



**Phase I Environmental Site Assessment Report  
Old Guam Memorial Hospital (GMH)  
Tamuning, Guam**

*Prepared for*

Guam Environmental Protection Agency  
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*Prepared by*

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Barrigada, Guam 96913-1402

October 2018  
EA Project No. 15672.01



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Guam Operations Manager/Sr. Geologist

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## LIST OF ACRONYMS

AIRS	Aerometric Information Retrieval System
AST	Aboveground storage tank
ASTM	ASTM International
BRS	Biennial Reporting System
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	CERCLA Information System
CDL	Clandestine Drug Labs
CONSENT	Superfund (CERCLA) Consent Decrees
CORRACTS	RCRA Information System-Corrective Action Sites
DLM	Department of Land Management
DOD	Department of Defense
DOT OPS	Department of Transportation, Office of Pipeline Safety
EA	EA Engineering, Science, and Technology, Inc., PBC
EDR	Environmental Data Resources, Inc.
EPA	Environmental Protection Agency
ERNS	Emergency Response Notification
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act/TSCA
FINDS	Facility Index System
ft	feet
FTTS	FIFRA/TSCA Tracking System
FOIA	Freedom of Information Act
FUDS	Formerly Used Defense Sites
GHS	Guam Homeland Security
GMH	Guam Memorial Hospital
GPD	Guam Police Department
GWA	Guam Water Works Authority
ICIS	Integrated Compliance Information System
LUCIS	Land Use Control Information System
LUST	Leaking underground storage tank
MARC	Micronesia Area Research Center
MLTS	Material Licensing Tracking System
MINES	Mines Master Index File

### LIST OF ACRONYMS (continued)

NFRAP	No Further Remedial Action Planned (Delisted CERCLA Site)
NPDES	National Pollutant Discharge Emissions System
NPL	National Priorities List
NSD	Naval Supply Depot
OCPCASES	Oil Control Program Cases
ODI	Open Dump Inventory
OEW	Ordnance and explosives waste
PADS	Polychlorinated Biphenyl Activity Database
PAH	Polycyclic aromatic hydrocarbons
PCB	Polychlorinated biphenyl
RADINFO	Radiation Information
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
ROD	Record of Decision
SHWS	State Hazardous Waste Sites
SSTS	Section Seven Tracking System
SWF/LF	Solid Waste Facilities/Landfills
SWRCY	State Recycling Directory
TPH	Total petroleum hydrocarbons
TRIS	Toxic Release Inventory System
TSCA	Toxic Substances Control Act
TSD	Treatment, Storage and/or Disposal
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USGS	U.S. Geological Survey
UST	Underground storage tank
VCP	Voluntary Cleanup Program

## 1 EXECUTIVE SUMMARY

EA Engineering, Science, and Technology, Inc., PBC (EA) has performed a Phase I Environmental Site Assessment (ESA) of the former old Guam Memorial Hospital (GMH) property (the “subject site”). The “subject site” is located near the cliff on the west end of Guam. The cliff is also known as Oka Point or Ypao Point that overlooks Tumon Bay. The subject site is at the west end of San Vitores Road in Tamuning, Guam. The northern and northeastern portions of the subject site are bounded by cliffs dropping off to sea level. The surrounding area is generally residential with the exception of the Hilton Resort hotel located east of the subject site

The subject site has recently been parceled creating Lot No. 5173-1-R2NEW-7 which is now proposed as the Chamorro National Shrine and the Reinternment of Ancestral Remains. The subject site contains structures that were used to house doctors for the old GMH. In 2013, the assessed value of the subject site was valued at \$19,394,218 and is currently seen as a potential use of commercial or hotel activity conducive to its size and location.

The first recorded use of the subject site was in 1909 where it was used as a coconut plantation owned by Don Lorenzo de Leon Guererro y Manalisay. In 1952, the GMH was built as a residential nursing school. In 1954, the main hospital structure was constructed for the purpose of a tuberculosis (TB) hospital. The introduction of new medicine caused a reduction of TB patients and as a result the TB hospital was converted into a general hospital. During this changeover, the Government of Guam constructed two more buildings to extend GMH. The construction of GMH was piecemeal and therefore did not meet the minimum fire safety requirements established in 1973 made by the Joint Commission of Accreditation of Hospitals. Building code standards weren't also met. In 1968, GMH started planning to remodel and build a new hospital. However, the Department of Health Education wrote a letter strongly recommending to not remodel the present facility due to the numerous building code violations. The master plan to build a new GMH facility was accepted in 1973. In 1976, Typhoon Pamela destroyed the walls and ceilings of the hospital facility including blowing away the air conditioners and windows. The following year, the new hospital was created located southwest of the subject property. The exact date of the old GMH demolition is unknown but happened around the 1990's. Significant data gaps exist regarding the demolition of the old GMH. Even after the demolition of the old GMH, there are 14 housing units that still exist on the western boundary of the subject site. Those houses are abandoned and covered by vegetation. After the time Typhoon Pongsongwa had hit Guam, the site became used as a transition station for typhoon debris. The following years later, around 2010, Younex used the subject site for a staging area for the construction of the Jonestown Tower project.

EA conducted a Phase I ESA of the subject site between May 2018 thru September 2018. There are no recognized environmental conditions (RECs) identified at the site.

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## 2 INTRODUCTION

### 2.1 LOCATION AND LEGAL DESCRIPTION

The subject site is located off the west end of San Vitores Road in Tamuning, Guam. The subject site is now Lot No. 5173-1-R2NEW-R7 after it was recently part of a parceling survey map for the proposed Chamorro National Shrine and the Reinternment of Ancestral Remains (Appendix E). The subject site is an irregularly shaped parcel that was used for the old GMH. GMH consisted of a six-story building adjoined with four-story, three-story, and two-story buildings united. The subject site is approximately 38 acres and is valued at \$19,394,218 as of January 2016. The first use of the subject site was for a coconut plantation. Prior to development of the old GMH in the 1952, the land was undeveloped and unoccupied.

### 2.2 PURPOSE

The purpose of the Phase I ESA is to identify, to the extent feasible pursuant to the process prescribed in ASTM International (ASTM) E1527-13, recognized environmental conditions (RECs) in connection with the property. An REC means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment, (2) under conditions indicative of a release to the environment, or (3) under conditions that pose a material threat of a future release to the environment. The ASTM E1527-13 practice constitutes all appropriate inquiries (AAIs) for the purpose of Landowner Liability Protections, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This report reflects the observations, information, and data collected by EA during the period of May 2018 through September 2018. Supporting documentation is provided in the appendixes as follows:

- Appendix A—Figures
- Appendix B—Photograph Log
- Appendix C—Historical Research Documentation (including aerial photographs and historical maps)
- Appendix D—Regulatory Records Documentation
- Appendix E—Supporting Documentation
- Appendix F—Qualifications of Environmental Professionals (including resumes of report preparers).

### 2.3 DETAILED SCOPE OF SERVICES

EA prepared this Phase I ESA in accordance with Guam EPA contract RFP No. 2015-001, dated 13 April 2018.

This Phase I ESA was performed in accordance with ASTM E1527-13 (Standard Practice for ESAs: Phase I ESA Process) and consists of a review of current and historic activities and conditions at the subject site and surrounding properties, including a non-intrusive visual inspection of the subject site; review of local, state, and federal regulatory database records; review of available historic records; and a survey of adjacent land uses. The site reconnaissance does not address non-ASTM considerations such as asbestos, lead-based paint, drinking water quality, or radon, nor does it include sampling or chemical analysis of soils, surface water, or groundwater or an intensive examination of facility hazards (compliance audit).

## **2.4 SIGNIFICANT ASSUMPTIONS**

In expressing the opinions stated in this report, EA has exercised the degree of skill and care ordinarily exercised by a reasonable prudent Environmental Professional in the same community and in the same time frame given the same or similar facts and circumstances. Documentation and data provided by the user, designated representatives thereof, or other interested third parties, or from the public domain, and referred to in the preparation of this assessment, were used and referenced. Consequently, EA assumes no responsibility or liability for the accuracy of such documentation or data.

The independent conclusions in this report represent EA's professional judgment based on information and data available to EA during the course of this assignment. Factual information regarding operations, conditions, and test data provided by the User or their representative are assumed to be correct and complete. The conclusions presented are based on the data provided, observations, and conditions that existed on the date of the onsite visit.

## **2.5 LIMITATIONS AND EXCEPTIONS**

EA does not warrant that there are no toxic or hazardous materials or contamination, nor does EA accept any liability if such are found at some future time or could have been found if sampling or additional studies were conducted. EA does not assume responsibility for other environmental issues that may be associated with this subject site.

In view of the rapidly changing status of environmental laws, regulations, and guidelines, EA cannot be responsible for changes in laws, regulations, or guidelines that occur after the study has been completed and that may affect the subject site.

This report was prepared for the Guam Environmental Protection Agency (EPA) by EA and is based in part on third party information not within the control of the Guam EPA or EA. While it is believed that the third-party information contained herein will be reliable under the conditions and subject to the limitations set forth herein, neither the Guam EPA nor EA guarantee the accuracy thereof.

## **2.6 SPECIAL TERMS AND CONDITIONS**

No special terms or conditions were stated for this Phase I ESA.

## **2.7 USER RELIANCE**

This report is exclusively for the use and benefit of the Guam EPA as shown on the cover page of this report. This report is not for the use or benefit of, nor may it be relied upon by, any other person or entity without the advance written consent of EA.

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### **3 USER PROVIDED INFORMATION**

A copy of the ASTM E1527-13 User Questionnaire as well as a Freedom of Information Act (FOIA) request was submitted to Guam EPA and the Guam Department of Land Management (DLM) for the purpose of requesting the following information. Records of communication are presented in Appendix E. Mr. Edwin Aranza of Guam EPA was contacted by EA via email. Mr. Mike Borja of Guam DLM was also contacted by EA via email. Both were also provided printed hard copies of the User Questionnaire. Records of communication are contained in Appendix E. To date, EA has not received a response from Guam EPA and DLM to the User Questionnaire.

#### **3.1 REASON FOR PERFORMING PHASE I ESA**

Guam EPA chose the subject site under the Brownfields State Response Program.

#### **3.2 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS**

No response was received on the User Questionnaire.

#### **3.3 SPECIALIZED KNOWLEDGE**

No response was received on the User Questionnaire.

#### **3.4 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION**

Mr. Mike Borja provided information pertaining to subject site history through an off-site interview with EA. The interview is documented in Section 5 and the Record of Communication is contained in the Appendix E.

#### **3.5 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES**

No response was received on the User Questionnaire.

#### **3.6 OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION**

According to Mr. Mike Borja, Guam DLM is currently the property owner and will be leasing part of the subject site to the Chamorro Land Trust.

#### **3.7 OTHER**

No additional information was provided by the User.

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## **4 RECORDS REVIEW**

### **4.1 PHYSICAL SETTING SOURCES**

#### **4.1.1 Topography**

The elevation of the subject site is on an average elevation between 140-150 feet (ft) above mean sea level and gently slopes south (Appendix C) (WGS 1984). There are no surface water features on or near the subject site. Steep cliffs surround the north and east side of the subject site and drop off to sea level.

#### **4.1.2 Geology**

Review of the Generalized Geology of Guam Map (WGS 1984), indicates that the subject site is underlain by the Mariana Limestone Reef Facies (Appendix E). The Mariana Limestone is of Pliocene to Pleistocene age. The Mariana Limestone is composed of reef and lagoonal limestone containing a wide range of lithologies (Water & Environmental Research Institute of the Western Pacific 2008).

#### **4.1.3 Soils**

The site is underlain by soils of the Guam Guam-Urban land Pulantat characterized by 0 to 7 percent slopes. Guam-Urban land Pulantat is well drained soil on limestone plateaus (U.S. Department of Agriculture 1998).

#### **4.1.4 Wetlands**

Review of information from the United States Fish and Wildlife National Wetland Inventory (NWI) Map of Guam, no wetland areas are located on the subject site (U.S. Fish and Wildlife Service 2018). A copy of the NWI map is included in Appendix E.

### **4.2 STANDARD ENVIRONMENTAL RECORD SOURCES AND ADDITIONAL DATABASES**

A regulatory database report as typically provided by a third-party vendor such as Environmental Data Resources, Inc. (EDR) is not available for Guam; therefore, regulatory information pertaining to the subject site and the surrounding area was obtained via contacting the agencies listed in Sections 4.2.1 and 4.2.2.

Furthermore, the following distances were used to assess potential for vapor migration to impact the subject site from offsite properties with impact from petroleum hydrocarbon contaminants of concern (COCs) and/or COCs included in Table X6.1 of the Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions (E2600-10). Petroleum hydrocarbon chemicals of concern are those volatile petroleum hydrocarbon compounds that are a subset of the COC list and that readily biodegrade to carbon dioxide or water by soil microbes in aerated environments.

- **Upgradient Sites**—1,760 ft (1/3-mile) for non-petroleum hydrocarbon COC sites, and 528 ft (1/10-mile) for sites with petroleum hydrocarbon COC sites.
- **Crossgradient Sites**—365 ft (1/3-mile) for non-petroleum hydrocarbon COC sites, 165 ft for sites with petroleum hydrocarbon COCs where light non-aqueous phase liquid (LNAPL) or “free product” exists, and 95 ft where only dissolved petroleum hydrocarbons are present.
- **Downgradient Sites**—100 ft for COC contaminated sites and sites where LNAPL or “free product” is presumed, and 30 ft when dissolved-phase petroleum hydrocarbons are presumed.

#### 4.2.1 Federal Records and Databases

EA contacted the United States Army Corps of Engineers (USACE) and United States Environmental Protection Agency (USEPA) and requested information from the following federal environmental databases as part of this investigation:

- Federal Department of Defense (DOD) list
- Federal Formerly Used Defense Sites (FUDS) list
- Federal Brownfields list
- Federal Superfund (CERCLA) Consent Decrees (CONSENT) list
- Federal Record of Decision (ROD) list
- Federal Uranium Mill Tailings Site (UMTRA) list
- Federal Open Dump Inventory (ODI) list
- Federal Toxic Chemical Release Inventory System (TRIS) list
- Federal Toxic Substances Control Act (TSCA) list
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)/TSCA Tracking System (FTTS) list
- Federal FTTS Inspections and Enforcements list
- Federal Historical FTTS
- Federal Section 7 Tracking System (SSTS) list
- Federal CERCLA Lien Information
- Federal Polychlorinated Biphenyl Activity Database (PADS) list
- Federal Radiation Information (RADINFO) list
- Federal Clandestine Drug Labs (CDL) list
- Federal Integrated Compliance Information System (ICIS) list
- Federal Land Use Control Information System (LUCIS) list
- Federal Department of Transportation, Office of Pipeline Safety (DOT OPS) Incident and Accident Data list
- Federal Material Licensing Tracking System (MLTS) list
- Federal Mines Master Index File (MINES) list
- Federal Facility Index System (FINDS) list
- Federal RCRA Administrative Action Tracking System (RAATS) list

- Federal Biennial Reporting System (BRS) list
- Federal National Priorities List (NPL) list
- Federal Proposed NPL list
- Federal Delisted NPL list
- Federal NPL Liens list
- Federal Comprehensive Environmental Response, Cleanup, and Liability Information System (CERCLIS) list
- Federal CERCLIS-No Further Remedial Action Planned (NFRAP) list
- Federal Resource Conservation and Conservation Act (RCRA) Corrective Action Sites (CORRACTS) list
- Federal RCRA non-CORRACTS TSD list
- Federal RCRA-generator list
- Federal Emergency Response Notification System (ERNS) list
- Federal Institutional Controls list
- Federal Engineering Controls list

EA has not received a letter from USEPA and USACE in response to the FOIA request. EA will issue an addendum letter to the client should any environmentally significant information be received from either USEPA and USACE. Documentation of the emails and FOIA requests to USEPA and USACE are presented in Appendix D.

#### **4.2.2 State/Tribal Records and Databases**

EA contacted Guam EPA and Guam Homeland Security (GHS) and requested information from the following state/tribal environmental databases as part of this investigation:

- State Recycling Directory (SWRCY) list
- State Brownfields list
- State National Pollutant Discharge Emissions System (NPDES) Wastewater Permitting list
- State Permitting and Facility Information (AIRS) list
- State Historical Underground Storage List (UST) list
- State Historical Leaking Underground Storage Tank (LUST) list
- State Aboveground Storage Tank (AST) list
- State Drycleaners list
- State Historical Cleaners list
- State Lead Inspection list
- State Hazardous Waste Sites (SHWS) list
- State Solid Waste Facilities/Landfills (SWF/LF) list
- State Oil Control Program Cases (OCPCASES) list
- State UST list
- State LUST list
- State Voluntary Cleanup Program (VCP) list
- Institutional Control list

- Indian Reservation list
- Indian LUST list
- Indian UST list

Documentation of the FOIA request and response are presented in Appendix D.

EA received a letter dated 1 June 2018 from GHS indicating that they do not have any records for the subject site. Documentation of the FOIA request and subsequent GHS response are presented in Appendix E.

### **4.3 ADDITIONAL ENVIRONMENTAL RECORD SOURCES**

#### **4.3.1 Guam Fire Department Records**

EA submitted a FOIA request to the Guam Fire Department (GFD) for information regarding environmental issues or emergency response at the subject site. EA received a letter from GFD indicating that there was a grass fire on 17 February 2018. Documentation of the FOIA request and a letter from GFD is presented in Appendix E.

### **4.4 HISTORICAL USE INFORMATION ON THE PROPERTY AND ADJOINING PROPERTIES**

#### **4.4.1 Topographic Maps**

A topographic map dated from 2016 was obtained from Arc GIS software and reviewed as part of this investigation. Copies of the reviewed topographic maps are presented in Appendix C.

#### **4.4.2 Aerial Photographs**

An aerial photograph from 1955, 2004, 2005, 2010, 2011, 2013, 2014, 2015, and 2018 were reviewed as part of this investigation. An aerial photograph in 1955 shows that the land was vacant and that no structures and activities was at the subject property during this time. An aerial photograph in 2004 indicates the site was developed and that the old GMH no longer exists. Aerial photographs from 2004 - 2018 show the asphalt road. A copy of the aerial photographs are presented in Appendix C.

### **AERIAL PHOTOGRAPH REVIEW SUMMARY**

Year	Source	Observations
1955	UOG - MARC	Subject site and adjacent properties appear to have no structures and utilities.
2004, 2006, 2010, 2011, 2012, 2013, 2014, 2015, 2017, 2018	Google Earth	Subject site and adjacent properties have structures and utilities.

#### 4.4.3 Fire Insurance Maps

There are no Sanborn fire insurance maps for Guam and for the subject site or adjacent properties.

#### 4.4.4 Local Street Directories

No local street directories were available at DPW and DLM for the subject site or adjacent properties.

#### 4.4.5 Property Tax Files

Figure 3 (Appendix E) provided by Guam DLM shows the tax parcel map for the subject site.

#### 4.4.6 Recorded Land Title Records

An Abstract of Title covering Lot 5173-1-R2-NEW-R6 which contains the subject site, was obtained from Pacific American Title Insurance & Escrow Company for review as part of this investigation summarizing ownership and real property history. The following table summarizes the Abstract of Title findings. A copy of the Abstract of Title is included in Appendix E.

