



Kalaupapa and Kalawao Settlements Cultural Landscape Report

VOLUME I OF II
JULY 2020

Cultural Resources

Kalaupapa and Kalawao Settlements

Kalaupapa National Historical Park

Hawai‘i

Cultural Landscape Report

June 2020

Prepared by:
Wiss, Janney, Elstner Associates, Inc.
2000 Powell Street, Suite 1650
Emeryville, California 94608

Prepared for:
National Park Service
Department of the Interior Regions 8, 9, 10, and 12
333 Bush Street, Suite 500
San Francisco, California 94104



National Park Service
Department of the Interior Regions 8, 9, 10, and 12
333 Bush Street, Suite 500
San Francisco, California 94104
(415) 623-2100

About the front cover: View from Kauahkō Crater

This manuscript has been authored by Wiss, Janney, Elstner Associates, Inc., under Task Order No. P16PD03678 of Contract Number P14PC00036 with the National Park Service. The United States Government retains and the publisher, by accepting the article for publication, acknowledges that the United States Government retains a non-exclusive, paid-up, irrevocable, world-wide license to publish or reproduce the published form of this manuscript, or allow others to do so, for United States Government purposes.

Kalaupapa and Kalawao Settlements

Kalaupapa National Historical Park

Hawai‘i

Cultural Landscape Report

Contents

VOLUME I OF II

Table of Figures	vii
Project Team	xix

Introduction

Management Summary	1
Study Area Boundaries	3
Scope and Methodology	8
Summary of Findings	17

Site History

Early Hawaiian Settlement (pre-European Contact through circa early nineteenth century)	21
Establishment of Hansen's Disease Colony (1866-1873)	24
Arrival of Saint Damien and Associated Improvements to Kalawao (1873-1889)	30
Relocation to Kalaupapa (1889-1930)	37
Kalaupapa Revitalization Period (1931-1938)	55
Kalaupapa in the Modern Era (1939-1969)	73
Kalaupapa as Sanctuary (1970-Present)	83

Existing Condition Documentation

Introduction	89
Physical and Cultural Setting	89
Natural Systems and Features	94
Spatial Organization	101
Views and Viewsheds	139
Circulation	144
Primary Roads	145
Cultural Vegetation	153
Buildings	165
Structures	182
Small-Scale Features	197
Cultural Traditions	202
Archeological Resources	203

Analysis and Evaluation

Introduction	207
Evaluation of Significance	207
National Register Criteria for Evaluation	207
National Historic Landmark Criteria for Evaluation	208
Current National Register of Historic Places Status of Kalaupapa and Kalawao Settlements	210
National Register Significance of Kalaupapa and Kalawao Settlements	210
Period of Significance	211
Comparative Analysis	212
Kalaupapa Peninsula, Valleys, and Pali	213
Kalawao Character Area	222
Damien Road Character Area	233
Kauhakō Crater Character Area	241
Administrative Area Character Area	251
Character Area Assessment	258
Residential Area Character Area	261
Kalaupapa Churches Character Area	271

Bishop Home Character Area	279
Bay View Home Character Area	294
McVeigh Home Character Area	306
Staff Row Character Area	316
New Baldwin Home Character Area	326
‘Īliopi‘i Beach Houses Character Area.....	334
West Coast Cemeteries Character Area.....	343
Molokai Light Station Character Area	353

Treatment Plan

Introduction	361
Park Management Goals, Issues, and Concerns	363
Treatment Approach	364
Settlement-Wide Treatment Recommendations	369
Natural Features and Systems.....	369
Treatment Recommendations by Character Area.....	385
Settlement-wide Design Guidelines	471

Bibliography	521
--------------------	-----

VOLUME II OF II

Appendix A: Inventory Table and Maps

Appendix B: Cemetery Management Plan

Table of Figures

Figure 1.	Kalaupapa setting. (Source: National Park Service).....	4
Figure 2.	Study Area Boundary	5
Figure 3.	View east from the eastern shoreline at Kalawao, including views of the pali (right) and islets off the coast, 2017.	7
Figure 4.	View south of the headquarters for Kalaupapa National Historical Park, located in the historic Fumigation Room building along School Street in Kalaupapa Settlement, 2018. (Source: Photograph by authors. All subsequent images by authors, unless otherwise noted).....	8
Figure 5.	View of November 2018 workshop participants standing within Kahaloko Cemetery, 2018.....	12
Figure 6.	View of one of the many cemeteries associated with the Kalaupapa and Kalawao Settlements. Pictured is Cemetery J, one of the ‘Īliopi‘i Cemeteries within the West Coast Cemetery system, 2018.....	13
Figure 7.	View northeast of the Pool Hall at McVeigh Home, one of the historic group residential communities established at Kalaupapa Settlement during the early twentieth century, 2017.....	17
Figure 8.	The west side of the Makanalua Peninsula on the island of Molokai, undated; note the pali located towards the south side of the peninsula and Kalaupapa on the west side of the peninsula. Kalawao is located on the east side of the peninsula but is not visible in this figure. (Source: National Park Service)	77
Figure 9.	Hospital compound at Kalawao looking east, undated. (Source: Bishop Museum, Honolulu; Greene, Figure 8)	79
Figure 10.	Old stone church at Kalaupapa in use as jail, circa 1895. (Source: Hawai‘i State Archives, Honolulu; Greene, Figure 3).....	79
Figure 11.	Old stone church (formerly jail), in use as repair shop, 1930s. (Source: Kalaupapa Historical Society, Kalaupapa Greene, Figure 4)	80
Figure 12.	Kalawao settlement, 1884, showing Siloama Church prior to alterations of 1885, and St. Philomena with the new nave and steeple built by Saint Damien, and what is likely the rectory (between the two structures). (Source: Hawai‘i State Archives, Honolulu; Greene, Figure 14)	80
Figure 13.	Portrait of Saint Damien before arriving at the Kalaupapa settlement, circa 1873. (Source: Kalaupapa Historical Society).....	82
Figure 14.	Kalawao, undated, post-1893. The store is visible at the right, and the circular stone cistern visible in the background may be the reservoir built circa 1886. The Hospital compound is visible at the left. (Source: Bishop Museum, Honolulu; Greene, Figure 22)	83
Figure 15.	Old Kalawao store, circa 1930. (Source: Hawai‘i State Archives, Honolulu; Greene, Figure 10)	84
Figure 16.	One of the flumes used to transport water to the settlement. (Source: Kalaupapa Historical Society)	86
Figure 17.	Saint Marianne Cope (second from right) outside the Kapiloani Girls’ Home in Honolulu, circa 1886. (Source: Kalaupapa Historical Society).....	86
Figure 18.	Bishop Home, Kalaupapa, undated, probably pre-1911. The convent is to the right. Source: St. Louis-Chaminade Education Center, Honolulu. (Source: St. Louis-Chaminade Education Center, Honolulu; Greene, Figure 154)	87
Figure 19.	Social hall at the Bishop Home complex, used for social and recreational activities, circa 1930s (demolished 1934). (Source: Kalaupapa Historical Society)	87
Figure 20.	View inside Kauhakō Crater, circa 1890, showing terraced fields and house. (Source: Bishop Museum, Honolulu, Department of the Interior, USGS; Greene, Figure 24)	88
Figure 21.	Baldwin Home, Kalawao, looking north circa 1900. Dutton’s office is at left, facing the flagpole, with his cottage at the left bottom corner of the photograph. (Source: Bishop Museum, Honolulu; Greene, Figure 40)...	89
Figure 22.	Map of Kalaupapa and Kalawao villages, August 1908. (Source: R. J. Baker, Bishop Museum, Honolulu; Greene, Figure 71)	90
Figure 23.	Protestant Church, Kalaupapa, possibly circa 1907 (although the structure has a shingle roof in this photo). (Source: Hawai‘i State Archives, Honolulu; Greene, Figure 19)	91
Figure 24.	Mormon Church, undated photograph. The structure at left may be the 1904-chapel erected at Kalaupapa. (Source: Kalaupapa Historical Society, Kalaupapa; Greene, Figure 139)	92
Figure 25.	Kana’ana Hou Church, located in Kalaupapa, circa 1910s. Note the Kanaana Hou’s social hall to the right. (Source: Kalaupapa Historical Society)	92
Figure 26.	Kalaupapa settlement, undated, pre-1906, showing typical whitewashed houses and enclosed fields. The early St. Francis Church is seen in the distance at the far left. (Source: Hawai‘i State Archives, Honolulu; Greene, Figure 23)	93

Figure 27.	Stone Church of St. Francis, completed 1908. The old church is visible at left, showing repairs made after the 1906 fire. (Source: Damien Museum, Honolulu; Greene, Figure 74).....	93
Figure 28.	Bay View Home for the Aged and Blind, circa 1907. (Source: Greene, Figure 53).....	94
Figure 29.	Guest house constructed in 1906 near the landing. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 30).....	94
Figure 30.	"Tarry Wile" bandstand, circa 1905–1906, with assistant resident physician's house in background. (Source: Hawai'i State Archives; Greene, Figure 64).....	95
Figure 31.	Kalaupapa dispensary, built circa 1890, shown circa 1932. (Source: Kalaupapa Historical Society, Kalaupapa; Greene, Figure 29).....	96
Figure 32.	Bathhouse at rear of Kalaupapa dispensary, at the shore, 1932. (Source: Kalaupapa Historical Society, Kalaupapa; Greene, Figure 31).....	96
Figure 33.	One of the water storage tanks on the peninsula, circa 1930. (Source: Kalaupapa Historical Society).....	97
Figure 34.	Kalaupapa landing, which allowed for easier access to the peninsula by sea, undated photo. (Source: Kalaupapa Historical Society).....	97
Figure 35.	View toward the pali, showing the old general hospital buildings, likely prior to 1935–1936. (Source: Greene, Figure 108).....	98
Figure 36.	U.S. Leprosy Investigation Station with Baldwin Home in the foreground, circa 1910. (Source: Kalaupapa Historical Society).....	99
Figure 37.	U.S. Leprosy Investigation Station, circa 1913. The Baldwin Home is in the foreground with pasture and clothes washing and drying houses visible near the sea. (Source: National Archives, Washington, D.C.; Greene, Figure 51).....	99
Figure 38.	Kalawao, 1866-1909.....	51
Figure 39.	Kalaupapa Settlement 1866-1909.....	53
Figure 40.	Kalaupapa store and service station, completed 1934, shown in 1984. (Source: National Park Service; Greene, Figure 125).....	56
Figure 41.	Kitchen (left) and dining room (right) of Bay View Home, circa 1930s. (Source: Kalaupapa Historical Society; Greene, Figure 98).....	56
Figure 42.	Chinese clubhouse, undated. (Source: Kalaupapa Historical Society; Greene, Figure 143).....	57
Figure 43.	Plot plan A, McVeigh home, Board of Hospitals and Settlement, June 1938. (Source: Annual Report for the Fiscal Year Ended Jun 30, 1938; Greene, Figure 90).....	58
Figure 44.	The new McVeigh Home completed following a fire that destroyed the original complex, undated. (Source: Kalaupapa Historical Society).....	58
Figure 45.	Patient cottages, McVeigh Home, early 1930s. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 94).....	59
Figure 46.	Heating plant, McVeigh Home, 1931–1932. (Source: Kalaupapa Historical Society, Kalaupapa; Greene, Figure 95).....	59
Figure 47.	Recreation pavilion at McVeigh Home, 1983, completed 1931–1932. (Source: National Park Service; Greene, Figure 96).....	59
Figure 48.	General Hospital, opened 1931, undated. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 106).....	60
Figure 49.	Former mental ward building, 1983. The building was later used as a fumigation room. (Source: National Park Service; Greene, Figure 30).....	61
Figure 50.	Superintendent's residence on Staff Row, Building No. 5, 1983. (Source: National Park Service; Greene, Figure 27).....	61
Figure 51.	Resident physician's residence, 1932, after reconstruction. (Source: Kalaupapa Historical Society, Kalaupapa; Greene, Figure 59).....	62
Figure 52.	Sisters' cottage, Bishop Home, constructed 1934, undated. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 101).....	62
Figure 53.	New chapel, Bishop Home, restored and enlarged 1934, undated. (Source: Kalaupapa Historical Society, Kalaupapa; Greene, Figure 102).....	63
Figure 54.	New social hall, Bishop Home, completed 1932. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 100).....	63
Figure 55.	New Baldwin Home, 1949, showing refurbishment and repainting of old hospital buildings. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 109).....	64
Figure 56.	Catholic brothers' cottage at New Baldwin Home, undated photograph. (Source: Kalaupapa Historical Society; Greene, Figure 110).....	65
Figure 57.	Kalaupapa patient's cottage, undated, possibly 1930s. (Source: Greene, Figure 66).....	65

Table of Figures

Figure 58.	An example of house style 4A, soon after construction in 1931. (Source: Kalaupapa Historical Society; Greene, Figure 104)	66
Figure 59.	Kalawao, 1909-1942	69
Figure 60.	Kalaupapa Settlement, 1909-1942	71
Figure 61.	One of the Boy Scout troops established at Kalaupapa during the 1940s. (Source: Kalaupapa Historical Society)	73
Figure 62.	Craft shop, formerly the bakery, 1949. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 166)	75
Figure 63.	Siloama Church in Kalawao undergoing repair work, 1948. (Source: Kalaupapa Historical Society)	75
Figure 64.	Mail being moved along the Pali Trail before airmail became available. (Source: Kalaupapa Historical Society)	76
Figure 65.	Social hall, 1949. The building was renamed Paschoal Hall in 1958. Note the sign for the Police Headquarters at the left end of the building. (Source: Greene, Figure 165)	77
Figure 66.	Aerial view of Kalaupapa settlement, 1950. (Source: U.S. Army photo, Bishop Museum, Honolulu; Greene, Figure 167)	78
Figure 67.	One of the Quonset huts being constructed in 1949. (Source: Greene, Figure 165)	78
Figure 68.	Superintendent's residence on Staff Row, 1949. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 111)	80
Figure 69.	Kalaupapa, 1942-1969	81
Figure 70.	A site plan showing the Kalaupapa Settlement in 1997. (Source: Cultural Landscape Inventory, 41, adapted from Greene)	83
Figure 71.	Existing Conditions Plan Kalawao	85
Figure 72.	Existing Condition Plan Kalaupapa	87
Figure 73.	Overview map of Kalaupapa and Kalawao Settlements and Kalaupapa Peninsula. (Source: LSHLA)	92
Figure 74.	View east toward 'Ōkala from Judd Park, 2017.	93
Figure 75.	Map of Kalaupapa Peninsula showing the three ahupua'a which pre-dated the Māhele of 1848. (Source: National Park Service)	95
Figure 76.	Map of Natural Systems and Features. (Source: LSHLA)	97
Figure 77.	View south toward the North Shore Cliffs, referred to as the pali, across a traditional Hawaiian hōlua that occupies the southern slopes of Pu'u 'Uao, 2017.	98
Figure 78.	View east across Kauhakō Crater from the rim of Pu'u 'Uao, 2017.	99
Figure 79.	View north toward 'Īliopi'i Beach, where patients have traditionally built beach houses to escape institutional oversight, 2017.	102
Figure 80.	Map of Peninsula-wide Spatial Organization. (Source: LSHLA)	104
Figure 81.	Map of Kalaupapa Settlement Spatial Organization. (Source: LSHLA)	105
Figure 82.	View north of Paschoal Hall and the open greensward to the east, 2017.	106
Figure 83.	A residential property at Kalaupapa, 2017. The property is characteristic of many residences within Kalaupapa Settlement for the Hawaiian Plantation style of architecture of the dwelling, the marking of the property along the road with a dry stacked stone wall, the paved walk leading to the front entrance through an open front yard, and the presence of ornamental plantings behind the house.	107
Figure 84.	View along Bishop Road, the entrance drive, edged by stone piers, that leads to the Bishop Home property from the intersection of School and Puahi Streets, 2017.	108
Figure 85.	Bay View Home buildings edging the central open space, 2017.	109
Figure 86.	View northwest of the grave markers associated with the West Coast Cemeteries at Papaloa that edge Kamehameha Street, 2017.	110
Figure 87.	View east of St. Philomena Church and the dry stacked stone wall that edges the property along Damien Road, 2017.	111
Figure 88.	View south toward the dry stacked stone walls that enclose a series of burial ground plots along the road leading to the western rim of Kauhakō Crater on Pu'u 'Uao, 2017.	112
Figure 89.	View west along the Damien Road corridor, 2017.	113
Figure 90.	Administrative Area	114
Figure 91.	Churches	116
Figure 92.	Residential Area	118
Figure 93.	Staff Row	120
Figure 94.	McVeigh	122
Figure 95.	Bishop Home	124
Figure 96.	Bay View Home	126
Figure 97.	New Baldwin	128

Figure 98. West Coast Cemeteries	130
Figure 99. Beach Houses	132
Figure 100. Kalawao	134
Figure 101. Molokai Light	136
Figure 102. PuuUao and Kauhako Crater	138
Figure 103. Damien Road	140
Figure 104. Diagram of key views within the study area. (Source: LSHLA)	142
Figure 105. View southeast from Kauhakō Crater, 2017.	143
Figure 106. Views of the pali and the Pacific Ocean are pervasive throughout the Settlements and are important to the sense of place, 2018.	143
Figure 107. The open area east of Paschoal Hall is visible from Staff Street looking southwest, 2018.	144
Figure 108. View toward the eastern shoreline from Damien Road, 2018.	144
Figure 109. View toward the pali from Kamehameha Street, 2018.	145
Figure 110. Kalaupapa Settlement circulation features. (Source: LSHLA)	146
Figure 111. Peninsula-wide circulation features. (Source: LSHLA)	148
Figure 112. View northeast along Kamehameha Street, with the West Coast Cemeteries at Papaloa to the left, and residential properties to the right, 2017.	149
Figure 113. View south along Puahi Street, one of the primary roads within Kalaupapa Settlement, 2017.	149
Figure 114. View west along Beretania Street near its intersection with Puahi Street (left), and Kamehameha Street (right), 2017. Also visible are the DOH administration building to the left and St. Francis Catholic Church to the right. .	150
Figure 115. Beach House Road is an example of a secondary road within Kalaupapa Settlement, 2017.	150
Figure 116. One of the interior roads associated with McVeigh Home, 2017.	151
Figure 117. One of the unimproved access roads at the Molokai Light Station, 2018.	152
Figure 118. A concrete-paved residential driveway, 2018.	152
Figure 119. Driveway leading into the St. Francis Catholic Church property, 2017.	153
Figure 120. Paved parking area in front of the Patient Store, 2018.	153
Figure 121. Visitor Quarters sidewalks, 2018.	154
Figure 122. View of the Pali Trail, 2017.	155
Figure 123. View south along McKinley Street of the turf grass edging road corridors, shade trees, ornamental trees, and shrub plantings typical of Kalaupapa Settlement, 2017.	156
Figure 124. View of a residential garden located near Bay View Home, 2018.	158
Figure 125. View of plantings associated with Kana'ana Hou Church, 2018.	159
Figure 126. View of foundation plantings around one of the buildings at Bay View Home, 2018.	160
Figure 127. View of a residential hedge along School Street, 2018.	161
Figure 128. View of the hedge that marks the intersection of Damien and Mission Streets near Bay View Home, 2018.	161
Figure 129. View of a shade tree used for picnicking near the volleyball court, 2018.	162
Figure 130. View of ironwood pine trees planted along the dry stacked stone wall at Baldwin Home in Kalawao, 2017.	163
Figure 131. Orange tree at McVeigh Home, 2018.	164
Figure 132. Flowering plants such as bougainvillea [<i>Bougainvillea spectabilis</i>] have traditionally been common along the roads at Kalaupapa. Today, bougainvillea is growing on the wall that fronts the Church of Jesus Christ of Latter-day Saints shown here along Kamehameha Street, 2017.	165
Figure 133. View of Paschoal Hall and associated coconut tree plantings, 2017.	166
Figure 134. Map of representative buildings, Kalaupapa Settlement. (Source: LSHLA)	167
Figure 135. View east toward one of the beach houses at 'Īliopi'i from the shoreline, 2017. Beach houses were built by settlement residents, often using salvaged material.	168
Figure 136. View southeast toward Siloama Church at Kalawao in 2017. The building, although a twentieth century replacement for the original structure built in 1871, is an example of Mission architecture.	170
Figure 137. View northwest toward the Old Stone Church, Kalaupapa's oldest structure, built as a Protestant Church meetinghouse in 1853, 2017.	171
Figure 138. View southwest toward the General Warehouse, 2017, one of several Art Deco buildings at Kalaupapa.	171
Figure 139. View of one of the Kalaupapa residences within the Residential Area representative of the Hawaiian Plantation style of architecture, 2018.	172
Figure 140. View of one of the ranch style Kalaupapa residences (Hicks Home Type #2) associated with construction during the modern era, 2018.	173
Figure 141. View southwest of the Old Bay View Kitchen and Dining Room at Bay View Home, 2017.	174
Figure 142. View of an early residence, later the AJA Benevolent Society Hall, 2017.	175

Figure 143. View of one of the A Houses located near the maintenance area, 2017.....	176
Figure 144. A Type #1 Hicks Home, 2018.	177
Figure 145. A garage, one of the outbuilding types represented in the Residential Area, 2018.....	178
Figure 146. View southeast of the Saint Marianne Library from the intersection of Beretania and Puahi Streets, 2017. The Library is one of the community buildings located within the Administrative Area at Kalaupapa.	179
Figure 147. View southwest of the Post Office, 2017.....	180
Figure 148. View southwest toward the principal façade of Kana'ana Hou Church, 2017.	182
Figure 149. View west toward the rear facade of St. Francis Catholic Church, 2017.....	183
Figure 150. View northeast toward the entrance to the Church of Jesus Christ of Latter-day Saints meetinghouse, 2017. ...	183
Figure 151. View east of the dry stacked stone wall that demarcates the boundary of the Bishop Home property along Damien Street, 2017.....	184
Figure 152. View southeast of the fencing outside the Residence for Single Women, 2017. This fence is a replacement of historic fencing that edged properties fronting Staff Street at Staff Row prior to the 1940s.	186
Figure 153. View north of deer fencing near McVeigh Home, 2018.	187
Figure 154. View of one of the chain link fences used to mark some residential properties within Kalaupapa Settlement, 2017.	187
Figure 155. View of the cattle guard at the end of Beretania Street, 2018.	188
Figure 156. View southwest of the gate posts that mark the entry into the Bay View Home complex, 2017.....	189
Figure 157. View of metal bollards and chains along Bay View Loop, 2017.	190
Figure 158. View southwest of the Kalaupapa Landing wharf, 2017.....	191
Figure 159. View east of the bulkhead/sea wall from the wharf, 2017.	192
Figure 160. View south of underground water tanks located along Damien Road that were associated with the historic water supply system, 2017.....	193
Figure 161. View of electrical poles and lines north of St. Francis Catholic Church, 2018.....	193
Figure 162. View north of the Puahi Street bridge, 2017.....	194
Figure 163. View north of the culvert that carries stormwater beneath Kamehameha Street near St. Francis Catholic Church, 2017.....	195
Figure 164. View southeast of the Rock Crusher, 2017.....	196
Figure 165. View northeast of one of the containers near the maintenance area, 2017.	196
Figure 166. View southwest of the Judd Park Pavilion, 2017.....	197
Figure 167. View southwest toward the Oceanside Pavilion located near Kalaupapa Landing, 2017.	197
Figure 168. View northwest across the multi-purpose court north of Paschoal Hall, 2017.....	198
Figure 169. View north of the Grotto for Our Lady of Lourdes and St. Bernadette at St. Francis Catholic Church, 2017.	199
Figure 170. View northeast of the Hospital ruins, 2017.....	199
Figure 171. View southeast of grave markers associated with the Siloama churchyard, 2017.	200
Figure 172. View east toward the Saint Marianne Cope grave marker, 2017.	201
Figure 173. View south of the sign marking the location of the Kahaloko Cemetery, 2017.....	202
Figure 174. View southeast of the wayside exhibit that interprets a heiau along Damien Road, 2017.....	203
Figure 175. View northeast of the bake oven at Bishop Home, 2017.....	203
Figure 176. View northeast of the Saint Damien Monument, 2017.	204
Figure 177. Replicas of rocks painted by Ed Kato located near the Saint Damien Monument, 2017.....	205
Figure 178. View north of two of the Saint Marianne and St. Francis murals marking the entrance into the St. Francis Catholic Church property at Beretania Street, 2017.	205
Figure 179. Character area key. (Source: LSHLA).....	213
Figure 180. View of horses and rider traveling the Peninsula, with Kalaupapa Settlement beyond, circa 1925–1928. (Source: KALA 1925-1928, AB Potter_KALA-17429ee-1).....	214
Figure 181. View of the Waikolu Valley, 1901. (Source: KALA Kalaupapa Historical Society Album PG 8 #185)	215
Figure 182. View of the landscape between Waihānau Valley and Wai'ale'ia Valleys on the road between Kalaupapa and Kalawao, noted as leading to Baldwin Home in the archival record, undated, circa 1890s. (Source: KALA Potter Collection_KALA17492.PAL1).	216
Figure 183. View of the guard house at the top of the pali trail used by a caretaker who policed those coming and going, circa 1930s. (Source: KALA Kalaupapa Historical Society Album E PG 4 #446-448).....	218
Figure 184. View of the pali and Waihānau Valley, circa 1950. (Source: KALA Kalaupapa Historical Society Album E PG 2 #442)	219
Figure 185. View of nuns fishing, undated. (Source: KALA Kalaupapa Historical Society Album D PG 45 #152)	221
Figure 186. Siloama Church, undated, circa 1880. (Source: KALA Helen Keao_00373_Album 046).....	223

Figure 187. St. Philomena Catholic Church in 1886 showing the nave and steeple added to original chapel by Saint Damien. View looking east. (Source: KALA Kalaupapa Historical Society Album A PG 2 #176).....	224
Figure 188. Kalawao, with the hospital complex on the north side of the road enclosed by picket fence, and the store on the south side of the road, circa 1880s–1890s. View looking west. (Source: KALA Bruce Doneux_00372_Box 01_007, Hawaii State Archives).....	225
Figure 189. Bird's eye view looking northwest of Baldwin Home for Boys located across Damien Road from St. Philomena Catholic Church, undated. (Source: KALA Kalaupapa Historical Society Album A, page 7, #181).....	226
Figure 190. Bird's eye view to Baldwin Home for Boys (front), and U.S. Leprosy Investigation Station (beyond), circa 1913. View looking east. (Source: KALA Kalaupapa Historical Society Album B, page 31, #29).....	227
Figure 191. St. Philomena Church and walled churchyard precinct, view northwest, 2018.....	228
Figure 192. Siloama Church and churchyard, view southwest, 2017.....	229
Figure 193. View south into the Baldwin Home site across the perimeter dry stacked stone wall, 2017.....	229
Figure 194. View north past one of the picnic shelters at Judd Park, 2017.....	230
Figure 195. Kalawao character area assessment. (Source: LSHLA).....	233
Figure 196. Unidentified view along Damien Road. (Source: KALA Kenso Seki collection 12600_787).....	235
Figure 197. Water tank reservoirs along Damien Road, undated, circa 1900. (Source: KALA Helen Keao_00373_Album 045).....	236
Figure 198. View looking west along Damien Road, 2017.....	236
Figure 199. View looking west across Kahaloko Cemetery, 2017.....	237
Figure 200. View south toward a heiau along Damien Road, 2017.....	238
Figure 201. View northeast of the stone water reservoir built in the 1880s to supply water to the Kalawao hospital along Damien Road, 2017.....	238
Figure 202. Comparative views of Damien Road from a similar vantage point, undated, circa 1960s (top), and 2017 (bottom). (Source: KALA Kenso Seki collection 12600_542).....	239
Figure 203. Damien Road character area assessment. (Source: LSHLA).....	241
Figure 204. View of the Kauhakō Crater interior, 1886. Terracing and rock walls are visible. (Source: KALA Kalaupapa Historical Society Album C PG 31 #407).....	244
Figure 205. Historic photo of the crater perimeter and hand-drawn sketch of its location within the peninsula, undated. (Source: KALA Potter collection KALA_17429).....	244
Figure 206. The original wooden cross sited atop the crater rim, circa 1947. (Source: KALA Kalaupapa Historical Society Album K PG 14 #1010).....	245
Figure 207. View from the western rim of Kauhakō Crater, with the Molokai Light Station visible in the distance, 2017.....	246
Figure 208. View northwest from Crater Road toward several graves with the concrete cross beyond, 2017.....	247
Figure 209. View south along Crater Road, edged by ironwood pine trees, 2017.....	248
Figure 210. From the crater rim, expansive views are afforded to the north and west. Ironwood pine trees have begun encroaching on the view from the south as visible in the photo from 1991 (top) as compared with 2017 (bottom). (Source: (Source: Historic American Buildings Survey, 1991).....	249
Figure 211. Kauhakō Crater character area assessment. (Source: LSHLA).....	251
Figure 212. Undated view of the Kalaupapa Settlement store, dispensary, and visitor house, circa 1910. (Source: KALA Kalaupapa Historical Society Album E PG 9 #461).....	252
Figure 213. Paschoal Hall circa 1930s, showing the original picket fence and gate that surrounded the structure, before the coconut palm trees were planted. (Source: KALA Kalaupapa Historical Society Album G, page 33, #731).....	253
Figure 214. Kalaupapa poi factory/food distribution building constructed in 1931–1932. (Source: KALA Kalaupapa Historical Society Album G, page 15, #674).....	254
Figure 215. Detail of a 1930 map of a portion of the Administrative Area showing existing and proposed buildings. (Source Governor's Advisory Committee on Leprosy, H.A. Kluegal, C.E., August 1930; Greene, 445).....	255
Figure 216. View of the streetscape looking north through the Administrative Area in the 1930s. (Source: KALA Kalaupapa Historical Society Album G, page 11, #660).....	256
Figure 217. The Patient Store (left) and Gas Station (right) in the 1930s. (Source: KALA Kalaupapa Historical Society Album G, page 29, #720).....	256
Figure 218. View of Paschoal Hall and associated coconut palm tree plantings, 2017.....	257
Figure 219. View north toward the Oceanside Pavilion along Damien Street, 2017.....	258
Figure 220. View north of the Craft and Storage Building, 2017.....	259
Figure 221. View east of the ruins of the second hospital at Kalaupapa, which burned in 1991, 2017.....	259
Figure 222. Administrative Area character area assessment. (Source: LSHLA).....	261

Table of Figures

Figure 223. Early residences in Kalaupapa before the roads were paved in the 1930s, view looking south. (Source: KALA Kalaupapa Historical Society Album E PG 16 #480)	264
Figure 224. Two patient residences, circa 1930s. (Source: KALA Kalaupapa Historical Society Album G PG 36 #738; PG 37 #739)	265
Figure 225. Typical plot plan of A Houses by the Board of Hospitals and Settlement. (Source: Greene, 405)	266
Figure 226. Kalaupapa nursery on the left side of the photo, as it appeared in 1939. (Source: KALA Kalaupapa Historical Society Album G PG 23 #702)	267
Figure 227. Kalaupapa nursery-apiary, started in 1935. (Source: KALA Kalaupapa Historical Society Album G PG 24 #704)	267
Figure 228. The Lucy Kaona Residence, and example of the first style of Hicks Homes, 2017.....	268
Figure 229. View looking east along Damien Street. Bishop Home, masked by mature vegetation is on the left, circa 1970s. (Source: KALA Kenso Seki_KALA 12600_547).....	269
Figure 230. Views of an individual residence with a sidewalk leading to the entrance, 2017.	270
Figure 231. View of a hedge and variety of tree plantings along School Street, 2017.	271
Figure 232. View of a residence with an associated outbuilding, 2017.	271
Figure 233. Residential character area assessment. (Source: LSHLA)	273
Figure 234. The Catholic Church, Our Lady of Health of the Sick in Kalaupapa, following a circa 1881–1882 expansion. (Source: KALA Bruce Doneux_00372 Box 02_062; Sr. M. Wilma Collection, property of B. Doneux)	274
Figure 235. St. Francis Church, completed in 1899, was destroyed by fire in 1906. After construction of the new church, Our Lady of Health of the Sick was moved and converted for use as a social hall. (Source: KALA Bruce Doneux_00372 Box 02_077; Sr. M. Wilma Collection).....	275
Figure 236. Kana'ana Hou Church and Calvinist Parsonage, 1930s. (Source: KALA Kalaupapa Historical Society Album H PG 4 #805-807).....	276
Figure 237. View looking northwest of the south and east sides of St. Francis Catholic Church. Damien Hall, the social hall, is visible to the right, 1938. (Source: KALA Kalaupapa Historical Society Album H PG 14 #829)	276
Figure 238. View of St. Francis Catholic Church, looking east, with the garage and Damien Hall located to the left, 2017....	277
Figure 239. Views of the Church of Jesus Christ of Latter-day Saints meetinghouse complex, including the meetinghouse, walkway, gated entrance through the perimeter rock wall, and scattered plantings, 2017.	278
Figure 240. Views of Kana'ana Hou Church, with the parish hall beyond, 2017.	279
Figure 241. Kalaupapa Churches character area assessment. (Source: LSHLA)	281
Figure 242. The original convent built on the top of the knoll at the center of the Bishop Home for Girls, undated. View looking southwest. (Source: KALA Bruce Doneux 00372, Box 02_014_label 013).....	282
Figure 243. Early plantings at the Bishop Home for Girls, undated. (Source: KALA Kalaupapa Historical Society Album D PG 22 #105)	283
Figure 244. Two of the early cottages/dormitories at the Bishop Home for Girls, undated. (Source: KALA Bruce Doneux 00372, Box 02_028_label 027).....	284
Figure 245. Plot plan of Bishop Home, 1930, indicating plans for future improvements. (Source: Governor's Advisory Committee on Leprosy; Greene, 401)	285
Figure 246. Bishop Home for Girls following completion of the improvements. (Source: Board of Hospitals and Settlement; Greene, 495)	286
Figure 247. The new Social Hall built at the Bishop Home for Girls was completed in 1932 along the west side of the entrance drive oval at the top of the knoll. View looking south. (Source: KALA Kalaupapa Historical Society Album D PG 37 #137)	287
Figure 248. A new cottage for the sisters, built in 1934, replaced the original cottage in the same location. Note the wooden trellis near the entrance. (Source: KALA Bruce Doneux 00372, Box 02_008_label 007).....	288
Figure 249. The Bishop Home for Girls entrance, 1932. (Source: KALA Kalaupapa Historical Society Album D PG 32 #126)	289
Figure 250. The Bishop Home Infirmary built in 1938 on the east side of the oval was removed in 1951. (Source: KALA Bruce Doneux 00372, Box 02_011)	290
Figure 251. View southeast toward the cottage built for the nuns now referred to as the Bishop Home for Girls, 2017. ..	291
Figure 252. View east of the Boiler House along the secondary loop road at Bishop Home for Girls, 2017.	292
Figure 253. View southeast of the entrance drive, walls, and pylons at the corner of Puahi and School Streets marking the road and walks leading to the Bishop Home for Girls, 2017.	292
Figure 254. View east of one of the graves located along the entrance drive to the Bishop Home for Girls, 2017.	293
Figure 255. Saint Marianne's grave, undated (top) and 2017 (bottom). (Source: KALA Kalaupapa Historical Society Album D PG 14 #085)	295

Figure 256. Bishop Home character area assessment. (Source: LSHLA).....	296
Figure 257. The first Bay View Home complex, circa 1907. View looking southeast. (Source: KALA Kalaupapa Historical Society Album G PG 43 #764).....	297
Figure 258. Bay View Home, view south showing a concrete walkway leading from the entry on Damien Street to Building 4, now gone, circa 1938. The photograph also shows the concrete pier at the entrance edged by metal bollards and chain. (Source: KALA Helen Keao_00373 Album 023).....	298
Figure 259. Bay View Home, view looking south showing layout of the buildings and walkways connecting the wards with the dining room in the center of the cluster, and the generally open character of the early landscape, undated. (Source: KALA Potter Collection KALA 17429)	298
Figure 260. Plot plan of Bay View Home, 1930. (Source: Governor's Advisory Committee on Leprosy; Greene, 397)	300
Figure 261. Visitors' Pavilion, with fence and screen system to separate patients and visitors. View looking west, undated. (Source: KALA Kalaupapa Historical Society Album G, page 12, #667)	301
Figure 262. Bay View Home following improvements. (Source: Board of Hospitals and Settlement; Greene, 487).....	302
Figure 263. View southwest toward Bay View Home through the entrance piers from Damien Street, 2017.....	303
Figure 264. View southwest along the concrete walk and ramp system providing access to Bay View Home Residence 2, Bay View Home Dining Hall, and Bay View Home Residence 3, 2017.....	304
Figure 265. View along Damien Street toward the visitor services complex, 2017.	305
Figure 266. View southwest of the Visitors' Pavilion, 2017.	305
Figure 267. Bay View Home character area assessment. (Source: LSHLA).....	308
Figure 268. The first McVeigh Home, which was lost to fire in 1928. View looking east, undated. (Source: KALA Kalaupapa Historical Society Album, G PG38 #745).....	309
Figure 269. The pavilion or Pool Hall at McVeigh Home, before the walkways were added, 1932. Note the wood picket fence along the road enclosing the McVeigh Home. View looking northwest. (Source: KALA Kalaupapa Historical Society Album, G PG41 #759).....	310
Figure 270. McVeigh Home plot plan showing improvements completed during the 1930s. (Source: Board of Hospitals and Settlement; Greene, 479)	311
Figure 271. Aerial oblique view of the McVeigh Home, circa 1933, showing the formal spatial organization, circulation, building complex, and newly planted trees defining the edges of the development. View looking south. (Source: KALA Boland 015).....	312
Figure 272. McVeigh Home under construction circa 1931, showing new roads and curbing, typical cottage styles, and ironwood pine windbreak behind. View looking southeast. (Source: KALA Kalaupapa Historical Society Album, G PG38 #745)	312
Figure 273. View of McVeigh Home showing well-established shrub plantings and palm trees planted around the dormitory building. View looking northeast. (Source: KALA Kenso Seki_KALA 12600_858)	313
Figure 274. View east toward the Social Hall along one of the internal access roads associated with McVeigh Home, 2017.	314
Figure 275. View west toward the Pool Hall from one of the internal access roads associated with McVeigh Home, 2017. ..	315
Figure 276. View southwest toward the Boiler Room, 2017.	316
Figure 277. View southeast of one of the streetscapes illustrating hedge and tree plantings associated with individual cottage properties, 2017.	316
Figure 278. McVeigh Home character area assessment. (Source: LSHLA).....	318
Figure 279. The superintendent's residence at Staff Row was built in the late nineteenth century. Additional residences for other staff were built later along Staff Street. Picket fencing and gates marked the complex along the road. View looking east. (Source: KALA Potter Collection KALA17429).....	319
Figure 280. The new cottage for nurses and single women, referred to as the Residence for Single Women, was built in 1932 at the south end of Staff Row. Coconut palm trees were planted along the fence. View looking southeast, circa mid-1930s. (Source: KALA Potter Collection KALA17429_A)	320
Figure 281. The Resident Physician's Residence, July 1, 1932. Note the wood picket fence and gate, hedges against the fence, and vegetation surrounding the house. View looking southeast from the road. (Source: KALA Kalaupapa Historical Society Album F PG 49 #612)	321
Figure 282. Detail of a circa 1930s plot plan for Staff Row showing vegetable gardens and utility areas behind the residences. (Source: Board of Hospitals and Settlement, June 1938, Annual Report for the Fiscal Year Ended June 30, 1938).....	322
Figure 283. View of Staff Street prior to paving in 1935. Note the fences along Staff Row to the right, and the open character of the landscape west of the road that is now heavily impacted by tree cover. View looking north. (Source: KALA Kalaupapa Historical Society Album E PG 16 #479).....	323

Figure 284. View north across the site of the former Superintendent's Residence, which burned in 2016, toward Dentist's Residence, 2017.	324
Figure 285. View east of the picket fence that the edges the Residence for Single Women, 2017.	325
Figure 286. View east of the Assistance Resident Physician's Residence, gate posts, and hedges that follow the historic alignment of former picket fencing, 2017.	325
Figure 287. View east of the Resident Physician's Residence, gate posts, and concrete walk, 2017.	326
Figure 288. Staff Row character area assessment. (Source: LSHLA)	328
Figure 289. The boy's dormitory at New Baldwin Home, undated. (Source: KALA Bruce Doneux_00372 Box 02_042_label 041)	329
Figure 290. Playground located outside the New Baldwin Home entrance gates and original wooden fence. View looking southwest, undated. (Source: KALA Henry Kaanapu Collection. Bruce Doneux_00372_Box 02_44_label 043)	330
Figure 291. Baldwin Home plot plan, circa 1938. (Source: Board of Hospitals and Settlement; Greene, 483)	331
Figure 292. The entrance to the old hospital and new Baldwin Home site, circa 1949 just before it closed. (Source: KALA Kalaupapa Historical Society Album B PG 41 #316)	332
Figure 293. View south of the gate posts at the New Baldwin Home entrance, 2017.	333
Figure 294. View of the grotto at New Baldwin Home site, 2017.	334
Figure 295. View of the Slaughterhouse (left), Slaughterhouse Restroom (right), and corral fencing, 2017.	334
Figure 296. New Baldwin Home character area resources. (Source: LSHLA)	336
Figure 297. Jack McVeigh's beach house. (Source: KALA Kalaupapa Historical Society Album J PG1 #916)	337
Figure 298. Unidentified beach house. (Source: KALA Kenso Seki_KALA 12600_712)	338
Figure 299. The beach house area following the 1946 tsunami. (Source: KALA Kalaupapa Historical Society Album J PG 2 #914)	339
Figure 300. The Lions Pavilion along Kamehameha Road, circa 1970s, view looking north. (Source: KALA Kenso Seki_KALA 12600_495)	340
Figure 301. View looking west across 'Īliopi'i Beach from one of the beach houses, 2017.	341
Figure 302. View looking south along Beach Road, 2017.	342
Figure 303. View toward one of the beach houses and associated fencing, 2017.	342
Figure 304. View west of the Lions Pavilion, 2018.	343
Figure 305. 'Īliopi'i Beach Houses character area assessment. (Source: LSHLA)	345
Figure 306. Catholic Mission Cemetery (Cemetery H), prior to 1900. (Source: KALA Kalaupapa Historical Society Album H PG 19 #841)	347
Figure 307. Bird's eye view of Papaloa Cemetery and the residences built along Kamehameha Street, looking north, circa 1930s. (Source: KALA Boland004_Papaloa Cemetery_1930s)	348
Figure 308. Grave marker carved by a patient prior to 1900. (Source: KALA Kalaupapa Historical Society Album H PG 19 #841)	349
Figure 309. Effects from the 1946 tsunami to Papaloa cemeteries included dislodged and damaged head stones, broken fences, scattered rock associated with walls, and the loss of vegetation. View looking northwest, 1946. (Source: KALA Kalaupapa Historical Society Album J PG 2, 1913)	349
Figure 310. View north along Kamehameha Street of the West Coast Cemeteries character area with graves indicated to the left and residential features to the right, 2017.	351
Figure 311. View west of one of the low brown signs serving to identify the individual burial grounds comprising the West Coast Cemeteries, 2017.	352
Figure 312. View west of features associated with the West Coast Cemeteries, such as grave markers and plantings, 2017.	352
Figure 313. View southwest of Olivia's Beach House, located within Cemetery H, 2017.	353
Figure 314. West Coast Cemeteries character area assessment. (Source: LSHLA)	355
Figure 315. View of the Molokai Light Station complex, undated. (Source: KALA 1925-1928 AB Potter_KALA-17429h-1) ...	356
Figure 316. The Molokai Light Station visible beyond the airport complex, circa 1930s. (Source: KALA Helen Keao_00373_Album035)	357
Figure 317. Views of the Molokai Light Station lighthouse with the storage vault in the foreground, 2018.	358
Figure 318. View from the lighthouse environs and stone work associated with the heiau present on the knoll, 2018.	359
Figure 319. View of the wash house/storage shed with ironwood pines and the lighthouse beyond, 2018.	360
Figure 320. View toward the lighthouse along the concrete walk built circa 1927-1930, 2018.	360
Figure 321. Molokai Light Station character area assessment. (Source: LSHLA)	362
Figure 322. Diagram illustrating former agricultural lands at Kalaupapa Settlement. (Source: LSHLA)	373

Figure 323. Treatment plan for the Kalawao Character Area	391
Figure 324. Treatment plan for the Damien Road Character Area	395
Figure 325. Examples of woody vegetation encroaching on views and altering patterns of spatial organization associated with the western rim of Kauhakō Crater.	397
Figure 326. Maintain the burial grounds in low grass cover and mature shade trees as shown. Immediately remove woody volunteer species.	399
Figure 327. Treatment plan for the Kauhakō Crater Character Area	401
Figure 328. View of row of stored cars, buses, and construction vehicles along Kamehameha Street that should be screened or relocated to enhance the settlement entrance corridor.	404
Figure 329. View to row of clipped shrubs that might be replaced with a hedge of flowering shrubs.	405
Figure 330. View to the Benjamin Residence that is overgrown and has trash in the yard.	406
Figure 331. View of some of the containers that line Damien Street near the wharf.	406
Figure 332. View of one of the two concrete planters in front of Paschoal Hall. Both are cracked and broken.	407
Figure 333. Treatment plan for the Administrative Character Area	409
Figure 334. Treatment plan for the Residential Character Area	413
Figure 335. Several of the entry piers as well as the dry stacked lava rock walls at Kana'ana Hou Church are in need of repair.	416
Figure 336. Treatment plan for the Kalaupapa Churches Character Area	417
Figure 337. View of the stone pier that requires repair at the entrance to Bishop Home.	422
Figure 338. View of the piers at the entrance to the Mother Marianne Grave that require repair and repainting.	422
Figure 339. Preservation treatment plan for the Bishop Home Character Area	425
Figure 340. The concrete ramps placed over top of the historic concrete walks at Bay View Home are intrusive.	428
Figure 341. Use of the turf grass along the southern section of Bay View Loop Road has led to erosion.	429
Figure 342. The gate posts at the entrance into Bay View Home are in need of repair and whitewashing or painting.	430
Figure 343. The metal and concrete posts that edge Bay View Loop along the north edge are in need of repair.	431
Figure 344. Preservation treatment plan for the Bay View Home Character Area	433
Figure 345. View of one of the McVeigh Home internal road curbs overgrown with turf grass.	436
Figure 346. Detail of McVeigh Home showing locations of new accessible walks to the Social Hall and Pool Hall, accessible parking, screened utility features, and picnic tables and benches. (Source: LSHLA)	437
Figure 347. Illustrations indicating the provision of accessible parking and an accessible route for entering the McVeigh Social Hall. (Source: LSHLA)	438
Figure 348. Diagram showing recommended mow height zones. (Source: LSHLA)	440
Figure 349. Preservation treatment plan for the McVeigh Home Character Area.	443
Figure 350. Illustrations showing proposed guidance regarding the provision of an accessible route for entering the Residence for Single Women. (Source: LSHLA)	447
Figure 351. The gate posts associated with entrance walks at Staff Row are in need of repair and whitewashing or repainting.	449
Figure 352. Staff Row.	451
Figure 353. The historic Rock Crusher is currently overgrown with vegetation that poses a threat to preservation of the structure.	455
Figure 354. The gate piers and rock walls at New Baldwin are overgrown with vegetation and in need of repair.	455
Figure 355. The open space northwest of New Baldwin Home is rutted and eroded, with numerous roads in use. Repair of the road and establishment of a grass and forb field would enhance the appearance of this Settlement entrance corridor.	456
Figure 356. New Baldwin Home treatment.	457
Figure 357. Beach Houses Treatment.	463
Figure 358. West Coast Cemeteries	467
Figure 359. Molokai Light Treatment.	471
Figure 360. Diagram indicating the relationship between key views and proposed areas recommended for selective clearing at Kalaupapa. (Source: LSHLA)	476
Figure 361. Diagram indicating the key views (red arrows) at Moloka'i Light Station. (Source: LSHLA)	477
Figure 362. Diagram indicating the relationship between key views (red arrows) and proposed areas recommended for selective clearing (yellow hatching) at Damien Road corridor and Kauhakō Crater. (Source: LSHLA)	477
Figure 363. Diagram indicating the relationship between key views (red arrows) and proposed areas recommended for selective clearing (yellow hatching) at Kalawao. (Source: LSHLA)	478
Figure 364. Diagram indicating the relationship between key views (red arrows) and areas recommended for selective thinning and clearing along the western shoreline (yellow hatching). (Source: LSHLA)	478

Figure 365. Diagram indicating the adaptive strategy for clearing windows to reestablish views of the Pacific Ocean from the West Coast Cemeteries, illustrating existing conditions (top), initial removal (middle), and potential expanded removal (bottom). (Source: LSHLA).....	479
Figure 366. Diagrams indicating the proposed locations (top) and form (bottom) of parking pull-offs recommended for Damien Road. (Source: LSHLA)	482
Figure 367. Diagram illustrating the establishment of an accessible parking space between Siloama and St. Philomena Churches and accessible routes to the buildings. (Source: LSHLA)	483
Figure 368. Diagram illustrating the use of grass pavers to establish modest parking pull-offs for four bus stop locations. (Source: LSHLA)	484
Figure 369. Diagram illustrating ramp guidelines for buildings for public use. (Source: NPS).....	488
Figure 370. Additional guidance regarding ramps for buildings for public use. (Source: LSHLA)	489
Figure 371. Additional guidance regarding ramps for buildings for public use. (Source: LSHLA)	490
Figure 372. Guidelines for ramps for buildings for private use. (Source: LSHLA).....	491
Figure 373. Additional guidelines for ramps for buildings for private use. (Source: LSHLA)	492
Figure 374. Additional guidelines for ramps for buildings for private use. (Source: LSHLA)	493
Figure 375. Additional guidelines for ramps for buildings for private use. (Source: LSHLA)	494
Figure 376. Diagram illustrating accessibility plan for a landscaped area. (Source: LSHLA).....	495
Figure 377. Diagram illustrating the character of screen plantings to limit views of incompatible features from primary roads. (Source: LSHLA)	498
Figure 378. Tree and shrub care to maintain views. (Source: LSHLA)	500
Figure 379. Example of how to implement recommended foundation planting rehabilitation. (Source: LSHLA)	503
Figure 380. Diagram illustrating the difference in mowing height for roadsides and around buildings and in cemeteries, and field areas. (Source: LSHLA).....	504
Figure 381. Diagram illustrating vegetation management related to rock walls. (Source: LSHLA).....	507
Figure 382. Fence typologies at Kalaupapa and Kalawao Settlements, 2018. (Source: LSHLA)	509
Figure 383. Fence style recommendations for contemporary additions within Kalaupapa and Kalawao Settlements. (Source: LSHLA)	510
Figure 384. Fence style recommendations for contemporary additions within Kalaupapa and Kalawao Settlements. (Source: LSHLA)	511
Figure 385. Fence style recommendations for contemporary additions within Kalaupapa and Kalawao Settlements. (Source: LSHLA)	512
Figure 386. Sign typologies at Kalaupapa and Kalawao Settlements, 2018. (Source: LSHLA)	514
Figure 387. Sign typologies at Kalaupapa and Kalawao Settlements, 2018. (Source: LSHLA)	515
Figure 388. Sign typologies at Kalaupapa and Kalawao Settlements, 2018. (Source: LSHLA)	516
Figure 389. Sign typologies at Kalaupapa and Kalawao Settlements, 2018. (Source: LSHLA)	517
Figure 390. Sign palette for consideration of standards for Kalaupapa and Kalawao Settlements. (Source: LSHLA)	518
Figure 391. Illustrations of appropriate site furnishings, bollards, and walls. (Source: LSHLA).....	519
Figure 392. Illustrations of an appropriate bike rack style. (Source: Bola)	520
Figure 393. Illustrations of appropriate light fixtures. (Source: Millennium Lighting and Steel Lighting Company).....	520

Project Team

National Park Service – Kalaupapa National Historical Park

Erika Stein Espaniola, Superintendent
Stacy Lundgren, Chief, Cultural Resources Management Division
Paul Hosten, Natural Resources Chief
Amy Sakurada, Chief Ranger
Ka'ohulani McGuire, Cultural Anthropologist
Julia Aleszczyk, Curator
Mary Jane Naone, Archeologist
James Sutton, Facility Manager

National Park Service – Interior Regions 8, 9, 10, and 12

Vida Germano, Technical Advisor/Lead, Cultural Landscapes Program
Sueann Brown, Historical Architect/Historic Structures Program Manager
Elizabeth Gordon, Section 106 Coordinator
Christopher Johnson, Historian

Wiss, Janney, Elstner Associates, Inc.

