
**In-Progress Burial Treatment Plan for Discussion Purposes
For Construction Phase I of the
Honolulu High-Capacity Transit Corridor Project
Station 392+00 (near East Kapolei Station) to Station 776+00
(near Waimano Home Road),
Honouliuli, Hō‘ae‘ae, Waikele, Waipi‘o, and Waiawa Ahupua‘a,
‘Ewa District, O‘ahu
TMK: [1] 9-1, 9-4, 9-5, 9-6, 9-7 (Various Plats and Parcels)**

**Prepared for
PB
And the
City & County of Honolulu**

**Prepared by
Hallett H. Hammatt, Ph.D.
And
David W. Shideler, M.A.**

**Cultural Surveys Hawai‘i, Inc.
Kailua, Hawai‘i
(Job Code: HONOULIULI 18)**

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O‘ahu Office
P.O. Box 1114
Kailua, Hawai‘i 96734
Ph.: (808) 262-9972
Fax: (808) 262-4950

www.culturalsurveys.com

Maui Office
16 S. Market Street, Suite 2N
Wailuku, Hawai‘i 96793
Ph: (808) 242-9882
Fax: (808) 244-1994

Management Summary

Reference	In-Progress Burial Treatment Plan for Discussion Purposes for Construction Phase I of the Honolulu High-Capacity Transit Corridor Project Station 392+00 (near East Kapolei Station) to Station 776+00 (near Waimano Home Road), Honouliuli, Hō'ae'ae, Waikele, Waipi'o, and Waiawa Ahupua'a, 'Ewa District, O'ahu TMK: [1] 9-1, 9-4, 9-5, 9-6, 9-7 (Various Plats and Parcels) (Hammatt & Shideler 2009)
Date	August 2009
Project Number (s)	Cultural Surveys Hawaii (CSH) Job Code HONOULIULI 18
Investigation Permit Number	Any fieldwork associated with this project will likely be carried out under 2008 archaeological permit # 09-20 issued to CSH by the Hawai'i State Historic Preservation Division/Department of Land and Natural Resources (SHPD/DLNR), per Hawai'i Administrative Rules (HAR) Chapter 13-282.
Project Location	The proposed Honolulu High-Capacity Transit Corridor extending from Station 392+00 (near East Kapolei Station) to Station 776+00 (near Waimano Home Road), 'Ewa District, South O'ahu
Land Jurisdiction	State, City & County of Honolulu and private
Agencies	Prepared for the review of the City & County of Honolulu and the State Historic Preservation Division
Project Description	The purpose of the Honolulu High-Capacity Transit Corridor Project is to provide high-capacity rapid transit in the highly congested east-west transportation corridor between Kapolei and UH Mānoa, as specified in the Oahu Regional Transportation Plan 2030. The project corridor for the first construction phase addressed in this plan extends for approximately 35,400 linear feet (10.789 km or 6.70 miles) and includes seven proposed stations (East Kapolei Station, University of Hawai'i (UH) West O'ahu Station, Ho'opili Station, West Loch Station, Waipahu Transit Center Station, Leeward Community College Station, and Pearl Highlands Station) as well as park-and-ride and maintenance facilities.
Project Acreage	The project area addressed in this study (Construction Phase 1 plus a little more on the Diamond Head side to the vicinity of Waimano Home Road) includes three major types of developments with subsurface impacts: 6 areas for park-and-ride facilities and maintenance facilities with a total area of approximately 117.5 acres, seven stations with a total area of approximately 2.1 acres and approximately 236 column foundations impacting a collective area of approximately 0.4 acres. The total area of potential subsurface impact addressed is thus estimated at 120.0 acres.

<p>Area of Potential Effect (APE) and Survey Acreage</p>	<p>The project team understands the area of potential effect for project impacts to subsurface cultural deposits and/or human skeletal remains to be equal to the project acreage as discussed above (estimated at 120.0 acres) plus the area of any ancillary impacts – in particular impacts related to City and County utilities that will need to be re-located as a direct result of Construction Phase 1. The extent of this utility re-location impact is unclear at this time but is believed to be less than 10% of the area of direct project impact.</p>
<p>Historic Preservation Regulatory Context</p>	<p>This document was prepared in consultation with the State Historic Preservation Division and the O'ahu Island Burial Council to promote discussion and for possible inclusion following further refinement as a supporting document to a Memorandum of Agreement.</p> <p>Parts of this document may be utilized in a future Burial Treatment Plan (in accordance with HAR 13-300-33), Burial Site Component of a Preservation Plan (in accordance with HAR 13-300-40 (i)) and/or a Burial Site Component of a Data Recovery Plan (in accordance with HAR 13-300-40 (j) (2)).</p>

Table of Contents

Management Summary	i
Section 1 Introduction	1
1.1 Purpose of the Present Document	1
1.2 Project Description	1
1.3 Overview of Proposed Construction	4
1.3.1 Fixed Guideway and Stations	4
1.3.2 Support Facilities	4
1.3.3 Ancillary impacts	5
1.4 Environmental Setting for Construction Phase I	5
1.4.1 Natural Environment	5
1.4.2 Natural Environment for Construction Phase I West of Kunia Road	5
1.4.3 Natural Environment for Construction Phase I East of Kunia Road	7
1.4.4 Built Environment West of Kunia Road	10
1.4.5 Built Environment East of Kunia Road	10
Section 2 Background Research	11
2.1 Traditional and Historical Background	11
2.1.1 Mythological and Traditional Accounts	11
2.2 Early Historic Period	11
2.2.1 Mid- to late-1800s	12
2.2.2 1900s to Present	15
2.3 Previous Archaeological Research	16
2.3.1 Predictive Model West of Kunia Road	16
2.3.2 Predictive Model East of Kunia Road	16
Section 3 Burial Treatment Jurisdiction as Defined Under Law	18
3.1 Relevant Definitions	18
3.2 Jurisdiction	18
3.2.1 Procedures for “Previously Identified” Native Hawaiian Burial Sites	18
3.2.2 Procedures for “Inadvertent discovery” Native Hawaiian Burial Sites	21
Section 4 Proposed Mitigation Measures	26
4.1 Phased Investigation Prior to Construction	26
4.2 Communications	26
4.3 Mitigation Steps	26
4.4 Report on Mitigation	27
4.5 Burial Treatment Plan	27
4.6 Interim Curation	27
4.6.1 Duration of Interim Curation	28
4.6.2 Nature of Interim Curation	28
Section 5 Burial Treatment Plan	29
5.1 Hawai'i Administrative Rules	29
5.2 Burial Treatment Plan Requirements	30
5.3 OIBC and OHA Consultation and Lineal/Cultural Descendant Search	30
5.4 Consultation with OHA and other Hawaiian Organizations	31

5.5 Proposed Burial Treatment 32

5.6 Reburial Procedures 32

 5.6.1 Immediate Short-Term Reburial Site Protection Measures 32

 5.6.2 Disinterment Methods & Temporary Curation 32

 5.6.3 Proposed Reburial Procedures 33

 5.6.4 Long-Term Management of the Preserve Areas 33

 5.6.5 Burial Preserve Recordation 34

Section 6 References Cited 35

List of Figures

Figure 1. West portion of Construction Phase I.....2
Figure 2. East portion of Construction Phase I.....3

List of Tables

Table 1. Honouliuli Sub-area Land Commission Awards13
Table 2: Farrington Highway Sub-area Land Commission Awards.....13

Section 1 Introduction

1.1 Purpose of the Present Document

This Burial Treatment Plan addresses the first construction phase of the Honolulu High-Capacity Transit Corridor Project Station 392+00 (near East Kapolei Station) to Station 746+00 (near Pearl Highland Station), Honouliuli, Hō'ae'ae, Waikele, Waipi'o, and Waiawa Ahupua'a, 'Ewa District, O'ahu TMK: [1] 9-1, 9-4, 9-5,9-6,9-7 (Various Plats and Parcels) (Figures 1 & 2). Much of this document may be appropriate for inclusion in future Burial Treatment Plan(s) (in accordance with HAR 13-300-33), Burial Site Component of a Preservation Plan(s) (in accordance with HAR 13-300-40 (i)) and/or a Burial Site Component of a Data Recovery Plan(s) (in accordance with HAR 13-300-40 (j) (2)). This document, following further refinement, may be appropriate as a supporting document for a Memorandum of Agreement (MOA) for the Transit corridor project.

Under HAR §13-300-24 Duties and responsibilities: (b) "The council shall assist the department in the inventory and identification of Native Hawaiian burial sites by providing information obtained from families and other sources." A purpose of this document is to assist the O'ahu Island Burial Council in its duties and responsibilities and to be an "other source" in facilitating the inventory and identification of Native Hawaiian burial sites and re-burial sites.

1.2 Project Description

The project corridor for the first construction phase addressed in this plan extends for approximately 35,400 linear feet (10.789 km or 6.7 miles) and includes seven proposed stations (East Kapolei Station, University of Hawai'i (UH) West O'ahu Station, Ho'opili Station, West Loch Station, Waipahu Transit Center Station, Leeward Community College Station, and Pearl Highlands Station). In addition the present plan addresses the following:

- An 11.8 acre East Kapolei Station Park-and- Ride Facility located just southwest of the East Kapolei Station,
- Two proposed park-and-ride facilities of approximately 5-acres each located just east of the proposed UH West O'ahu Station,
- A proposed Maintenance and Storage Facility of approximately 12-acres located just northwest of the intersection of the project corridor's intersection with Farrington Highway,
- A proposed Maintenance and Storage Facility of approximately 43.3-acres located just southwest of the proposed Leeward Community College Station, and
- A proposed park-and-ride facility of approximately 11-acres located just west of the proposed Pearl Highlands Station