#### ABSTRACT OF TITLE SUMMARY

Date	Document	Notes	Lot
23 June 1909	Agana Volume 7, Page 715	Grantor: Circuit Court, Island of Guam Grantee: Don Lorenzo de Leon Guerrero y Manalisay Land With coconut plantations and other articles.	Lot No. 5173-1-R2, Tamuning, Guam
07 May 1929	Definite Record of Real Estate, 8870	Grantor: Naval Government of Guam Grantee: Lorenzo Manalizay Leon Guerrero, widower Bounded on the North by Government Land, on the East by the said Government Land, on the South by the Old Tumon Road, and on the West by Heirs of Zulio Leon Guerrero Tello	Lot No. 5173, Agana; Area: 593,726 square meters
07 June 1933	Deed of Sale 12797	Seller: Atkins Kroll & Company, a co-partnership, represented by their Manger F. Fall, married Buyer: Francisco D. Perez, minor son of Jesus F. Perez	Lot No. 5173, Oca, Dededo formerly Agana; Area: 59 Hectares, 37 acres, 26 Centares
29 October 1951	Deed of Conveyance 23817	Grantor: Francisco D. Perez Grantee: Government of Guam A part or portion of Lot 5173, place of Oca, Dededo designated as Lot 5173-1, also known as Parcel "A"; Area: 173,049.98 square meters	A part or portion of Lot 5173, place of Oca, Dededo designated as Lot 5173-1, also known as Parcel "A"; Area: 173,049.98 square meters

<b>Date</b>	<b>Document</b>	<b>Notes</b>	<b>Lot</b>
01 February 1968	Guam Memorial Hospital – Guam M.I. Hospital Site & Access Roads Boundary & Real Estate Requirements 84537	Made by: W.C. Sudan Drawing No. E4-53P144	Lot No. 5173-1 Guam Memorial Hospital Area Area: 42.780 acres 17 Hectares, 31 Acres, 26.39 Centares
23 June 2015	Claim of Interest 880917	Made by: Francis A. Perez, son of original landowner, Frank D. Perez Registered owner of Lot No. 5173-1 was identified as Frank D. Perez who conveyed property to the Government of Guam with specific understanding and intent the property would be used as a hospital facility.	Lot No. 5173-1, place of Oka Point, Dededo; Area: 46,953.5

#### 5.4.5 Prior Environmental Reports

There are no prior environmental reports provided by Guam EPA.

#### 5.4.6 Other Historical Sources

No other historical sources were identified or provided to EA as part of this Phase I ESA.

## **5 SITE RECONNAISSANCE**

### **5.1 METHODOLOGY AND LIMITING CONDITIONS**

Two site walks were conducted on the subject site. The first site walk was conducted by EA employees, Mr. Christopher Rosario, Environmental Scientist I and Mr. Timothy Chargualaf, Engineer I, of EA on 29 June 2018 from 1220-1350 hours. At the time of the site visit, the temperature was approximately 84 degrees Fahrenheit with partly sunny skies and no precipitation. The second site walk was conducted by Mr. Robert Shambach, and Mr. Christopher Rosario with EA on 10 October 2018 from 905-1000 hours. At the time of the site visit, the temperature was 87 degrees Fahrenheit with sunny skies and no precipitation. There were no other participants for the site walk.

The June 2018 site walk of the subject site was performed starting at the north boundary of the property. The site walk continued south towards the middle interior of the property. The site walk continued towards the southwest boundary of the subject site where the housing structures exist. The first concrete structure observed was last occupied by Guam Power Authority (GPA) which served as a field office. The building was accessed from the northern side and exited out to the west. The second through the seventh buildings were inspected. A photolog of the site reconnaissance is included in Appendix B.

### **5.2 SITE AND VICINITY GENERAL CHARACTERISTICS**

The subject site is located in a commercial/residential area of Tamuning, Guam. Facing northeast from the site, Tumon Bay is seen. Majority of the northern boundary of the property is surrounded by cliffs. The highest point of the property is located on the northern boundary at about 160 ft above sea level. The subject site is dominated by vegetation. Vegetation grows around the concrete asphalt where it used to serve as a roadway around the old GMH. The concrete foundation that served as the base of the old GMH still exist.

### **5.3 CURRENT USE OF THE PROPERTY**

The subject site is currently unoccupied. There are no fences surrounding the subject site; however, illegal dumping has occurred along the western portion of the property.

### **5.4 DESCRIPTION OF ONSITE STRUCTURES, ROADS, AND IMPROVEMNETS**

As depicted on Figure 1 (Appendix A), the subject site contains concrete asphalt that served the parking lot and roadway for the old GMH. The subject site also contains 14 existing housing structures on the western portion of the property. A photograph log is presented in Appendix B.

### **5.5 INTERIOR OBSERVATIONS**

The following information documents the interior observations of the subject site structures on Project Site Map – Figure 3 (Appendix E):

Buildings A – N These buildings were originally built for the use of housing temporary and permanent doctors from off-island to serve the old and new GMH.

- During the June 29 subject site walk through the buildings were discovered through a vast amount of trees. A roadway from the center to the southern boundary of the subject site was covered by vegetation. The first housing structure found “Building A” was discovered to be a GPA field office. It is unknown as to when that house was established as a field office. The following buildings B thru H were then discovered shortly after. Accessibility of these buildings were easy as there were no doors. The floor interior of buildings A thru H was all 12-inch tiles. The paint in the interior of the all the buildings were peeling off the walls.
- During the October 15 visit, the site was entered through the southwest boundary of the subject site. The interior of buildings I thru N were observed. Buildings were entered through a vast amount of vegetation. Accessibility of the buildings were very limited. The roofs and walls of majority of the buildings were covered by the invasive vine. Building N was the only building found to have 9-inch tiles.

## **5.6 EXTERIOR OBSERVATIONS**

EA noted several general observations of the subject site. There are a total of 15 building structures on the subject site; however, there are 14 housing structures that were used for housing for doctors and surgeons from the mainland. A concrete foundation still exists associated with the old GMH throughout the majority of the property. A building located north of the subject site still exist. The building was likely used for a backup generator for the old GMH. Nothing was found in the building however; an old forklift is observed on the north side of the building. South of the building is a concrete structure approximately 60 ft × 15 ft × 4 ft filled with swamp water. Located northeast of the subject property was solidified paint in a 5-gal plastic bucket and a 1-gal metal rusted can. A significant amount of typical household waste (e.g., rusted and deteriorated scrap metal, metal wiring, and household appliances) was on the south western portion of the subject site. Items found during the exterior observation is found in the photolog (Appendix B).

## **5.7 CURRENT USE OF ADJOINING PROPERTIES**

To the north and northeast is the cliff line. East of the subject site is the Guam Hilton Resort & Spa. South of the subject are mainly residential housing. A roundabout is also located south of the subject site shown on Figure 1 (Appendix A).

## **6 INTERVIEWS**

Records of communication are included in Appendix E.

### **6.1 PRESENT AND PAST OWNER INTERVIEWS**

The subject site is currently owned by the Government of Guam. EA interviewed Mr. Mike Borja, Director of Guam DLM as part of this Phase I ESA. More information pertaining to this interview is included in Section 6.4.

### **6.2 PRESENT AND PAST SITE MANAGER INTERVIEW(S)**

No site interviews other than Mr. Mike Borja, Director of Guam DLM.

### **6.3 PRESENT AND PAST OCCUPANT INTERVIEW(S)**

The subject site is currently unoccupied; therefore, no current operators or occupants were available to interview.

### **6.4 LOCAL GOVERNMENT OFFICIAL INTERVIEW(S)**

Mr. Mike Borja, Director of Guam DLM, is currently the property manager for the subject site. Mr. Borja states that the subject site was recently parceled out (Lot No. 5173-1-R2NEW-7) for the Chamorro Land Trust Commission and that it will be used as a Chamorro National Shrine and the Reinternment of Ancestral Remains. Mr. Borja did not mention any other future plans for the remaining parcel. During the interview, Mr. Borja provided supporting documentation regarding the subject site (Appendix E)

### **6.5 INTERVIEWS WITH OTHERS**

No other interviews were obtained regarding the subject site. Records of communication are included in Appendix E.

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## 7 EVALUATION

### 7.1 FINDINGS

#### 7.1.1 *De Minimis* Findings

*De minimis* conditions generally do not present a material risk of harm to the public or environment, and generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions assessed to be *de minimis* would include minor spills of petroleum products as a result of equipment usage or storage, temporary staging of non-hazardous waste or materials, etc.

The additional findings noted below are not considered RECs but would rather be considered a *de minimus* condition where no additional investigation or action is currently warranted; however, preventive measures may be prudent as discussed below and are provided only for the purpose of awareness.

- A significant amount of typical household waste, rusted and deteriorated scrap metal, metal wiring, and household appliances on the southwestern portion of the subject site.

#### 7.1.2 Historical Recognized Environmental Conditions

A HREC refers to a past release that has been remediated to below “residential” standards and given regulatory closure with no use restrictions. HREC is defined by ASTM in the E1527-13 standard as “a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).” No HRECs were identified.

#### 7.1.3 Controlled Recognized Environmental Conditions

Controlled Recognized Environmental Condition (CREC) is a new term introduced in the ASTM E1527-13 standard. The Controlled REC concept was introduced to address contaminated sites that have received risk-based regulatory closure, where no further remediation is required but residual contamination still exists at a site and the property is subject to some sort of control or use restriction. These sites, where contamination is controlled but could still pose ongoing or future obligations on the owner (such as special precautions during construction or grading activities), have been a source of some confusion to the environmental due diligence industry with regards to how they should be classified.

The ASTM definition of CREC in the E1527-13 standard is as follows: “a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-

based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).” No CRECs were identified.

### 7.1.1 Recognized Environmental Conditions

There were no REC’s identified on the subject site.

## 7.2 OPINION

Based on the results of this Phase I ESA, including the results of the site reconnaissance, interviews, and records review, EA is of the opinion that the identified de minimis condition (a significant amount of typical household waste such as rusted and deteriorated scrap metal, metal wiring, and household appliances) is not anticipated to have impacted the environmental integrity of the subject site as no hazardous materials/petroleum products of regulated/hazardous waste were identified in conjunction with the observed items

## 7.3 CONCLUSIONS

EA has performed this Phase I ESA in conformance with the scope and limitations of ASTM E1527-13 of the Lot 5173-1-R2-NEW-R7, as shown on Figure 1 (Appendix A), the subject site. Any exceptions to, or deletions from, this practice are described in Section 11. This ESA has revealed no evidence of RECs in connection with the property.

## 7.4 DATA GAPS

A data gap is defined by ASTM E1527-13 as a lack of or inability to obtain information required by this practice despite good faith efforts by the Environmental Professional to gather such information. Data gaps may result from the incompleteness in any of the activities required by this practice including, but not limited to, the site reconnaissance, interviews, and historical research. Failure to achieve the historical research objectives identified in the standard is termed a *data failure* and is a type of *data gap*.

Data Gap	Reason for Occurrence	Significance and Rationale
Data Gap – No EDR Report.	Third party database records do not exist for Guam.	Low Significance - Without repose from FOIA request, an EDR Report can provide sufficient information regarding the subject site and adjacent lands.
Data Gap – No User Questionnaire	Lack of response from DLM to submitted User Questionnaire.	High Significance – Without feedback from the user/owner regarding property records, usage or storage, a significant data gap exists.

**7.5 SIGNATURE(S) OF THE ENVIRONMENTAL PROFESSIONAL(S)**

“I declare that, to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in Section 312.10 of 40 CFR 312.” “I have the specific qualifications based on education, training, and expertise to assess a property of the nature, history, and setting of the subject site. I, have developed and performed the All Appropriate Inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.”

---

Robert Shambach, P.G.  
Guam Operations Manager/Sr. Geologist

October 2018

Resumes for personnel assigned to this project are presented as part of Appendix F.

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## **8 NON-SCOPE CONSIDERATIONS**

### **8.1 RECOMMENDATIONS**

The following recommendation, though not required under the ASTM E1527-13 standard, is provided as a courtesy to Guam EPA:

Based on the findings of this Phase I ESA, EA is presenting the following recommendation:

- It is the professional opinion of EA that a significant amount of household waste debris located on the roadway leading to the southern boundary of the subject site should be properly cleaned up and disposed offsite.

### **8.2 ADDITIONAL SERVICES**

No additional services were performed as part of this assessment.

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## 9 DEVIATIONS

As stated in Section 4.2, a regulatory database report as typically provided by a third-party vendor such as EDR is not available for Guam; therefore, regulatory information pertaining to the subject site and the surrounding area was obtained via contacting federal, state, and local agencies through FOIA requests and interviews.

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## 10 REFERENCES

The following sources of information were consulted as a part of this ESA. Documentation supporting these sources and additional site research is contained in the appendices.

Borja, M. 2018. Personal communication between Robert Shambach and Christopher Rosario of EA and Mike Borja of Guam Department of Land Management. June 6 (see Appendix E).

EA Engineering, Science, and Technology, Inc., PBC. 2018. Site reconnaissance by Robert Shambach and Christopher Rosario of EA. 29 June (see Appendix E).

EA Engineering, Science, and Technology, Inc., PBC. 2018. Site reconnaissance by Robert Shambach and Christopher Rosario of EA. 15 October (see Appendix E).

Federal Emergency Management Agency (FEMA). 2007. *Flood Insurance Rate Map, Territory of Guam, Panel 95 of 206, Map No. 6600010025D*. Available online at <https://hazards.fema.gov/wps/portal/mapviewer>. Accessed May 28, 2018.

Google Earth, 2004, 2005, 2010, 2011, 2013, 2014, 2015, 2018. Guam Aerial Image. Accessed August 2018. (See Appendix C)

Government of Guam. 1975. Uniform Mapping System Aerial Photograph.

Government of Guam. 1993. Parcelling Survey Map of Lot 7054-R4.

Pacific American Title Insurance & Escrow Co. 2018. *Abstract of Title, Lot Number 5173-1-R2NEW-R7, Yigo, Guam*. June 27.

U.S. Department of Agriculture. 1998. Soil Survey of Territory of Guam. May.

U.S. Fish and Wildlife Service. 2018. National Wetlands Inventory. Available online at <http://www.fws.gov/wetlands/Data/Mapper.html>. Accessed August 20.

U.S. Geological Society (USGS). 1944 Island of Guam Topographic Map.

World Geodetic System. 1984. USGS. Island of Guam Topographic Map.

Water & Environmental Research Institute of the Western Pacific. 2008. Generalized Geology of Guam, Mariana Islands.

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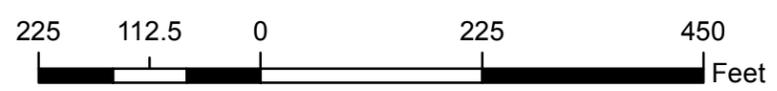
# **Appendix A**

## **Figures**

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- Legend**
- Above Ground Storage Tank Containment
  - Abandoned Concrete Houses
  - Site Features
  - Roadway Easement Line
  - Projects Site Location



COORDINATE/REFERENCE: WGS\_1984\_UTM\_Zone\_55N: IMAGERY 2016

<p>EA Engineering, Science, and Technology, Inc., PBC 1001 Army Drive, Suite 103, Barrigada, 96913-1402 Telephone: (671) 646-5231 Facsimile: (671) 646-5230</p>	<p>Project No./TO.: RFP No. 2015-001 Guam EPA Brownfields 2017 Phase I ESAs</p>		
	<p><b>Figure 1</b> <b>Project Site Map</b></p>		
Drawing No. Fig 1 Project Site Location	Date: 08/15/2018	Drawn By: TChargualaf	EA Project No. 1567201

**Appendix B**

**Photograph Log**

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Photo 1: Empty 4.5-gal. buckets of scrap metal and building materials found on the northwestern portion of the subject site, Oka Point, Tamuning Guam



Photo 2: An empty 4.5-gal. bucket of dried sheetrock and scrap building materials found on the northwestern portion of the subject site, Oka Point, Tamuning Guam



Photo 3: Solidified Paint in Plastic 5-gal. bucket and rusted, 1-gal. metal can found on the northwestern portion of the subject site, Oka Point, Tamuning Guam



Photo 4: Discarded electrical equipment found on the northwestern portion of the subject site, Oka Point, Tamuning Guam



Photo 5: Wooden utility poles and household found on the northwestern portion of the subject site, Oka Point, Tamuning Guam



Photo 6: Corroded paint cans, spray paint cans, and aerosol spray lubricant cans inside a Styrofoam box (NE Portion of the Property), Oka Point, Tamuning Guam



Photo 7: Concrete foundation found near the abandoned generator building that was possibly used as a containment for an Above-ground Storage Tank (AST) at the northwest portion of the subject site, Oka Point, Tamuning Guam



Photo 8: Concrete foundation for the Abandoned Generator Building found at the northwest portion of the subject site, Oka Point, Tamuning Guam



Photo 9: Forklift discovered at the Abandoned Generator Building at the northwest portion of the subject site, Oka Point, Tamuning Guam



Photo 10: Plastic 1-gal. Paint Buckets and Household Waste, Center of the Property, Oka Point, Tamuning Guam



Photo 11: Household trash found at the center of the subject site, Oka Point, Tamuning Guam



Photo 12: Paper, Metal, and Plastic Waste, Center of the Property, Oka Point, Tamuning Guam



Photo 13: Abandoned Building “A” also known as the former GPA field office near the southwest boundary of the subject site, Oka Point, Tamuning Guam



Photo 14: Inside GPA field office near the southwest boundary of the subject site, Oka Point, Tamuning Guam



Photo 15: 12-inch floor tiles inside the former GPA field office near the southwest boundary of the subject site, Oka Point, Tamuning Guam



Photo 16: Inside the former GPA field office near the southwest boundary of the subject site, Oka Point, Tamuning Guam



Photo 17: Containment for an Above Ground Storage Tank (AST) near the former GPA field office, near the southwest boundary of the subject site, Oka Point, Tamuning Guam



Photo18: Septic tank behind the GPA field office near the southwest boundary of the subject site, Oka Point, Tamuning Guam



Photo19: Multiple rolls of carpet found behind the former GPA field office, near the southwest boundary of the subject site, Oka Point, Tamuning Guam



Photo 20: Inside abandoned house “B”, near the west boundary of the site, Oka Point, Tamuning Guam



Photo 21: Inside Abandoned House “C” near the southwest boundary of the subject site, Oka Point, Tamuning Guam



Photo 22: Abandoned House “D”, near the southwest boundary of the subject site, Oka Point, Tamuning Guam



Photo 23: Inside Abandoned House “G” near the southwest boundary of the subject site, Oka Point, Tamuning Guam



Photo 24: Inside Abandoned House “F” near the southwest boundary of the subject site, Oka Point, Tamuning Guam



Photo 25: Inside Abandoned House “J” at the western boundary of the subject site, Oka Point, Tamuning Guam



Photo 26: Abandoned House “K”, near the western boundary of the subject site, Oka Point, Tamuning Guam



Photo 27: Invasive chain-of-love vine covering Abandoned House “K”, near the western boundary of the subject site, Oka Point, Tamuning Guam



Photo 28: 9-inch floor tiles found inside Abandoned House “N” near the western boundary of the subject site, Oka Point, Tamuning Guam



Photo 29: Precast manholes near the southern portion of the subject site, Oka Point, Tamuning  
Guam



Photo 30: Rubber flooring material at the southeastern portion of the subject site, Oka Point,  
Tamuning Guam