Una Gilmartin, Project Manager/Professional Engineer
Liz Sargent, Historical Landscape Architect
Deborah Slaton, Historian/Architectural Conservator
Jennifer Trompetter, Landscape Architect
Tim Penich, Historical Architect/Historian
Sean Barron, Architectural/Engineering Intern

Kalaupapa National Historical Park

Hawai‘i

Cultural Landscape Report



May 26, 2020

Approved by:
Superintendent, Kalaupapa National Historical Park

Date

CINDY
ORLANDO

Digitally signed by
CINDY ORLANDO
Date: 2020.06.02
16:39:13 -07'00'

Approved by:
Regional Director, National Park Service, Interior Regions 8, 9, 10, and 12

Date

Introduction

Management Summary

Kalaupapa National Historical Park was established in 1980 by the U.S. Congress¹ as a unit of the National Park System to provide for the preservation of the unique, nationally- and internationally-significant, cultural, historic, educational, and scenic resources of the Kalaupapa Settlement, located on the north coast of the island of Molokai in the State of Hawai‘i. The park “honors the mo‘olelo (story) of the isolated Hansen’s disease (leprosy) community by preserving and interpreting its site and values. The historical park also tells the story of the rich Hawaiian culture and traditions at Kalaupapa” that extend more than 800 years.² As of 2020, Kalaupapa Settlement remains home to a community of seven patients and eighty kōkua (helpers), most of whom are employees of the State of Hawai‘i Department of Health (DOH) or National Park Service (NPS) personnel. Like other units of the National Park System, Kalaupapa is open to the public. Special restrictions and parameters apply per DOH rules governing visitation, however. NPS works with DOH and in consultation with the patients, kōkua, and broader community to manage Kalaupapa National Historical Park and protect significant resources.

The purpose of the Kalaupapa and Kalawao Settlements Cultural Landscape Report (CLR) is to support NPS efforts to preserve, manage, maintain, and interpret the significant heritage associated with Kalaupapa National Historical Park, particularly focusing on the cultural landscape. The CLR articulates a preservation philosophy intended to guide long-term treatment and management of the park’s cultural landscape and to support interpretive programming. To meet the ongoing and evolving needs of the community, the CLR also provides general treatment guidelines for compatible new construction, adaptive use of existing resources, and other potential future modifications to the cultural landscape. Supporting the treatment guidelines are specific treatment recommendations for managing cultural landscapes areas and features and enhancing resource condition as well as the visitor experience.

As Kalaupapa and Kalawao Settlements transitions from a community focused on addressing the needs of Hansen’s disease patients to a more public landscape, NPS management of the historic property is envisioned to shift to education and interpretation of the significance of the cultural legacy preserved within the park, and the protection and appropriate management of cultural and natural resources that speak to that significance. Adaptive use of existing resources, which already occurs, is anticipated to increase, and along with it the need to guide the process in such a way that historic integrity is protected. The primary document to consider current and future management from multiple perspectives, including owners and stakeholders, and to provide a framework for future treatment of the cultural landscape of the park is the *Kalaupapa National Historical*

-
1. Public Law 96-565, H.R. 7217, December 22, 1980.
 2. National Park Service, *Kalaupapa National Historical Park General Management Plan and Environmental Assessment* (DRAFT 2018), 144; Mark D. McCoy, “The Development of the Kalaupapa Field System, Molokai Island, Hawai‘i.” In *The Journal of the Polynesian Society* 114 (4).

Park General Management Plan and Environmental Assessment (GMP)(Draft 2018). Although currently in draft form, the GMP addresses both near-term cooperative management of the park and longer-term strategies for the preservation of natural and cultural resources. The GMP also explores ideas for expansion of interpretive opportunities to ensure the story of the Kalaupapa and Kalawao Settlements continues for generations.

While the GMP provides overall direction for preservation of significant cultural and natural resources, it does not specify feature-level treatment recommendations, which are much-needed by park management. The CLR supports this need by documenting historic and existing conditions within the cultural landscape, identifying significant resource values, and addressing resource-specific treatment needs through the provision of recommendations and guidelines for individual areas and associated significant features.

The basis for understanding the direction for resource preservation indicated in the GMP is the Preferred Alternative (A-2). As currently articulated, the Preferred Alternative emphasizes stewardship of Kalaupapa's lands and resources in collaboration with the park's many partners. It specifically notes that:

- Kalaupapa's diverse resources would be managed from uka to kai (mountain to sea) to protect and maintain their character and historical significance.
- Through hands-on stewardship activities, service and volunteer work groups would have meaningful learning experiences, while contributing to the long-term preservation of Kalaupapa's resources.
- Visitation by the general public would be supported and integrated into park management.
- Visitor regulations would change, including by allowing children to visit Kalaupapa with adult supervision and removing the 100 person per day visitor cap while continuing to limit the number of visitors per day through new mechanisms.³
- The NPS recognizes the dynamic nature of planning for and managing Kalaupapa's cultural resources. The NPS would maintain an adaptive management philosophy, considering new opportunities and risks as they arise and reprioritizing historic preservation projects as needed.⁴
- Within Kalaupapa Settlement, the overall character would be protected, while the function and uses of some of the neighborhoods and many of the historic structures in the settlement could change.⁵
- Consideration would be paid, in consultation with State Historic Preservation Office (SHPO) and 106 compliance processes, to stabilize, preserve, and rehabilitate historic resources for compatible current and future uses, including visitor facilities, partner uses, park operations, and interpretive exhibits.⁶

3. Ibid., 1. It is important to note that based on the National Register of Historic Places and NPS policy, the CLR only addresses the treatment of tangible resources. In some cases, cultural traditions that have physical attributes in the landscape, and have previously been documented at Kalaupapa and are included in treatment under the guidance of park management.

4. Ibid., 21.

5. Ibid., 19.

6. Ibid., 22.

- The NPS would improve the overall condition of Kalaupapa’s documented cultural landscapes within the park boundary, including the Kalaupapa and Kalawao Settlements and Molokai Light Station.⁷

The Preferred Alternative serves as the baseline for all CLR treatment recommendations and guidelines, and each of the goals articulated in the GMP Preferred Alternative is considered in the development of the CLR preservation philosophy.

Also taken into consideration in the preparation of the CLR is the current and future context of cooperative agreements and partnerships that operate at Kalaupapa. Various federal and state agencies are involved in decision-making at Kalaupapa, including the NPS, the DOH, State of Hawai‘i Department of Land and Natural Resources (DLNR), Department of Transportation (DOT), and Department of Hawaiian Homelands (DHHL), as well as several religious organizations associated with church-run properties. Kalaupapa Settlement itself is governed by a director appointed by the DOH and is managed under a special Kalawao County designation as a residential medical facility.⁸ The director is responsible for determining the rules and regulations for operating the property and providing care for the patient community.

Study Area Boundaries

The Kalaupapa and Kalawao Settlements CLR addresses a specific area of Kalaupapa National Historical Park as defined by the NPS scope of services. The study area addressed by the CLR encompasses the cultural landscape boundary as identified in a Cultural Landscapes Inventory for Kalaupapa and Kalawao Settlements prepared in 2011, with two modifications. The first is the addition of the Molokai Light Station property, and the second is the removal of the Kalaupapa Airport (refer to Figure 2).

Included within the study area from north to south are the Molokai Light Station; Kamehameha Street/Airport Road; a cluster of patient-owned Beach Houses and four cemeteries at ‘Īliopi‘i; eight cemeteries at Papaloa; Barrel Field; a row of residences that edge Kamehameha Street; clusters of administrative, operational, residential, medical, and service features comprising the core of Kalaupapa Settlement; the Pali Trail trailhead and features located within the vicinity of the New Baldwin Home site; the Damien Road corridor that extends east from Kalaupapa Settlement; features associated with Pu‘u ‘Uao volcanic cone and the associated Kauhakō Crater to the north of the road; the Kahaloko Cemetery and the Ambrose Hutchison House Area to the south; as well as the core area of Kalawao Settlement along the eastern shoreline.

This study area encompasses approximately 425 acres of land within Kalaupapa Peninsula, an isolated landform that extends northward from the weathered northern coast of the island of Molokai, Hawai‘i (Figure 1). The peninsula is bounded to the west, north, and east by the Pacific Ocean, and to the south by the pali, a geological formation composed of some of the world’s tallest sea cliffs. The cliffs rise up to “topside” Molokai. The natural boundaries of Kalaupapa Peninsula form a unique physiographic setting that is an integral part of the story of the Kalaupapa and Kalawao Settlements history, as well as its distinctive sense of place.

The Kalaupapa Peninsula in its entirety falls within the larger area designated as Kalaupapa National Historical Park, which extends over 8,720 acres of land and 2,060 acres of submerged and offshore lands associated with the peninsula as well as areas to the south and southeast. In addition, DHHL owns 1,474 acres

7 Ibid., 22.

8 Ibid., 2.

on the northern plateau of Molokai, including a 1,247-acre parcel associated with the peninsula that overlap the legislated NPS park boundary. These lands are currently managed by the NPS through a 50-year lease with DHHL (the lease is due for renewal in 2041). The only land within Kalaupapa Peninsula owned outright by the federal government is 22.88 acres associated with Molokai Light Station.

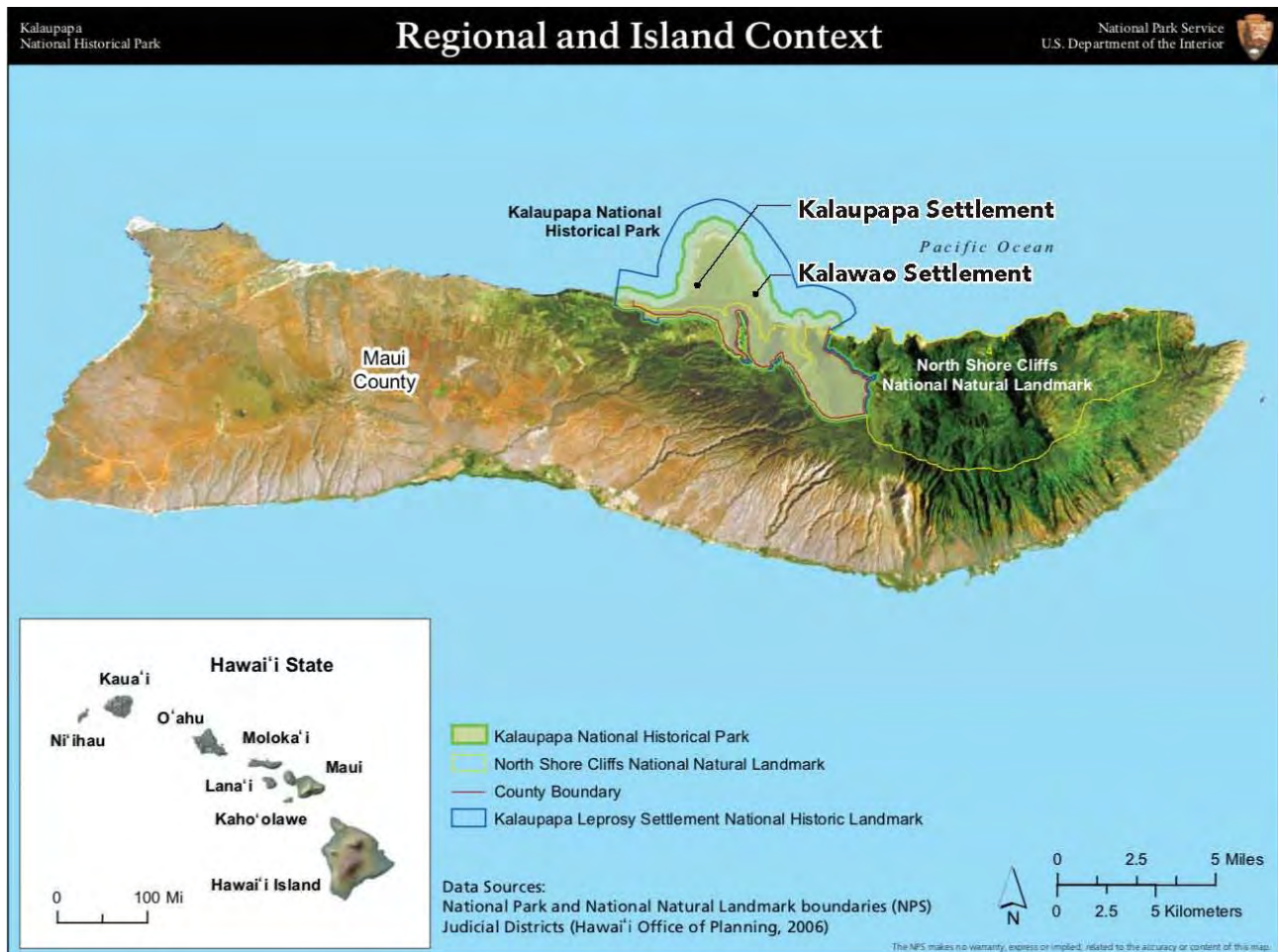
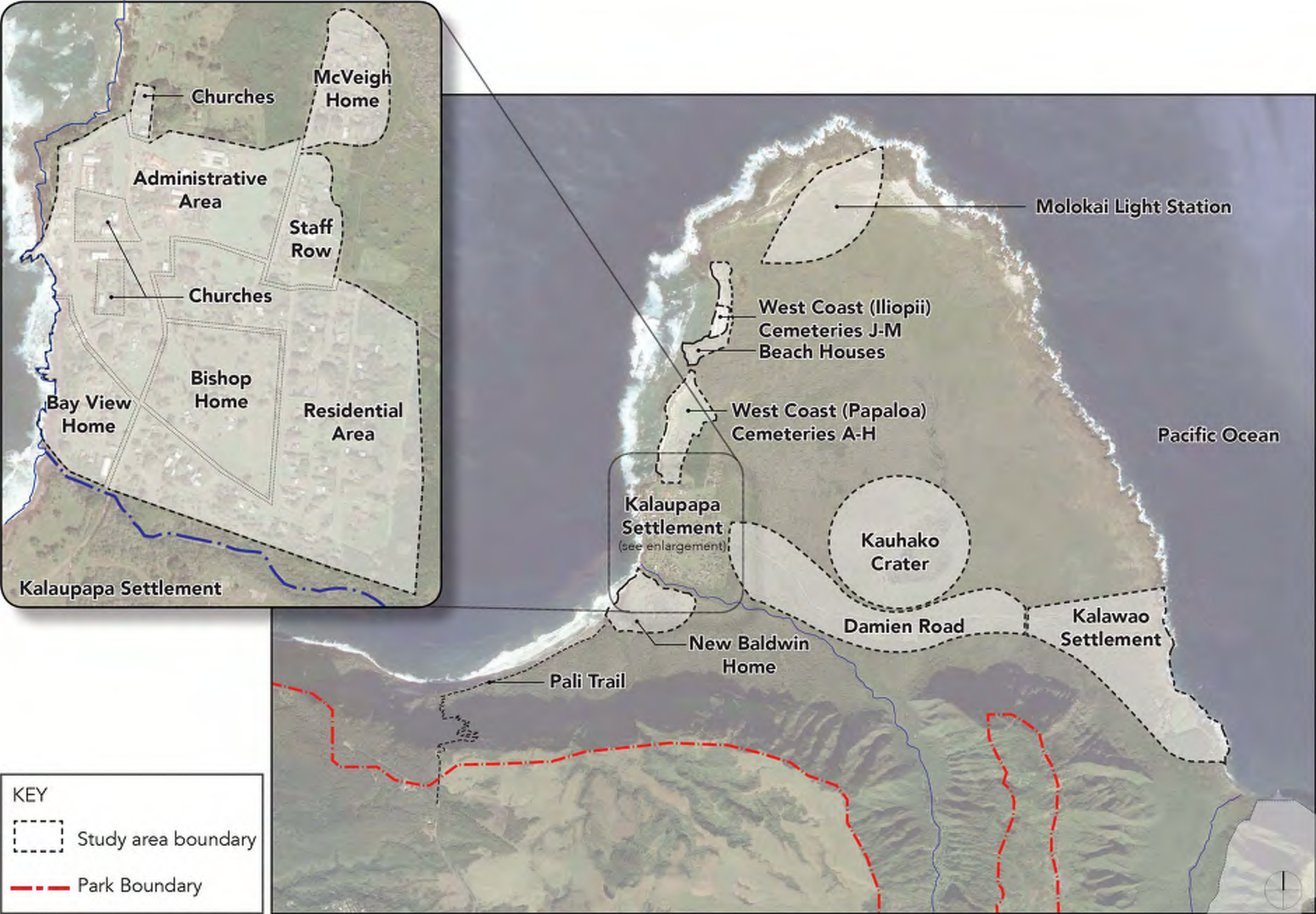


Figure 1. Kalaupapa setting. (Source: National Park Service)



Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii

Figure 2. Study Area



Figure 3. View east from the eastern shoreline at Kalawao, including views of the pali (right) and islets off the coast, 2017.

The Kalaupapa and Kalawao Settlements study area landscape features more than 250 historic buildings and structures, miles of dry stacked stone walls, numerous roads and walks, extensive plantings, more than 1,100 grave markers associated with twenty individual cemeteries, and a range of small-scale features tied to settlement lifeways spanning circa 1866 to present. Cultural landscape features exhibit deep connections with the natural environment through the use of materials, siting and orientation, and architectural expression (Figure 3). The Kalaupapa and Kalawao Settlements cultural landscape also exhibits distinctive patterns of spatial organization particular to this place, such as group home complexes, residential neighborhoods, administrative clusters, institutional facilities, recreational features, places of traditional use and meaning, and burial grounds that hold significant traditional value to those who have lived and worked on the peninsula. While many of the historic resources continue to support traditional community uses, others have been adapted for use by site managers and other stakeholders, such as the NPS (Figure 4). Kalaupapa and Kalawao Settlements features also co-exist, and sometime overlap, with traditional Hawaiian sites that relate to cultural use of the peninsula landscape, uka to kai (from the mountains to the sea), prior to 1866.



Figure 4. View south of the headquarters for Kalaupapa National Historical Park, located in the historic Fumigation Room building along School Street in Kalaupapa Settlement, 2018. (Source: Photograph by authors. All subsequent images by authors, unless otherwise noted)

Scope and Methodology

Project Scope

The scope of services for the Kalaupapa and Kalawao Settlements CLR addresses the specific product to be prepared for the project study area. Specifically, the CLR was scoped to include an abbreviated Part I, composed of a Site History, Existing Conditions, and Analysis and Evaluation, and a Part II, composed of Treatment, following the guidance afforded in the National Park Service *Guide to Cultural Landscape Reports*. Over the course of the project, the NPS issued a modification to the scope of services to include a Cemetery Management Plan as an appendix to the CLR. The Cemetery Management Plan was intended to provide documentation and management strategies for twenty ethnographic and historic cemeteries and isolated gravesites within the study area.

The abbreviated Part I CLR presents and analyzes the development and evolution of the landscape using information provided in a completed Kalaupapa and Kalawao Settlements Cultural Landscape Inventory (2005, rev. 2011), Molokai Light Station Cultural Landscape Inventory (2012), Draft National Historic Landmark (NHL) nomination update (2017), and Draft GMP (2018). These available sources were augmented with limited additional historical research involving review of historic photographs from the park archives to capture the historic character of the landscape.

The abbreviated Part I CLR is composed of four chapters. The specific tasks and products associated with each as indicated in the scope of services are outlined below:

Introduction

- Describe the purpose and need, scope of services, and methodology for the project
- Prepare a general site location map and description of the location (using the data included in the CLI, NHL, and GMP)
- Summarize the significance, period of significance, landscape character, and physical integrity of the cultural landscape (using the CLI, NHL, and GMP)
- Prepare a summary of findings

Site History

- Gather existing information, including NPS reports and working files prior to kick-off teleconference
- Conduct limited research in park archives to locate historic photographs and fill gaps in site history and chronology
- Update the chronology in the CLI using the NPS-provided source materials, adding images illustrating the specific periods of site development
- Prepare period plans for the historic periods, using GIS as base layers, including the landscape characteristics and primary features of the landscape

Existing Conditions

- Conduct limited field survey using non-destructive investigation techniques in order to update the existing conditions narratives and graphics of the following landscape characteristics:
 - Natural Systems and Features
 - Spatial Organization
 - Buildings and Structures
 - Topography
 - Circulation
 - Vegetation, including ornamental and ethnobotanical resources
 - Views and Vistas
 - Small-Scale Features
- Update the landscape characteristic and feature narratives in the CLI
- Prepare a site plan showing existing conditions and contributing, non-contributing, and undetermined-status features using GIS as base layers
- Identify character areas, including graphics showing the character areas diagramed

Analysis and Evaluation

- Update the comparative analysis of existing and historic conditions with photographs and plans on contributing landscape characteristics and features
- Create a series of overlay plans with existing conditions overlaid on top of historic period plans to show landscape evolution over time

The Part II CLR focuses on treatment, including the articulation of a strategy for long-term management based on significance, existing conditions, and use. It also includes a discussion of overall management objectives for the site as documented in the GMP and other existing documents. The treatment section of the

CLR addresses the entire 425-acre landscape as a whole as well as specific landscape characteristics and features. Treatment recommendations for individual buildings are not included. The Part II CLR also prioritizes and guides continued site maintenance and treatment by character area. The specific tasks and products addressed in composing the CLR as indicated in the scope of services are outlined below:

- Develop general treatment recommendations for the cultural landscape that outlines design guidelines for all future construction projects and maintenance activities, which will include both general guidelines and specific treatment proposals
- Provide specific recommendations for the appropriate treatment of the site and its important landscape qualities/resources, specifically spatial character, views, vegetation, small-scale features, and others identified by park personnel
- Through narrative and graphics, develop treatment guidelines that describe the treatment recommendations, including recurring and deferred preservation maintenance tasks and rehabilitation tasks, for the landscape characteristics and features by character areas
- Prepare schematic plan drawings with call-outs noting general overall recommended site treatments within each character area
- Identify specific treatment tasks for the settlement areas that include recommendations for:
 - site accessibility
 - vehicle parking
 - circulation
 - small scale features
 - vegetation management
 - potential interpretive opportunities
 - and facility improvements

In developing the Cemetery Management Plan, included in the CLR as Appendix B, the following tasks and products indicated in the scope of services were addressed:

- Conduct research in park archives on cemeteries
- Write a site history of each cemetery based on primary and secondary sources in park archives
- Conduct field survey (non-destructive) to observe the condition of cemetery resources
- Collect GIS data for specific cemetery resources
- Prepare GIS maps of each cemetery with all contributing and non-contributing resources mapped
- Prepare narrative of existing condition for each cemetery and evaluate changes since the end of the period of significance and incorporate into analysis and evaluation of all CLR landscape characteristics
- Develop treatment recommendations for the cemeteries that address:
 - Vegetation management strategies
 - Grave marker stabilization strategies
 - Ethnographic association management strategies
- Develop maintenance recommendations for cemeteries that address:
 - Type of cyclic and deferred maintenance needed
 - Frequency of cyclic maintenance
 - Appropriate maintenance techniques

Project Methodology

The CLR for the Kalaupapa and Kalawao Settlements was prepared in accordance with the guidance offered in the most recent versions of various federal standards documents, including:

- *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques*
- *NPS Director's Order No. 28: Cultural Resource Management Guideline* (release 5)
- *NPS-77: Natural Resources Management Guidelines*
- *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*
- *The Uniform Federal Accessibility Standard (UFAS) and Americans with Disabilities Act Accessibility Guidelines (ADAAG)*
- *The Architectural Barriers Act Accessibility Standards (ABAAS)*
- *The National Park Service's Guiding Principles of Sustainable Design*
- *NPS-10: Preparation of Design and Construction Drawings*
- *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*
- *National Register Bulletin 30: Guidelines for Documenting and Evaluating Rural Historic Landscapes*

In addition, the methodology used by project team members in preparing each component of the CLR is described in detail below.

Background Research and Data Collection. Prior to conducting an initial research and fieldwork visit to Kalaupapa and Kalawao Settlements in December 2017, CLR project team members assembled materials pertaining to the project, including the documents provided by the NPS. The team also perused the list of materials related to the park available at the National Park Service Denver Service Center in the electronic Technical Information Center (eTIC) to identify additional materials of interest for the project. The NPS provided the selected documents ahead of the research and fieldwork visit.

Also, in preparation for field investigations, project team members requested receipt of Geographic Information System (GIS) files relating to the park that could be used to develop base maps for field inventory. GIS files and Digital Orthophoto Quarter Quads (DOQQ) information was subsequently provided by the Interior Regions 8, 9, 10, and 12 Office of the NPS and used to generate field inventory maps.

Start-up Meeting. On December 6, 2017, project team members convened by teleconference to initiate work on the project. During the teleconference, park and regional NPS personnel discussed the needs of the team during their upcoming site visit.

Initial Site Visit. The site visit to initiate research and field investigations occurred on December 11–15, 2017.

During the site visit, two meetings were held to discuss the project. The meetings focused on research needs, including the collection of historic photographs, maps, and key documents, and fieldwork logistics, such as the availability of park personnel to provide assistance traveling to distant and restricted areas. Those in attendance at the meetings included:

- NPS, Interior Regions 8, 9, 10, and 12 Office
 - Vida Germano, Lead, Cultural Landscapes Program
- NPS, Kalaupapa National Historical Park
 - Erika Stein Espaniola, Superintendent
 - Julia Aleszczyk, Curator
 - Paul Hosten, Natural Resources Chief
 - Stacy Lundgren, Chief, Cultural Resources Management Division
 - Ka'ohulani McGuire, Cultural Anthropologist
 - Amy Sakurada, Chief Ranger of Visitor and Resource Protection
- A/E CLR team (prime firm Wiss, Janney, Elstner Associates, Inc.)
 - Una Gilmartin, WJE Project Manager
 - Liz Sargent, Liz Sargent Historical Landscape Architect (LSHLA)
 - Cathy Gilbert, Consulting Historical Landscape Architect

Also discussed at the meetings were issues specific to park needs that CLR should address. Park staff indicated that guidance was needed in the areas of interpretation, stabilization and preservation of historic resources, how to address later additions not determined significant or contributing to the historic landscape, and how to better accommodate visitors in the future in ways that will limit any impacts to the integrity of the settlements. The park suggested that graphics serve as a key tool in the CLR to explain and support treatment recommendations to facilitate appropriate implementation. The team discussed the status of partnerships between the NPS and other entities involved at the site, including the DOH, and what ideas were being considered for the adaptive reuse of buildings and complexes currently not utilized. Finally, the team discussed who the future user of the CLR would be, and the public review process for the report.



Figure 5. View of November 2018 workshop participants standing within Kahaloko Cemetery, 2018.

Second Site Visit and Workshop. During the week of November 5–9, 2018, team members again visited Kalaupapa National Historical Park to conduct additional research, field investigations, and a treatment workshop (Figure 5). Fieldwork entailed verification of existing conditions and clarifications of mapping

information. Research focused on collecting materials related to the Cemetery Management Plan, following its addition to the scope of services as a modification to the contract (Figure 6).

The workshop occurred over two days on November 8–9, 2018. The CLR team first presented a summary of the findings of the Part 1 CLR. This was followed by a group discussion regarding preliminary treatment recommendations conducted in the field.

Those attending the November 2018 workshop included:

- NPS, Interior Regions 8, 9, 10, and 12 Office
 - Vida Germano, Cultural Landscape Program Manager
 - Sueann Brown, Historical Architect
 - Elizabeth Gordon, Section 106 Coordinator
 - Christopher E. Johnson, Historian
- NPS, Kalaupapa National Historical Park
 - Erika Stein Espaniola, Superintendent
 - Julia Aleszczyk, Curator
 - Paul Hosten, Natural Resources Chief
 - Stacy Lundgren, Chief, Cultural Resources Management Division
 - Ka’ohulani McGuire, Cultural Anthropologist
 - James Sutton, Facility Manager
- A/E CLR team (prime firm Wiss, Janney, Elstner Associates, Inc.)
 - Una Gilmartin, WJE Project Manager
 - Liz Sargent, Liz Sargent Historical Landscape Architect (LSHLA)
 - Jennifer Trompetter, Landscape Architect and Graphics Specialist (LSHLA)



Figure 6. View of one of the many cemeteries associated with the Kalaupapa and Kalawao Settlements. Pictured is Cemetery J, one of the ‘Īliopi‘i Cemeteries within the West Coast Cemetery system, 2018.

Historical Landscape Documentation/Site History. Research conducted on behalf of the CLR entailed collection and review of documents, reports, photographs, and maps related to the history and physical evolution of the Kalaupapa and Kalawao Settlements since the mid nineteenth century. Park and regional NPS personnel assisted in the collection of these documents, which were available in the Interior Regions 8, 9, 10, and 12 Office, from the eTIC, and in the park archives. Research at the park focused on Kalaupapa's large and accessible museum collection that houses artifacts, historic photographs, aerial imagery, manuscripts, maps, and personal papers. Information that was not available electronically was scanned or photographed for office use.

In addition to the materials provided at the initiation of the project by the NPS, other baseline resource studies and reports that were of use for the project included a Historic Resource Study, several historic building inventories, ethnographic studies based on oral history interviews conducted with patients and kōkua between 2001 and 2007, archeological surveys and assessments from surveys conducted between 2006 and 2012, vegetation surveys, and National Register of Historic Places documentation.

Base Mapping. An AutoCAD base map of existing conditions within the CLR study area was developed from several available sources augmented through field investigations. The National Park Service provided AutoCAD mapping files for the central part of Kalaupapa Settlement that indicated the locations of roads, building footprints, contours, some fencing, and some sidewalks. The data did not extend east to Kalawao, or north to 'Īliopi'i. Aerial photographs, GIS data updated in 2019, and information collected during field investigations was used to augment available AutoCAD mapping. Maps presented in the CLR were developed in AutoCAD as well as Illustrator and Photoshop.

Historic Period Plan Preparation. The team developed historic period plans to present the Settlement at snapshot moments in time by registering historic mapping sources with existing conditions information. The project team utilized primary source materials, including historic maps and plans along with ground and aerial photographs, to create the period plans in AutoCAD. The period plans were rendered in Photoshop.

Existing Conditions Documentation. Existing conditions documentation was organized in accordance with the framework established in the NPS publication, *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques*, and following the specific guidance afforded in the project scope of services.

Evaluation. The Draft 2017 NHL nomination update for the Kalaupapa Leprosy Settlement Historic District served as the basis for evaluating the significance of the property on behalf of the CLR. Evaluation followed the guidance afforded in National Register bulletin *How to Apply the National Register Criteria for Evaluation*.

Analysis. The analysis section compared historic landscape conditions during the period of significance with changes that occurred after the period of significance for each character area. Maps illustrating historic features as well as changes since the end of the period of significance illustrate the analysis. This information was used to assess the integrity of the landscape in accordance with the guidance afforded in the National Register bulletin *How to Apply the National Register Criteria for Evaluation*.

Treatment Plan. The treatment plan was based in part on the input of those participating in the workshop held at the park in November 2018, consideration of the needs articulated in the project scope of services, and specific needs indicated by park personnel in communications with the project team.

Summary of the Significance and Integrity of the Cultural Landscape

The Draft 2017 NHL nomination update provides a clear understanding of the significance of the Kalaupapa and Kalawao Settlements cultural landscape that has guided preparation of the CLR. Key to the significance evaluation is the following:

The Kalaupapa Leprosy Settlement Historic District... is significant under NHL Criteria 1, 2, 3, 4, and 6 for its association with nationally and internationally important events, ideas, and persons in the history of leprosy (now also known as Hansen’s disease).... The period of significance extends from 1866 to 1969, covering the period when the settlement was operated under a policy of compulsory segregation of persons believed to have the disease. During those years, approximately 8,000 people—mostly Native Hawaiians—were forcibly exiled to the Kalaupapa peninsula, isolated from their families and society under the rationale that this would halt the spread of the disease. Those sent to Kalaupapa also fought to retain control over their lives by demanding reforms to the government’s leprosy program, inspiring others to support them, and adapting the settlement to meet their needs as a predominantly Hawaiian community. The establishment and expansion of the settlement also involved a second incidence of separation: the removal of the kama’āina, the Native residents of the area. Hawaiians had lived on the Kalaupapa peninsula for centuries, forming ties with the land that were disrupted when they were forced to make way for the settlement. Some kama’āina remained in defiance of the government’s orders, providing aid to those sent to the settlement during the early years. As it developed under the jurisdiction of the Kingdom of Hawai‘i, the territorial government of Hawai‘i, and finally the State of Hawai‘i, Kalaupapa became a model for other isolation institutions established in the US and worldwide. It also represents an important origin point for ongoing social justice and human rights movements by and in support of persons affected by the disease.⁹

Additionally, the cultural landscape of the Kalaupapa and Kalawao Settlements demonstrates a high degree of integrity for the identified period of significance, identified as extending initial establishment in 1866 through the revocation of the law serving to segregate residents of Hawai‘i with Hansen’s disease in 1969. Numerous historic landscape features survive from the period of significance to convey the property’s significant associations. These range from buildings, to roads, plantings, walls, fences, grave markers, activity areas, places of religious and ethnographic importance, views, and small-scale features. The character of the cultural landscape reflects both institutional construction methods, materials, and forms established within the Kalaupapa and Kalawao Settlements by the Territory and State of Hawai‘i, as well as more personal vernacular expressions of the local lifeways of patients, their kōkua, and other community members. The character of the cultural landscape also reflects remnant expressions of pre-Contact traditional Hawaiian habitation as well. Most archaeology conducted within the park acknowledges the presence of a “layered landscape” in that the historic landscape utilized existing structures, materials, and features in creation of both Kalaupapa and Kalawao Settlements.¹⁰

Kalaupapa remains a living community composed of patients, caregivers, and administrators. As a living community, the character of the Kalaupapa and Kalawao Settlements has continued to evolve in an organic manner to reflect the needs and choices of the residents during and after the period of significance. Despite minor changes that have occurred since 1969, at a broad scale, the character and

-
9. Christopher E. Johnson, Historian, National Park Service, Interior Regions 8, 9, 10, and 12 Office, DRAFT *National Historic Landmark nomination update, Kalaupapa Leprosy Settlement Historic District* (Washington, D.C.: National Park Service, August 7, 2017), 5.
 10. Erika Stein, *Layered Landscapes: Archaeological Investigations and Identification Report Associated with the Kalaupapa Memorial Project (MEMO)*; Kalawao Ahupua‘a, Kalawao County, Island of Molokai, National Park Service (2010).

composition of the Kalaupapa and Kalawao Settlements remains very similar to that present during the period of significance. Demonstrable changes that have occurred since 1969 consist of deterioration and loss of a few historic buildings, outbuildings, and other structures; a general expansion of the amount of wooded cover in places where open fields were formerly present; a spread of invasive plant species, including as part of the expansion of wooded areas; modifications to buildings to accommodate resident needs and preferences; a loss of some examples of cultural vegetation as the number of individuals capable of caring for gardens and plantings has diminished. Animal husbandry has changed significantly (and changed the landscape); residents once had cattle, horses, pigs and chickens. Today, the landscape contains numerous chicken coops and animal enclosures no longer in use that suggest this former aspect of life in the Kalaupapa and Kalawao Settlements. Other changes have entailed the addition of new facilities and infrastructure related to management of the property, including NPS administration of the national historical park since 1980. To accommodate administrative and maintenance needs, buildings, structures, and work and storage areas have been added on a limited basis within discrete parts of Kalaupapa Settlement. While evident, these changes have not diminished to any great degree the core tangible and intangible qualities that contribute to the significance of the property as an NHL. Overall, Kalaupapa and Kalawao Settlements retain integrity of location, setting, feeling, association, design, workmanship, and materials. The location and remarkable physiographic setting of the isolated Kalaupapa Peninsula remain as imposing as they were at the time the settlement was first established. The boundaries that define this isolation remain identical to those present when the settlement was founded. The layout of the settlements remains evident in both spatial organization—generally defined by a gridded pattern of streets and a clustered arrangement of facilities and land uses—and the individual expression of hundreds of historic structures and associated landscape features. Surviving built features clearly display the workmanship and materials that have characterized construction throughout the history of the settlements, with examples such as dry laid stonework and single-wall construction methods. There are also examples of introduced vegetation planted by the patients as well as institutionally that can be tied to specific planting initiatives and patterns. Integrity of feeling is retained through the cumulative effect of setting, materials, workmanship, and design, which together conveys a unique sense of time and place. Integrity of association, or a direct link between the property and the events or persons who shaped it, is retained through the lives of those patients who continue to live at Kalaupapa.¹¹

11. National Park Service, *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements, Kalaupapa National Historical Park* (San Francisco: Pacific West Region Cultural Resources Program, 2005, rev. 2011), 43.



Figure 7. View northeast of the Pool Hall at McVeigh Home, one of the historic group residential communities established at Kalaupapa Settlement during the early twentieth century, 2017.

Summary of Findings

Kalaupapa and Kalawao Settlements are a unique, internationally significant, cultural landscape that reflects the deeply held story of the isolated Hansen’s disease community established on Molokai in 1866 and remained in effect by legal edict until 1969. Fifty years later, Kalaupapa remains a living community of patients, caregivers, and administrators, collectively engaged in promoting health and life on the peninsula. Although future changes are anticipated in terms of use and community composition, the NPS, with its partners, endeavors to protect the integrity and historic character of Kalaupapa and Kalawao Settlements to honor current and former residents and to ensure that the important stories of the community can continue to be told.

As guidance, the CLR considers the Preferred Alternative of the draft GMP in providing specific treatment recommendations and guidelines for short- and long-term management of the cultural landscape. Treatment as presented in the CLR is directly influenced by two related conditions. One is the potential threat to the integrity of property through incremental loss of historic fabric resulting from a lack of care, maintenance, or appropriate management. Preservation of all surviving tangible and intangible physical attributes of the landscape becomes increasingly imperative with each loss, which serves to diminishes the ability to understand historic patterns of spatial organization, land use, and character. The ability to preserve character-defining components of the cultural landscape requires first that they be identified, described, and articulated to ensure appropriate stewardship. The Part I CLR attempts to do just that, and to build on the knowledge presented in Part I to provide clear recommendations for preservation and rehabilitation actions and protocols that can be implemented given the park’s management and maintenance capabilities to address the needs of individual resources.

The other key consideration is the current uncertainty of proposed change to use and community composition in the future. Regardless of the adaptive uses proposed, it is essential that a goal for the future will be preserving a sense of place and “community spirit” as articulated by the residents over many years of calling Kalaupapa home. Some of the physical attributes of community life at Kalaupapa—the churches, Paschoal

Hall, Fuesaina's Bar, the Patient Store and Post Office, Kalaupapa Landing, Judd Park, and the Lion and Oceanside Pavilions—remain to convey their historic associations (Figure 7). It is important to consider how active community uses might continue into the future taking into consideration adaptive use of the existing infrastructure. Maintaining active use and a compatible and appropriate community structure at Kalaupapa Settlement offers the potential to promote preservation better than mothballing and treating the landscape like a museum piece. Stories of personal experiences and perceptions about Kalaupapa remain strong threads that connect people to this landscape and could be continued through different traditions.

Based on consideration of these two key issues, the CLR recommends the park adopt a two-tiered treatment approach for the Kalaupapa cultural landscape as it pertains to the guidance afforded by *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. Of the four approaches outlined by the Secretary of the Interior, the CLR recommends a near term treatment approach of Preservation. Preservation will ensure protection and stabilization of resources that contribute to the NHL. The focus of the approach is appropriate preservation maintenance of historic structures, including grave markers and monuments, and working with cultural resources specialists to remove or mitigate damage caused by invasive vegetation throughout the landscape. The goal of preservation as a treatment philosophy is to prevent additional loss and fragmentation of the cultural landscape until future uses are determined.

Over the longer term, Rehabilitation is the recommended primary preservation treatment approach, which is intended to address proposed changes in use and operation of the Settlement holistically. This includes reestablishment of native plant communities over various areas of the peninsula; accessibility improvements to circulation including vehicular parking areas and walkways, to ensure accessible routes are provided to all improved areas and facilities; and adaptive reuse of historic structures for interpretation, housing, and other needs associated with stakeholders through approved planning processes. Additional needs that might be addressed through rehabilitation include changes in land use to reflect new partnerships and programming.

Through consultation with Native Hawaiians groups and the Hawai'i State Historic Preservation Office, the GMP also identifies possible Restoration treatments for some archeological and other structures, such as rock walls, heiau, and the hōlua slide. Restoration treatment would be undertaken in partnership with cultural resource specialists and preservation maintenance crews possessing appropriate skills, knowledge, and abilities, including traditional Hawaiian building techniques and construction methodologies.

Because standards for treatment are not necessarily mutually exclusive, the CLR supports the application of more than one treatment approach to the landscape. For example, preservation of spatial organization is critical to the integrity of the historic district, but within that organization, individual structures may be rehabilitated to accommodate a new compatible use. In all cases, the recommendations provided for the treatment of individual features are not made in isolation, but the relationship of the feature to the larger cohesive whole of the cultural landscape. Because the Kalaupapa and Kalawao Settlements evolved over many decades and the contemporary landscape represents a palimpsest of development change over time, the CLR does not advocate restoration of the cultural landscape to a specific date or historic period. Rather, the goal for treatment is to balance preservation of contributing resources with the potential adaptive use of these resources in the future.

Collectively, the treatment approaches presented herein promote protection of historic resources and community character while acknowledging that future use of the settlement will involve collaboration with many organizations and partners to identify compatible new uses, enhance visitor services, support educational and interpretive opportunities, and encourage sustainable maintenance practices to protect and

ensure the character of the cultural landscape remains a legacy to the people who made Kalaupapa their home.¹²

12. All work associated with implementation of CLR recommendations requires consultation with and review by the Hawai'i State Preservation Office to ensure compliance with Hawai'i Revised Statutes Chapter 6E, and the National Historic Preservation Act, as Amended, and outlined in 36 CFR Part 800.

Site History

Sources referenced in preparing the following historical narrative include *Exile in Paradise: The Isolation of Hawaii's Leprosy Victims and Development of Kalaupapa Settlement, 1865 to the Present*, by Linda W. Greene (1985); National Historic Landmark nomination documentation for the Kalaupapa Leprosy Settlement Historic District; *Kalaupapa and Kalawao Settlements Cultural Landscape Inventory* (2011); and *Ma'i Lepera: Disease and Displacement in Nineteenth-century Hawai'i*, by Kerri A. Inglis (2013).

Early Hawaiian Settlement (pre-European Contact through circa early nineteenth century)

Kalaupapa peninsula was formed 345,000 to 570,000 years ago by eruptions from a small shield volcano that rested against the pali that rises above the peninsula. During the final eruptions, lava rose to the top of Kauhakō Crater, before draining northward through a lava tube. The pali above was formed over one million years by erosion as powerful trade winds drove waves into the island.¹³

The first Polynesians are thought to have migrated to the Hawaiian Islands at some point between 200 BC and 400 AD. Early Hawaiians developed networks of canals, constructed terracing walls and fishponds, and cultivated taro, as well as sweet potatoes and gourds.¹⁴

Through the thirteenth century, oral traditions state that there was two-way travel between the Hawaiian Islands and Kahiki (beyond the horizon). This brought increased migration and settlement to the islands, which resulted in a more structured hierarchy. Four island kingdoms would emerge: Kaua'i, O'ahu, Maui, and Hawai'i. The ruling chiefs of the island competed for resources and power.¹⁵

Based on oral traditions and archeological evidence, it is believed that Mākanalua peninsula, later known as Kalaupapa peninsula was the site of a major battle over fishing rights between the chiefs of the Kekaha and Ko'olau districts of Molokai during the early eighteenth century. The Kekaha chiefs, backed by Kualī'i, a chief from O'ahu, prevailed in the battle, resulting in the Kekaha and O'ahu chiefs taking control of Molokai.¹⁶

-
13. Kerri A. Inglis, *Ma'i Lepera: A History of Leprosy in Nineteenth-Century Hawai'i* (Honolulu: University of Hawai'i Press, 2013), 32–33, citing Gordon A. Macdonald, Agatin T. Abbott, and Frank L. Peterson, *Volcanoes in the Sea: The Geology of Hawaii*, 2nd ed. (Honolulu: University of Hawai'i Press, 1983), 416–417.
 14. *Ibid.*, 22–23, citing David L. Eyre, *By Wind, By Wave: An Introduction to Hawai'i's Natural History* (Honolulu: The Bess Press, Inc., 2000), 52–53.
 15. *Ibid.*, 25.
 16. Mark D. McCoy, *The Lands of Hina: An Archaeological Overview and Assessment of Kalaupapa National Historical Park, Molokai*, Technical Report 135, ed. David Duffy (Honolulu: Pacific Cooperative Studies Unit, University of Hawai'i at Mānoa, 2005), 50–52.

Early inhabitants of Molokai lived mostly along the southeastern coast of the island, which was known for its fishponds and its gentle sloping lands with fertile soil and access to water. A smaller population inhabited the valleys along the northeast coast of the island, as well as Makanalua peninsula. Native Hawaiians from other islands were fearful of the kahuna or priests at Molokai, who were known to be the most powerful in the islands.¹⁷

Not until 1778 did Europeans reach the islands, when the British explorer Capt. James Cook landed on the islands on his third expedition to the Pacific. Cook was seeking a sea passage joining the Atlantic and Pacific oceans. Cook named his discovery the Sandwich Islands after his patron the Earl of Sandwich, First Lord of the Admiralty. During a return visit in 1779, Cook was killed at Kealahou Bay following an attempt to take Kalani'ōpu'u, ruler of the Island of Hawai'i, hostage.¹⁸

Prior to Captain Cook's arrival, the Hawaiian Islands had been largely isolated from outside influences. Economic and social change occurred rapidly by the mid-nineteenth century, with the islands becoming an important port for foreign ships making the long voyage across the Pacific. Hawaiian chiefs received firearms and ammunition in exchange for fresh water, sweet potatoes, and pork.¹⁹ Visitors—including European, American, and Chinese persons—decided to live in Hawai'i, unfortunately bringing diseases such as measles and smallpox, to which Hawaiians had no immunity.

When Cook reached the islands, “the individual islands or parts of islands were ruled by various high chiefs, who constantly quarreled among themselves for supremacy.” Kalani'ōpu'u, ruler of the Island of Hawai'i, whom Cook attempted to take hostage died in 1782, at which time he was succeeded by his son, Kīwala'ō. At this time, Kamehameha was given a position as guardian of Kūkailimoku, the god of war. Following his defeat of Kīwala'ō the Battle of Moku'ōhai, Kamehameha was able to consolidate power and land, soon taking control of the other islands.²⁰

Kamehameha conquered Molokai in 1795, which resulted in the dramatic decrease in the population of the island, as disease spread. An epidemic that spread across the island in 1803, further decimated the population. The population of Molokai declined from approximately 20,000 to 25,000 at the start of the nineteenth century, to only 6,000 in 1836. The Kalaupapa peninsula and the neighboring valleys to the east of the peninsula had a population of 2,700 by this time.²¹

While disease was a major factor in the population loss on Molokai, a number of residents migrated to Honolulu and Lahaina to work in the whaling and trading economy. Due to its lack of fresh water for vessels as well as the presence of only a few small harbors along the south shore, trading ships rarely stopped at Molokai.²²

In 1810, Kaua'i was ceded to Kamehameha by Kaumuali'i the ruler of Kaua'i, giving Kamehameha control over all of the islands, and established himself as ruler, putting an end to wars and, with minor exceptions, revolts. Kamehameha I ruled from 1795 to 1819, strengthening the islands as a united nation.²³ During this

17. Inglis, 30.

18. Greene, 1; Inglis, 25, citing 12. George Gilbert, *Captain Cook's Final Voyage: The Journal of Midshipman George Gilbert*, ed. Christine Holmes (Honolulu: University Press of Hawai'i, 1982).

19. *Ibid.*, 5.

20. Inglis, 26–27.

21. *Ibid.*, 30–31.

22. *Ibid.*, 31.

23. *Ibid.*, 26–27.

time, many Europeans and a few Americans lived in Hawai‘i. Upon Kamehameha’s death, his heir Liholiho ruled as Kamehameha II.²⁴

During the eighteenth and early nineteenth centuries, Molokai was known for its rich agricultural lands and fishponds, making it a favorite place for Kamehameha I and his family. The Kalaupapa peninsula was known for its taro fields in the upland valleys and sweet potatoes that were grown on the dry plain.²⁵

The advent of the sandalwood trade in the early nineteenth century further contributed to the decline of agriculture on Molokai, as residents began harvesting lumber instead. Despite this, the island became a supplier of sweet potatoes to California, with exports peaking in 1851. Sweet potatoes continued to be exported to California through 1866, when the government acquired the land for establishment of the Hansen’s Disease settlement.²⁶

Prior to the arrival of the first Hansen’s Disease patients in 1866, the Kalaupapa Peninsula and pali valleys were inhabited by native Hawaiian peoples within four traditional Hawaiian ahupua‘a (land divisions): Kalaupapa, Makanalua, Kalawao, and Waikolu.

Early Nineteenth Century Villages, Missionary Activity (circa early nineteenth century through 1865)

American Protestant missionaries arrived in Hawai‘i in 1820, at a time when the Hawaiian religion had been weakening for some time. Although Kamehameha I had supported the old religion, with its kapu or taboo system, the influence of foreigners and other factors contributed to the decline of the old religion. Two of the widows of Kamehameha I persuaded his successor to abolish the old religion and kapu system. Kamehameha II permitted the missionaries to settle and work in Hawai‘i, where they established a written language and published religious booklets in Hawaiian.