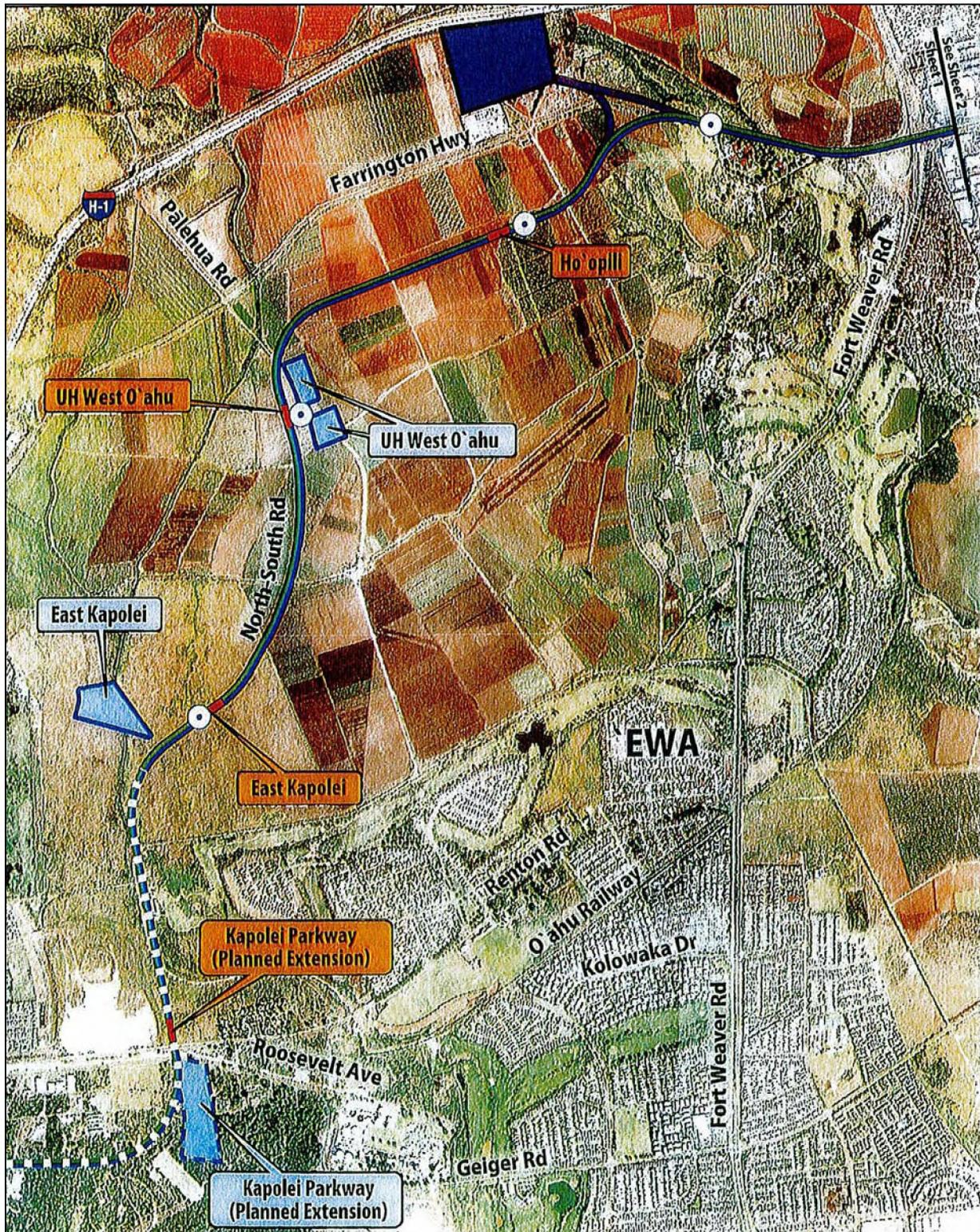


Figure 1. West portion of Construction Phase I

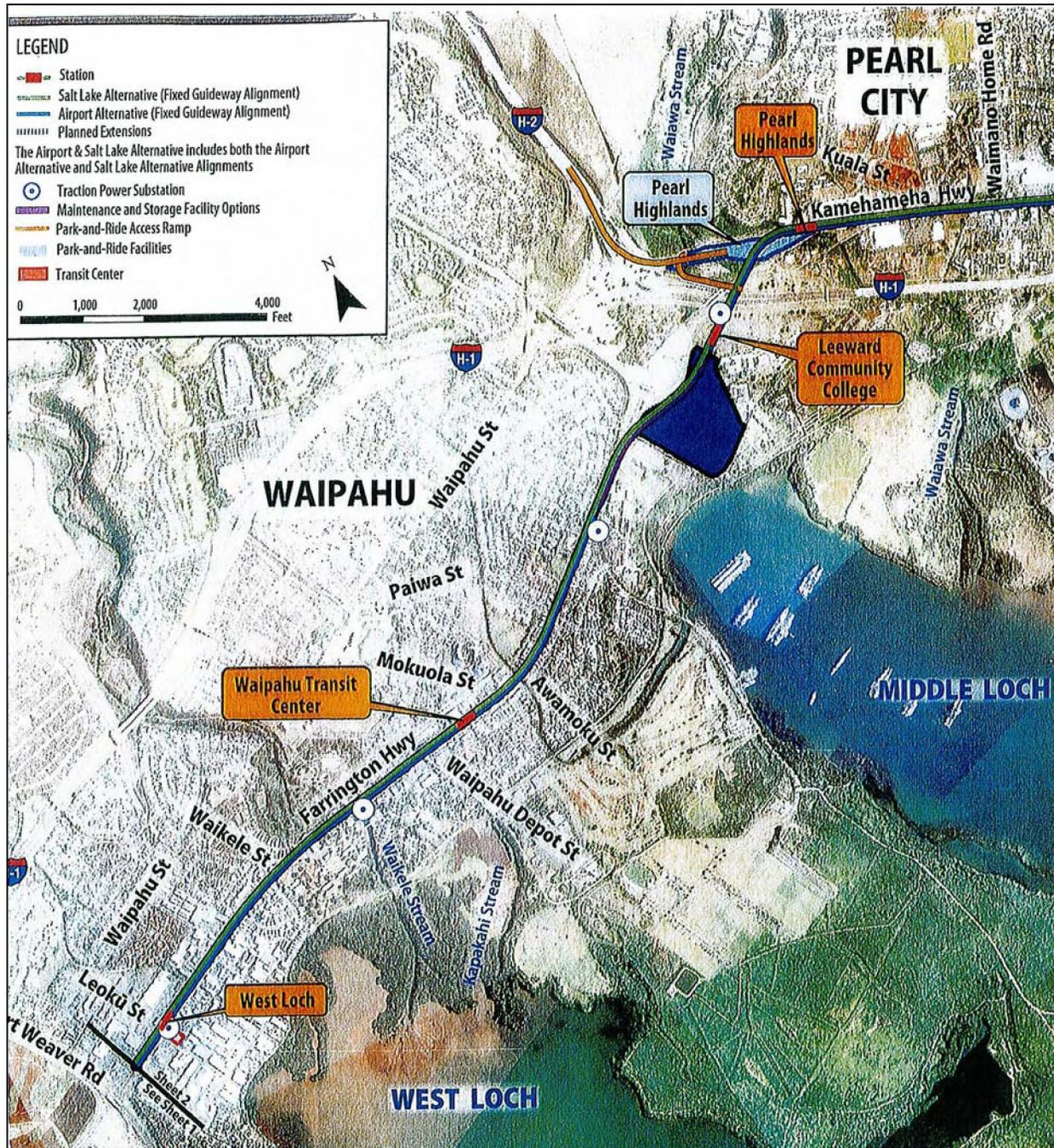


Figure 2. East portion of Construction Phase I

1.3 Overview of Proposed Construction

The exact design, process, method of construction and timeline continue to be refined. The following information is a synopsis from the Honolulu High-Capacity Transit Corridor Project Draft Environmental Impact Statement (Appendix C - Construction Process).

1.3.1 Fixed Guideway and Stations

As presently envisioned the project involves a fixed guideway and stations that would largely be aerial. The four main components of the fixed guideway system to be constructed include foundations, piers (support columns), superstructure (the elevated guideway structure), and stations. The subsurface impacts would be largely associated with the excavation of foundations for the support columns and stations. Typical pier spacing is understood to be approximately 150 feet (45.7 m) with shorter or longer spans used where needed. Dividing the indicated first construction phase project length (35,400 linear feet) by the indicated column spacing (1 every 150 feet) suggests something on the order of 236 support column foundation excavations.

However, it seems clear that certain additional excavations will be needed, such as in station areas for the support of platforms, mezzanines, elevators, escalators, stairs, roofing, architectural items, etc.

The preferred foundation excavation technology at the present is drilling with a large (6-foot to ten-foot) diameter auger. An advantage to this technology is that a minimal area needs to be disturbed and thus potential adverse impact to subsurface cultural resources can be minimized. A disadvantage is that the mitigation of impacts to cultural resources during the actual drilling is problematic. This difficulty of mitigation during construction would be heightened if stabilization of unstable ground is indicated (often involving jet grouting or other injection of cementitious material) and/or a slurry is used to counterbalance inward seepage of groundwater.

In addition to the drilling it is assumed that there will be at least some pile driving which can include a combination of striking the pile with a heavy weight, vibrating the pile or jacking the pile. It is assumed that in some cases the initial excavation for piles would also be by drilling.

In some cases it will almost certainly be the case that multiple smaller drilled or driven piles will be connected with pile caps or concrete foundations linking the tops of piles to pier foundations. While often the open excavation used for the pile caps is carried out after the piles are set present plans are for the open excavation for the pile caps to precede the setting of the piles. While the pile cap excavations are relatively shallow, they may well extend below the depth of potentially culture-bearing soils.

The depth of the excavations for foundations will likely be between 50 and 150 feet (no potentially culture bearing sediments are anticipated below 15 feet and in almost all cases would not be expected to extend below 5 feet).

1.3.2 Support Facilities

As presently envisioned support facilities, including proposed future park-and-ride areas, proposed future maintenance and storage facility areas, and traction power substations, would be at grade. Although subsurface structural foundation work might be minimal some grading and

excavation for amenities (office facilities, storage facilities, toilet facilities, lighting, landscaping, drainage, utility conduits, sidewalks, etc.) would be expected.

1.3.3 Ancillary impacts

On projects of this scale, ancillary impacts can be significant and merit discussion.

Existing utilities that conflict with the project's construction would be relocated. The nature and extent of these utility relocations is not clear at this time. As the nature and extent of these utility relocations becomes clearer consultation with the State Historic Preservation Division is recommended. Appropriate mitigation might include incorporation of these relocations within a monitoring program.

It is understood that perhaps all of the foundation excavations will extend far below the water table potentially creating significant need for the management of displaced water and/or slurry. It is unclear at this time how this will be managed but we cannot rule out significant excavation for de-watering pits.

Multiple staging areas for construction equipment and stockpiling of construction material will be needed. While the use of proposed future park-and-ride areas and proposed future maintenance and storage facility areas for construction staging is planned additional construction staging areas will be needed.

1.4 Environmental Setting for Construction Phase I

1.4.1 Natural Environment

Because the first construction phase lies in two rather different geographic areas it is suggested to be appropriate to divide the discussion of the natural environment between the relatively inland southwestern Honouliuli lands that were, as a generalization, relatively barren and little used prior to being placed under sugar cane cultivation for a century and the lands on the margin of Pearl Harbor that were much more intensively used in traditional Hawaiian times and that have continued under fairly intensive habitation to the present time. A rather convenient and only slightly arbitrary division is Kunia Road (Station 570+00).

1.4.2 Natural Environment for Construction Phase I West of Kunia Road

The southwestern portion of the first construction phase extends through the 'Ewa Plain, seaward (*makai*) of the Wai'anae Mountain Range. The 'Ewa Plain is a Pleistocene (>38,000 years old) reef platform overlain by alluvium. The terrain consists of limestone and alluvial deposits, which overlie flows of the Wai'anae volcanic series (MacDonald et al. 1983:423). In pre-contact Hawai'i, the project area would have been covered by lowland dry shrub and grassland, but this area has been extensively disturbed and transformed by human activity; it is now dominated by a variety of exotic grasses, weeds, and shrubs.