## **Appendix C**

### **Historical Research Documentation**

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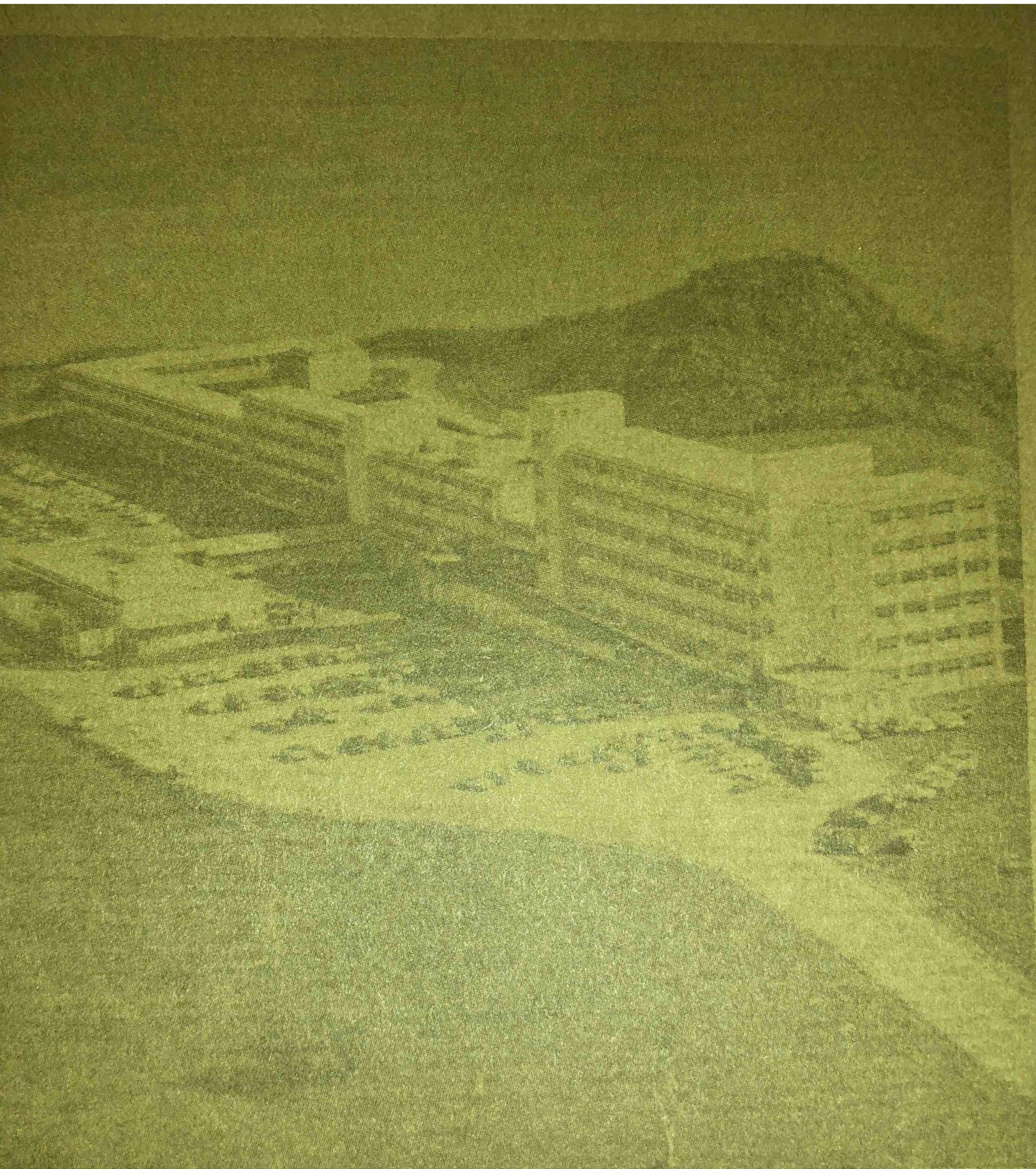
**Legend**

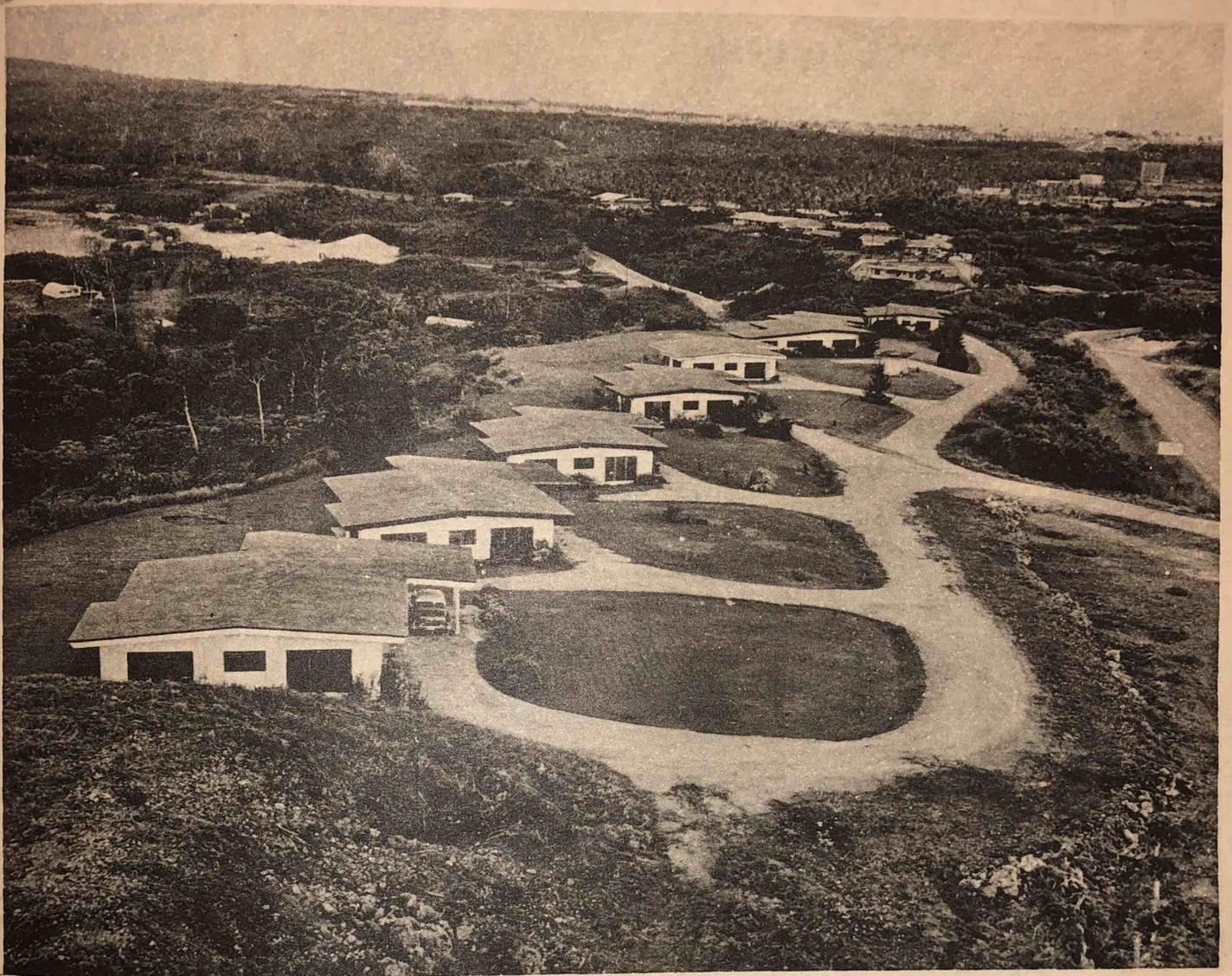
- Project Site Location
- Elevation Contour Line 5ft



COORDINATE/REFERENCE: WGS\_1984\_UTM\_Zone\_55N: IMAGERY 2016

 EA Engineering, Science, and Technology, Inc., PBC 1001 Army Drive, Suite 103, Barrigada, 96913-1402 Telephone: (671) 648-6231 Facsimile: (671) 648-6230	Project No./TO: RFP No. 2015-001 Guam EPA Brownfields 2017 Phase I ESAs		
	<b>Figure 6 Topographic Map</b> <b>Phase I Environmental Site Assessment</b> <b>Oka Point</b>		
Drawing No. Fig 1_ Project Site Location	Date: 08/15/2018	Drawn By: TChargualaf	EA Project No. 1567201





Government of Guam-owned housing is adjacent to the hospital and rented fully furnished, including utilities. A telephone (\$5.00 to \$6.00 per month) is the responsibility of the occupant as are linens, silver, cooking utensils, dinner ware and household appliances. Washing machines are not furnished. Appliances such as toasters, electric irons, radios, television sets, etc., should be wired for alternating current.

Each occupant is responsible for the upkeep of the grounds surrounding his housing and a lawn mower is available on loan from the hospital. Most occupants enjoy planting hedges and flowers as they grow easily and rapidly.

**Legend**

 Subject Site -- 2004

**Oka Point - Old GMH**

LOT 5173-1-R2-NEW-R7



**Legend**

 Subject Site -- 2005

**Oka Point - Old GMH**

LOT 5173-1-R2-NEW-R7



# Oka Point - Old GMH

LOT 5173-1-R2-NEW-R7

**Legend**  
Subject Site -- 2010



# Oka Point - Old GMH

LOT 5173-1-R2-NEW-R7

## Legend

 Subject Site -- 2011



# Oka Point - Old GMH

LOT 5173-1-R2-NEW-R7

## Legend

 Subject Site -- 2013

Google Earth

Image © 2018 DigitalGlobe  
Image Landsat / Copernicus

700 ft



# Oka Point - Old GMH

LOT 5173-1-R2-NEW-R7

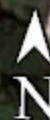
## Legend

 Subject Site -- 2014

Google Earth

Image Landsat / Copernicus  
Image © 2018 DigitalGlobe

700 ft



# Oka Point - Old GMH

LOT 5173-1-R2-NEW-R7

## Legend

 Subject Site -- 2015



# Oka Point - Old GMH

LOT 5173-1-R2-NEW-R7

## Legend

 Subject Site -- 2018



## **Appendix D**

### **Regulatory Records Documentation**

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**CHAMORRO LAND TRUST COMMISSION**  
**Potential Property for Commercial Use**  
**January 19, 2016**

**Lot No. 5173-1-R2NEW-6, -R6, Tamuning**

**1. FACTS:**

- a. **Location:** Off the west end of San Vitores Road, also known as Oka Point or Old Hospital Point
- b. **Lot Size:** 38 acres (153,463 square meters)
- c. **Zone:** Multi-family Dwelling (R2) zone
- d. **Parcel Identification Number:** 30000016360000
- e. **Land Management Survey Map No.:** 076FY2013
- f. **Tax Assessed Value:** \$19,394,218

**2. POTENTIAL USE:**

Any commercial or hotel activity conducive to its size and location

**3. RECOMMENDATION:**

Authorize for commercial use for the purpose of engaging in a commercial lease

**Appendix E**

**Supporting Documentation**

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## Record of Communication

Date: 05/18/18 – 05/30/18

EA Project No.: 15672.01

---

Communications with: Leo Espia

---

Telephone No: (671) 483-0361

---

Communication by: Email (Bob and Chris)

---

Re: FOIA request to GHS

---

Summary of Communication: (See Email Below)

---

Bob and Chris,

I was advised this afternoon that my boss has routed the document to the Governor's legal counsel. Please pardon us for the delay. He is new on this area and I guess he wants to be advised. But, I am taking note that you should receive our response no later than Friday. Thank you for being patient with us.

Leo

On Wed, May 30, 2018 at 7:15 PM, Shambach, Bob <[bshambach@eaest.com](mailto:bshambach@eaest.com)> wrote:  
Leo

Can you get a response out by end of the day Friday that's fine. If you need more time let me know.

Thank you  
Bob

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---

**From:** Leo Espia <[leo.espia@ghs.guam.gov](mailto:leo.espia@ghs.guam.gov)>

**Sent:** Wednesday, May 30, 2018 6:17:58 PM

**To:** Rosario, Christopher; Shambach, Bob

**Subject:** Re: File Review Request under FOIA

Chris and Bob,

Request extend the submission of our response to one more day. Our draft correspondence was not acted as of COB today. Our Head of Office just came back from military leave. For sure this will be with you by tomorrow. Thanks!

Leo

On Fri, May 25, 2018 at 7:57 AM, Rosario, Christopher <[crosario@eaest.com](mailto:crosario@eaest.com)> wrote:

Hi Leo,

Thank you for your response, I agree with Bob.

Cheers,

Christopher A. Rosario

Scientist I

EA Engineering, Science, and Technology, Inc., PBC

[1001 Army Drive, Suite 103](#)

[Barrigada, GU 96913](#)-1402

671-646-5231 Ext. 513 (office)

671-487-1640 (cell)

[crosario@eaest.com](mailto:crosario@eaest.com)

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**From:** Shambach, Bob  
**Sent:** Thursday, May 24, 2018 5:11 PM  
**To:** Leo Espia <[leo.espia@ghs.guam.gov](mailto:leo.espia@ghs.guam.gov)>; Rosario, Christopher <[crosario@eaest.com](mailto:crosario@eaest.com)>  
**Subject:** RE: File Review Request under FOIA

Hi Leo,

Thank you for the response. Additional time is not a problem, if you can get back to Chris and I by close of business, Wednesday, 30 May that will work.

Regards,

**Bob Shambach, P.G.**

Guam Office Manager/Sr. Geologist

EA Engineering, Science, and Technology, Inc., PBC

[1001 Army Drive, Suite 103](#)

[Barrigada, Guam 96913](#)-1402

Tel: 671-646-5231 x505

Fax: 671-646-5230

Mobile: 671-727-6094

[www.eaest.com](http://www.eaest.com)



Before printing, think about ENVIRONMENTAL responsibility

**From:** Leo Espia [<mailto:leo.espia@ghs.guam.gov>]  
**Sent:** Thursday, May 24, 2018 4:47 PM  
**To:** Rosario, Christopher <[crosario@eaest.com](mailto:crosario@eaest.com)>  
**Cc:** Shambach, Bob <[bshambach@eaest.com](mailto:bshambach@eaest.com)>  
**Subject:** Re: File Review Request under FOIA

Chris,

As of this date, we cannot find anything in our records that pertains to the sites mentioned in your inquiry. However, we wanted to devote a little more time to go over our response related files. Please give us until close of business on Monday, 28 May 2018. We submit a formal response to your inquiry on or before that time. Thanks!

Leo

---

**LEO RUSTUM J. ESPIA**

Deputy Administrator and State Hazard Mitigation Officer, Guam Homeland Security / Office of Civil Defense

Security Liaison and Senior Security Officer, Mariana Regional Fusion Center (Guam)

221-B Chalan Palasyo, Agana Heights, Guam 96910  
Tel: (671) 475-9600 / Cell: (671) 483-0361 / Fax: (671) 477-3727

Email: [leo.espia@ghs.guam.gov](mailto:leo.espia@ghs.guam.gov)

On Fri, May 18, 2018 at 4:47 PM, Rosario, Christopher <[crosario@eaest.com](mailto:crosario@eaest.com)> wrote:

Greetings Leo Espia,

My name is Christopher Rosario from EA Engineering, Science and Technology Inc., PBC (EA). EA is an environmental consulting firm submitting a Freedom of Information Act (FOIA) request on behalf of our client, Guam Environmental Protection Agency, under the Brownfields Phase I ESA. Please see the attached file.

Cheers,

Christopher A. Rosario

Scientist I

EA Engineering, Science, and Technology, Inc., PBC

[1001 Army Drive, Suite 103](#)

[Barrigada, GU 96913](#)-1402

671-646-5231 Ext. 513 (office)

671-487-1640 (cell)

[crosario@eaest.com](mailto:crosario@eaest.com)

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EA Engineering, Science, and Technology, Inc., PBC

1001 Army Drive, Ste. 103  
Barrigada, Guam 96913  
Telephone: 671-646-5231  
Fax: 671-646-5230  
www.eaest.com

18 May 2018

Leo Espia, Chief Planner  
Guam Homeland Security  
Office of Civil Defense  
[leo.espia@ghs.guam.gov](mailto:leo.espia@ghs.guam.gov)  
Phone: 671- 475-9600  
Fax: 671- 477-3727

*Sent via email*

Re: File Review Request under FOIA

Mr. Espia:

EA Engineering, Science and Technology Inc., PBC is an environmental consulting firm submitting a Freedom of Information Act (FOIA) request on behalf of our client, Guam Environmental Protection Agency, under the Brownfields Phase I ESA. As part of the assessment, I am submitting a request for information pertaining to the following programs or databases which could possibly have locations near the subject sites (Figure 1) on Guam:

- Emergency Planning and Community Right-to-Know Act (EPCRA) information regarding hazardous materials and/or chemical inventories.
- Any other information regarding emergency responses to the Subject Sites (see attached figures).

Specific Site of Interest:

- 1. Old GMH – Oka Point**  
**LOT: M19 L5173-1-R2-NEW-R6**  
**Location: Tamuning, Guam**  
**Latitude: 13.506601    Longitude: 144.781587**  
**(Figure 3)**
- 2. Island Girl Power**  
**LOT: M05 L10114-NEW-3-R2**  
**Location: Dededo, Guam**  
**Latitude: 13.521548    Longitude: 144.844717**  
**(Figure 4)**
- 3. Old Good Will**  
**LOT: M19 L5138-2-R3-NEW-1**  
**Location: Tamuning, Guam**  
**Latitude: 13.499506                      Longitude: 144.798411**  
**(Figure 5)**
- 4. IBC Lot**  
**LOT: M13 L7054-R5**  
**Yigo, Guam**  
**Latitude: 13.543863    Longitude: 144.893347**  
**(Figure 6)**



EA Engineering, Science, and Technology, Inc., PBC

1001 Army Drive, Ste. 103  
Barrigada, Guam 96913  
Telephone: 671-646-5231  
Fax: 671-646-5230  
www.eaest.com

Please use **Guam EPA Brownfields** on all written correspondence or responses forwarded to our offices in reference to this request. Please respond within ten (10) business days of this request. Any written responses should be sent to one of the following:

- 1.) Email: [bshambach@eaest.com](mailto:bshambach@eaest.com) & [crosario@eaest.com](mailto:crosario@eaest.com) , or
- 2.) Address: 1001 Army Drive, Ste. 103  
Barrigada, Guam 96913  
Telephone: 671-646-5231  
Fax: 671-646-5230  
www.eaest.com

Please contact myself or Bob as soon as possible at 671-646-5231 or by email at [crosario@eaest.com](mailto:crosario@eaest.com) or [bshambach@eaest.com](mailto:bshambach@eaest.com) with any or with information regarding available files.

Sincerely,

A handwritten signature in black ink that reads "Christopher Rosario". The signature is written in a cursive, flowing style.

Christopher Rosario  
Environmental Scientist I



Eddie Baza Calvo  
Governor  
Ray Tenorio  
Lieutenant Governor

## OFFICES OF HOMELAND SECURITY AND CIVIL DEFENSE

*Inasiguran I Tano' Guahan/Ufisinan Difensia Sibet*  
221-B Chalan Palasyo, Agana Heights, Guam 96910  
Tel: (671) 475-9600 / Fax: (671) 477-3727  
Website: [www.ghs.guam.gov](http://www.ghs.guam.gov)



Charles V. Esteves  
Administrator  
George L. Charfauros, Jr.  
Homeland Security Advisor

June 1, 2018

Mr. Christopher Rosario  
Environmental Scientist I  
EA Engineering, Science and Technology, Inc.  
1001 Army Drive, Suite 103  
Barrigada, Guam 91913

Dear Mr. Rosario:

Please see our official response to your Freedom of Information Act request for information on Emergency Planning and Community Right-to-Know Act related hazardous materials and/or chemical inventories, and information on emergency responses to the following sites:

1. Old GMH, Oka Point, Taumuning, Guam  
Lot: M19 L5173-1-R2-NEW-R6  
Latitude: 13.506601 / Longitude: 144.781587
2. Island Girl Power, Dededo, Guam  
Lot: M05 L10114-NEW-R2  
Latitude: 13.521548 / Longitude: 144.844717
3. Old Good Will, Tamuning, Guam  
Lot: M19 L5138-2-R3-NEW-1  
Latitude: 13.499506 / Longitude: 144.798411
4. IBC Lot, Yigo, Guam  
Lot: M13 L7054-R5  
Latitude: 13.543863 / Longitude: 144.893347

We do not have any records for the sites listed.

