to Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) hazardous substances as listed in 40 Code of Federal Regulations (CFR) 302.4, and provides information necessary to support real property disposal or conveyance in accordance with 41 CFR 102-75.

The Phase I EBS report provides information about the current physical and environmental conditions of the survey area to provide a compilation of information to establish a baseline of data for the property. The Phase I EBS survey area is within an area of responsibility of the Pacific Air Forces (PACAF), which is a DAF major command, and the U.S. Pacific Fleet (PACFLT), which is a major component of the Department of the Navy (DoN). The commander of Joint Forces Marianas (JRM) also serves as Commander of U.S. Naval Forces Marianas and Defense Representative to Guam, Commonwealth of the Northern Mariana Islands, Republic of Palau, and the FSM.

1.2 Boundaries of the Property and Survey Area

The survey area includes the Yap IAP and surrounding land that is primarily undeveloped and densely vegetated. The Yap IAP is on the southwestern portion of Yap Island, approximately 2 miles (3.2 km) southwest of Colonia (Figure 1-1). The airport provides commercial passenger and cargo services. It has a passenger terminal complex (building and parking apron) and one asphalt paved runway (0 7-25). The runway is 9,100 feet (2.8 km) long by 150 feet (45.7 meters) wide and has 25-foot-wide (7.62-meter-wide) asphalt paved shoulders along the full length of the runway, 200-foot-long (60.9 meter-long) asphalt paved overruns at each runway end for jet blast protection, and paved turnarounds at both runway ends that allow aircraft to turn around. It is a U.S. Federal Aviation Administration (FAA) certified airport and is governed by FAA criteria for clear zones, imaginary surfaces, and other airfield restrictions (DAF 2020).

The survey area includes approximately 826 acres of land, including the Yap IAP and surrounding land. The survey area was divided into eight survey zones (Figure 1-2). The purpose of the zones was to allow the EBS survey to be conducted concurrently with the cultural and natural resources surveys. The Port Road encompassed an extra 93 acres and was surveyed by utilizing a windshield survey methodology, which can be found in Appendix F.

The governance of property ownership in Yap is a complex system of traditional customs (i.e., community acknowledgment and memory), communal responsibilities, and an evolving legal framework. The preservation of customary practices remains paramount in the governance of property ownership; therefore, traditional, modern property ownership maps and information were unavailable for the project area. The Department of Public Works and Transportation (DPW&T) manages the land within the fence line surrounding the airport. No territorial maps were available for the surrounding area within the survey area.

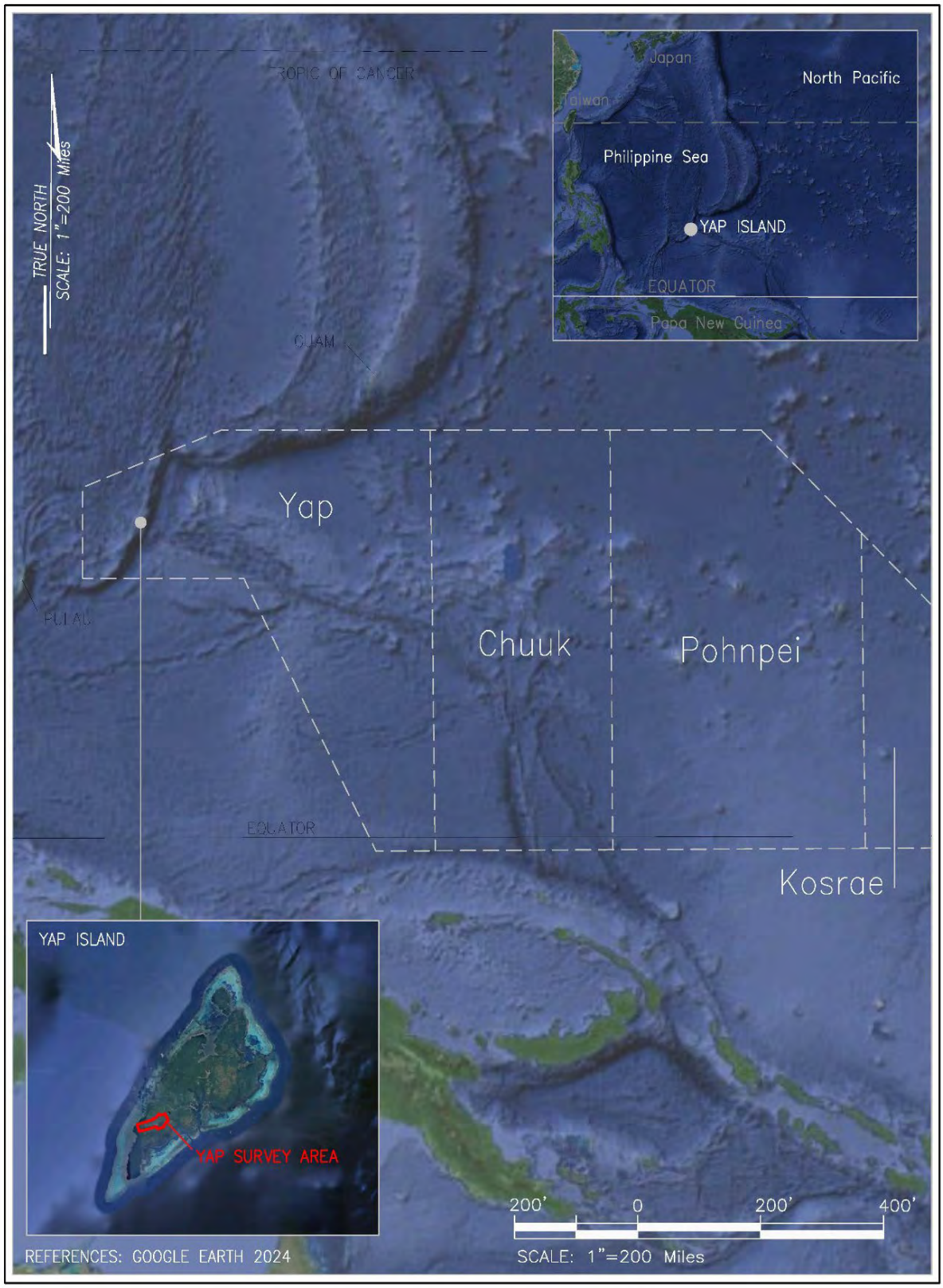


Figure 1-1: Yap Location Map

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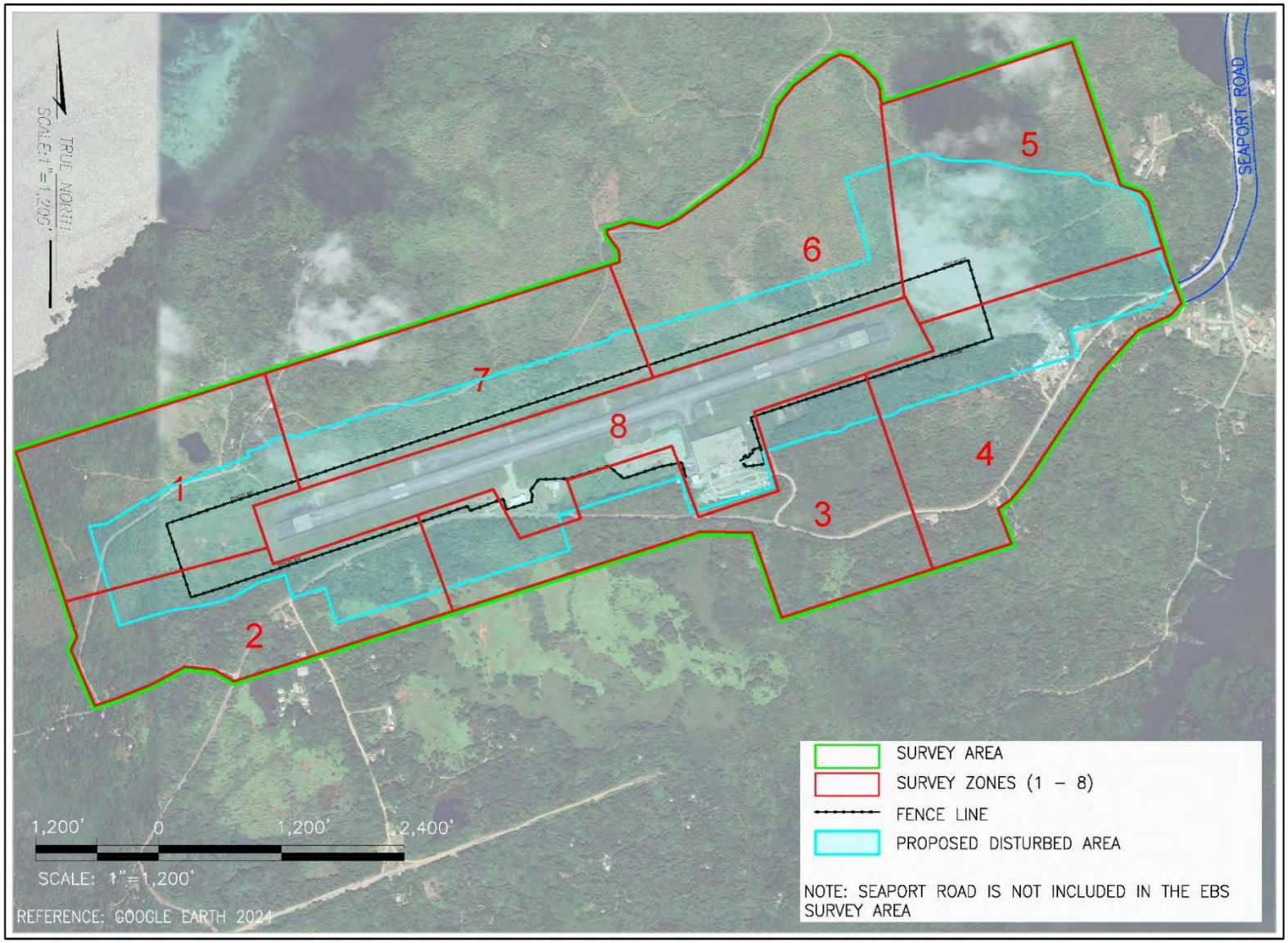


Figure 1-2: Project Layout and Survey Area

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Section 2 Survey Methodology

2.1 Approach and Rationale

Data requests specific to environmentally significant current and past uses of the real property consist of the following:

- *Detailed search and review of available information and records in the possession of the Department of Defense (DoD) components and records made available by the regulatory agencies or other involved FSM and Yap agencies.* The DoD components were responsible for requesting and making reasonable inquiries into the existence and availability of relevant information and records to include any additional study information (e.g., surveys for radioactive materials, asbestos-containing materials [ACM] (i.e., floor tiles, transite panels or piping, acoustic ceiling tiles, thermal system insulation), radon, lead-based paint [LBPs], drinking water quality, indoor air quality, transformers containing polychlorinated biphenyls [PCBs], Resource Conservation and Recovery Act [RCRA] Facility Assessments and Investigations, underground storage tank [UST] cleanup program) to help support the determination of the environmental condition of property (ECOP) category.
- *Adjacent Facility Records Search and Review.* All reasonably obtainable Federal, State, and local government records were requested for each adjacent facility where there has been a release or likely release of any hazardous substance or any petroleum product and which is likely to cause or contribute to a release or threatened release of any hazardous substance or any petroleum product on the real property.
- *Aerial Photograph Analysis.* All aerial photographs that were in the possession of the U.S. Government or that were reasonably obtainable through FSM or Yap Government agencies that may reflect prior uses of the property were requested and reviewed.
- *Interviews.* Contact information was requested to facilitate interviews with pertinent personnel and to connect with key current and former employees involved in the operations conducted on the real property. Additionally, interview questionnaires were prepared for distribution during the deconfliction meetings, aimed at interviewing the chiefs and interviewing employees.
- *Visual Site Inspection (VSI)*. A non-intrusive VSI of 826 acres of real property; any building, structures, equipment, pipe, pipeline, or other improvements on the real property, noting sewer lines, runoff patterns, evidence of environmental impacts, and other observations that indicate actual or potential release of hazardous substances or petroleum products was conducted. The survey area and immediately adjacent properties were visually inspected; it should be noted that no access was granted to enter the adjacent properties, so the VSI was completed from the survey area boundaries.
- *Contamination Source Identification*. Identification of sources of contamination within the survey area and on adjacent properties that could migrate to the real property.
- *Ongoing Response Actions*. No ongoing response actions or actions that have been taken at or adjacent to the survey area were identified.

Data requests specific to the physical and ECOP to support the development of the EBS included the following:

- DoD Component and FAA records maintained on the property or elsewhere but reasonably obtainable, which are relevant to the classification of the ECOP category types, including but not limited to records of:
    - Records of ongoing and completed site remediation and environmental response activities. This includes Environmental Restoration Program (ERP) activities, corrective action programs, leaking USTs responses, and similar activities. Additionally, it includes all administrative records maintained under the CERCLA.
    - Records of reported spills of hazardous substances and responses.
    - Records of hazardous waste accumulation, storage, treatment, or disposal, including accumulation records, manifests, and records maintained in connection with permitted hazardous waste activities.
    - Records of hazardous substances and petroleum usage and/or storage.
    - Records of potential hazard surveys, including but not limited to ACM, LBP, radioactive materials, mercury, PCB, and radon surveys.
    - Environmental compliance records are not specifically included in other required records. This includes but is not limited to drinking water reports, permits and discharge reports, air permits and discharge and emission reports, and pollution prevention plans and reports.
    - Additional records included planning maps, base historian records, real property records, fire department records, historical photographs, and facility and utility records.
    - Federal, State, and local agency records.
    - Recorded chain of title documents.

Reasonable inquiry into the existence and availability of relevant information and records was conducted, including surveys, inspection reports, or other relevant records, including but not limited to maps showing archaeologically sensitive areas, historical activities, and storage tank locations, results of storage tank leak testing, hazardous waste management plans, spill plans, utility drawings, environmental impact analysis documents, biological surveys for federally threatened and endangered species associated with the property, environmental incident reports, supply records and surveys related to drinking water surveillance, PCBs, ACM, radon, and LBP.

2.2 Description of Documents Reviewed

The EBS team all documents provided by the United States Army Corps of Engineers (USACE), DAF, PACAF, DoN, and JRM that contained information on the environmental condition of the survey area. In addition, documents from Federal, State, and local offices were examined to provide background information on the survey area and surrounding areas. The documents reviewed are included in Table 2-1. Aerial photographs and maps reviewed are included in Table 2-2. Maps are included in Appendix B, and aerial photographs are included in Appendix C. Federal, tribal, State, and local government records and databases were not practically reviewable because coverage for the FSM was not available from standard resources that search various government databases. The Federal and state environmental databases searched individually from online resources are included in Table 2-3. A full list of references is included in Appendix D.

Table 2-1: Summary of Documents Reviewed

Title	Date Published	Prepared by
TTPI Yap District, Caroline Islands, Capital Improvement Program, Airport and Roads Project, Soils Investigation and Analysis Final Report	01/30/1980	Lyon Associates, Inc., on behalf of the DoN, NAVFAC Pacific
Groundwater Resources Reconnaissance of the Yap Main Islands, FSM, Water-Resources Investigations Report 90-4074	1992	USGS
Airfield Pavement Failure Evaluation, Yap IAP, Yap Island, FSM	06/1994	Steve L. Webster and Gary L. Anderton, on behalf of the USACE Waterways Experiment Station
Pavement Evaluation Runway 7-25, Yap IAP	06/1995	FAA Western Pacific Region, Airports Division
Safe Drinking Water Performance Report, An analysis of the effectiveness of Access to Safe Drinking Water in the State of Yap	03/05/2012	Office of the Public Auditor, State of Yap
FSM Department of Transportation, Communication and Infrastructure, Yap IAP, Final Master Plan	06/2012	Leo A. Daly
FSM Infrastructure Development Plan FY2016-FY2025	10/2015	Department of Transportation, Communication & Infrastructure
Yap State Solid Waste Management Strategy 2018-2027	09/14/2018	FSM
Area Development Plan, Yap IAP, Final Submittal	04/2019	Jacobs Government Services Company, on behalf of the DAF
Planning Charrette Report, PAF24XXX APSI Aircraft Parking Apron Phase I	10/2020	Jacobs Government Services Company, on behalf of the DAF
Planning Charrette Report, PAF24XXX APSI Runway Extension, Segment 1	10/2020	Jacobs Government Services Company, on behalf of the DAF
Preliminary Soil Screening Report for Yap IAP, FSM	03/01/2024	MNA Environmental
FY24 MCAF P-020 Aircraft Parking Apron and FY25 MCAF P-010 Extend Runway, Yap, FSM, MEC and Anomaly Avoidance Plan	03/2023	Jacobs /Buns McDonnell, on behalf of the DoN, NAVFAC Pacific
Final Archaeological Monitoring Plan in Support of Geotechnical Borings for FY25 MCON Project P-970, Aircraft Parking Apron Expansion, P-990 Runway Extension, and P-991 Aircraft Taxiway, Yap IAP, Yap, FSM	05/2023	NAVFAC Pacific
Preliminary Soil Screening Report for Yap IAP, FSM, N62742-17-D-0003	03/01/2024	MNA Environmental

Title	Date Published	Prepared by
HAZMAT Survey Report for FY26 YAAD229020 Aircraft Parking Apron and Taxiway FY25 YAAD229010 Runway Extension, Yap IAP, FSM, N62742-17-D-0003	03/27/2024	MNA Environmental
Draft Historical Ordnance Assessment Report, Yap IAP, Yap Island Port, and Yap Island Harbor Area	04/2024	Jacobs Engineering, Inc. and USA Environmental, Inc., on behalf of the DoN, NAVFAC Pacific

Notes: DAF = Department of the Air Force; DoN = Department of the Navy; FAA = Federal Aviation Administration; FSM = Federated States of Micronesia; FY = fiscal year; HAZMAT = hazardous materials; IAP = International Airport; MEC = munitions and explosives of concern; MNA Environmental = Myounghee Noh & Associates, LLC, doing business as MNA Environmental; NAVFAC Pacific= Naval Facilities Engineering Command, Pacific Division; TTPI = Trust Territory of the Pacific Islands; USACE = United States Corps of Engineers; USGS = U.S. Geological Survey

Table 2-2: Summary of Maps and Aerial Photographs Reviewed

Aerial Photography and Maps	Date Taken/ Published	Source	Details Observed
Map 1 (Semper's Yap Complex)	1873	(NAVFAC Pacific 2023a)	No noteworthy features are shown within the survey area.
Map 2 (Salesius Yap Complex)	1906	(NAVFAC Pacific 2023a)	Zone 2 and Zones 6 and 7 have dashed areas marked out, text on the map illegible, and possible village locations.
Map 3 (Office of Strategic Services)	1944	(NAVFAC Pacific 2023a)	No noteworthy features are shown within the survey area.
Aerial 1 (Eastern Portion of Japanese Airstrip)	1944	(NAVFAC Pacific 2024a)	The original Japanese Airstrip and surrounding roads and pathways are seen. An extensive number of bomb craters are located throughout the area, including unimproved areas adjacent to the airstrip. The south boundary of Zone 2 within the survey area is located in the top left corner of the photograph.
Aerial 2 (Current Airport)	1944-03	(NAVFAC Pacific 2024a)	Roads, pathways, cleared areas, and bomb craters are seen in the southwest portion of Zone 2 and adjacent areas.
Aerial 3 (Japanese Defensive Installations)	1944-06	(NAVFAC Pacific 2024a)	Roads, pathways, cleared areas, and the original Japanese Airstrip are seen south of the Yap IAP and survey area. Underground entrances are noted within Zones 1 and 2 of the survey area.
Aerial 4 (Japanese Defensive Installations)	1944-07	(NAVFAC Pacific 2024a)	A site labeled "Possible Gas or Ammo. Dump" is indicated within Zone 1 of the survey area. A site labeled "Barracks and Shop Area – Destroyed" is indicated to the south of survey area Zone 2. Underground entrances are still visible within Zones 1 and 2 of the survey area.
Aerial 5 (Central Part of Current Airport)	1944-10	(NAVFAC Pacific 2024a)	Roadways, patches of cleared areas, and bomb craters are located within Zones 1, 2, and 8 of the survey area. The underground entrances are no longer visible within Zones 1 and 2 of the survey area.
Map 4 (Kirch Survey Location)	1978	(NAVFAC Pacific 2023a)	No noteworthy features are shown within the survey area.
Map 5 (Soils)	1983	(NAVFAC Pacific 2023a)	The original airport is shown to the south of the Yap IAP.
Map 7 (Topographic Map)	1996	(NAVFAC Pacific 2023a)	The Yap IAP is located within the Dalipebenau, Rull, and Kanifay municipalities. A small area of surface water is located within Zone 1.

Aerial Photography and Maps	Date Taken/ Published	Source	Details Observed
Aerial 6	02/2005	(Google Earth 2024)	Zone 1 has two ponds and residences; one is the residence that becomes the Vehicle Storage/Residence site. Zone 2 has residences along main intersections and a paved road. Zone 4 is being used as a construction yard and quarry with several associated and residential structures. Zone 5 has a cleared area with unpaved roads/trails. Zone 6 is undeveloped with an unpaved road. Zone 7 has mainly undeveloped areas with a few residential structures. Zone 8 has an airport runway, wind cone, NOAA station, apron, terminal, and other surrounding structures.
Aerial 7	01/2008	(Google Earth 2024)	There are no significant changes from the 2005 aerial, with the exception of Zones 4 and 5, where it appears that the site is no longer being quarried and the associated quarry buildings have been cleared.
Aerial 8	03/2013	(Google Earth 2024)	When comparing the current photo with the one taken in 2008 in Zone 1, the only noticeable difference is that only the larger pond is still visible. In Zone 4, the GPCC, Inc. Facility has been constructed, and several structures and various types of stockpiles of stone are now visible. Likewise, in Zone 4, a facility is present. In Zone 5, a small, cleared area now exists on the south side. The ARFF Station in Zone 8 is visible. There are no significant changes in Zones 2, 3, 6, and 7 compared to the 2008 photo.
Aerial 9	05/2014	(Google Earth 2024)	When comparing the current photo with the one taken in 2013, Zone 4 and 5 have undergone minimal alterations, with the exception being the clearing of an area located to the north of the GPCC, Inc. Facility. There are no significant changes in Zones 1, 2, 3, 5, 6, 7, and 8 when compared to the 2013 photo.
Aerial 10	05/2016	(Google Earth 2024)	In Zones 1, 2, and 5 through 7, a significant portion of the site appears to have suffered from a fire or drought, resulting in scorched or dried vegetation. Modifications in Zone 1 involve grading and clearing a considerable part of the land, except for the densely vegetated sections in the northeast and northwest corners. It is evident that the vehicle storage area remains active, as there is now a visible fence surrounding the airport. Moreover, adjacent to the vehicle storage area/residence, there is a rectangular structure with multiple cars visible. In Zone 2, there have been some alterations since the 2014 photograph was taken. The northern section of the site has been cleared and leveled, presumably for construction or other developmental purposes. In Zone 4, an area has been cleared east of the GPPC, Inc. facility, which will eventually become the 7-D Car Rental. Additionally, a fence has been erected around the airport, which is now noticeable in this area.
Aerial 11	03/2017	(Google Earth 2024)	There are no significant changes in any of the Zones when compared to the 2016 photo.
Aerial 12	04/2018	(Google Earth 2024)	There are no significant changes in any of the Zones when compared to the 2017 photo.
Aerial 13	12/2019	(Google Earth 2024)	There are no significant changes in any of the Zones when compared to the 2018 photo.

Aerial Photography and Maps	Date Taken/ Published	Source	Details Observed
Aerial 14	01/2022	(Google Earth 2024)	Cloud cover prevents visibility of Zone 1 and the northern part of Zone 2, with no notable differences from the 2018 photo. There are no significant changes in Zones 3, 4, 5, 6, 7, and 8 when compared to the 2018 photo.
Aerial 15	09/2023	(Google Earth 2024)	Cloud cover prevents visibility of portions of Zones 3 through 7, with no notable differences from the 2022 photo. No significant changes are observed between the 2023 photo and the present.
Aerial 16	2024	(Google Earth 2024)	In Zone 1, the primary noticeable difference from the 2022 picture is the notable increase in residences. There are no significant changes in Zones 2, 3, 5, 6, 7, and 8 when compared to the 2022 photo or Zone 4 when compared to the 2018 photo.

Notes: ARFF = Aircraft Rescue and Fire-Fighting
IAP = International Airport
NAVFAC Pacific = Naval Facilities Engineering Command, Pacific Division
NOAA = National Oceanic and Atmospheric Administration

Table 2-3: U.S. Federal and Yap State Environmental Databases Reviewed

Database	Date Reviewed	Details Observed
Federal NPL	06/06/2024	No sites identified in the FSM
Federal CERCLA Superfund	06/06/2024	Superfund Site W Trust Terr (33 Yap) EPA ID: FMD981621873, Not on the NPL. Removal Only Site (No Site Assessment Work Needed for PCB releases). No location was identified; it is believed to be at the Former Loran Station located on Gagil-Tomil.
Federal CERCLIS	06/06/2024	No sites were identified in FSM.
Federal RCRA TSD facilities list	N/A	There is no coverage for FSM.
Federal RCRA generators list		
Federal ERNS list		
State lists of hazardous waste sites (NPL and CERCLIS equivalents)		
State leaking UST lists		
State-registered UST list		
State landfill and/or solid waste disposal site lists	06/06/2024	Yap has one public landfill in the Colonia area. Island Paradise Metal Company is the State Recycling Program Operator (SPREP 2021).

Notes: CERCLA = Comprehensive Environmental Response, Compensation and Liability Act of 1980
CERCLIS = Compensation, and Liability Information System
EPA = Environmental Protection Agency
ERNS = Emergency Response Notification System
FSM = Federated States of Micronesia
N/A = not applicable
NPL = National Priorities List
PCB = polychlorinated biphenyl
RCRA = Resource Conservation and Recovery Act
SPREP = Secretariat of the Pacific Regional Environment Programme
TSD = Treatment, Storage, and Disposal
UST = underground storage tank

The Yap EPA was emailed to inquire about the location of the Superfund Site W Trust Territory Site and to determine whether there are any additional sites within one mile of the Yap IAP. Unfortunately, no response has been received. The site is believed to be at the Former Loran Station located in Gagil-Tomil.

2.3 Property Inspections/Personal Interviews

The survey area was visually inspected from February 15 through 28, 2024 (UTC+10). The survey involved entering and inspecting all accessible buildings and facilities as well as walking transects through heavy vegetation throughout the survey area. During the property inspection, the Pacific Mission Aviation (PMA) station manager, Amos Collins, accompanied us throughout the PMA facility. Venatus Choay, Manager of the Yap IAP, accompanied us throughout the remaining areas of the Yap IAP property, including but not limited to the ARFF station, the ARFF Burn Pit, Runway 07-25, the apron area, and the Terminal Building. Tommy Fathal, a local resident knowledgeable of the history of the project area, accompanied us for the entirety of the survey area inspection. Areas within the Yap IAP property boundary (area within the fence line) at each end of the runway and most areas outside of the Yap IAP boundary were covered with heavy vegetation and limited access and observational abilities. Site photographs are provided in Appendix C.

The EBS team interviewed personnel from the Yap IAP, PMA, ARFF, and NOAA facilities within the survey area regarding environmental issues at the Yap IAP. In addition, various questions were transmitted through the USACE Pacific Division (CEPOH) and the DAF Proponent and to the Yap IAP, Yap Mayor, PMA, NOAA, FAA, Yap EPA, FAA, and Yap State DPW&T. The personnel interviewed are listed in Table 2-4. A summary of the interviews is included in Appendix E.

Table 2-4: List of Personnel Interviewed

Name	Title
Venatus Choay	Yap International Airport Manager
Jeff Adalbai	Rull Municipality Mayor
Amos Collins	PMA Station Manager
John Geros	NOAA Facility Technician
On-Duty Supervisor (name unknown) and Dominic Brug	Yap IAP ARFF Commander
Kevin Nishimura	FAA Western Pacific Region, Environmental Protection Specialist
Jodie Fite	Jacobs Engineering UXO Specialist
Joe Joyner	Jacobs Engineering UXO Tech
Captain Terrance Wheeler	NAVFAC Oceania Engagement Team
Captain Ted Donahue	NAVFAC Oceania On-site Military Liaison in Yap
Christina Fillmed	Yap State EPA Executive Director
Jordon Mautaman	Yap State EPA
Various Island Residents	Matric (?) Yamaguchi and others who did not provide names
Mr. Thinnifel	Yap State DPW&T Director
Tommy Fathal	Local Guide

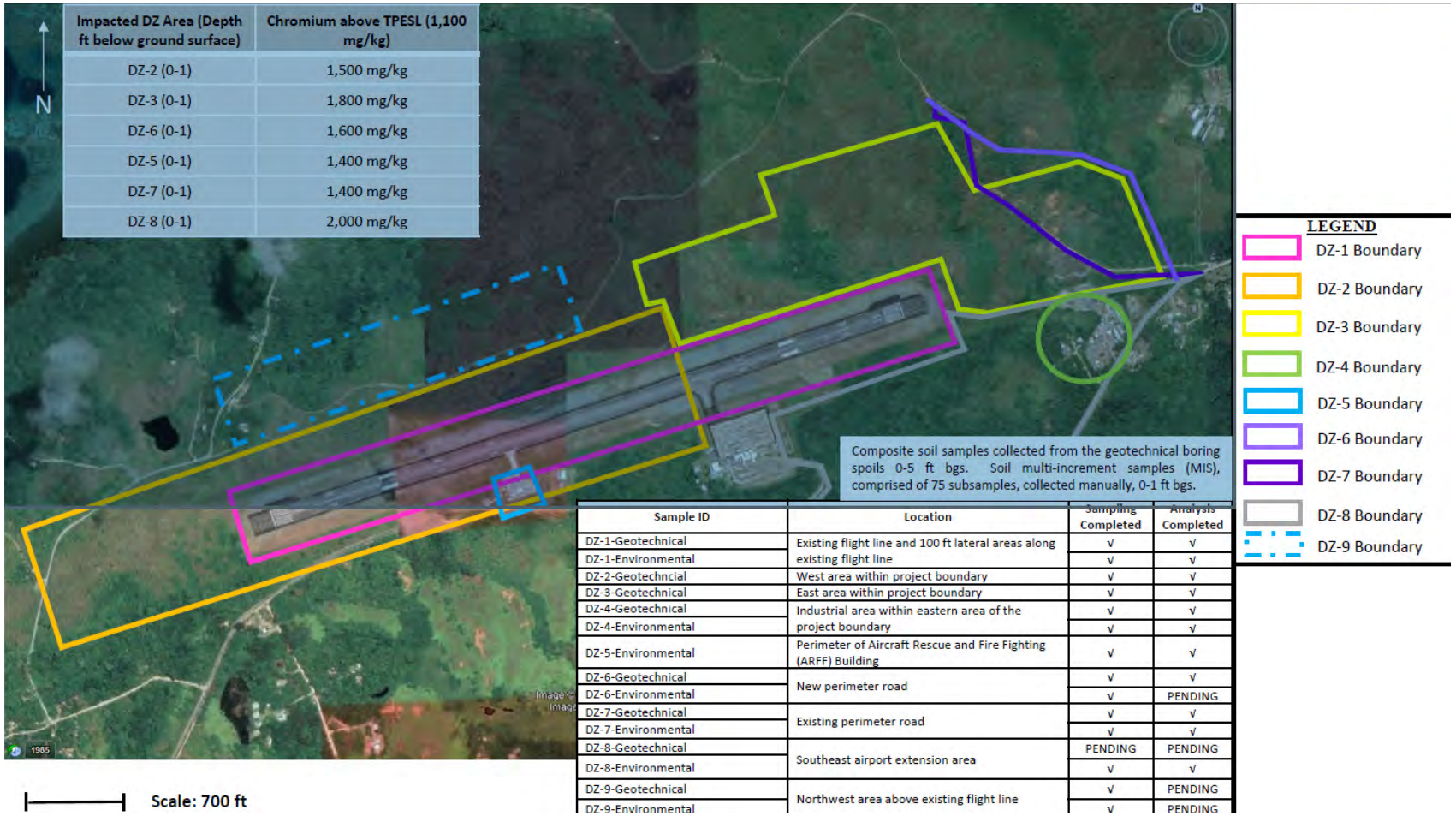
Notes: ARFF = Aircraft Rescue and Fire-Fighting
EPA = Environmental Protection Agency
IAP = International Airport
PMA = Pacific Mission Aviation
UXO = unexploded ordnance
DPW&T = Department of Public Works and Transportation
FAA = Federal Aviation Administration
NAVFAC = Naval Facilities Engineering Command
NOAA = National Oceanic and Atmospheric Administration

2.4 Sampling

Soil sampling and analysis conducted from March 2023 to January 2024 in the areas shown in Figure 2-1, revealed elevated levels of total chromium in all soil samples, ranging from 380 milligrams per kilogram (mg/kg) to 2,000 mg/kg (MNA Environmental 2024b). These levels exceed the Tropical Pacific Environmental Screening Levels (TPESL) in soil for chromium background of 380 mg/kg. The highest levels of chromium were found in surface soils within 0 to 1 foot below the ground surface in the decision units (MNA Environmental 2024b). Hexavalent chromium analysis was also conducted, and analysis indicated a concentration of 4 mg/kg below the TPESL of 30 mg/kg.

Historical mineral research in Yap has indicated high background levels of heavy metals, including chromium, nickel, and magnesium, in boninite lavas, which are part of the earliest phase of volcanism in Yap. The un-metamorphosed rock that contributed to Yap's formation is also high in chromium and titanium. Another geological report found high levels of chromium at 380 mg/kg in the crust from Ngulu Ridge on the Yap arc, which connects the Mariana and Philippine arcs (NAVFAC Pacific 2024b).

No sampling was conducted in conjunction with the Phase I EBS.



Sample ID	Location	Sampling Completed	Analysis Completed
DZ-1-Geotechnical	Existing flight line and 100 ft lateral areas along existing flight line	√	√
DZ-1-Environmental		√	√
DZ-2-Geotechncial	West area within project boundary	√	√
DZ-3-Geotechnical	East area within project boundary	√	√
DZ-4-Geotechnical	Industrial area within eastern area of the project boundary	√	√
DZ-4-Environmental		√	√
DZ-5-Environmental	Perimeter of Aircraft Rescue and Fire Fighting (ARFF) Building	√	√
DZ-6-Geotechnical	New perimeter road	√	√
DZ-6-Environmental		√	PENDING
DZ-7-Geotechnical	Existing perimeter road	√	√
DZ-7-Environmental		√	√
DZ-8-Geotechnical	Southeast airport extension area	PENDING	PENDING
DZ-8-Environmental		√	√
DZ-9-Geotechnical	Northwest area above existing flight line	√	PENDING
DZ-9-Environmental		√	PENDING

Figure 2-1: MNA Environmental Soil Sampling (MNA Environmental 2024b)

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Section 3 Property Description

This chapter describes the environmental resources or topical areas to establish a baseline understanding of the environmental conditions, including potential hazards for future environmental impact assessments and project planning. For each resource, a physical survey area is defined for the purposes of analysis. Sources of data used and cited in the preparation of this chapter include available literature, environmental studies, USACE, JRM, DAF, and DoN resources, as well as regulatory agencies.

The Yap Government does not maintain complete records of land ownership, so an extensive process of public outreach, property identification and surveying, negotiation, purchase, and potential relocation will likely be required. Due to the size of the survey area and lack of property ownership boundaries, the EBS separated the land area into eight survey zones, as shown in Aerial 1, included in Appendix C.

3.1 History and Current Use

3.1.1 Historic

During World War II (WWII), the Japanese constructed a major military air installation and airfield approximately 1 mile south of the current Yap IAP. The airfield experienced heavy bombing and shelling during the war by Allied ships (NAVFAC Pacific 2023b). The Japanese surrendered the island to the U.S. military on September 5, 1945 (NAVFAC Pacific 2023b). The Allied commanders allowed the Japanese to remain on the island and tasked them with clearing ordnance from the island's surface. They moved all surface explosive remnants of war (ERW) on barges to an inlet and then dumped them overboard (NAVFAC Pacific 2023b).

The U.S. gained administrative control of the Pacific after the end of WWII. In 1948, the administration of the outer islands was transferred to Palau, but it was transferred back to Yap in 1951, when the TTPI was formed. Subsequently, as part of the TTPI, efforts were made to enhance the airfield for civilian use. The TTPI was created by the United Nations and granted administrative control of Yap District to the U.S. During this time, the U.S. expanded the education and health care systems, and English became one of the official languages with Yapese, Ulithian, Woleian, and Satawalese. Yap District gained statehood in 1979 as one of the states in the FSM. The FSM entered into a CoFA with the U.S. in 1986. Title One, Article VI (Environmental Protection) of the CoFA identifies U.S. government obligations for its actions within the FSM. Under this agreement, the FSM is provided with financial resources and emergency aid, as well as services from the National Park Service, the National Weather Service, and the U.S. Post Office (NAVFAC Pacific 2023a). Citizens of the FSM can also travel freely in the U.S. without a visa and serve in the U.S. military (NAVFAC Pacific 2023a). An amended Compact was enacted as Public Law 108-188, followed by permanent financial assistance through 2023.

3.1.1.1 Historic Operations and Land Use

The construction of the new Yap airfield took place between 1978 and 1982, utilizing local resources and involving earth-moving activities along the slope of the hill. The original 1979 construction grading plans prepared by Lyon indicated the criteria for the disturbance footprint were at least 4 feet of cut or 4 feet of fill material. In areas of softer surface materials (based on geotechnical boring data), the plans specified 64 inches of engineered fill material. For areas underlain by weathered schist, 21 inches of fill material were planned. Recent preliminary boring log data from the undeveloped parts of the Yap IAP military construction (MILCON) project were evaluated and indicated 0 to 7 feet of depth to bedrock throughout and 10-plus feet of gravel fill on the western side of the airport. However, the exact footprint and depth of previous excavations and the use of clean fill to 4 feet below ground surface could not be confirmed (NAVFAC Pacific 2024a).

3.1.1.2 Demolitions

No historic demolition was known within the survey area.

3.1.2 Current Operations and Land Use

The Yap IAP is an FAA-certified international airport that receives three regular weekly commercial flights from Guam and Palau.

The airport has a single runway, Runway 07-25. The runway has 200-foot (61-meter) overruns on both ends, grooves for drainage and flight safety, and a pavement condition number of 53FC (PACAF 2019). It is designed for a Boeing 737-800 aircraft. The runway is made of grooved asphaltic concrete (AC) (PACAF 2019). At both ends of the runway, there are turnarounds for aircraft to taxi back to the main terminal and parking apron.

According to the Final Master Plan report by Leo A. Daly, the existing runway pavement is made up of four inches of AC, nine inches (22.9 centimeters [cm]) of aggregate base course, 14 inches (35.6 cm) of prepared subbase, and a subgrade California Bearing Ratio (CBR) of 10 (Leo A Daly 2012). This differs significantly from the design plans for the runway and apron construction provided by the Yap IAP Airfield Manager. These plans indicate that the runway consists of six inches (15.2 cm) of AC, six inches (15.2 cm) of 60 CBR base course, a 12 CBR subgrade in cut areas and six inches (15.2 cm) of AC, 16 inches (40.6 cm) of 60 CBR base course, a minimum 50 inches (127 cm) of 12 CBR subbase, and a 3 CBR subgrade in fill areas (PACAF 2019).

On the east end of Runway 25, there is an existing parking apron of dimensions 521 feet (158.8 meters) by 300 feet (91.4 meters) adjacent to the passenger terminal (PACAF 2019). Assuming there is no commercial air traffic, the apron can accommodate 14 F-15 aircraft. However, due to the lack of aircraft support equipment, such as tow capability, the current operations require a considerable amount of apron space to maneuver the aircraft into its designated parking space.

A list of buildings within the survey area and their description is included in Table 3-1.

Table 3-1: Description of Buildings

Building Use	Zone/Area	Year of Construction	Construction Materials
Various Residences	Zones 1-7	Unknown	Wood, metal, CMU, and/or concrete
Vehicle Storage/Residence	1-1	Unknown	Wood and metal
Water Treatment Facility	1-2	c. 2018 to 2023	Metal
Cellular Network Antenna	1-3	Unknown	Metal
Family Corner Store	2-1	Unknown	Wood and metal
7-D Rental Storage Yard Sheds and Restroom	4-1	Unknown	Concrete columns with a metal roof
GPPC, Inc. Material Storage Sheds	4-2	Between 2008-2013	Concrete foundation, metal framing, and walls/roof
GPPC, Inc. Various Facilities		Between 2008-2013	Concrete foundation, wood or metal framing, and metal walls/roof
A.J. Bake Shop	4-3	Between 2008-2013	Concrete foundations, wood framing, wood and metal walls, metal roof
ARFF Facility	8-2	2010	CMU and/or concrete
NOAA Facility	8-3	c. 2005	CMU and/or concrete
Ground Service Equipment / Maintenance	8-4	1988	Concrete
PMA Facility	8-5	1988	Concrete foundation, metal framing, and walls/roof
Old Generator Building	8-6	1988	CMU and/or concrete
New Generator Building	8-7	2024 (Construction in progress during VSI)	CMU and/or concrete
Administration Building	8-8	1988	wood
Terminal Building	8-9	1988	CMU and/or concrete, wood
Terminal Apron		1988	Concrete
Construction Lay Down Yard		c. 2023	Temporary wood structures
Health Center / Former Quarantine Facility	8-10	2024	Portable prefabricated units
Vital FSM Fuel Farm	8-11	c. 1988	CMU and/or concrete

Notes: ARFF = Aircraft Rescue and Fire-Fighting; c. = circa; CMU = concrete masonry unit; FSM = Federated States of Micronesia; NOAA = National Oceanic and Atmospheric Administration; PMA = Pacific Mission Aviation; Vital FSM = Vital FSM Petroleum Corporation; VSI = visual site inspection

Airport improvements were in progress during the EBS VSI. The survey area includes a significant amount of undeveloped land surrounding the airport. Development south of the airport that is not on the airport property includes residential properties, a private school, and undeveloped land that includes areas of open space up to the airport's boundary fence and areas of dense undeveloped jungle. The only public road providing access to the south end of the island is located directly south of the runway and would have to be relocated to accommodate development in that area. Development of the project requirements on property south of the airport is feasible but would require the acquisition of a significant amount of privately owned land and public road and utility relocation (PACAF 2019).