Catholic missionaries arrived in Hawai‘i in 1827 but found resistance to their presence from the Hawaiian chiefs, who had been influenced by the Protestant missionaries already present in the islands. As a result, Catholic missionaries and their followers were persecuted. Calvinist tenets became the state religion by royal ordinance in December 1837.²⁷

In 1840, the first written constitution of the kingdom was published and included a clause on religious toleration, although hostility between Protestants and Catholics continued for several decades. Mormon missionaries arrived in the islands in the 1850s, and Episcopalian missionaries arrived in the 1860s. Hawai‘i “. . . thus became a predominately Christian nation, watched over closely by missionaries.”²⁸ Missionaries representing several faiths would later play a role in the operation and development of the Hansen’s Disease colony at Kalaupapa.

24. Greene, 1.

25. Johnson, 26–27.

26. Inglis, 23.

27. Greene, 4.

28. Ibid.

Establishment of Hansen's Disease Colony (1866–1873)

For a map of Kalawao and Kalaupapa during this time period, refer to Figure 38, Kalawao, 1866–1909, and Figure 39, Kalaupapa Settlement, 1866–1909.

It is not known when leprosy first arrived in Hawai‘i, or how it arrived there. Referred to as the “Chinese sickness,” the disease was known to have occurred in China, and may have come to Hawai‘i with seafarers visiting Honolulu Harbor after contracting the disease in another location where it was widespread.²⁹ Missionaries noted the presence of what may have been cases of leprosy as well as syphilis as early as 1823, and leprosy is thought to have been present in Hawai‘i at least as early as 1830.³⁰

On December 13, 1850, King Kamehameha III organized the first Board of Health at the advice of his Privy Council, to protect the health of his people and to cure epidemic diseases such as cholera. Although leprosy was known to be present in the kingdom, it was not discussed prior to the king’s death in 1854.³¹ Finally, in April 1863, during the reign of King Kamehameha IV, William Hillebrand, the medical director of Queen’s Hospital in Honolulu, brought attention to the disease, writing:

... I will here avail myself of the opportunity to bring to your and the public’s attention a subject of great importance. I mean the rapid spread of that new disease, called by the natives “Mai Pake.” It is the genuine Oriental leprosy, as has become evident to me from the numerous cases which have presented themselves at the Hospital. ... It will be the duty of the next Legislature to devise and carry out some efficient, and at the same time, humane measure, by which the isolation of those affected with this disease can be accomplished.³²

Alarmed by the spread of the disease, in 1865 the Legislative Assembly of Hawai‘i passed the Act to Prevent the Spread of Leprosy. The Board of Health, which was established by the Legislative Assembly in 1850, began exploring ways to secure isolation of people at risk of spreading the disease.³³ The Act provided for land to be set apart for an establishment for “the isolation and seclusion of persons who were thought capable of spreading the disease.”³⁴ The law required physicians or other persons with knowledge of a case of leprosy to report it to the proper authorities, and also required the police to arrest affected persons and deliver them to the Board of Health for a medical examination and removal to a place of treatment or isolation. A hospital was to be established to treat patients in the early phases of the disease and to attempt to find a cure, but the Board of Health could send anyone considered incurable or capable of spreading the disease to a place of isolation.³⁵

To provide for isolation and seclusion of affected persons, the government acquired the land of the Makaanalua Peninsula on the island of Molokai, later called the Kalaupapa Peninsula after the small village of Kalaupapa located on the leeward side of the peninsula (Figure 8). The natural setting of the peninsula provided a “natural prison” to isolate those affected by the disease, as it was “enclosed on three sides by the ocean and on

29. Greene, 11.

30. Ibid., citing A .A. St. M. Mauritz, “The Path of the Destroyer: A History of Leprosy in the Hawaiian Islands and Thirty Years Research into the Means by Which it has Been Spread” (Honolulu: Honolulu Star-Bulletin, Ltd., 1916), 30.

31. Ibid., 12.

32. Ibid., citing Dr. W. Hillebrand, Surgeon to the Queen’s Hospital, quoted in Ralph S. Kuykendall, *The Hawaiian Kingdom, 1854–1874* (Honolulu: University of Hawaii Press, 1953), 73.

33. National Park Service. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements, Kalaupapa National Historical Park*. (San Francisco: National Park Service Pacific West Region Cultural Resources Program, 2011).

34. Greene, 13.

35. Ibid.

the fourth by sheer 1,000 to 3,000 foot-high pali (cliffs).”³⁶ A report provided to the Board of Health in 1865 noted:

The northern side of Molokai was thought to contain valleys which were by nature favorably located for the purpose, ... separated from other parts of the island by steep palis, and the landings of the sea shore difficult to approach so as to insure the seclusion desired.³⁷

Located on the pali were trails that gave access to the settlement by land. Over the course of the settlement, two trails were formally used since 1866: the Pali Trail and the ‘Ili‘ilikā Trail.



Figure 8. The west side of the Makanalua Peninsula on the island of Molokai, undated; note the pali located towards the south side of the peninsula and Kalaupapa on the west side of the peninsula. Kalawao is located on the east side of the peninsula but is not visible in this figure. (Source: National Park Service)

-
- 36 . Christopher E. Johnson, Historian, National Park Service Pacific West Regional Office, *National Historic Landmark nomination documentation, Kalaupapa Leprosy Settlement Historic District* (Washington, D.C.: National Park Service, August 7, 2017), 26, citing, “The Leper Colony on Molokai Island,” *The Medical Times* (August 1899), 242.
37. Inglis, 191, citing *Supplement. By Authority. Leprosy in Hawaii, Extracts from Reports of Presidents of the Board of Health, Government Physicians and Others, and from Official Records, in Regard to Leprosy before and after the Passage of the “Act to Prevent the Spread of Leprosy,” Approved January 3rd, 1865. The Laws and Regulations in Regard to Leprosy in the Hawaiian Kingdom.* In MMHC, Box 27: Leprosy. File 289 (1), Honolulu: Daily Bulletin Steam Printing Office, 1886, 21.

On January 6, 1866, the schooner *Warwick* departed for Molokai, carrying the first twelve leprosy patients to be sent to the settlement. The patients were left at the mouth of Waikolu Valley to make their way to Kalawao. The original inhabitants of the peninsula—all of whom would be removed from the peninsula by 1900—had owned land and houses, which were purchased by the government.³⁸ These arrivals and other early residents of Kalawao moved into fifteen to twenty empty properties that had once been inhabited by residents of the village.³⁹ Shelters at the initial settlement of Kalawao were adapted from pre-existing Hawaiian grass huts and modified rock shelters, and makeshift homes were constructed of local building materials.

After a September 1865 visit, the president of the Board of Health reported:

There are from seven to eight hundred acres, excellent land for cultivation and grazing, with extensive kalo [taro] land belonging to it; there are from 15 to 20 good houses obtained with the land, the whole being obtained for about \$1,800 cash, together with some other Government lands [on Molokai] given in exchange. A promise was made to the present inhabitants to remove them from there free of charge.⁴⁰

The first areas purchased included land in the Waikolu and Wai‘ale‘ia valleys. Much of the land belonged to the government but was being leased. The residents of the peninsula were transferred to new homes at Waialua on the southeast coast of Molokai.⁴¹

The Board of Health’s expectation was that residents would move into former homes of Hawaiians, and patients would be able to be self-sufficient by tending local crops. Unfortunately, due to the length of time that elapsed between the government’s purchase of the land and the establishment of the settlement, many homes had fallen into disrepair and the fields were overgrown by the time the first patients arrived.⁴² No treatment facilities or medical staff were present, and the government provided only limited supplies.⁴³ Most often, the only people able to care for ill patients were kōkua, relatives and friends who voluntarily left their homes to accompany their loved ones to Kalawao.⁴⁴ The kama‘āina, who remained on their land, also provided assistance to ill patients.

As the sick were not able to care for themselves, conditions quickly worsened. Patients’ health deteriorated and supplies ran low. Even as conditions worsened, the settlement continued to expand. The total number of residents reached 142 patients, with twenty-two kōkua, by October 1866.⁴⁵

The Board of Health soon began to provide basic rations to patients and established a management structure. Rudolph Meyer, chief superintendent, looked after the residents and handled the settlement’s finances. After resigning, he was replaced by Donald Walsh, who built a Hospital, School House, and Sleeping Quarters for boys and girls in 1867.⁴⁶ The hospital was constructed with supplies and laborers sent from Honolulu (Figure 9).⁴⁷ Although progress had been made toward better living conditions for the ill at Kalawao settlement, the

38. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*, 32.

39. Greene, 52; *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*. (See also discussion of Native Hawaiians moved from the peninsula in the 1890s in a later section of this chapter.)

40. Greene, 49 citing Hawaiian Kingdom Board of Health, *Leprosy in Hawaii*, pp. 27-28.

41. *Ibid.*, 49.

42. Johnson, 27, citing Greene, *Exile in Paradise*, 50–51.

43. *Ibid.*, 26.

44. *Ibid.*, 28.

45. *Ibid.*, 26.

46. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*

47. Greene, 57.

improvements made were not sufficient. Between 1868 and 1873, nearly 40 percent of people sent to Kalawao died.⁴⁸



Figure 9. Hospital compound at Kalawao looking east, undated. (Source: Bishop Museum, Honolulu; Greene, Figure 8)

The people of Kalawao soon began to organize their own institutions to handle the emotional and physical hardships of confinement. The Old Stone Church was built at Kalaupapa by Protestant missionaries in 1853 as a meeting house. (Figure 10 and Figure 11). In July 1871, the Congregational Siloama Church of the Healing Spring was built at Kalaupapa, established by a group of thirty-five Congregationalists who had requested of the Hawaiian Evangelical Association that they be released from their former churches and be allowed to form a new church (Figure 12).⁴⁹ In addition to housing religious services, the Siloama Church served as a platform to present demands to the Board of Health.⁵⁰ The church was named Siloama in memory of Jesus's healing of a blind man when he anointed his eyes with clay and bid him wash in the pool of Siloam.⁵¹ When the residents had collected sufficient funding for lumber, a bell, and a carpenter, the Hawaiian Board of Missions brought the material to Kalawao, where they were dumped overboard, floated ashore, and transported to the building site.⁵² A Catholic Church, St. Philomena, was built in 1872 after Brother Victorin Bertrant (sometimes Bertrand) transported a wooden chapel from Honolulu (refer to Figure 12).⁵³

48. Johnson, 28, citing Greene, *Exile in Paradise*, 62.

49. Johnson, 29.

50. Ibid., citing Greene, *Exile in Paradise*, 56.

51. Greene, 55–56; recounted in the Gospel of John, chapter 9, verse 7.

52. Ibid., 56.

53. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*; Greene, 60–61.



Figure 10. Old stone church at Kalaupapa in use as jail, circa 1895. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 3)



Figure 11. Old stone church (formerly jail), in use as repair shop, 1930s. (Source: Kalaupapa Historical Society, Kalaupapa Greene, Figure 4)



Figure 12. Kalawao settlement, 1884, showing Siloama Church prior to alterations of 1885, and St. Philomena with the new nave and steeple built by Saint Damien, and what is likely the rectory (between the two structures). (Source: Hawai'i State Archives, Honolulu; Greene, Figure 14)

By 1872, approximately 600 persons diagnosed with Hansen's disease had been moved to Kalawao.

The region was famous for growing sweet potatoes, which were used as food for people and animals, were used medicinally and ceremonially by native Hawaiians, and were traded via ship with California.⁵⁴ Small amounts of other native crops were also grown in the small cultivated fields on the peninsula and in the valleys. After the leprosy settlement was established, lands were poorly farmed or neglected due to the residents' lack of experience or interest, or physical disabilities. Terraced fields had traditionally been constructed for cultivation of taro, to produce poi. These fields were abandoned as eating habits changed, and the taro lands were overgrown by exotic brush plants.⁵⁵ Dairy cattle were imported by 1872. Cows were allowed to roam, as milk was not acceptable to many residents.⁵⁶

In January 1873, Prince William Charles Lunalilo ascended the throne. In response to public outcry regarding conditions at Kalawao, a new Board of Health was appointed to administer the settlement. The board would consist of a president, secretary, and prominent men such as doctors and ministers.⁵⁷ The practice of sick persons paying for care was discontinued; food rations were increased, with greater variety of food; and, in an effort to encourage cultivation of the land, patients were offered the choice of receiving the cash value of their food supplies in lieu of the food. Many residents were thus able to build houses and purchase supplies not

54. Greene, 31.

55. *Ibid.*, 35.

56. *Ibid.*, 61.

57. *Ibid.*, 62.

provided by the government.⁵⁸ A store offering clothing and other staples was established at Kalawao in July 1873.⁵⁹

Arrival of Saint Damien and Associated Improvements to Kalawao (1873–1889)

With limited progress in the development of treatment for Hansen’s disease, the Kalawao settlement soon grew beyond its initial capacity. Throughout 1873, a total of 560 people were sent to the settlement, doubling the previous population.⁶⁰ Already poor conditions at the settlement were exacerbated due to the increased population. In the same year, however, patients finally began to see some slight improvement in their living conditions with the arrival of Saint Damien at Kalawao (Figure 13).⁶¹

Saint Damien worked to bring public attention of the lives of leprosy patients sent to the settlement and led a construction program to increase physical development on the peninsula. Through this program, Saint Damien built homes and dormitories for patients and expanded St. Philomena Church. Many homes were destroyed in a violent storm in late 1873 or early 1874, providing Saint Damien the opportunity to re-design the layout of the village. Over 300 wood cottages with whitewashed exteriors were built in “neat rows.” The houses built during this time period incorporated both western and Hawaiian styles of construction. Additionally, Saint Damien worked to add a large enclosed cemetery adjacent to St. Philomena Church. The fence around the cemetery prevented disturbances to the shallow graves from encroaching animals.⁶²



Figure 13. Portrait of Saint Damien before arriving at the Kalaupapa settlement, circa 1873. (Source: Kalaupapa Historical Society)

Hawaiian Jonathan Napela arrived at the Kalawao settlement in 1873. Napela was a missionary for the Church of Jesus Christ of Latter-day Saints and served as assistant superintendent for a few months. Napela

58. Ibid., 64.

59. Ibid., 74.

60. Johnson, 30.

61. Ibid., 31, citing Moblo, “Blessed Damien of Moloka’i.”

62. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements.*

fought to allow kōkua to remain with their loved ones, defying the Board of Health's segregation rules.⁶³ Napela continued to work for the patients at the settlement until his death in 1879. He was buried near the Kauhakō Crater.⁶⁴

In response to public reforms to improve the lives of leprosy patients, King Kalakaua and Queen Kapi'olani visited the settlement in 1874. This visit, along with additional government interactions, led to the improvement of living conditions at Kalawao. After first visiting in 1881, Princess Lili'uokalani was moved by the experience and worked with the Board of Health to build a branch hospital at Kaka'ako near Honolulu.⁶⁵

In January 1883 Saint Damien and some helpers from the colony undertook repair of the government road leading from Kalawao to Kalaupapa. Upon completion, it was referred to as Father Damien Road. This roadway supported further settlement at Kalaupapa.⁶⁶

In 1883 it was recorded that “. . . forty-five children were in residence at the two dormitories Saint Damien had founded to house boys and girls who had been separated from their parents or whose parents had died at the settlement.”⁶⁷

Ambrose Hutchison, a native Hawaiian, served as the resident superintendent from 1884 to 1897. During a visit from Queen Kapi'olani and Princess Lili'uokalani in 1884, Hutchison advocated improving the inadequate housing and providing a sufficient water system. During his speech, a distressed child ran up to Hutchison, longing for attention as her ill mother—affected by leprosy—was not able to care for her. At this moment, the queen was confronted with the harsh reality that action needed to be taken to improve the lives of children affected by the disease. As a result of this visit, in 1890 the Kapi'olani Home for Girls was established near Honolulu, where girls born to patients at the settlement could be cared for until they reached the age of twenty-one, when they were permitted to enter society.⁶⁸

As part of his efforts to provide better conditions for the patients, Saint Damien wrote a report for the Board of Health detailing the needs of the settlement in 1886. This resulted in many improvements over the next several years, including construction of dormitories and dining halls. Rudolph W. Meyer, agent of the Board of Health and chief supervisor of the settlement from 1866–1897, submitted a report to the Board of Health in the same year, in which he estimated that there were 652 patients and 327 buildings in the settlement, including hospital structures, houses, a store, storehouses, drug shop and five churches (Figure 14 and Figure 15). He also noted that the Kalaupapa harbor had been cleared of rocks and a wharf or boat landing was constructed to accommodate both freight and the landing of passengers.⁶⁹

63. Johnson, 31, citing Fred E. Woods, “A Most Influential Mormon Islander: Jonathan Hawai'i Napela.” *Hawai'iian Journal of History* 42: (2008): 140, 146.

64. Lane D. Chase, “Mormons and Lepers: The Saints at Kalaupapa,” *Mormon Pacific Historical Society* 13, no. 1 (1992), 16.

65. Johnson, 32, citing Greene, *Exile in Paradise*, 122.

66. Greene, 151.

67. Johnson, 33.

68. Ibid., 33, citing Janine M. Richardson, “None of Them Came for Me: The Kapi'olani Home for Girls, 1885-1938,” *The Hawai'iian Journal of History* 42 (2008): 1-26.

69. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*, 33.



Figure 14. Kalawao, undated, post-1893. The store is visible at the right, and the circular stone cistern visible in the background may be the reservoir built circa 1886. The Hospital compound is visible at the left. (Source: Bishop Museum, Honolulu; Greene, Figure 22)



Figure 15. Old Kalawao store, circa 1930. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 10)

As the government did not have funding to purchase coffins, Saint Damien formed coffin associations to provide a common fund for proper interment. Residents had been required to pay for their own coffins or were buried in blankets.⁷⁰ Saint Damien also created a larger cemetery adjacent to St. Philomena, enclosed with fencing.

70. Greene, 107–108.

In July 1886, Brother Ira Barnes Dutton arrived at Molokai with the permission of the Board of Health. Dutton resided in Kalawao, initially with Saint Damien and later in his own residence nearby. Dutton took over medical and nursing duties from Saint Damien.⁷¹ In the spring of 1887, Dutton obtained seeds and plants, including an assortment of vegetables, catalpas, fuchsia, hibiscus, lilies, and roses, to be planted around the two churches at the settlement. Dutton also painted the interior of the church and built a neat fence around St. Philomena.⁷²

In 1887, King Kalākaua signed a new constitution, written by a group of businessmen and lawyers who sought to make the kingdom part of the United States. This new constitution, nicknamed the “Bayonet Constitution” due to the fact that Kalākaua was forced to sign the new constitution at gunpoint, severely stripped power from the monarchy and transferred power to the legislature. It also opened voting rights to non-citizens while disenfranchising Asian residents of Hawai‘i.

Following passage of the Bayonet Constitution within the Kingdom of Hawai‘i in 1887, the leprosy isolation settlement was expanded. A large influx of residents came to Kalawao and the Board of Health constructed shelters for an additional 200 residents in 1888, but this proved inadequate. The expansion included not only the Kalawao settlement, but the entire Kalaupapa peninsula.⁷³ Prior to this expansion, the settlement shared the peninsula with Native Hawaiians who lived in a fishing village on the peninsula’s west side. Co-habitation of the Kalaupapa peninsula came to an end, and the peninsula was now solely occupied by the leprosy settlement.⁷⁴

By 1888, there were 379⁷⁵ buildings on the peninsula, including 350 cottages housing more than 1,000 people, as well as two storehouses, two taro receiving houses, one store, two dormitories, twelve hospital buildings, a two-cell prison, a receiving house at Kalaupapa for new patients, a physician's house, dispensaries at Kalawao and Kalaupapa, and five churches.⁷⁶

In 1888, work began on two larger dormitories to expand the children’s home built to house orphans, replacing earlier buildings. At this time, new dining halls were also constructed, and a concrete baking oven was constructed for the home.⁷⁷ Also in 1888, work was completed on a new water system, which included a wooden flume carrying water from a diversion ditch off the main Waikolu stream, and cast iron pipes running to a 750,000 gallon storage tank above Kalaupapa (Figure 16).⁷⁸

In 1888, Saint Damien began to expand St. Philomena, as the number of Catholics at the settlement increased.⁷⁹ A severe storm in the same year blew down the church steeple, and Saint Damien and Dutton determined to expand the church. A stone church was subsequently constructed over the old transepts.⁸⁰

Planning was also underway for a home for the Sisters of St. Francis, who were to supervise the new home for women and girls. Saint Damien and Superintendent Meyer chose a site on a hill near St. Philomena, close to

71. Ibid., 173.

72. Ibid., 175.

73. Johnson, 34, citing Hawai‘ian Board of Health, *Biennial Report of the President of the Board of Health to the Legislature of the Hawai‘ian Kingdom, Session of 1888* (Honolulu: Gazette Publishing Company, 1888), 17.

74. Ibid.

75. Greene lists a total count of 374, but adding the number of buildings listed yields 379.

76. Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements, 33

77. Greene, 174, 176.

78. Ibid., 174.

79. Ibid., 175.

80. Ibid., 176.

the wharf on the Kalaupapa side of the peninsula. Arriving with the sisters was Saint Marianne Cope (Figure 17). Saint Marianne worked closely with Saint Damien to establish the Bishop Home, although Saint Damien died just five months after she arrived at the peninsula. Saint Marianne raised money for the settlement, oversaw landscaping, improved sanitation, and provided access to music, entertainment, and clothing. Additionally, she also helped implement higher standards of treatment for the patients at the settlement.⁸¹

The “Charles Bishop Home for Unprotected Leper Girls and Women” was completed in September 1888 (Figure 18 and Figure 19). Portions of the structure were built constructed using materials from the Kaka‘ako Branch Hospital. The Bishop Home consisted of four small cottages for women residents, including sleeping quarters, a kitchen/dining room, and a receiving station where medical care was provided. The convent where the sisters resided was a one-story house, referred to by the sisters as St. Elizabeth Convent.⁸²



Figure 16. One of the flumes used to transport water to the settlement. (Source: Kalaupapa Historical Society)

81. Ibid., 178–179.

82. Ibid., 180–181.



Figure 17. Saint Marianne Cope (second from right) outside the Kapiloani Girls' Home in Honolulu, circa 1886. (Source: Kalaupapa Historical Society)



Figure 18. Bishop Home, Kalaupapa, undated, probably pre-1911. The convent is to the right. Source: St. Louis-Chaminade Education Center, Honolulu. (Source: St. Louis-Chaminade Education Center, Honolulu; Greene, Figure 154)



Figure 19. Social hall at the Bishop Home complex, used for social and recreational activities, circa 1930s (demolished 1934). (Source: Kalaupapa Historical Society)

Cultivation within Kauhakō Crater was observed prior to establishment of the leprosy settlement, and by 1888 this resource was adapted by patients and kōkuas for growing purposes as well (Figure 20).⁸³ Also during this time, breeding cattle were stocked in the peninsula's pastures by the Board of Health, and fences were erected to create paddocks.⁸⁴

During this period, the water system from Waikolu Valley was extended to Kalaupapa. New homes and facilities were also constructed.

83. M. Remy. *Jules L'île de Molokai avant La Léproserie, Journal de M. Jules Remy Naturaliste voyageur du Museum*, "The Island of Moloka'i before Leprosy, 1893 (entries from 1854).

84. Greene, 174.



Figure 20. View inside Kauhakō Crater, circa 1890, showing terraced fields and house. (Source: Bishop Museum, Honolulu, Department of the Interior, USGS; Greene, Figure 24)

The 1890s marked the beginning of the construction of Staff Row at Kalaupapa, which housed the administrative staff and other professionals who lived and worked at the settlement.⁸⁵ The first building constructed on Staff Row was the Superintendent's Residence, completed in 1891. In 1892, the Dentist's Residence was completed.

Relocation to Kalaupapa (1889–1930)

For a map of Kalawao and Kalaupapa during this time period, refer to, Figure 38, Kalawao, 1866–1909, and, Figure 39, Kalaupapa Settlement, 1866–1909.

In 1889, Saint Damien passed away from Hansen's disease and was buried under a tree next to his church. His work was carried on by Brother Joseph Dutton, who had arrived at Kalaupapa in 1886, and Saint Marianne Cope (Kopp) and a small contingent of Franciscan Sisters of Charity, who had arrived in 1888.

Prior to his death, Saint Damien had established orphanages for girls and boys at the Catholic mission in 1878. In 1888 the girls' orphanage was moved to Kalaupapa. The boy's orphanage at Kalawao, now under the direction of Saint Marianne Cope following Saint Damien's death, continued to increase in size and in 1892,

85. Johnson, 62.

Henry Baldwin, a wealthy sugar planter and philanthropist donated funds to construct four new buildings to comprise the Baldwin Home for Boys and Men at Kalawao. The home was constructed on a formerly treeless, rocky area.⁸⁶ When it opened in May 1894, the Baldwin Home consisted of twenty-nine structures, some newly constructed and others moved across the road from St. Philomena. The complex was initially managed by Saint Marianne Cope and the Sisters of Charity, before disciplinary problems led Saint Marianne to lobby for a group of Sacred Heart brothers to serve the residents. The brothers ran the home under the direction of Brother Dutton beginning in late 1895 (Figure 21).⁸⁷



Figure 21. Baldwin Home, Kalawao, looking north circa 1900. Dutton's office is at left, facing the flagpole, with his cottage at the left bottom corner of the photograph. (Source: Bishop Museum, Honolulu; Greene, Figure 40)

At the Baldwin Home, numerous trees were planted for wind breaks and for fruit, and vegetation including croton plants surrounded the main building. The center of the complex featured a lawn with a rock garden and water fountain. Within a few years, a garden housed a plantation of banana trees and several acres of vegetables. Thirty coconut trees from Samoa were planted at the rear of the complex along the base of the cliff, along the garden fence. Other vegetation included forty-five Japanese plum trees, approximately fifty eucalyptus trees, and approximately fifty avocado trees, as well as date palms, hibiscus and pomegranates; a large hala tree was located in the center of the playground.⁸⁸

In 1890, the Board of Health undertook the official move of the isolation settlement from Kalawao to Kalaupapa. In a report to the legislature, the board stated:

It is thought best that the people be gradually concentrated at Kalaupapa, where there is plenty of room. Streets should be laid out in regular order according to some definite plan, and all new buildings erected thereon. Kalawao, as the buildings decay, should be abandoned as a place of residence, both on account of its inconvenient distance from the landing and its climatic inferiority to Kalaupapa.⁸⁹

86. Greene, 220.

87. Greene, 217.

88. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*, 34.

89. *Ibid.*, 34.



Figure 22. Map of Kalaupapa and Kalawao villages, August 1908. (Source: R. J. Baker, Bishop Museum, Honolulu; Greene, Figure 71)

The leeward side of the peninsula at Kalaupapa provided a better climate for patients. The water system, constructed in 1888, facilitated living at the new settlement. Nearly all of the patients (with the exception of those at the Baldwin Home) were relocated by 1902, and the Kalawao Settlement was abandoned except for the churches, the Baldwin Home, and the U.S. Leprosy Investigation Station (Figure 22).

In the fall of 1893, Act 55 was passed, which allowed the Minister of the Interior to take possession of any remaining land and property required by the Board of Health for the leprosy isolation settlements on Kalaupapa Peninsula. On November 30, 1894, the Board of Health issued a notification to all long-time property owners that their kuleanas (property) were now the property of the government. Property of remaining non-patient Hawaiians was purchased or traded, and the former owners were moved from the peninsula over following next year. Access to Kalaupapa at this time was by boat at the harbor and by a pali trail used by the original inhabitants. The trail was gradually improved with switchbacks and stone paving.⁹⁰ Ten thousand young trees raised from seedlings were planted on the peninsula in 1897, and a large garden adjacent to the original Baldwin Home containing various vegetation was developed by 1899. Most of the trees planted at this time were ironwood, with many located in the volcano crater.⁹¹

The year 1893 saw a major change in the political structure of Hawai‘i, with the U.S. military-aided overthrow of Queen Lili‘uokalani, leading to debates over the U.S. annexation of Hawai‘i. The interim territorial governor enacted stricter segregation laws to restrict kōkua from living on the peninsula with their loved ones. These stricter measures were in part due to mitigate fears of disease as annexation by the United States was being considered. Segregation measures were met with much resistance from those at Kalaupapa. To address this resistance, the Board of Health “. . . prioritized the development of social institutions and treatment facilities to improve living conditions at the settlement, even as it imposed stricter measures of

90. Ibid., 34–35.

91. Ibid.; Greene, 249.

segregation and surveillance.”⁹² The decision by the patients to sign the petition against annexation was part of broader Native Hawaiian opposition to U.S. rule and the deposition of the Queen.

With the expansion of the settlement into Kalaupapa, more cemeteries were established to accommodate patients who had passed away. The cemeteries were established along the Kalaupapa coastline and at Kalawao and were cared for by benevolent societies formed to ensure there were official cemeteries for each religious affiliation represented on the peninsula. Fences were constructed to prevent cattle from damaging the graves.⁹³

A group of these cemeteries are located at Papaloa along the west coast of the peninsula to the north of the Kalaupapa Settlement. A Protestant cemetery is located within this group, with the earliest grave dating to 1900. 200 graves have been identified in this cemetery. South of the Protestant cemetery is a Catholic cemetery, with the earliest grave dating to 1897. Originally, rock walls separated this cemetery from the Protestant cemetery, but these walls were later destroyed in a tsunami. Ninety-eight graves are now present in the Catholic cemetery. A second Protestant cemetery is located to the south of the Catholic cemetery, with the earliest burial dating 1895. This cemetery is smaller than the aforementioned Protestant cemetery, with seventy graves. An additional Protestant cemetery was established in 1895, located to the south of the Protestant cemetery previously mentioned. South of this cemetery is a cemetery for the Church of Jesus Christ of Latter-day Saints. The first burial in that cemetery occurred in 1888, and there are 115 graves in this cemetery. In the same year, a cemetery was started for Americans of Japanese ancestry and Old Hawaiians. This cemetery has a total of 179 graves dating back to 1888. The southernmost cemetery in the group is a Catholic cemetery established in 1891. There are 145 graves located within this cemetery.



Figure 23. Protestant Church, Kalaupapa, possibly circa 1907 (although the structure has a shingle roof in this photo). (Source: Hawai'i State Archives, Honolulu; Greene, Figure 19)

92 . Johnson, 43.

93. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*, 35.



Figure 24. Mormon Church, undated photograph. The structure at left may be the 1904-chapel erected at Kalaupapa. (Source: Kalaupapa Historical Society, Kalaupapa; Greene, Figure 139)



Figure 25. Kana'ana Hou Church, located in Kalaupapa, circa 1910s. Note the Kanaana Hou's social hall to the right. (Source: Kalaupapa Historical Society)



Figure 26. Kalaupapa settlement, undated, pre-1906, showing typical whitewashed houses and enclosed fields. The early St. Francis Church is seen in the distance at the far left. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 23)

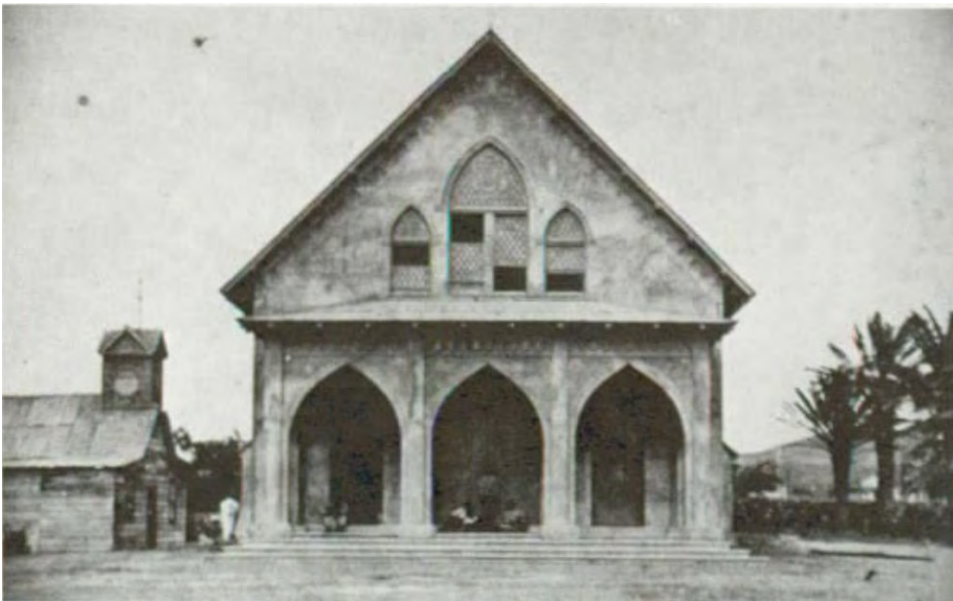


Figure 27. Stone Church of St. Francis, completed 1908. The old church is visible at left, showing repairs made after the 1906 fire. (Source: Damien Museum, Honolulu; Greene, Figure 74)

As the settlement expanded to the west side of the peninsula, additional churches were constructed in this area in order to accommodate the settlement's needs (Figure 23 through Figure 26). In 1899, Our Lady of Health of the Sick was built in Kalaupapa; however, a fire destroyed this church and it was replaced by St. Francis Catholic Church in 1901 on the same site. This church was also destroyed in a fire in 1906, and was later replaced by the second Saint Francis Church in 1908 (Figure 27). During the construction of the second St. Francis Church, a Social Hall was built as well.

In the early twentieth century, residents grew sorghum and alfalfa for cattle, and papaya and pumpkins for hogs. Patients raised beef cattle, dairy cattle, hogs and poultry. Taro was grown in Waikolu Valley and in irrigated fields at Puahi, at the south side of Kalaupapa toward the pali. Potatoes and vegetables

were grown at the sheltered floor of Kauhakō Crater, which was accessed by a trail. The Board of Health paid patients for food produced for local use.⁹⁴

The second major development at Kalaupapa, after the construction of the Bishop Home in 1888, was the construction of the Bay View Home for the Aged and Blind. This facility, which opened in 1900–1901, provided for both male and female patients needing additional care and included a full-time nursing staff (Figure 28). In the summer of 1901, new visitor quarters were constructed at Kalawao. Two dormitories providing additional visitor quarters were constructed at Kalaupapa (Figure 29).⁹⁵



Figure 28. Bay View Home for the Aged and Blind, circa 1907. (Source: Greene, Figure 53)



Figure 29. Guest house constructed in 1906 near the landing. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 30)

94. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*, 35.

95. Greene, 312.

In 1901–1902, the Physician’s House was constructed, with additions in 1905–1906, and 1911–1912. The building was partially destroyed by fire in 1929 and reconstructed in the same year.⁹⁶

In 1902 John McVeigh, superintendent, and Dr. William Goodhue, resident physician, took over the leadership of the Kalaupapa Settlement. With Lucius Pinkham, president of the Board of Health, over the next two decades they created what was considered the best leprosy treatment facility in the world. Under their leadership, activities for the patients were encouraged, and major building programs continued. In early 1903, 6 acres of land in a sheltered valley were cleared for the planting of 4,000 papaya trees.⁹⁷ A new bandstand was erected at Kalaupapa in 1905 (Figure 30). The structure was surrounded with a fence; trees and flowers were planted.⁹⁸ Extensive road repairs were completed in 1905–1906 including the widening of the road from the Baldwin Home to the Board of Health store at Kalawao and repairs to the Pali road and Pali Trail.⁹⁹ A steam laundry was erected at the Poi Factory, in a connected structure; machinery was installed at the laundry in 1906–1907.¹⁰⁰



Figure 30. “Tarry Wile” bandstand, circa 1905–1906, with assistant resident physician’s house in background. (Source: Hawai’i State Archives; Greene, Figure 64)

By 1908, additional new construction included a Bakery in Kalawao (1904); the Physician’s and Assistant Physician’s Houses as well as new stables on Staff Row, a Dispensary, cottages, warehouses, baseball grounds, Bath House, Wood Sawing and Splitting Yard beyond the Poi Factory, a 10,000 gallon water storage tank, and a residence for the mentally ill (Figure 31 through Figure 33). In addition, the wharf, which provided access to Kalaupapa by sea, was expanded with 150 feet of masonry on both sides (Figure 34). A pavilion was added at the landing in 1906–1907.¹⁰¹ The existing St. Francis Catholic

96. Ibid., 319.

97. Ibid., 349.

98. Ibid., 319.

99. Ibid., 364.

100. Ibid., 320.

101. Ibid., 346–347.

Church, which had replaced earlier church destroyed by fire, was rebuilt. At the Bishop Home, construction during this period included a new dormitory, dining room, and bathroom.



Figure 31. Kalaupapa dispensary, built circa 1890, shown circa 1932. (Source: Kalaupapa Historical Society, Kalaupapa; Greene, Figure 29)



Figure 32. Bathhouse at rear of Kalaupapa dispensary, at the shore, 1932. (Source: Kalaupapa Historical Society, Kalaupapa; Greene, Figure 31)

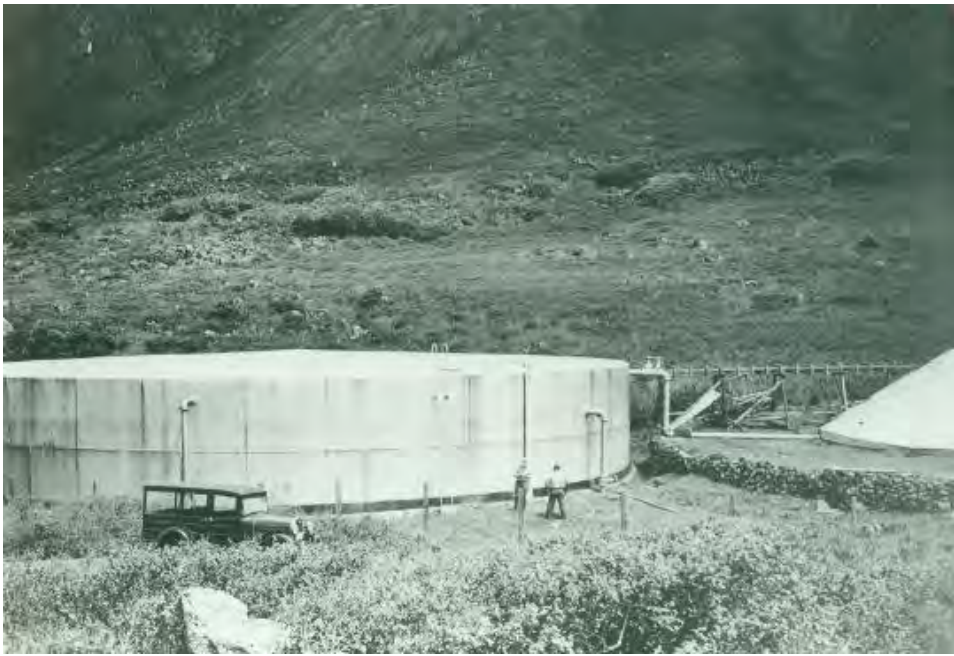


Figure 33. One of the water storage tanks on the peninsula, circa 1930. (Source: Kalaupapa Historical Society)

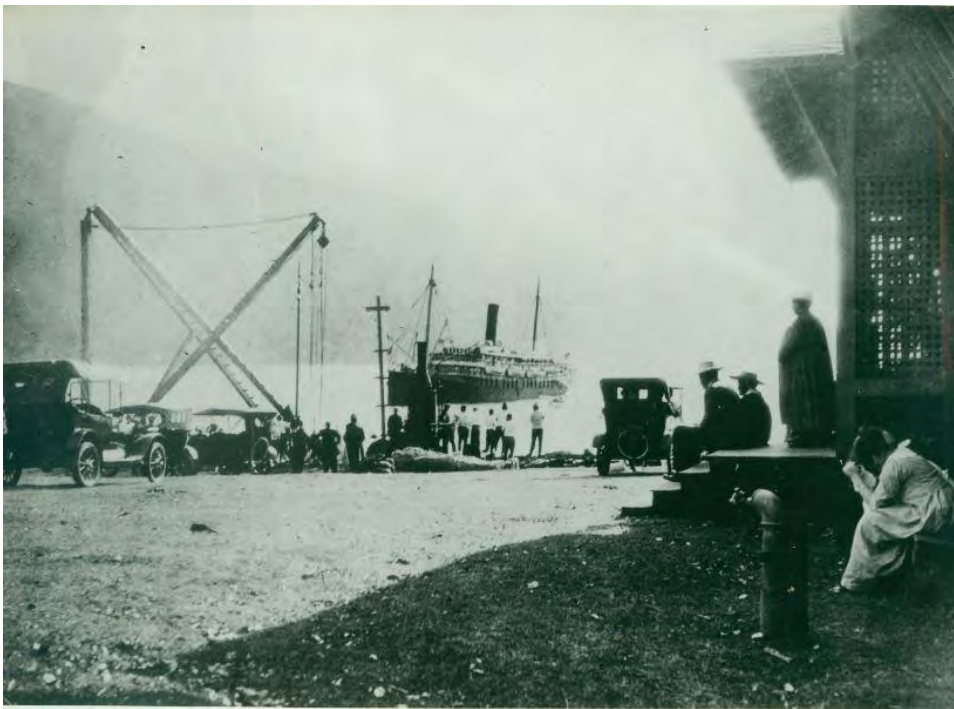


Figure 34. Kalaupapa landing, which allowed for easier access to the peninsula by sea, undated photo. (Source: Kalaupapa Historical Society)

The first Kalaupapa Hospital opened in 1908. Located at the base of the cliffs, the hospital complex included two general and four private wards, an operating room, drug room, nurse's quarters, dressing rooms, dining room, and a kitchen (Figure 35). A ward for patients with other contagious diseases was located in a separate building. The hospital also included a nursery for babies born to patients in the

settlement. Newborn babies were taken from their parents immediately, assuming that this would prevent infection.¹⁰²



Figure 35. View toward the pali, showing the old general hospital buildings, likely prior to 1935–1936. (Source: Greene, Figure 108)

In his annual message to Congress on December 6, 1904, President Theodore Roosevelt, with the support of Surgeon-General Wyman, Governor George R. Carter of Hawai‘i, and the Hawaiian Board of Health, recommended that the Marine-Hospital Service be empowered to establish a hospital and laboratory in the islands to study leprosy.¹⁰³ On March 3, 1905, Congress passed the “Act to Provide for the Investigation of Leprosy,” which included specific reference to the care and treatment of leprosy victims in Hawai‘i. The act gave the U.S. Public Health and Marine-Hospital Service responsibility for building and administering a federal leprosarium.¹⁰⁴ Land at several locations was selected for different functions of the new facility, including 114 acres on the grassy slope above Kalawao Bay for construction of the hospital; 8.9 acres along the coast for a landing site; 4.5 acres around a spring in Waikolu Valley, reserved as a possible future water source; and 502.6 acres in Makanalua as pasture land for livestock.¹⁰⁵ The Kalawao Leprosy Investigation Station opened in December 1909 and included residential, executive, and hospital sections, all surrounded by a double fence.¹⁰⁶ The new U.S. Leprosy Investigation Station was one of the largest public buildings in Hawai‘i (Figure 36). Encouraging patients to enter the institution proved to be difficult, however, as one of the requirements was for the patients to stay at the facility, meaning that they would leave behind their homes, families, and friends. Additionally, residents would be the subjects of studies and experiments. Ultimately, the facility only saw nine patients in total, much less than the number needed to perform any meaningful studies.

102. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*, 35; Greene, 320.

103. Greene, 255.

104. *Ibid.*, 251.

105. *Ibid.*, 258.

106. *Ibid.*, 286–287.

The facility closed in 1913 and remained vacant until 1929, when it was demolished and materials salvaged (Figure 37).¹⁰⁷



Figure 36. U.S. Leprosy Investigation Station with Baldwin Home in the foreground, circa 1910. (Source: Kalaupapa Historical Society)



Figure 37. U.S. Leprosy Investigation Station, circa 1913. The Baldwin Home is in the foreground with pasture and clothes washing and drying houses visible near the sea. (Source: National Archives, Washington, D.C.; Greene, Figure 51)

After Hawai‘i was annexed to the United States, the Lighthouse Board was placed in charge the Hawaiian lighthouse service in 1903. A light and fog signal was to be established on the north shore of Molokai, and an area of 21.6 acres was reserved for the station in 1908. Plans were prepared for a reinforced concrete tower and three concrete dwellings with an oil house. The concrete and ironwork tower was completed in early June 1909 and station was placed in commission early in fiscal year 1910.¹⁰⁸ The facility was expanded with construction of a garage in the 1920s.

Kalaupapa saw more development in the 1910s, with construction of the McVeigh Home for White Foreigners in 1910. The housing complex, which was established to help meet the dietary needs of the small

107. Johnson, 44, citing Information and quotes from Jerrold M. Michael, “The Public Health Service Leprosy Investigation Station on Molokai, Hawai‘i, 1909-1913: An Opportunity Lost,” *Public Health Reports* 95, no. 3 (May-June 1980): 204-206.

108. Greene, 373–374.

number of non-Hawaiian patients, who often did not care for the poi and sought more coffee, flour, sugar, and potatoes in their diets than were offered. Named for John McVeigh, superintendent of the settlement, the building opened in August 1910. As of 1912, the building consisted of twenty-five bedrooms, a hospital ward, a dining room, social hall, and a veranda that was present on three sides of the building's exterior.¹⁰⁹ Although originally intended to house non-native Hawaiians, many early residents preferred the freedom afforded by living in the cottages in other areas of the settlement, and by 1913, the building housed only eight residents. As a result, in 1914, all nationalities were allowed to live in the building. The original McVeigh Home was destroyed in a fire in 1928 and a new McVeigh Homes was built during the 1930s.¹¹⁰

Other developments during this time included the construction of a slaughterhouse and hide house in 1910–1911.¹¹¹ A slaughterhouse had previously been operated at Kalawao, and was overseen by Saint Damien during his time at the settlement.¹¹² A hog ranch was established near the slaughterhouse during this time.¹¹³ In 1915, the Protestant Kana'ana Hou Church was constructed, replacing an earlier church.

In 1913–1914 residents planted approximately 300 coconut trees throughout the community and in 1916, thousands of eucalyptus trees were planted.

A new social hall (Paschoal Hall) was erected at Kalaupapa in 1916.¹¹⁴ The social hall, which measured 110 feet by 40 feet in plan and included a hall and a stage, was used for movies, live theatrical performances, dances and other events. The hall had a capacity of three-hundred-fifty.

The new Bay View Home was built in 1917 after the original was destroyed by a fire in 1914–1915. The facility contained enough rooms to house ninety-six patients and included a kitchen and two dining rooms. The rebuilt Bay View Home contained four residential buildings. In 1918, the grounds around the new buildings were graded and grass was planted; fruit and ornamental trees were added.

At this time, as the overall quality of life improved in terms of living conditions, however, segregation and surveillance increased. Visitors were kept at the visitors' quarters and were prevented from coming into contact with patients. Punishments became more severe for the possession of alcohol and firearms.¹¹⁵

During the 1920s, the Board of Health began treatments using chaulmoogra oil due to promising reports from a leprosy home located in Louisiana. As these treatments progressed, it became apparent that the chaulmoogra oil treatment was not successful. Any wish that the settlement could eventually be closed faded, and the focus was shifted once again to developing the settlement and managing the patients.¹¹⁶

109. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*, 35–36; Greene 310–311.

110. Greene, 310–311.

111. *Ibid.*, 348.

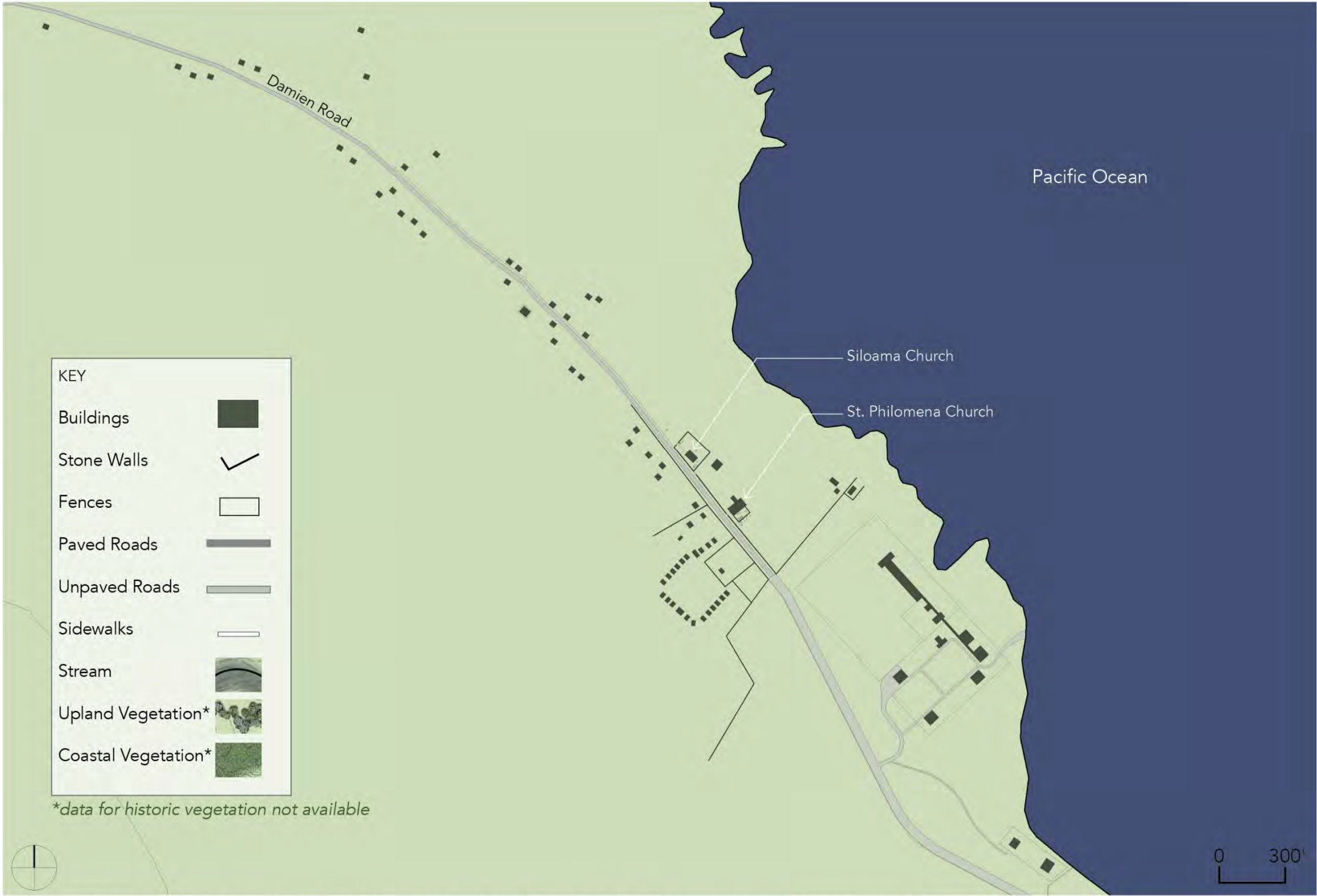
112. Greene, 195.

113. *Ibid.*, 354.

114. Johnson, 45, citing Greene, *Exile in Paradise*, 251–292.

115. *Ibid.*, citing Moran, *Colonizing Leprosy*, 106–108.

116. *Ibid.*, citing Law, *Kalaupapa*, 370–371.



Source material: "Kalaupapa Peninsula – 1908. Kalaupapa National Historical Park," U.S. Department of the Interior, National Park Service. Adapted from map titled "Portion of Leper Settlement Molokai," Hawaii Territory Survey, Walter E. Wall, Surveyor. Survey and Map by W.L. Heilbron, August 1908.