-2-

Please feel free to contact me if you have any questions at office (671) 478-0202 or [charles.esteves@ghs.guam.gov](mailto:charles.esteves@ghs.guam.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Charles V. Esteves". The signature is stylized and cursive.

Charles V. Esteves  
Administrator, Office of Civil Defense

Cc:  
Robert Shambach, P.G., Guam Office Manager/Senior Geologist, EA Engineering, Science and Technology, Inc.



EA Engineering, Science, and Technology, Inc., PBC

1001 Army Drive, Ste. 103  
Barrigada, Guam 96913  
Telephone: 671-646-5231  
Fax: 671-646-5230  
www.eaest.com

26 June 2018

Mr. Ronald Castro, Battalion Chief  
Guam Fire Department  
Phone: 671-472-3311  
Fax: 671-472-3360

***Sent via Facsimile:***

Re: File Review Request under FOIA

Mr. Castro:

EA Engineering, Science and Technology Inc., PBC is an environmental consulting firm submitting a Freedom of Information Act (FOIA) request on behalf of our client, Guam Environmental Protection Agency, under the Brownfields Phase I ESA. As part of the assessment, I am submitting a request for information pertaining to the following programs or databases which could possibly have locations near the subject sites (Figure 1) on Guam:

- Emergency Planning and Community Right-to-Know Act (EPCRA) information regarding hazardous materials and/or chemical inventories.
- Any other information regarding emergency responses to the Subject Sites (see attached figures).

Specific Site of Interest:

1. **Old GMH – Oka Point**  
**LOT 5173-1-R2-NEW-R6**  
**Location: Tamuning, Guam**  
**Latitude: 13.506601    Longitude: 144.781587**  
**(Figure 3)**
2. **Island Girl Power**  
**LOT10114-NEW-3-R2**  
**Location: Dededo, Guam**  
**Latitude: 13.521548    Longitude: 144.844717**  
**(Figure 4)**
3. **Old Good Will**  
**LOT 5138-2-R3 NEW-1-R2**  
**Location: Tamuning, Guam**  
**Latitude: 13.499506                      Longitude: 144.798411**  
**(Figure 5)**
4. **IBC Lot**  
**LOT 7054-R8**  
**Yigo, Guam**  
**Latitude: 13.543863    Longitude: 144.893347**  
**(Figure 6)**



EA Engineering, Science, and Technology, Inc., PBC

1001 Army Drive, Ste. 103  
Barrigada, Guam 96913  
Telephone: 671-646-5231  
Fax: 671-646-5230  
www.eaest.com

Please use **Guam EPA Brownfields** on all written correspondence or responses forwarded to our offices in reference to this request. Please respond within ten (10) business days of this request. Any written responses should be sent to one of the following:

- 1.) Email: [bshambach@eaest.com](mailto:bshambach@eaest.com) & [crosario@eaest.com](mailto:crosario@eaest.com) , or
- 2.) Address: 1001 Army Drive, Ste. 103  
Barrigada, Guam 96913  
Telephone: 671-646-5231  
Fax: 671-646-5230  
www.eaest.com

Please contact myself or Bob as soon as possible at 671-646-5231 or by email at [crosario@eaest.com](mailto:crosario@eaest.com) or [bshambach@eaest.com](mailto:bshambach@eaest.com) with any or with information regarding available files.

Sincerely,

A handwritten signature in black ink that reads "Christopher Rosario". The signature is written in a cursive, flowing style.

Christopher Rosario  
Environmental Scientist I

# NFIRS-1 Basic

**A**

66010	GU	02	17	2018		18-3051-E1	0
FDID	State	Month	Day	Year	Station	Number	Exposure

**B Location Type**

Census tract: \_\_\_\_\_

Street Address  
 Intersection  
 In Front Of  
 Rear Of  
 Adjacent To  
 Directions  
 US National Grid

Number	Prefix	Street or Highway	Street Type	Suffix
		Old GMH		

Apt./Suite/Room	City	State	Zip Code
	Tamuning	GU	96931

Cross Street: \_\_\_\_\_

<p><b>C Incident Type</b></p> <p>143-Grass fire</p>	<p><b>E1 Dates and Times</b></p> <p>Alarm: 02   17   2018   18:38</p> <p>Arrival: 02   17   2018   18:42</p> <p>Controlled: 02   17   2018   18:57</p> <p>Last Unit Cleared: 02   17   2018   19:29</p>	<p><b>E2 Shifts and Alarms</b></p> <p>B      </p> <p>Shift or Alarms District Platoon</p>
	<p><b>D Aid Given Or Received</b></p> <p> <input type="checkbox"/> 1 Mutual Aid Received  <input type="checkbox"/> 2 Auto. Aid Received  <input type="checkbox"/> 3 Mutual Aid Given  <input type="checkbox"/> 4 Auto. Aid Given  <input checked="" type="checkbox"/> 5 Other Aid Given  <input type="checkbox"/> None         </p> <p>           Their FDID: _____ Their State: _____            Their Incident Number: _____         </p>	<p><b>E3 Special Studies</b></p> <p>ID# _____ Value _____</p>

<p><b>F Actions Taken</b></p> <p>11-Extinguishment by fire service personnel</p> <p>Primary Action Taken</p>	<p><b>G1 Resources</b></p> <p><input type="checkbox"/> Apparatus or Personnel Module is used.</p> <table border="1"> <tr> <td></td> <td>Apparatus</td> <td>Personnel</td> </tr> <tr> <td>Suppression</td> <td>1</td> <td>4</td> </tr> <tr> <td>EMS</td> <td>0</td> <td>0</td> </tr> <tr> <td>Other</td> <td>0</td> <td>0</td> </tr> </table> <p><input type="checkbox"/> Resource counts include aid received resources.</p>		Apparatus	Personnel	Suppression	1	4	EMS	0	0	Other	0	0	<p><b>G2 Estimated Dollar Losses and Values</b></p> <p><b>Losses:</b> Required for all fires if known. Optional for all non-fires. None</p> <p>Property: \$ _____ <input checked="" type="checkbox"/></p> <p>Contents: \$ _____ <input checked="" type="checkbox"/></p> <p><b>Pre-Incident Values:</b> Optional None</p> <p>Property: \$ _____ <input checked="" type="checkbox"/></p> <p>Contents: \$ _____ <input checked="" type="checkbox"/></p>
	Apparatus	Personnel												
Suppression	1	4												
EMS	0	0												
Other	0	0												

<b>Completed Modules</b> <input type="checkbox"/> 2 - Fire <input type="checkbox"/> 3 - Structure Fire <input type="checkbox"/> 4 - Civilian Fire Cas. <input type="checkbox"/> 5 - Fire Service Cas. <input type="checkbox"/> 6 - EMS <input type="checkbox"/> 7 - HazMat <input type="checkbox"/> 8 - Wildland Fire <input type="checkbox"/> 9 - Apparatus <input type="checkbox"/> 10 - Personnel <input type="checkbox"/> 11 - Arson	<b>H1 Casualties</b> <input checked="" type="checkbox"/> None <table border="0"> <tr> <td></td> <td>Deaths</td> <td>Injuries</td> </tr> <tr> <td>Fire Service</td> <td><input type="text" value="0"/></td> <td><input type="text" value="0"/></td> </tr> <tr> <td>Civilian</td> <td><input type="text" value="0"/></td> <td><input type="text" value="0"/></td> </tr> </table>		Deaths	Injuries	Fire Service	<input type="text" value="0"/>	<input type="text" value="0"/>	Civilian	<input type="text" value="0"/>	<input type="text" value="0"/>	<b>H3 Hazardous Materials Release</b> <input type="checkbox"/> 1 - Natural Gas <input type="checkbox"/> 2 - Propane Gas <input type="checkbox"/> 3 - Gasoline <input type="checkbox"/> 4 - Kerosene <input type="checkbox"/> 5 - Diesel Fuel / Fuel Oil <input type="checkbox"/> 6 - Household Solvents <input type="checkbox"/> 7 - Motor Oil <input type="checkbox"/> 8 - Paint <input type="checkbox"/> 0 - Other <input checked="" type="checkbox"/> None	<b>I Mixed Use Property</b> <input type="checkbox"/> Not Mixed <input type="checkbox"/> 10 - Assembly Use <input type="checkbox"/> 20 - Education Use <input type="checkbox"/> 33 - Medical Use <input type="checkbox"/> 40 - Residential Use <input type="checkbox"/> 51 - Row Of Stores <input type="checkbox"/> 53 - Enclosed Mall <input type="checkbox"/> 58 - Business and Residential <input type="checkbox"/> 59 - Office Use <input type="checkbox"/> 60 - Industrial Use <input type="checkbox"/> 63 - Military Use <input type="checkbox"/> 65 - Farm Use <input type="checkbox"/> 00 - Other Mixed Use
		Deaths	Injuries									
Fire Service	<input type="text" value="0"/>	<input type="text" value="0"/>										
Civilian	<input type="text" value="0"/>	<input type="text" value="0"/>										
<b>H2 Detector</b> Required for Confined Fires <input type="checkbox"/> 1 - Detector Alerted Occupants <input type="checkbox"/> 2 - Detector Did Not Alert Them <input type="checkbox"/> 3 - Unknown												

**J Property Use**  None

<b>Structures</b> <input type="checkbox"/> 131 Church, Place of Worship <input type="checkbox"/> 161 Restaurant or Cafeteria <input type="checkbox"/> 162 Bar/Tavern or Nightclub <input type="checkbox"/> 213 Elementary School, Kindergarten <input type="checkbox"/> 215 High School, Junior High <input type="checkbox"/> 241 College, Adult Education <input type="checkbox"/> 311 Nursing Home <input type="checkbox"/> 331 Hospital	<input type="checkbox"/> 341 Clinic, Clinic-Type Infirmary <input type="checkbox"/> 342 Doctor/Dentist Office <input type="checkbox"/> 361 Prison or Jail, Not Juvenile <input type="checkbox"/> 419 1- or 2-Family Dwelling <input type="checkbox"/> 429 MultiFamily Dwelling <input type="checkbox"/> 439 Rooming/Boarding House <input type="checkbox"/> 449 Commerical Hotel or Motel <input type="checkbox"/> 459 Residential, Board and Care <input type="checkbox"/> 464 Dormitory/Barracks <input type="checkbox"/> 519 Food and Beverage Sales	<input type="checkbox"/> 539 Household Goods, Sales, Repairs <input type="checkbox"/> 571 Gas or Service Station <input type="checkbox"/> 579 Motor Vehicle/Boat Sales/Repairs <input type="checkbox"/> 599 Business Office <input type="checkbox"/> 615 Electric-Generating Plant <input type="checkbox"/> 629 Laboratory/Science Laboratory <input type="checkbox"/> 700 Manufacturing Plant <input type="checkbox"/> 819 Livestock/Poultry Storage (Barn) <input type="checkbox"/> 882 Non-Residential Parking Garage <input type="checkbox"/> 891 Warehouse
--	--	--

<b>Outside</b> <input type="checkbox"/> 124 Playground or Park <input type="checkbox"/> 655 Crops or Orchard <input type="checkbox"/> 669 Forest (Timberland) <input type="checkbox"/> 807 Outdoor Storage Area <input type="checkbox"/> 919 Dump or Sanitary Landfill <input type="checkbox"/> 931 Open Land or Field <input checked="" type="checkbox"/> 936 Vacant Lot	<input type="checkbox"/> 938 Graded/Cared for Plot of Land <input type="checkbox"/> 946 Lake, River, Stream <input type="checkbox"/> 951 Railroad Right-of-Way <input type="checkbox"/> 960 Other Street <input type="checkbox"/> 961 Highway/Divided Highway <input type="checkbox"/> 962 Residential Street/Driveway <input type="checkbox"/> 981 Construction Site <input type="checkbox"/> 984 Industrial Plant Yard	<b>Property Use:</b> <input type="text"/> <b>Description</b> Look up and enter a Property Use code and description only if you have NOT checked a Property Use box.
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**K2**

**Owner**

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Local Option	Person/Entity Type	Business Name (if applicable)	Phone Number
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Mr., Ms., Mrs.	First Name	MI	Last Name
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Number	Prefix	Street or Highway	Street Type
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Post Office Box	Apt./Suite/Room	City	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
State	Zip Code		
<input type="text"/>	<input type="text"/>		

**L Remarks:**

Engine 1 checked out to the Old GMH site to a reported grass fire. Upon arrival to the scene engine crew commenced extinguishment via booster line. Also utilized brush beater and shovels. likewise 2 ea 100' forestry hose line.

**M Authorization**

302	MESA, RAFAEL			02/17/2018
Officer In Charge ID	Signature	Position or Rank	Assignment	Date
281	MABAYAG, JOHN			02/17/2018
Member Making Report ID	Signature	Position or Rank	Assignment	Date

# NFIRS-2 Fire

A	66010	GU	02	17	2018		18-3051-E1	0
	FDID	State	Month	Day	Year	Station	Number	Exposure

<p><b>B</b></p> <p><b>Property Details</b></p> <p><b>B1</b> <input type="checkbox"/> <input type="checkbox"/> Not Residential          Estimated number of residential living units in the building of origin whether or not all units became involved</p> <p><b>B2</b> <input type="checkbox"/> <input type="checkbox"/> Buildings Not Involved          Number of buildings involved</p> <p><b>B3</b> <input checked="" type="checkbox"/> None <input type="checkbox"/> Less than 1 acre          Acres burned (outside fires)</p>	<p><b>C</b></p> <p><b>On-Site Materials Or Products</b></p> <p><b>On-Site Materials Storage Use</b></p>
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<p><b>D</b></p> <p><b>Ignition</b></p> <p><b>D1</b> <input type="text"/>          Area of Fire Origin</p> <p><b>D2</b> <input type="text"/>          Heat Source</p> <p><b>D3</b> <input type="text"/>          Item First Ignited</p> <p><b>D4</b> <input type="text"/>          Type of Material First Ignited</p>	<p><b>E1</b></p> <p><b>Cause of Ignition</b></p> <p><input type="checkbox"/> 1 - Intentional  <input type="checkbox"/> 2 - Unintentional  <input type="checkbox"/> 3 - Failure of Equipment or Heat Source  <input type="checkbox"/> 4 - Act of Nature  <input type="checkbox"/> 5 - Cause Under Investigation  <input type="checkbox"/> U - Cause Undetermined After Investigation</p> <hr/> <p><b>E2</b></p> <p><b>Factors Contributing to Ignition</b></p>	<p><b>E3</b></p> <p><b>Human Factors Contributing to Ignition</b></p> <p>Check all applicable boxes</p> <p><input checked="" type="checkbox"/> None  <input type="checkbox"/> 1 - Asleep  <input type="checkbox"/> 2 - Possibly impaired by alcohol or drugs  <input type="checkbox"/> 3 - Unattended person  <input type="checkbox"/> 4 - Possibly Mentally Disabled  <input type="checkbox"/> 5 - Physically Disabled  <input type="checkbox"/> 6 - Multiple Persons Involved</p> <hr/> <p><input type="checkbox"/> 7 - Age Was A Factor</p> <p>Estimated Age of Person Involved <input type="text"/></p> <p><input type="checkbox"/> Male <input type="checkbox"/> Female</p>
--	---	--

<p><b>F1</b></p> <p><b>Equipment Involved In Ignition</b></p> <p><input checked="" type="checkbox"/> None</p> <p><input type="text"/>          Equipment Involved</p> <p>Brand <input type="text"/>          Model <input type="text"/>          Serial # <input type="text"/>          Year <input type="text"/></p>	<p><b>F2</b></p> <p><b>Equipment Power Source</b></p> <p><input type="text"/>          Equipment Power Source</p> <hr/> <p><b>F3</b></p> <p><b>Equipment Portability</b></p> <p><input type="checkbox"/> 1 - Portable  <input type="checkbox"/> 2 - Stationary          Portable equipment normally can be moved by one or two persons.</p>	<p><b>G</b></p> <p><b>Fire Suppression Factors</b></p>
---	---	--



**ABSTRACT OF TITLE**

**PREPARED FOR:** EA ENGINEERING, SCIENCE & TECHNOLOGY, INC.  
1001 ARMY DRIVE, STE. 103, BARRIGADA, GUAM 96913

**ATTENTION:** CHRISTOPHER ROSARIO

**CONTACT INFORMATION:** PHONE: 671-487-1640  
EMAIL: crosario@eaest.com

**SUBJECT:** LOT NO. 5173-1-R2NEW-R7, TAMUNING, GUAM

**Period as of:** 09/04/2018

As to Basic Lot No. 5173-1-R2NEW, Dededo, Guam (a consolidation of Lot Nos. 5173-1-R2 and 5174-REM)

As to Basic Lot No. 5173-1-R2, Tamuning, Guam

1. **FIRST RECORD:** Decree  
**INSTRUMENT NO.:** Agana Volume 7, Page 715  
**GRANTOR:** Circuit Court, Island of Guam  
**GRANTEE:** Don Lorenzo de Leon Guerrero y Manalisay  
**PROPERTY:** Land with coconut plantations and other articles  
**DATED:** Not mentioned  
**RECORDED:** June 23, 1909  
**REMARKS:** Possessed the estate since 1877 on which he acquired by inheritance of his deceased father Mariano de Leon Guerrero.
  
2. **TYPE OF INSTRUMENT:** Definite Record of Real Estate  
**INSTRUMENT NO.:** 8870  
**GRANTOR:** Naval Government of Guam  
**GRANTEE:** Lorenzo Manalizay Leon Guerrero, widower  
**PROPERTY:** Lot No. 5173, Agana; Area: 593,726 square meters  
**DATED:** May 7, 1929  
**RECORDED:** May 8, 1929  
**REMARKS:** Bounded on the North by Government Land, on the East by the said Government Land, on the South by the Old Tumon Road, and on the West by the Heirs of Zulio Leon Guerrero Tello.