Directly east of the airport property are mixed industrial uses, two public schools, multiple residential properties, the only public road providing access to the south end of the island, and some undeveloped land. Development east of the airport would be significantly more difficult than south of the airport due to the presence of an existing high school and middle school that would be affected by a runway extension in that direction (PACAF 2019). Also, the existing public road would have to be relocated, requiring additional property acquisition or a tunnel under the runway (PACAF 2019).

North and west of the airport are residential properties and undeveloped land. Approximately 4,700 feet (1.4 km) west of the west end of the runway is the Philippine Sea. Development north of the airport and a runway extension west of the airport will also affect large amounts of privately owned land and a local road that provides the only paved access to multiple residential properties north of the runway (PACAF 2019).

3.2 Environmental Setting

The following sections describe the environmental setting of the survey area and include information on climate, topography, geology, soils, surface water, and groundwater.

3.2.1 Climate

Yap is located near the boundary between the North Equatorial Current and the North Equatorial Counter Current, approximately 9 degrees north of the equator. The region has a tropical climate, with an average annual rainfall of 310 millimeters (mm) (NAVFAC Pacific 2023a). The wet season is from July to October, while the dry season and trade winds prevail from December to April. The mean annual temperature is 81 degrees Fahrenheit (27 degrees Celsius), and the relative humidity ranges from 79 to 85 percent (%) (NAVFAC Pacific 2023c). Yap has a distinctive seasonality, with the lowest average rainfall occurring from February to April and the highest from June to October. The average rainfall per year at the airport weather station was 120 inches between 1948 and 1992, as opposed to 77 inches between 1985 and 2015 (NAVFAC Pacific 2023c).

As the westernmost state of FSM, Yap is vulnerable to a range of threats. It is positioned in a region known as 'Typhoon Alley' and is susceptible to earthquakes, tsunamis, and droughts exacerbated by El Niño Southern Oscillation (ENSO) (Government of the FSM 2016). Yap is regularly hit by typhoons (especially from June to December), with three to five typhoons hitting the State each year. Yap is susceptible to drought, and during prolonged droughts, water sources on outlying islands can dry up. Yap is also vulnerable to earthquakes, with four significant earthquakes recorded in recent times (Government of the FSM 2016). Although Yap has a high probabilistic tsunami hazard, no significant damage has been recorded. In the event of a tsunami, Yap's low-lying areas would likely suffer significant damage (Government of the FSM 2016). Due to the distances between islands, it is challenging to deliver food, water, and medical supplies to residents after a disaster, making Yap vulnerable to health and other secondary impacts of disasters. The region does not regularly receive large amounts of rain, so the damage from extreme surges and rainfall events is usually more severe. The main island of Yap has also experienced wildfires during dry periods, such as that of 1997/1998 (Government of the FSM 2016).

3.2.2 Soils

Four geological formations fall within the project area: 1) Yap formation, 2) Tomil volcanics, 3) Alluvium, and 4) Mangrove swamp deposits.

- The Yap Formation, which comprises most of the project area, is a pre-Tertiary metamorphic basement composed primarily of greenschists, amphibolites, and intrusive ultramafic rocks. The rocks weather to fat clay, which is gray to greenish in color near the weathered rock surface, and grades upward to yellowish and, in some places, red clay at the surface of the ground. Serpentinite dikes and sills, mostly 1 to 10 feet thick and of unknown extent, are scattered throughout the Yap Formation. The rock is dense, dark green to nearly black, with faint grayish-green spots or mottles.

As the serpentinite undergoes weathering, it transforms into a clay rich in iron and with a small amount of nickel. The formation is pre-Miocene, possibly Mesozoic, in age.

- The Tomil volcanics are a volcanic geological unit within the southern part of the project area and are composed of "andesitic and basaltic volcanic breccias, conglomerates, lava flows, and tuffs" (NAVFAC Pacific 2024b). The clays generally are deeply eroded because they support only sparse vegetation. Most alluvial deposits are restricted to beaches because most streams on Yap are narrow with steep gradients and; therefore, have no flood plains of alluvium. Only near the shore, where the streams flow at or near sea level, does stream alluvium accumulate to any great amount.
- Alluvium is found in marshy environments in the southern part of the project area.
- Mangrove swamp deposits are found in the southern project area, which contains organic-rich soils composed of muck, sand, silt, and clay.

The schist rock, which makes up the bedrock in the region, is primarily composed of platy minerals and tends to split into layers. It has been observed that when this schist rock is reused as structural fill or subbase for pavement without proper stabilization and drainage design, it can weaken significantly when exposed to increased moisture content (NAVFAC Pacific 2024b).

Within the survey area, there are seven different soil series (Figure 3-1), with varying slope degrees, from most to least prevalent, and include the following:

- Gitam very gravelly silty clay loam, 0 to 12% slopes, comprises the most prevalent soil series in the survey area. This moderately deep and somewhat poorly drained soil is formed on plains in materials derived from schist (United States Department of Agriculture [USDA] Natural Resources Conservation Service [NRCS] 2024). Depth to solid bedrock is typically 90 centimeters (USDA NRCS 2024).
- The Rumung-Weloy complex, 12 to 50% slopes, is present on low-lying foothills within the northern portion of the survey area and within small pockets in the central portion (USDA NRCS 2024). It is comprised of approximately 45% Rumung gravelly silt loam and 35% Weloy gravelly silty clay loam. Rumung and Weloy soils formed in residuum derived from schist and are well-drained. Rumung soil is typically shallow (25 to 30 cm to bedrock), while Weloy soil is moderately deep (50 to 62 centimeters to bedrock).
- Gagil silty clay loam, from 2 to 30% slopes, is mapped along the southern boundary of the survey area (USDA NRCS 2024). The Gagil series formed in highly weathered volcanic breccia and tuff on central uplands and is very deep and well-drained (USDA NRCS 2024).
- Dechel mucky silt loam, 0 to 2% slopes, is found in the southcentral and eastern portions of the survey area. This soil series formed in alluvium from volcanic rock and schist and is found on valley floors (USDA NRCS 2024). It is very deep (80 cm to bedrock) and poorly drained (USDA NRCS 2024).
- Mesei mucky peat, 0 to 1% slopes, is found in a small pocket along the southern boundary of the survey area (USDA NRCS 2024). It is formed in organic deposits overlying alluvium on bottom lands, is very deep (80 cm to bedrock), and is very poorly drained (USDA NRCS 2024).

- Ilachetomel peat, 0 to 1% slopes, is present in a small pocket in the southern portion of the survey area (USDA NRCS 2024). This soil is formed by decomposing mangrove roots and litter in intertidal zones; it is very deep and very poorly drained (USDA NRCS 2024).
- Yap silty clay loam, 2 to 6% slopes, is present in the northwest corner of the survey area (USDA NRCS 2024). The soil series formed in material derived from volcanic breccia and tuff, is very deep and well-drained and found on ridges (USDA NRCS 2024).

3.2.3 Geology/Hydrogeology

The islands that comprise Yap State are primarily metamorphic and volcanic rock formations accompanied by coral sand and mangrove mud. Yap Islands comprise an island arc system on the eastern convergent margin of the Philippine Plate. The Yap trench arc links the Mariana and Philippine arcs. There is no modern volcanism on Yap. The main rock type of Yap is greenschist.

Groundwater resources on the Yap main islands mainly exist in weathered rock, talus, alluvium, and artificial land fill (USGS 1992). In the past, groundwater was accessed through shallow dug wells, seeps, and springs. Groundwater reservoirs tend to be larger in low-lying areas compared to higher-elevation areas. However, due to limited storage capacity, most springs and seeps stop flowing shortly after rainfall. Some springs and seeps connected to larger groundwater bodies may continue discharging water for longer periods.

Within the airport boundary, intermittent streams are present, and permanent streams are located to the south. These streams support a mangrove ecosystem situated approximately 1,500 feet (457.2 meters) south of the existing airport runway. Evidence of surface water features was observed within the survey area during a previous investigation, including drainage channels, saturated soils, standing water, hummocks, river channel, a patch of giant swamp taro, or lak (*Cyrtosperma chamissonis*), and various plant species that are often found in the wetland.

The Yap main islands have three large-scale water supply systems: the Colonia System, Southern Yap System, and Gagil-Tamil System, as well as 20 smaller village-scale systems (USGS 1992). The Southern Yap Water System, for instance, relies on groundwater extraction near the old airport on Yap Island. The slope in the southern direction is unknown. Groundwater discharges occur at seeps and streams in various directions, including the north, northwest, and south of the high water level area.

3.2.4 Topography

The establishment of the airport infrastructure required a significant amount of fill material due to the challenging topography of the area. Future development plans may involve either utilizing fill material on the south side of the runway or excavating on the north side. The existing drainage pattern of the airfield flows from north to south (PACAF 2019).

A USGS topographic map, initially produced in 1969 and updated in 1996, provides details of the elevation variations in the surrounding area (Map 7, included in Appendix B). The map shows that the elevation to the west of the airport ranges from five meters above mean sea level (msl), while to the south, it is about 10 meters, and to the northeast, it reaches 60 meters. The runway itself sits at an approximate elevation of 27 meters above msl (PACAF 2019).

The existing topography and observations made on-site present significant challenges for airport development. The grades on the northern side of the runway are steep, requiring substantial earthworks for development. Conversely, the grades on the southern side are steeply sloping down, necessitating the use of fill material for suitable development. It is crucial to consider the potential impact on surrounding properties and public roads when filling in the southern area. Additionally, a prominent hill to the east restricts any possibility of extending the runway (PACAF 2019). The western area for runway extension appears more natural, while the eastern area shows signs of previous clearing and potential grading. Vegetation in the area consists of grasses, with some taller vegetation further away from the runway. The taxiway area is at a higher elevation compared to the existing runway, with rolling topography and some swale areas. The northern area, beyond the existing fence line, is densely vegetated, with rolling topography extending to the proposed apron extension and fuel storage areas.

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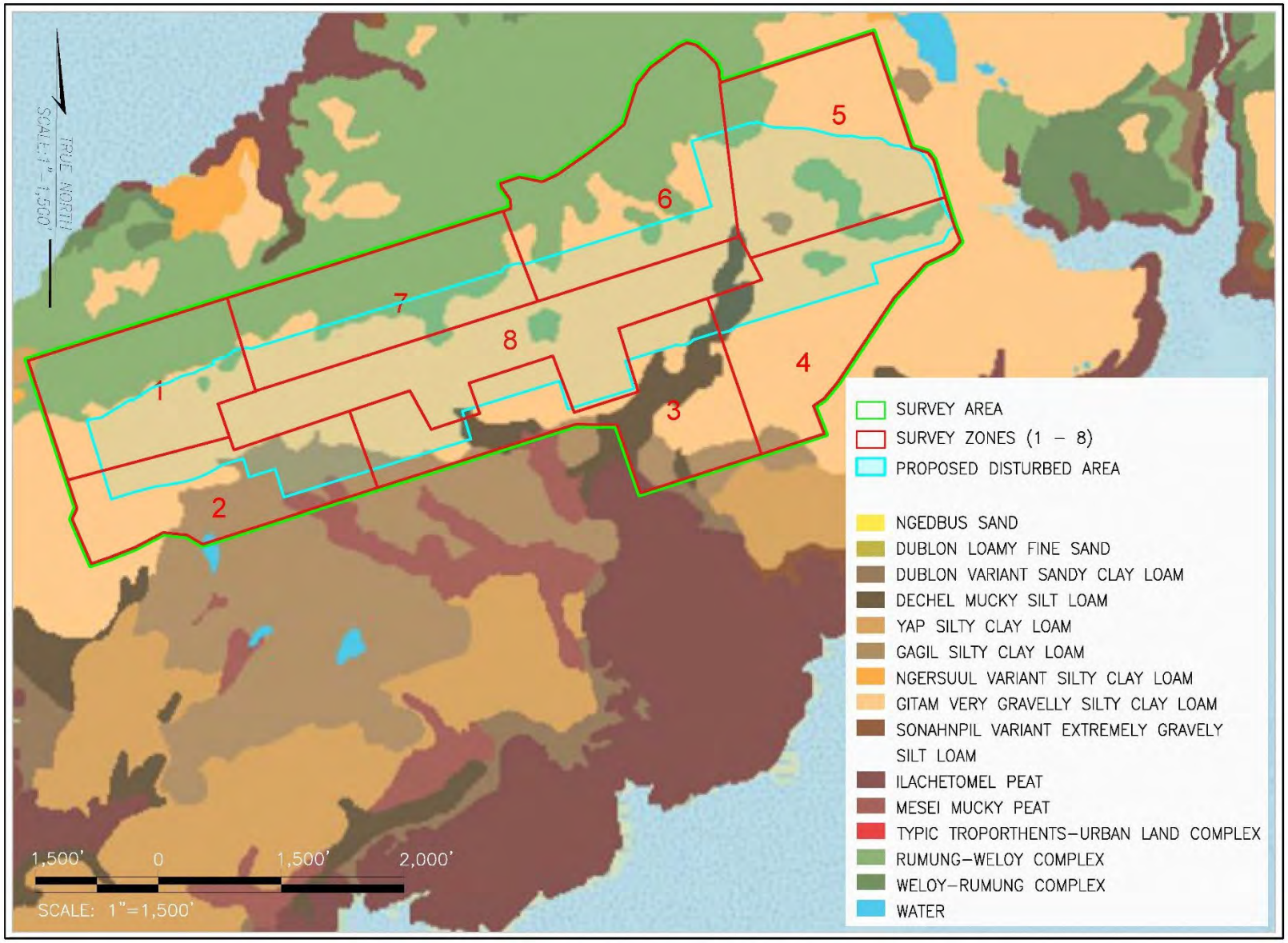


Figure 3-1: Soils Map

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Section 4 Property Categorization

Classification of the seven standard ECOP area types is according to statutory requirements for (1) the identification of uncontaminated property within the provisions of the Community Environmental Response Facilitation Act of 1992 (CERFA) and (2) for designating parcels of DoD installations as being suitable or unsuitable for transfer by deed within the provisions of CERCLA Section (§) 120(h)(3)(B)(I). Standard ECOP area categories" are described in ASTM D5746-98, *Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities*. Standard ECOP area categories are ranked in order of their suitability for transfer, with category types 1 through 4 being suitable for transfer by deed and Category 5 through 6 being unsuitable for transfer by deed until legal concurrence is obtained from AF/JAOE-FSC (Environmental Law Field Support Center) and SAF/GCN (Air Force Office of General Counsel [Installations, Energy and Environment Division]) prior to proceeding with the transaction. Areas classified as Category 7 are either unevaluated or require further evaluation in order to classify them as one of the other ECOP area types.

- Category 1: An area or real property where no release or disposal of hazardous substances or petroleum products or their derivatives has occurred into the environment or structures or disposed of within the survey area (including no migration of these substances from adjacent properties).
- Category 2: An area or real property where only the release or disposal of petroleum products or their derivatives has occurred.
- Category 3: An area or real property where release, disposal, or migration or some combination thereof, of hazardous substances, has occurred, but at concentrations that do not require a removal or remedial action.
- Category 4: An area or real property where release, disposal, or migration, or some combination thereof, of hazardous substances, has occurred, and all remedial actions necessary to protect human health and the environment have been taken.
- Category 5: An area or real property where release, disposal, or migration, or some combination thereof, of hazardous substances, has occurred and removal or remedial actions or both are underway, but all required actions have not yet been taken.
- Category 6: An area or real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, but required response actions have not yet been initiated.
- Category 7: An area or real property that is unevaluated or requires additional evaluation.

As of the date of this document, there are several data gaps that may affect the conclusion of the EBS for Yap IAP. The data gaps are described as follows:

- Federal, state, tribal, and local government records were not all practically reviewable because coverage for Yap was not available from standard resources that search various government databases to identify on-site and/or off-site sources of concern that have the potential to impact soil and/or groundwater at the survey area. This data failure is not expected to represent a significant data gap because the island has not undergone significant development since WWII, and many of the existing land uses have remained unchanged since the 1950s and 1960s.

- Title, deed, or other real property records are not maintained by the Yap Government; therefore, no ownership or property maps were able to be obtained. Customary practices and oral agreements are heavily relied upon for land transfer and use. It is anticipated that an extensive process of public outreach, property identification and surveying, negotiation, purchase, and potential relocation will likely be required.

- Diplomatic obstacles prevented the EBS questionnaires from being distributed to the community or those not on-site during the EBS VSI, preventing the collection of crucial information directly. This data failure is anticipated to represent a significant data gap as very few historical or environmental documents were available. This lack of historical or environmental documents exacerbates the information deficit caused by the diplomatic obstacles.

- The lack of written historical documents resulted in a heavy reliance on oral information from facility or site representatives, which could not be readily verifiable through visual observations or corroborated by any existing written materials. It is possible that relevant facts were concealed, withheld, or not fully disclosed by the facility or site representative at the time of this work being conducted.

- A language barrier was encountered during the EBS VSI with local residents; all information had to be interpreted by a local guide who did not possess specialized knowledge or familiarity with the environmental field. Miscommunication in translation and interpreting may have led to potentially flawed environmental management responses from the local residents. In addition, language barriers may have discouraged some of the local residents from participating in the survey, resulting in a lack of diverse perspectives and insights essential for a comprehensive environmental assessment.

- Inaccessible areas were encountered mainly outside the proposed disturbance footprint during the non-intrusive EBS VSI, due to heavy vegetation, steep slopes, area not being cleared of ERW, no access, or for cultural or archaeological items of potential concern. In addition, one area east of the airport was actively being cleared with heavy equipment, preventing a safety hazard for field workers. In several instances, locked doors were encountered, resulting in portions of structures and/or facilities being inaccessible due to missing or lost keys or unknown respective points of contact for the facility. Such instances include the interior portion of the Water Treatment Facility, shipping containers by the ARFF Burn Pit and within the 7-D Car Rental site, the interior portions of the Health Center/Quarantine Facility, the FSM Telecommunications area within the Terminal Building, and a small structure believed to house an emergency generator south of the “Old” Emergency Generator Buildings. Vital FSM Petroleum Corporation was unresponsive to multiple requests for access to the Fuel Farm while the field team was present. The EBS VSI covered 620 acres of the 826-acre survey area. This data failure is anticipated to represent a significant data gap as it encompasses a large percentage of the survey area outside of the Yap IAP proposed disturbed area.

Facilities that generated and/or stored hazardous substances or petroleum products were evaluated based on the methodology presented above. Several factors contributed to the classification, as listed below:

- There is a potential for ERW primarily in the subsurface across all surveyed regions beyond the developed areas of the airport where significant grading activities have occurred. During the EBS VSI, potential ERW was observed on the surface. Yap State lacks established guidelines for managing ERW and does not have subject matter experts on-island.
- Right-of-entry was not obtained for entry into private residences.
- The lack of regulation and efficient solid waste collection services has led to the use of community dumping sites throughout the island. Additionally, poor disposal habits among residents could negatively affect the survey area beyond the Yap IAP's fence line. Yap State developed a Solid Waste Management Strategy for 2018 to 2027, along with an Action Plan for 2018 to 2022. This foundational document outlines prioritized improvements and highlights the importance of a coordinated approach to implementing related activities (Yap State 2018).
- The electrical equipment (such as transformers and capacitors) within the surveyed areas did not have any indications of their PCB status, and no information or records were available on this matter. Consequently, it is presumed that these devices contain PCBs. In 2014, the Yap State EPA established a regulation concerning *Persistent Organic Pollutants*, which categorizes PCBs as a "Priority List" substance. This regulation prohibits the use, disposal, or discharge of any "Priority List" materials unless it adheres to a Disposal Plan approved by the Director of the Yap State EPA, in compliance with established regulations (Yap State EPA 2014).
- All residences and buildings are assumed to have ACM, as no records were available for any of the buildings. Yap State has regulations under the Yap State Code *Title 18: Conservation and Resources, Division 4: Environmental Protection, Chapter 15: Environmental Quality Protection Act*; however, it does not mention a ban on the use of asbestos.
- The Yap State Code, *Title 18: Conservation & Resources, Chapter 15 – Environmental Quality Protections*, prohibits pollution, defined as any direct or indirect alteration of the physical, thermal, chemical, biological, or radioactive characteristics of the environment resulting from the discharge, emission, or deposit of waste. Such pollution adversely affects beneficial uses and can create conditions that are hazardous or potentially hazardous to public health, safety, and welfare of animals, birds, wildlife, aquatic life, and all forms of plant life. However, information on any violations or enforcement actions is unavailable due to the inability to obtain records.
- It is probable that any releases or spills of petroleum products identified or suspected within the survey area have not been reported in compliance with Yap State EPA Regulation *Title VII: Regulations for Reporting Petroleum Releases, Chapter 1 - Oil Spill Reporting*, as we were unable to obtain the necessary records from Yap EPA for review.

Within the survey area zones, twenty Areas of Concern (AOCs) were identified, as outlined in Table 4-1.

Table 4-1: Areas of Concern

Site Summary	Classification
Undeveloped Areas, Zones 1-7	**7**
The undeveloped areas consist of approximately 206 acres located largely outside of the proposed disturbance footprint. Significant portions of these areas were occupied by heavy vegetation and steep slopes with occasional historical (WWII remnants including potential ERW) or cultural (burial sites and potentially managed taro patches) features. This AOC, Undeveloped Areas, Zones 1-7, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 determination is based on the lack of available information, inaccessibility of the area, the high probability potential for ERW, and the improper management, storage, and disposal practices of solid waste, hazardous substances, and/or petroleum products potentially impacting the area.	
Village Residences, Zones 1-7	**7**
Most residences were observed from a distance due to privacy and cultural concerns. All residences are located outside of the airport fence line; however, there are no real property boundaries or ownership records as customary practices and oral agreements govern ownership. A typical residence consisted of a single-story wooden single-wall house on post and pier foundations with a corrugated metal roof. Suspect LBP was observed on the structures. Utilities were uncommon; however, some residences did have electrical and water connections to the municipal grid/systems. Sanitary waste was usually collected in a sanitary tank, although several residences did not have any observable sanitary systems in place. With the exception of the Vehicle Storage/Residence (Site No. 1-1), most residences were free from petroleum products, hazardous substances, and municipal solid waste. Derelict vehicle storage was common at or around residences due to a lack of proper disposal options. Driveways were most often bare soil with occasional gravel fill-in or cover, and functional vehicles were parked on bare soil or covered by gravel. Within Zone 1, several residences were observed consisting of wood-framed structures with wood or corrugated metal walls and roofing. Most of the building materials for these residences appeared to be scrap material that had been repurposed. Many of these residences appeared to have connections to a water supply (outdoor showers) but did not have connections to the power. This AOC, Village Residences, Zones 1-7, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 determination is based on the lack of available information, inaccessibility of the area, the high-probability potential for ERW, suspect ACM, LBP, and PCBs, and the improper management, storage, and disposal practices of solid waste, hazardous substances, and/or petroleum products potentially impacting the area.	
Vehicle Storage/Residence, Site No. 1-1	**7**
This area overlies the area quarried for common and aggregate borrow during the construction of the airport. The site is located northwest of the Yap IAP within Zone 1 and contains a residence with approximately 20 derelict vehicles stored south of the residence. The house is a single-story wooden, single-wall structure on post and pier foundations. Suspect LBP was observed on or within the structure. Power and water utility connections were observed; however, a sanitary system was not identified. Stockpiles of municipal waste, C&D debris, and scrap vehicle parts and components were present around the residence. A closer inspection of the residence, with the permission of the occupant, revealed the presence of petroleum products, hazardous substances, and various waste types. A derelict anti-aircraft gun mount was located south-southeast of the residence. This AOC, Vehicle Storage/Residence, Site No. 1-1, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The classification as a Category 7 is justified due to the lack of available information, the high probability potential for ERW, suspect ACM and LBP, and solid waste, hazardous substances, and petroleum products disposal practices potentially impacting the area.	
Water Treatment Facility, Site No. 1-2	**7**
This area overlies the area quarried for common and aggregate borrow during the construction of the airport, and according to a 1944 aerial photograph (Aeria 4), the site is labeled as “Possible Gas or Ammo. Dump.” The site is located northeast of the large pond within Zone 1 and treats water flowing from a 250,000-gallon concrete AST upgradient to the northeast of the facility as it transmits towards the Yap IAP apron to the southeast. Two 2,500-gallon polyethylene water storage tanks and two 250-gallon water softening tanks were observed within the facility. The interior of the facility was inaccessible but likely contained hazardous substances associated with water treatment activities. A waterline from this facility extends to the northwest of the airport apron.	

Site Summary	Classification
This AOC, Water Treatment Facility, Site No. 1-2, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 classification was justified due to the lack of available information, the high-probability potential for ERW, suspect ACM and LBP, the lack of access to the interior of the water treatment facility, and the former quarry activities conducted in this AOC potentially impacting the area.	
Cellular Network Antenna, Site No. 1-3	**7**
The site is located on top of a hill northwest of the Yap IAP. A cellular network antenna array is mounted on a metal communications tower.	
Family Corner Store, Site No. 2-1	**7**
The site is located south of the approach end of Runway 7 within Zone 2 and consists of a single-story CMU-walled structure with a corrugated metal roof and poured concrete foundation. An AC pavement extends from the north face of the building to the main roadway to the north. A wood branch-framed carport with concrete piers, a corrugated metal roof, and bare soil surface is located southeast of the building. Suspect ACM and LBP were observed on or within the structures. Coconut trees and managed taro patches were observed in the north and east portions of the site. Imported soil, derelict equipment, scrap metal, and C&D debris are stored along and within a forested area to the west of the site. The structure is connected to power via three pole-mounted transformers to the east and is connected to the municipal water supply. Sanitary waste is collected in a sanitary tank located near the building. Small containers of petroleum products and hazardous substances were observed within the structure, and a lead-acid battery was stored in the carport. This area has a high likelihood of subsurface ERW. This AOC, Family Corner Store, Site No. 2-1, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 classification was justified due to the lack of available information, the high-probability potential for ERW, and suspect ACM, LBP, and PCBs, and the improper management, storage, and disposal practices of solid waste, hazardous substances, and/or petroleum products potentially impacting the area.	
ARFF Burn Pit, Site No. 3-1	**7**
The site contains a roll-off bin stored in an approximate 10-foot by 20-foot pit located west of the ARFF station but on the edge of Zone 3. Black- and gray-stained soil was observed around the edge of the pit, and standing water with a heavy oily sheen was observed within the pit and the roll-off bin. Greenwaste, partially burnt tires, and remnants of 55-gallon steel drums were observed within the roll-off bin and pit. A locked shipping container, approximately fifteen steel drums, eight waste tires, and scrap lighting equipment were stored to the east of the pit. Reportedly, waste petroleum products, hazardous substances, and other materials are stored within or near the shipping container and are later burned within the burn pit during ARFF training exercises, which have historically included the use of AFFF to extinguish. The waste products, substances, and materials are collected from various facilities associated with the airport. This area has a low likelihood of subsurface ERW as the area has been previously graded. This AOC, ARFF Burn Pit, Site No. 3-1, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 classification was justified due to the lack of available information, inaccessibility to the locked shipping container, the use and storage of AFFF, and the improper management, storage, and disposal practices of solid waste, hazardous substances, and/or petroleum products potentially impacting the area.	
7-D Car Rental, Site No. 4-1	**7**
The site is located northeast of the GPPC, Inc. Facility within Zone 4 and is largely vacant, with the exception of three structures, a row of approximately 15 derelict vehicles, a septic tank, and a portable drill rig. A ramada with concrete columns and a metal roof is located in the southwest portion of the site and covers a shipping container, a pallet of bentonite chips, and a utility sink. The utility sink drains through a pipe that enters the ground; its discharge point is unknown. A metal-walled outhouse with a metal roof and poured concrete foundation is located in the north portion of the site and drains to a septic tank adjacent to the north of the building. A second shipping container is stored adjacent to the outhouse. A wood-frame structure without walls or a roof is located in the west corner of the site and is unused. Several steel drums and plastic buckets labeled as petroleum products and hazardous substances were stored on bare soil throughout the site and dozens of small containers Stockpiled soil is stored in the northeast portion of the site; the source of the soil is unknown. This AOC, 7-D Car Rental, Site No. 4-1, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 classification was justified due to the lack of available information, inaccessibility to shipping containers, the high-probability potential for ERW, suspect ACM and LBP, and the improper management, storage, and disposal practices of solid waste, hazardous substances, and/or petroleum products potentially impacting the area.	

Site Summary	Classification
GPPC, Inc. Facility, Site No. 4-2	**7**
GPPC, Inc. is a company that provides skilled craft labor and heavy equipment for construction services (e.g., building/structures, concrete/asphalt paving, utilities, renovation/interior, specialty services). They have been at the site within Zone 4 since c. 1998. The site is located directly east of the departure end of runway 7 of the Yap IAP. An asphalt plant installed at the facility in 2023 is located in the south portion of the site and is surrounded by large quantities of 55-gallon steel drums containing an unlabeled bituminous substance and a dozen or two that were labeled as oil. The asphalt mixing plant produced 26,000 tons of hot mix asphalt for the Airport runway rehabilitation. A large metal-framed and roofed structure is located north of the asphalt plant and also contains large quantities of 55-gallon steel drums containing an unlabeled bituminous substance and pallets of 5-gallon buckets of traffic marking paint. In the southwest portion of the site, several metal- or wood-walled and metal-roofed structures house workshops, equipment storage, material and chemical storage, restrooms/ showers, and offices. Several showers and sinks were observed draining to bare soil through effluent pipes and small drainage channels to the southwest of the site, while soaps, shampoos, and cleaning chemicals were observed in their vicinity. In the northeast portion of the site, petroleum products and hazardous substances were stored in a metal-framed and roofed ramada, and derelict equipment, including generators, were observed within a metal-walled and roofed building. Several large gravel stockpiles were observed in the north portion of the site, and a large equipment and truck junkyard is located in the northwest corner, reportedly having been moved to its current location from the gravel stockpile area with excavators and other large equipment prior to the placement of the gravel stockpiles. Several significant leaks, spills, and/or releases of petroleum products and/or hazardous substances were observed throughout the site, including within the junkyard, gravel stockpiles area, petroleum product, and hazardous drum storage area, equipment maintenance area, and along the gravel and dirt roadways within the site. Bituminous substance releases were observed in and around the bituminous drum storage areas, and the asphalt mixing plant, and they were leaking out of a gravel stockpile in the gravel stockpile area. This AOC, GPCC, Inc. Facility, Site No. 4-2, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 classification was justified due to the lack of available information and the gross mismanagement, storage, and disposal practices of solid waste, hazardous substances, and/or petroleum products potentially impacting the area.	
A.J. Bake Shop, Site No. 4-3	**7**
The site is located south of the departure end of Runway 7 and consists of two single-story wood single-wall structures with metal roofs and partial concrete foundations and a two-story metal-walled and roofed structure. The two-story structure was a residential dwelling, while the two single-story structures appeared to be commercial in nature. One of the commercial buildings was vacant, while the other contained a bakery/pizza restaurant. *De minimis* amounts of various cleaning chemicals were observed in small containers within the restaurant. Suspect ACM and LBP were observed during the VSI. This AOC, A.J. Bake Shop, Site No. 4-3, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 classification was justified due to the lack of available information, the high probability potential for ERW, suspect ACM, and LBP, and the improper management, storage, and disposal practices of solid waste, and/or hazardous substances potentially impacting the area.	
Runways and Taxiways, Site No. 8-1	**7**
The airport is owned and operated by the Yap State Government as a Division of the DPW&T. The entire airfield was constructed with local materials, and it was cut and filled along the slope of a hill between 1978 and982 (Leo A Daly 2012). Many cracks were already apparent in pavement surfaces in 1990 (USACE 1994). The original pavement design was 4 inches AC surfacing over 17 inches of crushed schist base course. In cut sections, the design subgrade was 12 inches, and in fill areas, 43 inches of select fill was placed over a design subgrade. The entire runway was grooved with saw cuts on a 2-inch spacing (USACE 1994). In 1944, USACE completed a study indicating pavement failures at the airport due to water in the ground under the surface, or "base course," was the culprit (USACE 1994).	

Site Summary	Classification
The runway is oriented in east-west orientation along the cardinal headings of 070 degrees to 250 degrees in reference to magnetic north; therefore, the runway designation is 7-25. Runway 7-25 measures 6,000 feet (1,829 meters) long and 150 feet (46 meters) wide and has an asphalt grooved surface. The bituminous runway surface has a weight-bearing capacity of 75,000 pounds for single-wheel aircraft, 160,000 pounds for duel-wheel aircraft; and 230,000 pounds for dual tandem-wheeled aircraft. Runway 7 is situated at an elevation of 90.5 feet (27.7 meters) and is equipped with a 4-light PAPI on its left side. It also has an obstruction at ground level of 6 feet, located 404 feet from the runway, with a 34:1 slope clearance requirement. Conversely, Runway 25 has an elevation of 89.6 feet and also includes a 4-light PAPI on the left. Notably, there is an obstruction at 29 feet above ground level, positioned 1,200 feet from the runway and 300 feet to the left of the centerline, also requiring a 34:1 slope clearance. Runway 7-25 uses medium-intensity runway lights. Yap is an uncontrolled airport with no air traffic control tower. There is a single stub taxiway that connects to the terminal apron located approximately 2,000 feet from the approach end of Runway 25 and proceeds to the south of the runway. The RSA is 200 feet in length. The apron safety area is entirely unpaved (Leo A Daly 2012). The taxiway measures approximately 370 feet in length and 90 feet in width, featuring 25-foot-wide shoulders. It connects the runway to the apron area. The drainage design for the runway and taxiway ensures that water runoff flows sheet-like away from the center into adjacent grass areas. This runoff is then collected by drainage swales and ditches located within the RSA. The above-ground drainage system includes grassed swales and concrete ditches along the RSA, which effectively collect and direct runoff from the runway to designated discharge points on both the northern and southern sides of the runway. The above-ground drainage system is overgrown with vegetation in many places. The outlet pipes and the subdrain pipes along the runway shoulders likely consist of cast iron. A 2023 hazardous material sampling at the aircraft parking apron and taxiway and runway extension found only one suspected material, a white coating with black asphalt on the runway and landing area; however, no measurable levels of asbestos were found. Suspect paints located on the runway included yellow and white paint on asphalt and yellow paint on the metal lighting system; however, all the suspected materials were below the laboratory reporting limit (MNA Environmental 2024a). On the north side, swales and ditches run off toward the inlets of three drainage culverts that traverse beneath the runway. Conversely, on the south side, these drainage features direct water towards various low points, ultimately leading it off-site. Additionally, the drainage culverts also discharge runoff off-site to the south of the airfield. Airlines that operate in Yap include United, Hawaiian Airlines, and PMA. The runway's length restricts the types of aircraft that can land safely. It can accommodate smaller commuter planes as well as some larger models, such as the Boeing 737-800. In 2006, an 8-foot high-security fence with barbed wire was installed surrounding the entire airfield. This is a standard fence without animal intrusion paving at the base (Leo A Daly 2012). This AOC, Runways and Taxiways, Site No. 8-1, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 classification was justified due to the lack of available information and suspected AFFF use for training and emergency response activities potentially impacting the area.	
ARFF Station, Site No. 8-2	**7**
The ARFF facility is situated on the south side and slightly west of the mid-point of the runway. The ARFF facility is a two-story building covering about 9,852 square feet, completed in 2010, and meets all requirements for an Index C airport. It has three large bays designated for airfield rescue equipment. The second floor of the building also includes airport management offices on the second floor. The facility also features accommodations for crew members, training rooms, support equipment, restrooms, washing machines, an airfield observation area, and an Aeronautical/Aerodrome Flight Information Service. To provide water to the ARFF facility, a duplex portable water booster pump is employed. Additionally, a rainwater harvesting storage tank and a catchment water transfer pump were implemented to increase the domestic water supply. A domestic water storage tank is in place to guarantee a consistent water supply for the ARFF facility. One oil water separator is located on the south side of the building. The main service switchboard receives secondary service from a 75 kVA utility transformer outside the Power Vault. A 500 kVA pad-mounted transformer reduces the voltage from 13.8 kV to 208Y/120 volts, 3-phase, 4-wire. A PSC secondary meter next to the transformer monitors service for the ARFF facility. Emergency power is supplied by a Kohler generator set with a 440 kW standby rating at 208Y/120 volts, capable of supporting the entire ARFF load. The grading of the ARFF site directs stormwater towards a concrete swale. This AOC, ARFF Station, Site No. 8-2, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 classification was justified due to the lack of available information, the unknown PCB status of transformer oil, and the storage and use of AFFF potentially impacting the area.	