"U.S. Leprosy-Investigation station – 1908" Adapted from map titled "Location Plan," U.S. Leprosy-Investigation Station, Kalawao, Molokai, P. October 21, 1908." U.S. Department of the Interior National Park Service, September 1984.

Figure 38. Kalawao, 1866-1909

Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii

Period Plans - Kalawao, 1866 -1909



KEY	
Buildings	
Stone Walls	
Fences	
Paved Roads	
Unpaved Roads	
Sidewalks	
Stream	
Upland Vegetation	
Coastal Vegetation	

**data for historic vegetation not available*

Source material:
"Kalaupapa Peninsula – 1908. Kalaupapa National Historical Park," U.S. Department of the Interior, National Park Service. Adapted from map titled "Portion of Leper Settlement Molokai," Hawaii Territory Survey, Walter E. Wall, Surveyor. Survey and Map by W.L. Heilbron, August 1908.

Kalaupapa and Kalawao Settlements
Cultural Landscape Report
Molokai, Hawaii

Period Plans - Kalaupapa Settlement,
1866 -1909

Figure 39. Kalaupapa Settlement 1866-1909

Kalaupapa Revitalization Period (1931–1938)

For a map of Kalawao and Kalaupapa during this time period, refer to Figure 59 Kalawao, 1909–1942, and Figure 60, Kalaupapa Settlement, 1909–1942.

In 1929, Territorial Governor Lawrence M. Judd created a new advisory committee to evaluate conditions at Kalaupapa, with the intent of making improvements to the settlement. The advisory committee called for construction of a modern hospital, as well as expansion of social welfare programs, and rebuilding of housing and other facilities.¹¹⁷ In response to the commission's report, administrative and physical changes were implemented at the settlement.

In 1931 the Board of Health gave control over the leprosy program to Hawai'i's Board of Hospitals and Settlement. Additionally, a biannual construction budget of \$375,000 was approved for Kalaupapa, with an additional \$875,000 approved for the operating expenses associated with the facilities in the settlement.¹¹⁸ The territorial legislature authorized construction of a modern hospital; some restrictions relating to the compulsory segregation of patients were eased, a social welfare program implemented, and the rebuilding of Kalaupapa Settlement undertaken.

In order to create a more comfortable, familiar living environment at Kalaupapa, one of the goals of the new construction was to recreate the way of life in a typical Hawaiian community while also working within the constraints of the segregation policy, thus disassociating Kalaupapa from the feeling of traditional American isolation hospitals. To achieve this goal, construction included residential cottages, a Post Office, an Automobile Service Station, an Ice Plant, a Poi Shop, a Central Laundry, and a Community Store (Figure 40).¹¹⁹ For entertainment, tennis, basketball, and volleyball courts were constructed for resident use.

With these efforts improved the patients' quality of life, Judd hoped that people outside the settlement would be encouraged to seek help for leprosy, instead of fearing the facility to which they could potentially be sent for treatment. Having patients come forward would also help the government to understand the extent of leprosy in Hawai'i.

By 1938, almost the entire settlement was rebuilt. Construction and remodeling was completed at McVeigh Home, Bay View Home, Baldwin Home in Kalaupapa, and the Bishop Home (Figure 41). A social hall (later known as Paschoal Hall) was remodeled, with improvement of the grounds. During the 1930s, patients at the time participated in a variety of social clubs, including Japanese, Filipino, and Chinese clubs, and a women's social club (Figure 42). Individual patient-owned beach houses were constructed.¹²⁰

117. Johnson, 46, citing Report cited in Moran, *Colonizing Leprosy*, 138.

118. Ibid.

119. Ibid.

120. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*, 36–37.



Figure 40. Kalaupapa store and service station, completed 1934, shown in 1984. (Source: National Park Service; Greene, Figure 125)



Figure 41. Kitchen (left) and dining room (right) of Bay View Home, circa 1930s. (Source: Kalaupapa Historical Society; Greene, Figure 98)



Figure 42. Chinese clubhouse, undated. (Source: Kalaupapa Historical Society; Greene, Figure 143)

In 1930–1938, the McVeigh Home, which had been destroyed by fire in 1928, was rebuilt. In 1930, plans were developed for two new eleven-room dormitories to replace the facilities destroyed during the November 1928 fire. Work also included construction of fourteen additional cottages, which were completed in 1931–1932.¹²¹ The new facility contained two twelve-room dormitories, twenty-one two-room cottages, two four-room cottages, one older cottage, a central kitchen/dining room, laundry, hot water plant, recreation pavilion, and garages (Figure 43 through Figure 47). All quarters had electricity, indoor plumbing and hot water.¹²²

121. Greene, 390.

122. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*, 36.

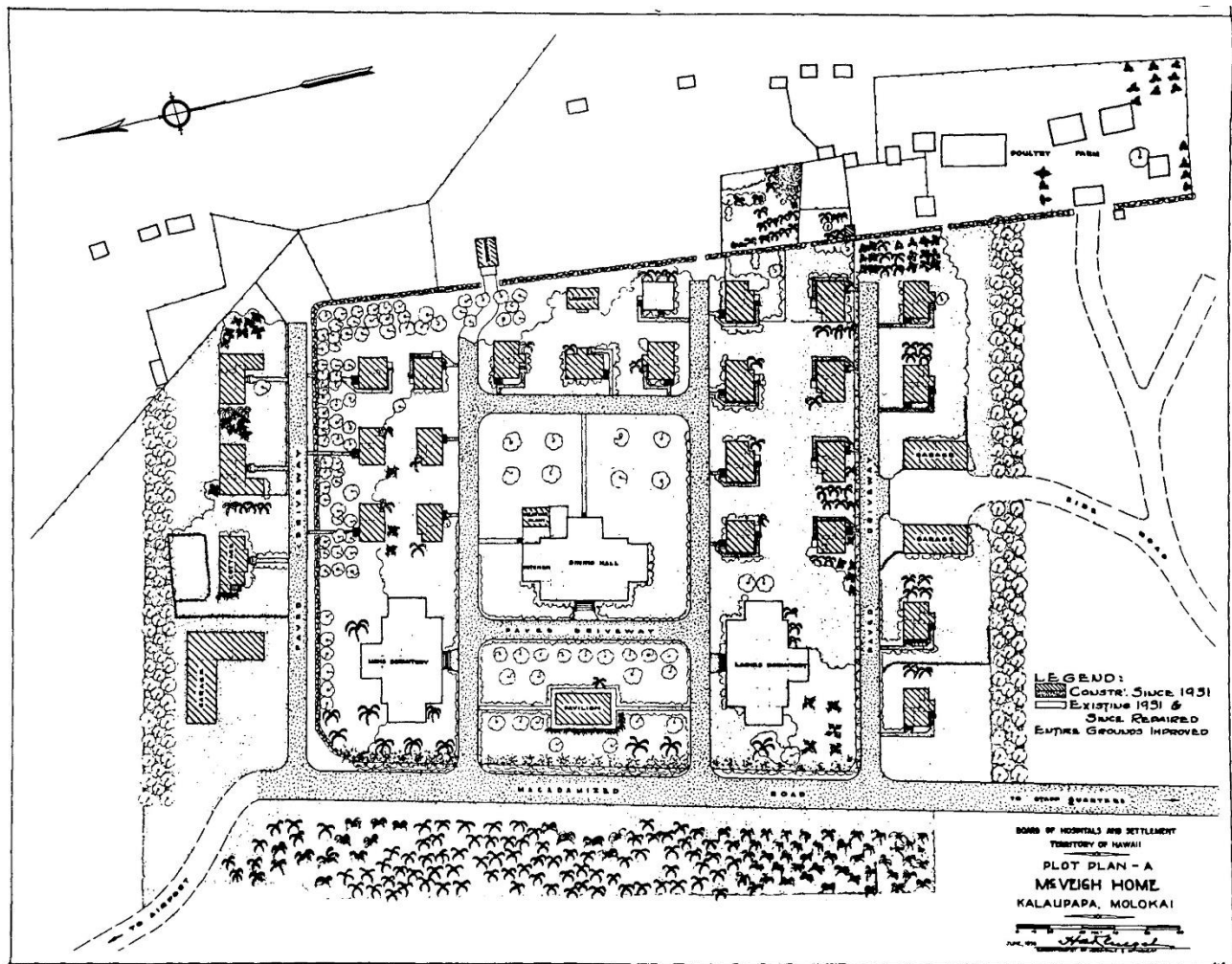


Figure 43. Plot plan A, McVeigh home, Board of Hospitals and Settlement, June 1938. (Source: Annual Report for the Fiscal Year Ended Jun 30, 1938; Greene, Figure 90)



Figure 44. The new McVeigh Home completed following a fire that destroyed the original complex, undated. (Source: Kalaupapa Historical Society)



Figure 45. Patient cottages, McVeigh Home, early 1930s. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 94)



Figure 46. Heating plant, McVeigh Home, 1931–1932. (Source: Kalaupapa Historical Society, Kalaupapa; Greene, Figure 95)



Figure 47. Recreation pavilion at McVeigh Home, 1983, completed 1931–1932. (Source: National Park Service; Greene, Figure 96)

Starting in 1931, an additional twelve cottages for patients were constructed by local carpenters from Molokai in the residential area on the east side of Kalaupapa. These cottages, known as “A Homes,” each included two bedrooms, kitchen, dining room, bathroom, and living room. Running water and electricity were also supplied to the twelve new cottages.¹²³ Major repairs were done on 25 other residences and dormitories, while 24 uninhabitable buildings in the settlement were demolished.

A new Kalaupapa Hospital opened on July 1, 1931, displacing twelve cottages and numerous outbuildings which were demolished (Figure 48). The hospital had a capacity of 50 beds, maternity ward, operating room, x-ray room and laboratory, dining room, kitchen, storeroom, staff offices, boiler room, incinerator and laundry. The new hospital modernized the medical treatment capabilities of the settlement. With the construction of the hospital, all residents from Kalawao were moved to Kalaupapa, ending Kalawao’s time as a settlement for patients.¹²⁴ A mental ward was added to the Kalaupapa Hospital complex in 1935–1936 (Figure 49).¹²⁵

Staff Row also saw further expansion in the 1930s, with the addition of the Electrician’s Residence and a nurses’ cottage, also known as the residence for single women, in 1932.¹²⁶ Other buildings constructed at staff row included residences for the superintendent, resident physician, and assistant physician (Figure 50 and Figure 51).¹²⁷



Figure 48. General Hospital, opened 1931, undated. (Source: Hawai’i State Archives, Honolulu; Greene, Figure 106)

123. Johnson, 47; Greene, 412.

124. Johnson, 47.

125. Greene, 413.

126. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*. (Electricity had been provided to the settlement previously via overhead lines and generating plants; see Mason Architects for CH2MHill, *Determination of Eligibility for the Kalaupapa Electrical System*.)

127. Greene, 424.



Figure 49. Former mental ward building, 1983. The building was later used as a fumigation room. (Source: National Park Service; Greene, Figure 30)



Figure 50. Superintendent's residence on Staff Row, Building No. 5, 1983. (Source: National Park Service; Greene, Figure 27)



Figure 51. Resident physician's residence, 1932, after reconstruction. (Source: Kalaupapa Historical Society, Kalaupapa; Greene, Figure 59)

The 1930s saw the Bishop Home complex almost entirely rebuilt (Figure 52 and Figure 53). Additions to the complex included a new entrance, a flagpole, sidewalks, pedestrian gates, and a road to a dining hall, and additional roads around the complex were paved. Two cottages were added along with a new Social Hall, a Storeroom, Boiler Plant, Dining Room, and Laundry (Figure 54).¹²⁸



Figure 52. Sisters' cottage, Bishop Home, constructed 1934, undated. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 101)

128. Ibid., 399.



Figure 53. New chapel, Bishop Home, restored and enlarged 1934, undated. (Source: Kalaupapa Historical Society, Kalaupapa; Greene, Figure 102)



Figure 54. New social hall, Bishop Home, completed 1932. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 100)

The cemeteries were also developed with perimeter walls and fences, and vegetation. Maintenance of these cemeteries was vital due to the fact that as many as two or three people died every day due to complications relating to Hansen's Disease. Initial life expectancy before the discovery of treatment for the disease was about five years.¹²⁹

129. Juvik, *Ethnographic Study*, 26.

Other construction during this time period included a Police Headquarters (at the former courthouse), Department of Health Motor Pool Garage, Gas Station, and General Warehouse. Two dormitories were constructed in 1932 for visitor accommodations, together with a separate dining room and kitchen unit.¹³⁰

The Baldwin Home for Boys in Kalawao was abandoned in 1932 (after the death of Brother Dutton the previous year), marking the end of an era in that settlement's history and appearance. Patients were moved to Kalaupapa into the original Kalaupapa Hospital next to the cliffs, which was converted into a home for 30 to 35 patients. The complex was still called Baldwin Home for Boys though commonly referred to as New Baldwin Home (Figure 55 and Figure 56). The remains of the old Baldwin Home in Kalawao were destroyed by fire in 1936.¹³¹

In 1934–1936, four more cottages were built, and another twenty-three cottages were remodeled.¹³² Beginning in the 1930s and continuing into the 1940s, many houses were updated by the Department of Health. Improvements included increased accessibility so that residents could be more self-sufficient. Typical changes included replacing door knobs with levers and installing wheelchair ramps where necessary.¹³³ This work continued through 1937–1938 (Figure 57 and Figure 58).



Figure 55. New Baldwin Home, 1949, showing refurbishment and repainting of old hospital buildings. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 109)

130. Greene, 425.

131. Ibid., 413.

132. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*.

133. Johnson, 147, from a conversation between Edwin Lelepali and Richard Miller, exhibit specialist, November 27, 2015.



Figure 56. Catholic brothers' cottage at New Baldwin Home, undated photograph. (Source: Kalaupapa Historical Society; Greene, Figure 110)



Figure 57. Kalaupapa patient's cottage, undated, possibly 1930s. (Source: Greene, Figure 66)



Figure 58. An example of house style 4A, soon after construction in 1931. (Source: Kalaupapa Historical Society; Greene, Figure 104)

St. Francis Catholic Church also built a new Rectory on its property. In 1935 a residence was built to function as a Rectory for the Church of Latter-day Saints, and in 1940 a parish hall was constructed for the church.

In 1929, the field located across from the cemeteries at Papaloa was converted to an airstrip. The strip was constructed from 1931–1933 and opened in August 1933. A 1,900 foot runway was constructed at the airfield, allowing aircraft to bring supplies, workers, and visitors to Kalaupapa. This was a significant development for the settlement, as previously access to the settlement was either by sea or by the Pali Trail.¹³⁴ Inter-Island Airways maintained frequent service (although not regular), and army and navy planes made occasional landings. Reliance on travel via the Kalaupapa Trail diminished as airplanes brought in food and people, and interisland steamers brought in supplies. Mail, however, was still brought in by horse and mule on the pali trail.¹³⁵ This practice continued until 1950, when daily airmail service was established between Honolulu and Kalaupapa.¹³⁶

Additions were made to the power plant, water system, and power distribution system; in 1933 the Molokai Electric Company began to supply power to the settlement. Fire hydrants and streetlights were added to Kalaupapa's streets. The purchase of a rock crusher, road roller and other equipment allowed for the paving of roads and parking spaces throughout the settlement. Sidewalks were also added at this time. A plant nursery was established with banana and coconut trees and other planting materials for the use of patients in their yards and gardens. A telephone connection was made so the superintendent could order supplies of food.¹³⁷

In 1937 improvements to Kalaupapa's water system were made, the first permanent changes to the system since before the turn of the century. This work included the construction of a new dam at Notley Springs (the secondary source of water supply, after Waikolu Valley), replacement of wooden flumes with concrete

134. Johnson, 47; citing Greene, *Exile in Paradise*, 513.

135. Greene, 413.

136. Johnson, 51.

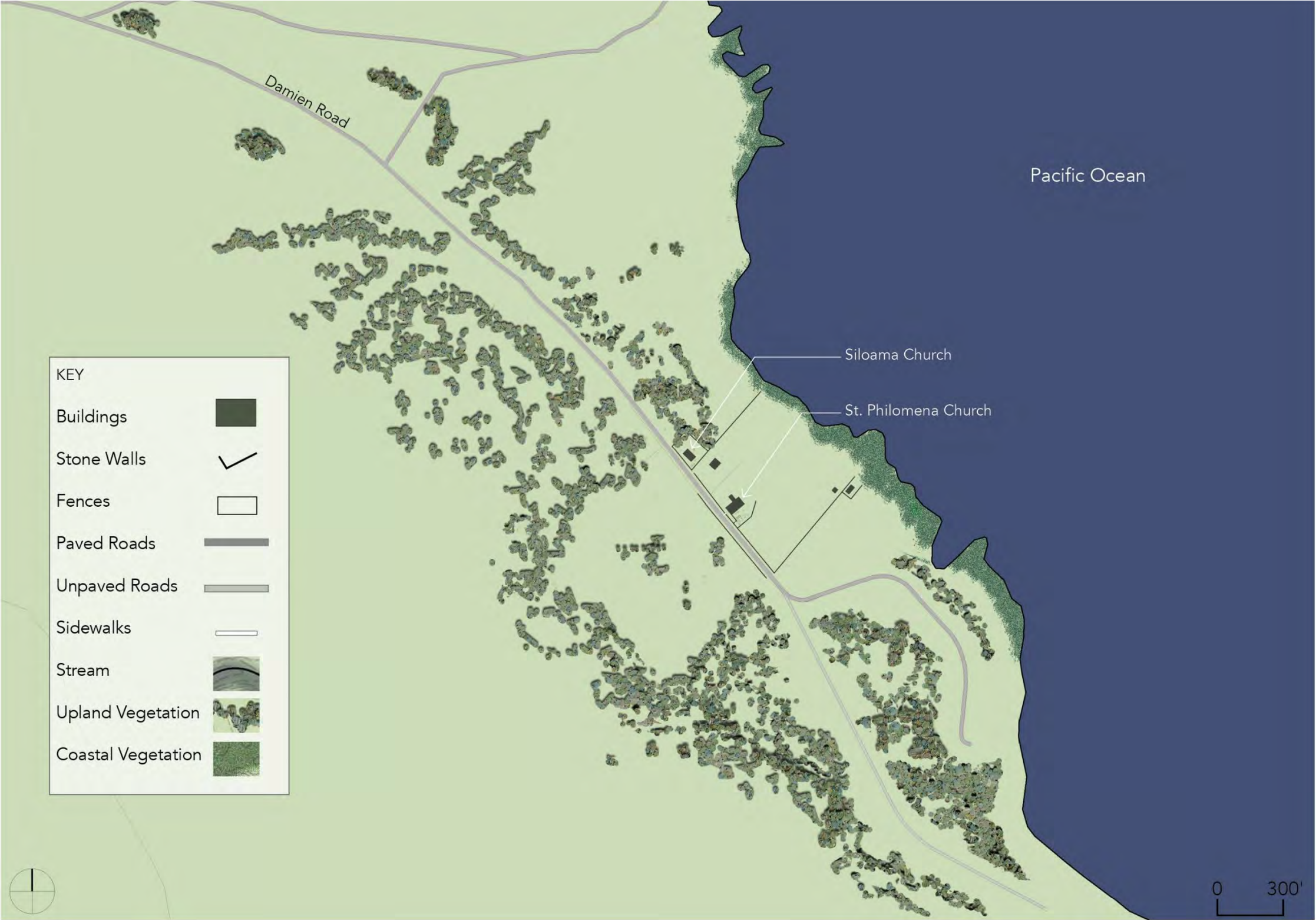
137. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*, 36.

culverts and the addition of cast iron pipes as well as new aeration, sedimentation, and branching and valve systems.¹³⁸

Though many improvements were made since the beginning of the twentieth century, these improvements did not alleviate the separation of the patients from their families, their homes, and the rest of society. Patients began using salvaged materials to construct beach houses as an escape from the regulation and surveillance present in the rest of the settlement. These beach houses were used for parties, gambling, and other social events by the patients at Kalaupapa.¹³⁹

138. Greene, 520–521, citing Board of Hospitals and Settlement, Territory of Hawaii, *Annual Report for the Fiscal Year Ended June 30, 1938*, 30–32.

139. Johnson, 49, citing Langlas, et al., *Kalaupapa 2002-2005*, 99.



Source material: Aerial orthoimagery, 1938 (<http://miles.giscenter.isu.edu/kalaupapa/overview.html>).

Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii

Period Plans - Kalawao, 1909 -1942

Figure 59. Kalawao, 1909-1942



KEY	
Buildings	
Stone Walls	
Fences	
Paved Roads	
Unpaved Roads	
Sidewalks	
Stream	
Upland Vegetation	
Coastal Vegetation	

Source material:
-Aerial orthoimagery, 1938 (<http://miles.giscenter.isu.edu/kalaupapa/overview.html>)
- "Bay View Home Kalaupapa," Governor's Advisory Committee on Leprosy. H.A. Kluegal, C.E., August 1930.
- "Bishop Home for Girls, Kalaupapa," Governor's Advisory Committee on Leprosy. H.A. Kluegal, C.E., August 1930.
- "Industrial Center Kalaupapa," Governor's Advisory Committee on Leprosy. H.A. Kluegal, C.E., August 1930.
- "Kalaupapa Settlement – 1939. Kalaupapa National Historical Park," U.S. Department of the Interior, National Park Service. Adapted from map titled

"Hawaii Territory Survey, L.M. Whitehouse, Surveyor. Survey and Map by Thos. J.K. Evans, November 1939.
-National Historic Landmark Nomination - Kalaupapa Leprosy Settlement Historic District, U.S. Department of the Interior, National Park Service. June 2016.
- "Plot Plan – A, Bay View Home," Kalaupapa, Molokai, Board of Hospitals and Settlement Territory of Hawaii. June, 1938.
- "Plot Plan – A, Bishop Home," Kalaupapa, Molokai, Board of Hospitals and Settlement Territory of Hawaii. June, 1938.
- "Plot Plan – A, Calvinist Mission," Kalaupapa, Molokai, Board of Hospitals and Settlement Territory of Hawaii. June, 1938.
- "Plot Plan – A, Industrial Center," Kalaupapa, Molokai, Board of Hospitals and Settlement Territory of Hawaii. June, 1938.
- "Plot Plan – A, Kalaupapa Hospital," Kalaupapa, Molokai, Board of Hospitals and Settlement Territory of Hawaii. June, 1938.
- "Plot Plan – A, Staff Row," Kalaupapa, Molokai, Board of Hospitals and Settlement Territory of Hawaii. June, 1938.

Kalaupapa and Kalawao Settlements
Cultural Landscape Report
Molokai, Hawaii

Period Plans - Kalaupapa Settlement,
1909-1942

Figure 60. Kalaupapa Settlement, 1909-1942

Kalaupapa in the Modern Era (1939–1969)

For a map of Kalaupapa during this time period, refer to Figure 69, Kalaupapa Settlement, 1942–1969.

The rehabilitation and construction program that began in the early 1930s came to a halt in 1938. Following the completion of the many planned improvements, few other changes occurred within the settlement following the Japanese attack on Pearl Harbor in 1941 and the entrance of the United States into World War II.

As a result of the war, life at Kalaupapa changed abruptly. Almost immediately after the Japanese attack on Pearl Harbor, Hansen's disease patients at Kalihi Hospital in Honolulu were evacuated to Kalaupapa. As a result, a new school was established, and Boy Scout and Girl Scout troops were organized to provide for the social and educational needs of the children (Figure 61).¹⁴⁰ General supplies and provisions were stockpiled in larger amounts than previously, in case of interruptions to transport. To accommodate the new residents and larger amounts of reserves, quarters were expanded, additional warehouses provided, and vegetable gardens increased in size; Victory Gardens were a particularly successful effort during World War II.¹⁴¹

Throughout the remainder of the war, access to Kalaupapa was limited as steamer service and flights into Kalaupapa Airport were cancelled. Mail service was also suspended at this time. As a result, patient family members and friends were not permitted to visit the settlement, rendering life even more isolated.¹⁴²



Figure 61. One of the Boy Scout troops established at Kalaupapa during the 1940s. (Source: Kalaupapa Historical Society)

Soon after the war ended, discovery of new treatments for Hansen's disease would forever change the lives of resident patients at Kalaupapa. The first successful medicinal treatment of leprosy occurred in 1946 with the introduction of sulfone drugs. These drugs were first used in 1941 at the U.S. National Leprosarium in

140. Johnson, 50.

141. Greene, 524, citing *Summary of Department Activities, Hawaii, Board of Hospital and Settlement: A Brief Summary of the Report for the Year Ended June 30, 1941*.

142. Johnson, 50.

Carville, Louisiana. As a result of the new treatment, those with leprosy became non-infectious and the physical effects due to the disease became less severe.¹⁴³ With the discovery of a cure for the disease in 1946, some in the medical profession began to question the policy of segregation, but in Hawai‘i, segregation continued to be the official policy of the government. At the same time, as a result of the new developments for the treatment of leprosy, a new residential treatment facility for patients with Hansen’s disease opened in Pearl City, on the island of Oahu, replacing the Kalihi Hospital. With the new facility, new patient admissions at the settlement declined sharply.¹⁴⁴ Between 1949 and 1969, only thirty-two new patients transferred to Kalaupapa.¹⁴⁵

On April 1, 1946, a large tsunami struck the west side of Molokai, significantly affecting Kalaupapa. The water level rose approximately 25 feet above normal at the Kalaupapa dock and approximately 55 feet above normal at the mouth of Waikolu Valley. In the settlement, the wave damaged several structures in the industrial area, washed away twelve beach houses, the Mormon Church along Kamehameha Street, and destroyed infrastructure including 1500 feet of water lines. The cemeteries along the shore were heavily damaged, with gravestones moved off their foundations, fences and stone walls washed away, plantings destroyed, and shoreline erosion effectively erasing some burial locations.¹⁴⁶

Lawrence M. Judd, former governor of Hawai‘i, was appointed resident superintendent of Kalaupapa in 1947. Judd, along with his wife Eva Marie, sought to improve the quality of life for the patients at Kalaupapa. In addition to establishing new education and vocational activities and clubs, Judd abolished several regulations forbidding patient contact with visitors and staff. Among the changes implemented by Judd was the removal of several physical barriers at Kalaupapa, including wire netting in the visitors’ pavilion and the fence that divided visitors from patients, picket fencing at Staff Row, and the guarded gate located at the top of the Pail Trail.¹⁴⁷ Additionally, the unpopular practice of fumigating mail leaving the settlement was also ended.¹⁴⁸ For the first time since establishment of the isolation settlement in 1866, residents were permitted to leave the settlement, while notable persons, particularly entertainers, were encouraged to visit the settlement.¹⁴⁹

Henry Hori, a carpenter who was sent to Kalaupapa when he was diagnosed with leprosy in 1936, regained his health in 1945 after praying to God and vowing to build a large cross if he recovered. Hori, with the assistance of Boy Scouts, built a large wood cross at the rim of Kauhakō Crater.¹⁵⁰ In 1956, Hori erected a new concrete cross with assistance from the Lions Club.¹⁵¹

In 1948, the craft shop/bakery/beauty shop at the corner of Beretania and Kamehameha Streets was destroyed by a fire (Figure 62). The building was reconstructed the following year, at which time it was used as a craft shop, complete with looms, worktables, sewing machines, and ceramic kiln. The shop soon had twenty-seven

143. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*. The introduction of sulfone drug treatments helped make progress toward destigmatizing the disease and those afflicted. In the 1940s, residents of the US National Leprosarium in Carville sought to replace the term “leprosy” with “Hansen’s disease,” named for Gerhard Hansen’s who in 1873, discovered the leprosy bacterium. In 1949, the Territory of Hawai‘i adopted the term “Hansen’s disease” replacing “leprosy.”

144. Johnson, 50.

145. Ibid., 50.

146. Ibid., 166, Greene, 525, 534.

147. Johnson, 50.

148. Ibid., 50.

149. Ibid., 50.

150. “Love Never Faileth,” *Ohana Conections: Family Stories*, http://www.kalaupapaohana.org/Newsletters/news_pg6.html, accessed August 2019.

151. Johnson, 52.

employees, with a craft club also organized.¹⁵² In 1948, repairs were also implemented at Siloama Church (Figure 63).



Figure 62. Craft shop, formerly the bakery, 1949. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 166)



Figure 63. Siloama Church in Kalawao undergoing repair work, 1948. (Source: Kalaupapa Historical Society)

In 1950, direct airmail service between Kalaupapa and Honolulu was established. Previously, all mail into the settlement arrived via the Pali Trail and the 'Ili'ilikā trail (Figure 64).¹⁵³ A wood landing ramp was constructed at Kalaupapa Landing in 1954.¹⁵⁴ From 1956 through 1958, several of the McVeigh Home quarters, including nine cottages and four apartments were converted for use by patients who did their own housekeeping. Nine

152. Ibid., 139–140.

153. Ibid., 51.

154. Greene, 558.

new cottages were constructed at McVeigh Home in 1956.¹⁵⁵ Of the eighty-one separate cottages that were available at the time, forty were occupied by married couples.¹⁵⁶ Additional street paving was completed in 1956 and 1958.¹⁵⁷ In the 1950s, a new picnic pavilion for the use of residents and their families—named for Lawrence Judd— was constructed at Kalawao near the site of the former US Leprosy Investigation Station.¹⁵⁸ The social hall was renamed Paschoal Community Hall in 1958, after Manuel G. Paschoal, a longtime proponent for the people of the Kalaupapa settlement (Figure 65).

During the 1940s and 1950s, Ed Kato, a self-taught artist began painting signs throughout the settlement. Some signs were painted on wood, while others were painted rocks. Some of the Kato's more notable signs include a painted rock with a yellow smiley face, and a wood sign marking the entrance to the Saint Marianne grave marker.¹⁵⁹



Figure 64. Mail being moved along the Pali Trail before airmail became available. (Source: Kalaupapa Historical Society)

155. Ibid., 561.

156. Ibid., 558.

157. Ibid., 562.

158. Ibid., 552.

159. Johnson, 52–53.



Figure 65. Social hall, 1949. The building was renamed Paschoal Hall in 1958. Note the sign for the Police Headquarters at the left end of the building. (Source: Greene, Figure 165)

With the number of new residents declining, and the current population aging, a number of physical changes were made to Kalaupapa during the 1950s and 1960s (Figure 66). With the population continuing to decline through the 1950s, a number of facilities were closed or converted to different uses, with several residences altered in order to meet modern standards. In 1951, residents of the New Baldwin home were relocated to the Bay View Home. At the same time, a surplus Quonset hut from Pu‘u nēnē Maui Naval Air Station was reconstructed adjacent to the Bay View Home to serve as a dormitory. Other surplus Quonset huts brought from the Naval Air Station were reconstructed at the settlement for use as warehouses and housing for staff. Following the relocation of residents, building materials were salvaged from the New Baldwin Home, while entire sections of the building were also moved in 1951.¹⁶⁰ By 1951, non-patient dormitories were moved to five Quonset huts obtained from the Navy in 1950 (Figure 67). Evaluation of the residential structures at the settlement revealed that about one-third of the homes were beyond repair.

160. Ibid., 51.



Figure 66. Aerial view of Kalaupapa settlement, 1950. (Source: U.S. Army photo, Bishop Museum, Honolulu; Greene, Figure 167)

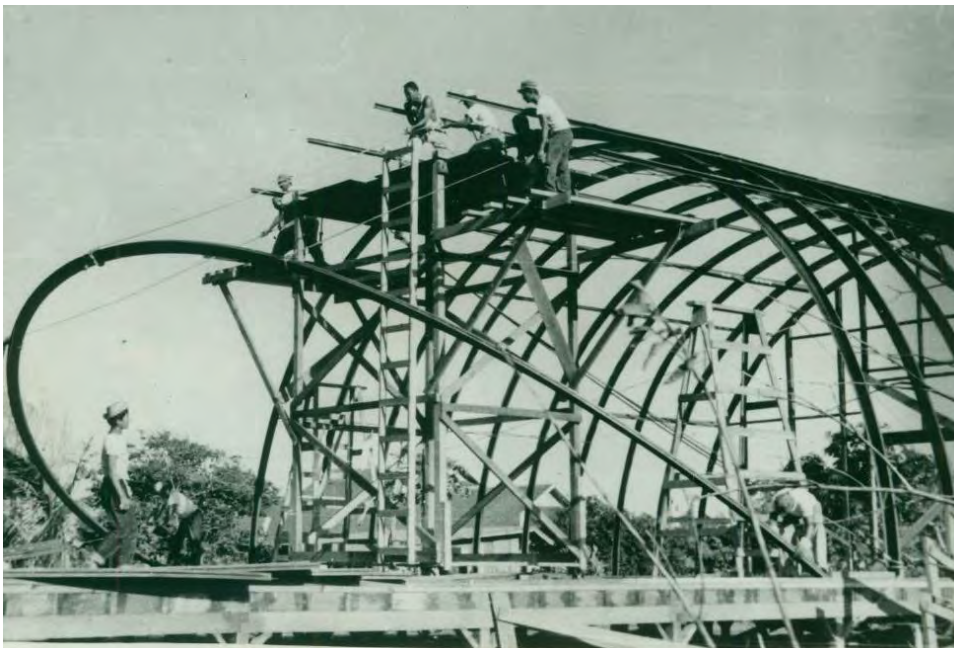


Figure 67. One of the Quonset huts being constructed in 1949. (Source: Greene, Figure 165)

With the introduction of airmail service, the road between the settlement and Kalaupapa airport was paved.¹⁶¹ The airstrip and adjacent roads were also paved between 1953 and 1960.

In 1951, additional funds were requested for the continued operation of Kalaupapa.¹⁶² Around this time, some residents of Kalaupapa began to lobby the Hawaiian government to repeal the law calling for the segregation of patients afflicted with Hansen's disease while providing new accommodations for outpatient care.¹⁶³

A new library was built in 1956 along Puahi Street. Renovations were made to the St. Philomena and Siloama churches during this time. A Maintenance Building was also constructed for the Kana'ana Hou Protestant Church during this time.

In 1957, five residents of the settlement were granted concession contracts, allowing them to operate a guided tour and taxi service.¹⁶⁴

During the 1950s and 1960s, many of the stone walls that separated individual yards and created boundaries for the group homes were dismantled and crushed and used for road maintenance. At the same time, with segregation no longer a high priority, fences throughout the settlement fell into disrepair, with many removed.¹⁶⁵

In response to an increase in patients calling for the end to the policy of isolation, the Superintendent's Residence was converted into a dining room and kitchen for the settlement's residents (Figure 68).

Although several buildings and site features were dismantled during the 1950s and 1960s, some new construction occurred at Kalaupapa during this time. This generally entailed construction of numerous prefabricated single-family residences to improve living conditions for patients. The units, known as Hicks Homes, were built in three phases beginning in 1956 and ending in 1964.¹⁶⁶

In the early 1960s, a dormitory at Bay View was dismantled. By this time, only two cottages, the chapel, and convent remained at the Bishop Home.¹⁶⁷

Other construction in the 1960s included a new Administrative Building (1961) along Beretania Street, a multi-purpose recreation court (1960–1961) near Paschoal Hall, a storage shed/carport (by 1964; one of several built throughout the settlement in the second half of the twentieth century) at a residence on Goodhue Street, and the Lions Pavilion (1965).

In 1963 the historic Siloama Church was demolished; it was rebuilt in 1966 (a reconstruction based on its historic appearance). A new Mormon Church was built in 1965 in the same location as the one destroyed by the tsunami in 1946 (refer to Figure 24). A Parish Hall was added to the existing cluster of structures at the Kana'ana Hou Protestant Church in 1968.

161. Ibid., 51.

162. Ibid., 51–52.

163. Ibid., 52.

164. Ibid., 51.

165. Ibid., 51.

166. Ibid., 51.

167. Ibid., 51.



Figure 68. Superintendent's residence on Staff Row, 1949. (Source: Hawai'i State Archives, Honolulu; Greene, Figure 111)

The numerous calls for reform eventually resulted in the Department of Health establishing the Citizens' Committee on Leprosy. Bernard Punakai'a and Anita Una represented the Kalaupapa Patients' Council on the committee, which was also made up of medical professions and prominent citizens of Hawai'i. The committee released a report in March 1969, which stated that isolation had little positive effects in controlling the disease, and as a result recommend the isolation law be rescinded.¹⁶⁸ Based on the committee's recommendations, as well as budget constraints, the Hawai'i Department of Health determined the isolation policy to be obsolete later in the same year. Hawai'i Revised Statute 326 officially ended the isolation policy and called for those diagnosed with Hansen's disease to be treated on an outpatient basis.

168. Ibid., 53–54.



Source material:
Aerial orthoimagery, 1964 (<http://miles.giscenter.isu.edu/kalaupapa/overview.html>)

"Kalaupapa Settlement – 1966. Kalaupapa National Historical Park," U.S. Department of the Interior, National Park Service. Adapted from map titled "Hawaii Territory Survey, L.M. Whitehouse, Surveyor. Survey and Map by Thos. J.K. Evans, November 1939. Re-survey by Ernest H. Fernandes, March 1966.

National Historic Landmark Nomination - Kalaupapa Leprosy Settlement Historic District, U.S. Department of the Interior, National Park Service. June 2016.

Kalaupapa and Kalawao Settlements
Cultural Landscape Report
Molokai, Hawaii

Period Plans - Kalaupapa Settlement,
1942-1969

Figure 69. Kalaupapa, 1942-1969

Kalaupapa as Sanctuary (1970–Present)

Between 1866 and 1969, as many as 8,000 people living with (or suspected of living with) Hansen's Disease were sent to the Kalaupapa peninsula.¹⁶⁹ With the isolation policies lifted in 1969, patients of Kalaupapa could be treated as outpatients, and the number of residents rapidly declined, though some chose to remain. Many of the residential and support building were no longer needed, and from the 1970s to the 1990s, over 200 structures were destroyed or demolished and salvaged (Figure 70).¹⁷⁰

For a current map of Kalawao and Kalaupapa during this time period, refer to Figure 71, Existing Condition Plan, Kalawao and Figure 72, Existing Condition Plan, Kalaupapa Settlement.



Figure 70. A site plan showing the Kalaupapa Settlement in 1997. (Source: *Cultural Landscape Inventory*, 41, adapted from Greene)

During the 1970s, interest grew about telling the story of Hansen’s disease in Hawai‘i, as well as protecting the privacy and lifestyles of the residents. In 1976, studies began to assess the feasibility of adding Kalaupapa to the National Park System, and in 1980, Kalaupapa National Historical Park was established through Public

169. Inglis, 197.

170. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements.*

Law 96-565.¹⁷¹ The park is managed cooperatively by the National Park Service with the Hawai‘i Department of Health, “. . . to remember and honor extraordinary people living in an extraordinary setting”¹⁷²

A new hospital was constructed in 1979 located across the road from the Kana‘ana Hou Church. In 1991, the Kalaupapa Hospital—constructed in 1931 and located off Damien Road—was destroyed in a fire. A large ruin remains at the site. Beginning in the 1990s, individual residences at the McVeigh Home began to be used to house NPS personnel and state workers. Worker residences are now scattered throughout the settlement.

A condition assessment of the grave markers in the cemeteries was prepared by the National Park Service in 2003, at which time the number of grave markers on the peninsula totaled over 1,300.¹⁷³

In 2009 President Barack Obama authorized the construction of the Kalaupapa Memorial. The memorial, which will be located at the site of the Baldwin Home for Boys, has not yet been constructed.¹⁷⁴ In the same year, Father Damien was canonized by Pope Benedict XVI.

On October 21, 2012, Pope Benedict XVI canonized Saint Marianne Cope. The canonization of Saint Marianne Cope drew visitors from all over the world to Kalaupapa, where events were held to celebrate her canonization.

The State Kitchen, formerly the Superintendent’s Residence, was destroyed in a fire in September 2016. Prior to its destruction, the building served as the staff dining room and central kitchen.¹⁷⁵

In 2018, the Kalaupapa Pali Trail was closed indefinitely due to a landslide, leaving the park accessible only via aircraft until the trail is repaired.¹⁷⁶

Today, visitors can arrange to take a tour of Kalaupapa and Kalawao by pre-arrangement with two tour organizations—Kekaula Tours and Saints Damien & Marianne Cope Molokai Tours, LLC. Both tour organizations are owned and operated by Kalaupapa patient-residents. In addition, mule ride tours that descend the 2,000 foot sea cliffs are available to visitors through Molokai Mule Ride or Kekaula Tours.¹⁷⁷

171. Public Law 96-565.

172. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements*, 40.

173. Johnson, 166.

174. Johnson, 55.

175. *Ibid.*, 126

176. *Ibid.*, 55.

177. National Park Service, Kalaupapa National Historical Park web site, <https://www.nps.gov/kala/planyourvisit/guidedtours.htm> (accessed May 14, 2019).



Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii

Kalawao Existing Conditions Plan

Figure 71. Existing Conditions Plan Kalawao



Figure 72. Existing Condition Plan Kalaupapa

Kalaupapa and Kalawao Settlements
Cultural Landscape Report
Molokai, Hawaii

Kalaupapa Settlement
Existing Condition Plan

Existing Conditions Documentation

Introduction

This chapter documents, through narrative description, photographs, and labeled maps, the character and composition of the Kalaupapa and Kalawao Settlements cultural landscape. The chapter is introduced by a section on the park's physical and cultural setting. The existing conditions documentation that succeeds the introduction is organized in accordance with the following landscape characteristics:

- Natural Systems and Features, including Topography
- Spatial Organization
- Views and Vistas
- Circulation
- Cultural Vegetation, including ornamental and ethnobotanical resources
- Buildings and Structures
- Small-scale Features
- Cultural Traditions
- Archeological Resources

Appendix A summarizes the information conveyed in this and the subsequent chapter (Analysis and Evaluation) regarding the physical and cultural features that together comprise the Kalaupapa and Kalawao Settlements.

Physical and Cultural Setting

Kalaupapa National Historical Park encompasses the remote northern peninsula of Molokai Island that serves as the physical setting for the Kalaupapa and Kalawao Settlements study area (Figure 73). The Kalaupapa and Kalawao Settlements comprise the developed portions of Kalaupapa Peninsula where those presenting with Hansen's disease, also known as leprosy, were separated from Hawaiian society in an effort to control the feared disease. The way in which the removal of individuals who had contracted Hansen's disease to the Kalaupapa Peninsula affected the people and families of Hawai'i continues to be felt today. Kalaupapa

National Historical Park is dedicated to preserving the memories and experiences of the people forcibly sent here and to sharing their stories for future generations so that valuable lessons may be learned.¹⁷⁸



Figure 73. Overview map of Kalaupapa and Kalawao Settlements and Kalaupapa Peninsula. (Source: LSHLA)

Kalaupapa Peninsula is set topographically below topside Molokai and edged by some of the world's tallest sea cliffs. The North Shore Cliffs are referred to as the pali. The rocky face of the cliffs ranges from 1,600 to 3,000 feet in height. Kalaupapa Peninsula extends north from the pali as a half-oval shaped landform edged on three sides by the Pacific Ocean. The coastline of the peninsula is variously comprised of rocky cliffs, reefs, and sand beaches.

Kalaupapa Peninsula was formed by a cataclysmic landslide when the northern third of Kamakou, or the East Molokai Volcano, collapsed and slid into the sea.¹⁷⁹ The landslide spread earth and rock underwater for nearly 100 miles northward. Examination of the gigantic submarine landslide deposits has suggested that a large portion of north Molokai disappeared into the ocean as a result of the geological event that occurred approximately 400,000 years ago. Later, between 230,000 and 300,000 years ago, a small near-shore volcano formed, referred to as Pu'u 'Uao. Out of this volcano flowed pahoehoe lava, which formed the Kalaupapa Peninsula, a geologically and topographically distinct entity from Molokai.¹⁸⁰ Kauhako Crater exists within the collapsed dome of Pu'u 'Uao.

178. National Park Service, "Kalaupapa National Historical Park Hawai'i," available at <https://www.nps.gov/kala/planyourvisit/index.htm> (accessed January 25, 2020).

179. National Park Service, Kalaupapa CLI, 44.

180. National Park Service, *Foundation Document: Kalaupapa National Historical Park* (August 2017), 6.



Figure 74. View east toward Ōkala from Judd Park, 2017.

Kalaupapa National Historical Park encompasses portions of the North Shore Cliffs. Other portions fall within Molokai Forest Reserve and Pu‘u Ali‘i Natural Area Reserve, administered by the State of Hawai‘i, Division of Forestry and Wildlife. Also located within the park are two dramatic rock formations or islets east of the peninsula—Ōkala (Figure 74) and Huelo, both of which are designated Sea Bird Sanctuaries administered by the State of Hawai‘i Department of Land and Natural Resources (DLNR). The North Shore Cliffs, designated a National Natural Landmark in 1972, serve as a refuge for certain endemic plant species, such as the endangered puaala (*Brighamia rockii* ssp. *Longiloba*), that have been decimated by introduced herbivores elsewhere in Hawai‘i. Pālā‘au State Park also falls within the southwestern corner of Kalaupapa National Historical Park.

Thirty-five federally listed threatened, endangered, or candidate terrestrial plant species have been recorded within the park, with an additional eighteen plant species federally listed as species of concern. Many of these are associated with the remnant dryland forest located within Kauhakō Crater, coastal spray/strand vegetation communities along the shoreline, and montane wet forest present within some of the cool valleys of the pali. The park also contains other important biological resources which contribute to the historic setting.¹⁸¹

Set within the pali are three deeply incised valleys. From east to west these are referred to as Waikolu, Wai‘alei‘ia, and Waihānau. An intermittent stream flows through the Waihānau Valley before flowing west to empty into the Pacific Ocean within Kalaupapa Settlement. The Waikolu Valley contains the peninsula’s only perennial stream. Historically, this stream served as the primary source of water for the Kalaupapa and Kalawao Settlements.

To reach the peninsula, residents, employees, visitors, volunteers, and others travel via small aircraft to Kalaupapa Airport, or by foot or mule down a steep, winding 3-mile-long footpath known as the Pali Trail. Many NPS employees live topside and commute to work by hiking the Pali Trail. Residents also hike the trail to buy groceries and other supplies. The Pali Trail, which precedes Kalaupapa and Kalawao Settlements and

181. Johnson, Draft Kalaupapa NHL nomination update, 60.

was used as a traditional Hawaiian travel route, is a critical part of the cultural landscape at Kalaupapa. Access can be suspended by landslides and other natural events.

Many of the daily supplies of the residents and employees, including the U.S. Mail, are delivered by air. Larger items such as construction materials, fuel, appliances, cars, equipment, and other goods are transported by barge from Honolulu. Docking a barge at the Kalaupapa Landing wharf can be treacherous, depending upon surf conditions, and requires a special use permit. Barge deliveries generally occur only once per year.

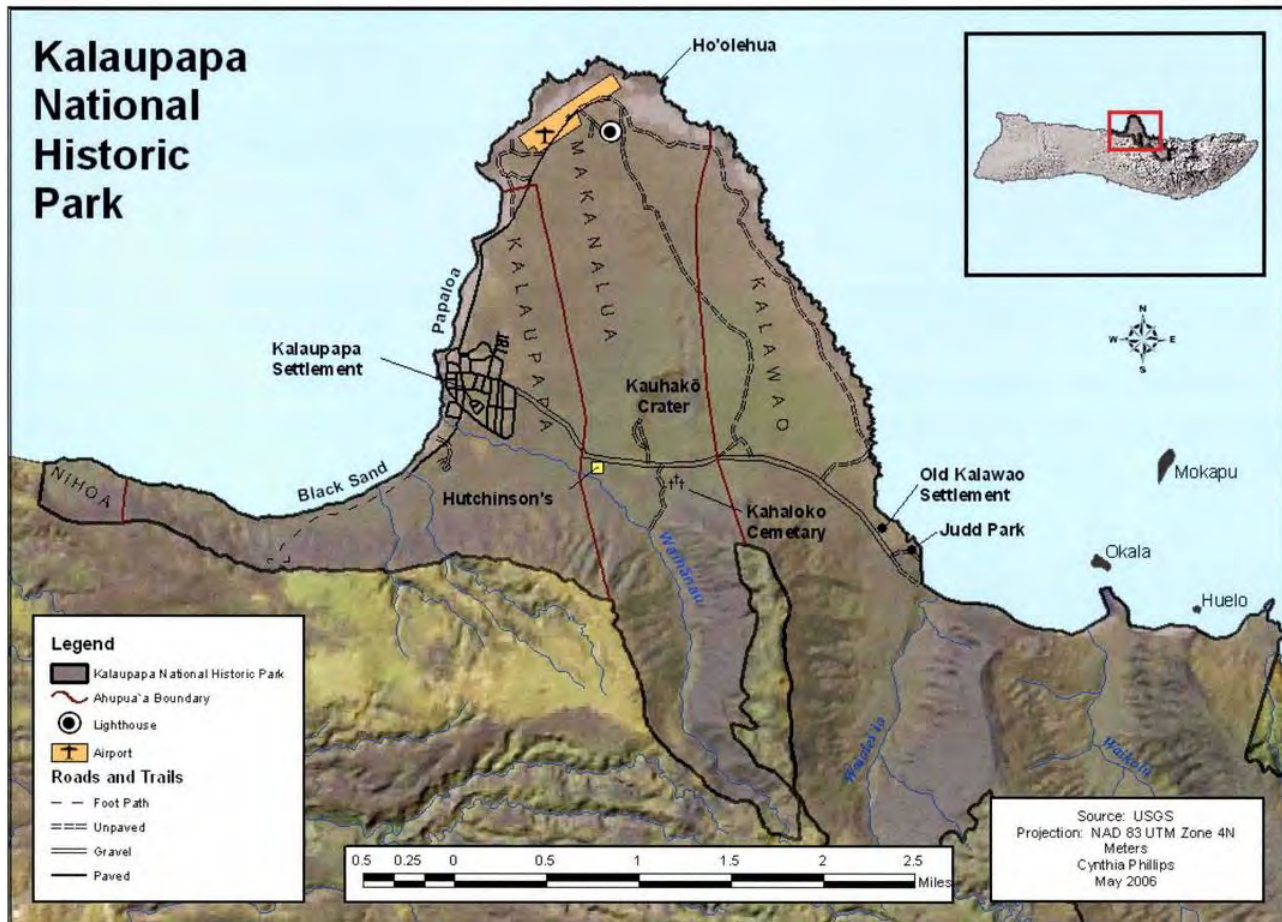


Figure 75. Map of Kalaupapa Peninsula showing the three ahupua'a which pre-dated the Māhele of 1848. (Source: National Park Service)

In addition to the historic period developed areas associated with Kalawao and Kalaupapa Settlements, the peninsula also contains extensive evidence of earlier cultural lifeways thought to extend to approximately 840 years before present.¹⁸² Archeological investigations suggest that the entire peninsula was occupied and used by cultural groups practicing traditional Hawaiian lifeways. The Kalaupapa and Kalawao Settlements were established within the traditional Hawaiian complex composed of a system of ahupua'a, field systems, habitation and religious structures (heiau), and a network of rock walls, enclosures, and platforms. The peninsula was divided into three ahupua'a—Kalawao, Makanalua, and Kalaupapa—extending makai to mauka (ocean to mountain) (Figure 75). Kalawao and Kalaupapa Settlements are named for two of the ahupua'a. The ahupua'a walls showing original land divisions of the peninsula remain intact. Other locations

182. Mark D. McCoy, "Landscape, Social Memory, and Society, An Ethnohistoric-Archaeological Study of Three Hawaiian Communities" (ProQuest, 2006).

within the CLR study area where traditional Hawaiian features exist include Molokai Light Station, along Damien Road, and within Kauhakō Crater.