3. TYPE OF INSTRUMENT: Order Confirming Sale of Real Property; under Civil Case No. 36, Year 1930  
INSTRUMENT NO.: 12464  
PLAINTIFF: Atkins, Kroll & Company, Guam Branch  
DEFENDANT: Heirs of Lorenzo M. Leon Guerrero, Deceased  
PROPERTY: Lot No. 5173, with all improvements thereon, place of Oca, Dededo; Area: 593,726 square meters  
DATED: October 16, 1931  
RECORDED: February 8, 1933  
REMARKS: Atkins, Kroll and Company, represented by their general manager, H.V. Hussey, being the only bidder became the purchaser of said real estate for the sum of \$3,700.00
4. TYPE OF INSTRUMENT: Deed of Sale  
INSTRUMENT NO.: 12797  
SELLER: Atkins Kroll & Company, a co-partnership, represented by their Manager F. Fall, married  
BUYER:: Francisco D. Perez, minor son of Jesus F. Perez  
PROPERTY: Lot No. 5173, Oca, Dededo formerly Agana; Area: 59 Hectares, 37 Ares, 26 Centares  
DATED: June 7, 1933  
RECORDED: June 12, 1933
5. TYPE OF INSTRUMENT: Untitled Document  
INSTRUMENT NO.: 23811  
MADE BY: Francisco D. Perez  
PROPERTY: Lot No. 5173, portion  
DATED: October 29, 1951  
RECORDED: October 30, 1951  
REMARKS: Francisco D. Perez sold to the Government of Guam a portion of a lot designated as Lot 5173.
6. TYPE OF INSTRUMENT: Deed of Conveyance  
INSTRUMENT NO.: 23817  
GRANTOR: Francisco D. Perez  
GRANTEE: Government of Guam  
PROPERTY: A part or portion of Lot 5173, place of Oca, Dededo, designated as Lot 5173-1, also known as Parcel "A"; Area: 173,049.98 square meters  
DATED: October 29, 1951  
RECORDED: October 31, 1951
7. TYPE OF INSTRUMENT: General Release  
INSTRUMENT NO.: 24786  
GRANTOR: Francisco Duenas Perez  
GRANTEE: United States of America  
PROPERTY: Certain portions of Lot No. 5173  
DATED: October 21, 1951  
RECORDED: November 18, 1952  
REMARKS:

8. TYPE OF INSTRUMENT: Mortgage  
INSTRUMENT NO.: 25771  
MORTGAGOR: Francisco D. Perez  
MORTGAGEE: The Government of Guam as represented by the Guam Finance and Development Administration  
PROPERTY: A portion of Lot No. 5173, Oca, Dededo  
DATED: August 28, 1953  
RECORDED: August 31, 1953  
REMARKS: \$42,410.00, Promissory Note
9. TYPE OF INSTRUMENT: Lease  
INSTRUMENT NO.: 25980  
LESSOR: Francisco Duenas Perez  
LESSEE: The United States of America, Government  
PROPERTY: That certain portion of Lot No. 5173, Dededo; Area: 214,672 square meters  
DATED: September 12, 1953  
RECORDED: October 21, 1953  
REMARKS: A term commencing on July 1, 1951 and ending on June 30, 1954 with an option to renew for 1 year, exclusively for the purpose of the site of the United States Naval Hospital.
10. TYPE OF INSTRUMENT: Renewal of Government Lease  
INSTRUMENT NO.: 27679  
LESSOR: Francisco Duenas Perez  
LESSEE: The United States of America  
PROPERTY: Lot No. 5173, within the perimeter of the United States Naval Hospital; Area: 214,672 square meters  
DATED: May 28, 1954  
RECORDED: August 24, 1954  
REMARKS: A term commencing on July 1, 1954 and ending June 30, 1955.
11. TYPE OF INSTRUMENT: First Modification of Lease No. N0y (R)-47899  
INSTRUMENT NO.: 28042  
LESSOR: Francisco Duenas Perez  
LESSEE: The United States of America  
PROPERTY: Lot No. 5173 (designated as Parcel E) , Dededo; Area: 36,975 square meters  
DATED: October 1, 1954  
RECORDED: November 8, 1954  
REMARKS: Parties agree that as of October 1, 1954 an area of 36,975 square meters is to be released from the lease premises, as determined to be excess military requirements.

12. TYPE OF INSTRUMENT: Agreement to Exchange Real Property  
INSTRUMENT NO.: 30502  
GRANTOR: Francisco Duenas Perez  
GRANTEE: Government of Guam  
PROPERTY: Lot No. 5173 to be designated as Lot No. 51733-TSS, Dededo; Area: 25,203.06 square meters.  
DATED: January 10, 1956  
RECORDED: January 24, 1956  
REMARKS: Government gives to Francisco Lot No. 2050-1, East Agana, Area: 6,380.26 square meters.
13. TYPE OF INSTRUMENT: Release Agreement  
INSTRUMENT NO.: 30731  
GRANTOR: Government of Guam  
GRANTEE: Francisco Duenas Perez  
PROPERTY: Lot No. 5173, Dededo  
DATED: February 21, 1956  
RECORDED: March 6, 1956  
REMARKS: Government releases Building Nos. 105, 105A, 106 and 107 back to Francisco Duenas Perez.
14. TYPE OF INSTRUMENT: Warranty Deed  
INSTRUMENT NO.: 33402  
GRANTOR: Francisco D. Perez, married  
GRANTEE: Government of Guam  
PROPERTY: Lot No. 5173-TSS, New Tamuning School Site, Dededo; Area: 25,203.06 square meters  
DATED: August 5, 1957  
RECORDED: August 7, 1957  
REMARKS:
15. TYPE OF INSTRUMENT: Partial Release of Mortgage  
INSTRUMENT NO.: 33993  
LENDER: The Guam Finance and Development Administration, represented by D.D.L. Flores, Administrator  
BORROWER: Francisco D. Perez  
PROPERTY: A portion of Lot No. 5173, Dededo  
DATED: December 30, 1957  
RECORDED: January 13, 1958
16. TYPE OF INSTRUMENT: Release of Mortgage  
INSTRUMENT NO.: 35403  
LENDER: The Guam Finance and Development Administration, represented by D.D.L. Flores, Administrator  
BORROWER: Francisco D. Perez  
PROPERTY: A portion of Lot No. 5173, Dededo  
DATED: November 14, 1958  
RECORDED: November 28, 1958

17. TYPE OF INSTRUMENT: Notice of Lis Pendens; under Civil Case No. 3-67  
INSTRUMENT NO.: 79022  
PLAINTIFF: Government of Guam  
DEFENDANT: Francisco D. Perez, Perez Bros., Inc., Mary L. Giblin,  
Conrado C. Salvador and Teresita S. Salvador  
PROPERTY: Lot Nos. 5173, Block 10; 5173REM; 5173 29/Block 29;  
5173 30/Block 9, Guam Memorial Hospital, Dededo  
DATED: January 9, 1967  
RECORDED: January 9, 1967  
REMARKS:
18. TYPE OF INSTRUMENT: Guam Memorial Hospital – Guam M.I. Hospital Site &  
Access Roads Boundary & Real Estate Requirements  
INSTRUMENT NO.: 84537  
MADE BY: W.C. Sudan  
DRAWING NO.: E4-53P144  
PROPERTY: Lot No. 5173-1 Guam Memorial Hospital Area, Dededo  
DATED: February 1, 1968  
RECORDED: February 14, 1968  
REMARKS: Lot No. 5173-1; Area: 42.780 acres, 17 Hectares, 31  
Ares, 26.39 Centares
19. TYPE OF INSTRUMENT: Order for Final Distribution of Estate; under Probate  
Matter No. 98-70  
INSTRUMENT NO.: 101370  
GRANTOR: In the Matter of the Estate of Gregorio S. Perez,  
Deceased  
GRANTEE: Afra S. Perez, widow  
PROPERTY: Lot No. 5173, Tamuning  
DATED: May 3, 1971  
RECORDED: May 6, 1971  
REMARKS: Together with the residential building thereon.
20. TYPE OF INSTRUMENT: Termination of the Rights of Redemption, Tax Sold  
Properties  
INSTRUMENT NO.: 236957  
MADE BY: Government of Guam  
IN FAVOR OF: Artemio R. Crisostomo, Etal  
PROPERTY: Lot No. 5173, Dededo; Area: 714 square meters  
DATED: June 4, 1974  
RECORDED: June 12, 1974  
REMARKS: 1 Res. Building; Tax year 1965

21. TYPE OF INSTRUMENT: Conveyance of Real Estate Sold for Nonpayment of Property Taxes  
INSTRUMENT NO.: 264121  
MADE BY: Government of Guam  
AGAINST: Artemio R. Crisostomo, Etal  
PROPERTY: Lot No. 5173, Dededo  
DATED: April 4, 1974  
RECORDED: January 22, 1976  
REMARKS: Together with a residential building thereon; Tax year 1964 for the amount of \$133.80.
22. TYPE OF INSTRUMENT: Conveyance of Real Estate Sold for Nonpayment of Property Taxes  
INSTRUMENT NO.: 265571  
MADE BY: Government of Guam  
AGAINST: Jose L. Rosario  
PROPERTY: Lot No. 5173, Dededo; Area: 747.35 square meters  
DATED: April 4, 1974  
RECORDED: February 6, 1976  
REMARKS: Tax year 1964 for the amount of \$13.80.
23. TYPE OF INSTRUMENT: Conveyance of Real Estate Sold for Nonpayment of Property Taxes  
INSTRUMENT NO.: 322903  
MADE BY: Government of Guam  
AGAINST: Carmen E. Del, Etal  
PROPERTY: Lot No. 5173, Dededo; Area: 862.50 square meters  
DATED: April 27, 1981  
RECORDED: August 4, 1981  
REMARKS: Tax year 1967 for the amount of \$38.40.
24. TYPE OF INSTRUMENT: Conveyance of Real Estate Sold for Nonpayment of Property Taxes  
INSTRUMENT NO.: 323803  
MADE BY: Government of Guam  
AGAINST: Artemio R. Crisostomo, Etal  
PROPERTY: Lot No. 5173, Dededo; Area: 714 square meters  
DATED: September 9, 1981  
RECORDED: September 18, 1981  
REMARKS: Tax year 1968 for the amount of \$130.20.
25. TYPE OF INSTRUMENT: Conveyance of Real Estate Sold for Nonpayment of Property Taxes  
INSTRUMENT NO.: 325329  
MADE BY: Government of Guam  
AGAINST: Eulogio Del Carmen, Etal  
PROPERTY: Lot No. 5173, Dededo  
DATED: December 11, 1981  
RECORDED: December 7, 1981  
REMARKS: Tax year 1970 for the amount of \$33.00.

26. TYPE OF INSTRUMENT: Conveyance of Real Estate Sold for Nonpayment of Property Taxes  
INSTRUMENT NO.: 327138  
MADE BY: Government of Guam  
AGAINST: Artemio R. Crisostomo, Etal  
PROPERTY: Lot No. 5173, Dededo; Area: 714 square meters  
DATED: February 24, 1982  
RECORDED: February 26, 1982  
REMARKS: Tax year 1971 for the amount of \$46.00.

27. TYPE OF INSTRUMENT: Conveyance of Real Estate Sold for Nonpayment of Property Taxes  
INSTRUMENT NO.: 327139  
MADE BY: Government of Guam  
AGAINST: Artemio R. Crisostomo, Etal; Perez Bros., Inc.; Frank D. Perez & Carmen D. Perez  
PROPERTY: Lot No. 5173, Dededo; Area: 714 sm; Amt: \$160.50  
Lot No. 5173, Dededo; Area: 878.5 sm; Amt: \$49.50  
Lot No. 5173, Dededo; Area: 778.03 sm; Amt: \$48.90  
Lot No. 5173, Dededo; Area: 787.50 sm; Amt: \$49.50  
Lot No. 5173, Dededo; Area: 841.71 sm; Amt: \$53.10  
Lot No. 5173, Dededo; Area: 722.95 sm; Amt: \$48.60  
Lot No. 5173, Dededo; Area: 830.18 sm; Amt: \$52.20  
Lot No. 5173, Dededo; Area: 825.93 sm; Amt: \$51.90  
Lot No. 5173, Dededo; Area: 825.93 sm; Amt: \$51.90  
Lot No. 5173, Dededo; Area: 1,104.60 sm; Amt: \$69.60  
Lot No. 5173, Dededo; Area: 592 sm; Amt: \$37.20  
Lot No. 5173, Dededo; Area: 654 sm; Amt: \$41.40  
Lot No. 5173, Dededo; Area: 832.50 sm; Amt: \$50.70  
Lot No. 5173, Dededo; Area: 802.50 sm; Amt: \$50.70  
Lot No. 5173, Dededo; Area: 742.56 sm; Amt: \$41.10  
Lot No. 5173, Dededo; Area: 742.56 sm; Amt: \$41.10  
Lot No. 5173, Dededo; Area: 862.94 sm; Amt: \$47.70  
Lot No. 5173, Dededo; Area: 811.16 sm; Amt: \$44.70  
Lot No. 5173, Dededo; Area: 847.50 sm; Amt: \$46.80  
Lot No. 5173, Dededo; Area: 847.50 sm; Amt: \$46.80  
Lot No. 5173, Dededo; Area: 847.50 sm; Amt: \$46.80  
Lot No. 5173, Dededo; Area: 847.50 sm; Amt: \$46.80  
Lot No. 5173, Dededo; Area: 847.50 sm; Amt: \$46.80  
Lot No. 5173, Dededo; Area: 934.83 sm; Amt: \$51.60  
Lot No. 5173, Dededo; Area: 749.02 sm; Amt: \$41.40  
Lot No. 5173, Dededo; Area: 749.02 sm; Amt: \$41.40  
Lot No. 5173-R, Dededo; Area: 5.4 H; Amt: \$421.80  
Lot No. 5173, Dededo; Area: N/A; Amt: \$776.40  
DATED: February 24, 1982  
RECORDED: February 26, 1982  
REMARKS: Tax year 1972

28. TYPE OF INSTRUMENT: Conveyance of Real Estate Sold for Nonpayment of Property Taxes  
INSTRUMENT NO.: 327140  
MADE BY: Government of Guam  
AGAINST: Artemio R. Crisotomo, Etal  
PROPERTY: Lot No. 5173, Dededo; Area: 714 square meters  
DATED: February 24, 1982  
RECORDED: February 26, 1982  
REMARKS: Tax year 1973
29. TYPE OF INSTRUMENT: Conveyance of Real Estate Sold for Nonpayment of Property Taxes  
INSTRUMENT NO.: 327141  
MADE BY: Government of Guam  
AGAINST: Artemio R. Crisostomo, Etal; Frank D. Perez; Carmen D. Perez  
PROPERTY: Lot No. 5173, Dededo; Area: 714 sm; Amt: \$160.50  
Lot No. 5173, Dededo; Area: 811.16 sm; Amt: \$44.70  
Lot No. 5173, Dededo; Area: N/A; Amt: 776.40  
DATED: February 24, 1982  
RECORDED: February 26, 1982  
REMARKS: Tax year 1974
30. TYPE OF INSTRUMENT: Conveyance of Real Estate Sold for Nonpayment of Property Taxes  
INSTRUMENT NO.: 327142  
MADE BY: Government of Guam  
AGAINST: Artemio R. Crisostomo, Etal; Steph S. and Mieko F. Crowell  
PROPERTY: Lot No. 5173, Dededo; Area: 714 sm; Amt: \$46.00  
Lot No. 5173, Dededo; Area: 684.30; Amt: \$82.90  
DATED: February 24, 1982  
RECORDED: February 26, 1982  
REMARKS: Tax year 1975
31. TYPE OF INSTRUMENT: Conveyance of Real Estate Sold for Nonpayment of Property Taxes  
INSTRUMENT NO.: 327143  
MADE BY: Government of Guam  
AGAINST: Artemio R. Crisostomo, Etal; Perez Bros., Inc.; Frank D. Perez & Carmen D. Perez  
PROPERTY: Lot No. 5173, Dededo; Area: 714 sm; Amt: \$160.50  
Lot No. 5173, Dededo; Area: 878.5 sm; Amt: \$49.50  
Lot No. 5173, Dededo; Area: 778.03 sm; Amt: \$48.90  
Lot No. 5173, Dededo; Area: 787.50 sm; Amt: \$49.50  
Lot No. 5173, Dededo; Area: 841.71 sm; Amt: \$53.10  
Lot No. 5173, Dededo; Area: 722.95 sm; Amt: \$48.60  
Lot No. 5173, Dededo; Area: 830.18 sm; Amt: \$52.20  
Lot No. 5173, Dededo; Area: 825.93 sm; Amt: \$51.90  
Lot No. 5173, Dededo; Area: 825.93 sm; Amt: \$51.90

Lot No. 5173, Dededo; Area: 1,104.60 sm; Amt: \$69.60  
Lot No. 5173, Dededo; Area: 592 sm; Amt: \$37.20  
Lot No. 5173, Dededo; Area: 654 sm; Amt: \$41.40  
Lot No. 5173, Dededo; Area: 832.50 sm; Amt: \$50.70  
Lot No. 5173, Dededo; Area: 802.50 sm; Amt: \$50.70  
Lot No. 5173, Dededo; Area: 742.56 sm; Amt: \$41.10  
Lot No. 5173, Dededo; Area: 742.56 sm; Amt: \$41.10  
Lot No. 5173, Dededo; Area: 862.94 sm; Amt: \$47.70  
Lot No. 5173, Dededo; Area: 811.16 sm; Amt: \$44.70  
Lot No. 5173, Dededo; Area: 847.50 sm; Amt: \$46.80  
Lot No. 5173, Dededo; Area: 847.50 sm; Amt: \$46.80  
Lot No. 5173, Dededo; Area: 847.50 sm; Amt: \$46.80  
Lot No. 5173, Dededo; Area: 847.50 sm; Amt: \$46.80  
Lot No. 5173, Dededo; Area: 847.50 sm; Amt: \$46.80  
Lot No. 5173, Dededo; Area: 934.83 sm; Amt: \$51.60  
Lot No. 5173, Dededo; Area: 749.02 sm; Amt: \$41.40  
Lot No. 5173, Dededo; Area: 749.02 sm; Amt: \$41.40  
Lot No. 5173-R, Dededo; Area: 5.4 H; Amt: \$421.80  
Lot No. 5173, Dededo; Area: N/A; Amt: \$776.40

DATED: February 24, 1982  
RECORDED: February 26, 1982  
REMARKS: 1976 Tax Assessment

32. TYPE OF INSTRUMENT: Memorandum of Cancellation of Tax Deed  
INSTRUMENT NO.: 369761  
MADE BY: Government of Guam  
IN FAVOR OF: Carmen E. Del, Etal  
PROPERTY: Lot No. 5173, Dededo; Area: 862.50 square meters  
DATED: March 10, 1986  
RECORDED: March 25, 1986  
REMARKS: Reference No. 322903

33. TYPE OF INSTRUMENT: Memorandum of Cancellation of Tax Deed  
INSTRUMENT NO.: 369762  
MADE BY: Government of Guam  
IN FAVOR OF: Artemio R. Crisostomo, Etal and Frank D. Perez  
PROPERTY: Lot No. 5173, Dededo  
DATED: March 10, 1986  
RECORDED: March 25, 1986  
REMARKS: Reference No. 323803

34. TYPE OF INSTRUMENT: Memorandum of Cancellation of Tax Deed  
INSTRUMENT NO.: 369769  
MADE BY: Government of Guam  
IN FAVOR OF: Eulogio Del Carmen, Etal and Frank D. Perez  
PROPERTY: Lot No. 5173, Dededo  
DATED: March 10, 1986  
RECORDED: March 25, 1986  
REMARKS: Reference No. 325329

35. TYPE OF INSTRUMENT: Memorandum of Cancellation of Tax Deed  
 INSTRUMENT NO.: 369770  
 MADE BY: Government of Guam  
 IN FAVOR OF: Artemio R. Crisostomo, Etal; Eulogio Rosario Del Carmen; Frank D. Perez; Carmen D. Perez  
 PROPERTY: Lot No. 5173, Dededo  
 DATED: March 10, 1986  
 RECORDED: March 25, 1986  
 REMARKS: Reference No. 327138
36. TYPE OF INSTRUMENT: Memorandum of Cancellation of Tax Deed  
 INSTRUMENT NO.: 369777  
 MADE BY: Government of Guam  
 IN FAVOR OF: Artemio R. Crisostomo, Etal; Perez Bros., Inc.; Frank D. Perez; Carmen D. Perez  
 PROPERTY: Lot No. 5173, Dededo  
 DATED: March 10, 1986  
 RECORDED: March 25, 1986  
 REMARKS: Reference No. 327139
37. TYPE OF INSTRUMENT: Claim of Interest  
 INSTRUMENT NO.: 880917  
 MADE BY: Francis A. Perez, son of original landowner, Frank D. Perez  
 PROPERTY: Lot No. 5173-1, place of Oka Point, Dededo; Area: 46,953.5 acres  
 DATED: June 23, 2015  
 RECORDED: June 24, 2015  
 REMARKS: Registered owner of Lot No. 5173-1 was identified as Frank D. Perez who conveyed property to the Government of Guam with the specific understanding and intent the property would be used as a hospital facility.