Site Summary	Classification
NOAA Station, Site No. 8-3	**7**
The NOAA Station, constructed c. 2005, encompasses two distinct buildings: the Weather Service Office and the Upper Air Inflation Building. The Weather Service Office spans 2,650 square feet and serves as a hub for the data acquisition and processing systems of the National Weather Service. In contrast, the Upper Air Inflation Building is a 408-square-foot facility dedicated to the launch of weather balloons. Both structures are designed to withstand typhoons, with a redundant air conditioning system, a backup generator, and typhoon shutters for all openings. They are constructed with precast concrete wall panels and roof elements. The exterior walls are finished with a textured coating, with reveals for an aesthetic appeal. All doors and windows are made of clear, anodized aluminum and are equipped with roll-up shutters for additional protection during severe weather events. The air conditioning system employs a ducted air distribution mechanism utilizing packaged units. Power is supplied to the facility via a 75 kVA pad-mounted transformer, complemented by a 35 kW backup generator to maintain operations during power outages. Electricity enters the station through underground lines, further safeguarding the infrastructure from potential damage. This AOC, NOAA Station, Site No. 8-3, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 classification was justified due to the lack of available information, the potential for off-site migration of AFFF from the runways and taxiways, ARFF Burn Pit, and ARFF Facility; and suspect ACM and LBP potentially impacting the area.	
Ground Service Equipment / Maintenance, Site No. 8-4	**7**
The site encompasses the northeast portion of the apron area and is used to store equipment associated with aircraft service (e.g., mobile stairs, tugs, a forklift). An in-ground Jet A-1 hydrant was located in the vicinity, and Vital FSM Jet A-1 fuel trucks were often staged within the site before and during aircraft fueling activities. Petroleum products and hazardous substances are likely contained in the equipment stored within the area, and service and repairs reportedly take place on equipment within the site as needed. Waste substances and materials associated with the site are disposed of at the ARFF Burn Pit or landfill. On April 9, 2004, Yap was directly impacted by Super Typhoon Sudal, which caused ground shifts. This compromised the soil integrity under the apron and raised concerns for Mobile regarding the fuel pipelines that traversed the area (The Kaselehlie Press 2005). It is unknown if the fuel storage at the airport negatively impacted the Yap IAP and areas affected by the Typhoon. In 2009, an FAA apron enhancement project was initiated. This project involved the construction of a concrete apron measuring 520 feet in length, aligned parallel to the runway centerline and 300 feet in width, parallel to the taxiway centerline. The apron is capable of accommodating two 757-300 aircraft in a power-in/power-out configuration. It provides full safety and object-free area clearances on three sides. Additionally, two fuel hydrants (with a leak detection system) were installed, one at each parking apron that was connected by underground pipes with piping stubbed out for connection in the vicinity of the fuel storage and handling facility. The apron is drained by two trench drains that lead to a drainage ditch located on the east side. Additionally, there is a subdrain system installed along the west, north, and east sides of the apron (Leo A Daly 2012). This AOC, Ground Service Equipment / Maintenance, Site No. 8-4, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 classification was justified due to the lack of available information; the potential for off-site migration of AFFF from the runways and taxiways, ARFF Burn Pit, and ARFF Facility; suspect ACM and LBP; and potential fuel line releases from apron expansion due to typhoon potentially impacting the area.	
PMA Hangar, Apron, Storage, and Housing, Site No. 8-5	**7**
The PMA hanger was completed in May of 1988. PMA currently utilizes two Beechcraft Queen Air Excalibur aircraft. PMA services Falalop islands, Fais Island, Woleai Atoll, and Palau and provides essential cargo services to the outer islands of Yap. PMA also provides emergency medical evacuation and other transportation under FAA Part 135. The PMA hanger also operates as the main office building and terminal area. All passengers traveling on PMA enter and exit the airport through this hanger area. The site consists of a main terminal building, a storage warehouse, and a fuel storage area. The main terminal building is a metal-walled and roofed structure with a poured concrete foundation and is used for aircraft storage and maintenance. Petroleum products and hazardous substances were observed to be stored properly within the structure. The storage warehouse is a metal-walled and roofed structure with a poured concrete foundation. It is used to store maintenance materials, petroleum products, hazardous substances, and miscellaneous items associated with aircraft operations. The fuel storage area consists of an approximately 7,000-gallon portable AVGAS 100LL AST and one 7,132-gallon and one 6,341-gallon portable Jet A-1 AST. All three portable ASTs were stored beneath a metal-framed and roofed ramada; however, only the two Jet A-1 ASTs had secondary containment. All waste substances were reportedly stored onsite pending future disposal off-island during	

Site Summary	Classification
interviews with staff; however, a conflicting report from ARFF staff indicated that waste substances were disposed of at the ARFF Burn Pit. All solid waste is disposed of at the landfill by PMA staff. The site is connected to municipal power, water, and sanitary systems. On April 9, 2004, Yap was directly impacted by Super Typhoon Sudal, which damaged the PMA hangar door, tore off roofing sheets, and left the office thoroughly soaked (The Kaselehlie Press 2005). This AOC, PMA Hanger, Apron, Storage, and Housing, Site No. 8-5, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 classification was justified due to the lack of available information; the potential for off-site migration of AFFF from the runways and taxiways, ARFF Burn Pit, and ARFF Facility; and suspect ACM, LBP, and PCBs potentially impacting the area.	
"Old" Emergency Generator Buildings, Site No. 8-6	**7**
The "Old" Emergency Generator Buildings are both single-story CMU-walled structures with poured concrete roofs and foundations located across from the entrance road. The larger structure contained one functional generator along with a day tank and associated electrical equipment and transformers. There was also evidence of a former second generator within the building and remnant concrete cradles from a former AST northwest of the larger structure. The smaller structure is located southwest of the larger structure with a 1,000-gallon diesel AST located between the structures. The interior of the smaller structure was inaccessible during the EBS VSI, however, is likely to contain a generator as evidenced by an intake vent and exhaust vent observed on the west-facing wall as well as hazardous substance warning labels on the door. The site also contains an electrical vault along with support facilities for the airfield lighting system and FAA equipment. The structures are outside the secured air operations zone of the airfield. Reportedly, the emergency generators' fuel delivery systems and ventilation systems are in disrepair. The main fuel tank is out of service, and the fuel lines with the transfer pump between the main fuel tank and the day tank have been removed. The observed generator is a 30-kW generator that no longer supports any of the airport's operational loads and has remained out of service for some time. Maintenance personnel previously transferred fuel from 55-gallon drums into the daytank by hand while the generator was operated. The generator room, transformer vault, and electrical equipment room are currently used to stockpile materials unrelated to the function of the facility. Two pad-mounted transformers are located in a fenced area north of the larger structure. One transformer is the YSPSC electric utility company service transformer, which energizes all loads of the Power Vault. Its physical dimensions (no nameplate visible) suggest it is rated approximately 75 kVA, which correlates with the 3P225A main circuit breaker in the vault switchboard. This oil-filled, pad-mounted utility transformer also supplies the FAA Power Vault loads. The second pad-mounted transfer is a dry-type unit, with rain guards for its ventilation openings, rated 25kVA single-phase, 120/240 to 2400V, that is used for FAA circuits and is not the responsibility of Yap State. This AOC, "Old" Emergency Generator Buildings, Site No. 8-6, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 classification was justified due to the lack of available information, the potential for off-site migration of AFFF from the runways and taxiways, ARFF Burn Pit, and ARFF Facility; and suspect ACM, LBP, and PCBs potentially impacting the area.	
"New" Emergency Generator Building, Site No. 8-7	**7**
The "New" Emergency Generator Building was under construction during the EBS VSI but consists of a single-story CMU-walled structure with a poured concrete roof and foundation. A 1,000-gallon diesel AST is located adjacent to the southeast of the building within a fenced-in area. Two new generator units were partially installed within the building, however, day tanks and supporting electrical equipment, including transformers, were not yet present. During the EBS VSI, a construction worker was washing his painting tools and equipment with water and dumping the paint and wash water directly to the ground to the east of the building which then drained towards the Health Center / Quarantine Facility. This AOC, "New" Emergency Generator Building, Site No. 8-7, is found to be a Category 7. The Category 7 classification was justified due to the lack of available information and the potential for off-site migration of AFFF from the runways and taxiways, ARFF Burn Pit, and ARFF Facility, and suspect ACM, LBP, and PCBs potentially impacting the area.	

Site Summary	Classification
Administration Building, Site No. 8-8	**7**
The Administration Building is a single-story single wood-walled structure with a metal roof and post and pier foundation. It is located southwest of the Terminal Building and reportedly contains a concessions/gift shop. Just west of the Administration Building is a small wooden guard house building at the gated entrance to the apron. A derelict tractor is stored under the north eave of the building where it reportedly awaits parts and maintenance. Releases of petroleum products and/or hazardous substances were observed in bare soil and gravel beneath the derelict tractor. Small amounts of cleaning chemicals and fuels were observed within the building. Suspect ACM and LBP were observed within the This AOC, Administration Building, Site No. 8-8, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 classification was justified due to the lack of available information, the potential for off-site migration of AFFF from the runways and taxiways, ARFF Burn Pit, and ARFF Facility; and suspect ACM and LBP potentially impacting the area.	
Terminal Building and Apron, Site No. 8-9	**7**
The Yap IAP is owned and operated by the Yap State Government as a Division of the DPW&T. The terminal building, situated at the southern edge of the apron, is a single-story facility covering roughly 11,050 square feet. It was completed in 1987 and opened in 1988 (Leo A Daly 2012). The terminal building has a ticketing area, baggage claim (manual loading), security checkpoint, immigration and customs office, lobby area, hold room, a lounge with a restroom facility (one toilet in each of the men's and women's bathrooms), and a cargo facility. Additionally, a concession/gift shop can be found in the nearby Administration Building. The access road to the airport terminal was constructed at the same time as the airfield. In 1944, USACE completed a study investigating pavement failures at the airport; water in the ground under the surface, or "base course," was identified as the cause (USACE 1994). On April 9, 2004, Yap experienced the direct effects of Super Typhoon Sudal, which resulted in ground shifts beneath the taxiway and parking areas. It is unknown if the fuel storage at the airport negatively impacted the Yap IAP and areas affected by the Typhoon. Due to the damage caused by the typhoon, significant repairs and improvements were made to the terminal, including the enlargement of the lounge and immigration and customs areas, as well as a roof replacement carried out in 2005 (Leo A Daly 2012). The airport receives water (Colonia and Southern Water Systems), electricity (YSPSC), and telephone services (FSM Telecommunications Corporation) from the distribution systems of the local utility agencies on the island. The utility lines are installed both above ground (for electricity only) and below ground. FSM Telecommunications has an integral battery backup mounted within the electric room near the public restroom of the Terminal Building which was not accessible during the EBS VSI. Underground utilities at the site include a waterline from a main in the public road that leads services to the terminal and apron facilities, and a sewer line (Colonia Wastewater Collection and Treatment Plan) is located in the entrance road and connects to the island sanitary system located in the public roadways. Overhead primary power lines extend from the YSPSC overhead distribution lines routed on the public roadway, extended up the slope closer to the airport parking lot, and then transitioned to underground at a riser pole below the "Old" generator/power vault. This AOC, Terminal Building and Apron, Site No. 8-9, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 classification was justified due to the lack of available information, the potential for off-site migration of AFFF from the runways and taxiways, ARFF Burn Pit, and ARFF Facility; and suspect ACM and PCBs potentially impacting the area.	
Health Center / Quarantine Facility, Site No. 8-10	**7**
The Health Center / Quarantine Facility was opened in 2024 and is located to the southwest of the terminal building area. The site consists of 15 quarantine units built from 18 shipping containers supported by concrete and metal piers. Wood-framed metal roofing extends across all fifteen of the units. Large quantities of small-container (between 1 and 5 gallons) cleaning products including but not limited to Clorox®, Pine Sol®, isopropyl alcohol, and hand sanitizer were stored within many of the units. This AOC, Health Center/Quarantine Facility, Site No. 8-10, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 classification was justified due to the lack of available information, the potential for off-site migration of AFFF from the runways and taxiways, ARFF Burn Pit, and ARFF Facility; and suspect ACM, LBP, and PCBs potentially impacting the area.	

Site Summary	Classification
Fuel Farm, Site No. 8-11	**7**

The fuel farm is located adjacent to the southeast of the apron. The fuel farm is a complete fueling tank farm that includes ASTs, pumps, a truck loading rack, and other equipment to facilitate the use of the underground fuel lines and hydrants within the apron. The fuel farm has two 5,500-gallon ASTs for Jet A-1 fuel. A single-story CMU-walled and metal roofed structure occupies the northwest corner of the site. The Fuel Farm was not accessible during the EBS VSI including exterior areas around the structure and all interior areas of the structure. A potential AST is located adjacent to the southwest corner of the structure, although a determination could not be made due to the distance the observation was made at. Suspect ACM and LBP was observed within the site.

Historically, jet fuel was shipped from Guam in ISO tanks and transported to the airport via flatbed trucks. Once the fuel arrived, it was transferred to the two ASTs at the site. Currently, a fuel tank truck is reportedly used to transport jet fuel from a separate fuel farm near Colonia Harbor directly to aircraft and the Yap IAP Fuel Farm site is operational but inactive.

On April 9, 2004, Yap experienced the direct effects of Super Typhoon Sudal, which resulted in ground shifts beneath the taxiway and parking areas. It is unknown if the fuel storage at the airport negatively impacted the Yap IAP and areas affected by the Typhoon. This compromised the soil integrity under the apron and raised concerns for Mobil regarding the fuel pipelines that traversed the area. As a result, Mobil suspended its services in July 2004 (The Kaselehlie Press 2005). In 2009, two fuel hydrants were installed on the apron, and piping was stubbed out for connection in the vicinity of the fuel storage and handling facility (Leo A Daly 2012). This still has not been connected. FSM Petroleum Company now operates the fuel farm. The fuel farm is protected by its perimeter fence and has access on the public side for fuel delivery and access on the secure airfield side to permit the fuel truck to enter the airfield.

This AOC, Fuel Farm, Site No. 8-11, is found to be a Category 7 property - an area or real property that is unevaluated or requires additional evaluation. The Category 7 classification was justified due to the lack of available information, the potential for off-site migration of AFFF from the runways and taxiways, ARFF Burn Pit, and ARFF Facility; and suspect ACM, LBP, and PCBs potentially impacting the area.

Notes: AC = asphaltic concrete; ACM = asbestos-containing material; AOC = Area of Concern; ARFF = Aircraft Rescue and Fire Fighting; AFFF = aqueous film-forming foam; AST = aboveground storage tank; AVGAS = aviation gas; c. = circa; C&D = construction and demolition; CMU = concrete masonry unit; DPW&T = Department of Public Works and Transportation; ERW = explosive remnants of war; LBP = lead-based paint; FAA = Federal Aviation Administration; FSM = Federated States of Micronesia; IAP = International Airport; ISO = International Standards Organization; kVA = kilovolt-amperes; kW = kilowatt; No. = number; LL = low lead; NOAA = National Oceanic and Atmospheric Administration; PAPI = Precision Approach Path Indicator; PCB = polynuclear aromatic hydrocarbons; PMA = Pacific Mission Aviation; RSA = Runway Safety Area; USACE = U.S. Army Corps of Engineers; VSI = visual site inspection; YSPSC = Yap State Public Service Corporation

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Section 5 Findings for Subject Property

5.1 Visual Site Inspection (VSI)

The EBS team conducted a VSI of the survey area to identify evidence of storage, disposal, or release of hazardous substances and petroleum products. The areas of concern within the survey area are discussed in this section.

5.2 Hazardous Substances Notification

5.2.1 Storage of Hazardous Substances

Hazardous substances are used or stored in various areas of the survey area. Activities associated with hazardous substances used within the survey area include, but are not limited to, aircraft and vehicle maintenance activities, ARFF training and emergency response, atmospheric monitoring, AC production and preparation, and derelict vehicle and equipment storage. These activities require the use of hydrogen, nitrogen, antifreeze or other liquid coolants, various types of batteries, sealants, paints, adhesives, various cleaners, and AFFF. The ARFF training area is the accumulation point for the airport; any flammable substances are burned within the ARFF Burn Pit (Site No. 3-1). During the EBS VSI and records review, the hazardous substances identified as being used and/or stored within the survey area are listed in Table 5-1.

Table 5-1: Current Hazardous Substance Storage

Building and/or Area	Location	Site Number	Hazardous Substances	Containment
Village Residences (Zones 1-7)	Outside of the Airport Fenceline	Zones 1-7	Paints, cleaners, and degreasers	Small containers stored on shelving or the ground
			Fuel (gasoline), coolant/antifreeze, refrigerants, and lead-acid batteries	Within derelict vehicles
Vehicle Storage/ Residence	Northwest of Yap IAP	1-1	Fuel (diesel/gasoline), coolant/antifreeze, paints, cleaners, degreasers, and lead-acid batteries	Small containers or loose items stored on the ground
			Fuel (gasoline), coolant/antifreeze, refrigerants, and lead-acid batteries	Within derelict vehicles
Water Treatment Facility	Northwest of Yap IAP	1-2	Potentially contains chlorine, aluminum sulfate, and/or other hazardous substances associated with water treatment	Unknown
Family Corner Store	Southwest of Yap IAP	2-1	Cleaners and lead-acid batteries	Small containers or loose items stored on shelving or stored on bare soil
ARFF Burn Pit	Yap IAP	3-1	Various waste hazardous substances	55-gallon steel drums stored on bare soil or gravel
7-D Car Rental	Southeast of Yap IAP and GPPC, Inc. Facility	4-1	Fuel (gasoline), coolant/antifreeze, refrigerants, and lead-acid batteries	Within derelict vehicles

Building and/or Area	Location	Site Number	Hazardous Substances	Containment
GPPC, Inc. Facility	Southeast of Yap IAP	4-2	Fuel (diesel)	ASTs
			Cleaners and degreasers	Small containers stored in storage cabinets or on the ground
			Fuels (gasoline/diesel), coolant/antifreeze, refrigerants, and lead-acid batteries	Within derelict and functional vehicles and equipment
A.J. Bake Shop	Southeast of Yap IAP	4-3	None Identified	None observed
Runways and Taxiways	Yap IAP	8-1	None Identified	None observed
ARFF Station	Yap IAP	8-2	Fuel (diesel) and AFFF	ASTs
			Fuel (gasoline), coolant/antifreeze, solvents, cleaners, degreasers, and lead-acid batteries	Small containers stored in flammable materials storage cabinets or on the ground
			AFFF and Class BC dry chemical	Drums and buckets
			Fuel (diesel), AFFF, coolant/antifreeze, refrigerants, windshield washer fluid, and lead-acid batteries	Within ARFF trucks
NOAA Station	South of Yap IAP	8-3	Fuel (diesel)	AST
			Liquid hydrogen	Compressed gas cylinders
			Cleaners and degreasers	Small containers stored in storage cabinets
Ground Service Equipment / Maintenance	Yap IAP	8-4	Fuels (gasoline), coolant/antifreeze, and lead-acid batteries	Within equipment
			Fuel (Jet A-1)	Portable ASTs during aircraft fueling activities
PMA Hangar, Apron, Storage, and Housing	Yap IAP	8-5	Fuels (Jet A-1 and AVGAS 100LL)	ASTs
			Fuels (Jet A-1 and AVGAS 100LL), coolants, refrigerants, lead-acid batteries, solvents, and radioactive materials (aircraft instrumentation and equipment)	Within aircraft
			Solvents, cleaners, and degreasers	Small containers stored in flammable materials storage cabinets
			Various waste hazardous substances	Drums and buckets
"Old" Emergency Generator Buildings	Yap IAP	8-6	Fuel (diesel)	AST
			Fuel (diesel), coolants, and a lead-acid battery	Within the emergency generator unit
			Paint	Buckets
"New" Emergency Generator Building	Yap IAP	8-4	Fuel (diesel)	Equipment (not in service yet)
			Fuel (diesel)	AST and transfer pipes, day tanks, and generators (not in service yet)
Administration Building	Yap IAP	8-8	Fuels (gasoline), cleaners, and a lead-acid battery	Small containers stored in storage cabinets
			Fuel (diesel), coolant/antifreeze, and a lead-acid battery	Within defunct tractor
Terminal Building and Apron	Yap IAP	8-9	Cleaners and degreasers	Small containers stored in storage cabinets (Terminal Building only)
			Fuel (Jet A-1)	Portable ASTs during aircraft fueling activities (Apron area only)
Health Center / Quarantine Facility	Yap IAP	8-10	Cleaners and degreasers	Small containers stored in boxes and pallets

Building and/or Area	Location	Site Number	Hazardous Substances	Containment
Vital FSM Fuel Farm	Yap IAP	8-11	None Identified	None observed

Notes: AFFF = aqueous film-forming foam ARFF = Aircraft Rescue and Fire-Fighting AST = aboveground storage tank
FSM = Federated States of Micronesia IAP = International Airport LL = low lead
NOAA = National Oceanic and Atmospheric Administration PMA = Pacific Mission Aviation

5.2.2 Hazardous Substances Released

The Yap EPA is the agency responsible for enforcing regulations and ensuring compliance to protect human health and the environment. The hazardous substances known or suspected spill history within the survey area are listed in Table 5-2.

Table 5-2: Spill and Releases within the Survey Area

Building and/or Area	Location	Site No.	Spills
Village Residences	Outside of the Airport Fenceline	Zones 1-7	Burning of municipal waste and potentially petroleum products and hazardous substances
			Unknown historic disposal practices for municipal waste, petroleum products, and hazardous substances
Vehicle Storage/Residence	Northwest of Yap IAP	1-1	Spills and releases of petroleum products and hazardous substances were observed
			Unknown historic disposal practices for municipal waste, petroleum products, and hazardous substances
Water Treatment Facility	Northwest of Yap IAP	1-2	None Identified
The Family Mart	South of Yap IAP	2-1	None Identified
ARFF Burn Pit	Yap IAP	3-1	Burning of waste fluids during training exercises within the burn pit and sheen and staining associated with petroleum products and hazardous wastes were observed in water and soils within and around the burn pit
			Suspected releases associated with AFFF during training and emergency response activities
7-D Car Rental	Southeast of Yap IAP and GPPC, Inc. Facility	4-1	None Identified
GPPC, Inc. Facility	Southeast of Yap IAP	4-2	Fuels (gasoline/diesel), lubricants, cleaners, and bituminous (tar-like) substances throughout the site, and unknown disposal practices for municipal solid wastes, petroleum products, and hazardous substances
A.J. Bake Shop	Southeast of Yap IAP	4-3	None Identified
Runway and Taxiways	Yap IAP	8-1	Potential petroleum products and hazardous substance spills and releases associated with emergency response and/or training
			Suspected releases associated with AFFF during training and emergency response activities
ARFF Station	Yap IAP	8-2	Suspected releases associated with AFFF during training and emergency response activities
NOAA Station	Yap IAP	8-3	None Identified
Ground Service Equipment / Maintenance / Apron	Yap IAP	8-4	Potential releases associated with damaged in-pavement fuel lines during apron expansion
			Suspected releases associated with AFFF during training and emergency response activities

Building and/or Area	Location	Site No.	Spills
PMA Hangar, Apron, Storage, and Housing	Yap IAP	8-5	Suspected releases associated with AFFF during training and emergency response activities
"Old" Emergency Generator Buildings	Yap IAP	8-6	Paint and paint wash water to bare soil was observed during construction activities associated with the building
			Suspected releases associated with AFFF during training and emergency response activities
"New" Emergency Generator Building	Yap IAP	8-7	Paint and paint wash water to bare soil was observed during construction activities associated with the building
			Suspected releases associated with AFFF during training and emergency response activities
Administration Building	Yap IAP	8-8	*De minimis* amounts of fuels (gasoline/diesel) and/or lubricants associated with a defunct tractor were observed adjacent to the building
			Suspected releases associated with AFFF during training and emergency response activities
Terminal Building and Apron	Yap IAP	8-9	Suspected releases associated with AFFF during training and emergency response activities
Health Center / Quarantine Facility	Yap IAP	8-10	Suspected releases associated with AFFF during training and emergency response activities
Vital FSM Fuel Farm	Yap IAP	8-11	Suspected releases associated with AFFF during training and emergency response activities

Notes: AFFF = aqueous film-forming foam ARFF = Aircraft Rescue and Fire-Fighting AST = aboveground storage tank
FSM = Federated States of Micronesia IAP = International Airport
NOAA = National Oceanic and Atmospheric Administration PMA = Pacific Mission Aviation

5.2.3 Hazardous and Petroleum Waste

In several areas within the survey area, there are ongoing activities that generate petroleum wastes and hazardous, toxic, and radiological wastes (HTRW). Additionally, both the "old" and "new" generator emergency buildings likely produce small amounts of petroleum and hazardous substance wastes during normal operations. The historical production of these wastes is assumed from the "old" emergency generator building, and future production is expected from the "new" emergency generator building once it is completed and operational.

Various operations within the survey area contribute to the generation of petroleum wastes and HTRW. These include derelict vehicle and equipment storage and dismantling, ARFF training, aircraft and ARFF equipment maintenance and cleaning, aircraft fueling activities, airport and airport equipment maintenance and cleaning, ongoing construction-related waste, and waste associated with asphalt mixing and other industrial operations within the GPPC, Inc. facility. The hazardous wastes generated within the PMA facility are stored in 55-gallon steel drums until a suitable disposal location is identified; most hazardous wastes associated with Yap IAP are disposed of at the ARFF Burn Pit during training exercises.

The specific types of petroleum and hazardous waste generated include batteries, used oils and lubricants, filters, oily rags, paints, solvents and thinners, degreasers, and coolants/refrigerants. The current generation of these wastes is summarized in Table 5-1 and Table 5-3. During the EBS VSI, the inspectors searched for evidence of storage, disposal, or release of hazardous or petroleum waste. Any spills or releases observed during the EBS VSI are listed in Table 5-2 and Table 5-3.

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5.3 Petroleum Products and Derivatives

Petroleum products and derivatives are used or stored in various areas of the survey area. Activities associated with petroleum products and derivatives within the survey area include, but are not limited to, aircraft and vehicle fueling and maintenance activities, ARFF training and emergency response, atmospheric monitoring, AC production and preparation, and derelict vehicle and equipment storage. These activities require the use of petroleum-based lubricants and diesel/gasoline/aviation fuels. Aircraft fuel services are provided by a tanker truck, which is stored outside the survey area when it is not in use. The petroleum products and derivatives currently stored and spills observed during the EBS VSI are listed in Table 5-3. No records were available for any of the areas listed in the table.

Table 5-3: Current Petroleum Products and Derivatives Storage

Building and/or Area	Location	Site Number	Petroleum Products	Containment	Observed Spills
Village Residences	Outside of the Yap IAP Fenceline	Zones 1-7	Fuel (gasoline), lubricants, and windshield washer fluid	Within derelict vehicles	None observed
Vehicle Storage/Residence	Northwest of Yap IAP	1-1	Fuels (gasoline), lubricants, and windshield washer fluid	Within derelict vehicles	Spills and releases were observed during the VSI
			Fuels (diesel/gasoline), lubricants, cleaners, and degreasers	Small containers	
Water Treatment Facility	Northwest of Yap IAP	1-2	None observed		None observed
The Family Mart	South of Yap IAP	2-1	Cleaners	Small containers	None observed
ARFF Burn Pit	Yap IAP	3-1	None Identified		None observed
7D Car Rental	Southeast of Yap IAP and GPPC, Inc. Facility	4-1	Fuel (gasoline), lubricants, and windshield washer fluid	Within derelict vehicles	No observed
			Lubricants	Small containers	
GPPC, Inc. Facility	Southeast of Yap IAP	4-2	Fuel (diesel/gasoline), lubricants, and windshield washer fluid	Within derelict vehicles	Spills and releases were observed during the VSI in the drum storage area, the junkyard area, and in areas used for equipment maintenance
			Fuel (diesel/gasoline) and lubricants	Within heavy equipment	
			Solvents, cleaners, and degreasers	Small containers stored in storage cabinets	
			Fuel (diesel)	ASTs	None observed
			Bituminous substances (tar-like materials)	Drums	Spills and releases were observed during the VSI draining from a gravel stockpile and in areas around the drum storage area
A.J. Bake Shop	Southeast of Yap IAP	4-3	None Identified		None observed
Runway and Taxiways	Yap IAP	8-1	None Identified		None observed

Building and/or Area	Location	Site Number	Petroleum Products	Containment	Observed Spills
ARFF Station	Yap IAP	8-2	Fuel (diesel) and lubricants	Emergency Generators	None observed
			Fuel (gasoline), lubricants, cleaners, and degreasers	Small containers stored in flammable materials storage cabinets	
			Fuel (diesel)	AST, in-ground pipes, and day tanks	
			Fuel (diesel), lubricants, and windshield washer fluid	Within ARFF trucks	
NOAA Station	South of Yap IAP	8-3	Fuel (gasoline), lubricants, cleaners, and degreasers	Small containers stored in storage cabinets	None observed
			Fuel (diesel)	AST	
			Fuel (diesel), lubricants, and fuel additives	Emergency Generator	
			Fuel (gasoline) and lubricants	Within landscaping equipment	
Ground Service Equipment / Maintenance	Yap IAP	8-4	Fuel (diesel), lubricants, and fuel additives	Equipment	None observed
			Fuel (diesel)	Portable ASTs during aircraft refueling activities	
PMA Hangar, Apron, Storage, and Housing	Yap IAP	8-5	Fuels (Jet A-1 and AVGAS 100LL), lubricants, and fuel additives	Within planes	None observed
			Fuel (Jet A-1 and AVGAS 100LL)	ASTs	
			Lubricants, cleaners, and degreasers	Small containers stored in flammable materials storage cabinets	
"Old" Emergency Generator Buildings	Yap IAP	8-6	Fuel (diesel) and lubricants	Equipment	None observed
			Fuel (diesel)	ASTs and transfer pipes, day tanks, generators	
"New" Emergency Generator Building	Yap IAP	8-7	Fuel (diesel) and lubricants	Equipment	None observed
			Fuel (diesel) (not in service yet)	AST and transfer pipes, day tanks, generators	
Administration Building	Yap IAP	8-8	Fuel (gasoline), lubricants, cleaners, and degreasers	Storage cabinets	None observed
			Fuel (gasoline/diesel), lubricants, and fuel additives	Tractor and landscape equipment	

Building and/or Area	Location	Site Number	Petroleum Products	Containment	Observed Spills
Terminal Building and Apron	Yap IAP	8-9	Lubricants	Storage cabinets	None observed
			Fuel (gasoline), lubricants, and windshield washer fluid	Vehicles	
			Fuel (Jet A-1)	Hydrants and underground pipelines	
Health Center / Quarantine Facility	Yap IAP	8-10	Cleaners and degreasers	Boxes, pallets	None observed
Vital FSM Fuel Farm	Yap IAP	8-11	Fuel (Jet A-1/AVGAS 100LL)	ASTs and underground pipelines	None observed

Notes: Lubricants include engine oil, gear oil, grease, hydraulic fluids, and transmission fluids
ARFF = Aircraft Rescue and Fire-Fighting
AST = aboveground storage tank
IAP = International Airport
NOAA = National Oceanic and Atmospheric Administration
ARFF = Aircraft Rescue and Fire-Fighting
FSM = Federated States of Micronesia
LL = low level
PMA = Pacific Mission Aviation

5.4 Environmental Restoration

5.4.1 Environmental Restoration Program (ERP) Sites

The U.S. DoD ERP is designed to identify, evaluate, and remediate sites where activities may threaten public health, welfare, or the environment. No ERP sites have been identified within the survey area, as the survey area is within land owned by Yap State (currently developed airport facilities) and individuals and is not managed by the U.S. Government.

5.4.2 Military Munitions Response Program (MMRP) Sites

The U.S. DoD Military Munitions Response Program (MMRP) was established to address munitions response sites at active installations, Formerly Used Defense Sites, and Base Realignment and Closure locations. Through the MMRP, DoD complies with environmental cleanup laws, such as CERCLA. No MMRP sites have been identified within the survey area.

5.5 Areas of Concern (AOC)

The AOCs within the survey area, based on the findings of the EBS records review and VSI, are outlined in the facility matrix in Table 5-4. This matrix includes summaries of the storage, use, and disposal of petroleum products and hazardous substances, solid waste, and storage tanks within the survey area.

The property categorization was selected based on commercial guidance from the *Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities (ASTM D5746-98 [Reapproved 2016]) and Section 331 of the National Defense Authorization Act for fiscal year 2024* and is outlined in Section 4. The property categorization within the survey area is shown in Figure 5-1.

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Table 5-4: Facility Matrix of Property

Zone	Site Number	Area/Description	Environmental Issues									Property Category
			Petroleum Products Storage and Use	Hazardous Substances Storage and Use					Release or Disposal of Hazardous Substances or Petroleum Waste	Storage Tanks, Pipelines, and OWS	Solid Waste	
				ERW Probability	ACM	LBP	PCBs	Other				
1-7	N/A	Undeveloped Areas	None	High	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7
1-7	N/A	Village Residences (unless otherwise noted below)	Fuel (gasoline), lubricants, and windshield washer fluid in derelict vehicles	High	Suspect ACM observed	Suspect LBP observed	Suspect multiple pole- and pad-mounted transformers	Fuel (gasoline), coolant/antifreeze, refrigerants, and lead-acid batteries in derelict vehicles, and paints, cleaners, and degreasers in small containers	Municipal solid waste burn pits, unknown historic disposal practices for used hazardous waste other than burning	•Underground septic tanks in residential areas	Small stockpiles of municipal and green waste and C&D debris	7
1	1-1	Vehicle Storage/ Residence	Fuel (gasoline), lubricants, and windshield washer fluid in derelict vehicles and fuels (diesel/gasoline), lubricants, cleaners, and degreasers in small containers or on ground	High	Suspect ACM observed	Suspect LBP observed	Not observed	Fuel (gasoline), coolant/antifreeze, refrigerants, and lead-acid batteries in derelict vehicles and fuel (diesel/gasoline), coolants/antifreeze, paints, cleaners, degreasers, and lead-acid batteries in small containers	Spills and releases were observed, and unknown historic disposal practices for used hazardous waste other than burning	•One 70-gallon unused unlabeled portable polyethylene or fiberglass AST on a trailer	Small stockpiles of municipal waste, C&D debris, and scrap vehicle parts and components	7
	1-2	Water Treatment Facility	Not observed	High	Suspect ACM observed	Suspect LBP observed	Not observed	Potentially contains chlorine, aluminum sulfate, and/or other hazardous substances associated with water treatment	Not observed	•Two 250-gallon water-softening ASTs •Two 2,500-gallon water ASTs •One 250,000-gallon water AST	Not observed	7
2	2-1	The Family Mart	Cleaners	High	Suspect ACM observed	Suspect LBP observed	Suspect pole-mounted transformers	Cleaners and lead-acid batteries in small containers or on the ground	Not observed	Not observed	A small stockpile of C&D debris and derelict equipment	7
3	3-1	ARFF Burn Pit	Not observed	Low	Suspect ACM observed	Suspect LBP observed	Not observed	Various waste hazardous substances pending disposal within the pit in 55-gallon drums	Burning of waste fluids during training exercises within the burn pit and sheen and staining associated with petroleum products and hazardous wastes were observed in water and soils within and around the burn pit; and suspected releases associated with AFFF during training and emergency response activities	Not observed	Not observed	7
4	4-1	7-D Car Rental	Fuel (gasoline), lubricants, and windshield washer fluid in derelict vehicles; lubricants in small containers	High	Suspect ACM observed	Suspect LBP observed	Not observed	Fuel (gasoline), coolant/antifreeze, refrigerants, and lead-acid batteries in derelict vehicles	Not observed	•One underground septic tank	Not observed	7

Zone	Site Number	Area/Description	Environmental Issues									Property Category
			Petroleum Products Storage and Use	Hazardous Substances Storage and Use					Release or Disposal of Hazardous Substances or Petroleum Waste	Storage Tanks, Pipelines, and OWS	Solid Waste	
				ERW Probability	ACM	LBP	PCBs	Other				
4	4-2	GPPC, Inc. Facility	Fuel (diesel/gasoline), lubricants, and windshield washer fluid in derelict vehicles and heavy equipment, solvents, cleaners, and degreasers in small containers, fuel (diesel) in ASTs, and bituminous substances (tar-like materials) in drums	High	Suspect ACM observed	Suspect LBP observed	Not observed	Fuel (diesel) in ASTs, cleaners and degreasers in small containers, fuels (gasoline/diesel), coolant/antifreeze, refrigerants, and lead-acid batteries within derelict and functional vehicles and equipment	*De minimis* evidence of leaks and/or spills of fuel (diesel) around three of the ASTs, lubricants, and bituminous substances	•One 70-gallon diesel AST •One 100-gallon diesel AST •One 600-gallon diesel AST •One 2,500-gallon diesel AST •One 3,000-gallon diesel AST	Small stockpiles of municipal waste, C&D debris, and scrap vehicle parts and components	7
	4-3	A.J. Bake Shop	Not observed	High	Suspect ACM observed	Suspect LBP observed	Not observed	Not observed	Not observed	Not observed	Not observed	7
8	8-1	Runway and Taxiways	Not observed	Low	None	None	Not observed	Not observed	Not observed; however, suspected releases associated with AFFF during training and emergency response activities	Not observed	Not observed	7
	8-2	ARFF Station	Fuel (diesel) and lubricants in emergency generators; fuel (gasoline), lubricants, cleaners, and degreasers in flammable materials storage cabinets; fuel (diesel) in AST, in-ground pipes, and day tanks; fuel (diesel), lubricants, and windshield washer fluid in ARFF trucks	Low	Suspect ACM observed	Suspect LBP observed	One pad-mounted transformer	Fuel (diesel) and AFFF in ASTs, Fuel (gasoline), coolant/antifreeze, solvents, cleaners, degreasers, and lead-acid batteries in flammable materials storage cabinets or on ground, AFFF and Class BC dry chemical in drums and buckets, fuel (diesel), AFFF, coolant/antifreeze, refrigerants, windshield washer fluid, and lead-acid batteries in ARFF trucks	Not observed; however, suspected releases associated with AFFF during training and emergency response activities	•Two 7,000-gallon water ASTs •Two 420-gallon AFFF tanks on ARFF trucks •One 1,000-gallon 3% AFFF concentrate AST •One 2,000-gallon diesel AST •One 50-gallon diesel day tank •One 3,000-gallon water AST •OWS identified during the records review	Collected in bins and disposed of at landfill by ARFF staff.	7
	8-3	NOAA Station	Fuel (gasoline), lubricants, cleaners, and degreasers within storage cabinets; fuel (diesel) in an AST; fuel (diesel), lubricants, and fuel additives in the emergency generator; and fuel (gasoline) and lubricants in landscaping equipment	Low	Suspect ACM observed	Suspect LBP observed	One pad-mounted transformer	Fuel (diesel) in an AST, liquid hydrogen in compressed gas cylinders, and cleaners and degreasers within storage cabinets	Not observed	•One 1,000-gallon diesel AST •One liquid hydrogen AST of unknown volume	Collected in bins and disposed of at landfill by NOAA staff.	7
	8-4	Ground Service Equipment / Maintenance / Apron	Fuel (diesel), lubricants, and fuel additives in equipment; and fuel (diesel) in portable ASTs during aircraft refueling activities	Low	Suspect ACM observed	Suspect LBP observed	Not observed	Fuels (gasoline), coolant/antifreeze, and lead-acid batteries within equipment and fuel (Jet A-1) in portable ASTs during aircraft fueling activities	Not observed; however, possible release from damaged in-pavement fuel lines during apron expansion and suspected releases associated with AFFF during training and emergency response activities	Not observed	Not observed	7

Zone	Site Number	Area/Description	Environmental Issues									Property Category
			Petroleum Products Storage and Use	Hazardous Substances Storage and Use					Release or Disposal of Hazardous Substances or Petroleum Waste	Storage Tanks, Pipelines, and OWS	Solid Waste	
				ERW Probability	ACM	LBP	PCBs	Other				
8	8-5	PMA Hangar, Apron, Storage, and Housing	Fuel (Jet A-1 and AVGAS 100LL), lubricants, and fuel additives in planes; fuel (Jet A-1 and AVGAS 100LL) in ASTs; lubricants, cleaners, and degreasers in storage cabinets	Low	Suspect ACM observed	Suspect LBP observed	One pole-mounted transformer	Fuels (Jet A-1 and AVGAS 100LL) in ASTs; fuels (Jet A-1 and AVGAS 100LL), coolants, refrigerants, lead-acid batteries, solvents, and radioactive materials within aircraft instrumentation and equipment within aircraft; solvents, cleaners, and degreasers within small containers; and various waste hazardous substances within drums and buckets	*De minimis* evidence of leaks and/or spills from the 190-gallon AVGAS 100LL tank was observed, and suspected releases associated with AFFF during training and emergency response activities	•One 6,341-gallon Jet A1 AST •One 7,132-gallon Jet A1 AST •One 7,132-gallon AVGAS 100LL AST •One 190-gallon AVGAS 100LL portable AST	Collected in bins and disposed of at landfill by PMA staff.	7
	8-6	"Old" Emergency Generator Buildings	Fuel (diesel) and lubricants in equipment, ASTs and transfer pipes, day tanks, and generators	Low	Suspect ACM observed	Suspect LBP observed	One pole-mounted and two pad-mounted transformers	Fuel (diesel) in AST, coolants, and a lead-acid battery in the emergency generator unit, paint in buckets.	Paint and paint wash water to bare soil was observed during construction activities associated with the building, and suspected releases associated with AFFF during training and emergency response activities	•One 1,000-gallon diesel AST •Evidence of a former AST (unknown size and content; remnant concrete cradles)	Derelict electrical equipment, scrap metal, and construction and demolition debris	7
	8-7	"New" Emergency Generator Building	Fuel (diesel) in equipment, AST, transfer pipes, day tanks, and generators.	Low	Suspect ACM observed	Suspect LBP observed	One pad-mounted transformer	Fuel (diesel) in equipment, AST, transfer pipes, day tanks, and generators.	None observed (new install not connected)	•One 1,000-gallon diesel AST (not in service)	Not observed	7
	8-8	Administration Building	Fuel (gasoline), lubricants, cleaners, and degreasers in storage cabinets; and fuel (gasoline/diesel), lubricants, and fuel additives in tractor and landscape equipment	Low	Suspect ACM observed	Suspect LBP observed	Not observed	Fuels (gasoline), cleaners, and a lead-acid battery in small containers; and fuel (diesel), coolant/ antifreeze, and a lead-acid battery in defunct tractor	*De minimis* evidence of spills and releases of fuels (gasoline/diesel) and/or lubricants associated with a defunct tractor were observed adjacent to the building; and suspected releases associated with AFFF during training and emergency response activities	Not observed	Not observed	7
	8-9	Terminal Building and Apron	Lubricants in storage cabinets; Fuel (gasoline), lubricants, and windshield washer fluid in vehicles; and Fuel (Jet A-1) in hydrants and underground pipelines	Low	Suspect ACM observed	Suspect LBP observed	Not observed	Cleaners and degreasers in small containers; and fuel (Jet A-1) in portable ASTs	Not observed; however, suspected releases associated with AFFF during training and emergency response activities	•Two Jet A-1 in-ground hydrants and associated underground pipelines (reportedly not in use)	Not observed	7
	8-10	Health Center / Quarantine Facility	Cleaners and degreasers in small containers	Low	Suspect ACM observed	Suspect LBP observed	Not observed	Cleaners and degreasers in small containers	Not observed; however, suspected releases associated with AFFF during training and emergency response activities	Not observed	Not observed	7
	8-11	Vital FSM Fuel Farm	Fuel (Jet A-1, AVGAS 100LL) in ASTs and underground pipelines	Low	Suspect ACM observed	Suspect LBP observed	One pad-mounted transformer	None	Not observed; however, suspected releases associated with AFFF during training and emergency response activities	•Two 5,500-gallon Jet A-1 ASTs	Not observed	7

Notes: ACM = asbestos-containing material; ARFF = Aircraft Rescue and Fire-Fighting; AFFF = aqueous film-forming foam; AVGAS = aviation gas; AST = aboveground storage tank; C&D = construction and demolition; ERW = explosive remnants of war
FSM = Federated States of Micronesia; LBP = lead-based paint; N/A = not applicable; NOAA = National Oceanic and Atmospheric Administration; OWS = oil water separator; PCB = polychlorinated biphenyls
PMA = Pacific Mission Aviation
Lubricants include engine oil, gear oil, grease, hydraulic fluids, and transmission fluids.