Elevations within the sub-area vary between approximately 80 and 160 feet, and the area receives an average of 24 inches of rain annually (Giambelluca et al. 1986).

The only major streams running through this southwestern portion of the first construction phase is Honouliuli Stream.

According to USDA soil survey data (Foote et al. 1972), sediments in the southwestern portion of the first construction phase include: Kunia Silty Clay (KyA, KyC), Waipahu Silty Clay (WzA, WzB, WzC), Kawaihapai Clay Loam (K1A), and Honouliuli Clay (HxA, HxB) at various slopes.

The Kunia soil series is described (Foote et al. 1972) as follows:

This series consists of well-drained soils on upland terraces and fans on the island of Oahu. These soils developed in old alluvium. They are nearly level to moderately sloping. Elevations range from 700 to 1,000 feet. The mean annual rainfall amounts to 30 to 40 inches, most of which occurs from November to April. The mean annual soil temperature is 71° F. Kunia soils occur on the foot slopes of the Waianae Range, near Schofield Barracks. They are geographically associated with Kolekole, Lahaina, and Wahiawa soils.

These soils are used for sugarcane, pineapple, home sites, and military reservations. Most areas are cultivated, and the natural vegetation is not significant.

The Waipahu soil series is described (Foote et al. 1972) as follows:

This series consists of well-drained soils on marine terraces on the island of O'ahu. These soils developed in old alluvium derived from basic igneous rock. They are nearly level to moderately sloping. Elevations range from nearly sea level to 125 feet. Rainfall amounts to 25 to 35 inches annually; most of it occurs between November and April. The mean annual soil temperature is 75° F. Waipahu soils are geographically associated with Hanalei, Honouliuli, and Waialua soils.

The Kawaihapai soil series is described (Foote et al. 1972) as follows:

This series consists of well-drained soils in drainage ways and on alluvial fans on the coastal plains on the islands of O'ahu and Moloka'i. These soils formed in alluvium derived from basic igneous rock in humid uplands.

They are nearly level to moderately sloping. Elevations range from nearly sea level to 300 feet. The annual rainfall amounts to 30 to 50 inches. The mean annual soil temperature is 73° F. Kawaihapai soils are geographically associated with Haleiwa, Waialua, and Jaucas soils.

These soils are used for sugar cane, truck crops, and pasture. The natural vegetation consists of *kiawe*, *koa haole*, lantana, and bermudagrass.

The Honouliuli soil series is described (Foote et al. 1972) as follows:

This series consists of well-drained soils on coastal plains on the island of O'ahu in the 'Ewa area. These soils developed in alluvium derived from basic igneous material. They are nearly level and gently sloping. Elevations range from 15 to 125 feet. The annual rainfall amounts to 18 to 30 inches and occurs mainly between November and April. The mean annual soil temperature is 74° F.

Honouliuli soils are geographically associated with 'Ewa, Lualualei, Mamala, and Waialua soils.

These soils are used for sugar cane, truck crops, orchards, and pasture. The natural vegetation consists of kiawe, koa haole, fingergrass, bristly foxtail, and bermudagrass.

The southwestern portion of the first construction phase extends through a number of cultivated fields that are currently producing crops. Natural vegetation elsewhere in the sub-area consists predominantly of introduced perennial grasses and weeds, along with *kiawe* (*Prosopis pallida*) and *koa haole* (*Leucaena leucocephala*).

1.4.3 Natural Environment for Construction Phase I East of Kunia Road

The eastern portion of the first construction phase (east of Kunia Road) is between 0.4 and 1.2 miles inland of the West and Middle Lochs of Pearl Harbor. Terrain is fairly level with elevations between 20 and 40 feet above sea level, rising to 100 to 200 feet above sea level toward the Koko Head end. The sub-area receives an average of 24 to 31 inches of annual rainfall (Giambelluca et al. 1986).

The largest stream intersecting the project alignment in this sub-area is Waikele Stream in Waikele Ahupua'a. The name Waikele means "muddy water" (Pukui et al. 1974:223) and this appellation likely refers to the two permanent streams, Waikakalaua Stream and Kīpapa Stream, which flow through the Schofield Plateau and converge with Waikele Stream. Waikakalaua Stream has tributaries in the Ko'olau and Wai'anae Ranges; Kīpapa Stream originates in the Ko'olau Range; and Waikele Stream originates in the Wai'anae Range. These streams drain a "large expanse of lateritic soils of fine particle size [and therefore] the water would have appeared muddy in prehistoric times even during periods of normal flow" (Hammatt and Borthwick 1988). The permanent streams form steep gulches that cut through layers of interbedded thick basalt flows and thinner layers of weathered alluvium, which consist of loosely consolidated saprolitic pebbles and cobbles with occasional boulders. Within the gulches, the bottom-lands along the stream channels consist of deep, well-drained Haleiwa silty clay on nearly level slopes.

Four smaller, non-perennial streams intersect this sub-area: Hō'ae'ae Stream at the 'Ewa end, Kapakahi and Makalena Streams between West and Middle Lochs, and Waiawa Stream at the Koko Head end.

According to USDA soil survey data (Foote et al. 1972), sediments in the eastern portion of the first construction phase include: Waipahu Silty Clay (WzA, WzB, WzC), Fill Land, mixed (FL), Molokai Silty Clay Loam (MuC), Pearl Harbor Clay (Ph), Tropaquepts (TR) Kawaihapai Clay Loam (K1A), Honouliuli Clay (HxA), and Helemano silty clay (HLMG).

The Waipahu soil series is described (Foote et al. 1972) as follows:

This series consists of well-drained soils on marine terraces on the island of O'ahu. These soils developed in old alluvium derived from basic igneous rock. They are nearly level to moderately sloping. Elevations range from nearly sea level to 125 feet. Rainfall amounts to 25 to 35 inches annually; most of it occurs between November and April. The mean annual soil temperature is 75° F.

Waipahu soils are geographically associated with Hanalei, Honouliuli, and Waialua soils.

Fill Land, mixed (FL) is described (Foote et al. 1972) as follows:

This land type occurs mostly near Pearl Harbor and in Honolulu, adjacent to the ocean. It consists of areas filled with material dredged from the ocean or hauled from nearby areas, garbage, and general material from other sources. Included in mapping were a few areas that have been excavated.

This land type is used for urban development including airports, housing areas, and industrial facilities. (Not in a capability classification).

The Molokai soil series is described (Foote et al. 1972) as follows:

This series consists of well-drained soils on uplands on the islands of Maui, Lanai, Molokai, and Oahu. These soils formed in material weathered from basic igneous rock. They are nearly level to moderately steep. Elevations range mainly from nearly sea level to 1,000 feet but are as much as 1,500 feet on Lanai. The annual rainfall amounts to 20 to 25 inches, most of which occurs between November and April. The summers are hot and dry. The mean annual soil temperature is 73° F. Molokai soils are geographically associated with Holomua, Keahua, Lahaina, and Uwala soils.

In this survey area a shallow variant of the Molokai series was mapped. This soil, Molokai silty clay loam, shallow variant, 15 to 25 percent slopes, severely eroded, is described in alphabetical order, along with other mapping units of this series.

These soils are used for sugarcane, pineapple, pasture, wildlife habitat, and home sites. The natural vegetation consists of *kiawe*, *'ilima*, *uhaloa*, feather fingergrass, and buffelgrass.

The Pearl Harbor soil series is described (Foote et al. 1972) as follows:

This series consists of very poorly drained soils on nearly level coastal plains on the island of Oahu. These soils developed in alluvium overlying organic material. Elevations range from nearly sea level to 5 feet. The annual rainfall amounts to 18 to 40 inches. The mean annual soil temperature is 74° F. Pearl Harbor soils are geographically associated with Hanalei, Kaloko, and Keaau soils.

These soils are used for taro, sugarcane, and pasture. The natural vegetation consists of cattails, mangrove trees, California grass, and sedges.

The Tropaquepts (TR) are described (Foote et al. 1972) as follows:

Tropaquepts (TR) are poorly drained soils that are periodically flooded by irrigation in order to grow crops that thrive in water. They occur as nearly level flood plains on the islands of Oahu and Maui. Elevations range from sea level to 200 feet. The annual rainfall amounts to 20 to 150 inches.

These soils have been flooded for varying lengths of time, and soil development differs in degree from place to place. Generally, the surface layer, about 10 inches thick, consists of dark-gray, soft, mucky silt loam. This layer overlies firm to

compact silty clay loam, 5 to 10 inches thick, that is mottled with gray, yellow, and brown. The mottled layer overlies friable alluvium.

Tropaquepts are used for production of taro, rice, and watercress on flooded paddies. (Capability classification IVw, irrigated or non-irrigated)

The Kawaihapai soil series is described (Foote et al. 1972) as follows:

This series consists of well-drained soils in drainage ways and on alluvial fans on the coastal plains on the islands of O'ahu and Moloka'i. These soils formed in alluvium derived from basic igneous rock in humid uplands.

They are nearly level to moderately sloping. Elevations range from nearly sea level to 300 feet. The annual rainfall amounts to 30 to 50 inches. The mean annual soil temperature is 73° F. Kawaihapai soils are geographically associated with Haleiwa, Waialua, and Jaucas soils.

These soils are used for sugar cane, truck crops, and pasture. The natural vegetation consists of kiawe, koa haole, lantana, and bermudagrass.

The Honouliuli soil series is described (Foote et al. 1972) as follows:

This series consists of well-drained soils on coastal plains on the island of O'ahu in the 'Ewa area. These soils developed in alluvium derived from basic igneous material. They are nearly level and gently sloping. Elevations range from 15 to 125 feet. The annual rainfall amounts to 18 to 30 inches and occurs mainly between November and April. The mean annual soil temperature is 74° F. Honouliuli soils are geographically associated with 'Ewa, Lualualei, Mamala, and Waialua soils.

These soils are used for sugar cane, truck crops, orchards, and pasture. The natural vegetation consists of kiawe, koa haole, fingergrass, bristly foxtail, and bermudagrass.

The Helemano soil series is described (Foote et al. 1972) as follows:

This series consists of well-drained soils on alluvial fans and colluvial slopes on the sides of gulches. These soils are on the island of Oahu. They developed in alluvium and colluvium derived from basic igneous rock. They are steep to extremely steep. Elevations range from 500 to 1,200 feet. The annual rainfall dominantly amounts to 30 to 60 inches but ranges to 75 inches at the highest elevations. The mean annual soil temperature is 72° F. Helemano soils are geographically associated with Lahaina, Leilehua, Manana, Molokai, and Wahiawa soils.

These soils are used for pasture, woodland, and wildlife habitat. The natural vegetation consists of bermudagrass, Christmas berry, eucalyptus, Formosa koa, guava, Japanese tea, Java plum, and koa haole.

Vegetation in the sub-area consists primarily of grasses, shrubs, and introduced, non-native plants and trees used for landscaping and decoration.