**As to Basic Lot No. 5174-REM, Tamuning, Guam**

38. FIRST RECORD: Decree  
 INSTRUMENT NO.: Agana Volume 21, Page 517  
 GRANTOR: Island Court of Guam  
 GRANTEE: United States of America  
 PROPERTY: Lot No. 5174, Agana; Area: 331, 154 square meters  
 RECORDED: December 26, 1928  
 REMARKS: Possessed the estate since 1877 on which he acquired by inheritance of his deceased father Mariano de Leon Guerrero.

39. TYPE OF INSTRUMENT: Notice of Tax Lien Under Territorial Income Tax Laws under Lien No. 00842  
INSTRUMENT NO.: 37130  
ASSEESSEE: Joaquin A. and Macrena A. Perez  
DATED: October 7, 1959  
RECORDED: October 8, 1959  
REMARKS: \$1,048.65 for Income Tax
40. TYPE OF INSTRUMENT: Notice of Tax Lien Under Territorial Income Tax Laws under Lien No. 00843  
INSTRUMENT NO.: 37131  
ASSEESSEE: Joaquin A. Perez, dba: J.A. Perez Auto Parts and Service Center  
DATED: October 7, 1959  
RECORDED: October 8, 1959  
REMARKS: \$456.68 for Withholding Tax.
41. TYPE OF INSTRUMENT: Certificate of Release of Guam Territorial Income Tax Lien under Lien No. 00843  
INSTRUMENT NO.: 37402  
ASSEESSEE: Joaquin A. Perez, dba: J.A. Perez Auto Parts and Service Center  
DATED: October 26, 1959  
RECORDED: October 26, 1959  
REMARKS: \$456.68 for Withholding Tax.
42. TYPE OF INSTRUMENT: Certificate of Release of Guam Territorial Income Tax Lien under Lien No. 00137  
INSTRUMENT NO.: 37919  
ASSEESSEE: Joaquin A. and Macrena A. Perez  
DATED: January 19, 1960  
RECORDED: January 19, 1960  
REMARKS: \$1,048.65 for Income Tax.
43. TYPE OF INSTRUMENT: Property Map Ypao Beach Recreation Park  
INSTRUMENT NO. 38091  
MADE BY: Director of Land Management  
DRAWING NO.: E4-60T498  
PROPERTY: Lot No. 5174-REM, Dededo; Area: 322,661.30 square meters/3,473,083.49 square feet  
DATED: February 12, 1960  
RECORDED: February 14, 1960  
REMARKS:
44. TYPE OF INSTRUMENT: Notice of Tax Lien Under Territorial Income Tax Laws under Lien No. 02609  
INSTRUMENT NO.: 42587  
ASSEESSEE: Joaquin A. Perez  
DATED: August 31, 1961  
RECORDED: September 14, 1979  
REMARKS: \$165.16 for Withholding Tax.

45. TYPE OF INSTRUMENT: Notice of Tax Lien Under Territorial Income Tax Laws under Lien No. 02957  
INSTRUMENT NO.: 43726  
ASSESSEE: Joaquin and Macrena A. Perez  
DATED: December 5, 1961  
RECORDED: December 15, 1961  
REMARKS: \$588.30 for Income Tax.
46. TYPE OF INSTRUMENT: Notice of Tax Lien Under Territorial Income Tax Laws under Lien No. 02608  
INSTRUMENT NO.: 43727  
ASSESSEE: Joaquin A. Perez  
DATED: December 12, 1961  
RECORDED: December 15, 1961  
REMARKS: \$221.75 for Withholding Tax.
47. TYPE OF INSTRUMENT: Notice of Tax Lien Under Territorial Income Tax Laws under Lien No. 03156  
INSTRUMENT NO.: 44809  
ASSESSEE: Joaquin and Macrena A. Perez  
DATED: March 22, 1962  
RECORDED: April 2, 1962  
REMARKS: \$6,624.74 for Income Tax.
48. TYPE OF INSTRUMENT: Notice of Guam Tax Lien Under Business Privilege Tax Laws under Lien No. 0418  
INSTRUMENT NO.: 44923  
ASSESSEE: Joaquin A. Perez  
DATED: April 5, 1962  
RECORDED: April 10, 1962  
REMARKS: \$549.00 for Gross Receipt.
49. TYPE OF INSTRUMENT: Notice of Tax Lien Under Territorial Income Tax Laws under Lien No. 03177  
INSTRUMENT NO.: 45038  
ASSESSOR: Government of Guam  
ASSESSEE: Simeon C. and Maria Aguon  
DATED: April 17, 1962  
RECORDED: April 24, 1962  
REMARKS: \$114.84 for Income Tax.
50. TYPE OF INSTRUMENT: Notice of Tax Lien Under Territorial Income Tax Laws under Lien No. 03893  
INSTRUMENT NO.: 47600  
ASSESSEE: Joaquin and Macrena A. Perez  
DATED: November 1, 1962  
RECORDED: December 3, 1962  
REMARKS: \$2,639.43 for Income Tax.

51. TYPE OF INSTRUMENT: Certificate of Release of Guam Territorial Income Tax  
Lien No. 03177  
INSTRUMENT NO.: 47693  
IN FAVOR OF: Simeon C. Aguon and Maria Aguon  
DATED: December 3, 1962  
RECORDED: December 13, 1962  
REMARKS: \$114.84 under Income Tax.
52. TYPE OF INSTRUMENT: Certificate of Release of Guam Territorial Income Tax  
Lien No. 02609  
INSTRUMENT NO.: 49642  
ASSESSEE: Joaquin A. Perez  
DATED: April 29, 1963  
RECORDED: May 10, 1963  
REMARKS: \$165.16 for Withholding Tax.
53. TYPE OF INSTRUMENT: Quitclaim Deed  
INSTRUMENT NO.: 56476  
GRANTOR: Joaquin A. Perez and Macrena A. Perez, husband and  
wife  
GRANTEE: Government of Guam  
PROPERTY: Lot No. 5174, Ipao, Dededo  
DATED: August 4, 1964  
RECORDED: August 4, 1964  
REMARKS:
54. TYPE OF INSTRUMENT: Quitclaim Deed  
INSTRUMENT NO.: 56477  
GRANTOR: Julian L.G. Aguon and Maria Perez Aguon, husband and  
wife  
GRANTEE: Government of Guam  
PROPERTY: Lot No. 5174, Ipao, Dededo  
DATED: August 4, 1964  
RECORDED: August 5, 1964  
REMARKS: Together with all improvements.
55. TYPE OF INSTRUMENT: Lease  
INSTRUMENT NO.: 56651  
LESSOR: Government of Guam  
LESSEE: Joaquin A. Perez and Macrena A. Perez, husband and  
wife  
PROPERTY: Lot No. 5174, Ipao, Dededo  
DATED: August 4, 1964  
RECORDED: August 14, 1964  
REMARKS: A term of 1 year.

56. TYPE OF INSTRUMENT: Lease  
INSTRUMENT NO.: 56652  
LESSOR: Government of Guam  
LESSEE: Julian L.G. Aguon and Maria Perez Aguon, husband and wife  
  
PROPERTY: Lot No. 5174, Ipao, Dededo  
DATED: August 4, 1964  
RECORDED: August 14, 1964  
REMARKS: A term of 1 year.
57. TYPE OF INSTRUMENT: Government of Guam Income Tax Lien  
INSTRUMENT NO.: 57412  
ASSEESSEE: Joaquin A. and Macrena A. Perez  
PROPERTY: Lot No. 5174, Ipao, Dededo  
DATED: September 22, 1964  
RECORDED: September 22, 1964  
REMARKS: \$6,748.05 for Income Tax.
58. TYPE OF INSTRUMENT: Certificate of Partial Discharge from Guam Business Privilege Tax Lien  
INSTRUMENT NO.: 57413  
ASSEESSEE: Joaquin A. Perez  
PROPERTY: Lot No. 5174, Ipao, Dededo  
DATED: September 22, 1964  
RECORDED: September 22, 1964  
REMARKS: \$400.32 for Gross Receipts.
59. TYPE OF INSTRUMENT: Memorandum  
INSTRUMENT NO.: 103509  
MADE BY: Director of Revenue and Taxation  
TO: Director of Land Management; Jose Arriola Perez  
PROPERTY: Lot No. 5174, Dededo (1 Res.)  
DATED: June 28, 1971  
RECORDED: June 28, 1971  
REMARKS: Termination of the right of redemption on tax sold properties for tax year 1962.
60. TYPE OF INSTRUMENT: Conveyance of Real Estate Sold for Nonpayment of Property Taxes  
INSTRUMENT NO.: 103859  
GRANTOR: Government of Guam  
GRANTEE: Jose Arriola Perez  
PROPERTY: Lot No. 5174, Dededo  
DATED: June 25, 1971  
RECORDED: July 2, 1971  
REMARKS: \$18.00 for Tax Year 1962

61. TYPE OF INSTRUMENT: Memorandum  
INSTRUMENT NO.: 236955  
MADE BY: Director of Revenue and Taxation  
TO: Director of Land Management; Joaquin A. Perez  
PROPERTY: Lot No. 5174, Dededo (1 Res)  
DATED: April 4, 1974  
RECORDED: April 12, 1974  
REMARKS: Termination of the right of redemption on tax sold properties for tax year 1964.
62. TYPE OF INSTRUMENT: Memorandum  
INSTRUMENT NO.: 237149  
MADE BY: Director of Revenue and Taxation  
TO: Director of Land Management; Julian L.G. Aguon  
PROPERTY: Lot No. 5174, Dededo (1 Res)  
DATED: April 4, 1974  
RECORDED: June 19, 1974  
REMARKS: Termination of the Rights of Redemption, Tax Sod Properties for tax year 1966.
63. TYPE OF INSTRUMENT: Conveyance of Real Estate Sold for Nonpayment of Property Taxes  
INSTRUMENT NO.: 264656  
ASSESSEE: Julian L.G. Aguon  
PROPERTY: One residential building situated on Lot No. 5174, Dededo  
DATED: April 4, 1974  
RECORDED: January 28, 1976  
REMARKS: \$186.00 for tax year 1966.
64. TYPE OF INSTRUMENT: Conveyance of Real Estate Sold for Nonpayment of Property Taxes  
INSTRUMENT NO.: 265554  
ASSESSEE: Joaquin Arriola Perez  
PROPERTY: One residential building situated on Lot No. 5174, Dededo  
DATED: April 4, 1974  
RECORDED: February 6, 1976  
REMARKS: \$106.50 for tax year 1964.
65. TYPE OF INSTRUMENT: Memorandum of Cancellation of Tax Deed  
INSTRUMENT NO.: 369762  
MADE BY: Government of Guam  
TO: Julian L.G. Aguon  
PROPERTY: Lot No. 5174, Dededo  
DATED: March 11, 1985  
RECORDED: March 25, 1986  
REMARKS: \$186.00; Reference No. 323803

**Affecting Lot No. 5173-1-R2NEW-R7, Tamuning, Guam**

66. TYPE OF INSTRUMENT: Declaration of Taking; under Civil Case No. 1171-85  
INSTRUMENT NO.: 367682  
PLAINTIFF: Government of Guam  
DEFENDANT: 6,083.61 square meters of land, more or less, situated in the Municipality of Dededo and Maria B. Anderson, et al and unknown owners  
  
PROPERTY: Lot Nos. 5173-1-R2 NEW-1G and 5173-1-R2 NEW-R1, Dededo  
  
DATED: December 2, 1985  
RECORDED: January 23, 1986  
REMARKS: The property taken under the aforesaid authority is to be used for the purpose of widening and reconstructing San Vitores Road, together with access for purposes necessary or incidental to said construction project.
67. TYPE OF INSTRUMENT: San Vitores Road Severance Map (From Tumon Bay Road to Chalan San Antonio)  
  
INSTRUMENT NO.: 384173  
MADE BY: Francisco L.G. Castro, Acting Director, Department of Land Management  
  
DRAWING NO.: 8518  
LMFY#: LM401FY85 (SHEET 6 of 7)  
PROPERTY: Lot No. 5173-1-R2 NEW-R1, Dededo; Area: 205,868 square meters/2,215,937 square feet  
  
DATED: March 17, 1987  
RECORDED: April 27, 1987  
REMARKS:
68. TYPE OF INSTRUMENT: Retracement Survey Map of Lot 5173-1-R2NEW-R2, 5174-REM-2-R1, 5174-REM-1, 5174-REM-2-1G R/W, 5173-1-R2NEW-1G R/W, 5173-1-R2NEW-2G R/W, 5173-1-R2G R/W, Parcelling (R/W Severance) of Lot 5173-REM (PART)-B  
  
INSTRUMENT NO.: 491844  
MADE BY: Charles P. Crisostomo, Administrator, Guam Economic Development Authority  
  
DRAWING NO.: DSI-S-92-06  
LMFY#: LM470FY92  
PROPERTY: Lot No. 5173-1-R2NEW-R2, Tamuning; Area: 2,101,359 square feet/195,223 square meters (Computed); 2,100,636 square feet/195,156 square meters (Recorded); (Area under water is included.)  
  
DATED: July 9, 1993  
RECORDED: July 12, 1993  
REMARKS:

69. TYPE OF INSTRUMENT: Administrative Transfer of Jurisdiction of Certain Government Lands  
INSTRUMENT NO.: 503740  
GRANTOR: Director of Land Management  
GRANTEE: Chamorro Land Trust Commission  
PROPERTY: Lot No. 5173-1-R2NEW, Tamuning; Area: 53 acres  
DATED: January 19, 1994  
RECORDED: February 22, 1994
70. TYPE OF INSTRUMENT: Re-Subdivision Survey Map of Lot 5173-1-R2NEW-R2  
INSTRUMENT NO.: 725246  
MADE BY: J. Peter Roberto, ACSW, Director, Department of Mental Health and Substance Abuse  
DRAWING NO.: I4-06T697  
LMFY#: LM104FY2006  
PROPERTY: Lot No. 5173-1-R2NEW-R3, Tamuning; Area: 193,223 square meters  
DATED: May 4, 2006  
RECORDED: May 9, 2006  
REMARKS: Not part of Survey.
71. TYPE OF INSTRUMENT: Temporary Grant of Right-of-Way for the Erection and Maintenance of Power Lines, Poles, Wires, Cables and Underground Conduits  
INSTRUMENT NO.: 786612  
GRANTOR: Chamorro Land Trust Commission  
GRANTEE: Guam Power Authority  
PROPERTY: Lot No. 5173-1-R2NEW-R3, Tamuning  
DATED: February 13, 2009  
RECORDED: February 24, 2009  
REMARKS: A strip of land extending partially across Lot No. 5173-1-R2NEW-R3 as delineated on that certain sketch (or map) marked Exhibit "A".
72. TYPE OF INSTRUMENT: Lot Parceling Survey Map of Lot 5173-1-R2NEW-R3  
INSTRUMENT NO.: 814430  
MADE BY: Ann Marie B. Arceo, President, Inadahen I Lina'la Kotturan Chamoru, Inc.; Christopher M. Duenas  
DRAWING NO.: I4-07T704  
LMFY#: LM004FY2011  
PROPERTY: Lot No. 5173-1-R2NEW-R4, Tamuning; Area: 158,804 square meters (COMP)  
DATED: November 29, 2010  
RECORDED: November 29, 2010  
REMARKS: Not part of Survey.

73. TYPE OF INSTRUMENT: Lot Parceling Survey Map of Lot 5173-1-R2NEW-R4  
 INSTRUMENT NO.: 851244  
 MADE BY: David V. Camacho, Acting Director, Department of Land Management; Acting Administrative Director, Chamorro Land Trust Commission  
 DRAWING NO.: I4-013T722  
 LMFY#: LM076FY2013  
 PROPERTY: Lot No. 5173-1-R2NEW-R6, Tamuning  
 DATED: May 3, 2013  
 RECORDED: May 3, 2013  
 REMARKS: Lot No. 5173-1-R2NEW-R6; Area: 153, 463 square meters (COMP); NOT PART OF SURVEY

74. TYPE OF INSTRUMENT: Parceling Survey Map of Lot 5173-1-R2NEW-R6  
 INSTRUMENT NO.: 914646  
 MADE BY: Michael J.B. Borja, Director, Department of Land Management  
 DRAWING NO.: I4-017T50  
 LMFY#: LM313FY2017  
 PROPERTY: Lot No. 5173-1-R2NEW-R7, Tamuning; Area: 143,343 square meters  
 DATED: November 13, 2017  
 RECORDED: November 13, 2017  
 REMARKS: Not part of Survey.

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**As to Basic Lot No. 5173-1-R2, Tamuning, Guam**

- A. TYPE OF INSTRUMENT: Guaranteed Claim  
 CERTIFICATE OF TITLE NO.: 3236  
 ESTATE NO.: 2222/SUBURBAN  
 ISSUED TO: Lorenzo Manalisay Leon Guerrero  
 PROPERTY: Lot No. 5173, Agana, Guam
- B. TYPE OF INSTRUMENT: Certificate of Title  
 CERTIFICATE OF TITLE NO.: 530  
 ESTATE NO.: NONE ISSUED  
 ISSUED TO: Atkins Kroll and Company  
 PROPERTY: Lot No. 5173, Dededo, Guam
- C. TYPE OF INSTRUMENT: Certificate of Title  
 CERTIFICATE OF TITLE NO.: 570  
 ESTATE NO.: NONE ISSUED  
 ISSUED TO: Francisco D. Perez  
 PROPERTY: Lot No. 5173, Dededo, Guam

D. TYPE OF INSTRUMENT: Certificate of Title  
CERTIFICATE OF TITLE NO.: 5597  
ESTATE NO.: NONE ISSUED  
ISSUED TO: Francisco D. Perez  
PROPERTY: Lot No. 5173-1, Dededo, Guam

**As to Basic Lot No. 5174-REM, Tamuning, Guam**

A. TYPE OF INSTRUMENT: Guaranteed Claim  
CERTIFICATE OF TITLE NO.: 2979  
ESTATE NO.: 3906/SUBURBAN  
ISSUED TO: The United States of America  
PROPERTY: Lot No. 5174, Agana, Guam

*This document is not a title insurance policy, a title insurance commitment and/or a binder.  
The liability under this document is limited to \$500.00.*

**PACIFIC AMERICAN TITLE INS. & ESCROW CO.**

By:  \_\_\_\_\_  
Authorized Signature

End.....mm

## Record of Communication

Date: 05/18/2018

EA Project No.: 15672.01

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Communications with: US Army Corps

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Telephone No: N/A (Email: [foia-poh@usacwe.army.mil](mailto:foia-poh@usacwe.army.mil))

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Communication by: Email (Christopher Rosario)

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Re:

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Summary of Communication: FOIA for US Army Corps of Engineers

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Greetings US Army Corps of Engineers,

My name is Christopher Rosario from EA Engineering, Science and Technology Inc., PBC (EA). EA is an environmental consulting firm submitting a Freedom of Information Act (FOIA) request on behalf of our client, Guam Environmental Protection Agency, under the Brownfields Phase I ESA. Please see the attached file.