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5.6 Storage Tank(s)

5.6.1 Aboveground Storage Tanks

Multiple ASTs were observed within the survey area, mainly within the Yap IAP, to store fuels (Jet A-1, kerosene, AVGAS 100LL, and diesel), AFFF, and water. A list of tanks observed within the survey area is presented in Table 5-5. No records on the ASTs were able to be obtained.

Table 5-5: Summary of Aboveground Storage Tanks

Area Served	Approx-imate Volume (gallons)	Contents	Construction Materials	Year Installed	Status	Summary of Leaks	Observations during the VSI
Village Residences (Zones 1-7)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Vehicle Storage/ Residence (Area 1-1)	70	None	Polyethylene or fiberglass	N/A	Unused	Unknown	Portable AST, poor condition, no evidence of leaks or spills, no secondary containment identified
Water Treatment Facility (Area 1-2)	250 (x2)	Water, softening chemicals	Polyethylene with composite resin	2020	In Use	Unknown	Good condition, part of the water filtration facility
	2,500 (x2)	Water	Polyethylene	2020	In Use	Unknown	
	250,000	Water	Concrete	2020	In Use	Unknown	
The Family Mart (Area 2-1)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ARFF Burn Pit (Area 3-1)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7-D Car Rental (Area 4-1)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GPPC, Inc. Facility (Area 4-2)	70 (est.)	Diesel	Steel	Unknown	In Use	Unknown	Good condition, evidence of *de minimis* leaks and/or spills, no secondary containment
	100 (est.)	Diesel	Steel	Unknown	In Use	Unknown	Good condition, evidence of *de minimis* leaks and/or spills, no secondary containment
	600	Diesel	Steel	Unknown	In Use	Unknown	Good condition, evidence of *de minimis* leaks and/or spills, no secondary containment
	2,500	Diesel	Steel	Unknown	In Use	Unknown	Good condition, no evidence of leaks or spills, no secondary containment
	3,000	Diesel	Steel	Unknown	In Use	Unknown	Good condition, no evidence of leaks or spills, no secondary containment

Area Served	Approx-imate Volume (gallons)	Contents	Construction Materials	Year Installed	Status	Summary of Leaks	Observations during the VSI
A.J. Bake Shop (Area 4-3)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Runway and Taxiways (Area 8-1)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ARFF Station (Area 8-2)	7,000 (x2)	Harvested Rain and Potable Water	High-Density Polyethylene	2010	In Use	Unknown	AST-121 and 122
	420 (x2)	AFFF	ARFF truck (portable)	2010	In Use	Unknown	Good condition, with no evidence of leaks or spills, and no secondary containment
	1,000	3% AFFF Concen-trate	High-Density Polyethylene	2010	In Use	Unknown	AST-123 in the AFFF Storage room reportedly contains 700 gallons of PFAS-containing AFFF; the tank is in good condition with no evidence of leaks or spills and no secondary containment
	2,000	No. 2 Diesel	Concrete Encased Steel	2010	In Use	Unknown	AST-124, near the southeast corner of the building, reportedly feeds a fuel dispenser through an in-ground product line Good condition, with no evidence of leaks or spills, and no secondary containment
	50 (est.)	Diesel	Steel	2010	In Use	Unknown	Day tank for emergency generator (nonfunctional) Good condition, with no evidence of leaks or spills, and no secondary containment
	3,000	Harvested Rain and Potable Water	High-Density Polyethylene	2010	In Use	Unknown	
NOAA Facility (Area 8-3)	1,000	Diesel	Steel	Unknown	In Use	Unknown	Good condition, no evidence of leaks or spills, no secondary containment
	Unknown	Liquid Hydrogen	Steel	Unknown	In Use	Unknown	Good condition
Ground Service Equipment / Maintenance / Apron (Area 8-4)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Area Served	Approx-imate Volume (gallons)	Contents	Construction Materials	Year Installed	Status	Summary of Leaks	Observations during the VSI
PMA Hangar/ Storage (Area 8-5)	6,341	Jet A-1	Steel ISO Tank	N/A	In Use	Unknown	Good condition, no evidence of leaks or spills, no secondary containment
	7,132	Jet A-1	Steel ISO Tank	N/A	In Use	Unknown	Good condition, no evidence of leaks or spills, no secondary containment
	7,132	AVGAS 100LL	Steel ISO Tank	N/A	In Use	Unknown	Good condition, no evidence of leaks or spills, no secondary containment
	190		Steel Portable	N/A	In Use	Unknown	Used for ferrying fuel to aircraft from ISO tank, good condition, *de minimis* evidence of leaks and/or spills observed in the area of storage, no secondary containment
"Old" Emergency Generator Buildings (Area 8-6)	Unknown	Unknown	Unknown	Unknown	Re-moved	Unknown	Concrete cradles of a former AST were observed northwest of the building
	1,000	Diesel	Concrete	Unknown	In Use	Unknown	Feeds "Old" Emergency Generator Buildings Good condition, no evidence of leaks or spills, no secondary containment
"New" Emergency Generator Building (Area 8-7)	1,000	Diesel	Concrete	2024	New	N/A	Not in service (generator installation not complete) Good condition, no evidence of leaks or spills, no secondary containment
Administratio n Building (Area 8-8)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Terminal Building and Apron (Area 8-9)	N/A	N/A	N/A	N/A	N/A	N/A	Two Jet A-1 in-ground hydrants and associated underground pipelines (reportedly not in use)
Health Center / Quarantine Facility (Area 8-10)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Area Served	Approx-imate Volume (gallons)	Contents	Construction Materials	Year Installed	Status	Summary of Leaks	Observations during the VSI
Vital FSM Fuel Farm (Area 8-11)	5,500 (x2)	Jet A-1	Steel	Unknown	In Use	Unknown	Good condition, no secondary containment, unable to access the area around tanks to identify leaks or spills
	Unknown	Unknown	Metal	Unknown	Unknown	Unknown	Potential AST, unable to make determination due to distance of observation and limitation of access. Poor condition, no secondary containment, unable to access the area around tank to identify leaks or spills.

Notes: ARFF = Aircraft Rescue and Fire-Fighting
AST = aboveground storage tank
FSM = Federated States of Micronesia
LL = low lead
NOAA = National Oceanic and Atmospheric Administration
PMA = Pacific Mission Aviation
AFFF = aqueous film-forming foam
AVGAS = aviation gasoline
ISO = International Standards Organization
N/A = not applicable
PFAS = perfluoroalkyl and poly-fluoroalkyl substances
AFFF = unknown if AFFF is the legacy C8 or modern C6 type

Yap IAP has limited aircraft refueling capability with a total Jet A-1 storage and dispensing capacity of 11,000 gallons. Jet fuel is shipped from Guam in 6,600-gallon International Standards Organization (ISO) tanks and transported to the airport via flatbed trucks (PACAF 2019). Upon arrival at the airport, the fuel is transferred into two horizontal ASTs. A 3,000-gallon refueling truck is used to distribute jet fuel to the aircraft. The fuel receipt infrastructure at Yap IAP consists of one offload header with a single offload position. Additionally, the distribution infrastructure includes a truck fill stand with both receipt and issue filter separators (PACAF 2019).

5.6.2 Underground Storage Tanks

No evidence of USTs was identified during the examination of environmental records, EBS interviews, or during the EBS VSI.

5.6.3 Pipelines, Hydrant Fueling, and Transfer Systems

A fuel pipeline (Jet A-1) leading from the Vital FSM Fuel Farm east of the Yap IAP Terminal to two hydrant locations within the Yap IAP apron area was installed around 2009 and was intended to be used for aircraft fueling. The Yap IAP Master Plan reported that the previous in-pavement fuel lines were damaged during the apron expansion (Leo A Daly 2012). No information was available on whether the previous fuel lines were in use at the time, the damage occurred, if any fuel was released, or if any environmental restoration was conducted. Currently, the fuel pipeline and hydrant system are reportedly not connected to a fuel supply and are inoperable.

5.7 Oil Water Separator(s)

OWSs are used to separate oils, fuels, sand, and grease from wastewater and to prevent contaminants from entering the sanitary sewer and stormwater drainage systems. During the EBS VSI, no evidence of OWSs was observed; however, as-built plans completed by GMP Associates Hawaii, Inc. for the ARFF indicate one is located on the south side of the building (Figure 5-2). During the EBS VSI, this area was used for material storage, which obstructed the visual observation of the OWS.

5.8 Grease Trap(s)

No evidence of a grease trap was identified during the examination of environmental records, EBS interviews, or during the EBS VSI.

5.9 Wash rack(s)

No evidence of a wash rack was identified during the examination of environmental records, EBS interviews, or during the EBS VSI.

5.10 Waste Tank(s)

No evidence of waste tanks was identified during the examination of environmental records, EBS interviews, or during the EBS VSI.

5.11 Pesticides

No evidence of pesticide use was identified during the examination of environmental records, EBS interviews, or during the EBS VSI.

5.12 Military Munitions/Ordnance

Yap State in the Pacific was a significant location for Japanese forces to launch attacks against Navy ships. However, their efforts were thwarted by intense American bombings. After the war, the U.S. Navy repaired the former Japanese airfield and later improved it for civilian use as Colonia Airfield. The use of Colonia Airfield was discontinued in the late 1980s when the current Yap IAP was completed. Historically, both U.S. and Japanese munitions have been found in the vicinity of the Yap IAP, and recent investigations, including the EBS VSI, have observed bomb fragments, gun emplacements, aircraft wreckage, and Japanese vehicle parts. The U.S. Navy sent Explosive Ordnance Disposal (EOD) teams to Yap State multiple times in the decades after WWII to respond to findings of ERW by the local population. In addition, analysis of recent light detection and ranging (LiDAR) data identified more than 50 shallow ground depressions in the vicinity of the Yap IAP, which, following field inspection by ERW technicians, are suspected to be bomb craters (NAVFAC Pacific 2024b).

A 1944 aerial photograph from the Historical OrdnanceAssessment shows a Japanese “possible gas or ammo. Dump” and portions of “Tar. No. 120, 3 empty auto AA: underground storage 134-N, Q, R, S, T: 135-P” located near the northeast corner of Zone 1 and Zone 7 (NAVFAC Pacific 2024a). In addition, an area labeled “Tar. No. 123, ammunition storage buildings, 128-G, H” was located in the southeast area of Zone 2.

The host nation has not yet identified standards for the management and disposition of munitions and explosives or concerns and material potentially presenting an explosive hazard (NAVFAC Pacific 2023c). Although reports of encountering ERW during airport construction are not available, the footprint disturbed by the original construction can be assumed to have a low probability of ERW remaining within the upper four feet (1.2 meters) of the subsurface (NAVFAC Pacific 2024b). Due to the higher density and resistance to penetration, the weathered schist is not expected to contain ERW (NAVFAC Pacific 2024b). However, due to the proximity of the undisturbed Yap IAP areas to Colonia Airfield and adjacent wartime support facilities, the presence of documented military equipment within the project area, records of bombing missions, and wartime and modern aerial photographic analysis showing cratering likely due to bomb impacts, the land outside of the developed footprint (i.e., runway, terminal area, apron) of the Yap IAP is currently designated by the Jacobs/Buns McDonnell ERW technician as having a high probability of ERW presence (NAVFAC Pacific 2024b). Also, an area along the western portion of the survey area has been tentatively assigned a medium probability of ERW presence due to its distance from the former airstrip (NAVFAC Pacific 2024b). The probability determination for these areas may be revised if additional information regarding previous construction (cut, fill, and depths) and previous ERW removal becomes available.

During the EBS VSI, ERW and plane wreckage that may have contained ERW were discovered in multiple zones. Zone 1 contained plane wreckage and an anti-aircraft gun mount, while Zone 2 included the tail portion of a bomb and additional plane wreckage. In Zones 3 and 4, anti-aircraft gun bases were identified. Zone 5 potentially contained ERW in the form of a 4-inch round. Zone 7 had Japanese gun emplacements, coastal defense guns, plane wreckage, and a suspected dud bomb. Additionally, a possible ERW in the form of a Japanese bomb standing vertically on the ground was found in Zone 2.

5.13 Medical or Bio-hazardous Waste

No evidence of medical or bio-hazardous wastes was identified during the examination of environmental records, EBS interviews, or during the EBS VSI.

5.14 Radioactive Waste

No evidence of radioactive waste was documented or observed during the EBS VSI. It is unknown if current airplanes using the airport or airplane debris contain radioactive components, such as radar systems or instrumentation, which can further complicate environmental considerations.

5.15 Solid/Municipal Waste

Solid waste in the form of green waste, municipal waste, non-hazardous and hazardous commercial waste, and construction debris is generated within the survey area. Most waste, including non-hazardous commercial waste, is disposed of at a nearby municipal landfill. It is unknown where GPPC, Inc. disposes of its waste. In addition, patches of solid waste were observed within the survey area outside the Yap IAP fence line in several areas. During an interview with the Director of Yap State DPW&T, they advised us that solid waste disposal is managed through several methods: scrap metals, plastics, and cardboard/paper are collected by a private contractor for delivery to a central public waste facility. Aluminum cans, specific plastics, and batteries are sent to a recycling center. Additionally, materials like concrete, asphalt, and contaminated soil are repurposed as backfill in specific areas, such as a drop in elevation near runway 25.

Solid waste management at the central landfill site is the responsibility of the DPW&T, with the private sector involved in the collection and transport of solid waste (Government of the FSM 2016). Yap EPA licenses the site and employs the Fukuoka Method (installing a system of perforated pipes and stone rubble at the bottom of the landfill to drain leachate from the waste layers into a treatment system) common across the Pacific as an appropriate and cost-effective method for the disposal and processing of solid waste (Government of the FSM 2016). The landfill site has recently been upgraded but has limited capacity, and improvements to the separation and storage of recyclable waste are still required. With the current landfill site only having capacity for the next few years, the Yap EPA will undertake the planning and regulatory processes needed to secure the replacement site and begin its development in due course (Government of the FSM 2016).

5.16 Indoor Air Quality

There was no available data regarding ambient air quality in Yap. The EBS interviews and the EBS VSI did not reveal any indications of indoor air quality problems. Additionally, no indoor air quality sampling took place during the EBS VSI. The island's small size and consistently strong maritime winds promote rapid mixing of any air emissions from vehicles, fires, or aircraft with clean maritime air, preventing the formation of areas with lower air quality.

5.17 Groundwater

Groundwater was not encountered during the EBS VSI. No evidence of groundwater issues associated with petroleum products of hazardous substance storage or use was identified during the EBS VSI. Water shortages occur on Yap every year during the dry season, and especially during extended drought periods (USGS 1992).

5.18 Wastewater Treatment, Collection, and Disposal/Discharge

The survey area generates wastewater from various sources, including sanitation and commercial activities. The sewage from Yap IAP and its surrounding area within the survey area is directed to a sewage lift station located east of the Yap IAP Terminal building. This lift station is connected to the local treatment plant in Colonia, where the wastewater undergoes treatment. The plant, which was built in 1977, is only a primary treatment plant; wastewater treatment consists of combined settling and aerobic digestion tanks and drying beds. The YSPSC, responsible for the wastewater system in Colonia and its surrounding areas, has reported that the existing lift station experiences overflow during high flow and heavy rain events, and the wastewater network does not cover the entire supply area (NAVFAC Pacific 2024b and Yap State Government 2021). Effluent treated at the Colonia Wastewater Treatment Plant comes from the combined sewage system and private septic tanks (Yap State Government 2021).

Both the ARFF and terminal are connected to an eight-inch gravity sanitary sewer line, which is linked to a 12-inch (30.5 cm) force main. Along the route between the airport and the treatment plant, there are seven lift stations. Each lift station consists of a duplex pumping station, but only one pump is operational at each station. During the EBS VSI, a lift station was identified within Zone 3 southwest of the Terminal Building.

5.18.1 Storm Water

The Yap IAP stormwater runoff drainage system consists of large, corrugated metal pipes beneath the runway, which effectively drain water from the north to the south (NAVFAC Pacific 2024b). These pipes were initially installed in 1979 and have since been lined with concrete at the bottom to improve flow velocity and prevent sediment accumulation (NAVFAC Pacific 2024b). The Runway 7-25 underdrain drainage system includes 6-inch (182.8 cm) subdrain pipes that collect and divert water towards vegetated drainage swales or rectangular concrete channels located beyond the edges of the Runway Safety Area (NAVFAC Pacific 2024b).

Yap IAP on-site drainage includes the runway, airfield, ARFF area, and terminal apron drainage facilities. The runway has a cross-slope of at least 1% and is equipped with polyvinyl chloride (PVC) pipe subdrains parallel to it (Figure 5-3). These subdrains connect to ditches made of various materials, such as concrete U-shape channels and grass/earthen trapezoidal and V-shaped ditches. A reinforced concrete box culvert drains water from west to east and connects to the ARFF building. Ditches on the north side of the runway drain into corrugated steel pipe culverts, while those on the south side drain into concrete chutes that lead to the culvert outlet channels.

Yap IAP off-site drainage areas within the survey area consist primarily of undeveloped, dense tropical vegetation classified with the categories “Upland Forest” and “Savanna or Other Shrub/Grass” with hydraulically moderate-to-steep slopes.

5.18.2 Septic Tanks and Leach Fields

In some areas within the survey area, residences rely on septic tanks or cesspools due to limited access to the municipal sewage system. The PMA site also has an on-site septic tank that the Sewer and Water Corporation pumps out for disposal at the wastewater treatment plant. Evidence of existing septic tanks was observed adjacent to restroom facilities within the 7D Rental storage yard in Zone 4 and within Zone 2 during the EBS VSI.

5.19 Drinking Water Quality

Historically, villages depended upon rain catchments, shallow dug wells, and springs for water. YSPSC extended a water main from the Washington Water Treatment Facility to the airport, which was then connected to the Southern Water Authority water line, which services the ARFF, and the Central Water Authority, which services the terminal. Both water authorities provide a six-inch (15.24-cm) waterline to their respective service areas. The lines are connected by a gate valve on the south side of the runway that is normally kept closed to provide isolation between the two systems as the water to the ARFF facility is at a higher pressure. Yap does not have an extensive public water system, and only about three-quarters of the population has piped water available to them (Leo A Daly 2012).

The Southern Water Authority currently has two operating 80-foot (25-meter) wells and one 100,000-gallon (380,000-liter) groundwater AST. Two other wells were closed due to contamination and malfunction of their water treatment systems. The Director for the Yap State DPW&T mentioned during an interview that monthly water quality checks are conducted on a monthly basis by the EPA. No groundwater was encountered or sampled during the EBS VSI. A report from the Water and Environmental Research Institute (WERI), in collaboration with YSPSC and Yap State EPA, identified that 37 out of the 179 water samples tested throughout the island of Yap proper were positive for fecal coliforms (WERI 2006). No additional information was found regarding water quality during the EBS records review.

The Central Water Authority has six operating wells to the north and two 1,000,000-gallon (3,800,000-liter) groundwater ASTs. The deepest well is 186 feet (56.7 meters) deep. The authority maintains two water treatment facilities, the Daboch Water Treatment Plant and the Gitam Water Treatment Plant. The closest water treatment plant to the airport is the Gitam Water Treatment Plant. It has been identified as being in extremely poor condition and requires replacement.

During the EBS VSI, water intake pipes were observed in the north corner of the lake located within Zone 1. The water intake pipes appeared to be directed towards a small water treatment facility located to the north of the lake, which a resident reported to be a source of drinking water that was built in 2020. A large concrete water AST is located further uphill to the north of the water treatment facility and was present in aerial photographs as early as 2005. It is unknown whether the water AST and water treatment facility are connected.

The water provided by YSPSC is currently not considered potable by U.S. EPA Drinking Water standards. However, it is our understanding that the existing YSPSC water treatment facility is scheduled to be replaced, allowing YSPSC to deliver potable water that meets U.S. EPA Drinking Water standards (NAVFAC Pacific 2024b).

5.20 Utilities (Energy)

YSPSC provides electric power on Yap Island through diesel-fueled generators. Four overhead feeders serve different areas on the island. The Airport Feeder and Colonia Feeder have spare capacity for new development. The airport feeder has underground transitions with pad-mounted transformers at various locations. FAA navigational aids (NAVAIDS) equipment (e.g., FAA essential power panel, airfield lighting, signs, wind cone) are powered by transformers at the airport terminal, and a separate building houses the generator for the FAA panel.

5.21 Asbestos

A hazardous material sampling event, in support of the aircraft parking apron, taxiway, and runway extension, was conducted for materials suspected of containing asbestos on June 11, 2023 (MNA Environmental 2024a). The survey targeted suspected asbestos-containing coating and asphalt on the runway. A total of three bulk (one homogeneous material in triplicate) samples were collected and sent to an accredited analytical laboratory for analysis. No asbestos was detected in any of the samples collected. Suspect ACM may contain other hazardous constituents such as silica and other mineral fibers. During the EBS VSI, E2 observed suspect ACM in most buildings within the Yap IAP; however, private residences and facilities outside of the Yap IAP but within the survey area were not accessed. A detailed asbestos survey was not performed during the EBS field effort.

According to existing as-built drawings, the water utility includes asbestos cement pipes. The Yap State DPW&T indicated that there was a water line project at the airport, replacing the existing pipes with PVC pipes; however, during an ongoing resurfacing project at the airport by others, an asbestos cement drainpipe was observed within the Yap IAP (MNA Environmental 2024a). The extent to which the remaining asbestos cement pipes are in use or abandoned in-place underground is not known.

5.22 Polychlorinated Biphenyls (PCBs)

PCBs are used in electrical equipment such as capacitors and transformers because they are stable at high temperatures. However, they are harmful to the environment and can accumulate in organisms. The disposal of PCB-containing equipment is regulated under the Toxic Substance Control Act. A 2023 hazardous materials survey did not identify PCB-containing materials in areas affected by the aircraft parking apron, taxiway, and runway extension (MNA Environmental 2024a). According to an interview with personnel at PMA, a single pole-mounted transformer located south of the PMA hanger building was replaced when the prior transformer failed as a result of the installation of a new air compressor within the facility (no date provided). During the EBS VSI, several transformers of various types (pole-, pad-, and wall-mounted) were observed within the survey area, as shown in Table 5-4. Due to the unknown regulations on the use of PCB-containing oils, the PCB status of these transformers is not indicated on the equipment, and transformer information records are not kept or managed within the State of Yap. These transformers should be assumed to be PCB-containing until proven otherwise. PCB-containing oils may be used in transformers within the survey area, regardless of their age or type.

5.23 Radon

Radon is a naturally occurring, colorless, and odorless radioactive gas that is produced by the radioactive decay of naturally occurring radioactive elements (such as uranium and thorium) in soils and rocks. As part of the radioactive decay process, radon gas is produced. The gas moves up through the soil to the surface, where it can enter structures through cracks and other holes in the foundation. Radon can accumulate in structures above limestone and could be a concern in Yap.

The U.S. EPA has set a radon action level of 4 picocuries per liter (pCi/L). However, the U.S. EPA National Radon Database does not include FSM, and there is no existing Yap EPA Radon Database. Neither the EBS VSI nor the records review conducted within the survey area included a radon survey.

5.24 Lead-Based Paint

In 1973, the Consumer Products Safety Commission (CPSC) established a maximum allowable lead content in paint of 0.5% by weight in a dry film of newly applied paint. This was further lowered to 0.06% in 1978.

To support the aircraft parking apron, taxiway, and runway extension project, a hazardous material sampling was conducted on June 11, 2023 (MNA Environmental 2024a). The purpose of this survey was to identify materials suspected of containing lead, particularly on the painted surfaces of the runway, landing areas, and lighting system. A total of six paint samples were collected, with three duplicated samples, and sent to an accredited laboratory for analysis. The results indicated that none of the suspected lead-containing paint (LCP)/coatings had levels of lead above the laboratory reporting limit of 40 mg/kg (or 0.004%), well below the CPSC maximum allowable lead content in paint of 0.5% by weight. This applies to the yellow and white paint on asphalt, as well as the yellow paint on the metal lighting system. However, as the testing focused solely on lead content, the presence of other hazardous constituents in the lead-free paint coatings, such as cadmium, chromium, arsenic, mercury, zinc, and other metals and chemical substances, cannot be ruled out. The 2023 hazardous materials survey did not identify LPB in areas affected by the aircraft parking apron, taxiway, and runway extension (MNA Environmental 2024a).

During the EBS VSI within the survey area, various painted buildings, structures, and metals, including airplane and vehicle parts, were observed in different states of deterioration. It is currently unknown if these metals are coated with LBP or LCP. Given the limited Yap EPA and worker safety regulations within the State of Yap, both historic and new buildings and structures within the survey area may contain LBP or LCP.

5.25 Cultural Resources

A Cultural Resources Survey was conducted within the survey area by Kleinfelder, Inc. (Kleinfelder, Inc. 2024). The main objective of the cultural resources survey was to determine the presence of or potential for cultural resources within the survey area, the results of which are intended to assist the various Federal agencies involved in preliminary design planning for the proposed airport improvement project.

5.25.1 Prehistoric Resources

Villages with coastal access relied on various methods, such as fish weirs, stones, nets, and traps, to gather resources from the coast. Many of these fishing weirs were destroyed during the Japanese Colonial Period, but some remain in use today. Yapese villages were connected by stone-paved paths and consisted of many traditional structures, including family houses, men's meeting houses, community meeting houses, house platforms, and other meeting places for specific activities. These meeting houses were located at the center of the village and surrounded by stone-paved sitting platforms and raised dancing areas. The men's meeting houses served as a defense against outside threats. The individual dwelling houses were built on hexagonal-shaped platforms on either side of the stone-paved paths. Burial areas were often located within or near the village, but Western-style burials in cemeteries became more popular with increased contact with the Western world.

Radiocarbon dates suggest settlement around 2000 before the common era (BCE), but the collection methods of the samples are unclear. Other estimates range from 3300 BCE to over a millennium ago. Environmental data can be used as proxy evidence for human arrival but should be used cautiously. Settlement distribution in Yap was structured according to environmental zones, with communal and domestic structures located slightly inland from the shoreline. The earliest modern archaeological investigation in Yap dates human arrival to 1780 +/- 250 years BCE, but more recent investigations have provided dates of around 2200 years ago. The Indigenous population of Yap was estimated to be around 26,000 before European contact. Population numbers would drop considerably following European contact, which introduced foreign diseases to an otherwise unprotected population.

5.25.2 Historic Structures and Resources

During the 2024 cultural resources survey conducted, several potential historic sites and artifacts (pending confirmation) from 1939 to 1945 were identified in the project area (Kleinfelder, Inc. 2024). Further research and an additional cultural resource field survey are planned within the proposed project area, as more sites are expected to be inadvertently discovered. The survey will also assess whether the identified sites could face adverse effects during construction.

5.25.3 Paleontological Resources

No paleontological resources were identified at the subject property; results are pending confirmation.

5.26 Floodplains

Yap is prone to flooding during typhoon season and La Niña years. There is a shortage of local scale models showing rain, storm, wind, evapotranspiration, surface temperature, and ENSO patterns for FSM. In addition, digital elevation models and LiDAR technology are not widely available, prohibiting access to accurate and precise elevation data that can be used to identify areas vulnerable to coastal flooding. No floodplain maps were available for the FSM through the U.S. Federal Emergency Management Agency (FEMA).

5.27 Natural/Biological Resources

A biological survey was conducted within the survey area in 2024 (PACAF 2024). The purpose of the study was to record the natural resources the DAF identified within the environmental survey area that encompasses the proposed project to improve the capabilities of the Yap IAP (PACAF 2024).

DAF conducted a desktop search for species that have U.S. Federal, FSM, and Yap State protections. Additionally, the International Union for the Conservation of Nature (IUCN) at-risk species were considered to identify special status species that the State of Yap has not formally recognized as sensitive and vulnerable to extinction.

During the survey, field team members observed several areas that appeared to have been cleared of vegetation prior to surveys based on terrestrial churn and recently downed trees. Most of these disturbances were north of the airport. Due to safety concerns related to downed vegetation and unstable soils, some areas were not able to be fully surveyed. There was one area (east of the airport) that was actively being cleared with heavy equipment during the survey. For safety reasons, field team members were unable to survey the approximately 13.9 acres of Zone 5.

5.27.1 Sensitive Habitat

The 2024 biological survey report concluded that the special status plant species that could potentially occur within the survey area are listed in Table 5-6 (PACAF 2024). Table 5-7 summarizes the special status plant species recorded within the survey area.

Table 5-6: Special Status Plant Species with the Potential to Occur within the Survey Area

Scientific Name	Common/Yapese Name	Status	Required Habitat	Potential to Occur with Survey Area
Cycas micronesica	Cycad/faltir	FE/ IUCN E	Occurs most often on coastal limestone and cliffsides, and occasionally on back strands	Possible
Dioscorea nummularia	Pacific yam/thap	IUCN NT	Occurs mostly in lowland areas with well-draining sandy loam soil	Likely
Intsia bijuga	Borneo teak/throrrot	IUCN NT	Found along forest edges, grows best within lowland areas with well-drained soils and full sun	Possible
Metroxylon amicarum	Caroline ivory nut palm	IUCN NT	Prefers moist forest edges above 1,500 feet, wetlands, and coastal rainforests	Not Likely
Pericopsis mooniana	Nedun tree	IUCN V	Occurs along rivers and coasts	Not Likely
Pterocarpus indicus	Rosewood/lach	IUCN E	Occurs along rocky shores, tidal creeks, and coasts; occasionally in savannas and uplands	Possible

Notes: E = Endangered F = Federal
IUCN = International Union for the Conservation of Nature NT = Near Threatened V = Vulnerable

Table 5-7: Special Status Plant Species Observed within the Survey Area

Scientific Name	Common/Yapese Name	Individuals within the Survey Area
Cycas micronesica	Cycad/faltir	1
Dioscorea nummularia	Pacific yam/thap	3

There were six invasive species listed by the Global Invasive Species Database documented and verified during the survey: common bamboo, hairy beggarticks, Jack in the bush, Bermuda grass, nutgrass, and the shameplant were observed throughout the survey area (PACAF 2024).

5.27.2 Threatened and Endangered Species

The potential exists for 10 IUCN-listed birds, one IUCN-listed reptile, one IUCN-listed and State of Yap-protected mammal, and one State of Yap-protected crustacean to occur within the environmental survey area (PACAF 2024). The biological survey report found that certain species, which are considered special status, may exist in the survey area. These species are listed in Tables 5-8 and 5-9,summarize the special status species recorded within the survey area.

Table 5-8: Special Status Faunal Species with the Potential to Occur within the Survey Area

Scientific Name	Common/Yapese Name	Status	Required Habitat	Potential to Occur with Survey Area
Birds				
Calidris tenuirostris	Great knot	IUCN E	Prefers mudflats, coastal marine, wetlands, and intertidal habitats	Not Likely
Ducula oceanica	Micronesian imperial-pigeon/buleogol	IUCN V	Found across most habitats, but prefers undisturbed forest	Possible
Edolisoma nesiotis	Yap cicadabird	IUCN E	Found across most habitats, but prefers undisturbed forest	Possible
Limosa lapponica	Bar-tailed godwit	IUCN NT	Occurs on sandy beaches and intertidal habitats	Not Likely
Limosa limosa	Black-tailed godwit	IUCN NT	Occurs on grasslands, wetlands, and intertidal habitats	Possible
Monarcha godeffroyi	Yap monarch	IUCN NT	Occurs across most habitats, including mangroves and savannahs	Likely
Numenius madagascariensis	Far Eastern curlew	IUCN E	Found along coastal marine areas, estuaries, intertidal flats and mangrove swamps	Not Likely
Numenius tahitiensis	Bristle-thighed curlew	IUCN NT	Found along coral reefs, intertidal flats, palm forests, rocky shores, and beaches	Not Likely
Pamposana xanthonura	White-throated ground-dove	IUCN NT	Found in native and secondary forests, fields, and developed areas	Likely
Pseudobulweria becki	Beck's petrel	IUCN CR	Nests in borrows of high mountains but may breed on small islets	Not Likely
Zosterops hypolais	Yap plain white-eye	IUCN NT	Found in shrublands, grasslands, forests, and savannahs	Possible
Zosterops oleagineus	Yap olive white-eye	IUCN NT	Found in forest habitats, including forest edges and mangroves	Possible
Reptiles				
Perochirus ateles	Micronesia saw-tailed gecko/qadburruq	IUCN V	Inhabits forests and introduced vegetation	Likely
Mammals				
Pteropus pelewensis yapensis	Yap flying fox/maagul'aew	IUCN V/ Yap Regulated	Inhabits forests and mangroves	Likely
Crustaceans				
Birgus latro	Coconut crab	IUCN V/ Yap Regulated	Inhabits forests and marine tidal areas	Possible

Notes: CR = Critically Endangered E = Endangered F = Federal
IUCN = International Union for the Conservation of Nature NT = Near Threatened V = Vulnerable

Table 5-9: Special Status Species Observed within the Survey Area

Scientific Name	Common/Yapese Name	Individuals within the Survey Area
Birds		
Monarcha godeffroyi	Yap monarch	11
Pamposana xanthonura	White-throated ground-dove	2
Zosterops hypolais	Yap plain white-eye	1
Mammals		
Pteropus pelewensis yapensis	Yap flying fox/maagul'aew	1

One invasive species listed by the Global Invasive Species Database was documented during the survey: two monitor lizards were observed in the southwestern portion of the survey area (PACAF 2024). Additionally, the cane toad was observed within the survey area. The cane toad species is not listed as invasive by the Global Invasive Species Database, but is considered invasive in many other islands throughout the Pacific (PACAF 2024). There were four invasive species documented during the biological resources survey: two monitor lizards were observed in the southwestern portion of the environmental survey area; domestic dogs, domestic cats, and cane toads were observed throughout the environmental survey area (PACAF 2024).

5.27.3 Wetlands

During the 2024 natural resources study, the field team members observed 43 water features (totaling approximately 3.72 acres) within the environmental survey area, with 21 water features (approximately 1.42 acres) within the disturbance area (PACAF 2024). One water feature was historically a quarry; the rest of the water features appear to be moist depressions of water that are isolated from the known streams. Field team members observed two streams with slow-moving water within the environmental survey area. One stream ran from the southern edge of the main project area through the environmental survey area south of it and outside the survey boundaries. This stream was approximately 1,040 feet long; with 180 feet of the stream within the project area. The second stream originated in the northeastern corner of the environmental survey area, curved through the main project area, and out the southeastern boundary of the environmental survey area. This stream was approximately 3,220 feet long; with 2,020 feet of the stream within the project area.

Yap-Protected Area and Area of Biodiversity Significance were reviewed. No Yap-Protected Area overlaps with the environmental survey area. Approximately 9.8 acres of the environmental survey area overlap with the Area of Biodiversity Significance; there is no overlap of the project area (PACAF 2024).

No marine, marsh, swamp, mangrove, or wetland assessments were conducted as a part of the natural resources survey.

5.27.4 Floodplains

No floodplain maps were available for the FSM through FEMA. Further details on floodplains are discussed in Section 5.26.

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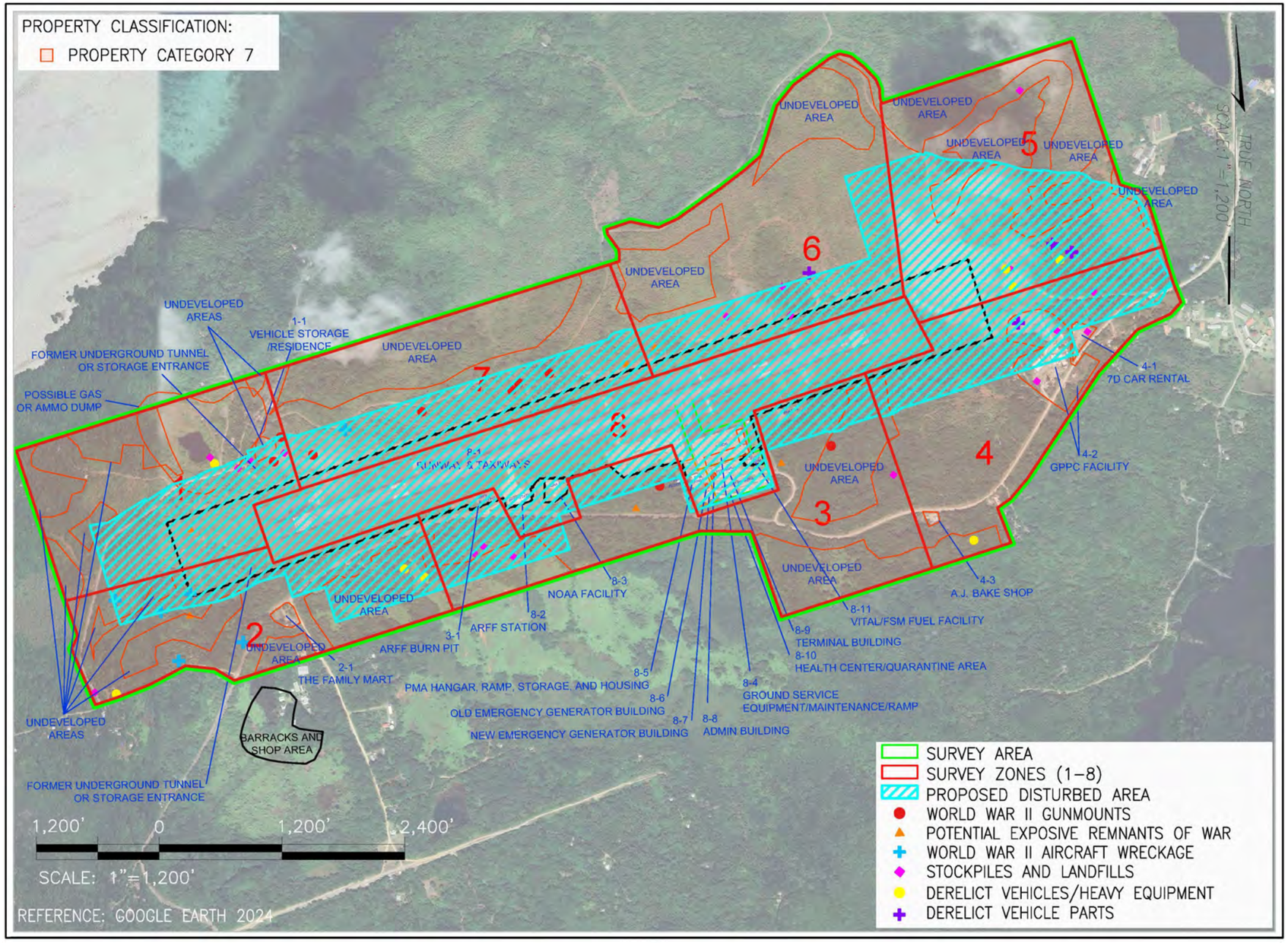
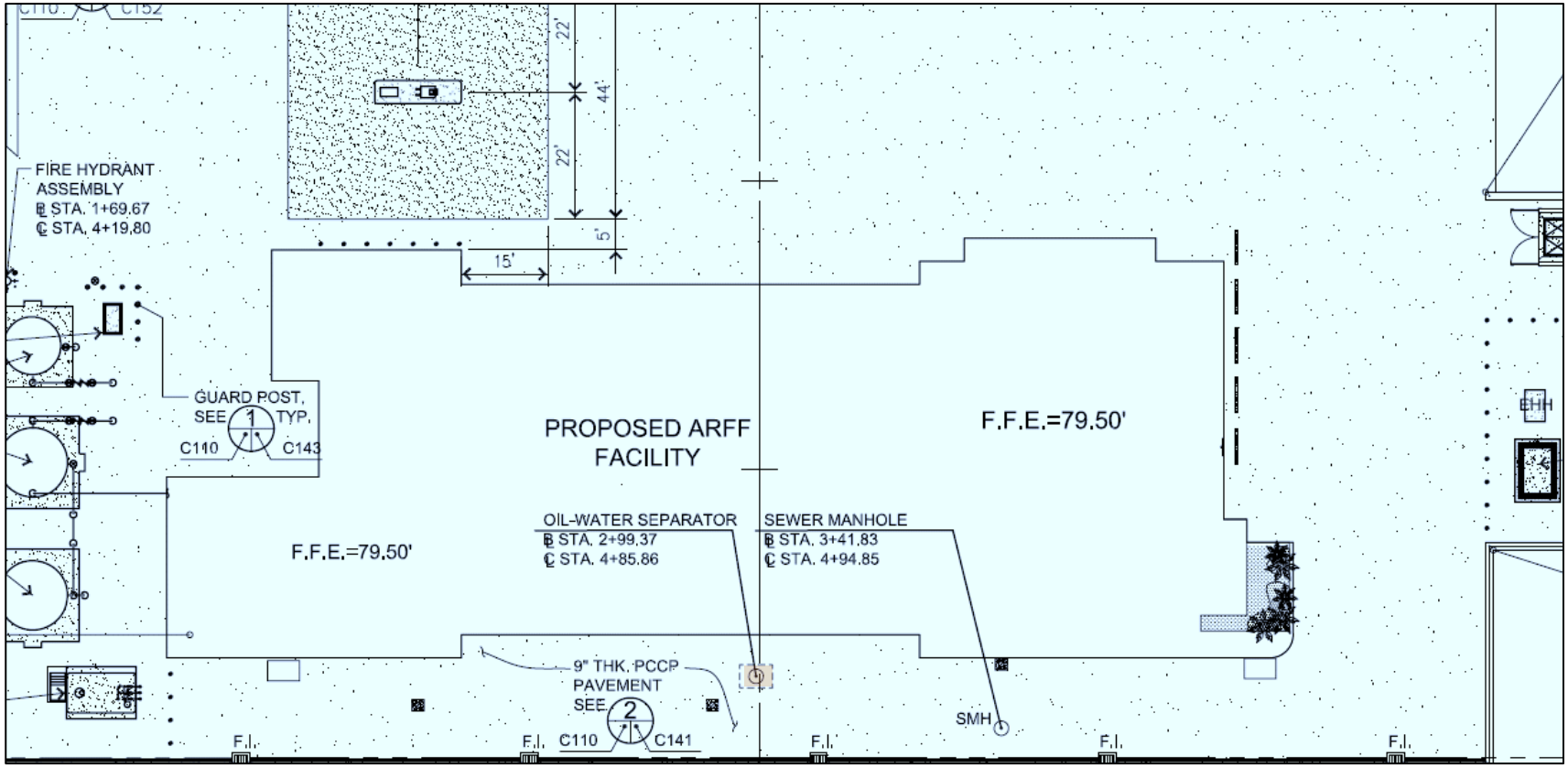


Figure 5-1: Property Category Designations

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Map 5-2: Location of OWS at the ARFF Facility (Yap Port Authority 2010)

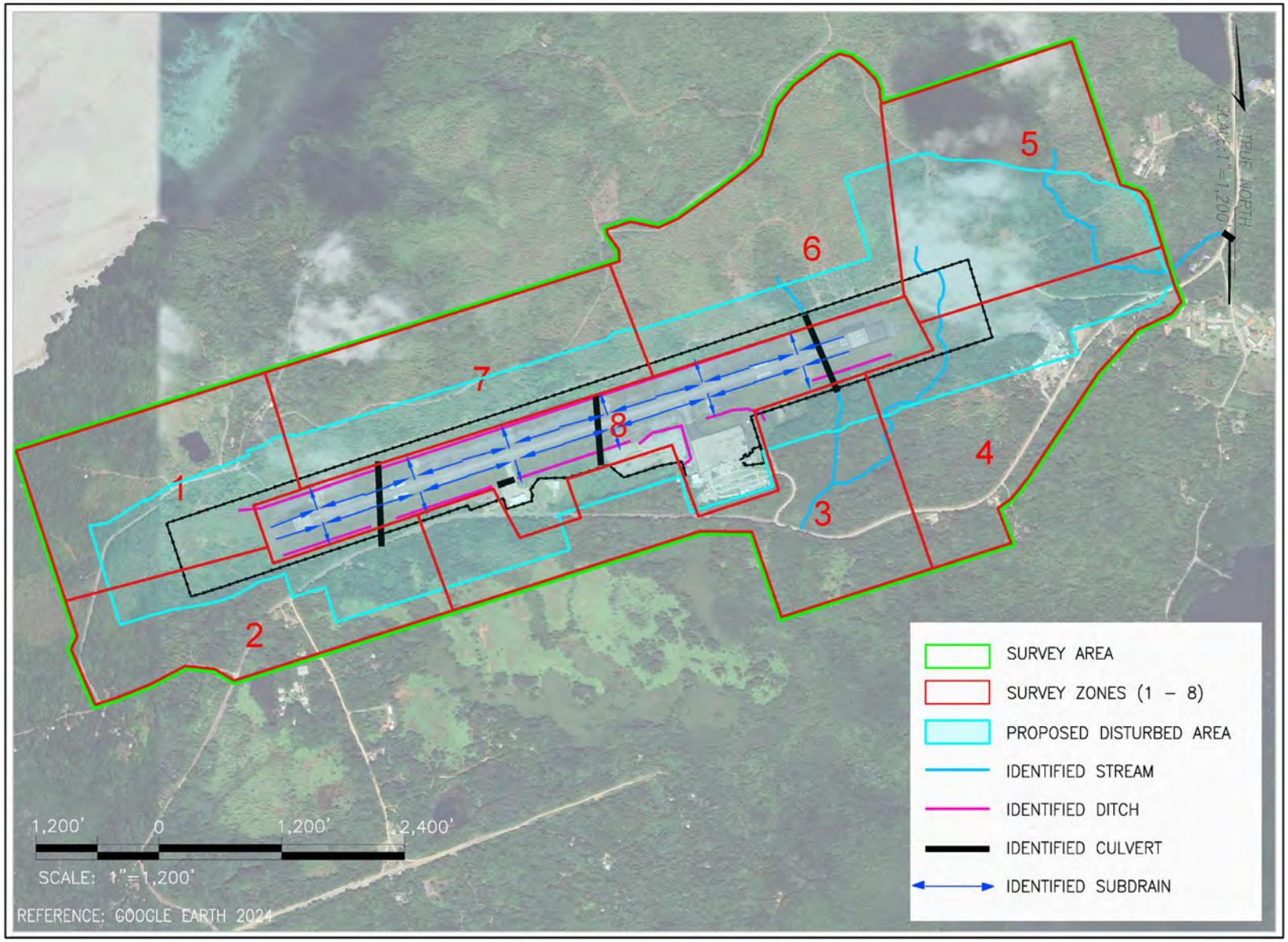


Figure 5-3: Conveyance Area

Section 6 Applicable Regulatory Compliance Issues

6.1 List of Compliance Issues

The survey area is within land owned by Yap State (currently developed airport facilities) and individuals and is not managed by the U.S. Government or part of the Formerly Used Defense Site Program, and no uncontrolled hazardous waste sites have been identified by Yap State; therefore, CERCLA compliance issues and RCRA corrective actions are not applicable.