1.4.4 Built Environment West of Kunia Road

The southwestern lands of the first construction phase have been drastically altered by historic and modern land use including in particular intensive sugar cane cultivation and, along old Farrington Highway, some residential development. In the last few years the southwestern lands of the first construction phase have been drastically altered by the construction of the North-South Road project and related utility infrastructure development. Other than the massive North-South Road construction project, the environment west of Kunia Road is still remarkably rural and is dominated by truck farming.

1.4.5 Built Environment East of Kunia Road

The immediate vicinity of Kunia Road (and “new” Fort Weaver Road extending on to the south) marks a sea-change in the landscape as the project alignment transitions abruptly from a very rural landscape to the west to a very urban landscape to the east. Most of the landscape east of Kunia Road is marked by mixed retail use along Farrington Highway interspersed with residential developments. East of Kunia Road the transit corridor typically straddles the median of Farrington Highway. Between Leeward Community College and the proposed Pearl Highlands Station the project area crosses over the road cuts of the H-1 and Farrington Highway to continue east along the Kamehameha Highway alignment. The immediate vicinity of the proposed Pearl Highlands park-and-ride facility is an exception to the heavily built-up environment that characterizes the transit alignment east of Kunia Road in that the “banana patch” community retains a decidedly rural ambiance. Continuing east along Kamehameha Highway the alignment resumes mixed retail use interspersed with residential developments.

Section 2 Background Research

A detailed discussion of the Mythological and Traditional Accounts, the Historic records, and the previous archaeology for this Honolulu High-Capacity Transit Corridor Project has been included in a recent Archaeological Inventory Survey Plan (Hammatt and Shideler 2009). Only a brief summary of this background research will be presented here.

2.1 Traditional and Historical Background

2.1.1 Mythological and Traditional Accounts

The traditions of 'Ewa have been compiled by several authors, in studies by Sterling and Summers (1978), Hammatt and Folk (1981), Kelly (1991), Charvet-Pond and Davis (1992), Maly (1992), and Tuggle and Tomonari-Tuggle (1997). Some of the traditional themes associated with this area include connections with *Kahiki*, the traditional homeland of Hawaiians in central Polynesia. There are several versions of the chief Kaha'i leaving from Kalaeloa for a trip to Kahiki; on his return to the Hawaiian Islands he brought back the first breadfruit (Kamakau 1991:110) and planted it near Pearl Harbor in 'Ewa (Beckwith 1940:97). Several stories associate places in 'Ewa with the gods Kāne and Kanaloa, with the Hawaiian pig god Kamapua'a and the Hina family, and with the sisters of Pele, the Hawaiian volcano goddess, all of whom have strong connections with Kahiki (Kamakau 1991:111; Pukui et al. 1974:200).

Place names or *wahi pana* ("legendary place" Pukui and Elbert 1986: 376) are an integral part of Hawaiian culture. "In Hawaiian culture, if a particular spot is given a name, it is because an event occurred there which has meaning for the people of that time (McGuire 2000:23)." The *wahi pana* were then passed on through language and the oral tradition, thus preserving the unique significance of the place. Hawaiians named all sorts of objects and places, points of interest that may have gone unnoticed by persons of other cultural backgrounds. Hawaiians named taro patches, rocks and trees that represented deities and ancestors, sites of houses and *heiau* (places of worship), canoe landings, fishing stations in the sea, resting places in the forests, and the tiniest spots where miraculous or interesting events are believed to have taken place. (Pukui et al. 1974). Lists and maps of place names in 'Ewa are presented in full in Hammatt and Shideler (2009).

In the pre-contact period, the rich resources of the Pearl Harbor lochs, the shoreline fishponds, the numerous springs, and the irrigated lands along the streams made central 'Ewa a prize for competing chiefs. Battles were fought for and on 'Ewa lands, sometimes from competing O'ahu chiefs, and sometimes by invading chiefs from other islands.

2.2 Early Historic Period

Various Hawaiian legends and early historical accounts indicate that the district of 'Ewa was once widely inhabited by pre-Contact populations, including the Hawaiian *ali'i* (chiefly class). This would be attributable for the most part to the plentiful marine and estuarine resources available at the coast, along which several sites interpreted as permanent habitations and fishing shrines have been located. Other attractive subsistence-related features of the district included irrigated lowlands suitable for wetland taro cultivation, as well as the lower forest area of the mountain slopes for the procurement of forest resources. The lochs of Pearl Harbor were ideal

for the construction of fishponds and fish traps. Forest resources along the slopes of the Wai'anae Range probably acted as a viable subsistence alternative during times of famine and/or low rainfall (Handy 1940:211; Handy and Handy 1972:469-470).

There are many documented references that chiefs resided in 'Ewa and that it was a political center in its day. The picture presented here is that the whole *moku* (district) of 'Ewa was one of prosperity and productivity and the land was heavily populated. 'Ewa continued to be a political center until the 18th century when Kahahana, a Maui chief, was chosen by the O'ahu chiefs to rule over the whole island.

Even though Waikīkī was a favorite playground for the chiefs of Kona, as with 'Ewa chiefs, there were no deep harbors where large ships could enter port. With the introduction of trade and foreign goods, along with Kamehameha's unifying the islands, attention shifted to Kou (old name for Honolulu, used until about 1800) (Pukui et al. 1974:117), which had a deep enough harbor for ships to pull in and anchor. Kou became the center of activity as royalty moved away from the outer districts toward the center of commerce. The general populace as well moved away from the rural areas as they, too, became dependent on a cash economy.

Subsequent to western contact in the area, the landscape of the 'Ewa plains and Wai'anae slopes was adversely affected by the removal of the sandalwood forest, and the introduction of domesticated animals and new vegetation species. Domesticated animals, including goats, sheep and cattle, were brought to the Hawaiian Islands by Vancouver in the early 1790s, and allowed to graze freely about the land for some time after. During this same time, perhaps as early as 1790, exotic vegetation species were introduced to the area. These typically included vegetation best suited to a terrain disturbed by the logging of sandalwood forest and eroded by animal grazing.

2.2.1 Mid- to late-1800s

At contact, the most populous *ahupua'a* on the island was Honouliuli, with the majority of the population centered on Pearl Harbor. In 1832, a missionary census of Honouliuli recorded the population as 1,026. Within four years, the population was down to 870 (Schmitt 1973:19, 22). In 1835, there were eight to ten deaths for every birth (Kelly 1991:157-158). Between 1848 and 1853, there was a series of epidemics of measles, influenza, and whooping cough that often wiped out whole villages. In 1853, the population of 'Ewa and Wai'anae combined was 2,451 people. In 1872, it was 1,671 (Schmitt 1968:71). The inland area of 'Ewa was probably abandoned by the mid-nineteenth century, due to population decline and consolidation of the remaining people in the town of Honouliuli, near Kapapāhū Point.

The Organic Acts of 1845 and 1846 initiated the process of the Māhele, the division of Hawaiian lands, which introduced private property into Hawaiian society. In 1848, the crown, the Hawaiian government, and the *ali'i* (royalty) received their land titles. The common people (*maka'āinana*) received their *kuleana* awards (individual land parcels) in 1850. It is through records for Land Commission Awards (LCA) generated during the Māhele that the first specific documentation of life in 'Ewa, as it had evolved up to the mid-nineteenth century, come to light.

In 1855 the Land Commission awarded all of the unclaimed lands in Honouliuli, 43,250 acres, to Miriam Ke'ahikuni Kekau'ōnohi, Royal Patent #6971 in 1877; Parcel #1069 in the Land Court office, Land Commission Award (LCA) 11218, a granddaughter of Kamehameha I, and the heir of Kalanimōkū, who had been given the land by Kamehameha after the conquest of

O'ahu (Indices of Awards 1929; Kame'eiehiwa 1992). During the *Māhele* of 1848, 96 individual claims were made and 72 individual claims in the *ahupua'a* of Honouliuli were registered and awarded by King Kamehameha III to commoners (Tuggle and Tomonari-Tuggle 1997:34). The 72 *kuleana* awards were almost all made adjacent to Honouliuli Gulch, which contained fishponds and irrigated taro fields.

The corridor is approximately 2 kilometers north of the middle of the dense cluster of LCA parcels for Honouliuli an area called the "Honouliuli Taro Lands." Five of these LCAs were awarded near the study area. All five were small awards; each included multiple *lo'i* (taro fields) and a *kula* (pasture or dry field), and two included a house lot (Table 1).

Table 1. Honouliuli Sub-area Land Commission Awards

LCA Number	Contents of Award
848:5	5 <i>lo'i</i> and 1 <i>kula</i>
847:1 and 847:2	14 <i>lo'i</i> , 1 <i>kula</i> , and 1 guard house for the <i>lo'i</i>
911:1	1 house, 1 <i>kula</i> , 5 <i>lo'i</i>
831:3	No data
1570:1	Several <i>lo'i</i> and 1 <i>kula</i>

The distribution of LCA parcels during the *Māhele* reflects the distribution of population in the *ahupua'a* of Hō'ae'ae, Waikele, Waipi'o, and Waiawa in the mid-19th century. In all four cases the bulk of the *ahupua'a* was awarded to one or more *ali'i*, government officials, or foreign residents favored by the throne. In Honouliuli, Hō'ae'ae, and Waikele all *kuleana* awards, and in Waipi'o most *kuleana* awards, were granted for small claims on the low floodplains near Pearl Harbor.

Thirty-seven LCA claims were awarded in the sub-area; four of these were large awards to *ali'i* (Table 2). The remaining LCA claims reflect the agricultural nature of the region. Nearly all of the 33 awards included *lo'i* (irrigated pond fields – an average of two *lo'i* per award); half of the awards included *kula*; and a third included house lots. Many of the LCA claims were clustered near the Government Road, which ran *mauka* (inland) of the plain.