Ocean resources have played an important role in supporting lifeways at the Kalaupapa and Kalawao Settlements. Fishing has been a traditional source of food; today, the peninsula offers advantages for shoreline and open-ocean fishing because coastal access from land and sea are significantly less problematic than anywhere else on the north coast of Molokai. The sand beaches and rocks along the shorelines are also important habitats for the endangered monk seal (*Monachus schauinslandi*), while the open waters along Molokai's northern coast support humpback whales (*Megaptera novaeangliae*), spinner dolphins (*Stenella longirostris*), and the threatened green sea turtle (*Chelonia mydas*).¹⁸³ The nearshore fish communities are some of the healthiest in the main Hawaiian Islands, with high biomass and a full complement of predators and other trophic groups. The park also features one of the most spectacular examples in Hawai'i of a large underwater volcanic boulder habitat, providing refuge and spawning areas for the abundant reef life. Along the coast, Kalaupapa's unique and thriving reef environment serves as a potential source of replenishment for degraded reef systems elsewhere within the Hawaiian Islands.

Residents have traditionally collected salt from favored places along the coastal perimeter of the peninsula. The salt is a byproduct of sea water that washes into natural pools within the lava rock. After the water evaporates in the sun, the salt remains and can be carefully extracted by various techniques before they wash away with tides or waves.¹⁸⁴ Salt is generally collected during the summer, and residents look forward to salt-collecting excursions, where the "glistening white salt crusts on black lava are an attractive sight."¹⁸⁵ Sea salt is a resource important for food, good health, and spiritual and ritual uses in Hawai'i. Another important association with the ocean is surfing. The surf at Kalaupapa has long been renowned. In traditional times, only chiefs were allowed to surf the wave break at Kalaupapa.¹⁸⁶ Today, however, surfing is no longer allowed based on DOH rules.

Ocean navigation and astronomy were important traditional Hawaiian practices. More research is needed, but evidence suggests that there is likely a connection between navigation, astronomy, and Heiau on the coast at Kalawao and elsewhere on the peninsula, as well as the land shelves. Traditionally, travel by canoe was a regular form of transportation and areas difficult to access overland, such as the Kuka'iwa'a and Nihoa land shelves, would have been accessible by boat. Traditionally, navigation by canoe was a daily, regular form of transportation, and the areas not currently occupied were not as isolated as they appear now.

The relationship of industries and lifeways on the peninsula to those on topside Molokai deserves additional research. While Kalaupapa was known as an important fishing grounds, topside Molokai contains numerous traditional Hawaiian fishponds, a sophisticated form of aquaculture practiced elsewhere in Hawai'i.¹⁸⁷ The importance of Kalaupapa as fishing grounds pre-dates the establishment of Kalawao Settlement, including both pre- and proto-Contact.¹⁸⁸

183. National Park Service, DRAFT Kalaupapa GMP, 40.

184. Juvik, *Ethnographic Study*, 53.

185. Ibid.

186. Samuel Kamakau, *Ruling Chiefs of Hawai'i* (Honolulu, Hawai'i: Kamehameha Schools Press, 1961), 54.

187. Samuel Kamakau, *The Works of the People of Old, Na Hana a ka Po'e Kahiko* (Honolulu, Hawai'i: Bishop Museum Press, 1976), 47.

188. Catherine Summers, *Molokai: A Site Survey* (Honolulu, Hawai'i: Bishop Museum Press, 1971).

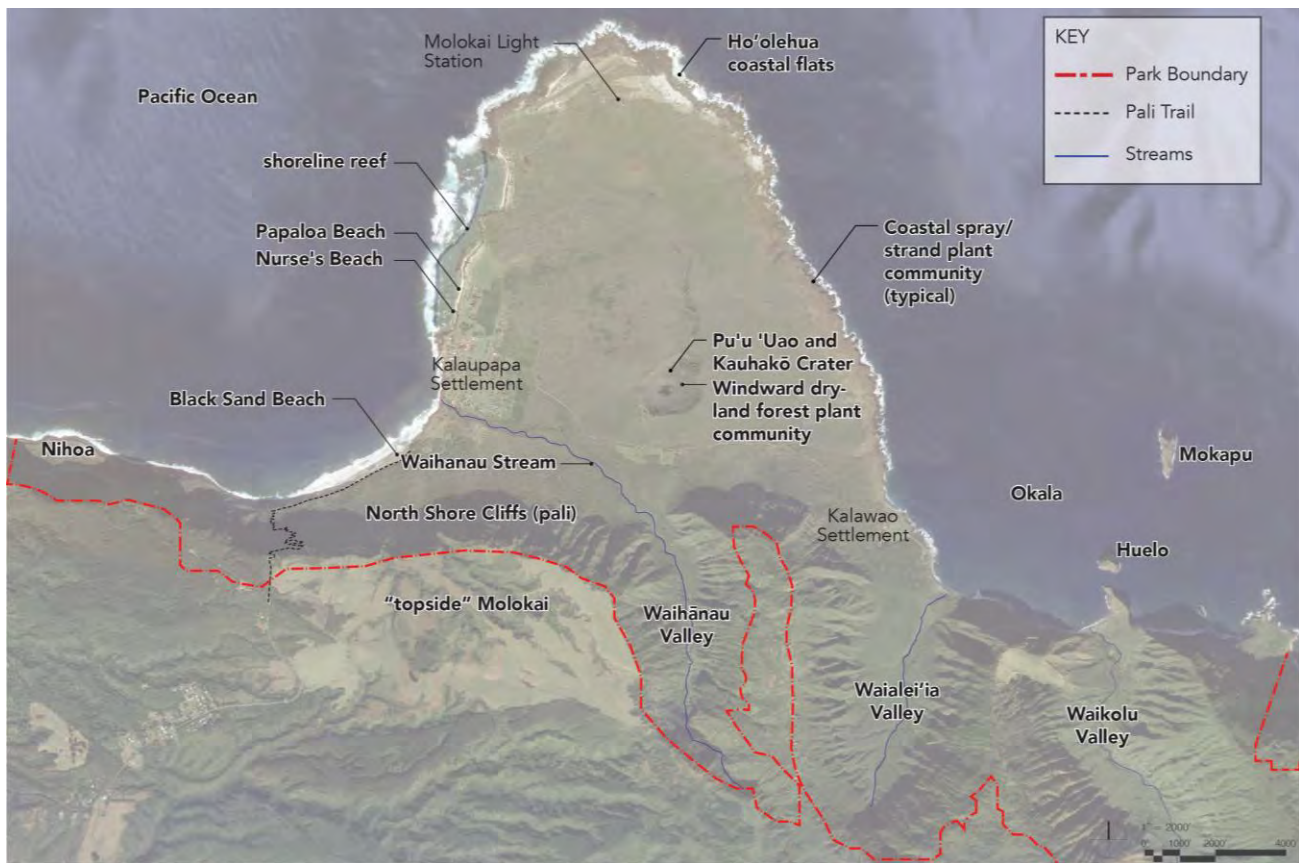


Figure 76. Map of Natural Systems and Features. (Source: LSHLA)

Natural Systems and Features

Refer to Figure 76, Map of Natural Systems and Features.

As discussed above, natural systems and features have played an integral role in cultural traditions, spatial organization, land use, and settlement patterns on the Molokai peninsula for hundreds of years. Available water resources, soils, geology, landform and topography, and vegetation have influenced where and how cultural activities have occurred. Kalaupapa and Kalawao Settlements, as well as archeological evidence of earlier cultural occupation, can be better understood through the ways in which people have adapted and responded to, managed, and manipulated environmental conditions and natural resources on the peninsula.

Climate has been a factor in several aspects of local life. The eastern and western sides of the peninsula—windward and leeward respectively—are climatically distinct. The windward or eastern side, where the Kalawao Settlement was established in the 1860s and 1870s to take advantage of the fresh water available from the stream flowing through Waikolu Valley, is frequently subject to chilly and moist air as well as dramatic diurnal temperature fluctuations. Because these conditions negatively affected the health of the patient population, the settlement was relocated to the western side of the peninsula during the late nineteenth and early twentieth centuries where conditions are warmer and drier. The western coastline is also more conducive to landing the boats needed to deliver visitors and goods to the Settlements. While the western coastline is subject to dangerous surf during the winter months, the eastern coastline is subject to choppy trade wind swells all year long.

Temperatures at Kalaupapa remain relatively consistent throughout the year, with average lows ranging from 67 degrees Fahrenheit in January to 75 degrees Fahrenheit in August, and average highs ranging from 79 degrees Fahrenheit in the winter to 85 degrees Fahrenheit in the summer. The average rainfall per year is about 38.5 inches, which can occur as small events on a regular basis, even daily, throughout the year. The climate is generally wet and tropical. The prevailing winds are from the northeast and can be quite strong, especially during the winter months. The winds contribute to soil erosion on the peninsula, particularly on the windward side. Although the initial settlement at Kalawao was sited at the southeastern end of the peninsula to take advantage of available fresh water resources flowing through the Waikolu Valley, the eastern side of the peninsula is subject to cooler temperatures, strong prevailing winds, and the shadow cast by the pali. The settlement was later moved to the southwestern end of the peninsula at Kalaupapa to take advantage of warmer temperatures, more prevalent sunshine, and less pervasive winds.



Figure 77. View south toward the North Shore Cliffs, referred to as the pali, across a traditional Hawaiian hōlua that occupies the southern slopes of Pu'u 'Uao, 2017.

The Kalaupapa Peninsula measures approximately 5 square miles, stretching 2 miles between the pali and the northern tip, and 2-1/2 miles from east to west. Much of the peninsula is characterized by relatively level topography, with elevations close to sea level. Exceptions include of Pu'u 'Uao, which rises to 402 feet in height within the south-central part of the peninsula, and the knoll on which the Molokai Light Station sits. At the southern edge of the peninsula, the dramatic rugged cliff face of the pali rises thousands of feet to topside Molokai (Figure 77). The challenges associated with accessing, and leaving, this remote landscape were key factors influencing the decision to site the Kalawao Settlement on Kalaupapa Peninsula in 1866.

Geologically, Kalaupapa Peninsula is underlain by volcanic base rock. Soil deposits overtop of the base rock are generally thin, rocky, silty clay loams derived from the weathering of basaltic flows from Pu'u 'Uao and volcanic ash overlying pahoehoe lava.¹⁸⁹ Bedrock typically occurs 12 inches below the surface. Soils associated with the Kalaupapa series occur over much of the central Makanalua ahupua'a, as well as the

189. D.A. Clague, C. Dao-Gong, R. Murnane, M.H. Beeson, M.A. Lanphere, G.B. Dalrymple, W. Friesen, and R.T. Holcomb, "Age and Petrology of the Kalaupapa Basalt, Molokai, Hawai'i," *Pacific Science* 36 (No. 4): 411–420.

eastern and western slopes of Pu‘u ‘Uao. These soils are well suited to cultivating sweet potatoes, which were traditionally grown in abundance and exported. Other crops grown historically include watermelons, beans, and onions. The soils have also supported grasslands used to pasture cattle, hogs, and other livestock. Other soils include the Jaucas Series along the coastline. Jaucas soils are deep and highly permeable due to the inclusion of calcareous sand with shell and coral fragments. They are not well suited to cultivation.

The southern part of the peninsula is wetter due to the influence of the pali and influx of water flowing downslope. Soils within the valleys and at the base of the pali are of the Hale‘iwa series. They are colluvial stony silty clays with a deeper profile than other parts of the peninsula, ranging from 5 to 6 feet. These soils traditionally supported taro cultivation. At the south end of Kalaupapa Settlement, the lower areas of Kalawao Settlement, and the drainages along the base of the pali are silty clays that range from 10 to 18 inches in depth. Bedrock is approximately 7.5 feet below the surface, and these soils become rockier with depth.



Figure 78. View east across Kauhakō Crater from the rim of Pu‘u ‘Uao, 2017.

One of the notable natural features of the peninsula is Kauhakō Crater (Figure 78), the primary vent of Pu‘u ‘Uao volcano that contains a prominent lava channel and tube system and trench and cave formations.¹⁹⁰ The interior of the crater features one of the deepest volcanically-formed freshwater lakes in the world, while rare native plant communities are found on both the interior and outer slopes. Rock outcroppings that have served as a source for the dry stacked stone walls found in many developed areas of the peninsula are also present, along with evidence of earlier agricultural terracing, residential structures, and some burials, which are distinct from the marked graves along the road that leads to the top of Pu‘u ‘Uao overlooking the crater. The western rim of Pu‘u ‘Uao affords sweeping views of the Kalaupapa Settlement to the west, the pali to the south, the level topography of the peninsula to the north, Molokai Light Station, and the Pacific Ocean to the west, north, and east. The top of Pu‘u ‘Uao and Kauhakō Crater holds special meaning for Kalaupapa residents. For many, it is sacred space with splendid views, considered “a beautiful place . . . a nice place to

190. Chris H. Okubo, “Geologic Map of Kalaupapa Peninsula, Molokai, Hawai‘i, USA,” in *Journal of Maps* 8 (No.3, September 2012):267.

be.”¹⁹¹ The crater rim has served as a place for religious services and has also become a place to honor the dead.¹⁹²

Within the interior and along the rim of Kauhakō Crater is found the last remnant of a low elevation windward dryland forest, one of the last remaining examples of fragile Hawaiian island plant and animal communities that are found nowhere else in the world. The NPS has been instrumental in helping to restore this community, although it remains in threatened condition.

The pali is another natural feature considered integral to cultural lifeways at Kalaupapa and Kalawao Settlements. The imposing rock face of the pali has led many residents to consider Kalaupapa Peninsula more like an island than an extension of Molokai.¹⁹³ Its sentry-like mass has afforded residents a sense of protection, but has also created a barrier that isolated them from friends, family, and the experience of life without imposed boundaries. Ethnographer Sonia P. Juvik, who interviewed many residents in preparing *Kalaupapa Landscape: An Ethnographic Study* (2007) notes that the pali was “profoundly important in molding the experiences and shaping the collective consciousness of Kalaupapa residents and visitors alike.”¹⁹⁴ Juvik considers “The pali [to be] the single most important natural feature that led to the use and maintains the image of Kalaupapa as [a] place of containment of individuals who contracted Hansen’s disease. This same mountain mass now helps to maintain [a] serene environment and a high level of privacy.”¹⁹⁵ According to one interviewee, when she “first got here [1962], I thought it was [a] beautiful sight, but I’m pretty sure it wasn’t for everybody. And back then, I guess it was more like a—maybe like a jail, I guess—in the sense, you know, it was inaccessible to the rest of the Island. But I’ve come to admire this pali. I think it’s beautiful. It’s different so—and in way it could prove to be haven.”¹⁹⁶

The Pali Trail that leads to topside Molokai was one of the only means of communicating with the outside world historically, although patients were generally forbidden to use the trail. Those that have regularly traveled the Pali Trail to work in the settlements often reflect on the emotional and physical experience of traversing its challenging terrain, indicating that the:

hardship is part of what you think about when the people were sent here. The effort it takes to get here or get out of here you directly relate to it in that concrete sense and it gives you this feeling of . . . that isolation is translated physically through you. When [I] get down from the trail I have [a] very good feeling; it’s like a cleansing thing too. It’s like I have a very positive and open feeling when I get to Kalaupapa. It’s a very nice feeling. I like the commute. So, while it’s a hardship, I enjoy it . . . The trail is my window to work and my commute.¹⁹⁷

Like the pali, the three valleys formed in the cliff face—Waikolu, Waihānau, and Wai‘alei‘ia—have also been an important part of life on the peninsula due to through the presence of a variety of plants not found in abundance elsewhere within the Settlements, and the waters of Waikolu Stream. The perennial stream corridor, a key factor in early Settlement life, has been determined eligible for wild and scenic river designation as one of the few remaining freshwater streams in Hawai‘i. It supports all five of the endemic

191. Sonia P. Juvik, *Kalaupapa Landscape: An Ethnographic Study* (National Park Service, Pacific West Region Social Science Series, Publication Number 2007-03, 2007), 43.

192. *Ibid.*, 43.

193. *Ibid.*, 31.

194. *Ibid.*, 32.

195. *Ibid.*, 37.

196. PC, 8/12/02, in Juvik, *Ethnographic Study*, 34.

197. GH, 7/10/02, in Juvik, *Ethnographic Study*, 36.

freshwater fish and associated invertebrate species known on Molokai. The stream no longer supports the needs of peninsula residents. Fresh water is now obtained from a well installed by the NPS at the mouth of Waihānau Valley.¹⁹⁸ Other than the intermittent flow of Waihānau Stream, there are few water resources associated with the peninsula. The only wetland recorded is on the makai (seaward) side of Kamehameha Street/Airport Road about 100 yards from the airport.¹⁹⁹

Beyond their ecological significance, the natural systems and features within the peninsula possess an abiding cultural value. The spectacular environmental setting for the Kalaupapa and Kalawao Settlements provides a unique sense of place, and a diverse range of opportunities for cultural activities and uses that have become engrained in the lifeways of residents since the mid-nineteenth century. As noted by another interviewee in the ethnographic study, “all around, mother nature is beautiful.”²⁰⁰ In fact, the beauty of Kalaupapa inspired several patients and kōkua (helpers) to become artists, many specializing in landscape paintings.²⁰¹ Despite the isolation that characterized the community, its diverse features, beauty, and unique sense of place became a welcome home to many residents during the twentieth century. Residents ascribe meaning and joy to Kalaupapa from the landscape setting and environment. In 2002, one interviewee noted, “There is no place like this . . . I am sure if there was any other place it wouldn’t be like this.”²⁰² For other residents, the peninsula has become a place of peace, beauty, serenity, and security. The weather contributes to the important sense of place, including the strong trade winds, misty rains, and harder rains that produce waterfalls within the valleys.²⁰³ Rainbows, sunsets, and morning light are other spectacular results of the local weather cherished by residents.²⁰⁴ Another important natural quality of the peninsula is the general ambient quiet and the presence of dark night skies.

198. National Park Service, Kalaupapa CLI, 44.

199. Juvik, *Ethnographic Study*, 26-31.

200. George [pseudonym] 6/8/05, in Juvik, *Ethnographic Study*, 6.

201. Juvik, *Ethnographic Study*, 16.

202. KC, 8/5/02, in Juvik, *Ethnographic Study*, 7.

203. Juvik, *Ethnographic Study*, 48.

204. *Ibid.*, 49.



Figure 79. View north toward ‘Īliopi‘i Beach, where patients have traditionally built beach houses to escape institutional oversight, 2017.

Both Kalawao and Kalaupapa Settlements were sited to edge the coastline to allow for access to the ocean for fishing, boat landing, swimming, and the breezes. Both took advantage of relatively level topography, and the sheltering aspect of the pali. Patients built beach houses to the north of both Settlements where they could escape institutional oversight and enjoy recreational activities such as swimming in the ocean. Surviving today are several patient beach houses located along ‘Īliopi‘i beach (Figure 79) north of Kalaupapa. To the south is Papaloa Beach, an area of shoreline protected by coral reef, popular for swimming.

The Molokai Light Station was sited along the northern coast to ensure visibility for passing ships, while the airport was sited in the open flats at the northwestern end of the peninsula in the area referred to as Kahiu Point. The lava rock field and beach to the east, a popular location for salt picking, is referred to as Ho‘olehua Beach. Another popular beach location is Nihoa Beach at the far western edge of the shoreline.

Residents interviewed by Juvik have noted “Kalaupapa was warm and welcoming, and it offered wide-open spaces in which to roam. In Kalaupapa, patients fished the ocean and hunted the valleys all the way east to Waikolu.”²⁰⁵

Appreciation for life on the Kalaupapa Peninsula, however, did not emerge until later when the settlement moved to Kalaupapa, and patients no longer had to “experience the sense of gloom cast by the shadowy mountains in Kalawao.” Kalawao continues to convey a sense of grief and loneliness, potentially due to the physical characteristics of the site that include high cloud cover that overhangs the area, the shadows cast by the pali, and chilly temperatures once the sun begins to set. A sense of sadness often pervades Kalawao that is not present in Kalaupapa.²⁰⁶

From the arrival of the first patient, the unique and rugged setting of the Kalaupapa Peninsula has brought about a sense of both beauty and longing. One kōkua interviewed for the Ethnographic Study noted the

205. Ibid., 7.

206. Ibid., 41-42.

following about the particular sense of place, and isolation, both a blessing and a curse: “Kalaupapa is a Native Hawaiian place. The Kingdom of Hawai‘i appointed this place so that people could be healed here. It is one place where the community is living in the old style—close knit.”²⁰⁷ He went on to note:

Kalaupapa will always have something to teach people—an endless source of life and opportunity. It can teach about:

- What is worth preserving
- What we are valuing
- Respect for environment people religion and culture
- Looking at similarities in people rather than difference
- Giving and how far that can go
- How to show compassion
- What we need to do is slow down and enjoy the moment.²⁰⁸

A visitor noted after spending time in the community:

[H]ere I have learned and felt Hawaii, local culture, from the inside. I have heard the thick Pidgin, felt a different lovingness, heard real chanting, and gutted a fish myself. Now when [I] say [I] am from Hawaii, I am from a place that has Kalaupapa, where deer run on the beaches, where red wiliwili shine through the crater floor. Here I can see what Hawaii is, and what Hawaii was. The land is thick with spirit, thousands are buried under the stretches of grass along the beaches where the waves pound the giant rocks and the heiaus groan with age in the valley sides.²⁰⁹

Many of the natural features and systems associated with the park and the Kalaupapa and Kalawao Settlements cultural landscape are currently threatened by changing climatic conditions, as well as invasive species. Conditions such as high winds, regular heavy rains, the rapid growth of vegetation, and pests that thrive in warm and moist environments—including termites—pose challenges to the maintenance of cultural resources. Aggressive introduced species of flora and fauna have colonized large areas of the landscape and are impacting cultural resources in a variety of ways. Species of concern include ironwood pine (*Casuarina equisetifolia*) trees, Christmasberry (*Schinus terebinthifolius*), lantana (*Lantana camara*), axis deer (*Axis axis*), and feral pigs (*Sus scrofa*). Some plants of local cultural importance, such as Java plum (*Syzygium cumini*) and date palm (*Phoenix dactylifera*), have become naturalized and pose threats to native plant communities when not controlled. Anticipated future increases in the frequency and intensity of storms, coastal and stream channel flooding, sea level rise, landslides, and tsunamis pose an enormous challenge to park managers and those interested in protecting cultural landscape heritage values.

207. MJ, 6/8/05, in Juvik, *Ethnographic Study*, 14.

208. MJ, 6/8/05, in Juvik, *Ethnographic Study*, 14–15.

209. Jan, 3/10/99, in Juvik, *Ethnographic Study*, 16.



Figure 80. Map of Peninsula-wide Spatial Organization. (Source: LSHLA)

Spatial Organization

Refer to Figure 80, Map of Peninsula-wide Spatial Organization.

At a broad scale, Kalaupapa Peninsula is organized as an isolated half-oval-shaped landform contained on three sides by the Pacific Ocean, and on the fourth by the steep cliffs of the pali. Much of the peninsula is a relatively level plateau, punctuated at the south-central end by the 402-foot-high conical form of the Pu‘u ‘Uao and at the northern end by a knoll occupied by the Molokai Light Station. Set within this milieu, the developed areas associated with Kalawao and Kalaupapa Settlement form nodes at the southwest and southeast ends of the peninsula, with extensions along the coasts, particularly the western shoreline, that includes the West Coast Cemeteries and the beach houses. Kalawao and Kalaupapa Settlement developments are connected by the Damien Road corridor—which in addition to being edged to either side by clusters of cultural resources related to the historic Settlements—intersected a continuous traditional Hawaiian landscape dense with field and house features. Road corridors also extend north-south along the eastern and western shorelines, and through the center of peninsula. Extensive evidence of past cultural use also exists throughout the peninsula beyond the CLR study area, in many cases obscured by thickets of invasive plants.

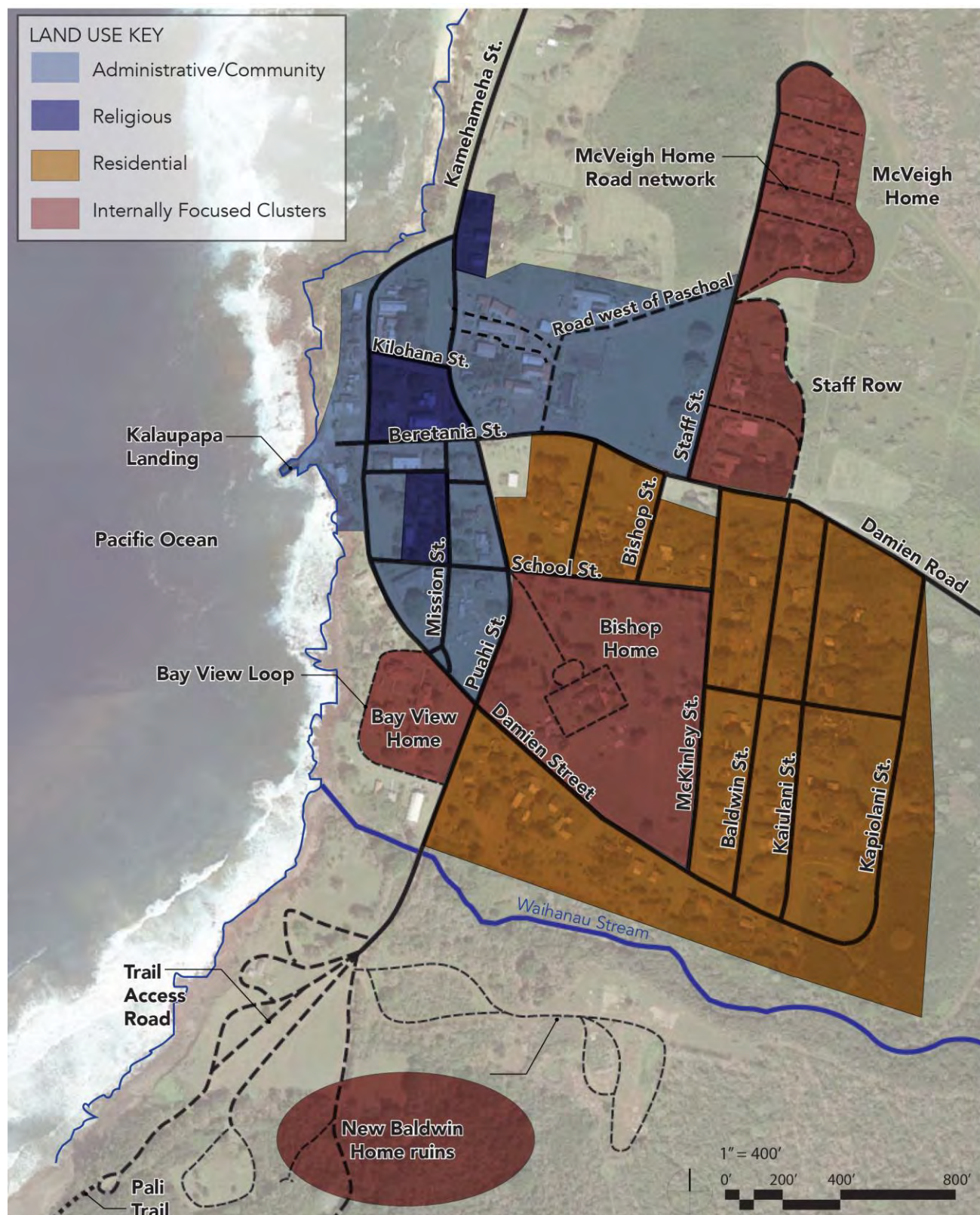


Figure 81. Map of Kalaupapa Settlement Spatial Organization. (Source: LSHLA)

Kalaupapa Settlement is a village-like community of more than 200 buildings sited along an irregular grid of primary roads. Spatial organization within Kalaupapa Settlement reflects land use patterns. Buildings are

generally clustered by land use, and form both streetscapes as well as internally focused complexes (Figure 81).

The clusters associated with Kalaupapa and Kalawao Settlements are discussed herein as character areas, land bays that are unified by associated land uses, landform and topography, period of development, and/or architectural character. Each is described below in terms of its spatial organization.



Figure 82. View north of Paschoal Hall and the open greensward to the east, 2017.

Administrative Area

Refer to Figure 90. Administrative Area – Existing Conditions

Central to the community is the administrative area located along the western margin of the settlement surrounded on three sides by residential and other uses. The administrative area contains most of the public facilities and services—Kalaupapa Memorial Hospital and Care Center, Patient Store, Library, Craft and Storage Building, Post Office, DOH Administrative Building, Fumigation Room (housing NPS Headquarters), Fuesaina’s Bar, Kalaupapa Landing, and Paschoal Hall or community center. Set within the broader Administrative Area are three community churches. Administrative buildings vary in size and scale depending on their use. Paschoal Hall (Figure 82), with its dramatic architecture and grand scale, offset by a large open space, provides a sense of center within Kalaupapa Settlement.

At the northern end, the Administrative Area features an industrial and service cluster that contains maintenance facilities, storage features, and service functions. Buildings include a Maintenance Shop, warehouses, storage structures, and garages. Many historic buildings no longer house the uses for which they are named and were built, but have been adapted to serve other Settlement needs. For example, the former courtroom, located in the same building as the Post Office, now serves as the Lions Club meeting room.

Kalaupapa Churches

Refer to Figure 91, Kalaupapa Churches Character Area - Existing Conditions

Sited along the Settlement’s main north-south road corridor—Kamehameha Street—are the Catholic, Protestant, and Church of Jesus Christ of Latter-day Saints church complexes. Each is set within its own rock-wall-enclosed enclave, and surrounded by grass lawn and ornamental plantings.



Figure 83. A residential property at Kalaupapa, 2017. The property is characteristic of many residences within Kalaupapa Settlement for the Hawaiian Plantation style of architecture of the dwelling, the marking of the property along the road with a dry stacked stone wall, the paved walk leading to the front entrance through an open front yard, and the presence of ornamental plantings behind the house.

Residential Area

Refer to Figure 92, Residential Character Area - Existing Conditions.

Edging the Administrative Area to the east is a large Residential Area composed of individual dwellings that face a grid of streets. The buildings generally follow a consistent setback and orientation, which provides a sense of rhythm and order. Each individual home, however, is treated in a personal way, conveying a sense of texture and richness that helps to diminish the institutional character of place. Concrete walks, driveways, hedges, gardens, and other plantings, fences, and dry stacked stone walls are characteristic of many of the residences (Figure 83). The front yards of many houses are relatively open, while the rear yards are often screened and made more private for the residents through the use of fences and plantings for use in hosting outdoor gatherings.

Staff Row

Refer to Figure 93, Staff Row Character Area - Existing Conditions.

To the northeast of the administrative area are two built clusters—Staff Row, and McVeigh Home. Staff Row is a linear arrangement of individual and shared residences that served as staff housing during the era when patients and staff were segregated.

McVeigh Home

Refer to Figure 94 McVeigh Home Character Area - Existing Conditions.

Beyond Staff Row is McVeigh Home, built as a residential community for patients in the 1930s. The complex features residences, dormitories, eating facilities, and social spaces. McVeigh Home is accessible from the adjacent Staff Street. Within McVeigh Home, the individual buildings face an internal road system of narrow

streets. The buildings feature a consistent architectural style. Group buildings are located at the center of the complex and surrounded by rows of cottages. The individual cottages are evenly spaced and sited at a consistent setback relatively close to the road. Plantings that are unique to each property provide a sense of scale and detail.



Figure 84. View along Bishop Road, the entrance drive, edged by stone piers, that leads to the Bishop Home property from the intersection of School and Puahi Streets, 2017.

Bishop Home

Refer to Figure 95 Bishop Home Character Area - Existing Conditions.

To the south of the administrative area are two additional group homes—Bay View and Bishop Home—both of which served distinct populations. Bishop Home for Girls was established for younger women in 1888. It also served as a convent for the nuns who cared for the girls and is currently in use by nuns who are in residence. It occupies one of the largest blocks within Kalaupapa Settlement and has one of the most formal landscape plans. The complex is centered on an elevated knoll, with all of the buildings sited around a central oval. Although many of the original buildings are no longer present, the original road system and other landscape features highlight the formal arrangement of the internally-focused built precinct set within the center of the property (Figure 84), which was also marked by a perimeter dry stacked stone wall system.



Figure 85. Bay View Home buildings edging the central open space, 2017.

Bay View Home

Refer to Figure 96, Bay View Home Character Area - Existing Conditions.

Bay View Home is another internally-focused group home complex. Originally designed with five similarly-scaled buildings arranged to form a central open space, Bay View is comprised of a cluster of dormitories, a kitchen, and a dining hall centered around a central open space (Figure 85). As with Bishop Home, paired piers mark the entrance into the group home precinct. Additional residences edge the cluster along a perimeter road. To the north of Bay View Home is a cluster of buildings that edge Damien Street associated with the Visitor Quarters developed area that house and otherwise address the needs of visitors.

New Baldwin Home

Refer to Figure 97, New Baldwin Home Character Area - Existing Conditions.

South of the Waihānau stream corridor is the New Baldwin Home site where another group home existed during the first half of the twentieth century. Although none of the buildings associated with New Baldwin Home survive, the site is marked by a dry stacked stone wall and gate piers, a few scattered concrete foundations, a grotto, and cultural vegetation. Surrounding the site is a dispersed collection of cultural features, some historic, and some contemporary. These include evidence a Slaughterhouse building and associated corral, facilities associated with contemporary tour operations, and recycling and waste disposal facilities. Thickets of invasive plants edge an open area along the western shoreline.



Figure 86. View northwest of the grave markers associated with the West Coast Cemeteries at Papaloa that edge Kamehameha Street, 2017.

West Coast Cemeteries

Refer to Figure 98, West Coast Cemeteries Character Area - Existing Conditions.

To the north of the Administrative Area, Kamehameha Street passes an extensive series of cemeteries along the western shoreline, as well as a row of residences to the east. The West Coast Cemeteries include two discontinuous groups of burial grounds. A group of eight burial grounds occupy a landform referred to as Papaloa that edges the Administrative Area. To the north, the second cluster contains four burial grounds located on the landform referred to as ‘Īliopi‘i. The individual burial grounds, each affiliated with a specific group of people or religion, are referred to by name and a letter of the alphabet between A and M.

The West Coast Cemetery burials occur within sand dunes originally deposited by wind along the western shoreline. Today, these cemeteries are maintained in mown grass. There are a few trees located within the cemeteries. The shoreline is nearly entirely edged by stands of ironwood pine trees, planted as a windbreak. Most of the grave markers are modest in size (Figure 86). They are fashioned from a variety of materials, and arranged in different ways depending on the affiliation of each individual burial ground. Some areas are also edged by concrete or rock walls, or cast iron fencing, although there are also several larger markers and monuments.

To the east of the road, a row of residential properties gives way to a large open field known as Barrel Field. It is maintained by the NPS through mowing. At the north end of the Papaloa Cemeteries along Kamehameha Street is a cattle guard associated with deer fencing used to exclude axis deer from Kalaupapa Settlement.

Beach Houses

Refer to Figure 99, Beach Houses Character Area - Existing Conditions.

Beyond the ‘Īliopi‘i Cemeteries to the north is a linear collection of beach houses that overlook the Pacific Ocean and ‘Īliopi‘i Beach. The beach houses are widely spaced, with other nearby houses not generally

visible to one another. Associated with the Beach House area along Kamehameha Street is a cluster of recreational facilities built by the Lions Club. The cluster includes the Lions Pavilion, also known as Oceanside Pavilion, two shelters, a barbecue, and restrooms. A dry stacked stone wall edges the complex along Kamehameha Street.



Figure 87. View east of St. Philomena Church and the dry stacked stone wall that edges the property along Damien Road, 2017.

Kalawao

Refer to Figure 100, Kalawao Character Area - Existing Conditions.

Few of the original built features survive today of the nineteenth and early twentieth century settlement at Kalawao due to the fact that it was abandoned over the course of several decades as the community relocated to the western side of the peninsula for better weather conditions. As part of the relocation, many of the buildings were salvaged and the building materials used at Kalaupapa, although many dry stacked stone walls survive to illustrate former building complexes.

Kalawao was a linear community that followed the alignment of Damien Road. Clusters of built features that edged the road were surrounded by open areas used for cultivation and livestock pasture and recreation. Several churches were built at Kalawao; two survive today—St. Philomena Catholic Church (Figure 87) and Siloama Protestant Church. Both are set within precincts formed by dry stacked stone walls that contain burial grounds and plantings. Also in evidence are the structural remains of buildings and walls associated with the 1909 U.S. Leprosy Investigation Station, located along Damien Road near the eastern end of the peninsula, and the original Baldwin Home, located across Damien Road from St. Philomena Catholic Church.

Damien Road extends past St. Philomena Catholic Church and three burial grounds before turning north along the shoreline to Judd Park. The eastern section of the road has been realigned. A trace of the historic road alignment passes through a wooded area before ending near Judd Park. The park is a picnic area established for residents and their families in the 1950s, that includes a shelter, overlook, and picnic tables. From the eastern shoreline at Judd Park, expansive views of the Pacific Ocean are afforded, including the islets of ‘Ōkala, Huelo, and Mōkapu off the coast.

Molokai Light Station

Refer to Figure 101, Molokai Light Station Character Area - Existing Conditions.

Located at the northwestern end of Kalaupapa Peninsula is the Molokai Light Station. Light station buildings and structures are grouped into two clusters, with the lighthouse and several support structures located atop a knoll, and a residential precinct set within a walled area to the west. The lighthouse itself was built on top of Bokikūmanomano (the dog heiau), and the landscape over which the light station was developed is an extensive traditional Hawaiian agricultural complex. Present within the light station precinct are the archeological remains of historic-era sweet potato farming fields marked by stone wall remnants. Much of the landscape is open. The residential cluster is approached via a road edged by an ironwood pine allée. The walled residential precinct is also edged by windbreak plantings of ironwood pine on three sides. A 160-acre area of the peninsula was used as a bombing range from 1941 to 1946. It was referred to as the Makanalua Bombing Range.²¹⁰



Figure 88. View south toward the dry stacked stone walls that enclose a series of burial ground plots along the road leading to the western rim of Kauhakō Crater on Pu'u 'Uao, 2017.

Pu'u 'Uao and Kauhakō Crater

Refer to Figure 102, Pu'u 'Uao and Kauhakō Crater Character Area - Existing Conditions.

As noted the volcanic cone of Pu'u 'Uao is the highest point on the peninsula. It rises dramatically within the south-central portion of the peninsula to the north of Damien Road. An unimproved access road leads north from Damien Road to the western rim of the peak which overlooks Kauhakō Crater. The road margins along the slope and the apex of the rim are edged by dry stacked stone wall enclosures that surround graves (Figure 88). A large concrete cross stands atop the western rim of the crater that is visible from the Kalaupapa

210. Parsons, "Site Inspection Report Makanalua Bombing Range, Island of Molokai, Hawaii" (Honolulu, Hawai'i: U.S. Army Corps of Engineers, Fort Shafter, 2008).

Settlement below to the west. Expansive views from Pu‘u ‘Uao are afforded to the Molokai Light Station, Kalaupapa Settlement, the Pacific Ocean, and the pali.



Figure 89. View west along the Damien Road corridor, 2017.

Damien Road

Refer to Figure 103, Damien Road Character Area - Existing Conditions.

Damien Road connects Kalawao and Kalaupapa Settlements along the southern margin of the peninsula.²¹¹ Damien Road, itself a historic feature, passes several historic features, including the road that leads to the western rim of the crater, water tanks associated with the original water supply system, the site of Settlement Superintendent Ambrose Hutchison’s House, a tsunami preparedness area, a stone cistern, numerous dry stacked stone walls, a heiau, wall-enclosed Kahaloko Cemetery, and evidence of the extensive traditional Hawaiian habitation and agricultural landscape that underlies the present built environment. The road is variously edged by woodland, clearings, and periodic stone cultural feature remains. The road corridor varies from being open along the margins to being heavily wooded (Figure 89).

211. For purposes of this study, Damien Road is the corridor that extends east from the cattle guard and deer fence at the eastern end of Beretania Street that marks the current extent of Kalaupapa Settlement, while one of the primary roads located within Kalaupapa Settlement is referred to as Damien Street. A trace of Damien Road extends from the eastern edge of the settlement within the residential area to the Ambrose Hutchison House site.



Administrative Area Resources

- | | |
|--|---|
| 1. DOH Large Equipment Garage | 27. Construction Camp Wash House 656 |
| 2. Kamahana Store | 28. NPS Garage near 302/303 |
| 3. Benjamin Residence | 29. Recreation Court |
| 4. Quonset Storage Hut | 30. Police/Jail Headquarters |
| 5. Crematory | 31. Paschoal Hall, coconut palm trees and sidewalks |
| 6. Materials Shed | 32. Concrete flagpole footing |
| 7. Laundry | Wayside exhibit |
| 8. Maintenance Shop | Concrete bollards |
| 9. Shoichi Hamai Residence | 33. Mae Malakaua Residence |
| 10. Garage | 34. Old Stone Church |
| 11. Ice Plant | 35. Carport and Storage Shed |
| 12. Restroom | 36. Craft Shop and Storage Building |
| 13. Patient Store | 37. Library |
| 14. Kalaupapa Landing, Breakwater, Bulkhead Wall | 38. Administration Building |
| 15. General Warehouse | 39. Shed 623 |
| 16. Oceanside Pavilion | 40. Souza Residence |
| 17. Gas Station | 41. Fuesaina's Bar |
| 18. Store Warehouse | 42. Fuesaina's Bar Restroom |
| 19. Post Office | 43. Fuesaina's Bar Storage |
| 20. Garage | 44. Fumigation Room |
| 21. DOH Motor Pool Gas Station | 45. Outpatient Clinic |
| 22. Vehicle Equipment Storage | 46. Hospital Site and Ruins |
| 23. DOH Motor Pool Garage | 47. Kalaupapa Memorial Hospital |
| 24. Garage/HAZMAT | 48. Kamehameha Street stone culvert |
| 25. Hale Malama | 49. Industrial Area / Administration Rock Walls |
| 26. Construction Camp Residence | 50. Ambulance garage |
| | 51. Generator shed |
| | 52. Containers |
| | 53. Storage Shed, Damien Road |

KEY

- Character area boundary
- Primary roads
- Secondary roads
- Buildings
- Foundations
- Sidewalks
- Walls (C)
- Fences (NC)
- Trees
- Key views

Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii

Figure 90. Administrative Character Area - Existing Conditions

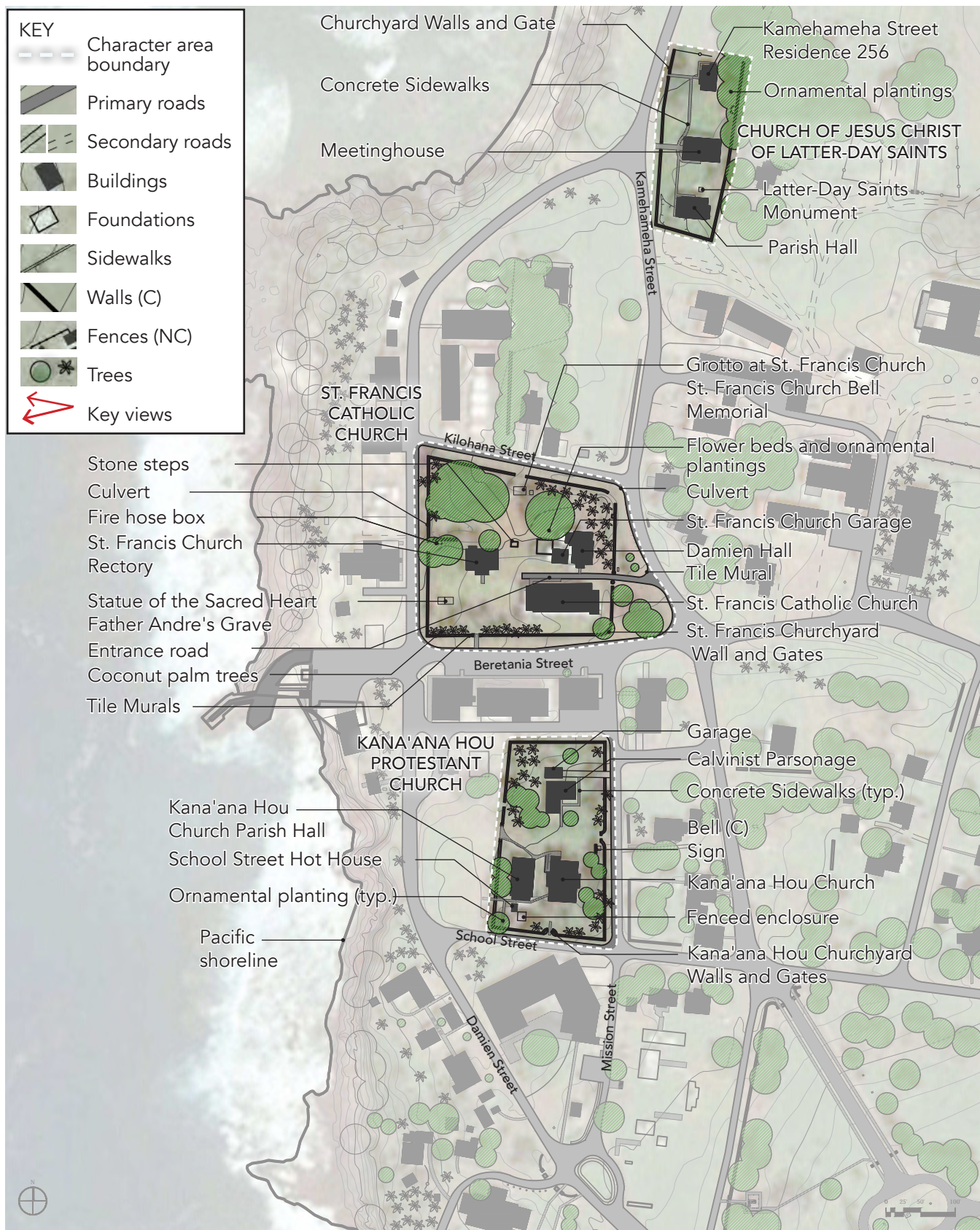


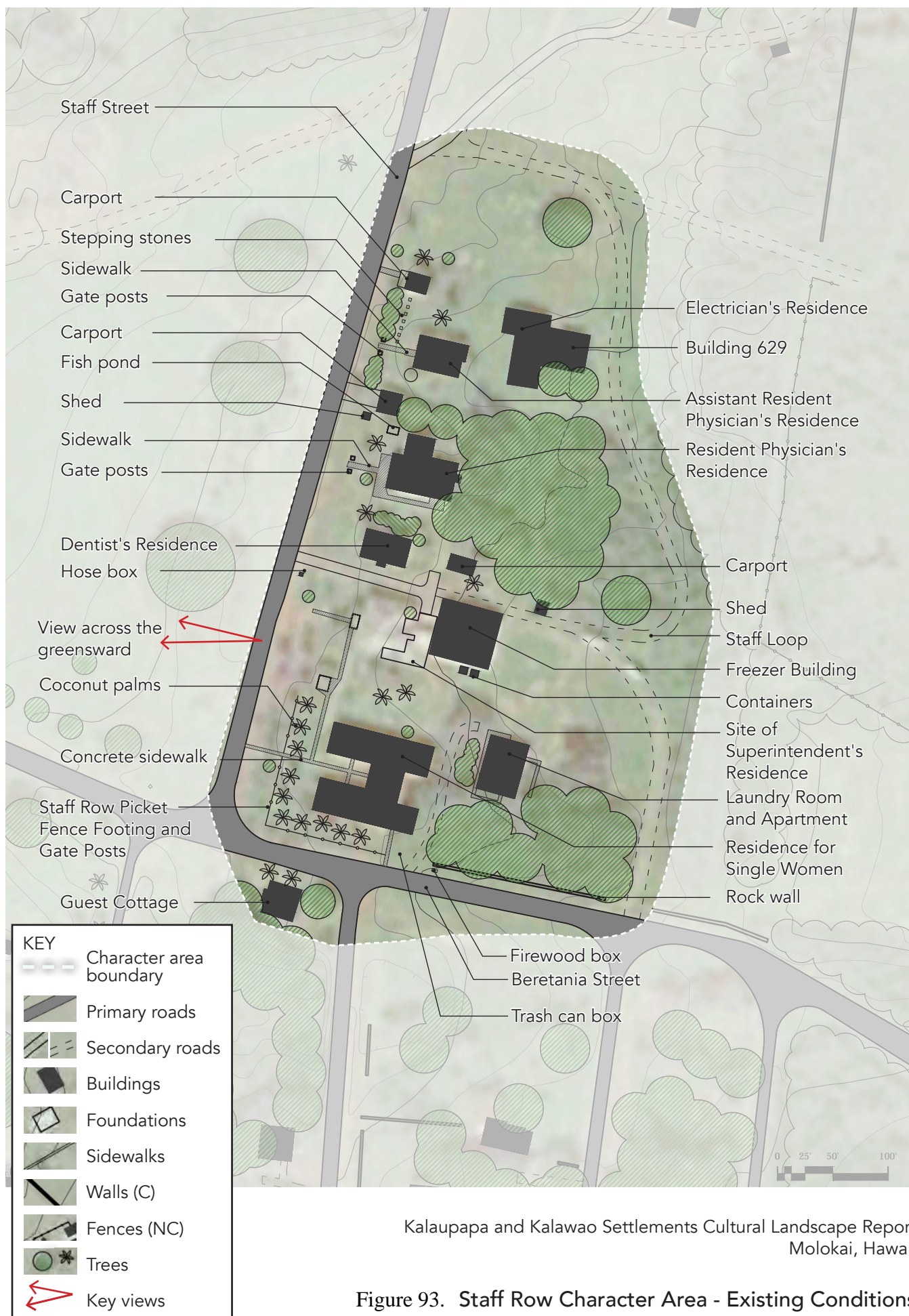
Figure 91. Kalaupapa Churches Character Area - Existing Conditions