The DoD established, maintains, and complies with final governing standards (FGSs) to protect human health and the environment. The FGSs will reconcile the requirements of applicable international agreements and applicable host-nation environmental standards with an executive order.

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Section 7 Findings for Adjacent Properties

7.1 Introduction

ASTM standards in Section 7 of E1527 require that properties within a one-mile radius of the Yap IAP be investigated to determine their potential to affect the survey area. Only one delisted NPL site (located greater than one mile east of the survey area) was identified on Yap; the PCB Waste site consists of eight separate locations throughout the U.S.-administered Trust Territory and several independent islands of the Pacific, FMD980637987 (U.S. EPA 1986). Following the cleanup (i.e., blending and burning the PCB fluids and transporting other PCB and hazardous waste off-site for disposal) in 1986, the EPA removed the sites from the NPL (U.S. EPA 1986). Based on surface water runoff and groundwater flow directions, regulatory status, and distance, the site does not have the potential to affect the survey area.

7.2 Adjacent Environmental Data Resources (EDR) Survey Properties

Federal, Tribal, State, and local government records and databases were not practically reviewable because coverage for the FSM was not available from standard resources that search various government databases. Therefore, off-site properties that may represent an environmental concern for the survey area could only be evaluated by site visits, interviews, and historical aerial photographs. The EBS VSI was limited due to dense jungle, access, and lack of property delineation.

To the southeast of Zone 4, you will find the College of Micronesia Yap Campus and an Old German Radio Station. Moving towards the east side of Zone 5, adjacent to the Port Road, is the SOWER Project Planning Site. On the eastern side of Zone 5 is the location of Colonia Middle School. Upon reviewing aerial photographs, it appears that near the northern border where Zones 6 and 7 meet, there is a small quarry or construction site. Heading towards the south of Zone 2 is the Yap Catholic High School. The remaining areas consisted mainly of dense jungle with only a few houses scattered around.

7.2.1 Federal Databases

The adjacent properties were not identified on the databases available for the FSM, as listed in Table 2-3.

7.2.2 State and Local Databases

No records were identified for the adjacent properties.

7.2.3 Tribal Records

No records were identified for the adjacent properties.

7.3 Findings/Impact

No evidence of hazardous substances, petroleum product releases or spills, or hazardous or petroleum waste sites were observed during the EBS VSI or identified during the records review that have the potential to impact the survey area.

No DoD facilities or ERP sites were identified as being located within a one-mile radius of the survey area during the EBS VSI or the records review.

No storage tanks were observed on the surrounding properties during the EBS VSI.

Section 8 Recommendations

The DAF proposes to construct and operate facilities and infrastructure at the Yap IAP to conduct military readiness activities involving fighter, cargo, tanker, and miscellaneous aircraft and associated support personnel. Upgrades to the airfield are essential for training and improving capabilities related to aircraft diversions, humanitarian assistance, disaster relief efforts, and other contingencies. These upgrades are needed to allow U.S. military aircraft and personnel to improve the use of the Yap IAP to meet U.S. national security objectives and fulfill U.S. obligations to provide for the defense of the FSM per Title Three of the CoFA between the U.S. and the FSM.

In accordance with AFI 32-7020 and ASTM D6008-22, we conducted a thorough evaluation of available records from the Yap government and other relevant agencies. Our assessment included historical research of the survey area and its surroundings, interviews with key personnel, and a VSI to characterize the environmental conditions accurately.

Several potential environmental concerns have been identified for the survey area:

- Hazardous Substances and Petroleum Products: Numerous AOCs have been identified where hazardous substances and petroleum products may have been improperly stored, handled, or disposed of, posing potential risks to human health and the environment. These issues arose partly due to inadequate waste disposal practices and regulations of the host nation, which are still in the early stages of development. Many releases and threats of releases were observed; however, the extent and magnitude of the releases are unknown.

- ERW: Based on the island's history during past conflicts, areas outside the developed area of the airport that were not previously cut and filled are rated as having a high probability of ERW, particularly in subsurface regions. Field activities, including environmental sampling and surveys that will be performed, should use MEC and anomaly avoidance procedures as outlined in the MEC and Anomaly Avoidance Plan developed for the FY24 MCAF P-020 Aircraft Parking Apron and FY25 MCAF P-010 Extend Runway Project, which comply with NAVSEA OP 5 (NAVFAC Pacific 2023c).

- WWII-Era Aircraft Wreckage: The presence of wreckage from WWII-era aircraft in areas outside of the developed portion of the airport serves as tangible evidence of past aircraft operations, which raises concerns about residual aviation fuel within various tanks within the aircraft. These aircraft may also contain LBP, solvents, lubricants, and potentially radioactive components that complicate environmental assessments.

- ARFF Burn Pit Concerns: At the ARFF Burn Pit (Site No. 3), waste petroleum products, hazardous substances, and other materials are stored and burned during ARFF training exercises, raising environmental concerns. It is unknown but unlikely that the pit is lined, and during the VSI, standing water with a heavy oily sheen was observed in the pit, indicating possible contamination that may impact the environment.

- AFFF: The use and storage of AFFF, presumed to contain PFAS (persistent environmental contaminants), raises significant health and environmental concerns, especially regarding the island's limited freshwater resources. The host nation is still in the early stages of establishing a comprehensive tracking system for hazardous substances and petroleum products. Inadequate tracking records concerning AFFF usage complicate efforts to assess potential impacts.

- Improperly Stored Materials: The GPCC, Inc. Facility (Site No. 4-2) has been found to contain numerous unlabeled 55-gallon drums, likely holding bituminous materials, and several labeled 55-gallon oil drums, in poor condition and lacking proper containment. Various ASTs containing oil are also present on-site. Notably, a large stockpile of gravel appears to be oozing a significant amount of bituminous material onto the bare soil beneath it. Improper storage practices lead to soil and environmental contamination, underscoring the need for further investigation.

- Potential PCB Contamination: Transformers identified at several locations, including residential areas and facilities, may contain PCBs; however, no evidence of leaks was noted during the EBS VSI. No available records regarding the type of oil used were found. If these devices need to be relocated during construction, appropriate measures must follow relevant environmental standards.

- LBP and ACM: Buildings within the AOCs may contain LBP and ACMs that should be evaluated prior to any demolition or renovation activities.

- Waste Disposal Practices: Historically, Yap State relied on communal dumping for waste disposal, leading to a significant potential for environmental hazards. While the state has made significant advancements in waste management, community dump sites remain across nearly all municipalities on the island. There is only one public landfill on the island with limited collection services. Despite improvements, illegal dumping and derelict vehicles and heavy equipment still pose risks throughout the AOCs.

- Water Quality Concerns: The YSPSC water supply does not currently meet U.S. EPA drinking water standards. Nevertheless, upgrades to the water treatment facility are expected to address these deficiencies in the near future.

- Stormwater Runoff: Stormwater runoff from the YAP IAP drains into an extensive mangrove habitat located south of the survey area without any filtration system and may be impacting surface waters.

- Cultural and Natural Resource Surveys: Cultural and natural resource surveys have identified potential historical sites from 1939 to 1945 and several special-status plant and animal species. Further research and surveys will be undertaken to document these findings thoroughly.

Given the findings, the entire survey area is classified as Category 7, indicating potential environmental liabilities that may not necessitate immediate corrective actions. It will be at the discretion of the DAF to determine the need for additional investigations. Notifications regarding these environmental concerns should ensure that future occupants are aware of the potential liabilities associated with undetected ERW and environmental hazards.

Section 9 Certifications

9.1 Certification of the Environmental Baseline Survey

Element Environmental, LLC has conducted this EBS on behalf of the Air Force. E2 has reviewed all appropriate records made available and conducted a VSI of the selected facilities following an analysis of information during the record search. The information contained within the survey report is based on records made available and, to the best of E2's knowledge, is correct and current as of September 11, 2024.

Certified by: Angela Peltier Date: 02/26/2026

Angela Peltier
Senior Geologist
Element Environmental LLC

Approved by: CONESA.LEE.A.1265640792 Digitally signed by CONESA.LEE.A.1265640792 Date: 2026.02.26 14:03:30 -10'00' Date: 2/26/26

Lee Conesa
Deputy Commander
AFIMSC Det 2

The following specific certifications apply:

Hazardous Substances:

Certification of No Contamination

_____ This real property contains no known hazardous substances as that term is defined in the CERCLA (42 USC § 9601), as amended, or other contamination as specified by the RCRA of 1976, the implementing Environmental Protection Agency regulations (40 CFR Parts 261, 262, 263, and 761), and the Federal Property Management Regulations (41 CFR Part 101-47). A complete search of agency files revealed that no hazardous substance has been stored for more than one year, known to have been released, or disposed of on the Air Force controlled real property described below.

Certification of Contamination

__X___ A complete search of agency files has revealed that hazardous substance(s) as that term is defined in the CERCLA (42 USC § 9601) as amended, were stored for one year or more, known to have been released, or were disposed of on the excess Air Force controlled real property described in AFI32-7020 Section A3.7.

Certification of PCB Clearance (Either 1 or 2)

_____ 1. This Real Property is in compliance with 40 CFR 761 as outlined below:

a. An inventory has been prepared and is being maintained of all PCB Real Property Installed Equipment and Real Property PCB Items per Section 761.45.

b. All in-service and stored serviceable PCB, PCB contaminated Real Property Installed Equipment and Real Property PCB Items have been inspected, repaired and are being maintained to prevent leakage, therefore can be distributed per Section 761.30.

c. PCB Real Property Installed Equipment and Real Property PCB Items have been stored, decontaminated, and labeled per Sections 761.42, 761.43, and 761.44.

d. There is no known PCB-contaminated soil, wastes, or unserviceable equipment remaining on the existing property.

_____ 2. A records search and a VSI indicate that this property has not been exposed to PCB materials or equipment.

Certification of Other Contaminants: check all that apply and/or list any other known contaminants

__X___ Lead-Based Paint

__X___ Asbestos-Containing Materials

__X__ Other (please list any other contaminants)

Petroleum-related substances and
Hazardous materials associated with aircraft and vehicle maintenance, repair, and fire-fighting activities, and building maintenance materials.

Certified by: Angela Peltier Date: 02/26/2026

Angela Peltier
Senior Geologist
Element Environmental LLC

Approved by: CONESA.LEE.A.1265640792 Digitally signed by CONESA.LEE.A.1265640792 Date: 2026.02.26 14:03:57 -10'00' Date: 2/26/26

Lee Conesa
Deputy Commander
AFIMSC Det 2

Appendix A

Terms

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%	percent
§	Section
AC	asphaltic concrete
ACM	asbestos-containing material
AFFF	aqueous film-forming foam
AFI	Air Force Instruction
AOC	Areas of Concern
ARFF	Aircraft Rescue and Fire Fighting
AST	aboveground storage tank
ASTM	ASTM International
AVGAS	aviation gas
BCE	before the common era
C&D	construction and demolition
c.	circa
CBR	California Bearing Ratio
CEPOH	U.S. Corps of Engineers Pacific Division
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERCLIS	Compensation, and Liability Information System
CERFA	Community Environmental Response Facilitation Act of 1992
CFR	Code of Federal Regulations
cm	centimeter
CMU	concrete masonry unit
CoFA	Compact of Free Association
CPSC	Consumer Products Safety Commission
CR	Critically Endangered
DAF	Department of the Air Force
DoD	Department of Defense
DoN	Department of the Navy
DPW&T	Department of Public Works and Transportation
E	Endangered
EBS	Environmental Baseline Survey
ECOP	environmental condition of property
ENSO	El Niño Southern Oscillation
EOD	Explosive Ordnance Disposal
EPA	Environmental Protection Agency
ERNS	Emergency Response Notification System
ERP	Environmental Restoration Program
ERW	explosive remnants of war
F	Federal
FAA	Federal Aviation Administration
FEMA	U.S. Federal Emergency Management Agency

FGS	final governing standards
FSM	Federated States of Micronesia
FY	fiscal year
HAZMAT	hazardous materials
HTRW	hazardous, toxic, and radiological waste
IAP	International Airport
ISO	International Standards Organization
IUCN	International Union for the Conservation of Nature
JRM	Joint Forces Marianas
km	kilometer
kVA	kilovolt-amperes
kW	kilowatt
LBP	lead-based paint
LCP	lead-containing paint
LiDAR	light detection and ranging
LL	low lead
MEC	munitions and explosives of concern
mg/kg	milligrams per kilogram
MILCON	military construction
mm	millimeter
MMRP	Military Munitions Response Program
MNA Environmental	Myounghee Noh & Associates, LLC dba MNA Environmental
msl	mean sea level
N/A	not applicable
NAVAIDS	navigational aids
NAVFAC Pacific	Naval Facilities Engineering Command, Pacific Division
No	number
NOAA	National Oceanic and Atmospheric Administration
NPL	National Priorities List
NRCS	Natural Resources Conservation Service
NT	Near Threatened
OWS	oil water separator
PACAF	Pacific Air Forces
PACFLT	United States Pacific Fleet
PAPI	Precision Approach Path Indicator
PCB	polychlorinated biphenyl
pCi/L	picocuries per liter
PFAS	perfluoroalkyl and polyfluoroalkyl substances
PMA	Pacific Mission Aviation
PVC	polyvinyl chloride
RCRA	Resource Conservation and Recovery Act

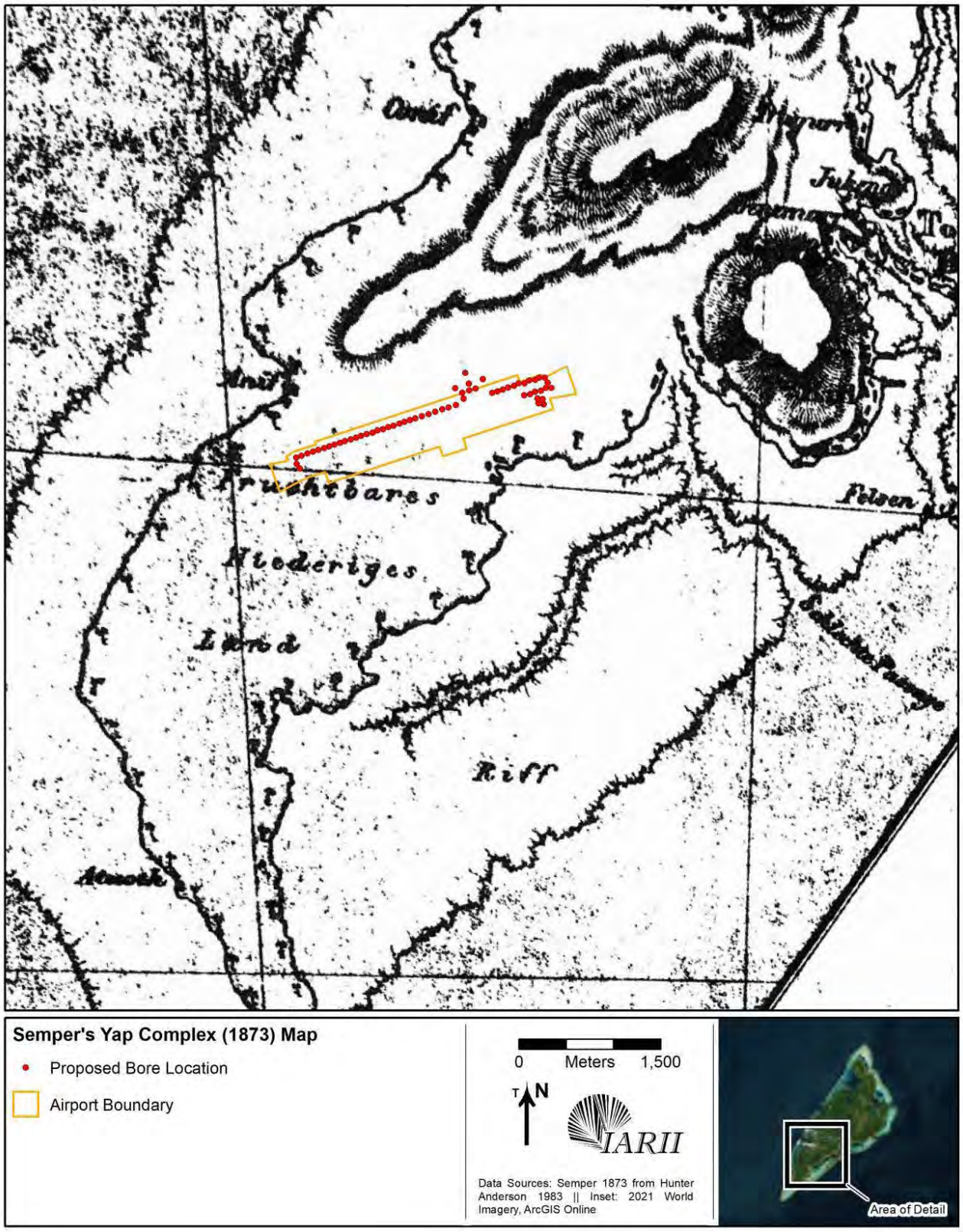
RSA	Runway Safety Area
SPREP	Secretariat of the Pacific Regional Environment Programme
TPESL	Tropical Pacific Environmental Screening Level
TSD	Treatment, Storage, and Disposal
TTPI	Trust Territory of the Pacific Islands
U.S.	United States of America
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USGS	United States Geological Survey
UST	underground storage tank
UXO	unexploded ordnance
V	Vulnerable
Vital FSM	Vital FSM Petroleum Corporation
VSI	Visual Site Inspection
WERI	Water and Environmental Research Institute
WWII	World War II
YSPSC	Yap State Public Service Corporation

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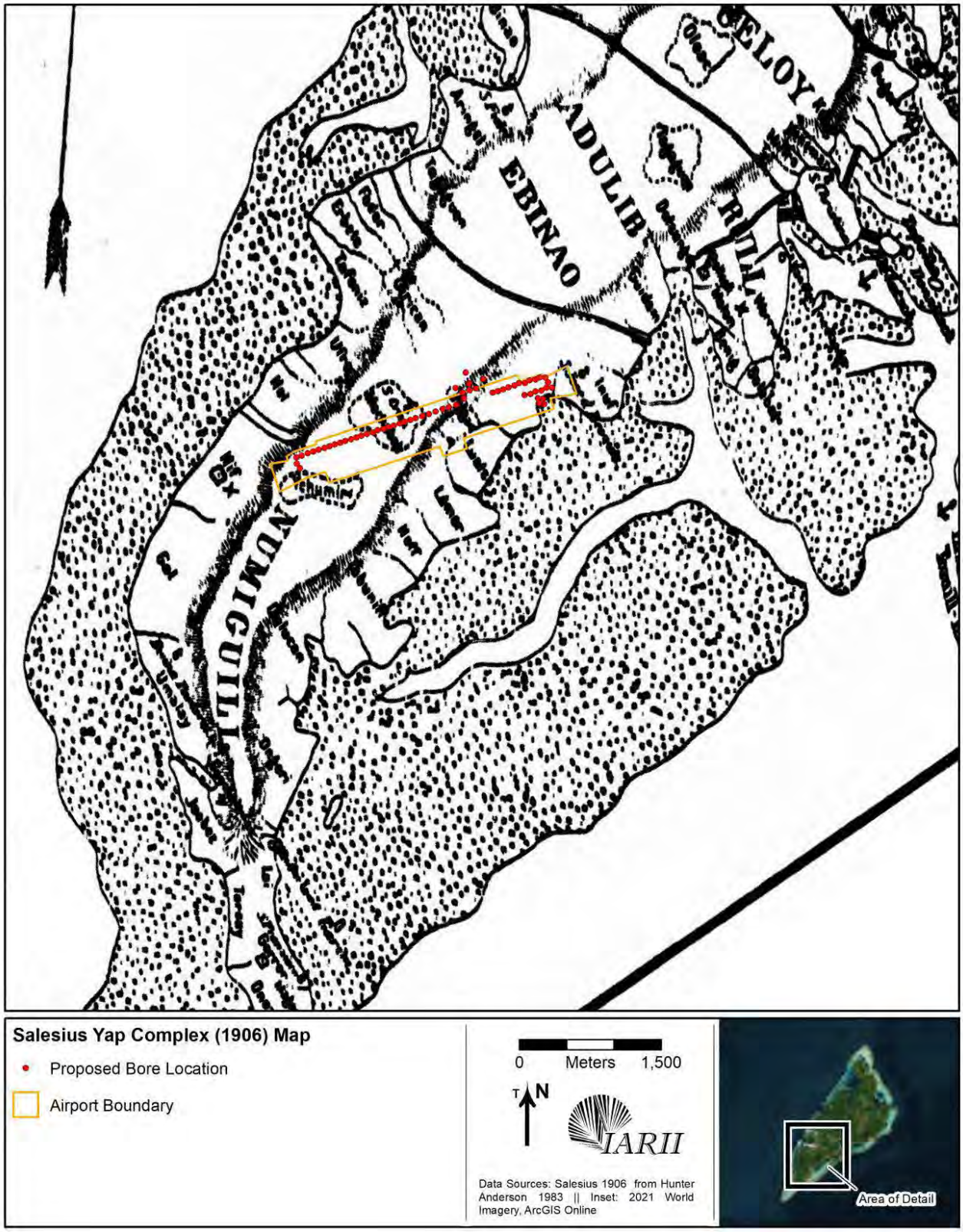
Appendix B

Maps

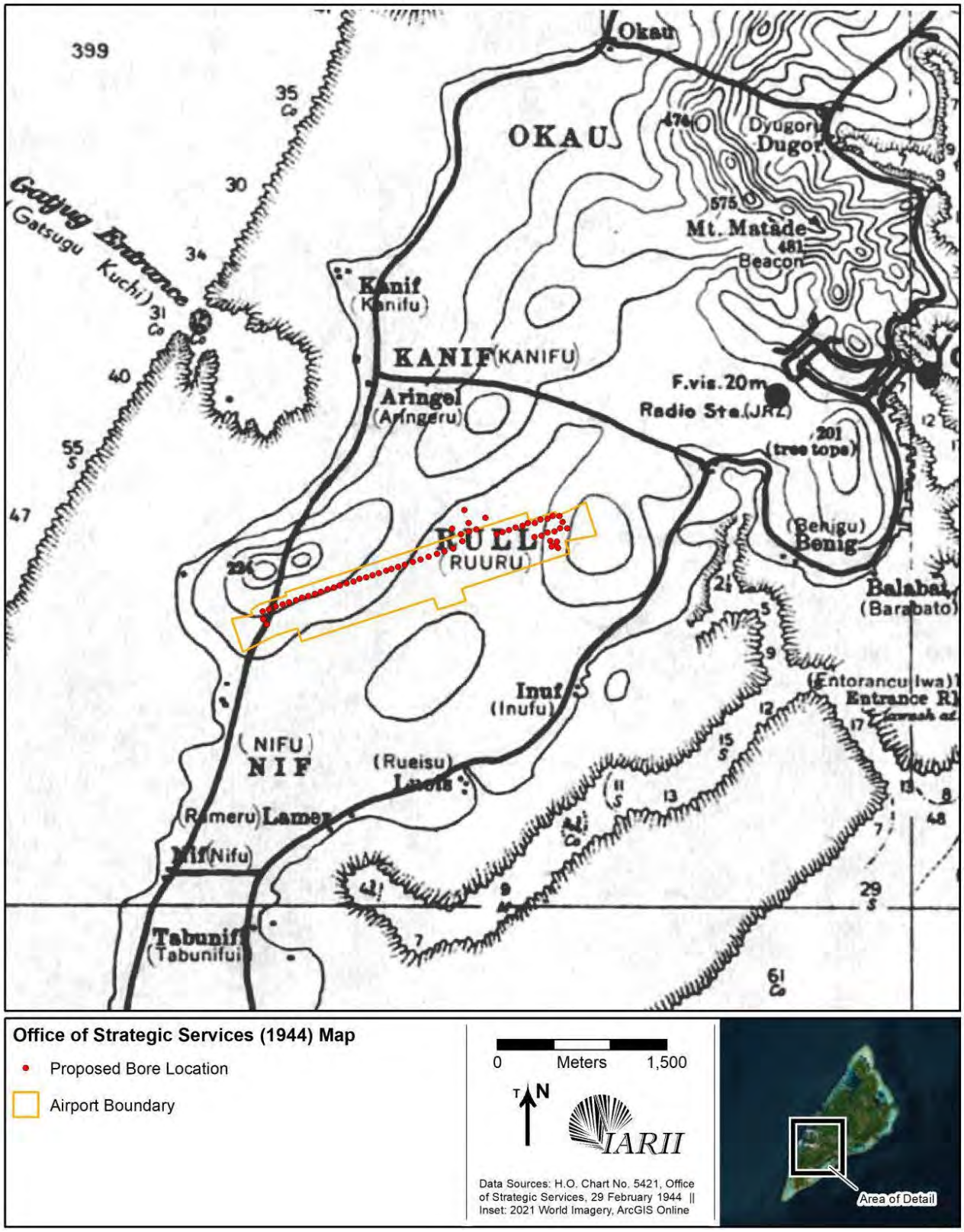
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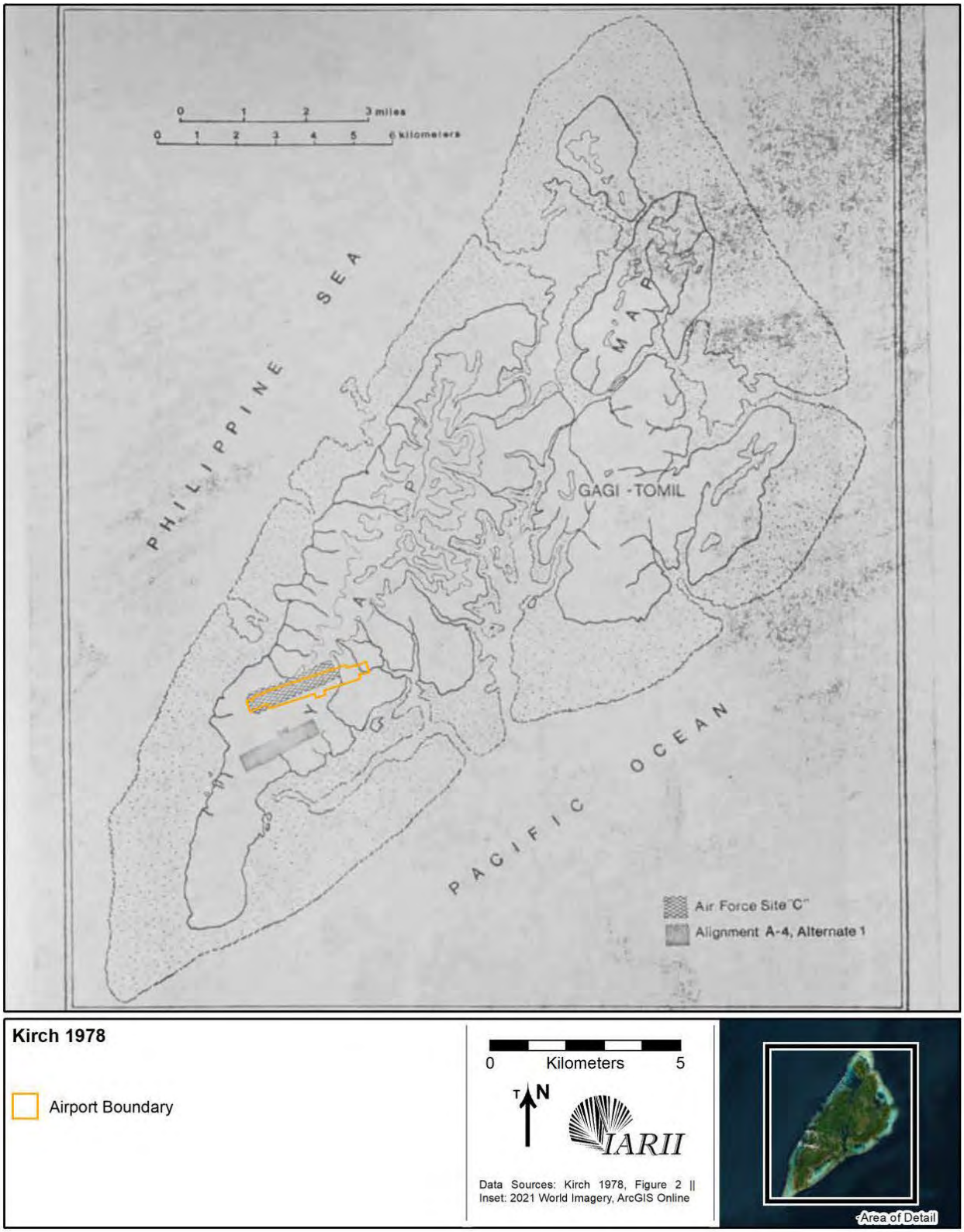
Map 1: 1873 Map (NAVFAC Pacific 2023a)



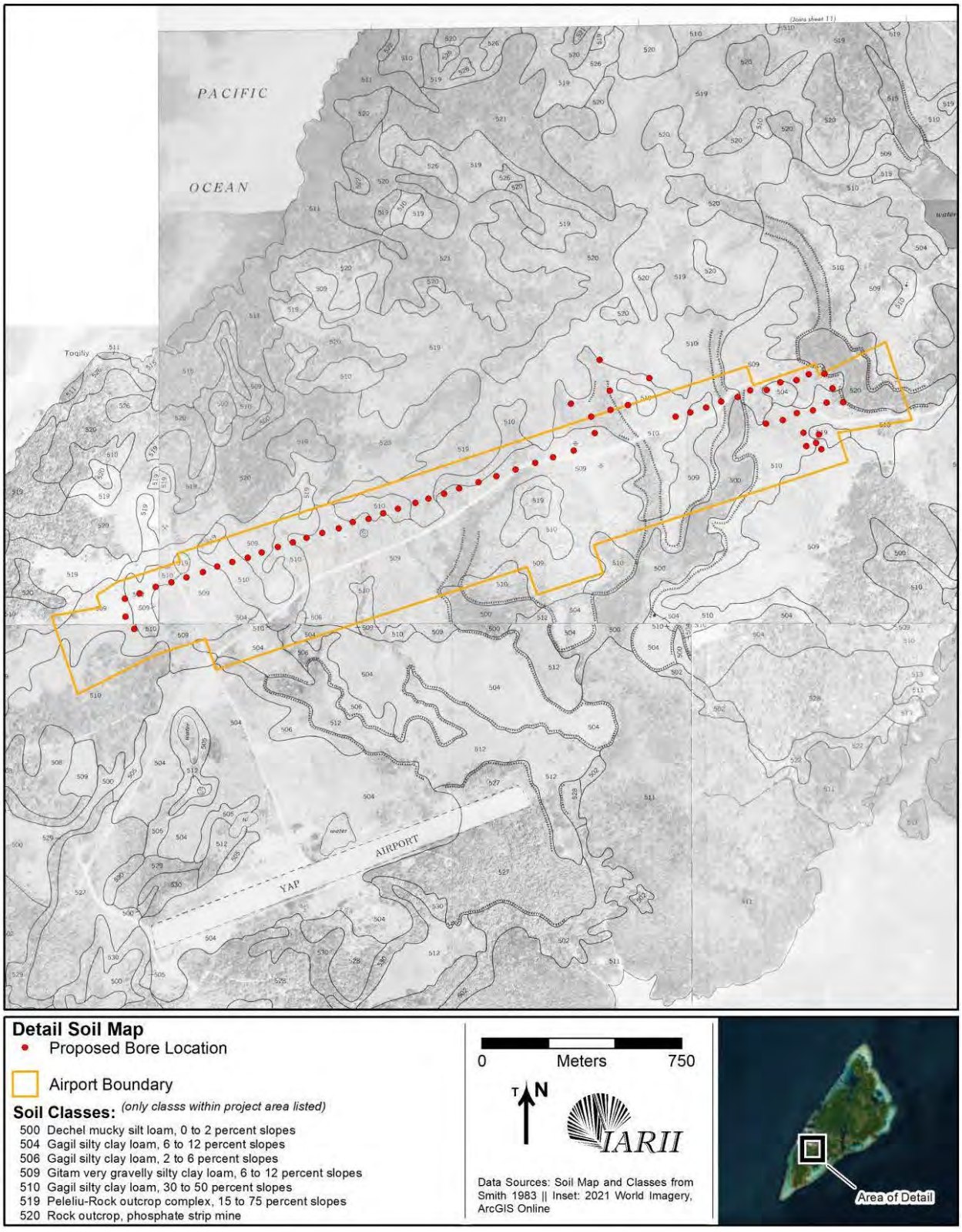
Map 2: 1906 Map (NAVFAC Pacific 2023a)



Map 3: 1944 Office of Strategic Services Map (NAVFAC Pacific 2023a)



Map 4: 1978 Map (NAVFAC Pacific 2023a)



Map 5: 1983 Detailed Soil Map (NAVFAC Pacific 2023a)

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Appendix C

Aerial and Site Photos

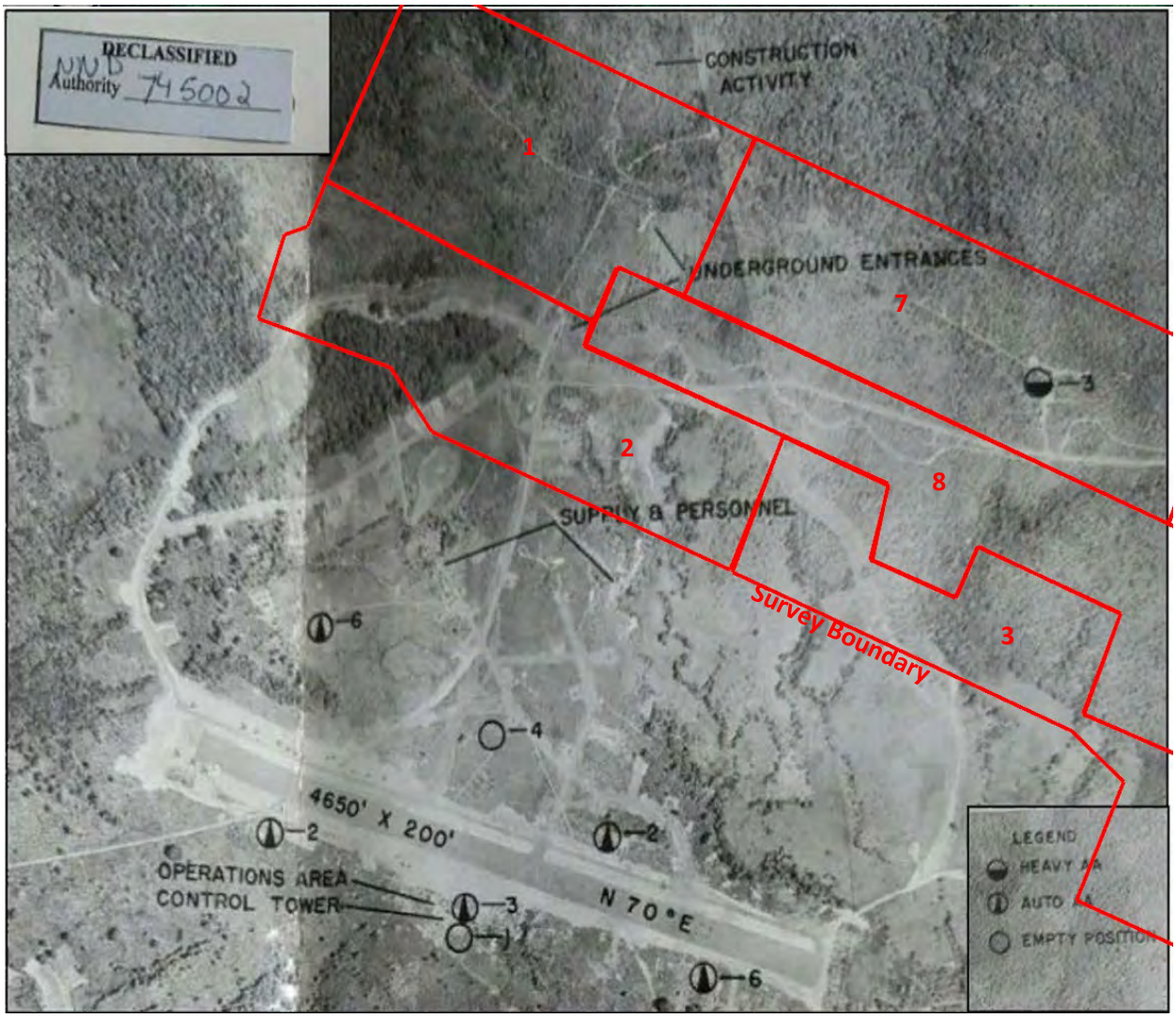
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Aerial 1: 1944 Eastern Portion of Japanese Airstrip on Yap Island (NAVFAC Pacific 2024a)