Table 2: Farrington Highway Sub-area Land Commission Awards

LCA Number	Ahupua'a	'Ili (listed west to east)	Contents of Award
1707:2	Hō'ae'ae	Kalokoeli	3 <i>lo'i</i> and 1 <i>kula</i>
1561	Hō'ae'ae	Amakeahiluna, Kamalokala	2 <i>lo'i</i> and 1 <i>kula</i>
899	Hō'ae'ae	Amakeahilalo	1 house lot (1 house), 5 <i>lo'i</i> , and 1 <i>kula</i>
750	Hō'ae'ae	Koipu, Kalokoloa	5 <i>lo'i</i>

LCA Number	Ahupua'a	'Ili (listed west to east)	Contents of Award
1571	Hō'ae'ae	Kamalokala	1 house lot (1 house), 1 <i>lo'i</i> , and 1 <i>kula</i>
1533 and 1696	Hō'ae'ae; Waiawa	Muki, Waihi, Kalokoeli	1 house lot (1 house), 4 <i>lo'i</i> , 1 <i>kula</i>
887:1	Hō'ae'ae	Kalaikea, Kapapahu, Kuainihi, Kalokoeli, Pakai	1 house, 1 <i>kula</i> , and 5 <i>lo'i</i>
1578:2	Hō'ae'ae	Laekea	1 <i>lo'i</i> and 1 <i>kula</i>
5930	Waikele	Hanohano	'ili of Hanohano to Puhalahua
858:2	Waikele	Pouhala, Waipahu	5 <i>lo'i</i> and 1 fishpond
857:1	Waikele	Pouhala	1 house lot (2 houses)
1018	Waikele	Pouhala	1 house lot (1 house) and 1 <i>kula</i>
860:1 and 860:2	Waikele	Paahao	1 house lot (1 house), 6 <i>lo'i</i> , and 2 salt lands
1005:1, 2 and 3	Waikele	Pouhala	4 <i>lo'i</i> and 1 <i>kula</i>
858-C:2	Waikele	Pouhala, Paahao	5 <i>lo'i</i>
1015:1	Waikele	Paahao	1 house lot (1 house), 3 <i>lo'i</i> , and 1 <i>kula</i>
5663:1	Waikele	Pahoa, Paahoa	'ili of Pahao (14.37 acres) to Kahonu
908	Waikele	Ohua	1 <i>lo'i</i>
6545:1	Waikele	Ohua	'ili of Ohua (30.32 acres) to Hana Hupa Haalilio
5989:1	Waikele	Kapakahi	3 taro patches (<i>lo'i</i>) and 1 pasture (<i>kula</i>)
1682-B:	Waikele	Kapakahi	2 <i>lo'i</i>
1614-B:2	Waikele	Ahualii, Mikiokai, Keahupuaa	1 house lot
7260:2	Waikele	Kaolipea	'ili of Waikele and Kaolipea (291.58 acres) to Bennett Namakeha
1712-C:2	Waikele	Kapuna, Keahupuaa°	1 house lot and garden
10512	Waipi'o	Kauaka	3 <i>lo'i</i>
1685:1	Waipi'o	Kapaia, Waikaka	3 taro patches (<i>lo'i</i>) and 1 pasture (<i>kula</i>)
8241 L.K.:2	Waipi'o	Hanaupouli	5 <i>lo'i</i>

LCA Number	Ahupua'a	'Ili (listed west to east)	Contents of Award
8241 S.S.:2	Waipi'o	Hanapouli, Kahaole	(0.73-acre) lot
10613:4	Waipi'o		Lands to Abner Pākī (<i>ali 'i</i> Award)
4213:1 and 4213:2	Waiawa	Holoipiapia, Kahoaiiai, Kapuaihalulu, Kalona	3 <i>lo 'i</i> and 1 <i>kula</i> , ½ house lot
4529 and 2685	Waiawa	Holoipiapia, Kapuaihalulu	1 house lot, 6 <i>lo 'i</i> , 1 <i>'auwai</i> , and 1 steep banana plantation
904:3	Waiawa	Panio, Kahoaiiai, Kuhia	1 house lot (3 houses), 1 <i>lo 'i</i> , and 2 fishponds
5591 and 9357:1	Waiawa	Kahoaee; Panaio	5 <i>lo 'i</i> and 1 <i>kula</i>
9294	Waiawa	Piliaumoa	1 house lot
9368:1; 1604	Waiawa	Kuhiawaho	3 taro patches (<i>lo 'i</i>) and 1 pasture (<i>kula</i>)
10942:1, 10942:2, 10942:3, and 10942:4	Waiawa	Kahoaiiai	1 house lot (1 house) and 8 <i>lo 'i</i> to William Wallace

In summary, the alignment for Central 'Ewa extends directly through the former irrigated taro fields near Pearl Harbor through Hō'ae'ae and Waikele. The alignment also passes through former taro lands in Waipi'o, but this area was mainly owned by only one man, John Papa 'Īī. In Waiawa the alignment extends through a cluster of LCA parcels at the base of a *pali* (cliff) on the western side of the *ahupua'a*.

2.2.2 1900s to Present

In the mid-eighteenth and early 1900s, foreign-born ranchers, rice cultivators, sugar cane or pineapple plantation owners and other entrepreneurs took over much of the land of 'Ewa. As the sugar industry throughout the Hawaiian kingdom expanded in the second half of the 19th century, the need for increased numbers of field laborers prompted passage of contract labor laws. In 1852 the first Chinese contract laborers arrived in the islands. Upon completion of their contracts, a number of the immigrants remained in the islands, many becoming merchants or rice farmers. As was happening in other locales, in the 1880s, groups of Chinese began leasing and buying — from the Hawaiians— former taro lands for conversion to rice farming. The taro lands' availability throughout the islands in the late 1800s reflected the declining demand for taro as the native Hawaiian population diminished.

The extension O'ahu Railway and Land Company to 'Ewa in 1890 brought in new people who established new residential areas. The railroads were also used to transport sugar and pineapples from the Ewa Plantation Co., the O'ahu Plantation Co. and the pineapple lands.

Early in the twentieth century, the U.S. Government began acquiring the coastal lands of 'Ewa for the development of a naval base at Pearl Harbor. In 1901, the U.S. Congress formally ratified the annexation of the Territory of Hawai'i, and the first 1,356.01 acres of Pearl Harbor land were transferred to U.S. ownership. By 1941, Pacific Naval Air Bases expenditures for new construction at Pearl Harbor were in the hundreds of millions of dollars. The Japanese attack on Pearl Harbor, December 7, 1941, damaged or destroyed much of the new construction. Reconstruction was instituted to double the Pearl Harbor's war capacity. Military planners approved a new ammunition depot in the mountainside of Waipahu, a large new hospital in 'Aiea, and thousands of additional changes to the Navy Yard to accommodate the new aircraft carrier task forces (Woodbury 1946). During World War II, the military used the sugar cane rail system to "haul large quantities of ammunition" (Condé and Best 1973:315). During the second half of the twentieth century, growth in central 'Ewa focused on the development of residential and military expansion, especially near Pearl Harbor.

2.3 Previous Archaeological Research

2.3.1 Predictive Model West of Kunia Road

West of Kunia Road there are no commoner Land Commission Awards and previous archaeological studies have indicated no concerns in the immediate transit corridor. The distance from the coast (and generally from fresh water) made this a little used area in pre-contact times. The intensive land disturbance of a century of commercial cane cultivation probably removed most of what little evidence of pre-contact use there ever was. The archaeological sensitivity of this area is generally regarded as low. As the transit corridor crosses Honouliuli Stream and passes within 300 m of the northern-most extent of the "Honouliuli Taro Lands" the sensitivity is believed to increase somewhat but is still regarded as low. Even though the distance to the former taro lands is not that far, the bottom lands that were preferred for pre-contact agriculture and habitation near the mouth of Honouliuli Stream seem in terms of environment to have been a world away. Archaeological deposits associated with pre-contact Hawaiian habitation and burial are a remote possibility. Post-contact archaeological deposits are not anticipated in any abundance on the basis of the historic record and the results reported in prior archaeological studies.

2.3.2 Predictive Model East of Kunia Road

East of Kunia Road the environment changes rather abruptly a fact that was mirrored in pre-contact settlement patterns that has continued right on up to the present day. The margins of the lochs of Pearl Harbor were proverbially "fat" "fertile" and "sweet" (*momona*) lands owing to the availability of marine resources, lacustrine resources, good, well-watered bottom lands for *kalo* cultivation and other forms of agriculture, and the generally sheltered conditions. These lands responded rapidly to human endeavor and the many fish ponds, fish traps, irrigation ditches and ponded fields of the margins of Pearl Harbor undoubtedly supported a relatively large and dense Hawaiian population for a thousand years. As such, the prospect of subsurface deposits relating to traditional Hawaiian habitation, burial, and agriculture having been present in the transit corridor is great. Furthermore the richness of the margins of Pearl Harbor attracted Hawaiian settlement and then settlement by other ethnic groups throughout the early historic period. The

prospect of subsurface deposits relating to post-contact habitation, burial, and agriculture having been present in the transit corridor is high.

Weighing against this is the virtual complete absence of reports of significant finds of cultural resources and/or *iwi kūpuna* (ancestral bones) in the historic and archaeological record. Undoubtedly this in part reflects the very substantial history of land alteration for transportation, commercial, and residential use in the twentieth century. It appears likely that the acidity and humidity of the soil has not been conducive to preservation.

Certainly cultural resources and/or *iwi kūpuna* relating to both pre-contact and post-contact habitation, agriculture and burial may be encountered almost anywhere in the project alignment east of Kunia Road. The likelihood of such finds, as a sweeping generalization, is suggested to be higher in the vicinity of known Land Commission Awards, streams, and the coast.

Section 3 Burial Treatment Jurisdiction as Defined Under Law

As a starting point the City and County of Honolulu as project proponent agrees to ensure the project follows the burial laws of the State of Hawai'i. Because these are of some inherent complexity the following review is offered (largely drawn verbatim from Hawaii Administrative Rules (HAR)).

3.1 Relevant Definitions

HAR §13-300-2 defines: "**Burial site**" as meaning: "any specific unmarked location where prehistoric or historic human skeletal remains and their associated burial goods if any, are interred, and its immediate surrounding archaeological context, including any associated surface and subsurface features, deemed a unique class of historic property, and not otherwise included in section 6E-41, HRS.

We note in passing that that non-articulated human skeletal remains in a disturbed context may not constitute a "Burial Site" (as defined by HAR 13-300-2), as a "specific location where prehistoric or historic human skeletal remains...are interred....). Clearly, HAR (13-300-31 (b) (3)) acknowledges the not uncommon situation where human skeletal remains discovered during archaeological inventory survey are not in a burial site context. Even if an isolated bone or bones in a disturbed context are regarded as most likely more than fifty years old and most likely Native Hawaiian the find may not be a "Native Hawaiian Burial Site" and may in fact be under the sole direction of the department (State Historic Preservation Division).

For the purposes of this Burial Treatment Plan two major categories of burials are relevant:

1) "**Previously identified**" means "burial sites containing human skeletal remains and any burial goods identified during archaeological inventory survey and data recovery of possible burial sites, or known through oral or written testimony." (HAR §13-300-2), and

2) "**Inadvertent discovery**" means "the unanticipated finding of human skeletal remains and any burial goods resulting from unintentional disturbance, erosion, or other ground disturbing activity." (HAR §13-300-2).

3.2 Jurisdiction

HAR §13-300-33 defines a major role of the council (the Oahu Island Burial Council): "The council shall have jurisdiction over all requests to preserve or relocate previously identified Native Hawaiian burial sites." This may be contrasted with the jurisdiction of Inadvertent Discoveries under HAR §13-300-40 (a) "The department shall have jurisdiction over any inadvertent discovery of human skeletal remains and any burial goods over fifty years old, regardless of ethnicity."

3.2.1 Procedures for "Previously Identified" Native Hawaiian Burial Sites

As the proponent of the Honolulu High Capacity Transit Corridor Project and as the applicant for any and all project related requests for council determinations, the City and County of Honolulu affirms that it will request council determination to preserve or relocate Native Hawaiian burial sites, acknowledging the following procedures from HAR §13-300-33:

(a) The council shall have jurisdiction over all requests to preserve or relocate previously identified Native Hawaiian burial sites.