Cheers,  
Christopher A. Rosario

Scientist I  
EA Engineering, Science, and Technology, Inc., PBC  
1001 Army Drive, Suite 103  
Barrigada, GU 96913-1402  
671-646-5231 Ext. 513 (office)  
671-487-1640 (cell)  
[crosario@eaest.com](mailto:crosario@eaest.com)

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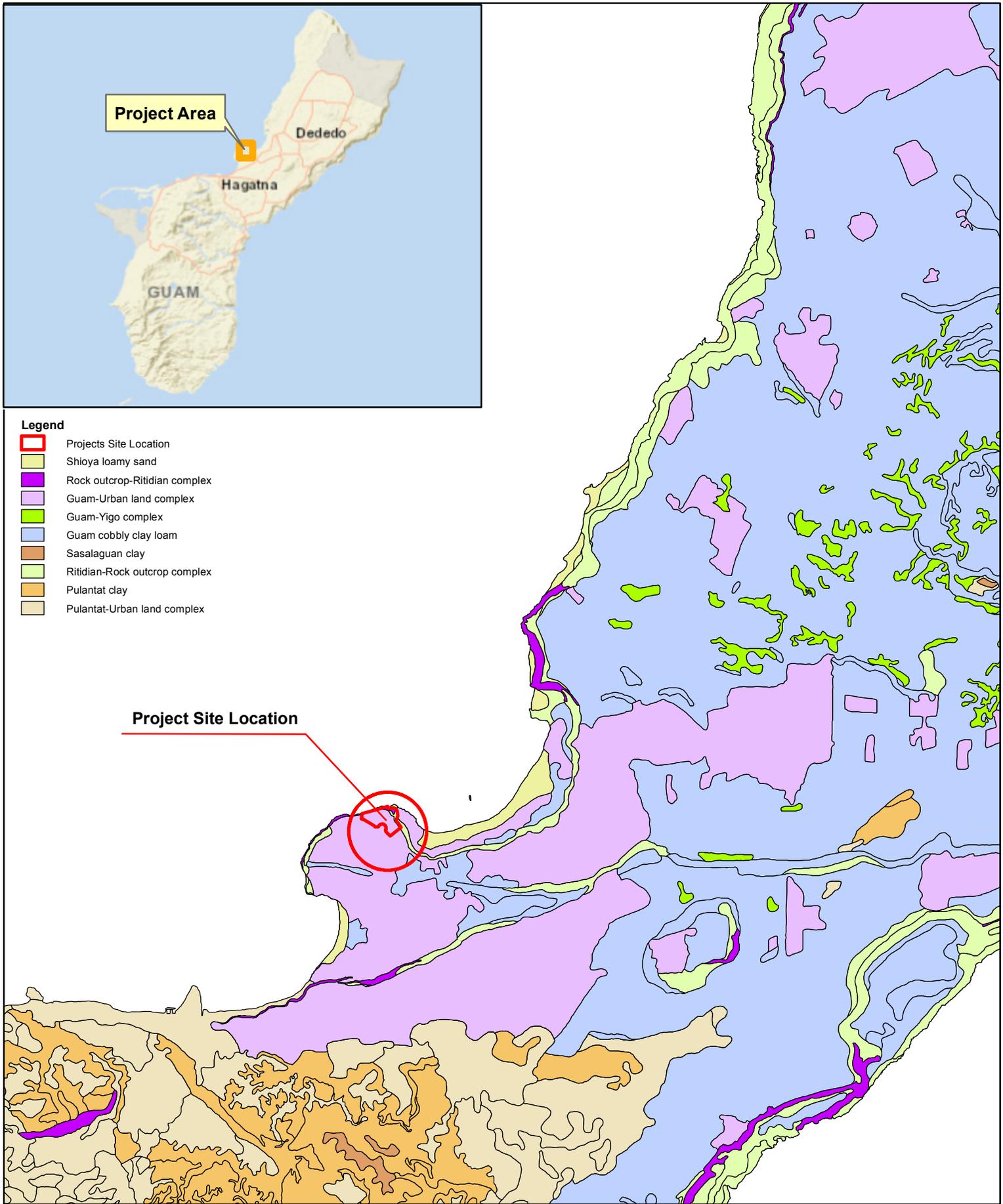
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**Legend**

- Projects Site Location
- Shioya loamy sand
- Rock outcrop-Ritidian complex
- Guam-Urban land complex
- Guam-Yigo complex
- Guam cobbly clay loam
- Sasalaguan clay
- Ritidian-Rock outcrop complex
- Pulantat clay
- Pulantat-Urban land complex

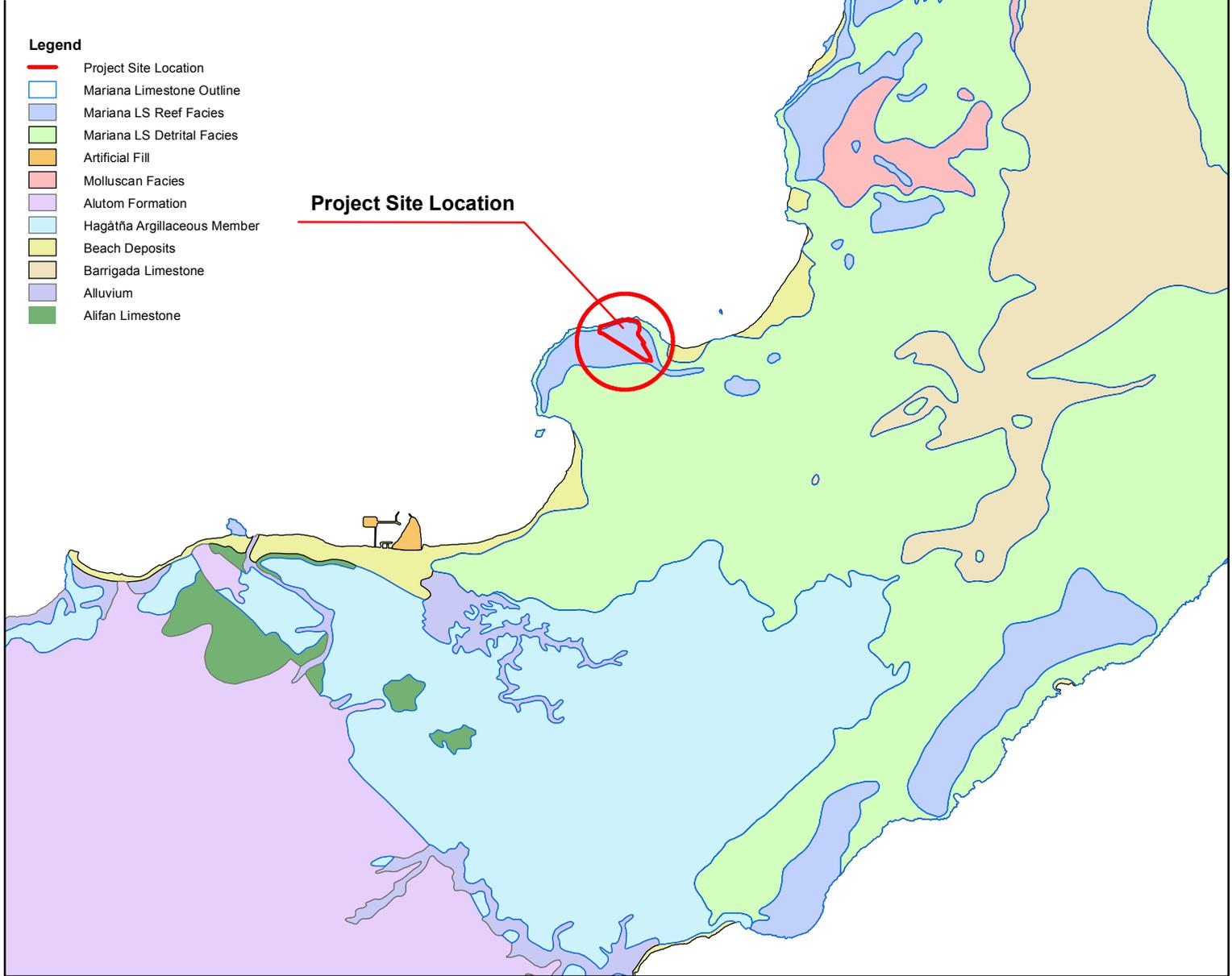
**Project Site Location**



COORDINATE/REFERENCE: WGS\_1984\_UTM\_Zone\_55N: IMAGERY 2016



<p>EA Engineering, Science, and Technology, Inc., PBC 1001 Army Drive, Suite 103, Barrigada, 96913-1402 Telephone: (671) 646-6231 Facsimile: (671) 646-6230</p>	<p>Project No./TO: RFP No. 2015-001 Guam EPA Brownfields 2017 Phase I ESAs</p>		
	<p><b>Figure 4 Soil Composition Map</b> <b>Phase I Environmental Site Assessment</b> <b>Oka Point</b></p>		
<p>Drawing No. Fig 1_Project Site Location</p>	<p>Date: 08/15/2018</p>	<p>Drawn By: TChargualaf</p>	<p>EA Project No. 1567201</p>



COORDINATE/REFERENCE: WGS\_1984\_UTM\_Zone\_55N: IMAGERY 2016



EA Engineering, Science, and Technology, Inc., PBC 1001 Army Drive, Suite 103, Barrigada, 96913-1402 Telephone: (671) 646-6231 Facsimile: (671) 646-6230	Project No./TO: RFP No. 2015-001 Guam EPA Brownfields 2017 Phase I ESAs		
	<b>Figure 5 Geologic Map</b> <b>Phase I Environmental Site Assessment</b> <b>Oka Point</b>		
Drawing No. Fig 1_Project Site Location	Date: 08/15/2018	Drawn By: TChargualaf	EA Project No. 1567201



# Old GMH

National Wetlands Information for Oka Point - Old GMH

**Legend**  
Subject Site - Old GMH (2018)



**Wetland Types**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

**Status Map**

- Digital Data
- No Data

## **Record of Communication**

Date: 06/06/18

EA Project No.: 15672.01

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Communications with: Mike Borja

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Telephone No: 671-649-5263 ext. 400

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Communication by: Bob Shambach & Christopher Rosario (In-person interview)

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Re: Brownfield Lots (Oka Point, Island Girl Power, Old Goodwill & IBC Lot)

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### Summary of Communication:

Mr. Borja then extends his information on the Old GMH property where he gives us a parcel map showing what parts of the property will be soon used for. He mentions that the Chamorro Land trust Commission wants to use part of the land for a shrine to honor the dead. Bob had asked Mr. Borja when the old hospital was demolished. Mr. Borja had no knowledge as to when the hospital was demolished.

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## **Appendix F**

### **Resumes of the Environmental Professional(s)**

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## **Robert P. Shambach, P.G.** **Project Manager/Geologist** **Environmental Professional**

Mr. Shambach is a registered Professional Geologist with more than 24 years of experience working on environmental projects for the public sector and government agencies throughout the United States, Saipan, and Guam. He served as the Guam Operations Profit Center Manager from 2010 to 2013, and has managed a variety of indefinite delivery/indefinite quantity projects under contracts for federal and local government, as well as industrial/commercial clients.

Mr. Shambach currently serves as the Guam office manager. His experience also includes multi-year basic ordering agreements, which he is responsible for overall schedule and budget compliance, and technical performance of EA personnel working from EA's Guam office.

Working in EA's Pacific Business Unit, Mr. Shambach's project responsibilities include operations management and supervision of site investigations with extensive experience at sites containing unexploded ordnance and munitions and explosives of concern. Over the past 19 years, he has developed experience with petroleum-contaminated site investigations, mitigation, and monitored natural attenuation evaluation. Mr. Shambach has a strong background in karst geology, including groundwater monitoring well installation and testing, air injection and monitoring wells, groundwater and soil sampling, geophysical surveys, soil gas surveys, air quality monitoring, asbestos building inspection and sampling, and report writing. His field experience also encompasses environmental sampling throughout the eastern and central United States at former U.S. Naval, Army, and Air Force bases as well as commercial and industrial facilities. For the past 13 years, he has been active in conducting marketing meetings, personnel interviews, and client presentations.

### **Professional Experience**

**Management/Business Development**—Responsible for project and personnel management, including managing 5-10 employees, providing staff allocations, scheduling, utilization, and general office management. Responsibilities include client contact, sales and marketing, work schedule projections, resource allocation, report generation, and budget tracking. Interacts with the client for purposes of maintaining client relations, obtaining new work orders, providing project updates, scheduling field activities, obtaining site-specific information, and change order/invoice preparation. Additionally, project management responsibilities include management of various types of projects worth in excess of \$1-1.5 million annually, with office annual revenue of more than \$2.5 million.

**Project/Operations Manager**—Managed Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedial investigation (RI)/feasibility study (FS) and Resource Conservation and Recovery Act (RCRA) projects exceeding \$1 million at remote locations throughout Guam and Saipan. Successfully managed over 40 Installation Restoration Program (IRP) site investigations, monitored natural attenuation projects, RCRA site investigations and closures, and preliminary assessment/site investigation projects for 33 sites. Completed several styles of reports including No Further Response Action Planned, Engineering Evaluation/Cost Assessment,

### **Qualifications**

#### **Education**

B.S.; Bloomsburg University; Geology; 1994  
B.S.; Bloomsburg University; Earth Space Science; 1994

#### **Registrations/Certifications**

Professional Geologist—PA (No. PG004866)  
Certified Manager of Integrated Solid Waste Management Systems  
Construction Quality Management for Contractors (U.S. Army Corps of Engineers); February 2016

#### **Specialized Training**

OSHA 40-Hour Hazardous Waste Health and Safety Training; 1994  
OSHA 8-Hour Hazardous Waste Health and Safety Training Recertification; 2018  
OSHA 8-Hour Hazardous Waste Advisory and Supervision Training  
EA Project Manager Training; 2013  
CPR and First Aid Training; February 2017

#### **Professional Affiliations/Appointments**

Society of American Military Engineers, Guam Post Board of Directors  
Recycling Association of Guam, Officer  
Solid Waste Association of North America, Pacific Basin Chapter, Vice President  
Dededo Soccer Club, Youth Coach/Technical Director

#### **Experience**

Years with EA: 24                      Total Years: 24

RI/FS Reports, RCRA Closure Reports, monitored natural attenuation reports, plume delineation reports, and Comprehensive Contaminant Assessment reports. Regular interface with regulatory agencies for project updates and decision-making is common.

***Remedial Investigation/Feasibility Studies***—Managed RIs at over 40 National Priorities List sites performed under CERCLA and Air Force Center for Engineering and the Environment IRP guidance. These projects involved site reconnaissance, geophysical surveys, site personnel interviews, real property record searches, historical records review, report preparation, project proposals, project cost estimating, terrestrial and marine environment investigations, monitoring well drilling, and required media analyses of soil and groundwater samples. The investigations addressed numerous chemicals of concern in various media and evaluated exposures to assess human health and ecological risk.

***Environmental Assessments***—Performed investigative activities that have included site reconnaissance, site personnel interviews, real estate searches, historical records review, report preparation project proposal, and project cost estimating. Performed work on Phase I and Phase II environmental baseline surveys under the IRP at former U.S. Air Force properties scheduled for real estate transactions in the Pacific Region. Also performed Solid Waste Management Unit Release Assessments at 76 sites with responsibilities ranging from scheduling, field management, work plan development, cost estimation sample collection, and site evaluation. Initiated cost saving measures at a site on Guam using portable auger and prepacked wells screens instead of using a subcontracted hollow-stem auger and traditional well. Received Guam U.S. Environmental Protection Agency concurrence to proceed with prepacked well installations at the site.

***Solid Waste Management Unit Investigations***—Managed the field effort of over 30 solid waste management unit sites. These projects involved surface and subsurface investigations, and required analyses of soil, wastewater, and sludge samples.

***Environmental Compliance***—Conducted biannual stormwater sampling in support of Air Force compliance with permitted underground injection wells. Performed sampling and participated in completing work plan, quality assurance project plan, compliance report, identifying non-compliant wells and recommending remedial and procedural adjustments to maintain compliance status. Managed the re-engineering of stormwater runoff at a covered percolation basin to eliminate the need for permitting of injection control wells.

***Asbestos Hazard Emergency Response Act Asbestos Building Inspector***—Performed inspections and sampling of more than 50 buildings throughout several military installations in the Pacific Region. Completed an Asbestos Survey Reinspection Report for updating the installation database.

***Shallow Groundwater Monitoring Well Installation and Sampling***—Managed the completion of groundwater monitoring wells (10-100 ft deep), well development, and conducted groundwater sampling. Evaluated groundwater and soil conditions for potential environmental concerns at commercial and industrial facilities throughout the northeastern United States. Responsibilities included well installation, groundwater and soil quality, and determination of hydrogeologic conditions in glacial till aquifers. Installed shallow groundwater wells in South Dakota, throughout the eastern United States, and Guam. Methods of sampling included utilization of low flow peristaltic pumps, variable speed pumps, and hand bailers.

***Deep Groundwater Monitoring Well Installation and Sampling***—Installed deep groundwater monitoring wells and open boreholes (300-700 ft deep) in the Northern Guam Lens portion of the island of Guam. Conducted field geologic and geophysical logging of boreholes and exhibited proficiency in describing coralline limestone geology in northern Guam. Monitoring wells averaged 500 ft deep and were generally drilled to basal and parabasal freshwater aquifers. Has experience in supervision of drilling contractors using air rotary and dual-wall reverse air rotary drilling methodology and provided oversight for containment of drilling fluids and cuttings from borings. Collected groundwater samples from monitoring wells located on Guam using low-flow Bennett piston pumps.

***Air Injection and Monitoring Well Installation***—Managed the completion of air injection and monitoring wells for in situ remediation of an abandoned underground storage tank containing fuels and solvents. The wells were completed in porous limestone bedrock to a depth of 300 ft below the surface. Three 1.5-in.-diameter threaded pipes were placed in each of the boreholes based on concentrations of volatile organic compounds. Also installed a biosparge system to assess applicability at a petroleum-impacted site in southern Guam.

***Geophysical Investigations***—Performed electromagnetic geophysical investigations at more than 20 RI sites in a variety of geologic conditions throughout the eastern United States and Guam. Some of the geophysical surveys were performed to identify areas of unexploded ordnance and munitions and explosives of concern.

***Field Task Management***—Field managed several CERCLA RI/FS and RCRA projects throughout the eastern United States and Guam. Managed several site investigations and provided oversight to subcontractors during investigation of CERCLA and RCRA sites. Successfully managed IRP site investigations in five operable units from start to final report phase. Completed several styles of reports including No Further Remedial Action Planned, Engineering Evaluation/Cost Assessment, RI/FS Reports, Comprehensive Contaminant Assessments, and Site Closure Reports.

## **EA Project Experience**

***Brownfield Assessment Phase II Environmental Site Assessment, Former Cowtown and Former Radar Station Sites, Commonwealth of the Northern Mariana Islands; Commonwealth of the Northern Mariana Islands Department of Public Lands; Project Manager/Environmental Professional***—Completed Work Plan, Sampling and Analysis Plan, and Site Health and Safety Plan for the project. Coordinated task with the field personnel and unexploded ordnance technicians onsite. Field activities included Global Positioning System surveying, oil-water separator characterization and soil sampling, surface soil sampling at multiple decision units within the project site, and prepared soil samples for shipment to an off-island laboratory.

***Project Date: September 2017 – Present***

***EA Project – 63223.01; Project Manager – Bob Shambach***

***Hazardous Materials Survey for Tanguisson Power Plant and Dededo Diesel Power Plant; Tumon/Dededo, Guam; Guam Power Authority; Project Manager***—Conducted soil sampling at the Tanguisson Power Plant and Dededo Diesel Power Plant for polychlorinated biphenyls. Prepared preliminary and final hazardous materials survey report. Responsibilities also included pre-sampling activities, preparation and shipping of soil samples in accordance with all quality assurance/quality control guidelines.

***Project Date: March–September 2017***

***EA Project No. – 6315601; EA Project Manager – Robert Shambach***

***Island-Wide Well Site Rehabilitation and New Well Site Development; Guam Waterworks Authority; Senior Geologist***—Provide geology oversight and construction inspection during the rehabilitation of five deep Guam Waterworks Authority water wells on the Northern Guam Lens Aquifer. Responsibilities include confirmation of well location following the design plan, ensuring drilling plan is in conformance with the design, monitoring condition of the drill rig, conducting meetings with regulators (Guam EPA), observing downhole video logs of new boreholes, observing and reviewing step drawdown and pump test data and results, attending meetings with construction contractor, design team, and client for any proposed changes to original design.