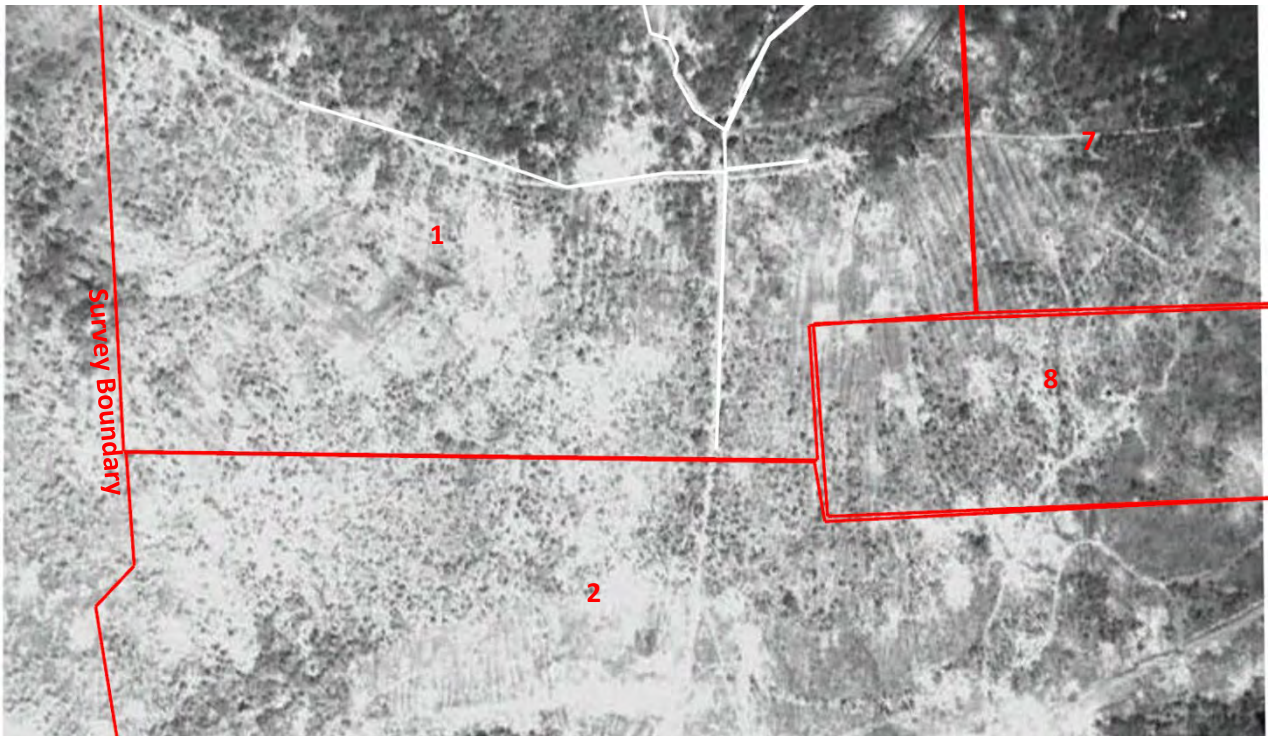
Aerial 2: March 1944 Aerial View of the Area where the Current Airport Sits after U.S. Bombing Raids in Late March 1944 (NAVFAC Pacific 2024a)



Aerial 3: June 1944 Japanese Defensive Installations (NAVFAC Pacific 2024a)



Aerial 4: July 1944 Japanese Defensive Installations (NAVFAC Pacific 2024a)



Aerial 5: October 25, 1944 Central Part of the Runway and Support Buildings (NAVFAC Pacific 2024a)



Aerial 6: February 2005 Aerial (Google Earth 2024)



Aerial 7: January 2008 Aerial (Google Earth 2024)



Aerial 8: March 2013 Aerial (Google Earth 2024)



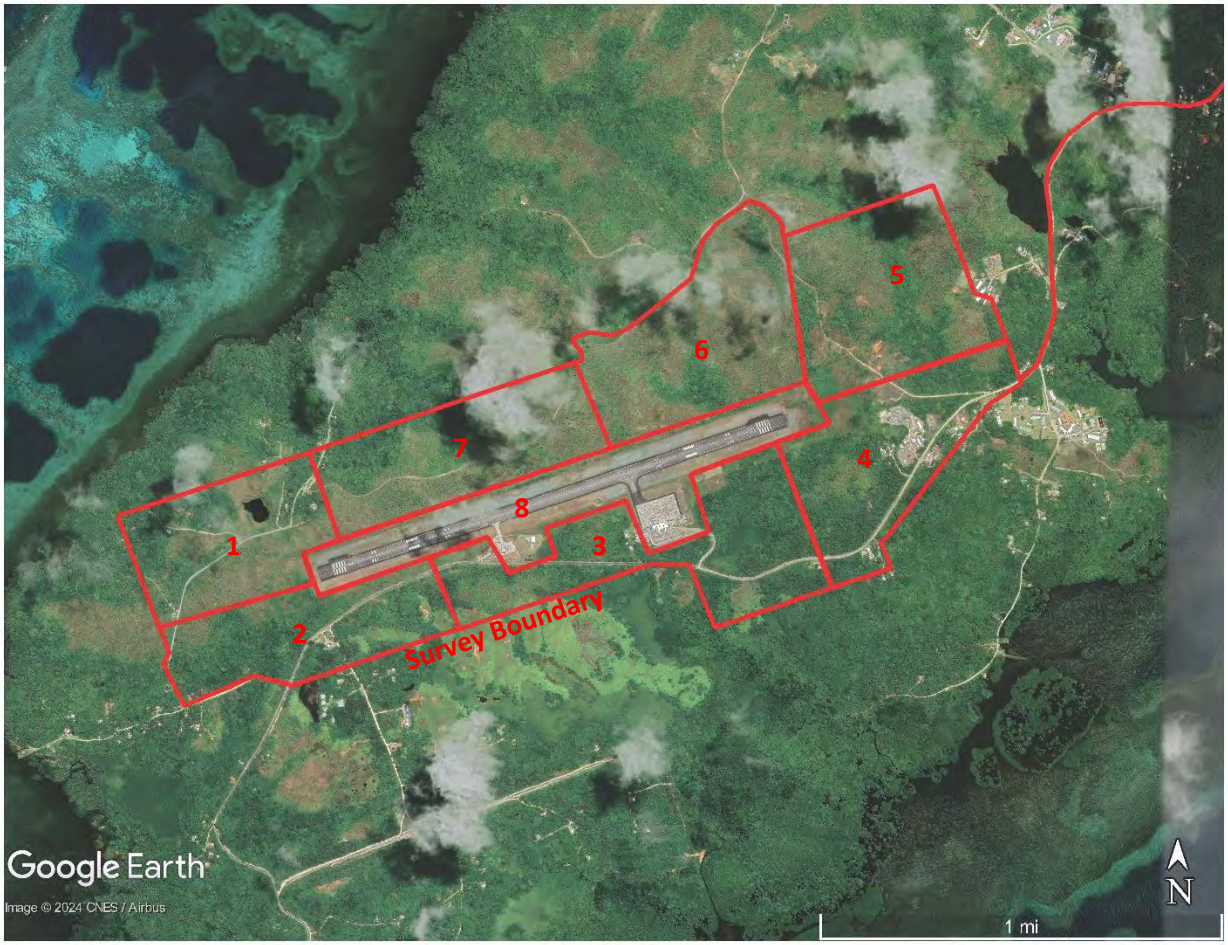
Aerial 9: May 2014 Aerial (Google Earth 2024)



Aerial 10: May 2016 Aerial (Google Earth 2024)



Aerial 11: March 2017 Aerial (Google Earth 2024)



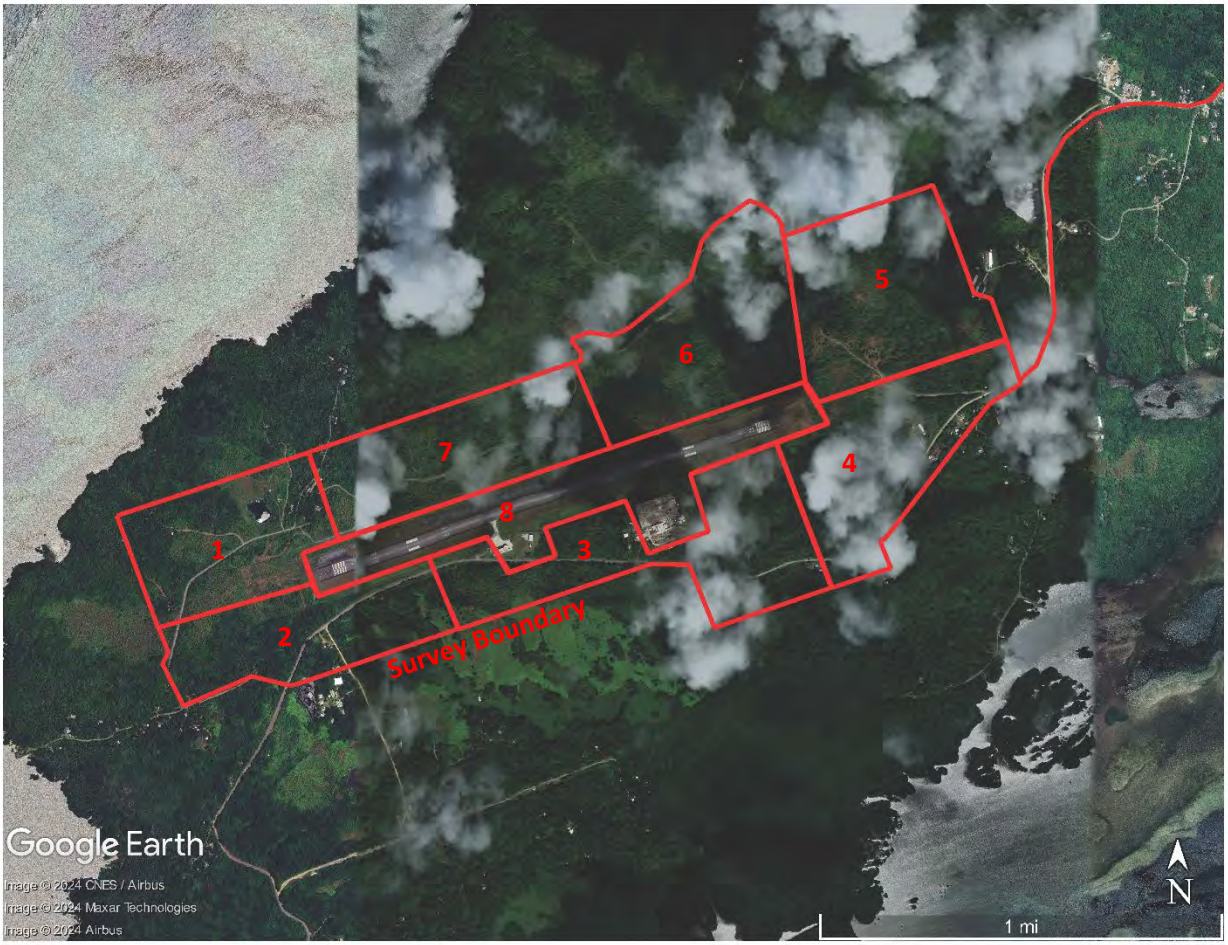
Aerial 12: April 2018 Aerial (Google Earth 2024)



Aerial 13: December 2019 Aerial (Google Earth 2024)



Aerial 14: January 2022 Aerial (Google Earth 2024)



Aerial 15: September 2023 Aerial (Google Earth 2024)



Aerial 16: 2024 Aerial (Google Earth 2024)



Photo 1	Description	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 2	Description	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
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Photo 3	**Description**	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
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Photo 4	**Description**	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 5	**Description**	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 6	**Description**	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 7	**Description**	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 8	**Description**	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 9	**Description**	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 10	**Description**	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
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Photo 11	Description	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 12	Description	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 13	**Description**	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 14	**Description**	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 15	**Description**	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
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Photo 16	**Description**	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
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Photo 17	**Description**	An overall view of a portion of Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 18	**Description**	A pole-mounted transformer located within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 19	**Description**	An equipment cabinet associated with a cellular antenna tower within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 20	**Description**	A cellular antenna tower located within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 21	**Description**	An unlabeled portable AST stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 22	**Description**	A large water AST within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 23	**Description**	A water filtration facility with multiple ASTs within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 24	**Description**	Municipal solid waste, scrap vehicle parts, a 55-gallon polyethylene drum, and derelict vehicles stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 25	**Description**	A derelict vehicle and a 55-gallon steel drum stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 26	**Description**	A 55-gallon steel drum and municipal solid waste stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 27	**Description**	A 55-gallon steel drum and municipal solid waste stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 28	**Description**	A 55-gallon steel drum and scrap metal waste stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 29	**Description**	Remnants of a 55-gallon steel drum stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 30	**Description**	Remnants of a 55-gallon steel drum stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 31	**Description**	A rusty 55-gallon steel drum stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 32	**Description**	A rusty 55-gallon steel drum stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 33	**Description**	A derelict vehicle and two lead-acid automotive batteries stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 34	**Description**	A lead-acid automotive battery and a derelict vehicle stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 35	**Description**	A lead-acid automotive battery, scrap vehicle parts, and a hazardous substance container stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 36	**Description**	A lead-acid automotive battery and scrap vehicle parts stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 37	**Description**	A lead-acid automotive battery, scrap vehicle parts, hazardous substance containers, and waste tires stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 38	**Description**	A radiator and scrap vehicle parts within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 39	**Description**	Two radiators and scrap metal parts within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 40	**Description**	Two lead-acid automotive batteries and scrap vehicle parts within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 41	**Description**	Oil filters and small containers of petroleum products and hazardous substances stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 42	**Description**	Two lead-acid automotive batteries and scrap vehicle parts within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 43	**Description**	Nine lead-acid automotive batteries stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 44	**Description**	Twenty lead-acid automotive batteries stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 45	**Description**	An automotive workshop within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 46	**Description**	Petroleum staining and a lead-acid automotive battery stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 47	**Description**	Two lead-acid automotive batteries and scrap vehicle parts within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 48	**Description**	Gasoline-powered equipment and 1-gallon paint containers stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 49	**Description**	A 5-gallon container partially full of used automotive oil stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 50	**Description**	A 5-gallon container partially full of used automotive oil and three 5-gallon hazardous substance containers stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 51	**Description**	A derelict vehicle with solid waste stored in the bed stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 52	**Description**	A derelict vehicle, scrap vehicle parts, and scrap metals stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 53	**Description**	A derelict vehicle and scrap vehicle parts stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 54	**Description**	A derelict vehicle, scrap vehicle parts, and waste tires stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 55	**Description**	A derelict vehicle and scrap metal waste stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 56	**Description**	A derelict vehicle and scrap metal waste stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 57	**Description**	Derelict vehicles stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 58	**Description**	Derelict vehicles stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 59	Description	Derelict vehicles stored within Zone 1.
Photo Date 2/21/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 60	Description	Derelict vehicles stored within Zone 1.
Photo Date 2/21/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 61	**Description**	Derelict vehicles stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 62	**Description**	Derelict vehicles stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
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Photo 63	**Description**	A derelict vehicle stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 64	**Description**	A derelict vehicle stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
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Photo 65	**Description**	A derelict vehicle stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 66	**Description**	A derelict vehicle stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
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Photo 67	**Description**	A derelict vehicle stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
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Photo 68	**Description**	A small burn pit and small amounts of municipal solid waste stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 69	**Description**	Municipal solid waste stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 70	**Description**	Municipal solid waste stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 71	**Description**	Scrap vehicle parts, and scrap metal stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 72	**Description**	Municipal solid waste stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 73	**Description**	Municipal solid waste stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 74	**Description**	Municipal solid waste stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 75	**Description**	Municipal solid waste stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 76	**Description**	Municipal solid waste stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 77	**Description**	Scrap vehicle parts stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 78	**Description**	Scrap vehicle parts and waste tires stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 79	Description	Waste tires stored within Zone 1.
Photo Date 2/21/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 80	Description	Waste tires stored within Zone 1.
Photo Date 2/21/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 81	**Description**	Scrap metal waste stored within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 82	**Description**	A burn pit located within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 83	**Description**	A drain pipe outfalls to bare soil from an automotive shop within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 84	**Description**	A bomb hole located within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 85	**Description**	A bomb hole located within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 86	**Description**	A wrecked airplane located within Zone 1.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 87	**Description**	The Family Mart store located within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 88	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 89	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 90	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 91	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 92	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 93	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 94	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 95	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 96	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 97	Description	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 98	Description	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 99	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 100	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 101	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 102	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 103	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 104	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 105	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 106	**Description**	An overall view of a portion of Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 107	**Description**	Three pole-mounted transformers located within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 108	**Description**	A septic tank located within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 109	**Description**	A 55-gallon steel drum, scrap metal waste, and derelict equipment stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 110	**Description**	A 55-gallon steel drum, a waste tire, and an empty 5-gallon bucket are stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 111	**Description**	A 55-gallon steel drum stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 112	**Description**	Two 55-gallon steel drums stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 113	**Description**	A 55-gallon steel drum stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 114	**Description**	Four lead-acid automotive batteries and two waste tires stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 115	**Description**	A lead-acid automotive battery stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 116	**Description**	A lead-acid automotive battery stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 117	Description	Derelict vehicles and scrap vehicle parts stored within Zone 2.
Photo Date 2/16/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 118	Description	Derelict vehicles and scrap vehicle parts stored within Zone 2.
Photo Date 2/16/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 119	**Description**	A derelict vehicle stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 120	**Description**	A derelict vehicle stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 121	**Description**	Derelict vehicles stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 122	**Description**	A derelict vehicle stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 123	**Description**	A derelict vehicle stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 124	**Description**	A derelict vehicle stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 125	**Description**	Stockpiled soil and scrap metal waste stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 126	**Description**	Scrap metal waste stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 127	**Description**	Municipal solid waste stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 128	**Description**	Scrap metal waste stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 129	Description	A derelict aircraft component located within Zone 2.
Photo Date 2/16/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 130	Description	Derelict aircraft components located within Zone 2.
Photo Date 2/16/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 131	Description	Derelict aircraft components located within Zone 2.
Photo Date 2/16/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 132	Description	Municipal solid waste stored within Zone 2.
Photo Date 2/16/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 133	**Description**	Scrap vehicle parts stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 134	**Description**	Waste tires stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 135	**Description**	Scrap metal waste and waste tires stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 136	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 137	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 138	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 139	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 140	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 141	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 142	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 143	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 144	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 145	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 146	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 147	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 148	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 149	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 150	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 151	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 152	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 153	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 154	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 155	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 156	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 157	**Description**	Stockpiled soil stored within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 158	**Description**	A burn pit located within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 159	**Description**	A burn pit located within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 160	**Description**	A covered drainage feature located within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 161	**Description**	A covered drainage feature located within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 162	**Description**	A covered drainage feature located within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 163	**Description**	A shower area which drains directly to the ground located within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 164	**Description**	A culvert located within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 165	**Description**	A culvert located within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 166	**Description**	A culvert located within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 167	**Description**	A culvert located within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 168	**Description**	A stormwater drainage feature located within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 169	**Description**	A bomb hole located within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 170	**Description**	A bomb hole located within Zone 2.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 171	**Description**	Historical airplane wreckages located within Zone 2.
Photo Date 2/23/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 172	**Description**	A historical airplane wreckage located within Zone 2.
Photo Date 2/23/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 173	**Description**	A historical airplane wreckage located within Zone 2.
Photo Date 2/23/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 174	**Description**	A historical airplane wreckage located within Zone 2.
Photo Date 2/23/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 175	**Description**	A historical airplane wreckage located within Zone 2.
Photo Date 2/23/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 176	**Description**	An overall view of a portion of Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 177	**Description**	An overall view of a portion of Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 178	**Description**	The NOAA facility within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 179	**Description**	An overall view of a portion of Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 180	**Description**	An overall view of a portion of Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 181	**Description**	An overall view of a portion of Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 182	**Description**	An overall view of a portion of Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 183	**Description**	A sewage lift station located within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 184	**Description**	An overall view of a portion of Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 185	**Description**	An overall view of a portion of Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 186	**Description**	An overall view of a portion of Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 187	**Description**	The A.J. Bake Shop located within Zone 3.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 188	**Description**	An overall view of a portion of Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 189	**Description**	A pad-mounted transformer located at the NOAA facility within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 190	**Description**	Two pole-mounted transformers located within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 191	**Description**	A 1,000-gallon diesel fuel AST located at the NOAA facility within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 192	**Description**	A hydrogen compressed-gas AST located at the NOAA facility within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 193	**Description**	A 55-gallon polyethylene drum containing a spill kit within the NOAA facility within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 194	**Description**	An unlabeled 55-gallon polyethylene drum within the NOAA facility within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 195	**Description**	Two 55-gallon steel drums stored within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 196	**Description**	A 55-gallon steel drum stored within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 197	**Description**	A 55-gallon steel drum stored within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 198	**Description**	Lead-acid batteries, waste tires, and a 5-gallon bucket located within the NOAA facility within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 199	**Description**	A lead-acid automotive battery, scrap vehicle parts, and a waste tire stored within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 200	**Description**	Hydrogen-filled compressed gas container storage at the NOAA facility within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 201	**Description**	A derelict gasoline-powered lawn mower stored at the NOAA facility within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 202	**Description**	A gas-powered lawn mower stored at the NOAA facility within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers

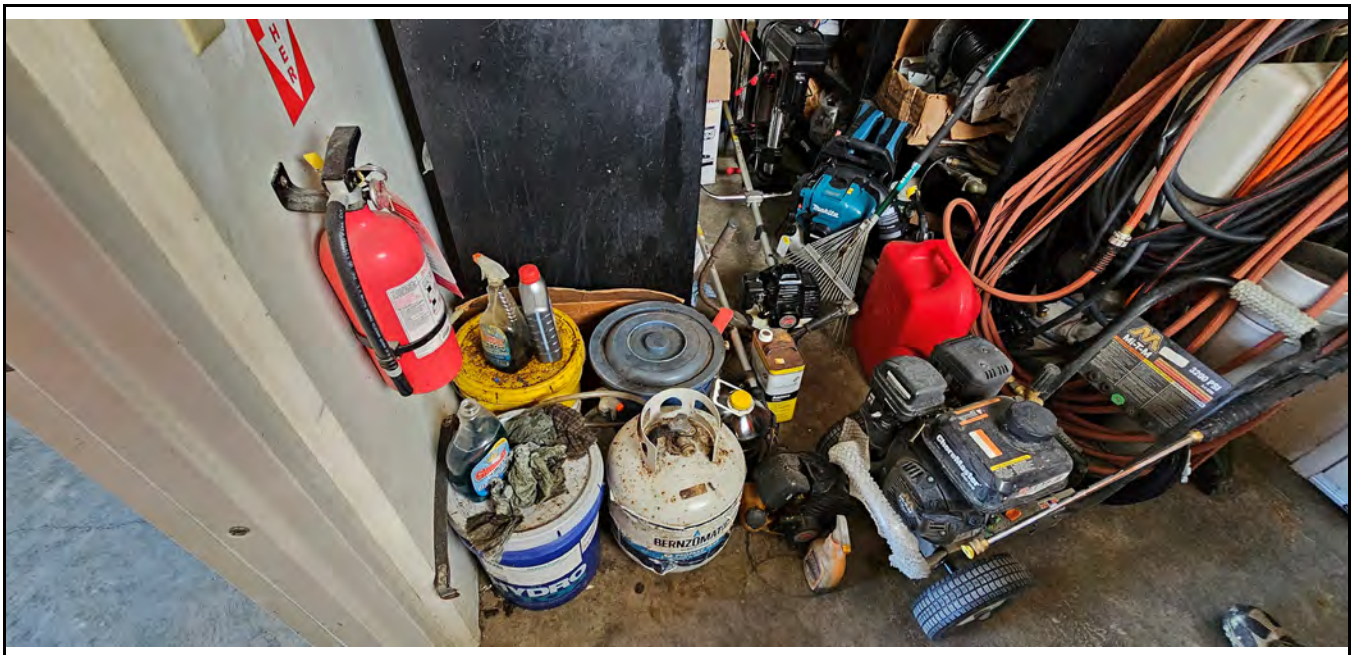


Photo 203	**Description**	Petroleum products and hazardous substance containers and gasoline-powered equipment within the NOAA facility within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 204	**Description**	A diesel-powered emergency generator located within the NOAA facility within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 205	**Description**	A 25-gallon diesel day tank located within the NOAA facility within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 206	**Description**	A burned derelict vehicle stored within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 207	**Description**	A derelict vehicle stored within Zone 3.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 208	**Description**	Buried municipal waste and hazardous substance containers south of the roadway within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 209	Description	Buried municipal waste and hazardous substance containers south of the roadway within Zone 3.
Photo Date 2/19/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 210	Description	Buried municipal waste and hazardous substance containers south of the roadway within Zone 3.
Photo Date 2/19/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 211	**Description**	A soil berm with municipal waste and hazardous substance containers partially buried along its south wall within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 212	**Description**	A culvert located within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 213	**Description**	A culvert located within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 214	**Description**	A stormwater drainage feature located within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 215	**Description**	A stormwater drainage feature located within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 216	**Description**	Remnant of a WWII anti-aircraft gun base located within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 217	**Description**	Remnant of a WWII anti-aircraft gun base located within Zone 3.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 218	**Description**	An overall view of the 7D Rental storage yard within Zone 4.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 219	**Description**	An overall view of a portion of Zone 4.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 220	**Description**	An overall view of a portion of Zone 4.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 221	**Description**	An overall view of a portion of Zone 4.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 222	**Description**	An overall view of a portion of Zone 4.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 223	**Description**	An overall view of a portion of Zone 4.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 224	**Description**	An overall view of the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 225	**Description**	An overall view of a portion of Zone 4.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 226	**Description**	An overall view of a portion of Zone 4.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 227	**Description**	Heavy petroleum staining around a 55-gallon steel drum containing hydraulic oil and two compressed-gas cylinders within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 228	**Description**	Heavy petroleum staining around two 55-gallon steel drums of hydraulic oil within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 229	**Description**	A bituminous substance draining from a 55-gallon steel drum and on bare ground within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 230	**Description**	A release of a bituminous substance on the ground around a 55-gallon steel drum within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 231	**Description**	Petroleum staining on bare ground around several 55-gallon steel drums within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 232	**Description**	Petroleum staining on bare ground around several 55-gallon steel drums within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 233	**Description**	Petroleum staining on bare ground around several 55-gallon steel drums within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 234	**Description**	Petroleum staining on bare ground around several 55-gallon steel drums within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 235	**Description**	A bituminous substance on bare ground around a 55-gallon steel drum within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 236	**Description**	A GPPC, Inc. employee power washing a gasoline-powered concrete saw on bare ground within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 237	**Description**	Evidence of recent spills or leaks around the base of an emergency generator within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 238	**Description**	Heavy petroleum staining on bare soil beneath an excavator within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 239	**Description**	Heavy petroleum staining on bare soil beneath an excavator within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 240	**Description**	Heavy petroleum staining and improper storage of petroleum products within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 241	**Description**	Heavy petroleum staining and improper storage of petroleum products within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 242	**Description**	A bituminous substance draining from beneath a gravel stockpile to the ground within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 243	**Description**	A bituminous substance draining from beneath a gravel stockpile to the ground within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 244	**Description**	A bituminous substance draining from beneath a gravel stockpile to the ground within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 245	**Description**	Heavy petroleum staining around a 300-gallon tote and three 55-gallon polyethylene drums stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 246	**Description**	A street cleaner is stored within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 247	**Description**	A water tank truck is stored within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 248	**Description**	A 600-gallon diesel AST stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 249	**Description**	A 70-gallon diesel AST stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 250	**Description**	A 100-gallon diesel AST stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 251	**Description**	A 2,500-gallon diesel AST stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 252	**Description**	A 3,000-gallon diesel AST stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 253	**Description**	A septic tank located within the 7D Rental storage yard within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 254	**Description**	Dozens of 55-gallon steel drums containing a bituminous substance used to separate gravel stockpiles within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 255	**Description**	Hundreds of 55-gallon steel drums containing a bituminous substance stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 256	**Description**	Hundreds of 55-gallon steel drums containing a bituminous substance stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 257	**Description**	An emergency generator, two diesel ASTs, two bitumen kettles, several diesel-powered lighting trailers, and dozens of 55-gallon steel drums containing a bituminous substance are stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 258	**Description**	Hundreds of 55-gallon steel drums containing a bituminous substance stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 259	**Description**	Two 55-gallon steel drums, four 55-gallon polyethylene drums, and six 5-gallon containers stored within the 7D Rental storage yard within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 260	**Description**	A 55-gallon steel drum and scrap metal waste stored within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 261	**Description**	A 55-gallon steel drum and scrap metal waste stored within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 262	**Description**	A 55-gallon steel drum and large amounts of solid waste stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 263	**Description**	Three 55-gallon steel drum remnants located within Zone 4.
Photo Date 2/19/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 264	**Description**	A rusty 55-gallon steel drum stored within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 265	**Description**	A 55-gallon steel drum stored within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 266	**Description**	Several 55-gallon steel drums are stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 267	**Description**	Twenty 55-gallon steel drums containing a bituminous substance and water stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 268	**Description**	Two 55-gallon steel drums and a 5-gallon container stored within the 7D Rental storage yard within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 269	**Description**	Four 55-gallon steel drums stored within the 7D Rental storage yard within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 270	**Description**	Remnants of a 55-gallon steel drum stored within Zone 4.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 271	**Description**	A lead-acid automotive battery and solid waste stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 272	**Description**	Pallets of 5-gallon buckets of traffic marking paint stored within a shed within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 273	**Description**	A diesel-powered emergency generator located within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 274	**Description**	Two bitumen kettles stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 275	**Description**	A diesel-powered JCD400T portable drill rig is stored within the 7D Rental storage yard within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 276	**Description**	Dozens of improperly stored petroleum product containers stored within the 7D Rental storage yard within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 277	Description	A derelict vehicle stored within Zone 4.
Photo Date 2/20/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 278	Description	A derelict vehicle stored within Zone 4.
Photo Date 2/20/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 279	Description	A derelict grader stored within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 280	Description	A derelict crane, truck, and backhoe stored within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	Site Name	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	Client	United States Army Corps of Engineers



Photo 281	**Description**	Derelict equipment stored within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 282	**Description**	Derelict equipment stored within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 283	**Description**	Derelict equipment stored within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 284	**Description**	Derelict equipment stored within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 285	**Description**	Derelict equipment stored within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 286	**Description**	Derelict equipment stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 287	**Description**	Derelict vehicles stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 288	**Description**	Derelict vehicles stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 289	**Description**	Derelict vehicles stored within the 7D Rental storage yard within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 290	**Description**	Derelict vehicles stored within the 7D Rental storage yard within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 291	**Description**	Derelict vehicles stored within the 7D Rental storage yard within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 292	**Description**	Municipal solid waste and stockpiled soil stored within Zone 4.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 293	**Description**	Asphalt shingles and other construction and demolition debris stored within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 294	**Description**	Scrap metal waste stored within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 295	**Description**	Scrap vehicle parts and municipal solid waste stored within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers

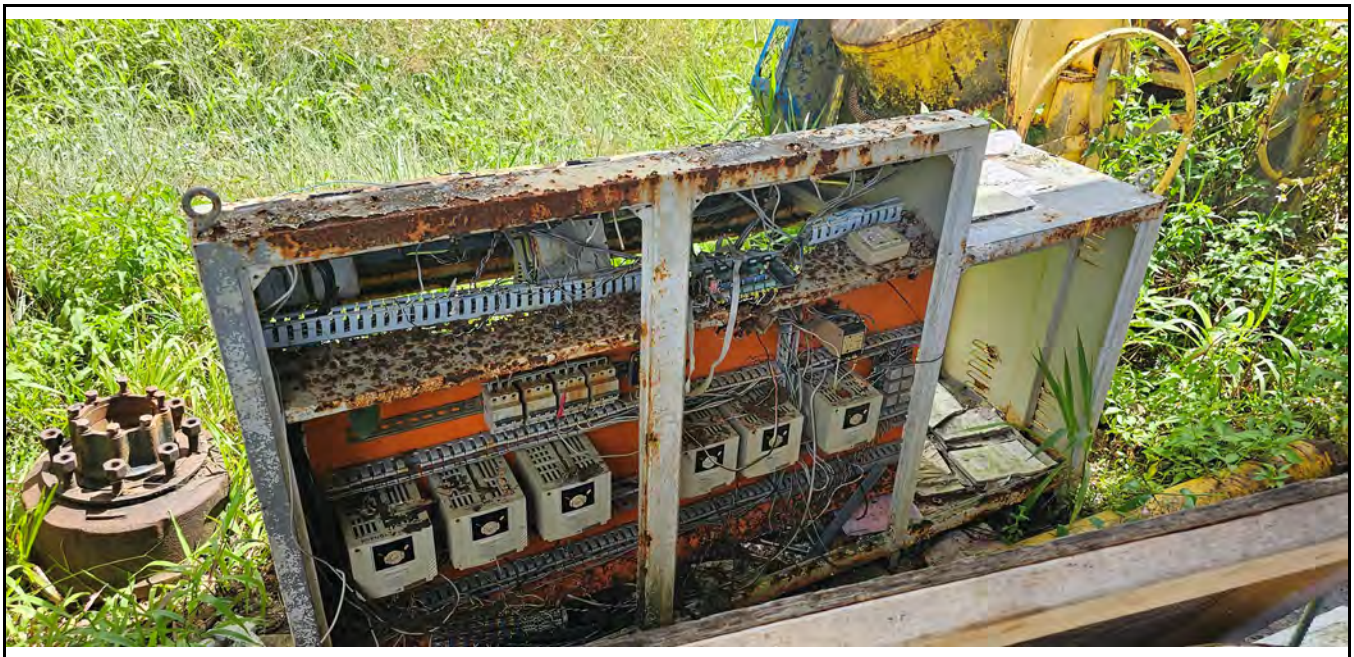


Photo 296	**Description**	Derelict equipment stored within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 297	**Description**	Buried solid waste revealed by erosion along the east slope of the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 298	**Description**	Scrap vehicle parts and waste tires stored within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 299	**Description**	Municipal solid waste stored within Zone 4.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 300	**Description**	Stockpiled soil stored within the 7D Rental storage yard within Zone 4.
Photo Date 2/16/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 301	**Description**	Stockpiled soil stored within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 302	**Description**	Stockpiled soil stored within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 303	**Description**	Stockpiled soil stored within the GPPC, Inc. encroachment portion of Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 304	**Description**	Two soil stockpiles within the 7D Rental storage yard within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 305	**Description**	A soil stockpile stored within Zone 4.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 306	**Description**	A burn pit located within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 307	**Description**	A shower area which drains directly to the ground located within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 308	**Description**	A sink drains to the ground within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 309	**Description**	A drain pipe which services a laundry facility drains to the ground within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 310	**Description**	Drain pipes which service shower units drain to the ground within the GPPC, Inc. facility within Zone 4.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 311	**Description**	An overall view of a portion of Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 312	**Description**	An overall view of a portion of Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 313	**Description**	An overall view of a portion of Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 314	**Description**	An overall view of a portion of Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 315	**Description**	An overall view of a portion of Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 316	**Description**	An overall view of a portion of Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 317	**Description**	An overall view of a portion of Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 318	**Description**	An overall view of a portion of Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 319	**Description**	An overall view of a portion of Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 320	**Description**	An overall view of a portion of Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 321	**Description**	Remnants of three rusted 55-gallon steel drums stored within Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 322	**Description**	Remnant of a rusted 55-gallon steel drum stored within Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 323	**Description**	Remnant of a rusted 55-gallon steel drum stored within Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 324	**Description**	Scrap vehicle parts and municipal solid waste stored within Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 325	**Description**	Derelict vehicles and scrap vehicle parts stored within Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 326	**Description**	Derelict vehicles and scrap vehicle parts stored within Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 327	**Description**	Derelict vehicles and scrap vehicle parts stored within Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 328	**Description**	A derelict shipping container stored within Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 329	**Description**	Municipal solid waste stored within Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 330	**Description**	A bomb hole located within Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 331	**Description**	A bomb hole located within Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 332	**Description**	Remnants of a derelict WWII vehicle stored within Zone 5.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 333	**Description**	An overall view of a portion of Zone 6.
Photo Date 2/23/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 334	**Description**	An overall view of a portion of Zone 6.
Photo Date 2/23/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 335	**Description**	An overall view of a portion of Zone 6.
Photo Date 2/23/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 336	**Description**	An overall view of a portion of Zone 6.
Photo Date 2/23/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 337	**Description**	An overall view of a portion of Zone 6.
Photo Date 2/23/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 338	**Description**	An overall view of a portion of Zone 6.
Photo Date 2/23/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 339	**Description**	An overall view of a portion of Zone 6.
Photo Date 2/23/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 340	**Description**	An overall view of a portion of Zone 6.
Photo Date 2/23/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 341	**Description**	A bomb hole located within Zone 6.
Photo Date 2/23/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 342	**Description**	A suspected Japanese WWII tunnel located within Zone 6.
Photo Date 2/23/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 343	**Description**	An overall view of a portion of Zone 7.
Photo Date 2/22/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 344	**Description**	An overall view of a portion of Zone 7.
Photo Date 2/22/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 345	**Description**	A remnant of a 55-gallon steel drum stored within Zone 7.
Photo Date 2/22/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 346	**Description**	A 55-gallon steel drum stored within Zone 7.
Photo Date 2/22/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 347	**Description**	A stormwater drainage feature located within Zone 7.
Photo Date 2/22/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 348	**Description**	A bomb hole located within Zone 7.
Photo Date 2/22/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 349	**Description**	A bomb hole located within Zone 7.
Photo Date 2/22/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 350	**Description**	A remnant of a WWII bomb located within Zone 7.
Photo Date 2/22/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 351	**Description**	Remnant of a WWII anti-aircraft gun located within Zone 7.
Photo Date 2/22/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 352	**Description**	Remnants of a WWII aircraft located within Zone 7.
Photo Date 2/22/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 353	**Description**	Remnant of a WWII coastal defense gun located within Zone 7.
Photo Date 2/22/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 354	**Description**	Remnant of a WWII coastal defense gun located within Zone 7.
Photo Date 2/22/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 355	**Description**	An overall view of a portion of Zone 8.
Photo Date 2/21/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 356	**Description**	An overall view of Runway 7/25 within Zone 8.
Photo Date 2/20/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 357	**Description**	An overall view of Runway 7/25 within Zone 8.
Photo Date 2/26/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 358	**Description**	An overall view of a portion of Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 359	**Description**	An overall view of a portion of Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 360	**Description**	The ARFF facility located within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 361	**Description**	An overall view of a portion of Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 362	**Description**	An overall view of a portion of Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 363	**Description**	A radio tower located within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 364	**Description**	Construction equipment stored within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 365	**Description**	The Yap IAP ramp area within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 366	**Description**	The Yap IAP terminal building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 367	**Description**	The Vital/FSM fuel farm at the Yap IAP within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 368	**Description**	The Yap IAP administration building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 369	**Description**	The quarantine facility/health center within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 370	**Description**	The Yap IAP terminal building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 371	**Description**	An overall view of a portion of Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 372	**Description**	An overall view of a portion of Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 373	**Description**	An overall view of a portion of Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 374	**Description**	An overall view of a portion of Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 375	**Description**	An overall view of a portion of Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 376	**Description**	An overall view of a portion of Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 377	**Description**	An overall view of a portion of Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 378	**Description**	The Vital/FSM fuel farm at the Yap IAP within Zone 8.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 379	**Description**	Remnants of a 55-gallon steel drum and a waste tire as well as heavy petroleum sheen within the ARFF burn pit within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 380	**Description**	The ARFF burn pit located within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 381	**Description**	A construction worker washing painting tools over bare ground within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 382	**Description**	Petroleum staining on bare ground beneath a derelict tractor adjacent to the Yap IAP administration building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers

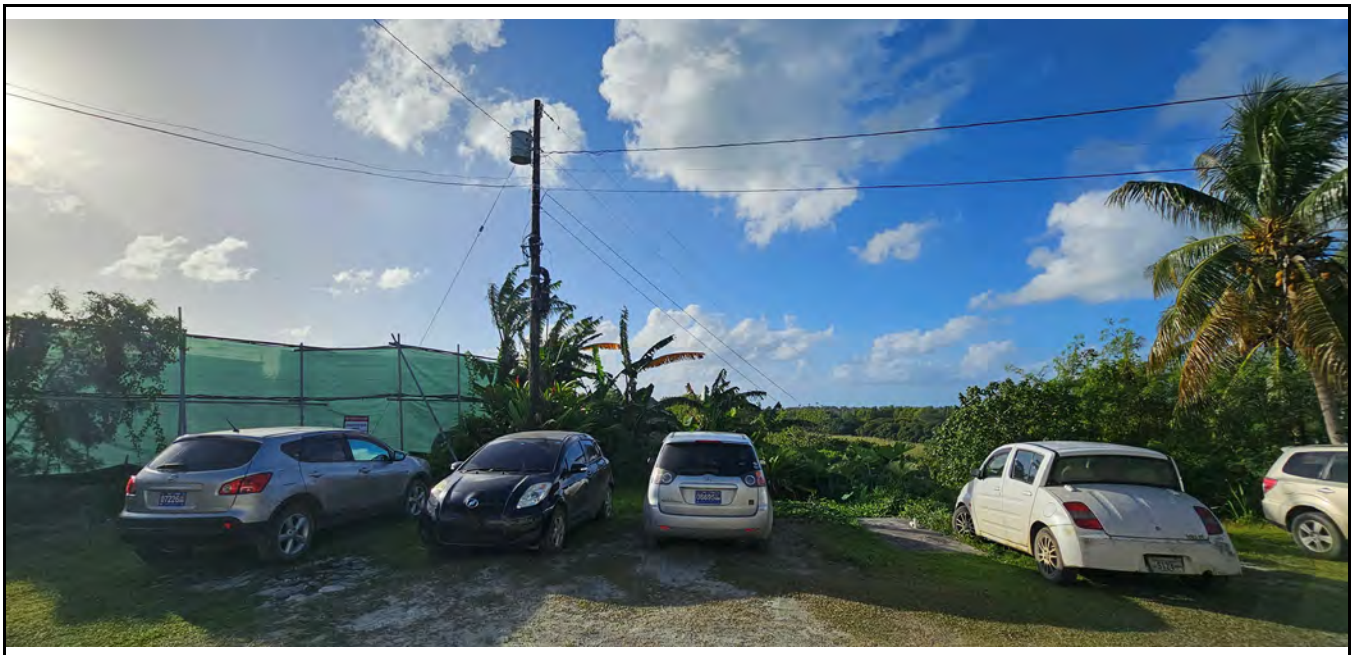


Photo 383	**Description**	A pole-mounted transformer located within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 384	**Description**	A pad-mounted transformer located at the ARFF facility within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 385	**Description**	A pad-mounted transformer located adjacent to the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 386	**Description**	A pad-mounted transformer located adjacent to the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 387	**Description**	A dry-type transformer located within the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 388	**Description**	A wall-mounted transformer located within the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 389	**Description**	A dry-type transformer located within the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 390	**Description**	Two wall-mounted transformers located within the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 391	**Description**	Two wall-mounted transformers located within the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 392	**Description**	An electrical equipment cabinet located within the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 393	**Description**	An electrical equipment cabinet located within the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 394	**Description**	A wall-mounted transformer located within the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers

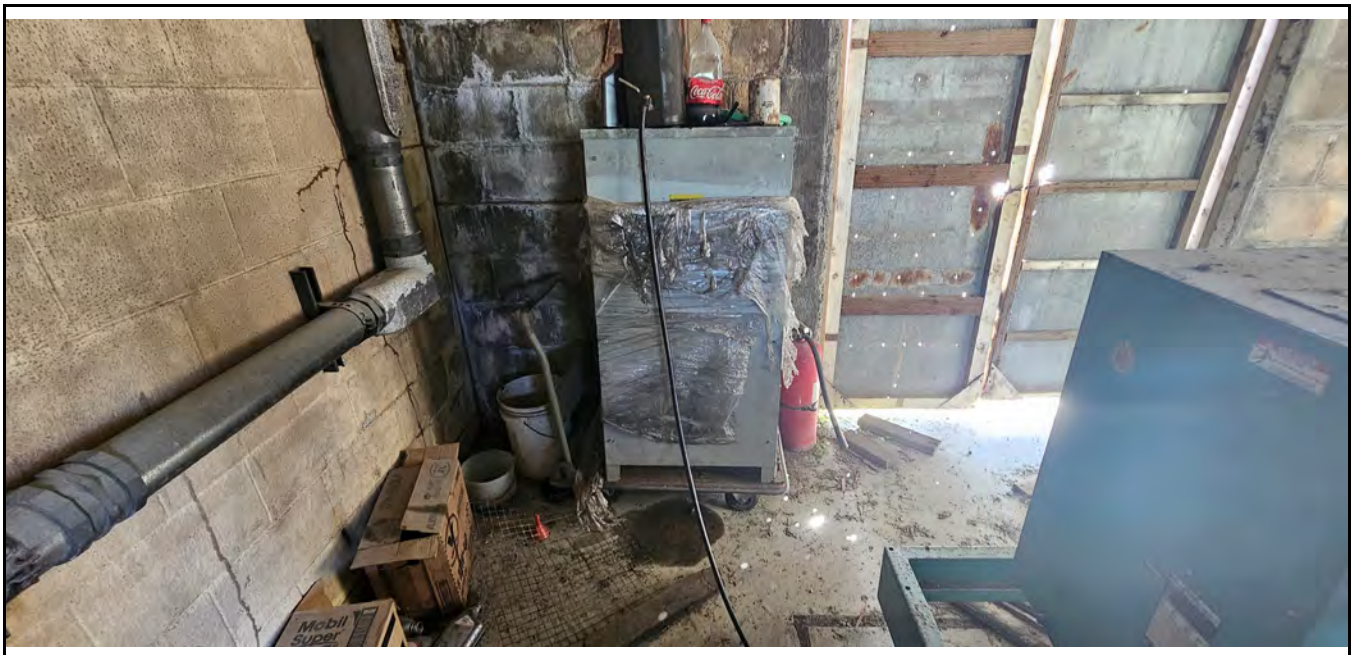


Photo 395	**Description**	A dry-type transformer located within the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 396	**Description**	A pole-mounted transformer within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 397	**Description**	A 2,000-gallon diesel AST and 55-gallon steel drum located within the ARFF facility within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 398	**Description**	Three shipping tanktainer ASTs located at the PMA ramp within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 399	**Description**	A portable 190-gallon AVGAS 100LL AST stored within the PMA hangar within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 400	**Description**	A 1,000-gallon AFFF AST located within the ARFF facility within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 401	**Description**	A diesel fuel dispenser located within the ARFF facility within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 402	**Description**	A former tanker truck AST stored adjacent to the PMA hangar within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 403	**Description**	A former aircraft fuel tank converted to a rain water catchment AST adjacent to the PMA hangar within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 404	**Description**	Three large water ASTs located within the ARFF facility within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 405	**Description**	A remnant AST mount and secondary containment adjacent to the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 406	**Description**	A 1,000-gallon diesel AST located adjacent to the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 407	**Description**	A 1,000-gallon diesel AST located adjacent to the new generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 408	**Description**	A fuel truck parked at the Vital/FSM fuel farm within Zone 8.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 409	**Description**	Two 5,000-gallon Jet A-1 ASTs located within the Vital/FSM fuel farm within Zone 8.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 410	**Description**	A fuel port located within the Yap IAP ramp area within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 411	**Description**	A fuel port located within the Yap IAP ramp area within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 412	**Description**	A fuel port located within the Yap IAP ramp area within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 413	**Description**	A fuel port located within the Yap IAP ramp area within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 414	**Description**	Six 55-gallon steel drums containing waste oil and waste tires stored within the PMA warehouse within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 415	**Description**	Four 55-gallon steel drums stored within the PMA warehouse within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 416	**Description**	Three 55-gallon steel drums stored outside the PMA warehouse within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 417	**Description**	A 55-gallon steel drum and three 5-gallon buckets used for waste oil transportation and storage within the PMA hangar within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 418	**Description**	A 55-gallon steel drum of oil and five compressed-gas cylinders stored within the PMA hangar within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 419	**Description**	Three 55-gallon steel drums of oil stored within the PMA hangar within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 420	**Description**	Four 55-gallon steel drums of oil stored within the PMA hangar within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 421	**Description**	Four 55-gallon polyethylene drums and several 5-gallon buckets of AFFF stored within the ARFF facility within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 422	**Description**	Four 55-gallon drums stored within the ARFF facility within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 423	**Description**	Nine 55-gallon steel drums and two 30-gallon steel drums stored near the ARFF burn pit within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 424	**Description**	Four 55-gallon steel drums stored within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 425	**Description**	A 55-gallon steel drum stored within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 426	**Description**	A 55-gallon steel drum adjacent to the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 427	**Description**	A 55-gallon steel drum adjacent to the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 428	**Description**	Various small-quantity petroleum product and hazardous substance containers located in the PMA hangar in Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 429	**Description**	Various small-quantity hazardous substance containers located in the PMA hangar in Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 430	**Description**	Various small-quantity petroleum product and hazardous substance containers located in the PMA hangar in Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 431	**Description**	A diesel-powered emergency generator located within the ARFF facility within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 432	**Description**	Twelve lead-acid vehicle batteries stored within the ARFF facility within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 433	**Description**	Fifteen 5-gallon containers of dry chemical extinguishing agent stored within the ARFF facility within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 434	**Description**	Two ARFF trucks stored within the ARFF facility within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 435	**Description**	Three gasoline-powered light towers stored within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 436	**Description**	Three diesel-powered portable generators stored within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 437	**Description**	A diesel-powered forklift stored within the Yap IAP ramp area within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 438	**Description**	Thirteen 5-gallon containers of traffic paint stored within the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 439	**Description**	A diesel-powered skyjack located within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 440	**Description**	A smaller diesel-powered generator building located between the old and new generator buildings within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 441	**Description**	A diesel-powered generator located within the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 442	**Description**	A smaller diesel-powered generator building located between the old and new generator buildings within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 443	**Description**	An diesel-powered generator located within the new generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 444	**Description**	An diesel-powered generator located within the new generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 445	**Description**	Large amounts of cleaning chemicals stored within the quarantine facility within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 446	**Description**	Five 5-gallon containers of fuels and hazardous substances stored within the Yap IAP administration building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 447	**Description**	An old and unused ARFF truck stored within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 448	**Description**	A derelict tractor is stored adjacent to the Yap IAP administration building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers

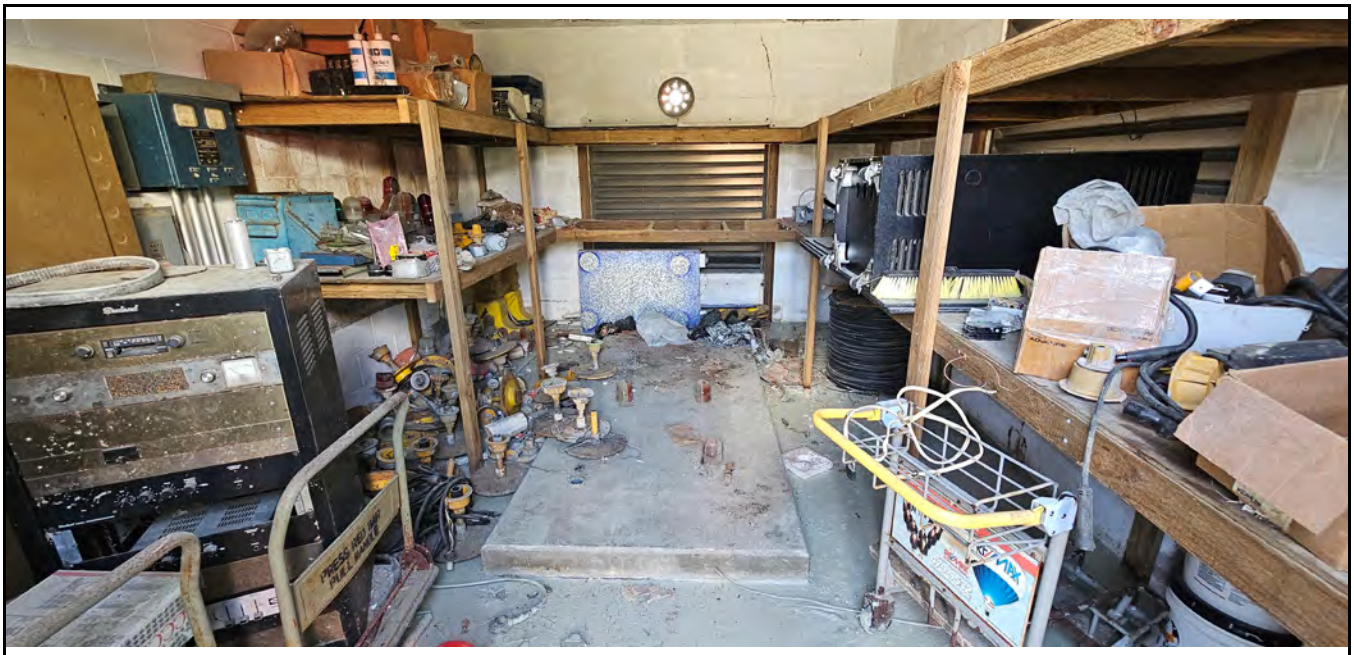


Photo 449	**Description**	Scrap equipment and parts stored within the old generator building within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 450	**Description**	Stockpiled soil located at the PMA ramp within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 451	**Description**	Fill material from a razed hill near the ARFF facility within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 452	**Description**	Stockpiled soil stored within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 453	**Description**	Stockpiled soil stored within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 454	**Description**	Stockpiled soil and gravel within the construction laydown yard within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 455	**Description**	A stormwater drain inlet located within the ARFF facility within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 456	**Description**	A stormwater drainage feature located within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 457	**Description**	A stormwater drainage feature located within the Yap IAP ramp within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 458	**Description**	Stormwater drainage features located within the Yap IAP ramp within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 459	**Description**	Water runoff from the construction laydown yard within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 460	**Description**	A sink drains to the ground within the Vital/FSM fuel farm within Zone 8.
Photo Date 2/15/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 461	**Description**	A drain pipe located within Zone 8.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Yap International Airport Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers

Appendix D

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Appendix E

Interviews

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Interviews

Interviews were conducted with personnel on-site during the Environmental Baseline Survey (EBS) Visual Site Inspection (VSI) and via email through consolidated lists that were distributed by the Department of the Air Force (DAF). The primary topics of discussion are summarized below by individuals.

Venatus Choay, Manager for the Yap International Airport (IAP) (interviewed via emails and during VSI)

- The fuel tank facility next to the airport is not connected to the pipelines beneath the apron, and he was uncertain whether it ever would be, citing concerns about training procedures and insufficient equipment.
- He mentioned that he lacks any significant knowledge about past environmental issues or work at the airport because he is relatively new to his position.

Jeff Adalbai, Mayor of Rull Municipality (interviewed during field investigation)

- There are significant concerns regarding stormwater runoff affecting the extensive mangrove habitat located south of the project site, as the entire area slopes in that direction. This issue has been prevalent since the airport's construction in the 1980s. He emphasized that the Yap Government would want clarification on how the impacts of stormwater runoff will be considered, avoided, and mitigated.
- The mangrove ecosystem is vital to the island residents, particularly in light of rising sea levels and other environmental issues. Access to the mangroves is through a private village, making it somewhat challenging to find.
- He suggested that we reach out to Margi Falanruw, a prominent U.S. Geological Survey (USGS) scientist with extensive experience in the Federated States of Micronesia (FSM), Palau, and Guam over the past five decades, to engage in discussions about plants, geology, and hydrology.
- Acknowledged receipt of the EBS questionnaire but has not responded.

Amos Collins, Director of Flight Operations for Pacific Mission Aviation (PMA) (interviewed during VSI)

- Has worked for PMA for 20 years with experience in medevac, search and rescue, and commercial flight operations within and around Yap.
- New fuel piping was installed beneath the YAP IAP apron connecting two in-ground hydrants to the Vital FSM Fuel Farm east of the apron around 2010, but it is not in use/connected. Suggested the lack of use due to missing equipment and/or a lack of training.
- Petroleum wastes associated with PMA operations include lubricants, cleaners, and degreasers.
- Hazardous substance wastes associated with PMA operations include Jet A-1 and AVGAS fuels, coolants, refrigerants, cleaners, and electronic components that may contain hazardous substances.
- Waste fluids are stored in 55-gallon drums. Currently, there are no proper disposal options on the island.

- AVGAS is delivered to PMA via ship in 7,000-gallon Iso-containers; Vital FSM delivers Jet A-1 via fuel trucks.
- A single pole-mounted transformer, located south of the PMA hangar building, was replaced when the prior transformer failed as a result of the installation of a new air compressor within the facility.
- A local vendor for disposal pumps out the on-site septic tank at a wastewater treatment plant.
- Municipal solid waste generated at the site is brought to the landfill by PMA.

John Geros, Facility Technician for National Oceanic and Atmospheric Administration (NOAA) (interviewed during VSI)

- Fuel is purchased at a nearby gas station for small gasoline-powered equipment used for landscaping and vegetation management as needed. Waste oils and fuels are disposed of at the Aircraft Rescue and Fire-Fighting (ARFF) burn pit.
- Hydrogen is used for sounding balloons twice daily.

On-Duty Supervisor (name unknown) and Dominic Brug, Yap IAP ARFF Commander (interviewed during VSI)

- Discussed equipment inventory for the Yap IAP ARFF station. Yap IAP ARFF possesses three specialized ARFF trucks, an early 2000's OshKosh Striker P-19, a mid-2010's OshKosh Striker 3000, and an early 2020's OshKosh Striker 3000. The OshKosh Striker P-19 is no longer in use, while both of the 3000s have an AFFF capacity of 420 gallons and a water capacity of 3,000 gallons.
- A 1,000-gallon unknown type of AFFF Concentrate AST (approximately 70% full [700 gallons]) and several smaller containers of National Foam Aer-o-Lite 3% are stored on-site. The Yap IAP ARFF was instructed not to use them in late 2022; however, they had been in use before that time. AFFF was ordered from OshKosh and was delivered from Saipan.
- Used and "dirty" oils are placed near the burn pit to be burned during fire training exercises. Solid waste is delivered to the landfill.
- The diesel-powered emergency generator has not worked since early 2020.

Kevin Nishimura, Environmental Protections Specialist with the Federal Aviation Facility (FAA) (interviewed via email through U.S. Army Corps of Engineers)

- Stated that the FAA has no information pertaining to past environmental work conducted at Yap IAP.
- They do not possess any related files and do not directly engage in construction work at the Yap IAP.

Jodie Fite, UXO Specialist for Jacobs Engineering (interviewed during VSI)

- Discussed four Japanese Zero's observed within Zone 2.

Joy Joyner, Unexploded Ordnance (UXO) Tech for Jacobs Engineering (interviewed via email with E2)

- Discussed Explosive Remnants of War (ERW) protocols.

Captain Terrance Wheeler, Oceania Engagement Team for Naval Facilities Engineering Systems Command (NAVFAC) Oceania (interviewed via emails and during VSI)

- Discussed aircraft components and ERW and reporting requirements. Captain Wheeler stated that the host nation is responsible for ERW; however, any findings should be reported to him for documentation.
- Safety hazards during the fieldwork are due to the dense jungle; the field teams walk over suspect ERW items before they even see them.
- A 1980 agreement was made whereby the community was supposed to remove grave sites from within the airport property.
- He mentioned that he had no useful information about the properties.

Captain Ted Donahue, Officer-in-Charge for the FSM team, NAVFAC Oceania (interviewed via emails)

- Airport access.
- Deconfliction meetings.

Christina Fillmed, Executive Director for the Yap Environmental Protection Agency (EPA) (Interviewed by meeting with Matt Welsh, Air Force Installation and Mission Support Center [AFIMSC] Det 2/CEV, National Environmental Policy Act [NEPA] Project Manager)

- Invasive species that are not in Yap include Coconut Rhinoceros Beetle (C.R.B.) and Brown Trees Snake (B.T.S.). Little Fire Ant (LFA) are in Yap and have not yet been eradicated. Chain of Love already eradicated in Yap. The most important thing is to keep those invasive species from coming to Yap.
- There are ten terrestrial plants and vines invasive species that we want to minimize or stop the movement of them around the island.
- No banded hornets have been documented in Yap.

Jordan Mautaman, with the Yap State EPA (interviewed via email from Lorraine Shaughnessy, the Environmental Program Lead for Joint Posture Management Office [JPMO], U.S. Indo-Pacific Command [INDOPACOM] J44/NAVFAC and during VSI)

- Regulations in Yap and the need to engage with the Yap Government often in determining the best way to implement their regulations.
- Discussed the extent of Yap EPA's operations. Priority operations for Yap EPA include residential and commercial inspections for solid waste handling (mainly the storage and disposal of municipal waste) or responding to complaints regarding waste. This indicates that Yap EPA does not have enforcement authority; however, it works with chiefs to encourage "clean" residences and commercial facilities. Other than drinking water, Yap EPA has not set environmental action levels for contamination of soils or groundwater and has not yet regulated disposal of wastes other than solid waste, although efforts to address hazardous waste concerns were initiated in 2023.

Various Island Residents (interviewed during VSI)

- Discussed the two Japanese or German anti-aircraft gun bases observed just south of the runway. Germans did have a presence on the island, and there was a German harbor on the south side of the island.
- Discussed access to the Fuel Farm with Vital FSM, was unresponsive to multiple requests.
- Discussed and gained access to GPPC, Inc. Facility through a security guard at the front gate of the facility.
- Discussed the junkyard located between the GPPC, Inc. Facility and the Yap IAP runway with a local resident who lives on a hill overseeing the northwest side of the facility (the junkyard is visible clearly from their location). The junkyard was recently moved from a location approximately 500 feet to the northeast of its current location and was moved using excavators.
- Discussed the locations of several WWII burial sites near a village in Zone 1 with a local resident.

Theo Thinnifel, the Director for Yap State Department of Public Works and Transportation (Interviewed via emails from Brent Ciboch, AFIMSC Det 2/CEB, Military Construction [MILCON] Project Manager)

- Only a few of the landowners neighboring the airport have undergone a metes and bound survey, while the majority remain un-surveyed. After the government did the initial survey, metes and bounds, of all the areas within the safety zone, some areas along the southern side of the runway but outside the safety zone were also surveyed in which ownership was established and is on record.
- He will ask the Land Resource Division to provide any records they have outside the Safety Zone. He noted that the Chief of the municipality stated that all the areas on the north side of the runway lay within his area and has the traditional power to negotiate on their behalf for the use or lease of those areas, especially for important government projects. The traditional Chiefs hold sway on matters related to land in general, but most especially land whose ownership had not been determined. As mentioned, they have briefed the relevant chiefs on the military interest and the subject land areas of interest and are prepared to assist when needed.
- The Department of Public Works has been assigned by the governor of the state of Yap to coordinate and ensure that this project, as a government priority project, is afforded all the assistance from all the relevant government agencies and the traditional leadership to get things moving.
- There is a chance of ERW; however, based on past experiences during runway construction, most were located underground during earthmoving operations, but many were found. The Land Resources Division might possess relevant maps.
- There are three or four big guns above the runway, but hardly anybody from World War II is still around with the memory to be able to identify these areas.
- He is not aware of anyone on the island who has UXO training.
- The Land Resources Office is the government depository.
- He was not aware of any known or suspected archaeological sites within the survey area. Relevant Chiefs and landowners may have more knowledge of this.

- Yap does not have an environmental office.
- Fire ants are the only invasive species he is aware of.
- He is not aware of an existing archive for past environmental efforts related to the Yap IAP.
- Mentioned that they still have most of the old blueprints, as-builts. He thought that since the USACE was the inspecting unit, it may also have this information. The gravel aggregate was sourced from Taiwan.
- The FAA mandates inspection of our firefighting, aviation fuel, and runway navigational aid capacity, capabilities, and standards.
- Currently, all wastewater and solids at the airport are linked to the main sewer line; however, the use of septic tank storage is also permissible for subsequent pumping by the Sewer and Water Corporation.
- The disposal method for solid waste is disposed of in the following methods:
    - Scrap metals, plastic, and cardboard/paper disposal services are contracted to a private contractor for pick-up and delivery to the central public waste disposal area.
    - Aluminum cans and materials, pet-type plastic, and batteries are sent to the recycling center.
    - Waste petroleum products are stored in drums and shipped off the island.
    - Concrete, asphalt, and contaminated soil are used in areas as backfill (e.g., at the end of runway 25, there is a drop in elevation of roughly 40 feet, which we could use as the disposal area).
- Clean, drinkable water is accessible in the city, with monthly water quality checks conducted by the EPA. Only wells are located on adjacent properties near the old Zero runway about 1,000 feet south of the Runway. There are four or five wells drilled down to the water lens.
- The source of potable water on the island is from the underground water lens up in the northern and southern parts of the Island and the pond close to town.

Tommy Fathal, Local Guide that was recommended by Jeff Adalbai, the Mayor of Rull Municipality (interviewed during VSI)

- Accompanied the field team during the entirety of the survey period, directing the field team to known aircraft and vehicle remnants and communicating with the local population encountered within and around the survey area.
- Directed the field team to several historical WWII sites containing aircraft wreckage and remnants as well as vehicle remnants, anti-aircraft gun emplacements, and coastal defense gun mounts.
- Assisted with communication between local residents and the field team (See Various Island Residents above).

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Appendix F

Windshield Survey of Port Road

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Section 1 Windshield Survey of Port Road

1.1 Methodology and Limitations

The windshield visual site inspection (VSI) of the roadway area from Colonia Harbor to the project site was conducted by Mr. John Ellis and Mr. James Tsubone of Element Environmental, LLC on February 27, 2024, and included a brief survey of visible portions of the adjacent areas from public access areas when possible. A lack of clear property boundaries, occasional dense vegetation, and steep topography in areas limited the VSI. Site photographs are included in Appendix F-1.



Aerial 1: Port Road Location

1.2 General Observations on the Subject Property

At the time of the windshield VSI, the roadway portion of the project totaled approximately 2.62 miles in length, was concrete paved, and varied from poor to good condition. Evidence of underground public utilities (water, sewer, communication) and aboveground power and communication utilities were observed beneath, along, or above the entire length of the roadway area. Phase I Environmental Site Assessment-related concerns are listed below by category and include distances (in roadway miles) from the project boundary in an easterly direction. Concerns listed within the Colonia Harbor area are 2.37 miles or more from the project site.

1.2.1 Hazardous Substances and Petroleum Products

Five lead-acid automotive batteries were stored on bare ground about 50 feet south of the roadway area within Colonia Harbor.

Diesel- or gasoline-powered emergency generators were observed immediately adjacent to the roadway area at the following locations:

- The Colonia Police Station, 2.20 miles east, north of the roadway.
- Colonia Harbor, south of the roadway.

Aboveground petroleum pipelines were observed adjacent to the portion of the roadway area connecting Vital FSM's harbor fuel farm to the Colonia commercial and harbor areas. The two 8-inch pipelines were immediately adjacent to the east of the roadway area between 2.28 and 2.29 miles east of the project site and ran along the shoreline before entering the ground and continuing in an unknown direction. The pipelines were in good condition, and no evidence of leaks or releases was observed during the windshield VSI.

Three fuel dispensers were located at the Coco Service Station 1.09 miles east of the project site and about 100 feet south and upgradient of the roadway area. One fuel dispenser was labeled "Unleaded" (gasoline), and the other two were labeled "Diesel." No evidence of spills, leaks, or releases was observed during the windshield VSI.

A fuel dispenser was not observed at the YCA gas station within Colonia Harbor; however, it is expected that a fuel dispenser and associated underground piping exist in an area of the gas station that is not visible from the roadway area.

1.2.2 Evidence of Aboveground Storage Tanks (ASTs)

Three ASTs of various sizes (approximately 2,500, 5,000 [x2]) were located at the Coco Service Center, about 150 feet south and upgradient of the roadway area and at a distance of 1.09 miles east of the project site. The ASTs were not labeled in an area visible from the roadway; however, an "Unleaded" (gasoline) fuel dispenser and two "Diesel" fuel dispensers were observed in front of the service station. No secondary containment was observed around the ASTs.

An approximately 1,000-gallon AST was located about 150 feet south of the roadway area and elevated about 15 feet above the ground surface along the harbor shoreline at the YCA gas station within Colonia Harbor. The AST was not labeled in an area visible from the roadway. No secondary containment was observed around the AST.

Two approximately 7,000-gallon ISO tanks were stored immediately adjacent to the south of the roadway at the YCA gas station within Colonia Harbor. One of the ISO tanks was labeled AVGAS 100LL (Aviation Gas, 100 octane, Low-Level Tetra Ethyl Lead), while the other ISO tank was not labeled in an area visible from the roadway. No secondary containment was observed around the ISO tanks.

Two approximately 10,000-gallon ASTs were located immediately adjacent to the south of the roadway area at the YCA gas station within Colonia Harbor. The ASTs were not labeled in an area visible from the roadway. Secondary containment was observed around the ASTs.

One approximately 10,000-gallon AST was located about 50 feet south of the roadway area within Colonia Harbor. The AST was not labeled in an area visible from the roadway. Secondary containment was observed around the AST.

Two heavily damaged derelict ASTs were located about 100 feet south of the roadway area within Colonia Harbor. The ASTs were not labeled in an area visible from the roadway. No secondary containment was observed around the ASTs.

1.2.3 Evidence of Underground Storage Tanks (USTs)

No evidence of USTs was observed during the windshield VSI.

1.2.4 Drums, Totes, and Unidentified Substance Containers

Approximately fifty 55-gallon steel drums were horizontally stored immediately adjacent to the south of the roadway area at the YCA gas station within Colonia Harbor. The drum labels were missing or otherwise not visible from the roadway.

1.2.5 Odors

No odors were observed during the windshield VSI.

1.2.6 Pools of Liquid

No pools of liquid (other than stormwater runoff) were observed during the windshield VSI.

1.2.7 Evidence of Potential Polychlorinated Biphenyls (PCBs)

Pole-mounted transformers were observed frequently throughout the roadway area, including Colonia Harbor. The Yap EPA does not regulate nor keep records of transformer PCB status. It is possible that all transformers, including historical and new units, may contain PCB-containing fluids.

In-ground and pad-mounted communication and electrical equipment cabinets were observed frequently throughout the entirety of the roadway area. Although the equipment type is unknown, there is a potential for transformers, capacitors, and other equipment containing PCB-containing insulating fluids to be present within these cabinets.

No obvious evidence of PCB releases was observed during the windshield VSI.

1.2.8 Heating/Cooling

No heating or cooling systems were observed during the windshield VSI.

1.2.9 Evidence of Leaks, Spills, and Releases

No evidence of leaks, spills, or releases was observed during the windshield VSI.

1.2.10 Drains and Sumps

Stormwater drainage features, including culverts, channels, drain inlets, and outfalls, were observed frequently throughout the roadway area.

1.2.11 Unknown Features

No unknown features were observed during the windshield VSI.

1.2.12 Pits, Ponds, and Lagoons

No pits, ponds, or lagoons were observed during the windshield VSI.

1.2.13 Stained Soil and Pavement

No stained soil or pavement was observed during the windshield VSI.

1.2.14 Stressed Vegetation

No stressed vegetation was observed during the windshield VSI.

1.2.15 Solid Waste

Municipal solid waste, construction and demolition debris, waste tires, and derelict vehicles and equipment were observed throughout the Colonia Harbor area along the edges of and adjacent to the north and south of the roadway area.

A junkyard consisting of a crane, several shipping containers, and several vehicles was observed immediately adjacent to the north of the roadway area within Colonia Harbor.

Two large derelict ships and a small boat were beached/sunk along the southeast portion of Colonia Harbor.

1.2.16 Wastewater Discharges

No wastewater discharges were observed during the windshield VSI.

1.2.17 Wells

No wells were observed during the windshield VSI.

1.2.18 Septic Systems

Sewage lift stations were observed immediately adjacent to the roadway area at the following locations:

- 0.20 miles east, east of the roadway.
- 1.29 miles east, south of the roadway.

The Yap Wastewater Treatment Plant was observed on the northeast portion of Colonia Harbor, adjacent to the northeast of the roadway area.

1.3 Adjacent Property Observations

Derelict vehicle storage was observed at several locations adjacent to the roadway area; however, due to the distance and/or gradient from the roadway area, this was not considered to be a significant concern.

Appendix F-1

Site Photos

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Photo 1	**Description**	Waste tires and lead-acid vehicle batteries stored on the ground within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 2	**Description**	An emergency generator and three pole-mounted transformers located north of the roadway area.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 3	**Description**	An emergency generator and two pole-mounted transformers located within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 4	**Description**	Two 8-inch petroleum pipelines located east of the roadway area.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 5	**Description**	Three fuel dispensers located at the Coco Service Center south of the roadway area.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 6	**Description**	The YCA gas station within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 7	**Description**	Three ASTs of various sizes located at the Coco Service Center south of the roadway area.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 8	**Description**	A 1,000-gallon AST (left) located within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 9	**Description**	Two 7,000-gallon shipping tanktainers and a pad-mounted transformer stored along the roadway area within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 10	**Description**	Two 10,000-gallon ASTs and approximately fifty 55-gallon steel drums stored along the roadway area within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 11	**Description**	A 10,000-gallon AST located within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 12	**Description**	Two large derelict ASTs located within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 13	**Description**	A pole-mounted transformer located north of the roadway area.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 14	**Description**	A remnant pole-mounted transformer platform located within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 15	**Description**	Three pole-mounted transformers located within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 16	**Description**	A sewage lift station and two pole-mounted transformers located south of the roadway area.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 17	**Description**	Municipal solid waste and construction and demolition debris stored within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 18	**Description**	Municipal solid waste and construction and demolition debris stored within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 19	**Description**	Scrap vehicle parts and waste tires stored adjacent to the roadway area within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 20	**Description**	Derelict vehicles stored adjacent to the roadway area within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 21	**Description**	Derelict vehicles stored adjacent to the roadway area within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 22	**Description**	A junkyard containing derelict equipment and vehicles located within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 23	**Description**	Two large derelict ships and a small derelict boat stored within Colonia Harbor
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 24	**Description**	A sewage lift station located south of the roadway area.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 25	**Description**	The Yap Wastewater Treatment Plant located within Colonia Harbor.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 26	**Description**	A derelict vehicle stored adjacent to the south of the roadway area.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: 210087	**Client**	United States Army Corps of Engineers



Photo 27	**Description**	Derelict vehicles stored on an adjacent property south of the roadway area.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers



Photo 28	**Description**	A junkyard containing derelict equipment and vehicles located north and downgradient of the roadway area.
Photo Date 2/27/2024	**Site Name**	Phase I Environmental Baseline Survey Windshield Survey of Road to Harbor Yap, Federated States of Micronesia
E2 Project No.: **210087**	**Client**	United States Army Corps of Engineers

Photo	Zone	Category(s)	Subject
1	1	None	An overall view of a portion of Zone 1.
2	1	None	An overall view of a portion of Zone 1.
3	1	None	An overall view of a portion of Zone 1.
4	1	None	An overall view of a portion of Zone 1.
5	1	None	An overall view of a portion of Zone 1.
6	1	None	An overall view of a portion of Zone 1.
7	1	None	An overall view of a portion of Zone 1.
8	1	None	An overall view of a portion of Zone 1.
9	1	None	An overall view of a portion of Zone 1.
10	1	None	An overall view of a portion of Zone 1.
11	1	None	An overall view of a portion of Zone 1.
12	1	None	An overall view of a portion of Zone 1.
13	1	None	An overall view of a portion of Zone 1.
14	1	None	An overall view of a portion of Zone 1.
15	1	None	An overall view of a portion of Zone 1.
16	1	None	An overall view of a portion of Zone 1.
17	1	None	An overall view of a portion of Zone 1.
18	1	Polychlorinated Biphenyls	A pole-mounted transformer located within Zone 1.
19	1	Polychlorinated Biphenyls	An equipment cabinet associated with a cellular antenna tower within Zone 1.
20	1	Polychlorinated Biphenyls	A cellular antenna tower located within Zone 1.
21	1	Storage Tanks	An unlabeled portable AST stored within Zone 1.
22	1	Storage Tanks, Drinking Water Quality	A large water AST within Zone 1.
23	1	Storage Tanks, Drinking Water Quality	A water filtration facility with multiple ASTs within Zone 1.
24	1	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	Municipal solid waste, scrap vehicle parts, a 55-gallon polyethylene drum, and derelict vehicles stored within Zone 1.
25	1	Hazardous Substances, Petroleum Products and Derivatives	A derelict vehicle and a 55-gallon steel drum stored within Zone 1.
26	1	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	A 55-gallon steel drum and municipal solid waste stored within Zone 1.
27	1	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	A 55-gallon steel drum and municipal solid waste stored within Zone 1.
28	1	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	A 55-gallon steel drum and scrap metal waste stored within Zone 1.
29	1	Hazardous Substances, Petroleum Products and Derivatives	Remnants of a 55-gallon steel drum stored within Zone 1.
30	1	Hazardous Substances, Petroleum Products and Derivatives	Remnants of a 55-gallon steel drum stored within Zone 1.
31	1	Hazardous Substances, Petroleum Products and Derivatives	A rusty 55-gallon steel drum stored within Zone 1.
32	1	Hazardous Substances, Petroleum Products and Derivatives	A rusty 55-gallon steel drum stored within Zone 1.
33	1	Hazardous Substances, Petroleum Products and Derivatives	A derelict vehicle and two lead-acid automotive batteries stored within Zone 1.
34	1	Hazardous Substances, Petroleum Products and Derivatives	A lead-acid automotive battery and a derelict vehicle stored within Zone 1.
35	1	Hazardous Substances, Solid/Municipal Waste	A lead-acid automotive battery, scrap vehicle parts, and a hazardous substance container stored within Zone 1.
36	1	Hazardous Substances, Solid/Municipal Waste	A lead-acid automotive battery and scrap vehicle parts stored within Zone 1.
37	1	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	A lead-acid automotive battery, scrap vehicle parts, hazardous substance containers, and waste tires stored within Zone 1.
38	1	Hazardous Substances, Solid/Municipal Waste	A radiator and scrap vehicle parts within Zone 1.
39	1	Hazardous Substances, Solid/Municipal Waste	Two radiators and scrap metal parts within Zone 1.

Photo	Zone	Category(s)	Subject
40	1	Hazardous Substances, Solid/Municipal Waste	Two lead-acid automotive batteries and scrap vehicle parts within Zone 1.
41	1	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	Oil filters and small containers of petroleum products and hazardous substances stored within Zone 1.
42	1	Hazardous Substances, Solid/Municipal Waste	Two lead-acid automotive batteries and scrap vehicle parts within Zone 1.
43	1	Hazardous Substances	Nine lead-acid automotive batteries stored within Zone 1.
44	1	Hazardous Substances	Twenty lead-acid automotive batteries stored within Zone 1.
45	1	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	An automotive workshop within Zone 1.
46	1	Hazardous Substances, Petroleum Products and Derivatives	Petroleum staining and a lead-acid automotive battery stored within Zone 1.
47	1	Hazardous Substances, Solid/Municipal Waste	Two lead-acid automotive batteries and scrap vehicle parts within Zone 1.
48	1	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	Gasoline-powered equipment and 1-gallon paint containers stored within Zone 1.
49	1	Petroleum Products and Derivatives, Solid/Municipal Waste	A 5-gallon container partially full of used automotive oil stored within Zone 1.
50	1	Hazardous Substances, Petroleum Products and Derivatives	A 5-gallon container partially full of used automotive oil and three 5-gallon hazardous substance containers stored within Zone 1.
51	1	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	A derelict vehicle with solid waste stored in the bed stored within Zone 1.
52	1	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	A derelict vehicle, scrap vehicle parts, and scrap metals stored within Zone 1.
53	1	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	A derelict vehicle and scrap vehicle parts stored within Zone 1.
54	1	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	A derelict vehicle, scrap vehicle parts, and waste tires stored within Zone 1.
55	1	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	A derelict vehicle and scrap metal waste stored within Zone 1.
56	1	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	A derelict vehicle and scrap metal waste stored within Zone 1.
57	1	Hazardous Substances, Petroleum Products and Derivatives	Derelict vehicles stored within Zone 1.
58	1	Hazardous Substances, Petroleum Products and Derivatives	Derelict vehicles stored within Zone 1.
59	1	Hazardous Substances, Petroleum Products and Derivatives	Derelict vehicles stored within Zone 1.
60	1	Hazardous Substances, Petroleum Products and Derivatives	Derelict vehicles stored within Zone 1.
61	1	Hazardous Substances, Petroleum Products and Derivatives	Derelict vehicles stored within Zone 1.
62	1	Hazardous Substances, Petroleum Products and Derivatives	Derelict vehicles stored within Zone 1.
63	1	Hazardous Substances, Petroleum Products and Derivatives	A derelict vehicle stored within Zone 1.
64	1	Hazardous Substances, Petroleum Products and Derivatives	A derelict vehicle stored within Zone 1.
65	1	Hazardous Substances, Petroleum Products and Derivatives	A derelict vehicle stored within Zone 1.
66	1	Hazardous Substances, Petroleum Products and Derivatives	A derelict vehicle stored within Zone 1.
67	1	Hazardous Substances, Petroleum Products and Derivatives	A derelict vehicle stored within Zone 1.
68	1	Hazardous Substances, Solid/Municipal Waste	A small burn pit and small amounts of municipal solid waste stored within Zone 1.
69	1	Solid/Municipal Waste	Municipal solid waste stored within Zone 1.
70	1	Solid/Municipal Waste	Municipal solid waste stored within Zone 1.