Residences Area Resources

- | | |
|--|---|
| 1. Beretania Street | 55. Shed in Bus Storage Area |
| 2. Goodhue Street | 56. Katherine Costales Residence |
| 3. Clarence Naia Residence | 57. Elizabeth Bell Residence |
| 4. Nono Residence | 58. Ka'iulani Street Building 569 |
| 5. Goodhue Street Shed 605 | 59. Kapi'olani Street Residence 199 |
| 6. Goodhue Street Garage 609 | 60. Ka'iulani Street Garage |
| 7. Sagadraca Residence | 61. Soria Residence |
| 8. Elaine Remigio Residence | 62. Garage |
| 9. Goodhue Street Garage 613 | 63. Ka'iulani Street Garage 570 |
| 10. Storage Shed/Carport | 64. Nellie McCarthy Residence |
| 11. Goodhue Street Garage 614 | 65. Rea Residence |
| 12. Goodhue Street Shed | 66. Kaiulani Street Garage 571 |
| 13. Cabane Residence | 67. Sebastiana Fernandez Residence |
| 14. School Street | 68. Kaiulani Street Storage Shed |
| 15. Yamamoto Residence | 69. Kaiulanai Street Shed 573 |
| 16. Bishop Street | 70. Storage Shed |
| 17. John Arruda Residence, Garage, and fishpond | 71. Puahi Street |
| 18. Bishop Street Garage 622 | 72. Puahi Street Garage |
| 19. Bishop Street Garage 621 | 73. Seki Residence |
| 20. Paul and Winifred Harada Residence | 74. Puahi Street Garage 515 |
| 21. Rock walls (typ.) | 75. Puahi Street Residence 103-64 |
| 22. Garage | 76. Damien Street |
| 23. McKinley Street Residence 123-62 | 77. Puahi Street Storage Building 520 |
| 24. McKinley Street | 78. Puahi Street Hothouse |
| 25. Nicky Ramos Residence | 79. Richard Purple Residence |
| 26. Shed 590 | 80. Clarence and Ivy Kahilihiwa Residence |
| 27. McKinley Street Building 592 | 81. Cathrine Puahala Residence |
| 28. Guest House, Ramos | 82. Meli and Randall Watanuki Residence |
| 29. Punikai'a Residence | 83. Garage 533 |
| 30. Haleakala Street | 84. Olivia Breitha Residence |
| 31. Lourdes Taghoy Residence | 85. Damien Road Garage 531 |
| 32. Baldwin Street Garage | 86. Damien Road Carport |
| 33. McKinley Street Residence 154 | 87. Damien Road Carport Tool Shed |
| 34. AJA Outbuilding | 88. Wire fencing (typ.) |
| 35. AJA Benevolent Society Hall, worship feature | 89. Damien Road Residence 110-64 |
| 36. Bernard Punikai'a Residence | 90. Damien Road Carport |
| 37. Lucy Kaona Residence | 91. Damien Road Residence 111-56 |
| 38. Henry Nalaelua Residence | 92. Damien Road Residence 112-56 |
| 39. Baldwin Street | 93. Anita Una Residence |
| 40. Baldwin Street Residence 182-62 | 94. Mamuad Residence |
| 41. Nakoa Residence | 95. Residential Area Sidewalks (typ.) |
| 42. Baldwin Street Garage | 96. Nakanishi Residence |
| 43. Yonemori Residence | 97. Shed |
| 44. Haleakala Street Garage 587 | 98. Chainlink fencing (typ.) |
| 45. Kapi'olani Street | 99. Damien Road Residence 26 |
| 46. Ka'iulani Street | 100. Mother Clinton Monument |
| 47. Ka'iulani Street Garage 563 | |
| 48. Kapi'olani Residence | |
| 49. Kaiulani Street Garage 564 | |
| 50. Gloria Marks Residence | |
| 51. Richard Marks Carport | |
| 52. Richard Marks Bottle House | |
| 53. Garage | |
| 54. Richard Marks Residence | |

Figure 92. Residential Character Area - Existing Conditions



Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii

Figure 93. Staff Row Character Area - Existing Conditions



Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii

Figure 94. McVeigh Home Character Area - Existing Conditions

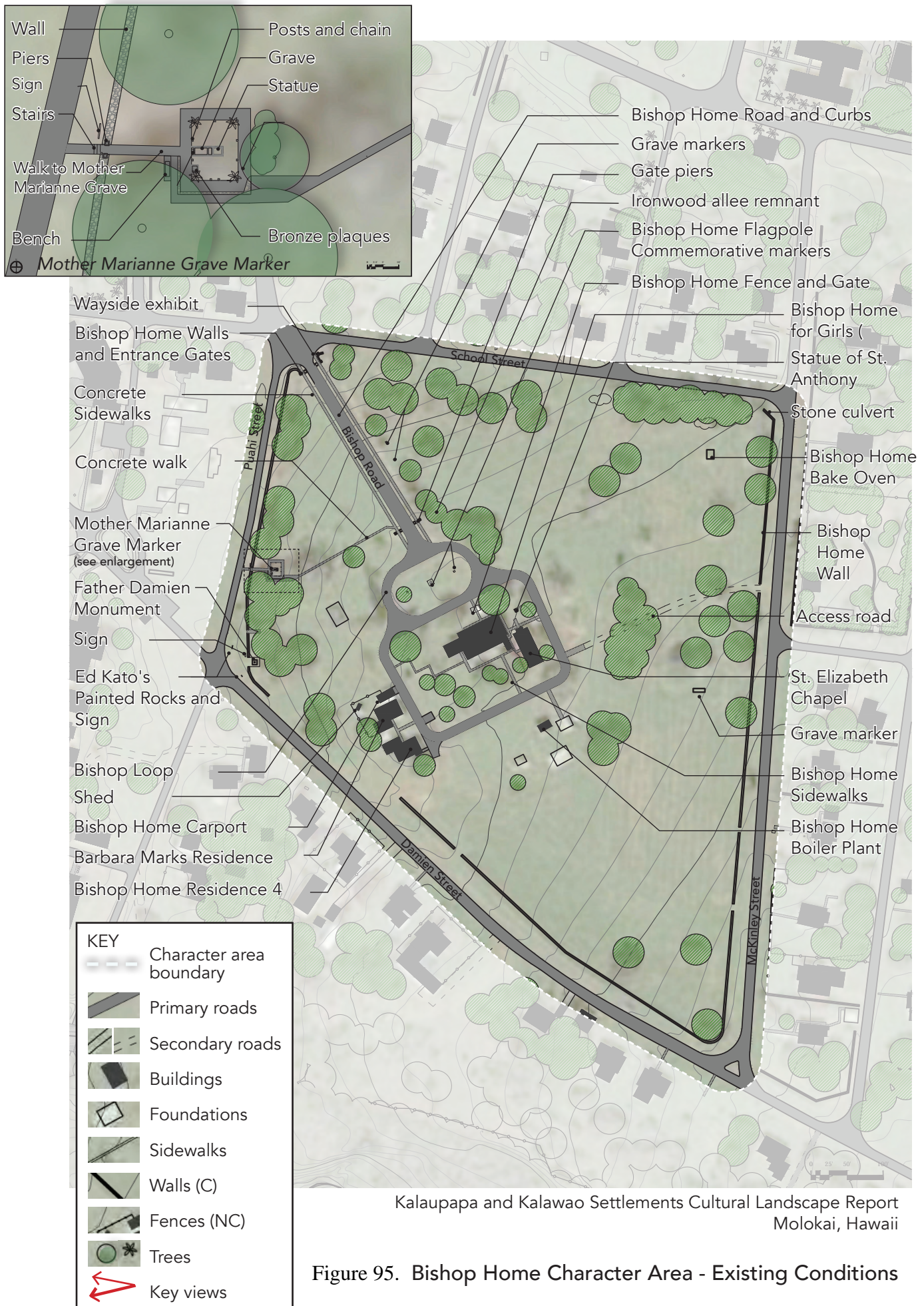


Figure 95. Bishop Home Character Area - Existing Conditions

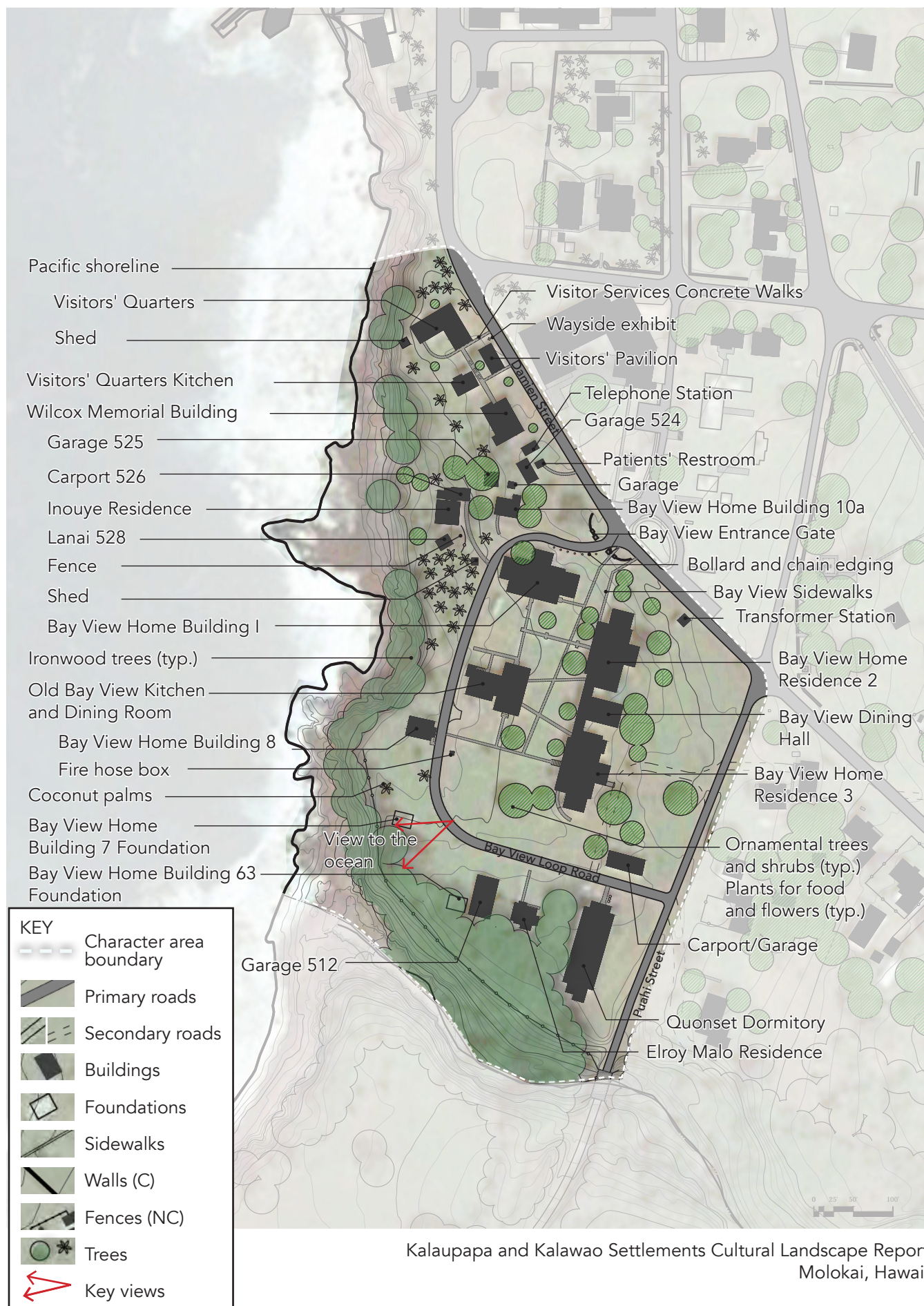


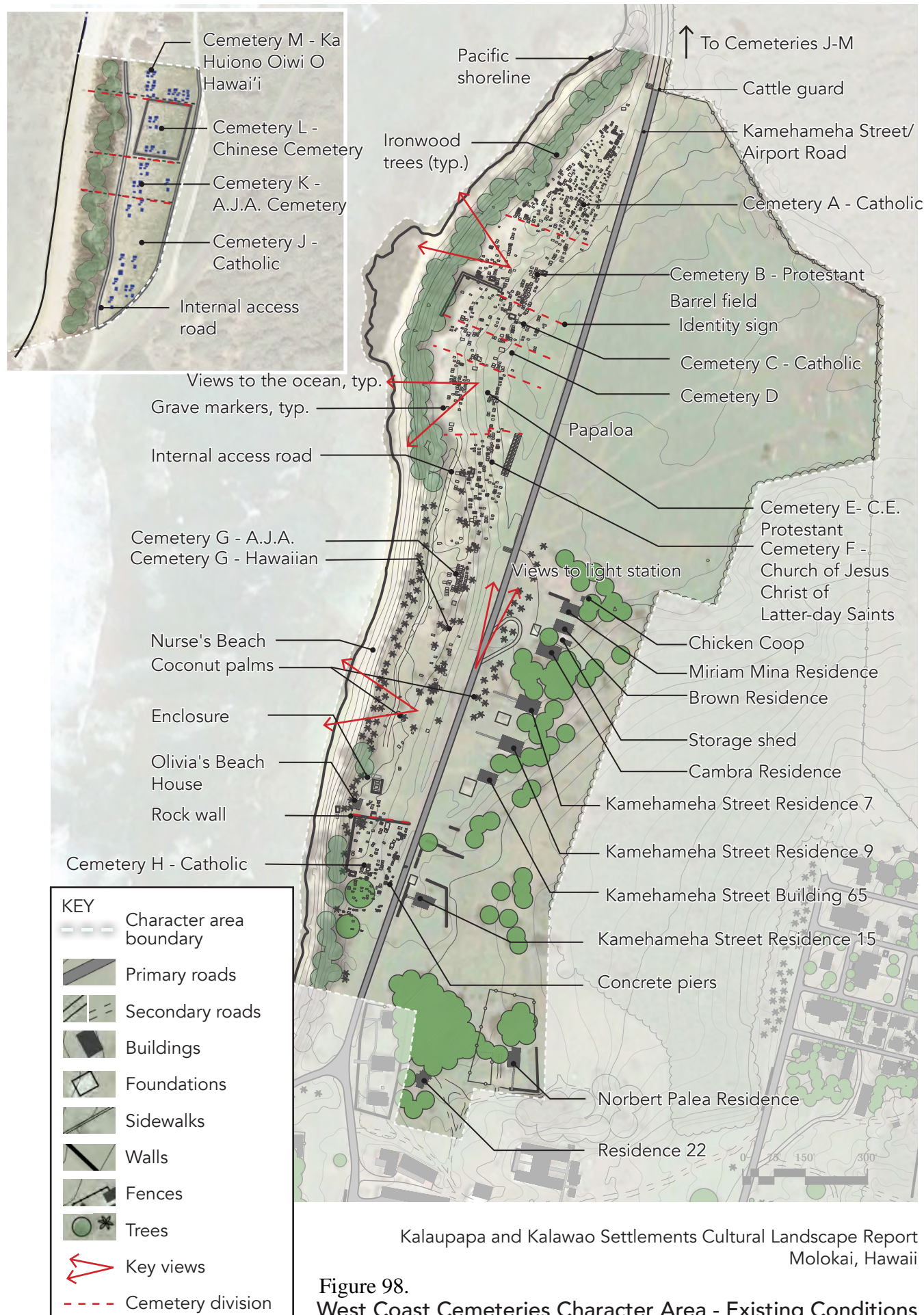
Figure 96. Bay View Home Character Area - Existing Conditions



KEY	
	Character area boundary
	Primary roads
	Secondary roads
	Buildings
	Foundations
	Sidewalks
	Walls (C)
	Fences (NC)
	Trees
	Key views

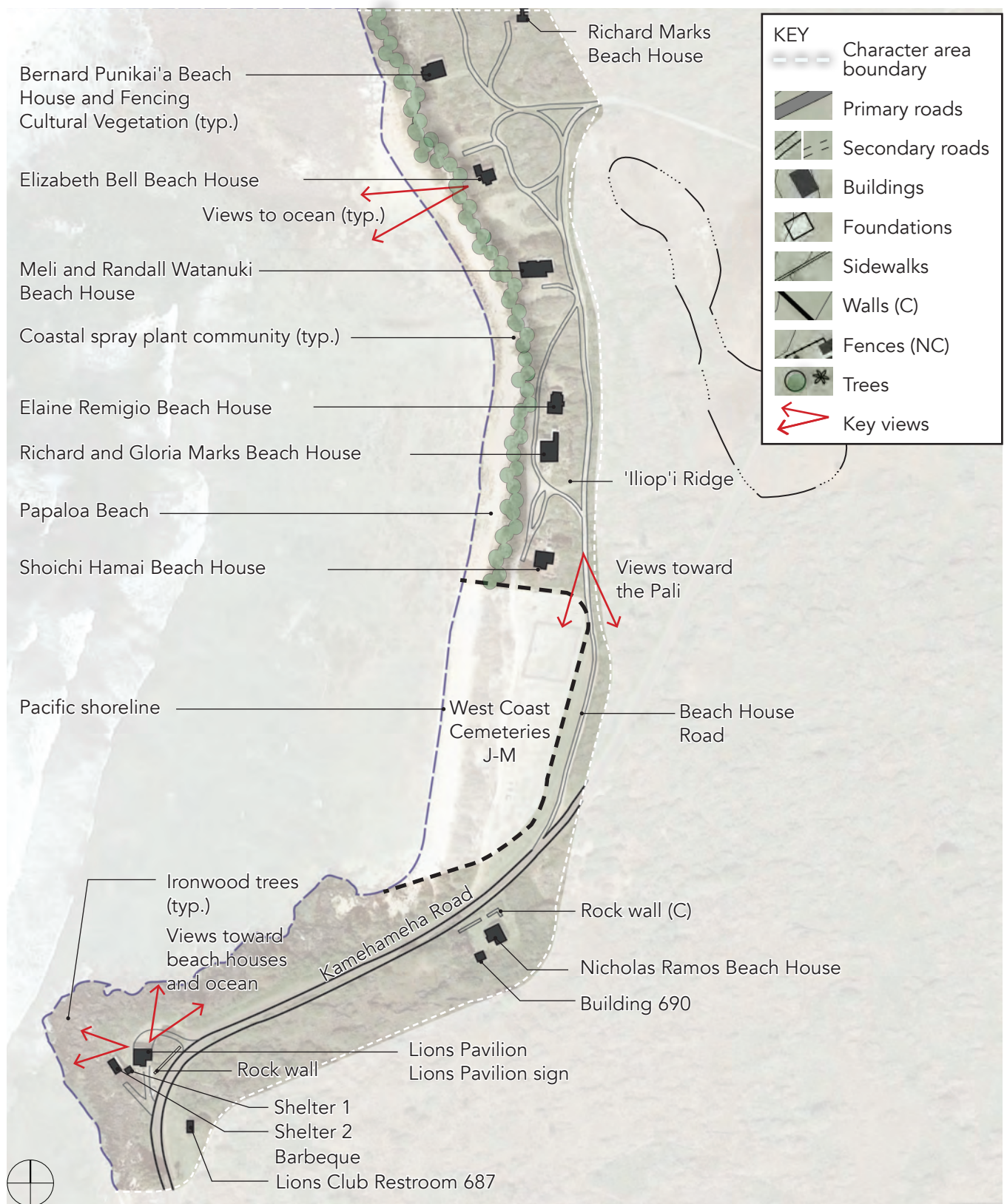
Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii

Figure 97. New Baldwin Home Character Area - Existing Conditions



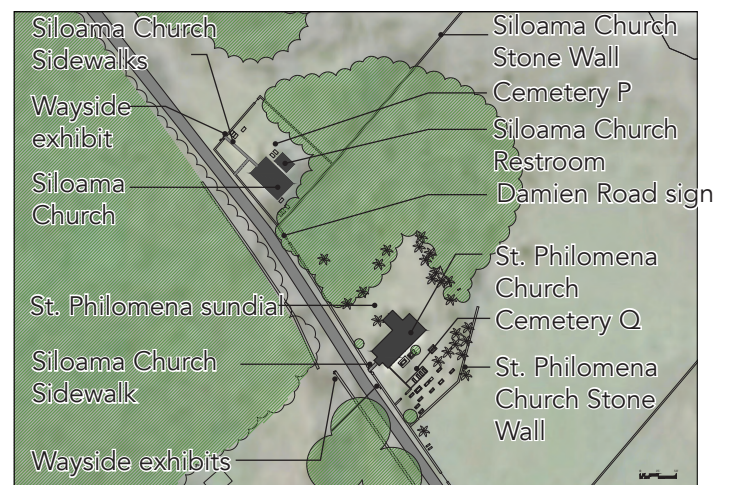
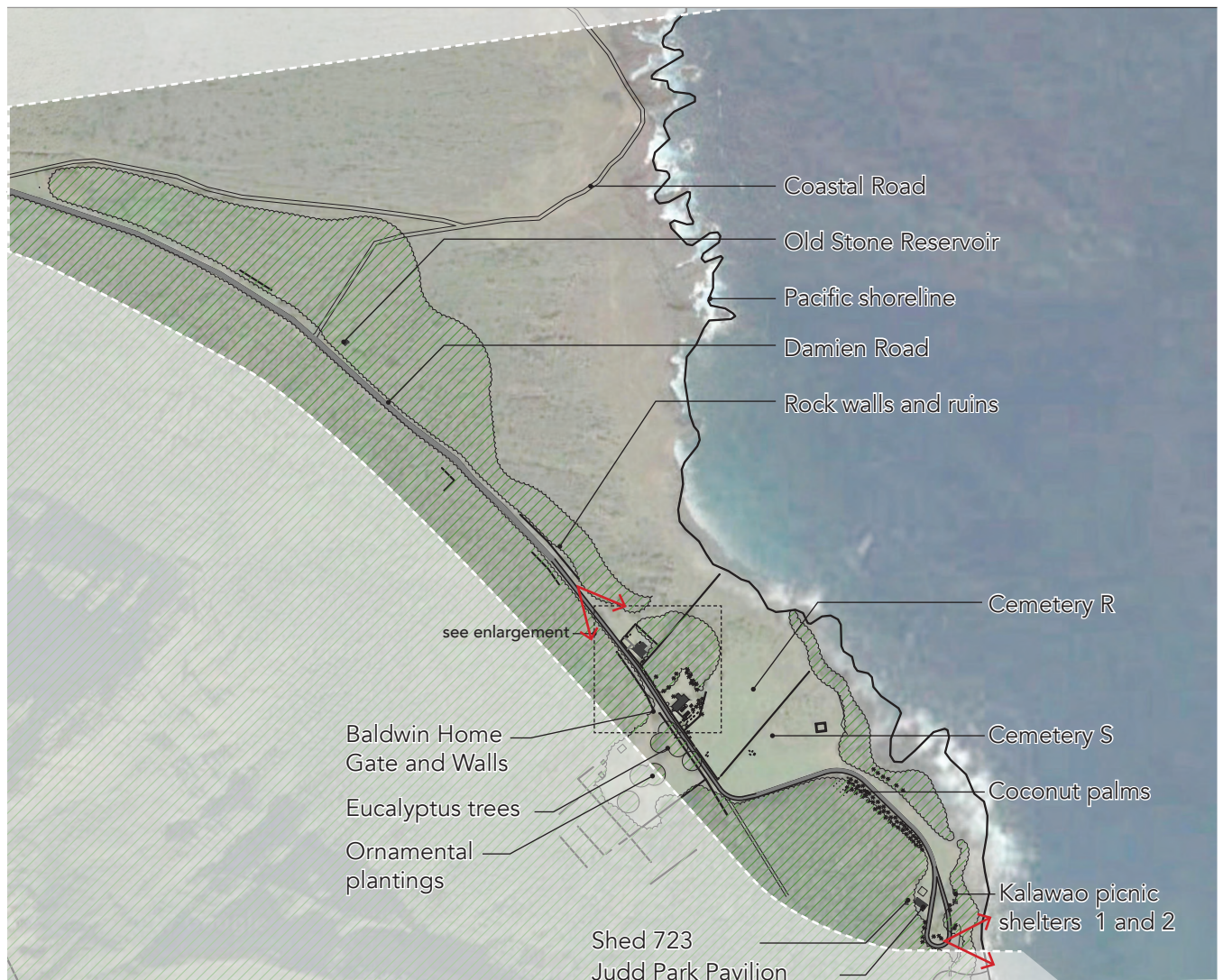
Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii

Figure 98.
West Coast Cemeteries Character Area - Existing Conditions



Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii

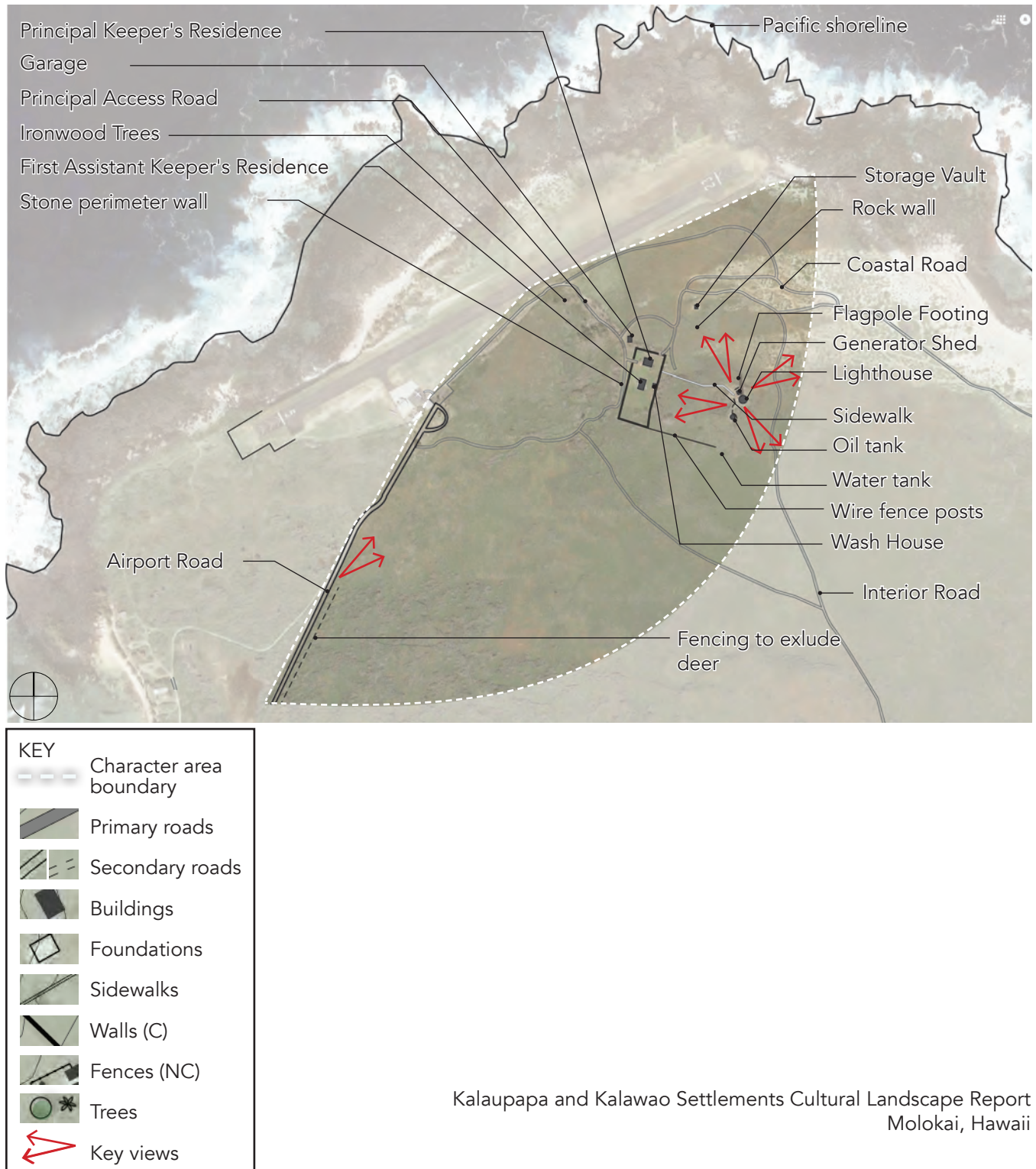
Figure 99. Beach Houses Character Area - Existing Conditions



Siloama Church and St. Philomena Church

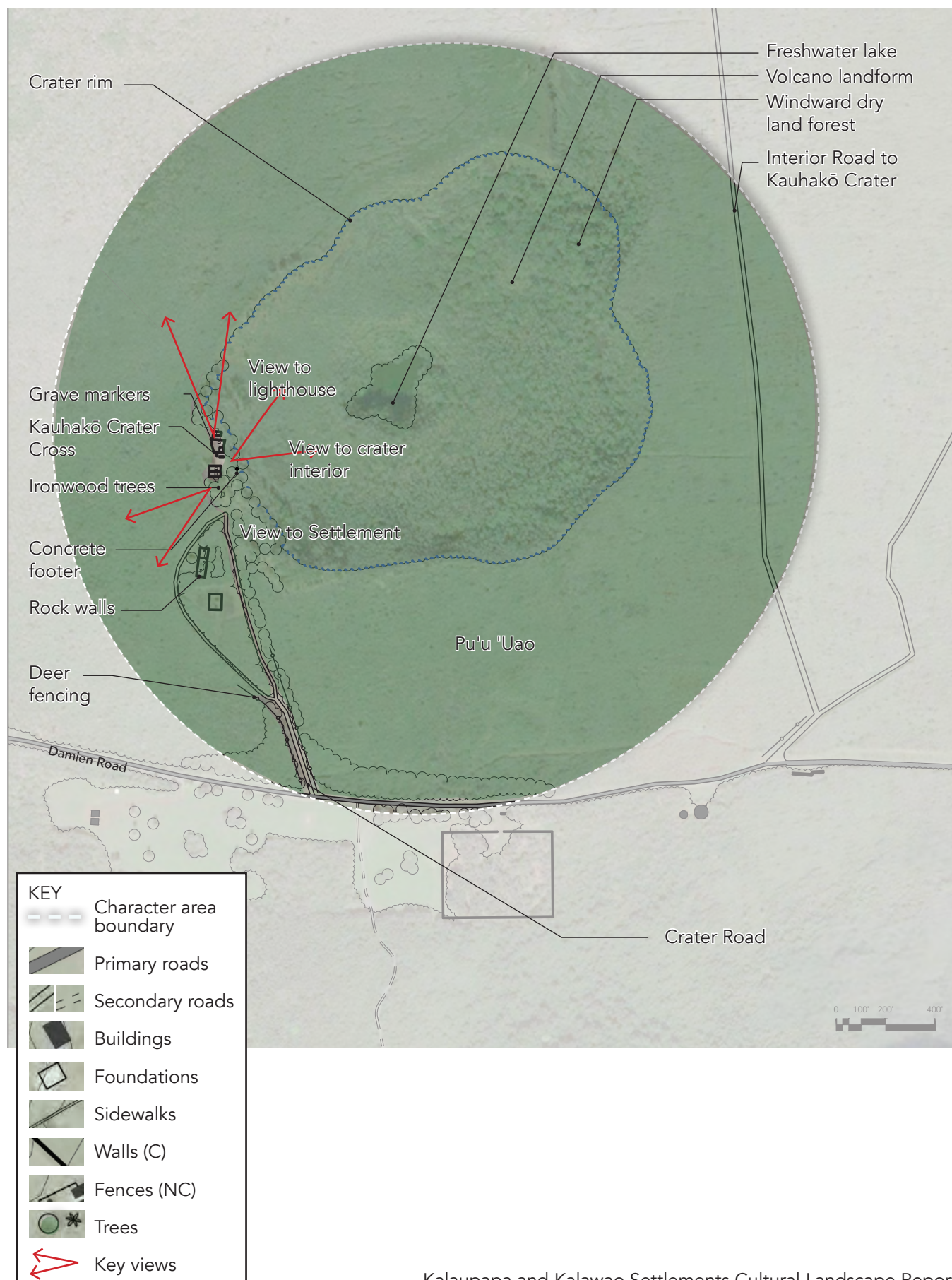
Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii

Figure 100. Kalawao Character Area - Existing Conditions



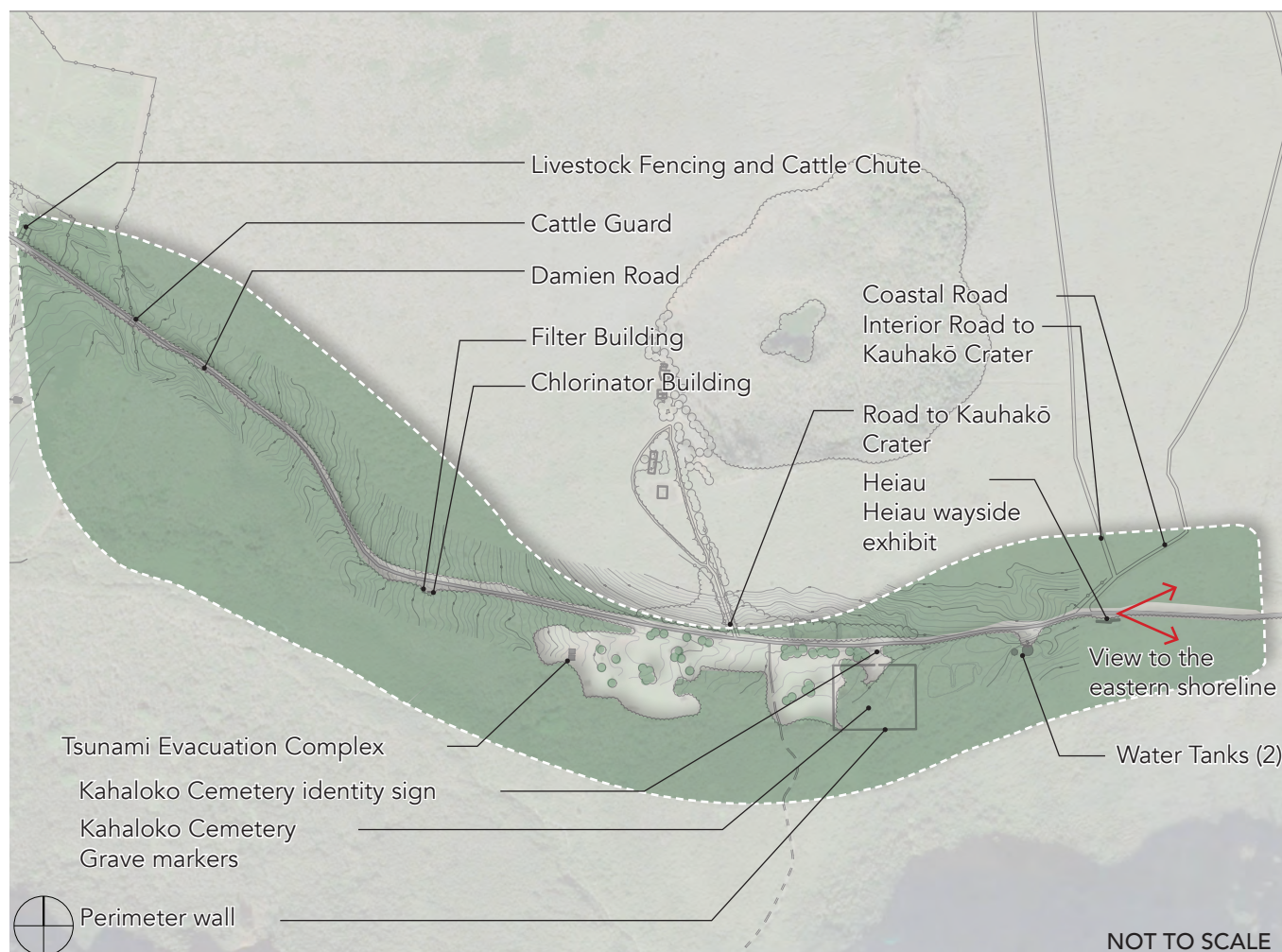
Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii

Figure 101. Molokai Light Station Character Area - Existing Conditions



Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii

Figure 102. Kauhakō Crater Character Area - Existing Conditions



Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii

Figure 103. Damien Road Character Area - Existing Conditions

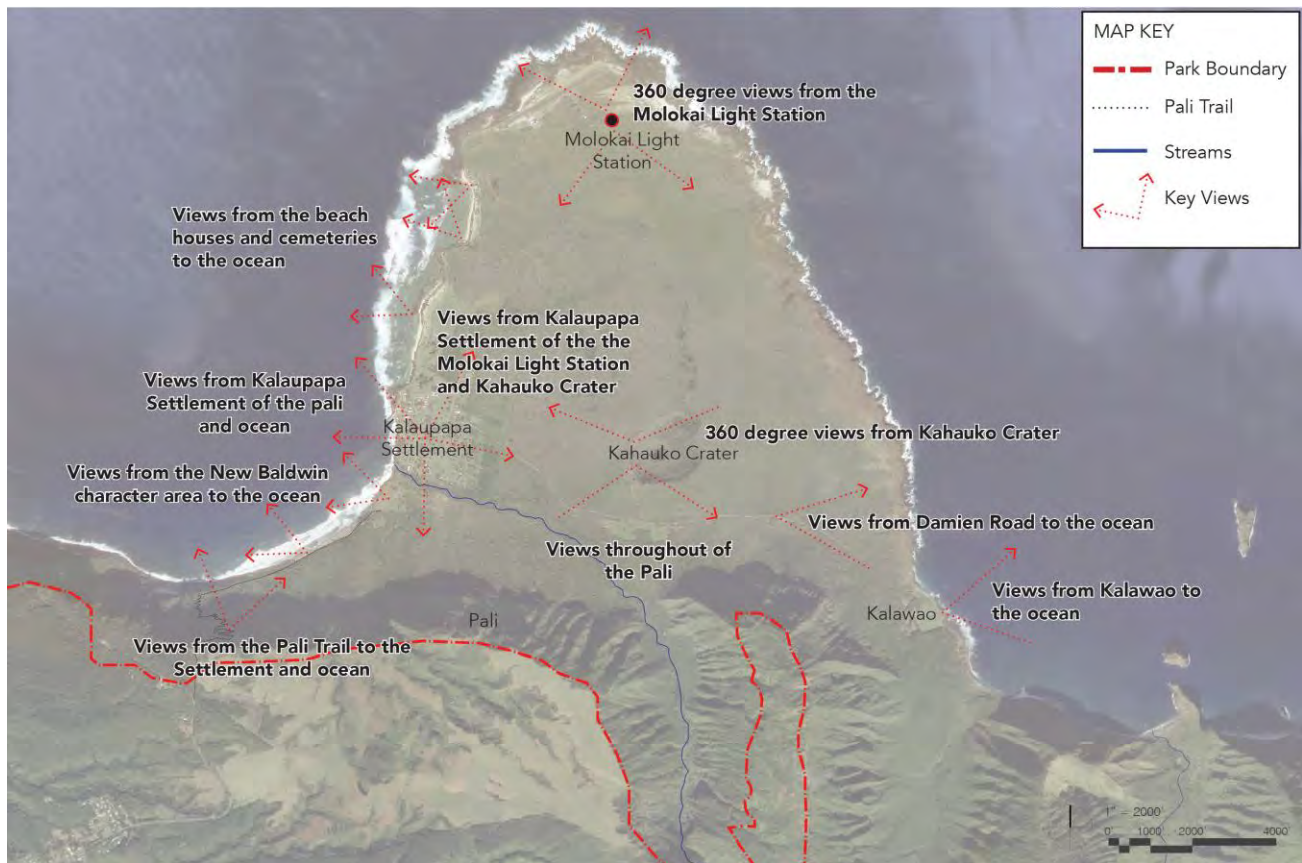


Figure 104. Diagram of key views within the study area. (Source: LSHLA)

Views and Viewsheds

Refer to Figure 104, Diagram of key views within the study area.

Views are among the most character-defining elements of the Kalaupapa peninsula. From most locations within the peninsula, dramatic views are afforded of the pali to the south and the Pacific Ocean to the north, west, or east. Views are pervasive throughout the Settlement along road corridors, across open fields and mown turf lawn, the cemeteries, and from elevated positions. Other important views are from two shelters located along the western coastline. One is the Oceanside Pavilion located south of Kalaupapa Landing within the core of Kalaupapa Settlement, while the other is the Lions Club Pavilion located north of Papaloa Cemeteries. Among the iconic views associated with the Settlements is the view from Judd Park to the three islets off the eastern coastline of the peninsula. Broad and expansive views of the Kalaupapa Settlement are afforded from the Molokai Light Station, the rim of Kauhakō Crater, and the upper reaches of the Pali Trail, particularly between switchback 16 and topside Molokai, and at a landing at the top of the trail that provides an overview of the peninsula. From the elevated position atop the crater, views are afforded of the pali (Figure 105), Pacific Ocean, and Molokai Light Station. The cross located atop the crater is visible from Kamehameha Street and the Papaloa Cemeteries.



Figure 105. View southeast from Kauhakō Crater, 2017.



Figure 106. Views of the pali and the Pacific Ocean are pervasive throughout the Settlements and are important to the sense of place, 2018.

Within both Kalawao and Kalaupapa Settlements, views of the Pacific Ocean are also integral to community life (Figure 106). Road corridors afford views of iconic structures, such as the churches and Paschoal Hall. Views along road corridors are sometimes open due to the presence of mown fields and grassy areas around buildings, and other times directed by rows of trees, fences, and the many dry stacked stone walls that characterize the Settlements landscape. Near views of Settlement features often include the more distant boundaries of the pali and Pacific Ocean. Views allow for a direct connection to the surrounding landscape and a sense of expansion that is exhilarating and one of the most joyous aspects of the Settlement.



Figure 107. The open area east of Paschoal Hall is visible from Staff Street looking southwest, 2018.

One of the important views within Kalaupapa Settlement is of the large open space that forms the heart of the community east of Paschoal Hall. This open space, visible from Staff Street and Staff Row, as well as Beretania Street (Figure 107), contributes to the sense of center associated with Paschoal Hall.



Figure 108. View toward the eastern shoreline from Damien Road, 2018.

Other important views include the first sight of the Pacific Ocean and the eastern shoreline along Damien Road as it approaches Kalawao (Figure 108).



Figure 109. View toward the pali from Kamehameha Street, 2018.

Open spaces maintained through mowing, such as Barrel Field across Kamehameha Street from the Papaloa Cemeteries, afford opportunities for expansive views of the landscape (Figure 109). Where invasive woody plant species have colonized formerly open fields, views are often blocked. Long-time residents of Kalaupapa specifically lament the loss of these views, particularly those along Damien Road within Kalawao, which are now blocked by woody vegetation. Residents of Kalaupapa have described the importance of views in interviews conducted with Sonia Juvik and others conducting ethnographic studies. One of the interviews indicated the following regarding the role of views within Kalaupapa:

At 9:00 the Kalaupapa Store becomes a gathering place. A long lanai (veranda) lined with benches stretches across the front of the store, offering a nice view out to the ocean . . . Usually they sit for a while on the benches and talk story with others who have come to buy, for anywhere from a few minutes up to a half hour.²¹²

212. Charles Langlas, Ka'ohulani McGuire, and Sonia Juvik, *Kalaupapa 2002-2005: A Summary Report of the Kalaupapa Ethnographic Project* (National Park Service, 2008), 28.

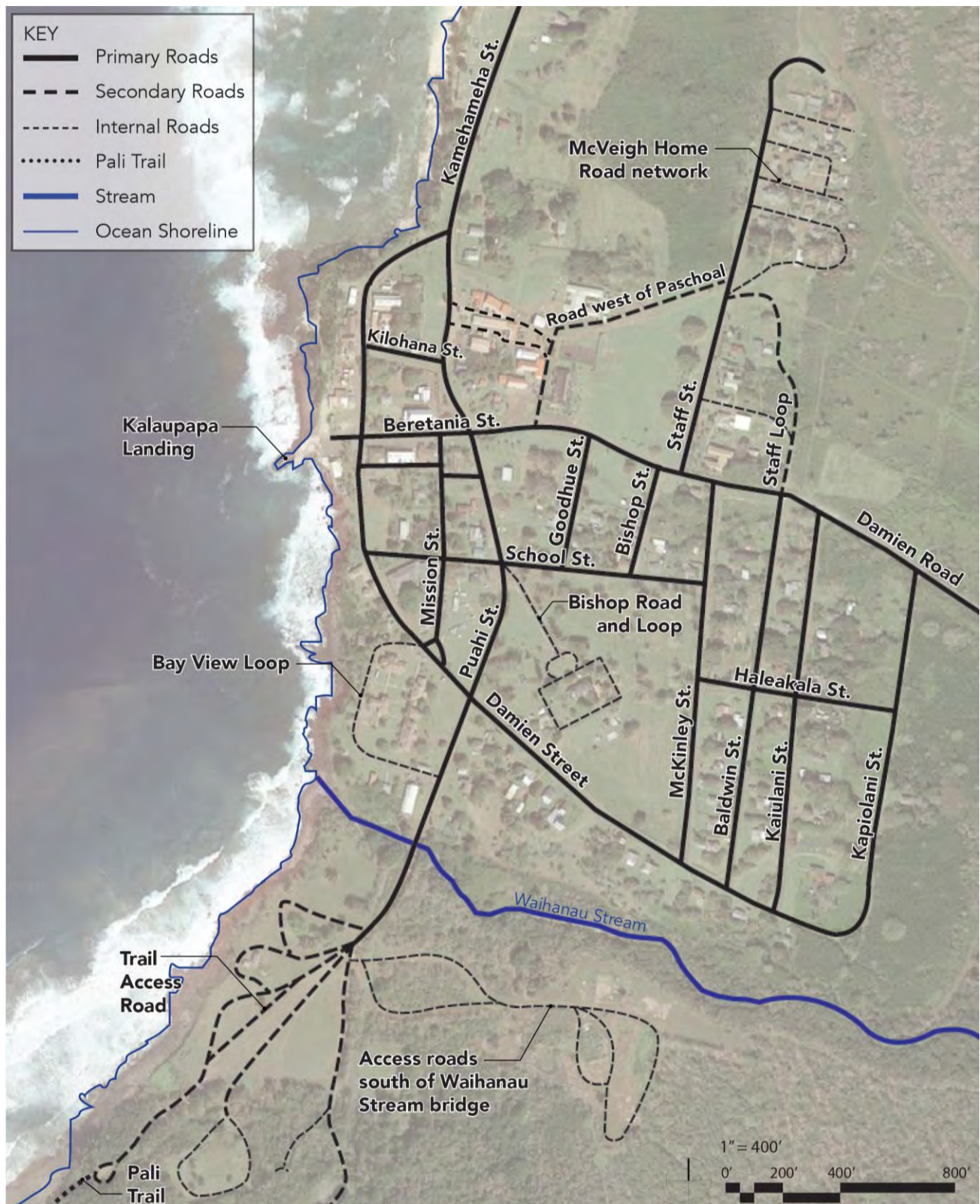


Figure 110. Kalaupapa Settlement circulation features. (Source: LSHLA)

Circulation

Refer to Figure 110, Kalaupapa Settlement circulation features, and Figure 111, Peninsula-wide circulation features.

Access to the Kalaupapa Peninsula occurs one of three ways—via boat to Kalaupapa Landing, by foot or by mule along the Pali Trail, or by small aircraft via the Kalaupapa Airport. Within Kalaupapa Peninsula there are numerous circulation features that accommodate vehicles as well as pedestrians in the form of primary, secondary, and interior access roads; driveways; parking facilities; and walks. Circulation features vary in terms of character, dimension, surfacing materials, and edge conditions.

Vehicular circulation occurs within an articulated hierarchy of primary and secondary roads, interior access roads, and unimproved access roads. At Kalaupapa Settlement, primary roads form an irregular grid pattern of blocks along which are sited buildings, structures, plantings, and other landscape features. Secondary roads are unpaved routes that provide access to more remote areas. Interior access roads lead to a cluster of features sited beyond a primary road. Unimproved access roads are dirt or grass two-tracks that lead to maintenance, service, or operational facilities or parking areas.

Arising from the roads are driveways and parking areas. Most are modest in size and scale, but vary in terms of surfacing materials from concrete to asphalt, dirt, and grass.

Pedestrian circulation primarily occurs in the form of concrete walks. These are generally narrow, typically 3-feet in width, and lead from roads, driveways, and parking areas to building entrances. Ramps are used to facilitate pedestrian and wheelchair access to many of the institutional and residential buildings.



Figure 111. Peninsula-wide circulation features. (Source: LSHLA)

The gridded network of primary roads at Kalaupapa Settlement contrasts with the linear arrangement of Kalawao Settlement, where most of the built features were historically oriented to a single central road corridor—Damien Road—with interior access roads formerly arising from the route (Figure 111).

Primary Roads. Primary roads are generally asphalt-paved, unstriped, 18- to 20-foot-wide public routes edged by a right-of-way maintained in turf grass, beyond which are located features such as dry stacked stone walls, fences, hedges, and trees that mark the boundaries of individual properties. Electrical power lines and poles edge, and cross, many of the primary road corridors. The buildings that line each street generally face primary roads at a consistent setback, while many of the blocks typically support a similar land use. Roads

intersect with curved radii. Stop signs mark intersections. Concrete and metal pipe culverts, some edged by stone headwalls, convey storm water beneath several primary roads at Kalaupapa Settlement. These occur at Kamehameha Street and Damien Street, with storm water flow traversing the lower-lying land north of St. Francis Catholic Church and into the Pacific Ocean to the west; at Staff Street west of McVeigh Home; and at the north ends of McKinley and Bishop Streets near the intersection with Beretania Street.



Figure 112. View northeast along Kamehameha Street, with the West Coast Cemeteries at Papaloa to the left, and residential properties to the right, 2017.

The primary road that leads north from Kalaupapa Settlement is known as Kamehameha Street/Airport Road. It is asphalt-paved (Figure 112). Damien Road, which connects Kalaupapa and Kalawao Settlements, is the only primary road corridor that is gravel-surfaced.



Figure 113. View south along Puahi Street, one of the primary roads within Kalaupapa Settlement, 2017.

North-south primary roads in Kalaupapa Settlement include Kamehameha Street, Mission Street, Damien Street, Baldwin Street, Bishop Street, Goodhue Street, Kaiulani Street, Kapiolani Street, McKinley Street, Staff Street, and Puahi Street (Figure 113).



Figure 114. View west along Beretania Street near its intersection with Puahi Street (left), and Kamehameha Street (right), 2017. Also visible are the DOH administration building to the left and St. Francis Catholic Church to the right.

East-west primary roads in Kalaupapa Settlement include Beretania Street, School Street, Haleakala Street, and Kilohana Street. Beretania Street extends from Kalaupapa Landing to Damien Road, and provides views of St. Francis Catholic Church (Figure 114) and Paschoal Hall.



Figure 115. Beach House Road is an example of a secondary road within Kalaupapa Settlement, 2017.

Secondary Roads. Secondary roads that occur within the Kalaupapa and Kalawao Settlements are narrower than primary roads, measuring approximately 12 to 15 feet in width, and surfaced with gravel, hard-packed earth, or sand. Edge conditions associated with secondary roads vary, and include woodlands, herbaceous and woody vegetation, and fencing. The secondary roads located within Kalaupapa and Kalawao Settlements include the Trail Access Road that leads to the Pali Trail, Beach House Road (Figure 115), Crater Road, Coastal Road, and the Interior Road to Kauhakō Crater.



Figure 116. One of the interior roads associated with McVeigh Home, 2017.

Interior Access Roads. Interior access roads lead into Bay View Home, Bishop Home, and McVeigh Home in Kalaupapa Settlement (Figure 116). Improved interior access roads are asphalt-paved, and narrower than primary roads. At McVeigh Home, the interior roads are narrow and range from 10 to 12 feet in width, while those at Bay View and Bishop Home are wider, ranging from 12 to 15 feet in width. Many of the interior access roads are edged by concrete curbs.



Figure 117. One of the unimproved access roads at the Molokai Light Station, 2018.

Unimproved Access Roads. Unimproved access roads are associated with service routes for maintenance and other utility functions, and lead to isolated buildings, parking areas, service and maintenance facilities, and remote storage areas. Unimproved access roads are generally single-lane, two-track routes surfaced with grass and hard-packed earth wheel ruts. Examples include three access roads associated with Molokai Light Station (Figure 117), Staff Row Loop, roads connecting Barrel Field and McVeigh Home, and leading through the West Coast Cemeteries.