***Project Date: 2016 – January 2018***

***EA Project No. – 1533401; EA Project Manager – Tressie Word***

***Brownfield Assessment Phase I/II Environmental Site Assessment, Masalog Ammunition Depot, Pina, Tinian Commonwealth of the Northern Mariana Islands; Commonwealth of the Northern Mariana Islands Department of Public Lands; Project Manager/Environmental Professional***—Researched and assisted with the Phase I Environmental Site Assessment report, performed site reconnaissance of former munitions site with munitions avoidance staff, completed all Freedom of Information Act requests, reviewed report and recognized environmental conditions at the site, and assisted with compiling Phase I Environmental Site Assessment report. Completed Work Plan, Sampling and Analysis Plan, and Site Health and Safety Plan for the project. Coordinated task with the field personnel and unexploded ordnance technicians onsite. Field activities included Global Positioning System

surveying, munitions avoidance during survey line cutting and surface soil sampling at 5 decision units within the project site, and prepared soil samples for shipment to an off-island laboratory.

***Project Date: November 2015 – Present***

***EA Project – 6301901; Project Manager – Bob Shambach***

***Tier 2 Landfill Gas Sampling-NMNO; Layon Municipal Landfill; Gershman, Brickner & Bratton, Inc.; Inarajan, Guam; Project Manager***—Project Manager with the installation of temporary direct-push gas probes, sample collection using summa canisters, shipping samples to laboratories, and providing non-methane organic compound report.

***Project Date: April–October 2015***

***EA Project No. – 6239216; EA Project Manager – Robert Shambach***

***Guam Drinking Water Source Assessment and Protection Program and Wellhead Protection Plan; Brown and Caldwell and Guam Waterworks Authority; Project Manager***—Project manager for producing the Guam Waterworks Authority wellhead protection plan for 120 drinking water supply wells. The Drinking Water Source Assessment and Protection document consisted of preparing a well data sheet of the well's physical characteristics, determining the geology of the surrounding area, recommending management practices, and performing a vulnerability assessment to determine how vulnerable each well is to each nearby potentially contaminating activity or source. This work entailed organizing field data, and researching reports from Guam Waterworks Authority and the Water and Environmental Research Institute of the Western Pacific to obtain information for each well. The vulnerability assessment incorporated factors such as the possibly contaminating source's degree of proximity to the well, the inherent risk associated with it, and the physical barrier effectiveness of the well. Other responsibilities are comprised of reviewing and editing Geographic Information System figures and careful ranking of the vulnerability to potentially contaminating activities among the wells. Lastly, prepared a PowerPoint presentation for a meeting attended by technical experts from Guam Waterworks Authority, Guam Environmental Protection Agency, Naval Facilities Engineering Command, University of Guam, Water and Environmental Research Institute, and U.S. Department of Agriculture/Natural Resources Conservation Service. This gave a summary of the work executed and the results, which was well received and other agencies are planning to use the data from the report as a tool to for future land use planning.

***Project Date: May 2014 – June 2015***

***EA Project No. – 1495306; EA Project Manager – Bob Shambach***

***Agat Wastewater Treatment Plant Evaluation Phase I Environmental Site Assessment; Agat, Guam; Brown & Caldwell; Project Manager***—Completed all field and report figures and performed a follow-up Freedom of Information Act request. Assisted with completion of the final Phase I environmental site assessment report.

***Project Date: September 2013 – June 2014***

***EA Project No. – 1495304; EA Project Manager – Bob Shambach***

***Guam Commercial Port Modernization Program, Environmental Investigation; U.S. Department of Transportation Maritime Administration; Guam; Project Manager***—Project manager for environmental assessment in support of the design for the modernization of the essential Jose D. Leon Guerrero Port facility per a \$400 million Indefinite Delivery/Indefinite Quantity contract. Investigative activities included performing soil borings and test pits for the collection of subsurface soil and groundwater to assess the volume of potentially impacted soils in areas scheduled for subsurface construction at the port. A hazardous material survey, installation of pump test wells and piezometers, and abandonment of wells was also included with the project. Calculations of estimated volumes and costs to remediate and dispose of impacted material was included in the assessment report.

***Project Date: August–December 2013***

***EA Project No. – 1477909; EA Project Manager – Robert Shambach***

***Layon Landfill Water Quality Monitoring; Gershman, Brickner & Bratton, Inc.; Inarajan, Guam; Project Manager***—Project Manager for Guam's Layon Landfill compliance water quality monitoring. Included two rounds of detection monitoring by sampling of groundwater and surface water, quarterly landfill gas monitoring and

reporting, sub-drain tank monitoring, and stormwater sample collection. Detection monitoring reports were completed and submitted within 90 days of sampling event.

**Project Date:** *October 2012 – October 2013*

**EA Project No. – 6239208; EA Project Manager – Robert Shambach**

**Dededo Solid Waste Transfer Station; Gershman, Brickner & Bratton, Inc.; Dededo, Guam; Senior Geologist**—Phase II environmental site assessment at the Dededo Solid Waste Transfer Station and former recycling/processing facility. Field activities included conducting a detailed site inventory of surface debris, Global Positioning System survey, surface and subsurface soil sampling, and waste characterization of soil and waste oil. Reporting of the waste volume and recommendations for removal and disposal were included. Land area will be remediated and a new waste transfer station built.

**Project Date:** *April 2013 – August 2016*

**Agat Transfer Station and Santa Ana Dump Site; Gershman, Brickner & Bratton, Inc.; Agat, Guam; Senior Geologist**—Phase II environmental site assessment at the Agat Transfer Station and former Santa Ana dump site. Field activities included conducting a detailed site inventory of surface debris, Global Positioning System survey, surface and subsurface soil sampling, waste characterization, and cultural resources survey. Provided input and review of data quality objectives, review of field data, and meetings with client.

**Project Date:** *November 2012 – January 2016*

**EA Project No. – 6239209**

**Soil Removal and Remediation at Site 75C and Site 77; EATC Joint Venture (U.S. Navy); Andersen Air Force Base, Yigo, Guam; Senior Geologist**—Performed field activities to include surface and subsurface soil sampling, Global Positioning System survey, excavation of soils containing contaminants of concern, and treatment using triple super phosphate RCRA hazardous soils to stabilize the leachability of constituents for disposal at the base consolidation unit. Several areas were also screened for munitions and explosives of concern.

**Project Date:** *September 2011 – September 2014*

**EA Project No. – 6243805; EA Project Manager – Scott Moncrief**

**Moffatt & Nichol Engineers; P-566 Emergent Repair Facility, Hazardous Materials Survey; U.S. Naval Facilities Command Pacific Naval Base Guam, Agat, Guam; Environmental Technician/Scientist/Project Manager**—Project Manager for the hazardous materials assessment of materials at a submarine warfare emergent repair facility to determine if hazardous items need to be included in design criteria. All painted items were screened for lead-based paint using an x-ray fluorescence detector. Materials were also assessed for polychlorinated biphenyls containing oils, asbestos-containing materials, and other potentially hazardous materials. All surveys were described and results included in a Hazardous Materials Report.

**Project Date:** *June 2013 – December 2014*

**EA Project No. – 6236511; EA Project Manager – Robert Shambach**

**Moffatt & Nichol Engineers; P-518/P-519 X-Ray Wharf Hazardous Materials Survey; U.S. Naval Facilities Command Pacific Naval Base Guam, Agat, Guam; Environmental Technician/Scientist/Project Manager**—Project Manager for the hazardous materials assessment of materials at X-Ray wharf to determine if hazardous items need to be included in design criteria. All painted items were screened for lead-based paint using an x-ray fluorescence detector. Materials were also assessed for polychlorinated biphenyls containing oils, asbestos-containing materials, and other potentially hazardous materials. All surveys were described and results included in a Hazardous Materials Report.

**Project Date:** *October 2012 – December 2013*

**EA Project No. – 6236508; EA Project Manager – Robert Shambach**

**Power Plant 1 and 2 Site Investigation, Commonwealth Utilities Commission, Saipan, Commonwealth of the Northern Mariana Islands; Project Manager**—Managed the site investigation and EA field staff to ensure adherence to the work plan. Investigation included installation of 20 borings and shallow wells, collection of soil samples and groundwater samples, product recovery, and report preparation.

**Project Date:** *June 2010 – May 2011*

**EA Project No. – 6232503; EA Project Manager – R. Shambach**

***Landfill Gas Monitoring Point Installation, Inarajan, Guam; Gershman, Brinker and Bratton; Senior Geologist/Project Manager***—Project manager for installation of the first three perimeter landfill gas wells around Cells 1 and 2 at the new Layon Landfill. This included oversight of drillers while performing well installation and monitoring using an air quality meter. Also responsible for the reporting and analysis of analytical data.

***Project Date: January–October 2011***

***EA Project No. – 6239204; EA Project Manager – Robert Shambach***

***EATC Joint Venture B-2 Crash Site Andersen Air Force Base Yigo, Guam; U.S. Air Force Center for Engineering and the Environment; Senior Geologist***—Responsible for reviewing field data and reporting of daily operation of vapor extraction unit. Provided information to client and tracked property usage and operation and maintenance of equipment.

***Project Date: June 2011 – April 2013***

***EA Project No. – 6243802; EA Project Manager - Scott Moncrief***

***Leaking Underground Storage Tank Phases 1 and 2, Division of Environmental Quality; Commonwealth of the Northern Mariana Islands; Environmental Professional***—Provided technical assistance for Division of Environmental Quality Leaking Underground Storage Tank Phases 1 and 2 Program in Saipan and Rota for the Division of Environmental Quality. Responsibilities included technical support for numerous Phase I and Phase II site remediation projects.

***Project Date: September 2010 – June 2011***

***EA Project – 6248202; EA Project Manager – Tressie Word***

***Hazardous Materials Survey, Apra Harbor Wharves (Tango, Uniform, Victor); Naval Base, Guam; Moffatt & Nichol Engineers; Project Manager***—Project Manager for the hazardous materials assessment of materials at the wharves to determine if hazardous items need to be included in design criteria. All painted items were screened for lead-based paint using an x-ray fluorescence detector. Materials were also assessed for polychlorinated biphenyls containing oils, asbestos-containing materials, and other potentially hazardous materials. All surveys were described and results included in a Hazardous Materials Report.

***Project Date: June 2009 – June 2010***

***EA Project No. – 6232601; EA Project Manager – Robert Shambach***

***GBB-Layon Landfill Baseline Groundwater Monitoring Program, Inarajan, Guam; Gershman, Brinker and Bratton; Senior Geologist/Project Manager***—Project manager for finalizing of the Site-Specific Groundwater Monitoring Plan that included groundwater monitoring well installation, development and monitoring using dedicated sampling pumps and abandonment of some wells, collecting stream surface water samples; water level transducer installation and monitoring, installation and monitoring of rain gauge system. Also responsible for the reporting and analysis of analytical data.

***Project Date: November 2009 – March 2011***

***EA Project No. – 6239201; EA Project Manager – Robert Shambach***

***URS Corporation- Shell Guam Phase II-Shell Terminal and Pipeline; URS Corporation; Agat, Guam; Project Manager***—Project Manager for work involving the collection of soil samples using hand augers and split spoon sampling equipment, packing and shipping of samples at a petroleum storage facility. The work also included installation of groundwater monitoring wells, well development and sampling using hand bailers and low flow peristaltic pumps. Product recovery and volume tracking in designated monitoring wells throughout the terminal complex.

***Project Date: 2010***

***EA Project – 1467901; EA Project Manager – Robert Shambach***

***Brownfields Phase I Environmental Site Assessment, Saipan, Commonwealth of the Northern Mariana Islands; Department of Environmental Quality; Project Manager/Responsible Professional***—Activities included performance of Phase I environmental site assessment in accordance with American Society for Testing and Materials E 1527-05 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process) at two sites and consisted of a review of current and historic activities and conditions at the

properties and adjacent properties, including a non-intrusive visual inspection of the subject sites; review of local, state, and federal regulatory database records; review of available historic records; and a survey of adjacent land uses. Concluded the Phase I environmental site assessment with a final report for each of the sites.

**Project Date:** August 2009 – May 2010

**EA Project No. – 6236001; EA Project Manager – Robert Shambach**

**Long-Term Groundwater Monitoring; Andersen Air Force Base, Yigo, Guam; Air Force Center for Engineering and the Environment (Subcontract to CAPE Environmental Management); Senior Geologist**—Provided Senior Technical Review and support of the Long-Term Groundwater Monitoring Program for MARBO Annex, Northwest Field, and Main Base Operable Units at Andersen Air Force Base, Guam. Responsibilities included ensuring that all aspects of the sampling of approximately 50 groundwater monitoring, open borehole, and production wells were in compliance with the work plan and sampling and analysis plan documents. Attended remedial program meeting updates and weekly meetings with the Air Force client.

**Project Date:** 2010 – April 2011

**EA Project – 6232101; EA Project Manager – Chip Brown**

**Preliminary Assessments/Site Investigations for 10 IRP Sites, Andersen Air Force Base, Guam; Air Force Center for Engineering and the Environment; Project Manager**—Project manager for a \$1.5 million preliminary assessment/site investigation to determine if chemicals of potential concern are present at 10 sites (18 subsites) following CERCLA process. Management of sites that included subcontractor oversight, subcontractor procurement, development of work plans, sampling and analysis plans, standard operating procedures, and preliminary assessment/site investigation reports.

**Project Date:** March 2006 – May 2008

**EA Project No. – 2970014; EA Project Manager –Robert Shambach**

**Old Seaman’s Club D-Line Release Assessment; Shell Guam, Inc.; Project Manager**—Project Manager for the assessment of groundwater after the release of petroleum from a distribution line leak. Used an excavator to complete test pits for the assessment and collection of groundwater grab samples.

**Project Date:** December 2005 – 2007

**EA Project No. – 1433904; EA Project Manager –Robert Shambach**

**Petroleum Plume Delineation – Shell Guam Agat Terminal; Shell Guam, Inc.; Project Manager**—Project Manager for the delineation and lateral extent of petroleum constituents in shallow groundwater at three plumes. Used cone penetrometer, prepacked well screens, portable hydraulic auger, and low-flow pump technology to complete the project with minimal budget. Project included a pilot study for use of biosparging technology to add oxygen to an anaerobic media.

**Project Date:** November 2005 – January 2009

**EA Project No. – 1433907; EA Project Manager –Robert Shambach**

**RCRA investigations under a Voluntary Corrective Action Plan, Agat, Guam; Shell Guam, Inc.; Geologist**—Field task manager for conducting drilling and report writing for several Solid Waste Management Unit sites following the RCRA process. Provided site support and oversight of subcontractors, collected boring samples during the investigation. Supported author for Corrective Action Completed Clean Closure Report for several sites on Guam.

**Project Date:** May 2002 – 2004

**EA Project No. – 1379701; EA Project Manager – Toraj Ghofrani**

***Product Recovery and Monitored Natural Attenuation Sampling and Performance Evaluation, Agat, Guam; Shell Guam, Inc.; Project Manager***—Project Manager for product recovery and monitored natural attenuation at several areas of concern in southern Guam. Biannually sampling for monitored natural attenuation parameters since May 2002. Performed monitoring well/recovery well drilling oversight, sampling, report writing and performance evaluations throughout the site. Data were also evaluated to U.S. Environmental Protection Agency and American Society for Testing and Materials guidance for monitored natural attenuation evaluations. BIOSCREEN modeling was also performed for several plumes at the site.

***Project Date: May 2002 – 2009***

***EA Project No. – 1337306; EA Project Manager – Robert Shambach***

***RCRA Solid Waste Management Unit Investigations, Andersen Air Force Base, Guam; Air Force Center for Engineering and the Environment; Task Manager/Site Geologist***—Field task manager for several solid waste management unit sites throughout Andersen Air Force Base. Conducted site investigations that include surface and subsurface soil sample collection, boring completion for site characterization. The investigations involved permits; surface and subsurface soil sampling, oversight of subcontractors, and reporting of results in a summary document.

***Project Date: July 2001 – 2008***

***EA Project Nos. – 1379706, 07, 08; EA Project Manager – Robert Shambach***

***IRP, Andersen Air Force Base, Guam; Air Force Center for Engineering and the Environment; Geologist***—Field task manager for several RI/FS IRP sites following CERCLA process under Air Force Center for Engineering and the Environment and Federal regulations. Successfully managed six IRP site investigations in five operable units from start to final report phase. During the investigation, conducted multiple activities that included installation of deep monitoring wells to 700 ft using reverse air rotary drilling equipment, groundwater sampling from deep wells, soil gas probe installation and sample collection, soil sample collection, unexploded ordnance avoidance, and electromagnetic geophysical surveys. Provided site task-managing support for several IRP sites including oversight of a minimum of two subcontractors. Writing experience included several styles of reports including No Further Remedial Action Plans, Site Characterization Summary Reports, Engineering Evaluation/Cost Analysis, and RI/FS reports.

***Project Date: March 1996 – 2008***

***EA Project No. – 2970014, EA Project Manager – Robert Shambach***

***Petroleum Storage Tank Leak Assessment; Shell Guam, Inc.; Project Manager***—Project Manager for initial assessment to determine if a petroleum storage tank leaked. Used portable hydraulic auger technology to complete shallow borings to groundwater to determine if release occurred. The project was completed within 50 percent of the proposed budget.

***Project Date: February 2007***

***EA Project No. – 1433909; EA Project Manager – Robert Shambach***

***Preliminary Assessments/Site Investigations for 23 IRP Sites, Andersen Air Force Base, Guam; Air Force Center for Engineering and the Environment; Project Manager***—Project manager for a \$2.4 million preliminary assessment/site investigation following CERCLA process under AFCE Air Force Center for Engineering and the Environment and Federal regulations. Provided site management support for sites including oversight of subcontractors, procurement of subcontractors, and development of work plans, sampling and analysis plans, standard operating procedures, and RI/FS reports.

***Project Date: March 2004 – January 2007***

***EA Project No. – 2970037; EA Project Manager – Toraj Ghofrani***

**Brownfields Site Survey, Saipan, Commonwealth of the Northern Mariana Islands; Department of Environmental Quality (Team Partner – Duenas & Associates); Task Manager/Site Geologist**—Task management activities included site preparation and logistics, review of survey procedures and forms, survey results, photos, forms, interviews, and draft report. Concluded the investigation with a Brownfields Site Survey and Inventory for the Island of Saipan report.

**Project Date:** *October 2005 – September 2006*

**EA Project No. – 6206401; EA Project Manager – Robert Shambach**

## **Employment History**

**Employer**—EA Engineering, Science, and Technology, Inc., PBC

**Dates of Employment**—June 1994 – Present

**Title**—Guam Office Manager/Senior Geologist (July 2013 – Present)

Guam Operations/Profit Center Manager (October 2008 – June 2013)

Project Manager/Geologist III (September 2005 – October 2008)

Geologist II (January 1997 – September 2005)

Geologist I (January 1995 – January 1997)

Environmental Technician II (June 1994 – January 1995)

## **List of Technical Skills and Specializations**

- Administrative duties
- Business development
- Brownfields assessments
- Investigations and removal actions with remote site logistics
- Investigations involving remote site logistics
- Munitions-related site investigations
- Naval Facilities Engineering Command Marianas Explosive Safety Submission compliance
- Management of teaming partners and subcontractors
- Monitored natural attenuation evaluation and reporting
- Performance of geophysical surveys and interpretation of data
- RI/FS at CERCLA and RCRA sites
- Technical document preparation and production
- Wellhead Protection Plans