Photo	Zone	Category(s)	Subject
71	1	Solid/Municipal Waste	Scrap vehicle parts, and scrap metal stored within Zone 1.
72	1	Solid/Municipal Waste	Municipal solid waste stored within Zone 1.
73	1	Solid/Municipal Waste	Municipal solid waste stored within Zone 1.
74	1	Solid/Municipal Waste	Municipal solid waste stored within Zone 1.
75	1	Solid/Municipal Waste	Municipal solid waste stored within Zone 1.
76	1	Solid/Municipal Waste	Municipal solid waste stored within Zone 1.
77	1	Solid/Municipal Waste	Scrap vehicle parts stored within Zone 1.
78	1	Solid/Municipal Waste	Scrap vehicle parts and waste tires stored within Zone 1.
79	1	Solid/Municipal Waste	Waste tires stored within Zone 1.
80	1	Solid/Municipal Waste	Waste tires stored within Zone 1.
81	1	Solid/Municipal Waste	Scrap metal waste stored within Zone 1.
82	1	Hazardous Substances, Solid/Municipal Waste	A burn pit located within Zone 1.
83	1	Wastewater Treatment, Collection, and Disposal/Discharge	A drain pipe outfalls to bare soil from an automotive shop within Zone 1.
84	1	Military Munitions/Ordnance	A bomb hole located within Zone 1.
85	1	Military Munitions/Ordnance	A bomb hole located within Zone 1.
86	1	Hazardous Substances, Petroleum Products and Derivatives	A wrecked airplane located within Zone 1.
87	2	Asbestos, Lead-Based Paint	The Family Mart store located within Zone 2.
88	2	None	An overall view of a portion of Zone 2.
89	2	None	An overall view of a portion of Zone 2.
90	2	None	An overall view of a portion of Zone 2.
91	2	None	An overall view of a portion of Zone 2.
92	2	None	An overall view of a portion of Zone 2.
93	2	None	An overall view of a portion of Zone 2.
94	2	None	An overall view of a portion of Zone 2.
95	2	None	An overall view of a portion of Zone 2.
96	2	None	An overall view of a portion of Zone 2.
97	2	None	An overall view of a portion of Zone 2.
98	2	None	An overall view of a portion of Zone 2.
99	2	None	An overall view of a portion of Zone 2.
100	2	None	An overall view of a portion of Zone 2.
101	2	None	An overall view of a portion of Zone 2.
102	2	None	An overall view of a portion of Zone 2.
103	2	None	An overall view of a portion of Zone 2.
104	2	None	An overall view of a portion of Zone 2.
105	2	None	An overall view of a portion of Zone 2.
106	2	None	An overall view of a portion of Zone 2.
107	2	Polychlorinated Biphenyls	Three pole-mounted transformers located within Zone 2.
108	2	Waste Tanks	A septic tank located within Zone 2.
109	2	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	A 55-gallon steel drum, scrap metal waste, and derelict equipment stored within Zone 2.
110	2	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	A 55-gallon steel drum, a waste tire, and an empty 5-gallon bucket are stored within Zone 2.
111	2	Hazardous Substances, Petroleum Products and Derivatives	A 55-gallon steel drum stored within Zone 2.
112	2	Hazardous Substances, Petroleum Products and Derivatives, Lead-Based Paint	Two 55-gallon steel drums stored within Zone 2.
113	2	Hazardous Substances, Petroleum Products and Derivatives	A 55-gallon steel drum stored within Zone 2.
114	2	Hazardous Substances, Solid/Municipal Waste	Four lead-acid automotive batteries and two waste tires stored within Zone 2.
115	2	Hazardous Substances, Solid/Municipal Waste	A lead-acid automotive battery stored within Zone 2.
116	2	Hazardous Substances	A lead-acid automotive battery stored within Zone 2.
117	2	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	Derelict vehicles and scrap vehicle parts stored within Zone 2.

Photo	Zone	Category(s)	Subject
118	2	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	Derelict vehicles and scrap vehicle parts stored within Zone 2.
119	2	Hazardous Substances, Petroleum Products and Derivatives	A derelict vehicle stored within Zone 2.
120	2	Hazardous Substances, Petroleum Products and Derivatives	A derelict vehicle stored within Zone 2.
121	2	Hazardous Substances, Petroleum Products and Derivatives	Derelict vehicles stored within Zone 2.
122	2	Hazardous Substances, Petroleum Products and Derivatives	A derelict vehicle stored within Zone 2.
123	2	Hazardous Substances, Petroleum Products and Derivatives	A derelict vehicle stored within Zone 2.
124	2	Hazardous Substances, Petroleum Products and Derivatives	A derelict vehicle stored within Zone 2.
125	2	Solid/Municipal Waste	Stockpiled soil and scrap metal waste stored within Zone 2.
126	2	Solid/Municipal Waste	Scrap metal waste stored within Zone 2.
127	2	Solid/Municipal Waste	Municipal solid waste stored within Zone 2.
128	2	Solid/Municipal Waste	Scrap metal waste stored within Zone 2.
129	2	Solid/Municipal Waste	A derelict aircraft component located within Zone 2.
130	2	Solid/Municipal Waste	Derelict aircraft components located within Zone 2.
131	2	Solid/Municipal Waste	Derelict aircraft components located within Zone 2.
132	2	Solid/Municipal Waste	Municipal solid waste stored within Zone 2.
133	2	Hazardous Substances, Solid/Municipal Waste	Scrap vehicle parts stored within Zone 2.
134	2	Solid/Municipal Waste	Waste tires stored within Zone 2.
135	2	Solid/Municipal Waste	Scrap metal waste and waste tires stored within Zone 2.
136	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
137	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
138	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
139	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
140	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
141	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
142	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
143	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
144	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
145	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
146	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
147	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
148	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
149	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
150	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
151	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
152	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
153	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
154	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
155	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
156	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
157	2	Solid/Municipal Waste	Stockpiled soil stored within Zone 2.
158	2	Hazardous Substances	A burn pit located within Zone 2.
159	2	Hazardous Substances	A burn pit located within Zone 2.
160	2	Wastewater Treatment, Collection, and Disposal/Discharge	A covered drainage feature located within Zone 2.
161	2	Wastewater Treatment, Collection, and Disposal/Discharge	A covered drainage feature located within Zone 2.
162	2	Wastewater Treatment, Collection, and Disposal/Discharge	A covered drainage feature located within Zone 2.
163	2	Wastewater Treatment, Collection, and Disposal/Discharge	A shower area which drains directly to the ground located within Zone 2.
164	2	Wastewater Treatment, Collection, and Disposal/Discharge	A culvert located within Zone 2.

Photo	Zone	Category(s)	Subject
165	2	Wastewater Treatment, Collection, and Disposal/Discharge	A culvert located within Zone 2.
166	2	Wastewater Treatment, Collection, and Disposal/Discharge	A culvert located within Zone 2.
167	2	Wastewater Treatment, Collection, and Disposal/Discharge	A culvert located within Zone 2.
168	2	Wastewater Treatment, Collection, and Disposal/Discharge	A stormwater drainage feature located within Zone 2.
169	2	Military Munitions/Ordnance	A bomb hole located within Zone 2.
170	2	Military Munitions/Ordnance	A bomb hole located within Zone 2.
171	2	Hazardous Substances, Petroleum Products and Derivatives	Historical airplane wreckages located within Zone 2.
172	2	Hazardous Substances, Petroleum Products and Derivatives	A historical airplane wreckage located within Zone 2.
173	2	Hazardous Substances, Petroleum Products and Derivatives	A historical airplane wreckage located within Zone 2.
174	2	Hazardous Substances, Petroleum Products and Derivatives	A historical airplane wreckage located within Zone 2.
175	2	Hazardous Substances, Petroleum Products and Derivatives	A historical airplane wreckage located within Zone 2.
176	3	Asbestos, Lead-Based Paint	An overall view of a portion of Zone 3.
177	3	Asbestos, Lead-Based Paint	An overall view of a portion of Zone 3.
178	3	Asbestos, Lead-Based Paint	The NOAA facility within Zone 3.
179	3	None	An overall view of a portion of Zone 3.
180	3	None	An overall view of a portion of Zone 3.
181	3	None	An overall view of a portion of Zone 3.
182	3	None	An overall view of a portion of Zone 3.
183	3	Wastewater Treatment, Collection, and Disposal/Discharge	A sewage lift station located within Zone 3.
184	3	None	An overall view of a portion of Zone 3.
185	3	Polychlorinated Biphenyls	An overall view of a portion of Zone 3.
186	3	None	An overall view of a portion of Zone 3.
187	3	Asbestos, Lead-Based Paint	The A.J. Bake Shop located within Zone 3.
188	3	None	An overall view of a portion of Zone 3.
189	3	Storage Tanks, Asbestos, Polychlorinated Biphenyls, Lead-Based Paint	A pad-mounted transformer located at the NOAA facility within Zone 3.
190	3	Wastewater Treatment, Collection, and Disposal/Discharge, Polychlorinated Biphenyls	Two pole-mounted transformers and a sewage lift station located within Zone 3.
191	3	Storage Tanks, Asbestos, Lead-Based Paint	A 1,000-gallon diesel fuel AST located at the NOAA facility within Zone 3.
192	3	Storage Tanks, Asbestos, Lead-Based Paint	A hydrogen compressed-gas AST located at the NOAA facility within Zone 3.
193	3	Hazardous Substances, Petroleum Products and Derivatives	A 55-gallon polyethylene drum containing a spill kit within the NOAA facility within Zone 3.
194	3	Hazardous Substances, Petroleum Products and Derivatives	An unlabeled 55-gallon polyethylene drum within the NOAA facility within Zone 3.
195	3	Hazardous Substances, Petroleum Products and Derivatives	Two 55-gallon steel drums stored within Zone 3.
196	3	Hazardous Substances, Petroleum Products and Derivatives	A 55-gallon steel drum stored within Zone 3.
197	3	Hazardous Substances, Petroleum Products and Derivatives	A 55-gallon steel drum stored within Zone 3.
198	3	Hazardous Substances, Solid/Municipal Waste	Lead-acid batteries, waste tires, and a 5-gallon bucket located within the NOAA facility within Zone 3.
199	3	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	A lead-acid automotive battery, scrap vehicle parts, and a waste tire stored within Zone 3.
200	3	Storage Tanks	Hydrogen-filled compressed gas container storage at the NOAA facility within Zone 3.
201	3	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	A derelict gasoline-powered lawn mower stored at the NOAA facility within Zone 3.

Photo	Zone	Category(s)	Subject
202	3	Hazardous Substances, Solid/Municipal Waste	A gas-powered lawn mower stored at the NOAA facility within Zone 3.
203	3	Hazardous Substances, Solid/Municipal Waste	Petroleum products and hazardous substance containers and gasoline-powered equipment within the NOAA facility within Zone 3.
204	3	Hazardous Substances, Solid/Municipal Waste	A diesel-powered emergency generator located within the NOAA facility within Zone 3.
205	3	Petroleum Products and Derivatives	A 25-gallon diesel day tank located within the NOAA facility within Zone 3.
206	3	Hazardous Substances, Petroleum Products and Derivatives	A burned derelict vehicle stored within Zone 3.
207	3	Hazardous Substances, Petroleum Products and Derivatives	A derelict vehicle stored within Zone 3.
208	3	Hazardous Substances, Solid/Municipal Waste	Buried municipal waste and hazardous substance containers south of the roadway within Zone 3.
209	3	Solid/Municipal Waste	Buried municipal waste and hazardous substance containers south of the roadway within Zone 3.
210	3	Solid/Municipal Waste	Buried municipal waste and hazardous substance containers south of the roadway within Zone 3.
211	3	Hazardous Substances, Solid/Municipal Waste	A soil berm with municipal waste and hazardous substance containers partially buried along its south wall within Zone 3.
212	3	Wastewater Treatment, Collection, and Disposal/Discharge	A culvert located within Zone 3.
213	3	Wastewater Treatment, Collection, and Disposal/Discharge	A culvert located within Zone 3.
214	3	Wastewater Treatment, Collection, and Disposal/Discharge	A stormwater drainage feature located within Zone 3.
215	3	Wastewater Treatment, Collection, and Disposal/Discharge	A stormwater drainage feature located within Zone 3.
216	3	Military Munitions/Ordnance	Remnant of a WWII anti-aircraft gun base located within Zone 3.
217	3	Military Munitions/Ordnance	Remnant of a WWII anti-aircraft gun base located within Zone 3.
218	4	None	An overall view of the 7D Rental storage yard within Zone 4.
219	4	None	An overall view of a portion of Zone 4.
220	4	None	An overall view of a portion of Zone 4.
221	4	None	An overall view of a portion of Zone 4.
222	4	None	An overall view of a portion of Zone 4.
223	4	None	An overall view of a portion of Zone 4.
224	4	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	An overall view of the GPPC, Inc. encroachment portion of Zone 4.
225	4	None	An overall view of a portion of Zone 4.
226	4	None	An overall view of a portion of Zone 4.
227	4	Hazardous Substances, Petroleum Products and Derivatives	Heavy petroleum staining around a 55-gallon steel drum containing hydraulic oil and two compressed-gas cylinders within the GPPC, Inc. facility within Zone 4.
228	4	Petroleum Products and Derivatives	Heavy petroleum staining around two 55-gallon steel drums of hydraulic oil within the GPPC, Inc. facility within Zone 4.
229	4	Petroleum Products and Derivatives	A bituminous substance draining from a 55-gallon steel drum and on bare ground within the GPPC, Inc. facility within Zone 4.
230	4	Petroleum Products and Derivatives	A release of a bituminous substance on the ground around a 55-gallon steel drum within the GPPC, Inc. facility within Zone 4.
231	4	Petroleum Products and Derivatives	Petroleum staining on bare ground around several 55-gallon steel drums within the GPPC, Inc. facility within Zone 4.
232	4	Petroleum Products and Derivatives	Petroleum staining on bare ground around several 55-gallon steel drums within the GPPC, Inc. facility within Zone 4.
233	4	Petroleum Products and Derivatives	Petroleum staining on bare ground around several 55-gallon steel drums within the GPPC, Inc. facility within Zone 4.
234	4	Petroleum Products and Derivatives	Petroleum staining on bare ground around several 55-gallon steel drums within the GPPC, Inc. facility within Zone 4.
235	4	Petroleum Products and Derivatives	A bituminous substance on bare ground around a 55-gallon steel drum within the GPPC, Inc. facility within Zone 4.
236	4	Petroleum Products and Derivatives	A GPPC, Inc. employee power washing a gasoline-powered concrete saw on bare ground within the GPPC, Inc. facility within Zone 4.

Photo	Zone	Category(s)	Subject
237	4	Petroleum Products and Derivatives	Evidence of recent spills or leaks around the base of an emergency generator within the GPPC, Inc. facility within Zone 4.
238	4	Petroleum Products and Derivatives	Heavy petroleum staining on bare soil beneath an excavator within the GPPC, Inc. encroachment portion of Zone 4.
239	4	Petroleum Products and Derivatives	Heavy petroleum staining on bare soil beneath an excavator within the GPPC, Inc. encroachment portion of Zone 4.
240	4	Petroleum Products and Derivatives	Heavy petroleum staining and improper storage of petroleum products within the GPPC, Inc. facility within Zone 4.
241	4	Petroleum Products and Derivatives	Heavy petroleum staining and improper storage of petroleum products within the GPPC, Inc. facility within Zone 4.
242	4	Petroleum Products and Derivatives	A bituminous substance draining from beneath a gravel stockpile to the ground within the GPPC, Inc. encroachment portion of Zone 4.
243	4	Petroleum Products and Derivatives	A bituminous substance draining from beneath a gravel stockpile to the ground within the GPPC, Inc. encroachment portion of Zone 4.
244	4	Petroleum Products and Derivatives	A bituminous substance draining from beneath a gravel stockpile to the ground within the GPPC, Inc. encroachment portion of Zone 4.
245	4	Petroleum Products and Derivatives	Heavy petroleum staining around a 300-gallon tote and three 55-gallon polyethylene drums stored within the GPPC, Inc. facility within Zone 4.
246	4	Storage Tanks	A street cleaner is stored within the GPPC, Inc. encroachment portion of Zone 4.
247	4	Storage Tanks	A water tank truck is stored within the GPPC, Inc. encroachment portion of Zone 4.
248	4	Storage Tanks	A 600-gallon diesel AST stored within the GPPC, Inc. facility within Zone 4.
249	4	Storage Tanks	A 70-gallon diesel AST stored within the GPPC, Inc. facility within Zone 4.
250	4	Storage Tanks	A 100-gallon diesel AST stored within the GPPC, Inc. facility within Zone 4.
251	4	Storage Tanks	A 2,500-gallon diesel AST stored within the GPPC, Inc. facility within Zone 4.
252	4	Storage Tanks	A 3,000-gallon diesel AST stored within the GPPC, Inc. facility within Zone 4.
253	4	Storage Tanks	A septic tank located within the 7D Rental storage yard within Zone 4.
254	4	Hazardous Substances, Petroleum Products and Derivatives	Dozens of 55-gallon steel drums containing a bituminous substance used to separate gravel stockpiles within the GPPC, Inc. facility within Zone 4.
255	4	Hazardous Substances, Petroleum Products and Derivatives	Hundreds of 55-gallon steel drums containing a bituminous substance stored within the GPPC, Inc. facility within Zone 4.
256	4	Hazardous Substances, Petroleum Products and Derivatives	Hundreds of 55-gallon steel drums containing a bituminous substance stored within the GPPC, Inc. facility within Zone 4.
257	4	Hazardous Substances, Petroleum Products and Derivatives, Storage Tanks	An emergency generator, two diesel ASTs, two bitumen kettles, several diesel-powered lighting trailers, and dozens of 55-gallon steel drums containing a bituminous substance are stored within the GPPC, Inc. facility within Zone 4.
258	4	Hazardous Substances, Petroleum Products and Derivatives	Hundreds of 55-gallon steel drums containing a bituminous substance stored within the GPPC, Inc. facility within Zone 4.
259	4	Hazardous Substances, Petroleum Products and Derivatives	Two 55-gallon steel drums, four 55-gallon polyethylene drums, and six 5-gallon containers stored within the 7D Rental storage yard within Zone 4.
260	4	Hazardous Substances, Petroleum Products and Derivatives	A 55-gallon steel drum and scrap metal waste stored within Zone 4.
261	4	Hazardous Substances, Petroleum Products and Derivatives	A 55-gallon steel drum and scrap metal waste stored within Zone 4.
262	4	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste, Lead-Based Paint	A 55-gallon steel drum and large amounts of solid waste stored within the GPPC, Inc. facility within Zone 4.
263	4	Hazardous Substances, Petroleum Products and Derivatives	Three 55-gallon steel drum remnants located within Zone 4.
264	4	Hazardous Substances, Petroleum Products and Derivatives	A rusty 55-gallon steel drum stored within Zone 4.
265	4	Hazardous Substances, Petroleum Products and Derivatives, Waste Tanks	A 55-gallon steel drum stored within Zone 4.
266	4	Hazardous Substances, Petroleum Products and Derivatives	Several 55-gallon steel drums are stored within the GPPC, Inc. facility within Zone 4.

Photo	Zone	Category(s)	Subject
267	4	Hazardous Substances, Petroleum Products and Derivatives	Twenty 55-gallon steel drums containing a bituminous substance and water stored within the GPPC, Inc. facility within Zone 4.
268	4	Hazardous Substances, Petroleum Products and Derivatives	Two 55-gallon steel drums and a 5-gallon container stored within the 7D Rental storage yard within Zone 4.
269	4	Hazardous Substances, Petroleum Products and Derivatives	Four 55-gallon steel drums stored within the 7D Rental storage yard within Zone 4.
270	4	Hazardous Substances, Petroleum Products and Derivatives	Remnants of a 55-gallon steel drum stored within Zone 4.
271	4	Hazardous Substances, Solid/Municipal Waste	A lead-acid automotive battery and solid waste stored within the GPPC, Inc. facility within Zone 4.
272	4	Hazardous Substances, Petroleum Products and Derivatives	Pallets of 5-gallon buckets of traffic marking paint stored within a shed within the GPPC, Inc. facility within Zone 4.
273	4	Hazardous Substances, Petroleum Products and Derivatives	A diesel-powered emergency generator located within the GPPC, Inc. facility within Zone 4.
274	4	Hazardous Substances, Petroleum Products and Derivatives, Storage Tanks	Two bitumen kettles stored within the GPPC, Inc. facility within Zone 4.
275	4	Hazardous Substances, Petroleum Products and Derivatives	A diesel-powered JCD400T portable drill rig is stored within the 7D Rental storage yard within Zone 4.
276	4	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	Dozens of improperly stored petroleum product containers stored within the 7D Rental storage yard within Zone 4.
277	4	Hazardous Substances, Petroleum Products and Derivatives	A derelict vehicle stored within Zone 4.
278	4	Hazardous Substances, Petroleum Products and Derivatives	A derelict vehicle stored within Zone 4.
279	4	Hazardous Substances, Petroleum Products and Derivatives	A derelict grader stored within the GPPC, Inc. encroachment portion of Zone 4.
280	4	Hazardous Substances, Petroleum Products and Derivatives	A derelict crane, truck, and backhoe stored within the GPPC, Inc. encroachment portion of Zone 4.
281	4	Hazardous Substances, Petroleum Products and Derivatives	Derelict equipment stored within the GPPC, Inc. encroachment portion of Zone 4.
282	4	Hazardous Substances, Petroleum Products and Derivatives	Derelict equipment stored within the GPPC, Inc. encroachment portion of Zone 4.
283	4	Hazardous Substances, Petroleum Products and Derivatives	Derelict equipment stored within the GPPC, Inc. encroachment portion of Zone 4.
284	4	Hazardous Substances, Petroleum Products and Derivatives	Derelict equipment stored within the GPPC, Inc. encroachment portion of Zone 4.
285	4	Hazardous Substances, Petroleum Products and Derivatives	Derelict equipment stored within the GPPC, Inc. encroachment portion of Zone 4.
286	4	Hazardous Substances, Petroleum Products and Derivatives	Derelict equipment stored within the GPPC, Inc. facility within Zone 4.
287	4	Hazardous Substances, Petroleum Products and Derivatives	Derelict vehicles stored within the GPPC, Inc. facility within Zone 4.
288	4	Hazardous Substances, Petroleum Products and Derivatives	Derelict vehicles stored within the GPPC, Inc. facility within Zone 4.
289	4	Hazardous Substances, Petroleum Products and Derivatives	Derelict vehicles stored within the 7D Rental storage yard within Zone 4.
290	4	Hazardous Substances, Petroleum Products and Derivatives	Derelict vehicles stored within the 7D Rental storage yard within Zone 4.
291	4	Hazardous Substances, Petroleum Products and Derivatives	Derelict vehicles stored within the 7D Rental storage yard within Zone 4.
292	4	Solid/Municipal Waste	Municipal solid waste and stockpiled soil stored within Zone 4.
293	4	Solid/Municipal Waste	Asphalt shingles and other construction and demolition debris stored within Zone 4.
294	4	Solid/Municipal Waste	Scrap metal waste stored within Zone 4.
295	4	Solid/Municipal Waste	Scrap vehicle parts and municipal solid waste stored within Zone 4.
296	4	Solid/Municipal Waste	Derelict equipment stored within the GPPC, Inc. facility within Zone 4.
297	4	Solid/Municipal Waste	Buried solid waste revealed by erosion along the east slope of the GPPC, Inc. facility within Zone 4.
298	4	Solid/Municipal Waste	Scrap vehicle parts and waste tires stored within Zone 4.
299	4	Solid/Municipal Waste	Municipal solid waste stored within Zone 4.

Photo	Zone	Category(s)	Subject
300	4	Solid/Municipal Waste	Stockpiled soil stored within the 7D Rental storage yard within Zone 4.
301	4	Solid/Municipal Waste	Stockpiled soil stored within the GPPC, Inc. encroachment portion of Zone 4.
302	4	Solid/Municipal Waste	Stockpiled soil stored within the GPPC, Inc. encroachment portion of Zone 4.
303	4	Solid/Municipal Waste	Stockpiled soil stored within the GPPC, Inc. encroachment portion of Zone 4.
304	4	Solid/Municipal Waste	Two soil stockpiles within the 7D Rental storage yard within Zone 4.
305	4	Solid/Municipal Waste	A soil stockpile stored within Zone 4.
306	4	Solid/Municipal Waste	A burn pit located within Zone 4.
307	4	Wastewater Treatment, Collection, and Disposal/Discharge	A shower area which drains directly to the ground located within Zone 4.
308	4	Wastewater Treatment, Collection, and Disposal/Discharge	A sink drains to the ground within the GPPC, Inc. facility within Zone 4.
309	4	Wastewater Treatment, Collection, and Disposal/Discharge	A drain pipe which services a laundry facility drains to the ground within the GPPC, Inc. facility within Zone 4.
310	4	Wastewater Treatment, Collection, and Disposal/Discharge	Drain pipes which service shower units drain to the ground within the GPPC, Inc. facility within Zone 4.
311	5	None	An overall view of a portion of Zone 5.
312	5	None	An overall view of a portion of Zone 5.
313	5	None	An overall view of a portion of Zone 5.
314	5	None	An overall view of a portion of Zone 5.
315	5	None	An overall view of a portion of Zone 5.
316	5	None	An overall view of a portion of Zone 5.
317	5	None	An overall view of a portion of Zone 5.
318	5	None	An overall view of a portion of Zone 5.
319	5	None	An overall view of a portion of Zone 5.
320	5	None	An overall view of a portion of Zone 5.
321	5	Hazardous Substances, Petroleum Products and Derivatives	Remnants of three rusted 55-gallon steel drums stored within Zone 5.
322	5	Hazardous Substances, Petroleum Products and Derivatives	Remnant of a rusted 55-gallon steel drum stored within Zone 5.
323	5	Hazardous Substances, Petroleum Products and Derivatives	Remnant of a rusted 55-gallon steel drum stored within Zone 5.
324	5	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	Scrap vehicle parts and municipal solid waste stored within Zone 5.
325	5	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	Derelict vehicles and scrap vehicle parts stored within Zone 5.
326	5	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	Derelict vehicles and scrap vehicle parts stored within Zone 5.
327	5	Hazardous Substances, Petroleum Products and Derivatives, Solid/Municipal Waste	Derelict vehicles and scrap vehicle parts stored within Zone 5.
328	5	Solid/Municipal Waste	A derelict shipping container stored within Zone 5.
329	5	Solid/Municipal Waste	Municipal solid waste stored within Zone 5.
330	5	Military Munitions/Ordnance	A bomb hole located within Zone 5.
331	5	Military Munitions/Ordnance	A bomb hole located within Zone 5.
332	5	Hazardous Substances, Petroleum Products and Derivatives, Military Munitions/Ordnance	Remnants of a derelict WWII vehicle stored within Zone 5.
333	6	None	An overall view of a portion of Zone 6.
334	6	None	An overall view of a portion of Zone 6.
335	6	None	An overall view of a portion of Zone 6.
336	6	None	An overall view of a portion of Zone 6.
337	6	None	An overall view of a portion of Zone 6.
338	6	None	An overall view of a portion of Zone 6.
339	6	None	An overall view of a portion of Zone 6.
340	6	None	An overall view of a portion of Zone 6.
341	6	Military Munitions/Ordnance	A bomb hole located within Zone 6.
342	6	Military Munitions/Ordnance	A suspected Japanese WWII tunnel located within Zone 6.
343	7	None	An overall view of a portion of Zone 7.
344	7	None	An overall view of a portion of Zone 7.

Photo	Zone	Category(s)	Subject
345	7	Hazardous Substances, Petroleum Products and Derivatives	A remnant of a 55-gallon steel drum stored within Zone 7.
346	7	Hazardous Substances, Petroleum Products and Derivatives	A 55-gallon steel drum stored within Zone 7.
347	7	Wastewater Treatment, Collection, and Disposal/Discharge	A stormwater drainage feature located within Zone 7.
348	7	Military Munitions/Ordnance	A bomb hole located within Zone 7.
349	7	Military Munitions/Ordnance	A bomb hole located within Zone 7.
350	7	Military Munitions/Ordnance	A remnant of a WWII bomb located within Zone 7.
351	7	Military Munitions/Ordnance	Remnant of a WWII anti-aircraft gun located within Zone 7.
352	7	Military Munitions/Ordnance	Remnants of a WWII aircraft located within Zone 7.
353	7	Military Munitions/Ordnance	Remnant of a WWII coastal defense gun located within Zone 7.
354	7	Military Munitions/Ordnance	Remnant of a WWII coastal defense gun located within Zone 7.
355	8	None	An overall view of a portion of Zone 8.
356	8	None	An overall view of Runway 7/25 within Zone 8.
357	8	None	An overall view of Runway 7/25 within Zone 8.
358	8	None	An overall view of a portion of Zone 8.
359	8	Petroleum Products and Derivatives	An overall view of a portion of Zone 8.
360	8	None	The ARFF facility located within Zone 8.
361	8	None	An overall view of a portion of Zone 8.
362	8	None	An overall view of a portion of Zone 8.
363	8	None	A radio tower located within Zone 8.
364	8	Hazardous Substances, Petroleum Products and Derivatives	Construction equipment stored within Zone 8.
365	8	None	The Yap IAP ramp area within Zone 8.
366	8	Hazardous Substances, Petroleum Products and Derivatives, Wastewater Treatment, Collection, and Disposal/Discharge	The Yap International Airport terminal building within Zone 8.
367	8	Petroleum Products and Derivatives	The Vital/FSM fuel farm at the Yap IAP within Zone 8.
368	8	None	The Yap IAP administration building within Zone 8.
369	8	None	A former quarantine facility within Zone 8.
370	8	None	The Yap IAP terminal building within Zone 8.
371	8	None	An overall view of a portion of Zone 8.
372	8	None	An overall view of a portion of Zone 8.
373	8	None	An overall view of a portion of Zone 8.
374	8	None	An overall view of a portion of Zone 8.
375	8	None	An overall view of a portion of Zone 8.
376	8	None	An overall view of a portion of Zone 8.
377	8	None	An overall view of a portion of Zone 8.
378	8	Petroleum Products and Derivatives	The Vital/FSM fuel farm at the Yap IAP within Zone 8.
379	8	Hazardous Substances, Petroleum Products and Derivatives	Remnants of a 55-gallon steel drum and a waste tire as well as heavy petroleum sheen within the ARFF burn pit within Zone 8.
380	8	Hazardous Substances, Petroleum Products and Derivatives	The ARFF burn pit located within Zone 8.
381	8	Hazardous Substances	A construction worker washing painting tools over bare ground within Zone 8.
382	8	Petroleum Products and Derivatives	Petroleum staining on bare ground beneath a derelict tractor adjacent to the Yap IAP administration building within Zone 8.
383	8	Polychlorinated Biphenyls	A pole-mounted transformer located within Zone 8.
384	8	Polychlorinated Biphenyls	A pad-mounted transformer located at the ARFF facility within Zone 8.
385	8	Hazardous Substances, Petroleum Products and Derivatives, Polychlorinated Biphenyls	A pad-mounted transformer located adjacent to the old generator building within Zone 8.
386	8	Polychlorinated Biphenyls	A pad-mounted transformer located adjacent to the old generator building within Zone 8.
387	8	Polychlorinated Biphenyls	A dry-type transformer located within the old generator building within Zone 8.
388	8	Polychlorinated Biphenyls	A wall-mounted transformer located within the old generator building within Zone 8.

Photo	Zone	Category(s)	Subject
389	8	Polychlorinated Biphenyls	A dry-type transformer located within the old generator building within Zone 8.
390	8	Polychlorinated Biphenyls	Two wall-mounted transformers located within the old generator building within Zone 8.
391	8	Polychlorinated Biphenyls	Two wall-mounted transformers located within the old generator building within Zone 8.
392	8	Polychlorinated Biphenyls	An electrical equipment cabinet located within the old generator building within Zone 8.
393	8	Polychlorinated Biphenyls	An electrical equipment cabinet located within the old generator building within Zone 8.
394	8	Polychlorinated Biphenyls	A wall-mounted transformer located within the old generator building within Zone 8.
395	8	Polychlorinated Biphenyls	A dry-type transformer located within the old generator building within Zone 8.
396	8	Polychlorinated Biphenyls	A pole-mounted transformer within Zone 8.
397	8	Hazardous Substances, Petroleum Products and Derivatives, Storage Tanks	A 2,000-gallon diesel AST and 55-gallon steel drum located within the ARFF facility within Zone 8.
398	8	Petroleum Products and Derivatives, Storage Tanks	Three shipping tanktainer ASTs located at the PMA ramp within Zone 8.
399	8	Petroleum Products and Derivatives, Storage Tanks	A portable 190-gallon AVGAS 100LL AST stored within the PMA hangar within Zone 8.
400	8	Hazardous Substances, Storage Tanks	A 1,000-gallon AFFF AST located within the ARFF facility within Zone 8.
401	8	Petroleum Products and Derivatives	A diesel fuel dispenser located within the ARFF facility within Zone 8.
402	8	Storage Tanks	A former tanker truck AST stored adjacent to the PMA hangar within Zone 8.
403	8	Storage Tanks	A former aircraft fuel tank converted to a rain water catchment AST adjacent to the PMA hangar within Zone 8.
404	8	Storage Tanks	Three large water ASTs located within the ARFF facility within Zone 8.
405	8	Storage Tanks	A remnant AST mount and secondary containment adjacent to the old generator building within Zone 8.
406	8	Petroleum Products and Derivatives, Storage Tanks	A 1,000-gallon diesel AST located adjacent to the old generator building within Zone 8.
407	8	Petroleum Products and Derivatives, Storage Tanks	A 1,000-gallon diesel AST located adjacent to the new generator building within Zone 8.
408	8	Petroleum Products and Derivatives, Storage Tanks	A fuel truck parked at the Vital/FSM fuel farm within Zone 8.
409	8	Petroleum Products and Derivatives, Storage Tanks	Two 5,000-gallon Jet A-1 ASTs located within the Vital/FSM fuel farm within Zone 8.
410	8	Petroleum Products and Derivatives	A fuel port located within the Yap IAP ramp area within Zone 8.
411	8	Petroleum Products and Derivatives	A fuel port located within the Yap IAP ramp area within Zone 8.
412	8	Petroleum Products and Derivatives	A fuel port located within the Yap IAP ramp area within Zone 8.
413	8	Petroleum Products and Derivatives	A fuel port located within the Yap IAP ramp area within Zone 8.
414	8	Hazardous Substances, Petroleum Products and Derivatives	Six 55-gallon steel drums containing waste oil and waste tires stored within the PMA warehouse within Zone 8.
415	8	Hazardous Substances, Petroleum Products and Derivatives	Four 55-gallon steel drums stored within the PMA warehouse within Zone 8.
416	8	Hazardous Substances, Petroleum Products and Derivatives	Three 55-gallon steel drums stored outside the PMA warehouse within Zone 8.
417	8	Hazardous Substances, Petroleum Products and Derivatives	A 55-gallon steel drum and three 5-gallon buckets used for waste oil transportation and storage within the PMA hangar within Zone 8.
418	8	Hazardous Substances, Petroleum Products and Derivatives	A 55-gallon steel drum of oil and five compressed-gas cylinders stored within the PMA hangar within Zone 8.
419	8	Petroleum Products and Derivatives	Three 55-gallon steel drums of oil stored within the PMA hangar within Zone 8.
420	8	Petroleum Products and Derivatives	Four 55-gallon steel drums of oil stored within the PMA hangar within Zone 8.
421	8	Hazardous Substances	Four 55-gallon polyethylene drums and several 5-gallon buckets of AFFF stored within the ARFF facility within Zone 8.

Photo	Zone	Category(s)	Subject
422	8	Hazardous Substances, Petroleum Products and Derivatives	Four 55-gallon drums stored within the ARFF facility within Zone 8.
423	8	Hazardous Substances, Petroleum Products and Derivatives	Nine 55-gallon steel drums and two 30-gallon steel drums stored near the ARFF burn pit within Zone 8.
424	8	Hazardous Substances, Petroleum Products and Derivatives	Four 55-gallon steel drums stored within Zone 8.
425	8	Hazardous Substances, Petroleum Products and Derivatives	A 55-gallon steel drum stored within Zone 8.
426	8	Hazardous Substances, Petroleum Products and Derivatives	A 55-gallon steel drum adjacent to the old generator building within Zone 8.
427	8	Petroleum Products and Derivatives	A 55-gallon steel drum adjacent to the old generator building within Zone 8.
428	8	Hazardous Substances, Petroleum Products and Derivatives	Various small-quantity petroleum product and hazardous substance containers located in the PMA hangar in Zone 8.
429	8	Hazardous Substances, Petroleum Products and Derivatives	Various small-quantity hazardous substance containers located in the PMA hangar in Zone 8.
430	8	Hazardous Substances, Petroleum Products and Derivatives	Various small-quantity petroleum product and hazardous substance containers located in the PMA hangar in Zone 8.
431	8	Hazardous Substances, Petroleum Products and Derivatives	A diesel-powered emergency generator located within the ARFF facility within Zone 8.
432	8	Hazardous Substances	Twelve lead-acid vehicle batteries stored within the ARFF facility within Zone 8.
433	8	Hazardous Substances	Fifteen 5-gallon containers of dry chemical extinguishing agent stored within the ARFF facility within Zone 8.
434	8	Hazardous Substances, Petroleum Products and Derivatives	Two ARFF trucks stored within the ARFF facility within Zone 8.
435	8	Hazardous Substances, Petroleum Products and Derivatives	Three gasoline-powered light towers stored within Zone 8.
436	8	Hazardous Substances, Petroleum Products and Derivatives	Three diesel-powered portable generators stored within Zone 8.
437	8	Hazardous Substances, Petroleum Products and Derivatives	A diesel-powered forklift stored within the Yap IAP ramp area within Zone 8.
438	8	Hazardous Substances	Thirteen 5-gallon containers of traffic paint stored within the old generator building within Zone 8.
439	8	Hazardous Substances, Petroleum Products and Derivatives	A diesel-powered skyjack located within Zone 8.
440	8	Hazardous Substances, Petroleum Products and Derivatives	A smaller diesel-powered generator building located between the old and new generator buildings within Zone 8.
441	8	Hazardous Substances, Petroleum Products and Derivatives	A diesel-powered generator located within the old generator building within Zone 8.
442	8	Hazardous Substances, Petroleum Products and Derivatives	A smaller diesel-powered generator building located between the old and new generator buildings within Zone 8.
443	8	Hazardous Substances, Petroleum Products and Derivatives	An diesel-powered generator located within the new generator building within Zone 8.
444	8	Hazardous Substances, Petroleum Products and Derivatives	An diesel-powered generator located within the new generator building within Zone 8.
445	8	Hazardous Substances	Large amounts of cleaning chemicals stored within the quarantine facility within Zone 8.
446	8	Hazardous Substances, Petroleum Products and Derivatives	Five 5-gallon containers of fuels and hazardous substances stored within the Yap IAP administration building within Zone 8.
447	8	Hazardous Substances, Petroleum Products and Derivatives	An old and unused ARFF truck stored within Zone 8.
448	8	Hazardous Substances, Petroleum Products and Derivatives	A derelict tractor is stored adjacent to the Yap IAP administration building within Zone 8.
449	8	Solid/Municipal Waste	Scrap equipment and parts stored within the old generator building within Zone 8.
450	8	Solid/Municipal Waste	Stockpiled soil located at the PMA ramp within Zone 8.
451	8	Solid/Municipal Waste	Fill material from a razed hill near the ARFF facility within Zone 8.
452	8	Solid/Municipal Waste	Stockpiled soil stored within Zone 8.
453	8	Solid/Municipal Waste	Stockpiled soil stored within Zone 8.
454	8	Solid/Municipal Waste	Stockpiled soil and gravel within the construction laydown yard within Zone 8.

Photo	Zone	Category(s)	Subject
455	8	Wastewater Treatment, Collection, and Disposal/Discharge	A stormwater drain inlet located within the ARFF facility within Zone 8.
456	8	Wastewater Treatment, Collection, and Disposal/Discharge	A stormwater drainage feature located within Zone 8.
457	8	Wastewater Treatment, Collection, and Disposal/Discharge	A stormwater drainage feature located within the Yap IAP ramp within Zone 8.
458	8	Wastewater Treatment, Collection, and Disposal/Discharge	Stormwater drainage features located within the Yap IAP ramp within Zone 8.
459	8	Wastewater Treatment, Collection, and Disposal/Discharge	Water runoff from the construction laydown yard within Zone 8.
460	8	Wastewater Treatment, Collection, and Disposal/Discharge	A sink drains to the ground within the Vital/FSM fuel farm within Zone 8.
461	8	Wastewater Treatment, Collection, and Disposal/Discharge	A drain pipe located within Zone 8.