Figure 118. A concrete-paved residential driveway, 2018.

Driveways. Driveways are associated with individual dwellings within the Residential Area as well as several other properties within the Administration Area. Driveways within the Residential Area often lead to garage structures or carports. Driveways are generally narrow—approximately 10 to 12 feet in width—and

vary in surfacing from concrete (Figure 118) or asphalt paving to grassy two-tracks or hard-packed earth roads.



Figure 119. Driveway leading into the St. Francis Catholic Church property, 2017.

Within the Administrative Area, driveways are associated with Craft Shop/Storage Building and Old Stone Church; St. Francis Catholic Church (Figure 119); Ice Plant; Kana‘ana Hou Church; Kalaupapa Memorial Hospital; Bay View Home Building 10A; Bay View Dining Hall; Administrative Building; McVeigh Home Residence 12; Dentist’s Residence and Freezer building; and the Assistant Resident Physician’s Residence.



Figure 120. Paved parking area in front of the Patient Store, 2018.

Parking Areas. Parking areas occur throughout Kalaupapa and Kalawao Settlements as both formal and informal circulation features located near institutional, recreational, administrative, health services, and commercial buildings, as well as group home complexes. Parking areas within the Administration Area are typically asphalt paved and arranged for head-in parking along the adjacent primary road. Examples include the Patient Store (Figure 120), Paschoal Hall and the DOH Administration Building. Parking also occurs within areas with a larger footprint, such as outside Kalaupapa Memorial Hospital.

Parking associated with maintenance facilities occurs in less formal arrangements such as single paved spaces adjacent to buildings and larger dirt-surfaced parking areas. Parking of vans used for tours currently occurs near the mule corral within the New Baldwin Home area. Ad hoc parking also occurs in several locations. For example, the turf at the south end of Bay View Home is used as a parking area for those working in offices within the complex. Elsewhere, Kalaupapa residents are also known to park on the turf grass alongside the road in front of most buildings that they visit. Painted white rocks have been placed in front of the NPS headquarters building where there is a buried septic system.



Figure 121. Visitor Quarters sidewalks, 2018.

Paved Walks. Paved walks lead to individual buildings within the Administration Area, the church properties, Molokai Light Station, many of the residences, and buildings associated with the group homes and the Visitor Quarters (Figure 121). The walks that lead from public roads to residences and other properties do not extend all the way to the road, but typically end well short of the pavement, potentially indicating where rock walls once marked the property boundary. In some locations, such as near the DOH Administrative Building, an asphalt extension has been added to the original concrete walk to enhance the accessibility of the walk. Some of the walks are elevated above the adjacent turf grass. Walks present on otherwise vacant lots illustrate the locations of former buildings. Walks are often marked at the street by gate piers and posts historically associated with fence and wall systems that are sometimes no longer present.



Figure 122. View of the Pali Trail, 2017.

The Pali Trail. The Pali Trail (also known as the Kalaupapa Trail) is a steep and challenging route that traverses the cliffs that overlook the peninsula to the south and connects the peninsula with topside Molokai. Slightly less than 3 miles in length, the trail climbs approximately 1800 feet in elevation, and features twenty-six switchbacks along its length. It is surfaced with earth and stone, and reinforced with concrete block and metal rebar. The trail is edged in places by dry stacked stone retaining walls (Figure 122). Stone water bars drain portions of the trail. Three bridges are associated with the trail. One is located near the upper end of the trail between switchbacks 2 and 3, while the other two are located at the lower end. Pedestrians as well as mules associated with concessionaire-led tours use the trail. The lower portion of the Pali Trail traverses through a traditional Hawaiian agricultural complex of approximately 780 features, including walls, enclosures, terraces, heiau, and habitation sites.



Figure 123. View south along McKinley Street of the turf grass edging road corridors, shade trees, ornamental trees, and shrub plantings typical of Kalaupapa Settlement, 2017.

Cultural Vegetation

Cultural vegetation associated with the Kalaupapa Peninsula is a highly complex assemblage of native and introduced plants that reflect past land uses and activities, including traditional Hawaiian agriculture, institutional and vernacular plantings associated with the Kalaupapa and Kalawao Settlements, and colonization by invasive species that has proliferated since a 1946 tsunami and removal of livestock from the landscape circa 1980, and a decline in the number of residents and kōkua to care for plantings.

At a broad scale, the Kalaupapa Peninsula is composed of a central dry land area that formerly supported extensive sweet potato cultivation but is now dominated by dense stands of Christmas berry, lantana, false koa or haole koa (*Leucaena leucocephala*), and guava (*Psidium sp.*); lushly vegetated pali and valleys that feature numerous culturally-important plants; and the more closely managed and manicured developed areas of the Settlements.²¹³

The developed areas are landscapes that continue to be actively used and maintained by DOH and the NPS. Maintenance focuses on mowing, tree care, pruning, and shaping cultural vegetation, addressing conflicts between vegetation and built features, and controlling invasive species. NPS also maintains a plant nursery.

Within the developed areas, turf grass is a dominant cultural vegetation feature. Lush verdant turf grass serves to unify the sense of place within the settlement; mown turf edges most primary roads within the right of way to either side (Figure 123) and is characteristic of most institutional and residential properties. Tree and shrub plantings are also associated with residential and institutional properties throughout the settlement. Trees provide shade, serve as windbreaks, and continue to reflect institutional design and development from the 1930s in the form of rows and groves of coconut palm (*Cocos nucifera*) and ironwood pine trees. Ironwood pine plantings form an alleé along the Primary Access Road leading to the keeper's complex and windbreaks

213. Juvik, *Ethnographic Study*, 59.

around the residential precinct wall at the light station, line the road leading to Kauhakō Crater, edge the road into Bishop Home, the shoreline at Bay View Home, and the West Coast Cemeteries, the Baldwin Home perimeter wall, and also form windbreaks at McVeigh Home. Coconut palms are planted around Paschoal Hall, along the shoreline at Bay View Home and near Kalaupapa Landing, in the West Coast Cemeteries and across Kamehameha Street, in a grove west of McVeigh Home, at Baldwin Home, and around the ruins of the U.S. Leprosy Station at Kalawao. Evidence of historic gardens and other plantings also survive at Molokai Light Station, within the residential precinct.

Cultural vegetation contributes to the beauty and aesthetics of place, provides fresh fruit and other foodstuffs, produces the flowers, leaves, seeds, and husks used to make lei, to decorate church and home interiors, and to create crafts, and medicinal remedies used by residents for a variety of ailments. Plants of special cultural importance include African tulip tree (*Spathodea campanulata*), crown flower (*Calotropis gigantea*), hibiscus (*Hibiscus rosa-sinensis*), and kamani (*Terminalia catappa*). Fruit trees in evidence include mango, avocado (*Persea americana*), breadfruit (*Artocarpus altilis*), tamarind (*Tamarindus indica*), banana (*Musa* spp.), papaya (*Carica papaya*) citrus (*Citrus* spp.), Surinam cherry (*Eugenia uniflora*), guava, litchi *Litchi chinensis*), and coffee (*Coffea arabica*). Medicinal plants include eucalyptus (*Eucalyptus citriodora*), and aloe (*Aloe vera*), as well as native noni (*Morinda citrifolia*) trees.

The shade afforded by trees within the Settlements offers welcome relief from the sun, while hedgerows and other linear plantings are used to diminish the force of the winds. A large number of historical hedgerows are also present at Kalaupapa, including at McVeigh Home. Hedgerows include mixed plantings, typically composed of such species as wiliwili (*Erythrina sandwicensis*), panax (*Panax ginseng*), and croton (*Codiaeum variegatum*). As cultivated by patients, these plantings reveal aspects of daily life, community values, and cultural preferences in the Settlement.

Nearly every yard and building complex contains fruit trees and ornamental plantings. Many individual dwellings contain gardens filled with a variety of plants cultivated by the residents. The ability of residents to grow plants for food and other needs affords a special opportunity for self-determination. The growing and sharing of the fruits of gardening and cultivation is a long-standing traditional Hawaiian custom. At Kalaupapa, “it is common practice...to take around fruit and give it to your friends and visitors. When bananas are ripe, they get cut down, divided up, and passed around. When mangoes are ripe, they get picked and passed around. Everything is shared. When people go visiting, especially when visiting friends or relatives on another island, food is taken as a gift... Without the home gardens, the sharing would end.”²¹⁴

Unlike Kalaupapa where gardens remain an integral part of the community, little evidence of settlement plantings survive at Kalawao. Historical garden areas and ornamental vegetation disappeared quickly after patients were transferred to Kalaupapa circa 1900. Plantings at St. Philomena and Siloama churches continue to be maintained by the active church organizations. Cultivated plants also remain present at the Baldwin Home site. Lands to the north, south, and east of the developed area of Kalawao, however, have been colonized by woody plants and invasive species where they are no longer used for residential purposes, cultivation, or pasture.

214. Earl (Buddy) Neller, “Home Gardens and Cultural Resources Management in Hawaii,” unpublished article (Illinois Transportation Archeological Research Program, Department of Anthropology, University of Illinois at Urbana-Champaign), 6.

Areas formerly used for pasture and other agricultural activities near Kalaupapa Settlement have also become overgrown with woody and invasive species. These include former fields near the New Baldwin Home site, Staff Row, and McVeigh Home.

It is believed that the peninsula has lost the majority of its native vegetation, with only 5 or 10 percent surviving today.²¹⁵ Invasive species pose an enormous challenge to park managers and those interested in protecting cultural landscape values. Pigs, deer, and goats also pose a threat to natural and cultural vegetation and are considered to have the potential to threaten to eliminate Hawaiian plants entirely.²¹⁶ To address the threat posed to cultural vegetation by feral hogs and axis deer, the NPS and DOH have erected fences around portions of the Kalaupapa and Kalawao Settlements, along Kamehameha Street/Airport Road, at Kauhakō Crater, and near the pali to limit the rooting and browsing activities of these species. Fencing does not currently extend south to the perimeter of New Baldwin Home, and axis deer and feral hogs are often seen in the area.



Figure 124. View of a residential garden located near Bay View Home, 2018.

Cultural Vegetation Features

Residential gardens. Within the Residential Area and around homes throughout Kalaupapa Settlement, residents have traditionally planted gardens that provided both emotional and physical sustenance, as well as pleasure (Figure 124). The government agencies involved in administering the settlement supported gardening as a way to promote community health and well-being. At one time, prizes were offered at Kalaupapa on a yearly basis for the best gardens.²¹⁷ The gardens propagated by individual residents offer an

215. Jeffrey Trainer, who assisted with dry land forest restoration efforts from 1997 to 2001. Trainer also states that sections of the coastal areas have 60 to 70 percent native plants. He has also indicated that the entire pali between Nihoa and Waikolu contains several threatened or endangered native plant species. He also contends that the pali contains 90 percent of the species diversity within the park concentrated between switchback number three and topside. Juvik, *Ethnographic Study*, 59.

216. Neller, *Home Gardens*, 12.

217. *Ibid.*, 10.

opportunity for personal expression and help to supplement the food provided by the DOH. One of the most widely planted and popular fruiting trees in Kalaupapa is mango.²¹⁸ Other fruit trees that have been regularly planted as a food source included cherry (*Prunus* spp.), avocado [*pea*], breadfruit [*ulu*], banana [*mai'a*], papaya [*mikana*], coconut palm [*niu*], fig (*Ficus carica*), and soursop (*Annona muricata*). Lemon and lime trees are also at many houses. In addition to providing food, residents grew flowers for special occasions, cultural traditions, medicinal needs, and spiritual communion. Ti (*Cordyline terminalis*) was planted around houses for protection from ghosts. The breadfruit tree represented the earth mother of the Hawaiian people and also the goddess of fertility. Kukui (*Aleurites moluccana*) and hala (*Pandanus tectorius*) were associated with the legendary Kamapua'a, a god of sexuality.²¹⁹ Friends and visitors shared the fruits of their gardens as gifts or signs of friendship.²²⁰ Other residential garden plantings provided shade, served as property boundaries, and formed windbreaks and hedges for privacy and climate control.



Figure 125. View of plantings associated with Kana'ana Hou Church, 2018.

Church gardens. Ornamental and symbolically-referenced plant materials have been used within church properties as part of their role as haven and sanctuary (Figure 125). At Kana'ana Hou Church, rows of coconut palms and other trees edge the dry stacked stone wall that frames the churchyard and parsonage precinct. Ornamental trees and shrubs form a linear border that helps to separate the parsonage from the church itself. The northwest corner of the parcel contains a grove of trees and shrubs that provides a cool shady area. At St. Francis Catholic Church, a row of coconut palm trees edges the southern wall, while shade trees and ornamental plantings provide a cool space to the north of the church that enhances use of the grotto. Foundation plantings edge the rectory. At the Church of Jesus Christ of Latter-day Saints, bougainvillea trained on the wall that fronts the property along Kamehameha Street adds a decorative touch. Inside the wall are several individual shade trees. Foundation plantings edge the residence and parish hall. The eastern edge of the property is also framed by trees.

218. Juvik, *Ethnographic Study*, 69.

219. Neller, *Home Gardens*, 8.

220. *Ibid.*, 6.

Institutional plantings. On the institutional side, fruit trees and shrubs were planted for use in the kitchens and dining halls of the group homes; kitchen staff would also make juice and send it to the hospital for patients to enjoy. Coconut palms were planted to mark important places, such as Paschoal Hall, while ironwood pine trees served as windbreaks and lined roads and spaces associated with many public spaces.



Figure 126. View of foundation plantings around one of the buildings at Bay View Home, 2018.

Foundation plantings. Many of the residences, as well as the buildings associated with group homes, and some institutional and administrative buildings are edged by foundation plantings (Figure 126). The plantings range from lower groundcover species to shrubs and trees. Foundation plantings are typically informal, with a diversity of species, and no recognizable order of spacing or sense of designated planting beds. Foundation plantings often occur as widely spaced shrubs or small trees that emerge within the turf grass. Many times, the shrubs become overgrown and leggy at the base. Trees are also often found growing up against buildings where foundation plantings might otherwise be located.



Figure 127. View of a residential hedge along School Street, 2018.

Hedges and hedgerows. Hedges are planted along property lines in front of some of the dwellings within the Residential Area and are used to create a sense of privacy by some residents. While some hedges are maintained through pruning and shearing at a height of 3 to 4 feet, allowing the residence behind to remain visible from the street (Figure 127), others are taller and block views of the property beyond. One species used for tall hedges is panic (*Adenanthera pavonia*). A pruned and sheared hedge is also present at the intersection of Damien and Mission Streets between Bay View Home and Kalaupapa Memorial Hospital (Figure 128). There are few other examples of hedges of this type, although they formerly existed at Bishop Home. Hedgerows that edge some open space and property boundaries are composed of mixed plantings that might include wiliwili, panax, and croton.



Figure 128. View of the hedge that marks the intersection of Damien and Mission Streets near Bay View Home, 2018.

Windbreaks. Trees and shrubs have traditionally been planted at Kalaupapa to form windbreaks protecting individual residences and some institutional properties from the impacts of the relentless prevailing northeast trade winds and the less pervasive but sometimes fierce kona (south winds), especially those that come down

the Waihānau Valley. Winds have been known to damage buildings and other landscape features. Windbreaks were more frequently planted during the early years of Kalaupapa Settlement when the landscape was more sparsely vegetated. Windbreaks today remain present in association with some residential properties, particularly along the south boundaries of residential yards to protect against the kona. One of the windbreaks planted in the 1930s at McVeigh Home at the southern end of the group home development survives today. The windbreak, which stretches from Staff Row east to the wall on the east boundary of McVeigh Home, is formed from ironwood pine trees. Panic hedges, false koa (otherwise a despised invasive species), and other species are used to form windbreaks.²²¹



Figure 129. View of a shade tree used for picnicking near the volleyball court, 2018.

Shade trees. Shade is a valued commodity within Kalaupapa Settlement that is sought to protect cars from the sun, in outdoor use areas (Figure 129), and at the western sides of buildings for passive cooling. Tree species that have been planted for shade within the Settlement include banyan (*Ficus microcarpa*), kamani, kukui, mango, heliotrope (*Tournefortia argentea*), sea grape (*Coccoloba uvifera*), and ironwood pine. Ironwood pine trees along the western shoreline are appreciated for the way they cut the sun's glare off the ocean, especially during the afternoon. Heliotrope, another problematic invasive species, formerly provided shade for picnicking and resting near Ho'olehua Point Beach, a favorite place for finding drift wood, shells, and other items washed up by the waves.²²² Removal of these most of these trees to address invasive species control by NPS, which was decried by the patient population, is an example of the challenges posed by the management of traditional cultural vegetation.

221. Jennifer L. Cerny, "Social Value: An Essential Step Toward Cultural Landscape Understanding; Kalaupapa National Historical Park Molokai, Hawaii" (Minor Thesis, Master of Cultural Heritage Studies Program, Townsville, Queensland [Australia]: James Cook University, December 2001), 56–58.

222. Cerny, *Social Value*, 62.



Figure 130. View of ironwood pine trees planted along the dry stacked stone wall at Baldwin Home in Kalawao, 2017.

Boundary markers. In addition to providing shade and wind protection, trees and shrubs are also used to delineate boundaries, sometimes in conjunction with dry stacked stone walls. Ironwood pine trees, for example, line the dry stacked stone wall at Baldwin Home (Figure 130), as well as the western boundaries of the West Coast Cemeteries. Vegetation also appears to be purposefully employed in articulating the boundaries of many individual residential yards, as well as the outdoor living areas associated with the residences at McVeigh Home and Staff Row. Plantings used to define property boundaries include trees, shrubs, hedges, windbreaks, panic, croton, and hibiscus hedges, ironwood pine plantings, bougainvillea (*Bougainvillea glabra*, *B. spectabilis*), shower trees (*Cassia* spp.), and a variety of palms.²²³ Hedges once marked boundaries that defined patient use areas at Bay View Home and the Visitor Quarters; a remnant of the hedge survives at Bay View Home.²²⁴

223. Ibid., 62–71.

224. Ibid., 62–71.



Figure 131. Orange tree at McVeigh Home, 2018.

Fruit trees and other food plants. Quality fruit trees and home-garden-grown foods have played an essential role in life in the Settlement and are cherished by the community. Key fruit and nut trees present within the Settlement include avocado, orange (*Citrus sinensis*) (Figure 131), breadfruit, lilikoi (passionfruit)(*Passiflora edulis*), guava, date palm, lemon (*Citrus limon*), mountain apple (*Syzygium malaccense*), papaya, kukui nut, tangelo (*Citrus grandis* x *C. nobilis*), and tamarind. Home gardens also contain additional popular food plants as noted above.²²⁵

225. Ibid., 71–77.



Figure 132. Flowering plants such as bougainvillea [*Bougainvillea spectabilis*] have traditionally been common along the roads at Kalaupapa. Today, bougainvillea is growing on the wall that fronts the Church of Jesus Christ of Latter-day Saints shown here along Kamehameha Street, 2017.

Flowering trees and shrubs. Although less prevalent today than during the early to mid-twentieth century, flowering trees and shrubs have traditionally edged some of the road corridors in Kalaupapa Settlement. Interviews with patients have described the use of bougainvillea to add color and texture within the Administrative Area. In general, ornamental plants have been highly valued by residents of the Settlements. Some of the species that have been planted for their aesthetic qualities include bird of paradise (*Strelitzia reginae*), heliconia (*Heliconia* spp.), and plants with tropical foliage. Today examples of flowering shrubs remain along Beretania and Staff Streets, with bougainvillea continuing to be maintained along some property boundaries, such as the dry stacked stone wall at the Church of Jesus Christ of Latter-day Saints (Figure 132).



Figure 133. View of Paschoal Hall and associated coconut tree plantings, 2017.

Coconut palm rows and groves. Stands of coconut palms arranged in rows and groves occur in several locations around the settlement, including along Kamehameha Street east of Papaloa Cemetery, within Cemetery G, west of McVeigh Home, around Paschoal Hall (Figure 133), along the western shoreline at Bay View Home, at St. Francis Catholic and Kana‘ana Hou Churches, and around the ruins of the U.S. Leprosy Investigation Station. These plantings form striking groupings that generally reflect institutional design efforts. At least 300 coconut trees were planted along road corridors and around government-administered buildings in the 1930s when a large investment in the settlement was made. The coconut palms along Damien Road near the U.S. Leprosy Investigation Station ruins were planted by Lions Club members in the 1950s.

Manicured turf. Lush verdant turf grasses characterize the majority of the Kalaupapa Settlement landscape, the areas around the beach houses, the cemeteries, and the church and park properties at Kalawao. Turf grass is maintained through mowing.



Figure 134. Map of representative buildings, Kalaupapa Settlement. (Source: LSHLA)

Buildings

Refer to Figure 134, Map of representative buildings, Kalaupapa Settlement.

The Kalaupapa and Kalawao Settlements contain more than 250 buildings and structures. Most are located within Kalaupapa Settlement, although there are also historic buildings present at Kalawao Settlement and Molokai Light Station. The majority of the buildings present today were constructed prior to 1969, although there are also several examples of later additions, as well as modifications that have been made to historic buildings to address the ongoing needs of the community and adaptive use.

At a broad scale, buildings can be organized into four typologies associated with use—residential, community/administrative/institutional, religious, and industrial/maintenance. Although individual buildings vary in terms of use, date of construction, scale, and materials, there is an overall cohesion of the built environment due to the way buildings sit within the landscape, are generally modest in size, and often reflect the Hawaiian Plantation style of architecture. The style is popular for the way it connects built interiors with the natural environment. Most buildings within the settlements are of low-profile, single-story, single-wall, wood construction. In addition to a main floor, many buildings also contain an attic or storage area above the first floor, rather than habitable space. Roofs are typically low-angle gable or hip in form with overhanging eaves and exposed rafters, while siding is often board and batten or tongue and groove. Porches are a feature of most buildings. Finished floors are typically elevated atop raised wood-post and concrete-pier foundations.



Figure 135. View east toward one of the beach houses at 'Īliopi'i from the shoreline, 2017. Beach houses were built by settlement residents, often using salvaged material.

Another interesting element of the settlement reflected in the architecture is the interplay between built features that clearly reflect the institutional nature of the settlement, and the way in which residences have been customized over time to reflect individual self-determination, ownership, and independence. The best example of this is the cluster of 'Īliopi'i Beach Houses, built by residents from salvaged materials at a distance from the administrative core of Kalaupapa Settlement (Figure 135).

Architectural Styles Represented at Kalaupapa

The buildings present at Kalaupapa represent several architectural styles recognized throughout the Hawaiian Islands—Mission, Art Deco, Hawaiian Plantation, and mid-twentieth-century Modern. These architectural styles are modifications of imported Western styles. While many contemporary Hawaiian buildings can be traced to the influence of a particular Western style, each incorporates modifications and adaptations that are uniquely Hawaiian and reflect the influence of the natural environment, local climatic conditions, and materials. Styles represented today can also be traced to various eras in governance history, beginning with the era of traditional Hawaiian antiquity, continuing through the kingdom era, the territorial years, the statehood period, and ending with the contemporary era. Through these eras, architecture has illustrated aspects of Hawaiian life, such as the attitudes and spirit of the people, and the assimilation of outside influences over time such as European traders, visiting whalers and fur trappers from Canada; French Catholic and New England missionaries from the United States and Latter-day Saints from Utah; as well as plantation laborer cultures from Asia.

Antiquity through the Kingdom Era Architecture. The earliest recorded form of Hawaiian architecture is associated with ancient Hawai‘i, when Polynesians first settled the islands and established villages characterized by a hierarchy of shelter types. The hierarchy of the social order was expressed throughout the architecture of various dwelling forms and their construction methods and use of materials. At Kalaupapa, the stone remains of traditional Hawaiian dwellings associated with fishermen as well as the working class maka‘āinana survive in many areas, while heiau associated with the kahuna, and the palatial thatched homes on raised basalt foundation of the ali‘i are present in several locations. In addition to hierarchy, the formalization of a structure helped signify the importance of the structure, as well as building materials, such as coral within religious structures. Details such as the patterns in which dried plants and lumber were fashioned might express not only the place of the individual within an overall societal hierarchy, but their skill, trade, or profession. The act of construction was considered a traditional Hawaiian skill evidenced by traits such as cooperation and preparation. Traditional Hawaiian masonry is a skill called ho‘oniho and often includes masons forming a laulima (line) to pass rock hand to hand from specific places. Rock can be considered a living entity, and the rock can be placed within a structure with respect for its mana (sacredness). Especially significant heiau were often constructed in this way.



Figure 136. View southeast toward Siloama Church at Kalawao in 2017. The building, although a twentieth century replacement for the original structure built in 1871, is an example of Mission architecture.

Mission Architecture. Missionaries introduced new architectural styles to traditional Hawaiian building practices during the early nineteenth century. The earliest missionaries were Congregationalists and Presbyterians. Missionaries built the first frame dwellings in Hawai‘i. Many were similar in style to the simple Congregational meeting houses and vernacular farmhouses found in New England, and featured high-pitched roofs, and siding composed of overlapping weatherboards, or clapboards. The simplicity of the buildings reflected the puritan ethic of the missionaries. Over time, the Mission style architecture brought to the islands from New England evolved through local building practices and materials into a distinctive style referred to as Hawaiian Mission architecture. At Kalawao, the original Siloama Congregational Church, constructed in 1871, was an austere structure representative of Hawaiian Mission architecture (Figure 136). The Old Stone Church was built by Protestant missionaries in 1853 as a meeting house. This plain rectangular structure is the only standing building that precedes establishment of the settlement at Kalawao (Figure 137).



Figure 137. View northwest toward the Old Stone Church, Kalaupapa's oldest structure, built as a Protestant Church meetinghouse in 1853, 2017.

Additional missionary-derived architecture was introduced to the islands by French Catholics. Architecture associated with French Catholics featured more formal, and often more ornate styles referencing Classical, Baroque, Renaissance, Rococo, and Neoclassical periods, as well as the basilica form. While examples of several of these styles are present within the islands, each has evolved into a unique Hawaiian version due to the influence of local builders, such as the inclusion of coral blocks into construction. At Kalaupapa, St. Francis Catholic Church reflects aspects of the Italian Gothic-style architecture.



Figure 138. View southwest toward the General Warehouse, 2017, one of several Art Deco buildings at Kalaupapa.

Art Deco Architecture. The Art Deco style was introduced to Hawai‘i in the 1920s, and became a popular style for institutional structures.²²⁶ The style emerged in France in the late nineteenth century as part of the Beaux Arts tradition that combined elements of ancient Greek and Roman architecture into a modern neoclassical style. Art Deco is considered to reflect a broader movement toward modernization in architecture and the use of materials, such as concrete, during the early twentieth century. Like other styles imported to the islands, aspects of the Art Deco style were modified in Hawai‘i to reflect local traditions, motifs, and available construction materials. The result is referred to as Hawaiian Beaux Arts and Art Deco architecture. The Waikiki Natatorium War Memorial on Oahu is an example of Hawaiian Beaux Arts architecture. At Kalaupapa there are several examples of Art Deco architecture. These include Boiler Rooms at McVeigh Home and Bishop Home, and the General Warehouse at Kalaupapa Landing (Figure 138).



Figure 139. View of one of the Kalaupapa residences within the Residential Area representative of the Hawaiian Plantation style of architecture, 2018.

Hawaiian Plantation Architecture. One of the most prevalent architectural styles within the Hawaiian Islands is Hawaiian Plantation architecture. The style was used primarily in residential buildings but can also be seen in many other building types. The style derives its name from the housing constructed for workers on the sugar cane and pineapple plantations during the boom in production that occurred during the early to mid-twentieth century. The style quickly became popular for the way it blends with the surrounding landscape. Buildings constructed in the style are often described as bungalows (Figure 139) that feature low-profile, wood frame construction, vertical plank siding, large porticos, and porches or lanai. Roofs, which are highly characteristic of the style, are typically wide-hipped or bellcast, split pitch, with deep bracketed eaves and exposed rafters.

226. The Hawai‘i Theatre in Honolulu is an example of the Art Deco style. It was built in 1922.

Many of the residences present at Kalaupapa are representative of the Hawaiian Plantation style of architecture, including the individual houses in the residential area and McVeigh Home. The A Homes built at Kalaupapa Settlement in the 1930s are also representative of the style. Many of the institutional buildings at Kalaupapa reflect the style, but at a larger scale.



Figure 140. View of one of the ranch style Kalaupapa residences (Hicks Home Type #2) associated with construction during the modern era, 2018.

Mid-Twentieth-Century Modern Architecture. Numerous prefabricated homes were erected within the settlement in the 1950s and 1960s. These are known as Hicks Homes. They are representative of mid-twentieth-century Modern architecture and are a local variation on the ranch-style house built throughout the United States at the time (Figure 140). Other examples of the style within Kalaupapa Settlement include the Church of Jesus Christ of Latter-day Saints Meetinghouse.

Building Typologies

Within the settlements, extant buildings can be grouped into four typologies, each of which exhibits specific distinguishable characteristics. The typologies include residential, community/administrative/institutional, religious, and industrial/maintenance.

Residential Buildings

Residential buildings present at Kalaupapa occur as individual homes, primarily cottages, that edge streets dedicated primarily to living quarters, or as components of group homes, clusters of buildings that include single and group living units as well as services, such as dining, and community meeting and recreation space.

Most of the residential buildings found within the settlements are single-story, single-wall, wood-frame construction. The use of a single wood wall to separate exterior and interior spaces responds to Hawai'i's mild climate, and the expense associated with importing construction materials from the mainland.

Residential buildings are simply massed rectilinear spaces accessed from open porches and raised from 1 to 2-

1/2 feet above grade on foundations composed of posts on rock or concrete footings. Siding is often vertical board siding, either tongue and groove, or board and batten.

Most residential buildings feature low-angle gable or hip roofs with overhanging eaves, single or paired windows and door openings, multi-paned double-hung or sliding windows, and plank or stile and rail doors. Some buildings exhibit minor design modifications, such as chamfered posts, which add to their character. Older buildings feature four-over-four or six-over-six double-hung windows. Louvered windows have been added to replace earlier window types in many houses, particularly within the kitchens and bathrooms.



Figure 141. View southwest of the Old Bay View Kitchen and Dining Room at Bay View Home, 2017.

Group homes often feature larger structures, with a construction style similar to the more modest cottages, that support dormitory style living or group functions. These include McVeigh, Bishop, and Bay View Homes (Figure 141). The Bishop Home for Girls is the only building at Kalaupapa with double-wall construction.



Figure 142. View of an early residence, later the AJA Benevolent Society Hall, 2017.

Residential buildings can also be grouped according to periods of development. Only four residences survive at Kalaupapa that pre-date 1931. These include the AJA Benevolent Society Hall on McKinley Street (Figure 142) the Clarence Naia and Nono Residences on Goodhue Street, and the Cambra Residence on Kamehameha Street. These early twentieth-century residences are typically simple structures. Like many other residences within the settlement, these residences also feature tongue and groove or board and batten walls. Early residences also typically had separate wash houses and privies, few of which survive today. These residences are typically modest buildings, often less than 400 square feet in size, with single-wall, wood-frame construction, 1 inch by 12 inch board and batten details, a central front door and a stoop leading to a lanai, and double-pitched gable roofs that extend the length of the structure with a change in pitch over the front and rear. The interiors of these buildings are divided into two or three living spaces, with kitchen and wash functions accommodated in separate adjacent structures.

Mid-period residences (circa 1920s–1940s) reflect the Hawaiian Plantation style and are consistent with the standardized plans produced by the Hawai‘i Sugar Planters’ Association in 1919 and 1930. Some buildings constructed at Kalaupapa appear to have been built from these plans, including the now-demolished Social Hall at Bishop Home, and several extant residences. Characteristic of the plans, the exterior frame consisted of vertical boards, either tongue and groove or board and batten. Gable or hip roofs had overhanging eaves; windows and door openings were organized in singles or pairs; windows were multi-paned double-hung or sliding; and doors were plank or stile and rail. During this period, kitchen and bathing functions were moved to the interior of the residence, while laundry functions continued to be housed in a separate structure.



Figure 143. View of one of the A Houses located near the maintenance area, 2017.

A Houses. Twelve patient cottages were built in 1931–1932 by Molokai homestead carpenters with similar floor plans, with four additional structures built in 1934–1936. These residences, known as A Houses, were simple rectangles in plan with a simple hip roof and inset porch that reflected the Hawaiian Plantation style. Some of the A Houses have been modified to enclose the front porch (Figure 143). The walls were tongue and groove. Each had concrete steps leading to the front door, a concrete stoop with stone buttresses, and a lanai on one side. Inside, there was a dining room and living room to one side, and two bedrooms separated by a shared bath. The kitchen was typically in the rear of the house, accessed by a rear stoop.²²⁷ All sixteen A Houses survive within Kalaupapa Settlement.²²⁸

227. Johnson, Draft NHL nomination update, 146.

228. These include Kamehameha Street Residence 7, Kamehameha Street Residence 9, Kamehameha Street Residence 15, Norbert Palea Residence, Shoichi Hamai Residence, Souza Residence, Elaine Remigio Residence, Nicky Ramos Residence, Punikai'a Residence, Bernard Punikai'a Residence/Alice Kamaka Residence, Henry Nalaelua Residence, Nakoa Residence, Kapi'olani Street Residence 199, Sebastiana Fernandez Residence, Elizabeth Bell Residence, and Kapiolani Residence.



Figure 144. A Type #1 Hicks Home, 2018.

Hicks Homes. Mid-twentieth-century modern residences (circa 1950s–1960s) are generally associated with the prefabricated Hicks Homes. During the later period that followed World War II, residential construction incorporated new manufactured building materials. One of the standardized residential models built throughout Kalaupapa was the Hicks Home, a pre-fabricated housing type popular in Hawai‘i at the time. These wood frame homes feature vertical siding and low-angle gable roofs, plate glass windows, one-over-one windows, or louvered/jalousie windows. Some have aluminum sliding windows. Hicks Homes were also built of cedar or redwood to increase the resistance of the structures to decay and termites.

Three different floor plans were used in the Hicks Homes models constructed at Kalaupapa. These include Type #1, a single-story two-bedroom style built in 1956 that is oriented so that the main entrance porch is at one gable end, and a shed roof is tacked above the entrance porch to shelter it from the elements (Figure 144);²²⁹ Type #2, a single-story two-bedroom style built in 1962 that features a corner picture window, a small wood porch, sheltered by a small extension of the gable roof that provides access to the front door, and a rear carport; and Type #3, a single-story two-bedroom style built in 1964 that features a central picture window and otherwise random fenestration, as well as a gable roof. This type also featured a carport with a nearly flat roof. There are nine examples of Type #1 and Type #2 Hicks Homes within Kalaupapa Settlement, and six examples of Type #3 Hicks Homes within the settlement today.

229. Laura E. Soulliere and Henry G. Law, *Architectural Evaluation, Kalaupapa-Hawaii* (National Park Service, Western Region, July 1979), 34–35.



Figure 145. A garage, one of the outbuilding types represented in the Residential Area, 2018.

Outbuildings. Many residences feature associated outbuildings. Outbuilding typologies range from garages (Figure 145), to carports, washhouses, outhouses, hothouses, sheds, poker rooms, garden houses, chicken coops, and pig sties. Most were built by patients to provide shelter for their vehicles, tools, supplemental food, and recreational activities and are vernacular expressions that represent the initiative of the individuals to provide for themselves and establish a unique identity in terms of their home place.²³⁰ They are considered to be the private property of residents. Many residential outbuildings were constructed using salvaged or recycled materials, including corrugated metal. The majority of the residential outbuildings are modest in size, single-story, simple wood-frame structures with gable or shed roofs clad with a wide range of materials. The roof coverings are asphaltic rolled roofing, wood or asphalt shingles, corrugated metal or plastic, or plywood. Siding is board and batten, tongue and groove, plywood, or corrugated metal. Foundations are concrete or stone, while interior floors are concrete or earth. Many outbuildings are in poor condition and are at risk of being lost.

230. Johnson, Draft NHL nomination update, 58–59, 62–64.



Figure 146. View southeast of the Saint Marianne Library from the intersection of Beretania and Puahi Streets, 2017. The Library is one of the community buildings located within the Administrative Area at Kalaupapa.

Community/Administrative/Institutional Buildings

Community buildings. Community buildings constructed for the enrichment of patient life are typically larger than the residences, and centrally located. The primary example of a community building within the settlement is Paschoal Hall, which serves as a social gathering space where people can watch movies and live entertainment, participate in community meetings, and attend events such as dances. Paschoal Hall is among the largest buildings within the settlement. In addition to its large size, Paschoal Hall is distinguished by its central location and associated open space that suggests the heart or center of the community. Rows of coconut palm trees surround the building, rendering the building visible from many parts of Kalaupapa. Like many of the community buildings present at Kalaupapa, Paschoal Hall, with its tongue and groove vertical wood walls, sliding windows, stile and rail doors, truncated hip roof and pre-cast concrete footings, is an example of Hawaiian Plantation style architecture. It is also atypical of the style due to an overall lack of articulation in the massing of the building.

Other community buildings are smaller in size and scale, providing for more intimate gatherings of groups. These include the McVeigh Home Social Hall, and the Americans of Japanese Ancestry (AJA) Benevolent Society Hall, which currently serves as the park bookstore.

Buildings that afford services for residents also count among the list of community buildings. These include the Library (Figure 146), which is an example of mid-twentieth-century Modern architecture with stone masonry siding at the front, and the Craft Shop and Storage Building, a modest structure with elements of Hawaiian Plantation architecture that was initially built as a house and bakery and later adapted for community use.

Administrative buildings. Administrative buildings are clustered in the west-central portion of Kalaupapa Settlement. Built over several decades, these building do not possess a unifying design style or principle, and vary in size, style, and period of construction. As a group, however, the administrative buildings continue to demonstrate the level of governmental commitment necessary to administer the settlement. Several contemporary structures also count among the administrative buildings within the settlement, such as Hale

Malama, the NPS Cultural Resource Management and Curatorial Facility, built in 2012. While the building makes reference to the Hawaiian Plantation style of architecture, it is generally larger than other buildings of the type located within the settlement.

Administrative buildings range from residential scale structures designed in the Hawaiian Plantation style, such as the Fumigation Room (now housing the NPS Headquarters), the Crematory, and the Outpatient Clinic, to larger more modern structures, such as the DOH Administrative Building, also known as Hale O Kamiana. Some administrative functions are housed in adaptively reused buildings originally construction for a different purpose.



Figure 147. View southwest of the Post Office, 2017.

Institutional buildings. Several institutional or civic buildings are also present within the Administrative Area of the settlement, including the Post Office (Figure 147), Laundry, Restroom at the Visitor Quarters, Patient Store, and Gas Station. Many of these are residential in scale, and consistent with other examples of Hawaiian Plantation style architecture.

Additional institutional buildings are associated with the Molokai Light Station, such as the principal keeper's residence, first assistant keeper's residence, wash house/storage shed, and garage that comprise the residential area. These buildings reflect the origin of the complex as a project of the federal government and U.S. Lighthouse Board. The Molokai Light Station Principal Keeper's Residence was built in 1909 as a relatively high-style Craftsman cottage with exterior stone walls unusual for a utilitarian structure. The Molokai Light Station First Assistant Keeper's Residence was built in 1950 to replace an earlier, wood-frame residence on the same location. The building is utilitarian and built of concrete block with a flat roof, reflective of mid-twentieth-century modern architecture. The Molokai Light Station Wash House/Storage Shed was built in 1909 as a laundry and possible shower facility. It is a simple, one-story, wood-frame structure, with a 1955

addition. The Molokai Light Station Garage was added in 1920. It is a simple utilitarian wood-frame structure designed to accommodate a truck.²³¹

Religious buildings

Places of worship have traditionally played an important role in life within both Kalawao and Kalaupapa and continue to do so today. The main religious congregations represented on the peninsula are Catholic, Protestant, and Church of Jesus Christ of Latter-day Saints. Several historic church buildings survive today, although some are replacements for earlier structures that burned or fell into disrepair. Today there are seven extant church buildings of various ages and styles at Kalaupapa: the Old Stone Church (Protestant, 1853), St. Philomena Church (Catholic, 1872), Siloama Church (Protestant, 1871, reconstructed 1966), St. Francis Church (Catholic, 1908), Kana'ana Hou Church (Protestant, 1915), St. Elizabeth's Chapel (Catholic, 1934), and the Church of Jesus Christ of Latter-day Saints meetinghouse (LDS, 1965).

Protestant churches. The Old Stone Church is the oldest standing structure at Kalaupapa and pre-dates Kalawao Settlement. Built as a Protestant church known as Kalawina in 1853, the building is currently used by the NPS. The building has the plain form of a nineteenth-century Protestant missionary meeting house, with a simple rectilinear volume, deeply set double-hung windows, and a gable roof. The building also features thick rubble masonry walls. The building has been altered over time to accommodate a variety of later uses.

Siloama Church was originally constructed in 1871 at Kalawao by the Congregational Church. It was rebuilt in 1880 and reconstructed in 1966. This simple, austere structure reflects the puritan ethic of the nineteenth-century Protestant missionaries. It was the first church structure to be erected at Kalawao Settlement. The church is a white wood-frame structure that rests on concrete pilings. It features a gabled portico, six double-hung windows, a small steeple, corrugated gable metal roof, horizontal channel siding, and corner boards. Siloama, like the other churches built to support life in the settlement, remains of symbolic and spatial importance to residents for its associations with the early settlement, and the importance of spirituality to residents. Church services continue to be held at Siloama once a month.

231. National Park Service, *Cultural Landscapes Inventory: Molokai Light Station, Kalaupapa National Historical Park* (San Francisco, California: West Region Cultural Resources Program, 2012), 94–98.



Figure 148. View southwest toward the principal façade of Kana'ana Hou Church, 2017.

Kana'ana Hou Church was constructed by the United Church of Christ in 1915 in a modified Arts and Crafts Stick Style of architecture. In plan, the church is in the shape of a Greek cross (Figure 148). The building is a beige wood-frame structure that rests on wood post, stone, and concrete foundations. It features a large bell-tower, gabled portico, numerous windows, tongue and groove siding, and a cross-gable wooden shingle roof. The architectural detailing also includes Gothic arched louvers and large dentils in the bell tower, as well as numerous chamfered buttresses.

Catholic churches. Catholic groups have established several churches at Kalawao and Kalaupapa since the 1870s. St. Philomena, the first Catholic church on the peninsula, was built in a simple Gothic style in 1872 at Kalawao. The building has been modified several times over the years. The first church building, most of which was later removed, was constructed by Brother Victorin Bertrand prior to Saint Damien's arrival. Saint Damien oversaw construction of the west nave in 1876. After the steeple collapsed in a wind storm, Saint Damien later oversaw construction of the masonry and wood main nave in 1888. He died in 1889 before the work was completed. The church features a gable roof topped with a bell tower. Double-hung windows are in the older rear portion, while eight triple-hung windows in Gothic arch recesses line the sides of the later addition. Construction of this building is considered "remarkable for the difficulties involved in acquiring building materials and for the scarcity of professional building expertise available."²³² St. Philomena Church remains of great importance to the community for its historic and symbolic associations with the early settlement, and with Saint Damien, who was also originally buried in the adjacent cemetery.

232. Linda W. Greene, *Exile in Paradise: The Isolation of Hawai'i's Leprosy Victims and Development of Kalaupapa Settlement, 1865 to the Present* (Denver, Colorado: National Park Service, Branch of Planning, Alaska/Pacific Northwest/Western Team, 1985), 578.



Figure 149. View west toward the rear facade of St. Francis Catholic Church, 2017.

A second Catholic church—St. Francis—is located within the Administrative Area at Kalaupapa. St. Francis Catholic Church is an Italian Gothic-style building of reinforced concrete rebuilt in 1908 (Figure 149). It replaced an earlier church lost to fire in 1906. St. Francis features a corner bell tower with kicked eaves, Gothic arches with double-hung windows, quatrefoil windows, side buttresses, and a large corrugated metal gable roof. The use of “ferro-concrete” (early reinforced concrete) to build this church is considered an early example by the State of Hawai‘i’s Register of Historic Places.²³³



Figure 150. View northeast toward the entrance to the Church of Jesus Christ of Latter-day Saints meetinghouse, 2017.

233. Ibid., 578.

Church of Jesus Christ of Latter-day Saints. The Church of Jesus Christ of Latter-day Saints congregation was established in the early years at Kalawao. Today, there are no known members of the congregation. Within Kalaupapa Settlement the church administers a complex that includes a residence, parish hall, meetinghouse, and monument to Jonathan Napela. The meetinghouse (Figure 150) was constructed in 1965 to replace an earlier structure lost to the 1946 tsunami. The current church is reflective of the mid-twentieth-century Modern style of architecture. It features a low gable roof of composition shingles, plywood and batten siding, and jalousie/louvered windows.

Industrial/Maintenance. Industrial buildings are consistent with the rest of the settlement in terms of scale, massing, materials, and character. However, several industrial/maintenance buildings have been added or replaced since the period of significance. The newer structures are larger and simpler in form, with less articulation and detailing, and flat or simple gable roofs. The older institutional buildings, such as the Bakery and Food Warehouse, feature simple hip roofs and are more residential in scale. Other industrial and maintenance structures are constructed on concrete slabs, and feature concrete or unit masonry walls with no decoration. The Warehouse features modern plaster decorative elements. Other industrial and maintenance buildings are in the Art Deco style, such as the Boiler Houses at McVeigh and Bishop Homes, and the General Warehouse Building. There are also two military surplus corrugated metal Quonset huts—one at Bay View Home and the other within the maintenance cluster at the northwest end of the Administrative Area—brought from Pu‘u nēnē Maui Naval Air Station in the 1950s. In later years, recycled Quonset materials were integrated into beach homes and outbuildings.²³⁴



Figure 151. View east of the dry stacked stone wall that demarcates the boundary of the Bishop Home property along Damien Street, 2017.

234. Johnson, Draft NHL nomination update, 63.

Structures

Several types of structures are present at Kalaupapa that can be grouped into categories such as edge and boundary features, infrastructure and utility features, recreation features, and religious/commemorative features. Building foundations and ruins are also classified as structures.

Edge and Boundary Features

Dry stacked stone walls. One of the character-defining structures of the Settlements is the dry stacked stone wall. Walls occur throughout the settlements to mark property boundaries (Figure 151). Rock walls built as part of settlement development co-exist within certain areas of the peninsula with earlier walls and wall systems. Traditional Hawaiian rock walls denote former ahupua'a (Hawaiian land division) boundaries, corrals, garden plots, and agricultural field systems, as well as heiau, also known as Hawaiian temple platforms. Rock walls constitute one of the elements that connects life before and after establishment of Kalawao Settlement. They also serve a dynamic place in the perpetuation of cultural traditions today and are symbolic of the "living resources" of the settlement.

The walls surrounding structures in the settlement are maintained through a hapai pohaku (carry rock) program that includes traditional Hawaiian masons within the NPS repairing the rock walls utilizing the traditional skills of dry set masonry, or ho'oniho. These "Hapai Pohaku" workshops are events characterized by cooperation between the NPS and the masons, many of who now work for the NPS at parks throughout the islands. This movement began at Pu'ukohola Heiau National Historic Site after the earthquakes of 2006, which required the NPS to seek masons to repair the damage and resulted in a program currently termed the "Hawaiian Legacy" program. The movement to continue cooperating in this way to perpetuate this traditional cultural skill of ho'oniho and continue caring for cultural sites cooperatively is ongoing and an important part of recognizing the significance of a living cultural landscape today. The workshops happen almost annually and are gatherings that are celebrated within the community, characterized by cooperation, hard work, food, and celebration.²³⁵

Within the Settlements, linear dry stacked stone walls are associated with group homes, individual residential properties, churchyards, burial grounds, and the Molokai Light Station residential precinct. Rock walls are present in the Residential Area, Administrative Area, Staff Row, McVeigh Home, Bishop Home, the West Coast Cemeteries, burial grounds on the western rim of Kauhakō Crater, at Kahaloko Cemetery, and New and Old Baldwin Homes. These walls provide a unifying character-defining element of the cultural landscape.

Most rock walls are comprised of dry-laid native volcanic rock, carefully stacked or piled to 3 to 4 feet in height. Most walls stand between 2 and 5 feet in width at the base, and between 2 and 3 feet in width at the top and are typically wider at the base. The walls are consistent with Hawaiian construction techniques that entail establishing two outer faces before filling the interior.

Several rock walls are inset with wood posts set at the center of the rock work and cemented into place. These posts may have been used to extend the height of the wall or to support wood or wire fencing. Examples include the wall along Damien Road at the Baldwin Home site in Kalawao, the wall near the Lions Pavilion, and the wall that forms a precinct around the Norbert Palea Residence.

235. Adam Johnson, Mary Slater, Laura Vater-Schuster, and Mary Jane Naone, "The 2006 Earthquake Project at Pu'ukoholā Heiau National Historic Site, Hawai'i."



Figure 152. View southeast of the fencing outside the Residence for Single Women, 2017. This fence is a replacement of historic fencing that edged properties fronting Staff Street at Staff Row prior to the 1940s.

Fences and railings. Fences have also been used historically to delineate property ownership. Fences were traditionally wooden. Picket fences were once found around many group home complexes, staff residences, and community structures; the majority were removed in the 1940s to reduce the separation between patients and other community members. A wooden picket fence that frames two sides of the yard associated with the Residence for Single Women (Figure 152) along Staff Row follows the alignment of one of these historic fences, but is a later replica used for interpretation.

Many other types of fences are present throughout the Settlements. Wooden post and board fencing is associated with the beach houses at ‘Iliop‘i, and serves as a safety feature at the Judd Park overlook. Fencing built of salvaged materials is used at McVeigh Home cottage properties as well as individual residences. White lattice fencing is also used to frame an outdoor sitting area along the western façade of Hale Malama as well as the entry court on the eastern facade. Green lattice fencing forms a gate between stone posts on axis with the entrance into the Norbert Palea Residence located north of the maintenance complex. A wooden board privacy fence edges the boundary of the Benjamin Residence within the Administrative Area.

Metal and chain link fencing has also been used to enclose livestock pasture, maintenance areas, and some residential and institutional properties (Figure 154). Cattle were traditionally grazed to the north and south of Kalaupapa Settlement in areas enclosed by post and wire fencing, the evidence of which survive today. The metal wire is often referred to as hog wire, formed of 4-to-6-inch squares. Hog wire fencing is also present in association with some institutional and residential properties, such as the rear yard of the Bernard Punikai’s Beach House, the northern end of the Church of Jesus Christ of Latter-day Saints property (in combination with chain link fencing), and around a garden at the Norbert Palea Residence. Hog wire fencing forms a portion of the perimeter of the nursery area. Remnants of a historic strand wire fence also survives at Molokai Light Station, including hog wire fencing that extends between the lighthouse and residential complex. A contemporary metal mule corral is located along the Trail Access Road near New Baldwin Home site used in association with park tours. Nearby at the Slaughterhouse is a metal cattle corral.



Figure 153. View north of deer fencing near McVeigh Home, 2018.