(b) The applicant shall submit a request to preserve in place or relocate a Native Hawaiian burial site to the department in the form of a burial treatment plan. The department shall assure that the burial treatment plan includes the following information prior to any council determination:

- (1) Evidence of a good faith search for lineal and cultural descendants, including:
 - (A) Research of relevant land conveyance documents including identification of land commission awardees located at or near the burial site;
 - (B) An inquiry to any person who may have knowledge of families possibly affiliated with the Native Hawaiian remains;
 - (C) Publication of notice in a newspaper of general circulation in the county in which the burial site is located and a newspaper of statewide circulation for a minimum of three days, including Sunday and Wednesday. At a minimum, the notice shall contain:
 - (i) A general description of the property including any identifying features and the tax map key, *ahupua'a*, district, and island;
 - (ii) The names of individuals or families including land commission awardees possibly associated with the burial site or property where the burial site is located;
 - (iii) The name, address, and telephone number of the applicant and a contact person in the department;
 - (iv) A brief statement of the proposed treatment for the burial site; and
 - (v) A statement that interested persons shall respond within thirty days and provide information to the department adequately demonstrating descent from the Native Hawaiian remains, or descent from ancestors buried in the same *ahupua'a* or district where the Native Hawaiian skeletal remains are buried.

Notice may also be placed in the next issue of *Ka Wai Ola O OHA*, published by the Office of Hawaiian Affairs, or any other similar publication. The applicant shall append to the burial treatment plan proof of notice publication for each newspaper.

- (2) Names of any known lineal or cultural descendants recommended by the department and recognized by the council, and their respective positions regarding burial site treatment;
- (3) A description of proposed treatment of all burial sites including a statement of preservation in place or relocation:
 - (A) In the event preservation in place is proposed, statements describing:
 - (i) Short term measures to immediately protect all burial sites including, but not limited to, fencing, buffers, and site restoration; and
 - (ii) Long term measures to properly manage and protect all burial sites including, but not limited to, buffers, landscaping, and access by known lineal or cultural descendants;
 - (B) In the event relocation is proposed, statements describing:

- (i) Reasons that warrant relocation;
 - (ii) The methods to be utilized to conduct disinterment;
 - (iii) The location and manner by which Native Hawaiian skeletal remains and any burial goods will be curated where reburial will not occur immediately following disinterment;
 - (iv) The proposed reburial site location mutually agreed upon by the landowner and any recognized lineal descendant;
 - (v) The manner in which the reburial site will be prepared;
 - (vi) Short term measures to immediately protect the reburial site, including but not limited to fencing and buffers; and
 - (vii) Long term measures to properly manage and protect the reburial site including, but not limited, to buffers, landscaping, and access by known lineal or cultural descendants;
- (4) Maps clearly indicating the location of all identified Native Hawaiian burial sites located at the property, including where applicable, the spatial relationship between Native Hawaiian burial sites and any proposed construction activities, drawn to scale;
 - (5) The name and mailing address of the applicant;
 - (6) The name and mailing address of the landowner if different from the applicant;
 - (7) The tax map key number for the property;
 - (8) The name of the *ahupua'a*, district, and island;
 - (9) A description of the present condition of all previously identified Native Hawaiian burial sites located at the property;
 - (10) Any project plans requested by the council including, but not limited to, construction and grading plans;
 - (11) A copy of the archaeological inventory survey report where requested by the council;
 - (12) Where applicable, proof that the archaeological inventory survey report has been accepted by the department;
 - (13) Where applicable, reports of any additional archaeological inventory level testing recommended by the council, reviewed and approved by the department; and
 - (14) Any other information the council deems necessary in order to make a fully informed determination provided that all council requests for additional information shall be done in a timely manner.
- (c) The applicant shall consult with the department in the development of the burial treatment plan. Once approved by the department, the applicant shall submit requisite copies of the completed burial treatment plan for distribution to the council, accompanied by a simple written request to be placed on the council agenda for a determination of burial site treatment.
 - (d) Prior to making a determination, the council may request site inspections of the property where the burial site is located.

- (e) The applicant may, at any time prior to referral of the matter to the council for a determination, submit a simple written request to be placed on the council agenda to conduct an informational presentation of proposed burial treatment.
- (f) The council shall render a determination to preserve in place or relocate previously identified Native Hawaiian burial sites in accordance with section 13-300-38 within forty-five days of referral by the department, unless otherwise extended by agreement between the landowner and the department. Referral shall mean the first date the council officially convenes following:
 - (1) Acceptance by the department of a complete or revised burial treatment plan;
 - (2) Receipt by the department of a written request to be placed on the council agenda for a determination of burial site treatment;
 - (3) Placement of the matter on the council agenda; and
 - (4) Posting of a notice of council meeting agenda with the lieutenant governor's office.
- (g) At any time prior to a determination by the council, an applicant may revise the burial treatment or withdraw the burial treatment plan from consideration by the council. In the event a withdrawn burial treatment plan is re-submitted to the department, the forty five day period shall commence following referral to the council, as provided in subsection (f).
- (h) Intentional removal of human skeletal remains or burial goods from a previously identified Native Hawaiian burial site is prohibited until a determination to relocate is made by the council pursuant to sections 6E-43 and 6E-43.5, HRS, and this chapter, except that the council shall be authorized to allow temporary removal of Native Hawaiian skeletal remains or any burial goods to protect from imminent harm, until a determination is made. [Eff SEP 28 1996] (Auth: HRS §§6E-43.5, 91-2) (Imp: HRS §§6E-43, 6E-43.5)

3.2.2 Procedures for “Inadvertent discovery” Native Hawaiian Burial Sites

As the proponent of the Honolulu High Capacity Corridor Project and as the applicant for any and all project related requests for council determinations, the City and County of Honolulu acknowledges the following procedures from HAR §13-300-40:

The department shall have jurisdiction over any inadvertent discovery of human skeletal remains and any burial goods over fifty years old, regardless of ethnicity.

- (b) The inadvertent discovery shall be immediately reported to the following persons:
 - (1) The state historic preservation division, unless discovery occurs on Saturday, Sunday, or holiday at which time the report shall be made to the division of conservation and resource enforcement;
 - (2) The medical examiner or coroner from the county in which the inadvertent discovery occurred; and
 - (3) The police department of the county in which the inadvertent discovery occurred.

- (c) Once the report of an inadvertent discovery has been made, the department shall do the following:
 - (1) Assure that all activity in the immediate area of the human skeletal remains ceases and that appropriate action to protect the integrity and character of the burial site from damage is undertaken;
 - (2) Assure that a representative of the medical examiner or coroner's office and a qualified archaeologist determines whether the human skeletal remains are over fifty years old;
 - (3) Conduct a site inspection where necessary;
 - (4) Gather sufficient information, including oral tradition, by seeking individuals who may have knowledge about the families possibly connected lineally or culturally with the inadvertently discovered human skeletal remains, to help document the nature of the burial context and determine appropriate treatment;
 - (5) Complete departmental inadvertent discovery forms;
 - (6) Notify the council member who represents the geographic region where the human skeletal remains were discovered, and the Office of Hawaiian Affairs;
 - (7) Inform the landowner or its agent of the discovery if different from the person making the report; and
 - (8) Determine whether to preserve in place or relocate the human skeletal remains.
- (d) In the event an inadvertent discovery of multiple human skeletons occurs on O'ahu, the department shall have two working days to complete the above, and three working days on all other islands. In the event the inadvertent discovery consisting of a single human skeleton occurs on O'ahu, the department shall have one working day to complete the above, and on all other islands the department shall have two working days. The statutory time periods may be extended upon voluntary written consent of the landowner or its authorized representative.
- (e) Where human skeletal remains are reasonably believed to be Native Hawaiian following an evaluation pursuant to section 13-300-31, the department shall determine whether to preserve in place or relocate, following consideration and application of the criteria stated in section 13-300-36 and in consultation with appropriate council members, the landowner, and any known lineal or cultural descendants.
- (f) Where the human skeletal remains are reasonably believed to be non Native Hawaiian following an evaluation pursuant to section 13-300-31, the department shall determine whether to preserve in place or relocate following application of the criteria stated in section 13-300-37, and in consultation with appropriate ethnic organizations, the landowner, and any known lineal or cultural descendants.
- (g) In the event ethnicity of the human skeletal remains is not established by reasonable belief and in the absence of a time extension, the department shall determine whether to preserve in place or relocate following application of any relevant criteria stated in sections 13-300-36 and 13-300-37, and in consultation with the landowner.

- (h) Within ninety days following a determination to preserve in place or relocate, the department shall approve the burial site component of either a preservation plan or an archaeological data recovery plan.
- (i) Where the department determines to preserve the human skeletal remains in place, the burial site component of the preservation plan shall be prepared by the department or with the department's concurrence.
- (1) In preparing the burial site component of the preservation plan, the department shall consult with the following:
 - (A) Council members representing the geographic region in which the inadvertent discovery occurred, where human skeletal remains are reasonably believed to be Native Hawaiian following an evaluation of ethnicity pursuant to section 13-300-31;
 - (B) The affected landowner or the landowner's representative;
 - (C) Any appropriate ethnic organizations where human skeletal remains are reasonably believed to be non Native Hawaiian following an evaluation of ethnicity pursuant to section 13-300-31; and
 - (D) Any known lineal or cultural descendants.
- (2) At a minimum, the burial site component of the preservation plan shall include statements describing:
 - (A) The location of all inadvertently discovered human skeletal remains and any burial goods determined to be preserved in place;
 - (B) Short term measures to immediately protect all burial sites including, but not limited to, fencing, buffers, and site restoration; and
 - (C) Long term measures to properly manage and protect all burial sites including, but not limited, to buffers, landscaping, and access by known lineal or cultural descendants.
- (3) In order to provide perpetual protection for human skeletal remains inadvertently discovered, departmental determinations to preserve in place shall be recorded in the bureau of conveyances. In addition, any affected landowner may enter into an in situ burial agreement with the State.
- (j) Where the department determines to relocate the human skeletal remains, the burial site component of the archaeological data recovery plan shall be prepared by the department or with the department's concurrence.
- (1) In preparing the burial site component of the archaeological data recovery plan, the department shall consult with the same parties as stated in subsection (i)(1).
- (2) At a minimum, the burial site component of the archaeological data recovery plan shall include statements describing:
 - (A) All inadvertently discovered human skeletal remains and any burial goods determined to be relocated;
 - (B) The archaeological methods utilized to conduct disinterment;

- (C) The location and manner by which human skeletal remains and burial goods will be curated where reburial will not occur immediately following disinterment;
- (D) The reburial site location mutually agreed upon by the landowner and any recognized lineal descendant;
- (E) The manner in which the reburial site will be prepared;
- (F) Short term measures to immediately protect the reburial site including, but not limited to, fencing and buffers; and
- (G) Long term measures to properly manage and protect the reburial site including, but not limited to, buffers, landscaping, and access by known lineal or cultural descendants.
- (3) In order to provide perpetual protection for the newly established reburial site, all departmental determinations to relocate human skeletal remains and any burial goods shall be recorded in the bureau of conveyances. In addition, any affected landowner may enter into a reburial agreement with the State.
- (k) Intentional removal of inadvertently discovered human skeletal remains or burial goods is prohibited until a determination to relocate is made by the department pursuant to section 6E-43.6, HRS, and this chapter, except that the department shall be authorized to allow temporary removal of the remains or burial goods to protect from imminent harm, until a determination is made.
- (l) The implementation of the preservation plan or archaeological data recovery plan shall be the responsibility of the following persons:
 - (1) The landowner, permittee, or developer, in discoveries related to development where land alteration project activities exist; and
 - (2) The department, in non-land alteration project contexts.
- (m) Reburial shall be based on commonly accepted cultural practices as routinely recorded by the department. Additional requests by lineal or cultural descendants beyond commonly accepted cultural practices, deemed specific or special by the department following consultation with the appropriate council or ethnic organization, may be accommodated provided that any additional expenses incurred are paid by the descendants.
- (n) In the event the landowner or it's authorized representative knowingly fails to comply with any of the provisions of the preservation plan or archaeological data recovery plan, and directly or indirectly causes the taking, appropriation, excavation, injury, destruction, or alteration of any burial or reburial site, the action may be considered a violation of applicable provisions of chapter 6E, HRS, and this chapter and subject to statutory and administrative penalties.
- (o) The inadvertent discovery of Native Hawaiian skeletal remains and any burial goods on lands managed by the department of Hawaiian home lands shall be governed by applicable provisions of the Native American Graves Protection and Repatriation Act (25 U.S.C. §3001). [Eff SEP 28 1996] (Auth: HRS §§6E-43, 6E-43.5, 91-2) (Imp: HRS §6E-43.6, 25 U.S.C. §3001)

As the proponent of the Honolulu High-Capacity Transit Corridor Project and as the applicant for any and all project related requests for council determinations, the City and County of Honolulu further agrees to assist the State Historic Preservation Division (as per HAR §13-300-40 (b) (6)) in the prompt notification (within 24 hours) of Council members representing the geographic region in which the inadvertent discovery occurred (i.e. 'Ewa District representatives – at the time of writing Mr. Shad Kane and Mr. Kāwika McKeague), where human skeletal remains are reasonably believed to be Native Hawaiian.

Section 4 Proposed Mitigation Measures

The purpose of this Mitigation discussion is to develop a plan to eliminate or minimize the impact of the project on *iwi kūpuna* buried within the project area and on any surface or subsurface cultural resources. The purpose of this discussion is to codify the project's conformity with the letter and spirit of Hawai'i Administrative Rules (HAR) 13-300 regarding practices and procedures relating to Native Hawaiian burial sites and human skeletal remains (*iwi kūpuna*).

Specific efforts to mitigate burial impact include the following proposed steps:

4.1 Phased Investigation Prior to Construction

As per the terms of the presently accepted Archaeological Inventory Survey Plan efforts at the identification of the presence of *iwi kūpuna* will be phased to allow for a greater probability of early identification. Specifically, in the case of column foundations (which may be the most problematic to move in the event of identifications of *iwi kūpuna* during actual construction), any identification of human skeletal remains will automatically trigger a subsurface investigation of a minimum of two immediately adjacent column foundations (typically the nearest on the east and west sides).

4.2 Communications

In order to minimize misunderstanding and promote dialogue it is suggested that communication between various concerned parties regarding burials and burial mitigation be handled through State Historic Preservation Division staff. The archaeologists (at present Cultural Surveys Hawai'i) will be responsible for submitting a weekly written account of proceedings and developments to State Historic Preservation Division staff. The archaeologists will to be responsible to provide a write up of any identifications of human skeletal remains the same day or within 24 hours. These accounts will be made available to concerned parties including O'ahu Island Burial Council members, and other parties, as State Historic Preservation Division staff sees appropriate. Concerned members of the O'ahu Island Burial Council will be informed of the circumstance of each and every burial found. Members of the O'ahu Island Burial Council will be invited to visit the work site (subject to OSHA regulations). Monthly updates will be presented to the OIBC from the beginning of archaeological inventory survey testing through the completion of construction.

Efforts will be undertaken to explore the availability and appropriateness of publication of appropriate information on the SHPD/DLNR web page and also on the project web site to be made available to the general public and/or specific concerned parties.

4.3 Mitigation Steps

The primary form of mitigation during actual construction will be in the form of archaeological monitoring. Each phase of the project will be governed by an archaeological monitoring plan prepared for the review and approval of the SHPD in advance of the on-set of construction within that segment.

In the event of any identifications of *iwi kūpuna* during actual construction mitigation will be through using a smaller (approximately 2 cubic foot bucket) excavator under archaeological

monitoring in the immediate vicinity. If human remains are encountered in any of these excavations the remains will be left in place, and the SHPD notified but no determination of burial disposition will be made until the number and location of any and all burials in the foundation area or specific project-related development area are ascertained. If one or more burials are encountered, consideration will be made of relocation of the construction followed by consultation with OIBC members before a determination of burial disposition.

The placing utility lines in the same trench where feasible, keeping these lines as shallow as feasible (subject to code requirements) and placing them along existing utility lines where feasible. Excavation of City and County utility lines will proceed under archaeological monitoring. If one or more burials are encountered, consideration will be made of relocation of the construction followed by consultation with the State Historic Preservation Division and at least one regional OIBC representative before a determination of burial disposition.

Excavations will be preceded by archaeological probing if located within 50' of a known burial and all will be excavated under archaeological monitoring. If one or more burials are encountered, consideration will be made of relocation of the construction followed by consultation with the State Historic Preservation Division and at least one regional OIBC representative before a determination of burial disposition.

4.4 Report on Mitigation

A brief final report will be produced at the end of each construction segment work in addition to the archaeological monitoring report. This will primarily evaluate the efficacy of the proposed mitigation program (based on subsequent findings during construction) to facilitate consideration of utilizing or altering such a mitigation program in the course of future construction phase work.

4.5 Burial Treatment Plan

As the proponent of the Honolulu High Capacity Corridor Project and as the applicant for any and all project related requests for council determinations, the City and County of Honolulu further agrees to develop future Burial Treatment Plan(s) (in accordance with HAR 13-300-33), Burial Site Component of a Preservation Plan(s) (in accordance with HAR 13-300-40 (i)) and/or a Burial Site Component of a Data Recovery Plan(s) (in accordance with HAR 13-300-40 (j) (2)). In consultation with appropriate parties including likely lineal descendants of the *kūpuna* who were disturbed, the OIBC, the Office of Hawaiian Affairs, Hui Mālama i Nā Kūpuna o Hawai'i Nei, other interested Hawaiian organizations and the SHPD to preserve in place or rebury the *kūpuna* who were disturbed. The City and County understands and will honor the need to incorporate the *mana'o* of likely lineal and/or cultural descendants in the formulation and implementation of any such plan(s). The City and County has indicated a willingness to donate land, provide design expertise, and offer ideas to aid possible lineal descendants in the course of the formulation and implementation of any such burial treatment plan(s) as detailed in Section 5.

4.6 Interim Curation

The City and County of Honolulu and the transit project team are making no assumptions regarding any disinterment. On the other hand it makes sense to consult in advance with the

SHPD and the OIBC regarding the nature of interim curation should interim curation be appropriate.

4.6.1 Duration of Interim Curation

In the event of any disinterment the City and County of Honolulu agrees to try and minimize the duration of interim curation with the intent that final interment to be undertaken promptly after completion of construction work in the vicinity if not before.

4.6.2 Nature of Interim Curation

The City and County of Honolulu will consult with the SHPD and members of the OIBC regarding appropriate interim curation and whether arrangement for appropriate facilities should be in place at the commencement of construction.

Section 5 Burial Treatment Plan

5.1 Hawai'i Administrative Rules

Burial Treatment Determinations and treatments are covered by Hawai'i Administrative Rules (H.A.R.), Title 13, Department of Land and Natural Resources (DLNR), Subtitle State Historic Preservation Division (SHPD) Title, Chapter 300 Rules of Practice and Procedure Relating to Burials Sites and Human Remains.

In these rules, “previously identified” means “burials sites containing human skeletal remains and any burials goods identified during archaeological inventory survey and data recovery of possible burials sites, or known through oral or written testimony.” “Inadvertent discovery of human remains” means the “unanticipated finding of human skeletal remains and any burial goods resulting from unintentional disturbance, erosion, or other ground disturbing activity.”

With all previously identified Native Hawaiian burial sites on O‘ahu, the decision to preserve in place or relocate burial remains falls under the jurisdiction of the O‘ahu Island Burial Council (OIBC), which makes its decision in consultation with any recognized lineal and/or cultural descendants, per the requirements of HAR Chapter 13-300-33. Once the determination regarding burial treatment is made, the remains’ proper treatment is carried out in accordance with HAR Chapter 13-300-38. This burial treatment plan is intended to provide the OIBC, any recognized lineal and/or cultural descendants, and SHPD with detailed information to support this burial treatment decision-making process.

With all inadvertently discovered human skeletal remains, the decision to preserve in place or relocate burial remains falls under the jurisdiction of State Historic Preservation Division (SHPD), which makes its decision in consultation with any recognized lineal and/or cultural descendants, per the requirements of Hawai'i Revised Statutes (HRS) Chapter 6E-43.6 and Hawai'i Administrative Rules (HAR) Chapter 13-300-40. Once the determination regarding burial treatment is made, the remains’ proper treatment is carried out in accordance with HAR Chapter 13-300-40.

The sections of the rules designated H.A.R. §13-300-40 (i) and (j) cover the minimal requirements for burial treatment plans, either preservation plans if the determination is made to preserve in place (H.A.R. §13-300-40 (i), or a burial site component of an archaeological data recovery plan (H.A.R. §13-300-40 (j), in the event of a determination to relocate the burial(s).

At a minimum, the burial site component of the archaeological data recovery plan should include the following sections.

Results of Lineal/Cultural Descendant Consultation	pursuant to H.A.R. §13-300-33 (b) (1)
Description of Inadvertent Skeletal Remains	pursuant to H.A.R. §13-300-40 (j) (2)(A)
Archaeological Methods used for Disinterment	pursuant to H.A.R. §13-300-40 (j) (2) (B)
Interim Curation Measures	pursuant to H.A.R. §13-30-040 (j) (2) (C)
New Burial Location	pursuant to H.A.R. §13-300-40 (j) (2) (D)

New Burial Site Location	pursuant to H.A.R. §13-300-40 (j) (2)(E)
Short Term Protection Measures	pursuant to H.A.R. §13-300-40 (j) (2) (F)
Long Term Protection Measures	pursuant to H.A.R. §13-300-40 (j) (2) (G)

5.2 Burial Treatment Plan Requirements

The SHPD Burial Sites Program requires that a burial treatment plan include:

- 1) The tax map key number, *ahupua'a*, district, and island for the property;
- 2) The names and mailing addresses of the applicant and/or land owner;
- 3) Documentation that an archaeological inventory survey has been completed at the project area and that a final report for the survey has been accepted by the SHPD.
- 4) Maps clearly indicating the location of all identified Native Hawaiian burial sites located on the property, including, where applicable, the spatial relationship between the burial sites and any proposed construction activities;
- 5) A description of the present condition of all previously identified Native Hawaiian burial sites located at the property;
- 6) A description of the proposed burial treatment (preservation in place or relocation);
- 7) Any project plans requested by the Island Burial Council;
- 8) Evidence of good a faith search for lineal and/or cultural descendants to include land conveyance research, inquiries of knowledgeable local residents, and legal advertising in state and local newspapers; and
- 9) The names of known lineal and/or cultural descendants, if known, recommended by the SHPD Burial Sites Program and recognized by the Island Burial Council, and their respective positions regarding burial site treatment.

5.3 OIBC and OHA Consultation and Lineal/Cultural Descendant Search

HAR 13-300-33 specifies that a Burial Treatment Plan present evidence of a good faith search for lineal and cultural descendants by means of research of relevant land conveyance documents, inquiry to persons with knowledge of families affiliated with the remains, and public notice in a general circulation newspaper.

The good faith search for potential lineal and cultural descendants is an important component of every burial treatment plan. As part of this burial treatment plan, land conveyance documents related to the *Māhele* will be inspected to identify potential land commission awardees or claimants located within or near the project area(s). The results of this search will be summarized in the final inventory survey report.

Another part of the good faith descendant search involves cultural consultation with knowledgeable Native Hawaiian families, individuals, or organizations in order to identify potential lineal and/or cultural descendants. The project proponents will contact potential lineal and cultural descendants for the project area's burials. The O'ahu Island Burial Council (OIBC)

Chairperson will be contacted when any burial remains are discovered during the archaeological inventory survey, as will the Office of Hawaiian Affairs (OHA) representative.

Informational presentations will be made to the OIBC throughout the project, when appropriate. The first presentation would focus on describing the proposed project and the historic preservation work that had been completed to date. The dates of these presentations, the participants, and the results of the presentation and discussions will also be presented in the final inventory survey report.

Potential lineal and/or cultural descendants and interested parties will be notified through a burial notice that will be published in the *Ka Wai Ola o OHA* as well as the *Honolulu Advertiser*. Interested persons will be asked to contact the SHPD Burial Sites Program staff to present information relating to lineal and/or cultural affiliation(s) to the burials on site. A sample of a newspaper notice is present below.

Public Notice for Honolulu Advertiser

NOTICE TO INTERESTED PARTIES IS HEREBY GIVEN that three sets of unmarked, human skeletal remains were discovered by Cultural Surveys Hawai'i, Inc. The find was made in the course of archaeological inventory survey excavations related to the proposed construction of the Honolulu Rapid Transit Project, Waikele Ahupua'a, O'ahu Island.

Following the procedures of Hawai'i Revised Statutes (HRS) Chapter 6E-43, and Hawai'i Administrative Rules (HAR) Chapter 13-300, the remains were determined by SHPD to be over 50 years old and most likely Native Hawaiian. The State Historic Preservation Division (SHPD) has assigned a SIHP (State Inventory of Historic Properties) number to the burial. The project proponent is considering preservation in place of the human remains; however, the decision to preserve in place or relocate these previously identified human remains shall be made by the O'ahu Island Burial Council and SHPD in consultation with any identified lineal and/or cultural descendants, per the requirements of HAR Chapter 13-300-33. The remains' proper treatment shall occur in accordance with HAR Chapter 13-300-38 or 13-300-39.

SHPD is requesting persons having any knowledge of the identity or history of these human skeletal remains to immediately contact Ms. Kaleo Paik, at SHPD, located at 555 Kākuhihewa Building, 601 Kamōkila Boulevard, Kapolei, Hawai'i 96707 [Tel. (808) 692-8026; Fax (808) 692-8020] to present information regarding appropriate treatment of the unmarked human remains. All interested parties should respond within thirty days of this notice and provide information to SHPD adequately demonstrating lineal descent from these specific burials or cultural descent from ancestors buried in the vicinity of this project.

5.4 Consultation with OHA and other Hawaiian Organizations

Cultural consultation letters that include a summary of the project's archaeological inventory survey investigation will be sent to Office of Hawaiian Affairs (OHA) and other Hawaiian organizations. These letters would include a request for comment on the project's burial issue

and request information regarding the potential impact of the project on the identified Native Hawaiian burials and proposed mitigation measures to alleviate this potential impact. Site visits by the OHA and other Hawaiian organizations could also be scheduled. The final inventory survey report will include a list or table of all letter recipients and their responses, if any.

5.5 Proposed Burial Treatment

Treatment of burial remains must be made individually on each discovery. The preferred treatment for all burial discoveries is:

- (1) Preservation in place
- (2) Disinterment and re-interment in an area as close to the original burial location as possible, or,
- (3) Disinterment and reinterment in an agreed upon interment site distant from the original location.

Ms. Kaleo Paik, of the SHPD Burial Sites Programs, has suggested that reinterment sites distant from the original location should be set up during the archaeological inventory survey testing phase in anticipation of burial finds. An interment site should be located in each *ahupua'a* on land acquired by the state or county near the proposed rail route. This would serve several purposes. As a backhoe will be used to test pilings along the rail route during the archaeological inventory survey, the same backhoe can be used to test the proposed interment sites for cultural deposits, burials, and other archaeological/historic features. The testing will also determine the suitability of the proposed area for reinterment. For example, to make sure that the soils in the area are not contaminated or that there is sufficient soil depth for reburials.

Once the decision has been made by the OIBC or the SHPD to preserve in place or relocate any burials, the remains' proper treatment will be carried out. If the determination is made for relocation, a burial site component of an archaeological data recovery plan will be submitted to provide the OIBC or SHPD with detailed information to support this burial treatment decision-making process. The burial treatment plan for the project will contain a statement of proposed treatment for any burials, whether preservation in place or disinterment and removal to a new reburial location.

5.6 Reburial Procedures

5.6.1 Immediate Short-Term Reburial Site Protection Measures

Short-term preservation measures will be carried out to protect any identified burials from harm between discovery and long-term preservation actions or removal. These could consist of prominent structures, such as plywood walls around the areas, or simpler buffer zones marked by rope and post. These temporary protective buffers will ensure no pedestrian or vehicular traffic passes over the burial deposits until the disinterments. The protective measures should ensure that the burials are protected from pedestrian and vehicular traffic, but at the same time they should not create an invitation to the curious.

5.6.2 Disinterment Methods & Temporary Curation

Once human skeletal remains are encountered and the decision is made for disinterment, all *in situ* remains will be exposed with the aid of a trowel and brush. When the bones are fully

exposed, a plan view will be drawn and the data recorded. The remains will then carefully be removed and placed in a plain brown paper bag. The disturbed remains and surrounding material will be screened with a 1/8th inch mesh screen. The bags will be placed in a plain brown cardboard box, and transported to either the either the SHPD Burial Sites Program office in Honolulu or to an on-site storage facility approved by the SHPD.

5.6.3 Proposed Reburial Procedures

In the final inventory survey report, any proposed reinterment procedures will be described, including preparation for reburial, layout of the reburial site, landscaping, and the methodology of burial relocation. A possible burial treatment for all of the burial remains is presented below, but these may differ from the final procedures for each individual set of remains, as different circumstances, agency directives and consultant's recommendations may require different procedures for each set of remains.

As noted in the previous section on Samples of Burial Treatment, each set of remains and associated burial goods are usually wrapped and placed in individual *lauhala* baskets. The type of wrapping material has varied from *kapa* cloth, unbleached muslin, or black cloth. The dimensions of the baskets are usually 24 inches by 8 inches by 8 inches. In other projects, these procedures have been accompanied by appropriate ceremonies, ranging from blessing by Christian ministers to cleansing rites of all participants, including the archaeologists and interested Hawaiian organizations.

In the past, human remains have been reburied in simple pits in the earth, in pits lined with basalt rocks or coral boulders, or in subsurface concrete vaults. The *lauhala* baskets would be placed on a layer of clean sand, and sand would also be used to refill the pits. The vaults are usually open on the top and bottom and range in size from a small 3-foot square planter to a large 10 by 6 foot vault constructed for multiple burials. The vaults can also have concrete or metal lids. Ms. Kaleo Paik of the SHPD Burial Sites Program has suggested 4 by 4 foot concrete electrical conduits may be appropriate burial vaults. The reburial sites in each *ahupua'a* could have room for several of these concrete boxes to be placed side by side. This is preferable to a large concrete vault, which cannot be easily reopened without heavy equipment. Each vault could contain one or more burials.

As noted from the previous section, a variety of procedures have been used to mark the surface location of the burials, for those preserved in place and those moved to a new location. Placards with text identifying the site as a burial are not recommended. Instead, the major reason for a surface marker is to protect the site from future construction activities. The simplest marker is a large boulder over the burial site and/or vault. This keeps away casual interference with the site. For aesthetic, cultural, and preservation reasons, the site should also be landscaped. It is usually recommended that native Hawaiian plants should be used for the landscaping. The types of plants would depend on the natural environment and need for protection. For instance, a low cover of *naupaka* may be appropriate for burials in low-traffic areas, but in high traffic areas it may be necessary to plant trees and shrubs to keep foot and vehicular traffic away from the site.

5.6.4 Long-Term Management of the Preserve Areas

Once the project construction is complete, long-term preservation and protection of the burial in place or reinterment preserve sites will include careful landscape maintenance. Proposed

pathways will be routed around the burial preserve area. In consultation with the landowner, recognized cultural descendants will have access to the burial preserve area. Also in consultation with the recognized cultural descendants, if appropriate, culturally sensitive educational signage could be installed in the vicinity.

5.6.5 Burial Preserve Recordation

In order to provide perpetual protection for the preserve areas, the project proponents, acting on behalf of SHPD, pursuant to §HAR 13-300-38(g), will record the preserve area locations with the State of Hawai'i Bureau of Conveyances. This recordation would create an encumbrance on the project property to run with the land in perpetuity. The burial preserve area recordation with the Bureau of Conveyances will be done upon the completion of project construction. Copies of the recorded document shall be submitted to SHPD, OIBC, and interested parties that participated in the burial treatment consultation process. Additionally, the project proponents may enter into an In Situ Burial Agreement, or another appropriate form of agreement, with the State.

Storm, flood, fire, traffic mishap, or other natural and/or cultural events could potentially damage the selected burial preserve areas. Should this occur, short-term, immediate repairs should be made to the affected burial preserve area to stabilize the damage. SHPD, the OIBC, and the recognized cultural descendants shall be notified of the damage. The landowner, in consideration of any comments from SHPD, OIBC, and recognized cultural descendants, should perform repairs and/or reconstruction of the burial preserve area. Repairs and/or reconstruction should follow best practices.

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