The NPS and DOH have erected taller metal fencing to exclude axis deer and hogs from Kalaupapa Settlement, Kalaupapa Airport, the pali, and Kauhakō Crater. Approximately 6 feet in height, the deer fencing is composed of metal or wood posts and a several strands of thin metal wire (Figure 153).



Figure 154. View of one of the chain link fences used to mark some residential properties within Kalaupapa Settlement, 2017.

Chain link fencing edges several residential properties (Figure 154), including the Paul and Winifred Harada Residence along School Street, the Olivia Breitha Residence along Puahi Street, and behind the Barbara Marks Residence at Bishop Home, and several properties at McVeigh Home. Black-coated chain link fencing surrounds much of the sports court to the north of Paschoal Hall, except where the presence of a block retaining wall in poor condition precluded the use of fencing. The stormwater management basin near the Pali Trail trailhead is surrounded by a woven wire fence supported by metal poles.

Pipe metal fencing occurs in around some grave sites within the West Coast Cemeteries and at St. Philomena Catholic Church as a safety railing sited atop a retaining wall and an enclosure around Joseph Dutton's grave. Saint Damien's grave, as well as additional graves in the West Coast Cemeteries, are surrounded by ornamental cast-iron fencing. Pipe rail is frequently used for handrails associated with ramps and stairs. It also surrounds part of the site marking the Saint Damien Monument.



Figure 155. View of the cattle guard at the end of Beretania Street, 2018.

Cattle guards are used where roads pass through the deer fences to keep animals from crossing into the Settlements. Cattle guards are located at the east end of Beretania Street (Figure 155), at the north end of the West Coast Cemeteries along Kamehameha Street, on Crater Road, within the bridge across Waihanau. There are also two on the roads leading to the light station. The gates at the entrances to the New Baldwin Home site and Bay View Home formerly included cattle guards as evidenced by the pipes at the bases of the piers. The cattle guards are composed of metal slat surfacing edged by angled wooden guards that are tied to the fence posts to either side.



Figure 156. View southwest of the gate posts that mark the entry into the Bay View Home complex, 2017.

Gate and Entry Posts. Gate and entry posts are another character-defining element of Kalaupapa Settlement. Gate posts or piers mark the entry into several group homes—Bishop Home, New Baldwin Home, Old Baldwin Home, and Bay View Home—as well as properties along Staff Row—the Electrician’s Residence, Resident Physician’s Residence, and Residence for Single Women—the West Coast and Kahaloko Cemeteries, along Beretania Street, the churchyards, and several individual residences, including Residence 22 and the Norbert Palea Residence. Although the gates themselves do not survive, the gate posts and remnant rusting hardware attachments survive to mark former gated vehicular and pedestrian access routes. The gate posts vary in height, materials, and finish. Many are square concrete columns with peaked caps that were historically whitewashed or painted. The posts at Bay View and New Baldwin Home site are supported by pipe buttressing elements at the base that likely relates to former cattle guards (as noted above). Other gate posts are constructed of mortared lava rock covered with stucco or lime wash. The gate posts at Bishop Home are mortared lava rock inset with bronze plaques. The front faces are inset with bronze plaques noting “Bishop Home” to the left and “1888–1931” to the right. One of the piers is in need of repair. The gate posts are often located at openings in rock walls that mark a property boundary. Others are free-standing and likely once were associated with picket fences that have since been removed. The gate posts at Bay View Home (Figure 156) as well as New Baldwin Home are edged by curvilinear concrete walls that extend to either side. Both of these examples include a buttressed taller post at the central vehicular entrance and a smaller, lower post to either side where a pedestrian entrance occurs.

Gate posts mark the entry into the Church of Jesus Christ of Latter-day Saints, St. Francis Catholic, Kana’ana House Protestant, Siloama, and St. Philomena Church precincts at Kalawao. The posts associated with the Church of Jesus Christ of Latter-day Saints Meetinghouse are more elaborate and feature articulated formwork. The gate posts associated with the access road into the St. Francis Catholic Church property exhibit a smooth finish and terminate in a point at the top with no other articulation. The entry into the churchyard from Beretania Street is marked by square, flat-topped concrete posts faced with contemporary tile murals. Four entrances occur within the perimeter wall of Kana’ana Hou Church. Along Mission Street, the entrance is marked by a pair of square concrete pillars with a wider base and a stepped cap and a finial above. A similar pair of posts marks entry across the way to the west, as well as two entrances located along

School Street. The entry through the perimeter dry stacked stone wall at Siloama is marked by a pair of square concrete posts with metal turning gates set between the posts. A second entrance into the churchyard from Damien Road is marked by wooden posts that support a picket fence style gate. A third entrance set within the wall is marked by slender square concrete posts that support a pair of swing arm wooden gates. Square unadorned concrete posts that end in a point at the top, and are painted yellow to match the building, mark the entrance into St. Philomena Catholic Church. A secondary entrance occurs to the west that is comprised of a single flat-topped concrete pillar that supports a wooden board fence. Entry into the cemetery located adjacent to the church also occurs from Damien Road. This entrance is marked by a pair of square concrete posts with flared caps. A pair of concrete piers also marks the entry into an adjacent cemetery area from the yard south of St. Philomena Catholic Church. These are similar in style to the pillars along Damien Road and across the road at the Baldwin Home site.

Within West Coast Cemetery H there are two examples of gate posts. One is a pair of ornate concrete piers with pointed finials on top that does not relate to a present-day enclosure. The second pair marks a former entrance into a concrete grave enclosure that has been filled with concrete. Posts are also associated with a rock enclosure at Cemetery L.



Figure 157. View of metal bollards and chains along Bay View Loop, 2017.

Edging Materials. Edging materials present along road margins to limit vehicular access to turf lawn, septic fields, buildings, and cliff margins include bollards and chains (Figure 157), concrete bollards, boulders, and painted rocks.



Figure 158. View southwest of the Kalaupapa Landing wharf, 2017.

Infrastructure and Utility Features

Kalaupapa Landing, Bulkhead, and Breakwater. Kalaupapa Landing features a wharf, pier, and dock structure (Figure 158) that extends into the Pacific Ocean from the shoreline at the western edge of Kalaupapa. The wharf is used to dock boats at the settlement, principally the barge that delivers goods annually. The pier is irregularly shaped with a 10 foot high concrete dog-leg shaped breakwater extending 50 feet into the bay. A metal leveling deck covers a portion of a U-shaped reinforced concrete dock built over an earlier stone wharf accessed by steps. There is a winch associated with the pier, as well as bollards, railroad ties, and rubber tires. Associated with Kalaupapa Landing is a 105 foot long, 20 foot high bulkhead/sea wall composed of cast-in-place concrete and mortared volcanic rock set in concrete (Figure 159). The wall protects the Kalaupapa Landing area from wave action, along with a breakwater composed of formed concrete and stacked volcanic rock, approximately 200 feet long, located within the water near Kalaupapa Landing.



Figure 159. View east of the bulkhead/sea wall from the wharf, 2017.

Molokai Light Station. Molokai Light Station features several structures associated with operation of a lighthouse on Kalaupapa Peninsula. These include the lighthouse itself, a water storage tank, generator shed, and the remains of a former oil storage tank and oil drum loading ramp. The Molokai Light Station Lighthouse is a 112-foot-tall octagonal structure topped with a circular glazed dome and conical metal roof, known as a lantern. The exterior of the tower is adorned with decorative moldings cast with the concrete walls. The lighthouse originally enclosed a Second Order Fresnel lens, now in storage. The Molokai Light Station Water Tank is a simple concrete structure, octagonal in plan, built to hold approximately 8,000 to 12,000 gallons of water. The Molokai Light Station Generator Shed is a rectangular, single story wood-frame building simple and utilitarian in character.²³⁶

236. National Park Service, Molokai Light Station CLI, 91–94.



Figure 160. View south of underground water tanks located along Damien Road that were associated with the historic water supply system, 2017.

Water System Infrastructure. Evidence of the historic water system, which preceded contemporary use of a well-established by NPS, includes water tanks, a water reservoir, a Filter Building, and a Chlorinator Building. All of these features are located along Damien Road. The water tanks are partially buried in the ground with metal roofs to the south of the road (Figure 160), while the Filter and Chlorinator buildings are located to the west, also to the south of the road. The water reservoir, sometimes referred to as the Damien Reservoir, is located to the north of Damien Road as it approaches Kalawao. There is also a cistern located at the Bishop Home behind a former dormitory site that is an underground structure 8 feet in diameter, with a 3-foot opening at ground level. The water system supports fire suppression needs within the Settlements. Fire suppression features include fire hydrants and nearby fire hose boxes located in proximity to buildings and structures.



Figure 161. View of electrical poles and lines north of St. Francis Catholic Church, 2018.

Electrical and Telephone System Infrastructure. The electrical system at Kalaupapa reflects several eras of power generation and distribution, including 1909, 1932-1933, and 1962. The electrical system is one of the Settlement features that represents early twentieth century modernization efforts and coincided with the construction of new housing and other facilities. Elements of the system include wood poles strung with lines (Figure 161), crossbars, wiring, insulators, and transformers.²³⁷ The electrical poles are known to have been used by patients with poor eyesight to navigate the Settlement. Electrical lines and utility poles are used to support street lighting within Kalaupapa. Lines extend throughout Kalaupapa Settlement, with power supplied from topside via lines that traverse the pali and continue through New Baldwin Home site. Electrical lines continue north along Kamehameha Street to the airport, beach houses, and light station. Located south of Kalaupapa Memorial Hospital along Mission Street is a contemporary block structure that houses an electric generator to support hospital needs during a power outage. Telephone lines are also strung from dedicated telephone poles, but were sometimes strung on power poles.²³⁸ A small wood-frame structure located near the Visitor Quarters complex along Damien Street, referred to as a Telephone Station, relates to the telephone line infrastructure.



Figure 162. View north of the Puahi Street bridge, 2017.

Bridges. Puahi Street crosses Waihānau Stream via a single-lane wood and concrete bridge (Figure 162). This bridge replaced an earlier cattle guard and bridge at the crossing of Waihanau that has since been filled. Three bridges are associated with the Pali Trail, two at the lower end of the trail and the other between switchbacks 2 and 3 near the top. The bridge near the top is at the second switchback. It is a 65-foot high-grade aluminum structure, while the lower bridge is wood set on stone abutments.

237. Mason Architects, Inc., Determination of Eligibility “Kalaupapa National Historical Park Electrical System” (National Park Service, April 2018), ES-1.

238. Mason Architects, Electrical System, 4-1.



Figure 163. View north of the culvert that carries stormwater beneath Kamehameha Street near St. Francis Catholic Church, 2017.

Culverts. Five culverts are present within Kalaupapa that convey storm water flow beneath elevated road corridors (Figure 163). Two are associated with the St. Francis Catholic Church property and convey stormwater beneath Kamehameha Street to the east and Damien Street to the west, emptying at a culvert on the beach. Two others extend beneath streets within the Residential Area. The fifth passes beneath the Staff Street west of McVeigh Home.

The culvert that passes beneath Kamehameha Street and empties into the lower area north of St. Francis Catholic Church has a stone headwall. It was built in the 1930s as part of the storm drain system. It measures 14 feet in diameter and is set within an 8-foot-high headwall. Stormwater flow continues across the lower garden area of the churchyard to a second culvert that passes beneath Damien Street to the west. This culvert has a concrete headwall and a pipe.

One of the Residential Area culverts passes beneath McKinley Street near its intersection with Beretania Street. This culvert is set within a dry stacked stone wall that parallels the road corridor. A grass swale east of the road conveys stormwater to the culvert, which is composed of a concrete with wingwall extensions, and a metal pipe. Metal screening covers the pipe opening to prevent plant detritus from entering the pipe. The other culvert occurs along Bishop Street at the north end near its intersection with Beretania. The culvert is set within a dry stacked stone wall and is composed of a pipe.

The culvert located beneath Staff Street southwest of McVeigh Home is also set within a dry stacked stone wall that edges the road. A metal pipe conveys water beneath the street that extends out from the wall on the downhill side. Water enters the pipe from open throat inlets located along the streets at McVeigh Home, as well as a catch basin in the open area south of the built complex.



Figure 164. View southeast of the Rock Crusher, 2017.

Rock Crusher. As discussed above, a Rock Crusher was brought to the settlement to pulverize stone for road surfacing in the 1950s. The rock crusher is currently located near the New Baldwin Home site and overgrown with vegetation. It is a timber frame structure that measures 20 by 50 feet in plan and features external frame walls, diagonal braces, and a corrugated metal roof (Figure 164). It contains an engine shelter and compartments for three separators for processing different sized gravel.



Figure 165. View northeast of one of the containers near the maintenance area, 2017.

Containers. There are several 20 foot by 8 foot shipping containers located in and around the industrial area used for storage, including items ready to be loaded on the summer barge (Figure 165). These prefabricated metal structures are located within a cluster of maintenance buildings near Kalaupapa Landing, east of Paschoal Hall, and along Damien Street.

Recreational Features. Recreational features located at Kalaupapa include picnic shelters and pavilions, picnic tables, lanai, a multi-purpose tennis/basketball court, and a volleyball court.



Figure 166. View southwest of the Judd Park Pavilion, 2017.

Picnic shelters and pavilions are located at Judd Park in Kalawao (Figure 166), and along the western shoreline in Kalaupapa. The Judd Park Pavilion, built in 1950, is located at the southeastern end of Kalawao. It is wood frame construction with a wood post and concrete foundation and a corrugated metal roof. One corner of the structure has been walled-in and converted to a restroom. The remainder is open.

Also located nearby are Kalawao Picnic Shelters 1 and 2, located east of the pavilion. These are constructed of dimension lumber and recycled telephone poles, topped with curved corrugated metal roofs, and likely date to 1955.



Figure 167. View southwest toward the Oceanside Pavilion located near Kalaupapa Landing, 2017.

An open-air picnic shelter is located near the beach houses along Kamehameha Street. The Lions Pavilion, also referred to as Ocean View Pavilion, was built in 1965 by the Lions Club, and later modified and expanded in 1970, 1984, and 1996. Restrooms associated with the pavilion are located across Kamehameha Road. A second shelter, known as Oceanside Pavilion, is located south of Kalaupapa Landing and overlooks the ocean (Figure 167). These two pavilions are both simple open-air structures with seating and other amenities inside. The Lions Pavilion has a sink with running water and electric lights, while the Oceanside Pavilion also has electric lighting.

A residential recreational structure is Lanai 528, located northwest of the Bay View Home complex in association with the Inouye Residence. The structure is rectangular and measures 12 by 15 feet with a flagstone slab foundation and a hip roof with corrugated metal.



Figure 168. View northwest across the multi-purpose court north of Paschoal Hall, 2017.

A multi-purpose recreation court is located behind Paschoal Hall (Figure 168). The court measures approximately 60 by 120 feet and is enclosed on three sides by a chain link fence. The fourth side is edged by a concrete block wall that is failing. The asphalt-paved court is striped for tennis and one basketball hoop is located along the west edge. There is also a volleyball court set up in a level grassy area across Puahi Street from Fuesaina's Bar.



Figure 169. View north of the Grotto for Our Lady of Lourdes and St. Bernadette at St. Francis Catholic Church, 2017.

Religious Features. There are two grottoes located within Kalaupapa. One is at New Baldwin Home and the other is located at the northern edge of the St. Francis Catholic Church property (Figure 169). Both are substantial stone structures with a vertical orientation, and niches that feature statuary.



Figure 170. View northeast of the Hospital ruins, 2017.

Building Foundations and Ruins. Former building sites are often marked by foundations and other types of structural ruins that are visible aboveground. Such features are considered as part of the cultural landscape due to their visual impact and the manner in which they mark missing historic features and patterns of spatial organization. They may also indicate the locations of potential archeological resources with a high sensitivity to change and disturbance. Several building foundations and ruins are scattered throughout the settlements, including at the Old and New Baldwin Home sites, Bay View Home, McVeigh Home, individual residential properties, in the beach house area, and at Kalawao, including the U.S. Leprosy Investigation Station, and the second Kalaupapa Hospital (Figure 170). The first was located south of the Waihanau Bridge near where New Baldwin Home was later established. The Superintendent's Residence at Staff Row is also marked by foundation ruins.

Small-scale Features

Small-scale features of a variety of types and uses occur throughout Kalaupapa and Kalawao Settlements, both in relationship to administrative and institutional properties as well as individual residential properties. Small-scale features fall within several categories—grave markers and other cemetery related objects; signage; site furnishings; statuary; monuments; memorials; art installations; edging materials; and utility/service elements. These features demonstrate utilitarian, decorative, and spiritual aspects of life within the settlement.



Figure 171. View southeast of grave markers associated with the Siloama churchyard, 2017.

Grave Markers and Cemetery Objects. Grave markers of a variety of styles, sizes, and materials are present within the twenty documented cemetery properties at Kalaupapa and Kalawao, including West Coast Cemeteries at Papaloa and ‘Īliopi‘i; St. Francis Catholic Churchyard, the Siloama (Figure 171) and St. Philomena Catholic Church churchyards and adjacent burial grounds, Kauhakō Crater, Kahaloko Cemetery along Damien Road, as well as graves located at Bishop Home, near New Baldwin Home, near one of the beach houses, near the lighthouse, and south of Damien Road. Overall, there are more than 1,300 grave markers associated with these cemeteries. The grave markers vary in terms of materials, scale, shape, and markings. Marker types include upright, raised, cross, flat or flush with the ground, mausoleum, tomb/vault, obelisk, post, pillow, slab, hakka or urn house, and temporary sign. Materials associated with the grave markers range from wood, to rough lava stone, concrete, cast-iron, iron pipe, bronze plaque, granite, marble, and sand as part of a mortar mix, or any combination thereof.²³⁹ A large majority of the grave markers are composed of mortared lava rock covered with a lime wash on stucco.²⁴⁰



Figure 172. View east toward the Saint Marianne Cope grave marker, 2017.

Among the most visited grave sites at Kalaupapa are the Saint Marianne Cope Grave at Bishop Home, and the Saint Damien and Joseph Dutton graves at St. Philomena Church. The grave of Saint Marianne Cope, who helped establish and then later ran the Bishop Home for Girls between 1888 and 1918, features a white statue of Jesus and John the Baptist surrounded by a formal walk, concrete posts and chains, and plantings (Figure 172).

239. National Park Service, *Kalaupapa CLI*, 64.

240. For more information, see Appendix B of this report.



Figure 173. View south of the sign marking the location of the Kahaloko Cemetery, 2017.

Signage. Signage occurs throughout the Settlements in the form of NPS and DOH identity signs, wayside exhibits that provide interpretive information, road signs, and signs marking locations such as the Saint Marianne Cope grave, Saint Damien Monument, and individual cemeteries.

Identity signs are found in several locations within Kalaupapa to mark important places for visitors. A park identity sign is located along Airport Road near the airport that is composed of routed brown-painted wood boards that read “Kalaupapa National Historical Park” and features a prominent NPS arrowhead. The Lions Club maintains a “Welcome to Kalaupapa” sign along Kamehameha Street/Airport Road near the cattle guard. The NPS has erected a sign marking Kahaloko Cemetery that is composed of two wood boards routed with the name of the cemetery and dates of use. The boards are mounted on wooden posts, and the sign is set off within a dry stacked lava stone base (Figure 173) along Damien Road. The NPS also maintains identity signs along Kamehameha Street to indicate the individual cemeteries that comprise the West Coast Cemeteries at Papaloa and ‘Īliopi‘i. These signs are simple, low wooden board features with the information routed into the wood and painted a lighter, contrasting color. Damien Road near St. Francis Church is also marked with an identity sign for the benefit of tourists. It is composed of a textured panel inset with “Damien Road.” Painted board signs set on metal poles identify the Saint Marianne Cope Grave site and Saint Damien Monument along Puahi Street at the western edge of Bishop Home.



Figure 174. View southeast of the wayside exhibit that interprets a heiau along Damien Road, 2017.

Several NPS standard wayside exhibits are located within the peninsula. These exhibits mark and interpret several features within the settlements including a heiau along Damien Road (Figure 174), St. Francis Catholic Church, Bishop Home, St. Philomena Catholic Church, Baldwin Home, and Staff Row.



Figure 175. View northeast of the bake oven at Bishop Home, 2017.

Site Furnishings. Site furnishing present throughout the Settlement includes picnic tables and benches located near Fuesaina's Bar and near administrative buildings for staff, two flagpoles—one at Bishop Home and the other at the Post Office—food delivery boxes and trash can boxes, and an informational chalkboard and planters outside Paschoal Hall. At Bishop Home there is a mortared masonry feature in the open grassy field at the northeastern corner of the property referred to as a beehive-shaped bake oven (Figure 175). The oven is associated with the introduction of Portuguese baking practices in Hawai'i.

Statuary. There are several examples of statuary located within Kalaupapa and Kalawao Settlements. All are related to religious figures. These include the 1907 Statue of the Sacred Heart of Jesus at St. Francis Catholic Church—a 6-foot-high bronze or iron statue that is painted white and set on a 4-foot-tall pedestal, and a 10 by 10-foot stepped concrete base protected within a perimeter edge of concrete posts and chain. Additional statuary include the white statue of Jesus and John the Baptist surrounded by a formal walk, concrete posts and chains, and plantings at the Saint Marianne Cope Grave site; the statue of St. Anthony in front of St. Elizabeth Chapel at Bishop Home; and the bust of Saint Damien associated with the Saint Damien Monument at Bishop Home. A statue of the Virgin Mary occupies a prominent position within the stone grotto at New Baldwin Home.



Figure 176. View northeast of the Saint Damien Monument, 2017.

Monuments. Examples of monuments present within the Settlements include the concrete cross erected in 1956 atop Pu‘u ‘Uao near the rim of Kauhakō Crater used for religious ceremonies and visible from many locations on the western coast of the peninsula, the Saint Damien Monument, a red granite Celtic cross located along Puahi Street erected in 1893 by the people of England (Figure 176). A third monument honors Jonathan Napela at the Church of Jesus Christ of Latter-day Saints. The concrete obelisk monument was erected in 1938. The fourth and final monument located within the CLR study area is the Mother Clinton Monument located at the southeastern corner of Damien and Puahi Street. The monument consists of a 2 by 8 foot concrete base inlaid with a plaque. The monument was erected in 1945 to honor Bessie Clinton, an administrator at the Kalihi Hospital from 1918 to 1946.



Figure 177. Replicas of rocks painted by Ed Kato located near the Saint Damien Monument, 2017.

Art installations. Art installations present within the Settlements include replicas of Ed Kato painted rock arrangements located near the Saint Damien Monument on the Bishop Home property (Figure 177), and tile murals of St. Francis, Saint Damien, and Saint Marianne Cope, installed in the 2010s, that ornament the entrances to St. Francis Catholic Church property (Figure 178). The artist responsible for the design of the murals is Karen Lucas, a resident of Honolulu. The mural tiles include fragments of pottery found within the settlement.



Figure 178. View north of two of the Saint Marianne and St. Francis murals marking the entrance into the St. Francis Catholic Church property at Beretania Street, 2017.

Cultural Traditions

Cultural traditions are expressions of society in the physical landscape and are often conveyed in the way people organize and use space, the type and style of structures, the use of vegetation, and the modification of natural systems for cultural purposes.

In addition to evidence of cultural practices reflected in the physical landscape, a growing body of documentation—derived from patient interviews and research by anthropologists, ethnographers, historians, archeologists, and others—is serving to enhance our understanding of ethnicity and the ways in which Hansen’s disease affected the daily experiences, perceptions, and feelings about living in the isolation settlement.²⁴¹ While information from patient interviews and ethnographic research is critical to understanding individual experience of the landscape over time, cultural traditions as a resource type considered in this CLR are addressed for the way they were expressed physically on the built landscape. Ultimately, culture and landscape cannot be so easily compartmentalized at Kalaupapa. Rather, it is the combination of cultural tradition expressed in the physical landscape, and the ways in which people think and feel about the landscape, that together create a *sense of place*, and gives deeper meaning and value to the landscape holistically. In this regard, the CLR incorporates information from patient interviews as a framework for understanding traditional use, meaning, value, change, adaptation, and the tangible character of “community” in the cultural landscape of Kalaupapa Settlement.

Approximately 90 percent of the people sent to Kalaupapa were Native Hawaiian.²⁴² Within the structure of the institutional landscape that became Kalaupapa Settlement, each of these individuals shared experiences of physical separation from home and family, isolation, and life with a devastating illness. Many people lived most of their life in Kalaupapa, experiencing many changes in the restrictions and policies governing their isolation over the years. After the move from Kalawao, and by 1932, the settlement landscape at Kalaupapa reflected a relatively formal institutional design including a spatial organization that emphasized the operational need to separate patients from staff and others, with development and placement of building complexes that supported that organization; an articulated alignment of roads controlling general access throughout the settlement; and distinctive architecture in terms of style, material, and siting. Yet within this ordered and relatively controlled environment, the landscape also reflected components that developed in a more vernacular way based on individual expression and in many cases, cultural preferences. At Kalaupapa, these adaptations occurred at several levels over many years and influenced land use patterns and activities, stylistic adaptations and conventions applied to buildings, the use of found materials for various hand-made tools, functional items, and decoration, the development of personal gardens, and perhaps most prevalent, the cultivation, collection and use of plant materials for dietary preferences, ceremony, medicine, and traditional craft. Collectively, these physical characteristics imbue the landscape with cultural values that remain evident today.

Archeological Resources

Archeological resources that have been recorded within Kalawao and Kalaupapa Settlements, and elsewhere on Kalaupapa Peninsula, include both historic-era features associated with the Kalaupapa and Kalawao settlement as well as evidence of occupation and the use of natural resources for subsistence, and agricultural development by Native Hawaiians more than 800 years before present.²⁴³ In many cases, pre- and post-

241. See Juvik, *Ethnographic Study*; Langlas, McGuire, and Juvik, *Kalaupapa 2001–2005*; Cerny, *Social Value*; and Neller, *Home Gardens*.

242. Other ethnic groups included Japanese, Chinese, Caucasian, and Filipino.

243. Mark McCoy, “The Development of the Kalaupapa Field System, Molokai Hawaii,” in *The Journal of Polynesian Society* 116 (4):339–358, and Mark D. McCoy, “Hawaiian Limpet Harvesting in Historical Perspective: A Review of Modern and Archaeological Data on *Cellana* spp. from the Kalaupapa Peninsula, Molokai Island,” *Pacific Science* 62 (1):21–39. McCoy’s summary chronology is used to provide the overview of occupation and use of the peninsula prior to the establishment of Settlements.

Hansen's disease settlement resources physically overlap, adding complexity to understanding historic spatial organization and structural development after 1866 and the early settlement at Kalawao.²⁴⁴

There are 593 sites recorded in the National Park Service Cultural Resources Inventory System (CRIS) for the park. The sites currently recorded may require State Historic Preservation Division (SHPD) concurrence. The remainder of the sites and features observed and investigated by archeologists over approximately 700 acres of the peninsula have yet to be evaluated. Based on previous investigations, however, Kalaupapa is considered among the best preserved traditional Hawaiian archeological districts in Hawai'i due in part to the establishment of the isolation settlement, limited access, and few disturbances.²⁴⁵ Historic era settlement archeological sites are also considered among the most intact within Hawai'i, and possibly within the world, due to their location on a small peninsula and their singular purpose associated with the isolation of a population with Hansen's disease from 1866 to 1969, with ongoing lifeways to the present.

Archaeological resources evidencing traditional Hawaiian land use and occupation remain in every area of Kalaupapa National Historical Park, including the peninsula, along and on the pali (cliffs), within Waihānau, Wai'ale'ia and Waikolu Valleys, Nihoa and Kuka'iwa'a landshelves, and within Kauhakō Crater. These sites include shelters and habitation sites, religious and ritual structures called shrines or Heiau, petroglyphs, stone markers and stone marked trails, platforms, burial sites, a hōlua slide, and extensive agricultural systems comprised of features such as terraces, planting enclosures and mounds, windbreaks and low walls. In addition, ahupua'a walls remain marking the boundaries between Kalawao, Makanalua, and Kalaupapa ahupua'a. Evidence of use of the colluvial soils in the valley bottoms and along the base of the pali in the form of agricultural complexes that include irrigated terraces dating to as early as 1200 AD has been documented into the Wailau Valley. Many of these complexes retain components of wetland agriculture found throughout the Hawaiian Islands, such as walled enclosures, diversion channels, and ditches.²⁴⁶ Access to fresh water and areas where taro could be grown remained an important agricultural activity when the settlement was established at Kalawao in 1866. After 1200 AD, archeological research suggests that people were using both the wetter valleys and some areas of the peninsula for dry land farming, particularly cultivation of sweet potatoes. Use of the shoreline areas to harvest marine resources during this time is also indicated with the presence of materials found at early habitation sites and shelters. Over time, as populations increased, large portions of the Kalaupapa Peninsula were used for agriculture.²⁴⁷ Between 1450 and 1550, extensive areas of the peninsula were organized by low rock walls buffering trade winds and delineating

244. Johnson, Draft NHL nomination update, 68; Flexner, *Archaeology of the Recent Past*, 258–263.

245. Johnson, Draft NHL nomination update, 12, referencing G.F. Somers, *Kalaupapa: More than a Leprosy Settlement: Archeology at Kalaupapa National Historical Park* (Tucson, Arizona: Western Archeological and Conservation Center Publications in Archeology, No. 30, 1985), 117; Patrick V. Kirch, *From the Cliffs of Keolewa' to the Sea of Papaloa': an Archeological Reconnaissance of Portions of the Kalaupapa National Historical Park, Moloka'i, Hawai'ian Islands* (Berkeley, California: Archeological Research Facility, University of California, 2002) 30, 32. See also Mark D. McCoy, *The Lands of Hina: An Archeological Overview and Assessment of Kalaupapa National Historical Park, Moloka'i Island* Technical Report 135, edited by David Duffy (Honolulu, Hawai'i: Pacific Cooperative Studies Unit, University of Hawai'i at Mānoa, 2005).

246. Sonia Juvik, *Doctoral Dissertation Research: The Development of Irrigated Agriculture in Wailau Valley, Moloka'i Hawai'i*; and McCoy, *The Lands of Hina*.

247. McCoy notes that prior to intensive agriculture, the peninsula was dominated by endemic trees, and while limited cultivation on the peninsula may have begun as early as 1200 and continued through the thirteenth century, widespread burning across the Kalaupapa peninsula—which signals the beginning of the “Kalaupapa Field System”—doesn't begin until 1450–1550 (McCoy, *The Lands of Hina*, 348); and McCoy, “Wind Erosion and Intensive Prehistoric Agriculture: A Case Study for the Kalaupapa Field System, Moloka'i Island, Hawai'i,” In *Geoarcheology: An International Journal* 22 (5):521.

fields. Structures associated with dry land agriculture remain on the peninsula today and include linear alignments of low rock walls that tend to conform to landforms near the coastal spray zone, a few larger “plots” on the east and southern half of the peninsula, and several irregular shaped plots on the steep western slopes of Kauhakō Crater. Substantial house sites in this area have also been surveyed. In other areas, high walls remain on the peninsula and in some cases, extend for great distances enclosing large growing areas.

Collectively, these structures and sites reveal a remarkably well-preserved traditional Hawaiian landscape throughout the ahupuaʻa. Although invasive vegetation covers much of this area, several sites have been documented including numerous rock walls, a large heiau abutting the talus slope at the base of the pali, a smaller heiau along Damien Road, another large heiau at the Molokai Light Station, a portion of a hōlua, upright stones, a large [possible hula] platform and adjacent petroglyph, and portions of a wall marking the boundary between ahupuaʻa.

Oral tradition suggests that sometime between 1650 and 1795, a battle for fishing rights took place on Kalaupapa Peninsula. One burial complex, at Makapulapai, is located on the peninsula, where, it is believed, the remains of the warriors who fought in that battle were buried.²⁴⁸

Based on recent archeological surveys and ethnohistoric research, the relationship among traditional Hawaiian and Kalawao and Kalaupapa Settlement resources, and the degree to which Hawaiian ritual structures and settlement patterns historically influenced the physical character and spatial organization of the isolation settlement are being considered. Key among this work is the research and survey work by James Flexner, who describes the archaeological remains of Kalawao as a place that can be interpreted in terms of a “village with aspects of traditional Hawaiian social organization, as well as Hawaiian adaptations to modernity.”²⁴⁹ This is evident in the use of components from the traditional Hawaiian landscape such as house sites, garden plots and enclosures, circulation routes, the appropriation of stone material for new building, and use of existing vegetation for subsistence, as well as the artifacts, many of which indicate considerable adaptation to daily life in the early years at Kalawao. Flexner also suggests that sacred sites and shrines throughout this landscape were not only valued by the Hawaiian community already residing in this area, but also were likely important traditional places of meaning to those who were sent to the peninsula after 1866, particularly those of Hawaiian heritage.²⁵⁰

The result is a landscape within a landscape and a deep historical record of settlement, change, and adaptation. This “layering” of archeological resources is key to understanding the cultural landscape holistically, and reading where and in what ways traditional Hawaiian cultural features both imprint and overlap throughout the Kalaupapa landscape.²⁵¹

248. McCoy, *Pacific Science*, and James Flexner and Mark McCoy, “After the Missionaries: Historical Archeology and Traditional Religious Sites in the Hawaiian Islands,” *Journal of the Polynesian Society* 125 (3):319–324.

249. Flexner, *Archaeology of the Recent Past*, 137.

250. Flexner and McCoy, *After the Missionaries*, 324.

251. James L. Flexner, “An Institution That Was a Village: Archeology and Social Life in the Hansen’s Disease Settlement at Kalawao, Molokaʻi Hawaiʻi,” in *International Journal of Historical Archeology* 16 (2012):151–158; and Flexner, *Archaeology of the Recent Past*.

Analysis and Evaluation

Introduction

This chapter is composed of two sections: an evaluation of the significance of the Kalaupapa and Kalawao Settlement cultural landscape in accordance with the guidance provided by the National Register of Historic Places; and a comparative analysis of historic and existing landscape conditions by landscape character area.

The significance evaluation identifies the important historical associations of the property, as well as its architectural, archeological, and social value. The property's significance is tied to a discrete period of time in which its important contributions were made and to relevant national, state, and local historic contexts. The significance evaluation is based on the 2017 Draft National Historic Landmark (NHL) nomination update for the property.

The comparative analysis examines the extent to which historic character survives and has changed since the end of the period of significance. The analysis for each character area includes summaries of historic and existing conditions, and an assessment that considers integrity based on changes that have occurred since the period of significance, and the degree to which the cultural landscape conveys its historic associations for each landscape characteristic. Maps and photographs illustrate the character of the historic and existing landscape and changes that have occurred since the period of significance. The individual landscape features discussed herein are inventoried by character area in Appendix A.

Evaluation of Significance

National Register Criteria for Evaluation

For a property to be eligible for inclusion in the National Register of Historic Places, it must possess significance under one of four criteria. The Criteria for Evaluation state:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, and objects that possess integrity of location, design, setting materials, workmanship, feeling, and association, and:

- a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- b) that are associated with the lives of persons significant in our past; or
- c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

- d) that have yielded, or may be likely to yield, information important in prehistory or history.²⁵²

National Historic Landmark Criteria for Evaluation

For a property to be eligible for designation as an NHL, it must possess significance under one of six criteria. The criteria states that:

The quality of national significance is ascribed to districts, sites, buildings, structures, and objects that possess exceptional value or quality in illustrating or interpreting the heritage of the United States in history, architecture, archeology, engineering, and culture and that possess a high degree of integrity of location, design, setting, materials, workmanship, feeling, and association, and:

Criterion 1

That are associated with events that have made a significant contribution to, and are identified with, or that outstandingly represent, the broad national patterns of United States history and from which an understanding and appreciation of those patterns may be gained; or

Criterion 2

That are associated importantly with the lives of persons nationally significant in the history of the United States; or

Criterion 3

That represent some great idea or ideal of the American people; or

Criterion 4

That embody the distinguishing characteristics or an architectural type specimen exceptionally valuable for the study of a period, style, or method of construction, or that represent a significant, distinctive, and exceptional entity whose components may lack individual distinction; or

Criterion 5

That are composed of integral parts of the environment not sufficiently significant by reason of historical association or artistic merit to warrant individual recognition but collectively compose an entity or exceptional historical or artistic significance, or outstandingly commemorate or illustrate a way of life or culture; or

Criterion 6

That have yielded or may be likely to yield information of major scientific importance by revealing new cultures, or by shedding light upon periods of occupation of large areas of the United States. Such sites are those which have yielded, or which may reasonably be expected to yield, data affecting theories, concepts, and ideas to a major degree.

Ordinarily, cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings and properties that have achieved significance within the past fifty years are not eligible for designation. If such properties fall within the following categories they may, nevertheless, be found to qualify:

252. Code of Federal Regulations, Title 36, Part 60. "The National Register Criteria for Evaluation."

Exception 1

A religious property deriving its primary national significance from architectural or artistic distinction or historical importance; or

Exception 2

A building removed from its original location, but which is nationally significant primarily for its architectural merit, or for association with persons or events of transcendent importance in the nation's history and the association consequential; or

Exception 3

A site of a building or structure no longer standing but the person or event associated with it is of transcendent importance in the nation's history and the association consequential; or

Exception 4

A birthplace, grave or burial if it is of a historical figure of 'transcendent national significance and no other appropriate site, building, or structure directly associated with the productive life of that person exists; or

Exception 5

A cemetery that derives its primary national significance from graves of persons of transcendent importance, or from an exceptionally distinctive design or an exceptionally significant event; or

Exception 6

A reconstructed building or ensemble of buildings of extraordinary national significance when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other buildings or structures with the same association have survived; or

Exception 7

A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own national historical significance; or

Exception 8

A property achieving national significance within the past 50 years if it is of extraordinary national importance.²⁵³

Current National Register of Historic Places Status of Kalaupapa and Kalawao Settlements

Kalaupapa was listed as an NHL in 1976.²⁵⁴ In 2017, NPS Historian Christopher Johnson prepared a draft NHL nomination update that has served as one of the foundation documents for developing this CLR.²⁵⁵ As discussed in the nomination, Kalaupapa meets NHL Criteria 1, 2, 3, 4, and 6. The NHL themes associated with Kalaupapa include Peopling Places, Creating Social Institutional Movements, Expressing Cultural Values, Expanding Science and Technology, and Changing Role of the United States in the World Community. Kalaupapa's period of significance dates from 1866–1969. The significant persons involved with the settlement include Father

253. National Park Service, *National Register Bulletin: How to Prepare National Historic Landmark Nominations*, 11.

254. Johnson, Draft NHL nomination update, 5.

255. The nomination will remain in draft form until the Landmarks Committee is convened and reviews the document.

Damien De Veuster (Saint Damien of Molokai), Mother Marianne Cope (Saint Marianne Cope), and the People of Kalaupapa. The cultural affiliation of Kalaupapa is Native Hawaiian. The NHL nomination lists the historic contexts as Leprosy and Public Health, 1866–1969; Euro-American Overseas Expansion and the Colonization of Hawai‘i, 1778–1959; and Social Justice and Human Rights Movements Concerning Leprosy, 1866–present.

National Register Significance of Kalaupapa and Kalawao Settlements

As stated in the summary statement of significance in the draft NHL nomination update:

The Kalaupapa Leprosy Settlement Historic District encompasses the entire Kalaupapa peninsula located on the north coast of the island of Molokai in Hawai‘i. The settlement is significant under NHL Criteria 1, 2, 3, 4, and 6 for its association with nationally and internationally important events, ideas, and persons in the history of leprosy (now also known as Hansen’s disease). . . . The period of significance extends from 1866 to 1969, covering the period when the settlement was operated under a policy of compulsory segregation of persons believed to have the disease. During those years, approximately 8,000 people—mostly Native Hawaiians—were forcibly exiled to the Kalaupapa peninsula, isolated from their families and society under the rationale that this would halt the spread of the disease. Those sent to Kalaupapa also fought to retain control over their lives by demanding reforms to the government’s leprosy program, inspiring others to support them, and adapting the settlement to meet their needs as a predominantly Hawaiian community. The establishment and expansion of the settlement also involved a second incidence of separation: the removal of the kama‘āina, the Native residents of the area. Hawaiians had lived on the Kalaupapa peninsula for centuries, forming ties with the land that were disrupted when they were forced to make way for the settlement. Some kama‘āina remained in defiance of the government’s orders, providing aid to those sent to the settlement during the early years. As it developed under the jurisdiction of the Kingdom of Hawai‘i, the territorial government of Hawai‘i, and finally the State of Hawai‘i, Kalaupapa became a model for other isolation institutions established in the US and worldwide. It also represents an important origin point for ongoing social justice and human rights movements by and in support of persons affected by the disease.²⁵⁶

The nomination indicates that Kalaupapa Leprosy Settlement Historic District meets Criterion 1 due to its close association with the history of leprosy, and as “the longest operating leprosy institution within the United States and its territories.”²⁵⁷ At the time that the settlement was established, the institution was connected and impacted by colonization efforts by the United States during the late nineteenth century. As Hawai‘i achieved statehood while Kalaupapa was in operation, the settlement influenced many other isolation institutions throughout the United States and the rest of the world.

The Kalaupapa Leprosy Settlement Historic District also meets Criterion 2 due to its association with people who greatly impacted both the settlement and the perception of leprosy throughout the world. Father Damien was a Belgian Roman Catholic priest who arrived on Molokai in 1873 and continuously worked on improving the conditions of the settlement and residents’ morale. He later contracted leprosy and died in 1889, leading to implementation of stricter segregation in response to fears about the disease’s communicability. His death also led to the formation of charities that sought to help those who had the disease. He was canonized in 2009.

Mother Marianne Cope was another significant person who provided religious counseling and nursing services for residents at Kalaupapa. She served as an administrator of the Bishop Home for Girls from 1888 until her death in 1918.²⁵⁸ She was inducted into the Women’s Hall of Fame in 2005 and canonized in 2012.

256. Johnson, Draft NHL nomination update, 5.

257. Ibid., 7.

258. Ibid., 9.

The residents of Kalaupapa made important contributions to human right efforts. Residents and their families and friends tried to improve each other's living conditions, and to inform the public about the disease and the conditions of the settlement.

The Kalaupapa Leprosy Settlement Historic District meets Criterion 3 through its influence concerning the rights of a person affected by leprosy. Those affected by the disease advocated for human rights and justice, while also challenging stereotypes associated with the disease. These efforts are evident in the numerous petitions and letters that inspired people including Saint Damien and Saint Marianne Cope.²⁵⁹

The Kalaupapa Leprosy Settlement Historic District meets Criterion 4 due to the distinct architecture employed in the settlement. Typical Hawaiian architecture is combined with institutional building design in the settlement. The residents themselves added to the village to address their needs at the settlement. Kalaupapa influenced other leprosy institutions to base these institutions on small villages instead of large hospitals or sites of imprisonment.²⁶⁰ Ruins such as the U.S. Leprosy Investigation Station located in Kalawao reveal some of the institutional architecture present at the settlement.

The last criterion met by the Kalaupapa Leprosy Settlement Historic District is Criterion 6. The settlement has a high likelihood to yield important archeological information concerning the lives of those with leprosy that are not recorded through the documents, letters, and interviews collected from the residents of the settlement. Further archeological efforts could also help “establish new links between pre- and post-contact Hawaiians,” as well as “contributing to new interpretations of Native Hawaiian resistance, adaptation, and accommodation to colonization and the introduction of western ideas and institutions.”²⁶¹

Period of Significance

The period of significance for Kalaupapa dates from 1866 to 1969. The beginning of this period, 1866, is the year in which the schooner *Warwick* transported the first twelve patients to Molokai. The end date of this period, 1969, is the date at which the DOH removed the isolation policy for those afflicted with Hansen's disease. The segregation laws were revoked as a result of the introduction of sulfone drugs as a treatment for Hansen's disease.

259. Ibid., 9.

260. Johnson, Draft NHL nomination update, 12, citing Michelle Moran, *Colonizing Leprosy: Imperialism and the Politics of Public Health in the United States* (Chapel Hill: The University of North Carolina Press, 2007), 27.

261. Johnson, Draft NHL nomination update, 12.

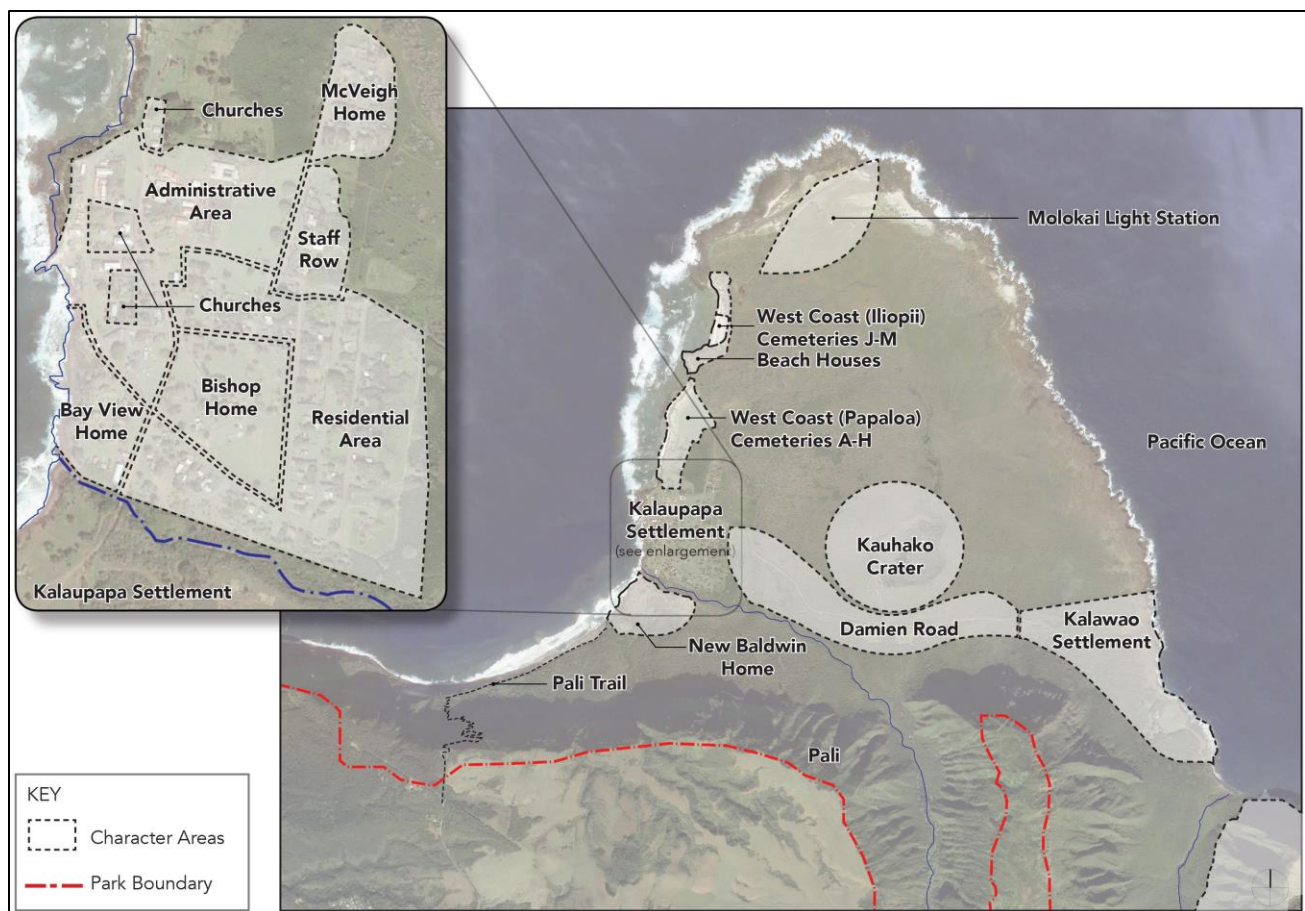


Figure 179. Character area key. (Source: LSHLA)

Comparative Analysis

This section analyzes and assesses the degree to which the Kalaupapa and Kalawao Settlements cultural landscape continues to reflect conditions present during the period of significance, and thus possesses integrity and the ability to convey its historic associations. The analysis presented below is organized by geographic location to make the information more accessible. The study area has been divided into character areas, defined as discrete geographic areas that contain concentrations of related cultural resources or a similar character based on a shared history of development or use. The analysis of each character area includes a summary assessment, an overview of historic conditions, followed by an overview discussion of existing conditions. The analyses conclude with a character area assessment that articulates changes that have occurred within the character area landscape since the end of the period of significance. The thirteen-character areas that comprise the study area (Figure 179) include

- Kalawao
- Damien Road
- Kauhakō Crater
- Administrative Area
- Residential Area
- Kalaupapa Churches
- Bishop Home
- Bay View Home

- McVeigh Home
- Staff Row
- New Baldwin Home
- ‘Īliopi‘i Beach Houses
- West Coast Cemeteries

Analysis of the individual character areas is preceded by a discussion of the larger landscape of Kalaupapa Peninsula, valleys, and pali as the milieu within which the CLR study area falls.



Figure 180. View of horses and rider traveling the Peninsula, with Kalaupapa Settlement beyond, circa 1925–1928. (Source: KALA 1925-1928, AB Potter_KALA-17429ee-1)

Kalaupapa Peninsula, Valleys, and Pali

Summary Analysis. Kalaupapa Peninsula and the pali that frames the landscape to the west serve in a broad sense as the environmental and cultural milieu for the settlement developed areas that are the focus of this CLR. The broad expanse of level terrain surrounded on three sides by ocean, and the dramatic cliffs to the south afford a unique sense of place (Figure 180), and have also served to support cultural lifeways through the provision of food, building materials, plants and objects that have served a variety of uses, and places to explore. The strong edge formed by the pali, visible throughout the Settlements, remains an ever-present reminder of the isolation of the peninsula. The pali has also served historically as a connection with the outside world due to the trails developed to afford passage through the steep and rocky terrain.

While the peninsula outside of the developed settlement areas is little visited today, evidence of hundreds of years of cultural occupation and use remains present throughout the landscape in the form traditional Hawaiian sites. These cultural features that suggest use of the land by those who preceded the settlement and were active on the peninsula during the earlier years of the settlements, are mostly now obscured beneath a thick cover of invasive vegetation. The Kalaupapa Peninsula, including Kalaupapa and Kalawao Settlements, has been described as one

of the richest, best preserved archeological sites for all eras of cultural use and activity in Hawai‘i.²⁶² Rough roads pass through this landscape along the eastern shoreline and across the center of the peninsula from Damien Road. Some people continue to visit the rugged and rocky coastline of the eastern and northern shorelines where residents have traditionally enjoyed fishing, salt picking, shell collecting, picnicking, and swimming. Most now travel the asphalt-paved Kamehameha Street/Airport Road, which connects with the more rugged roads northeast of Kalaupapa Airport.

The pali also remains an integral part of life at Kalaupapa Settlement, with the Pali Trail bringing visitors for tours, and providing a commuter route for staff who live topside Molokai. The current trail is the most recent, following earlier trails known to have been used by Saint Damien and others by the 1870s to visit topside. The locations of former, now abandoned, trails are known but have not been surveyed. The three valleys have also been integral to life at Kalaupapa, with the Wai‘ale‘ia Valley Stream providing water, and the other valleys the object of visits by patients for picnics and outings, and to collect plants growing in these cooler, wetter areas.



Figure 181. View of the Waikolu Valley, 1901. (Source: KALA Kalaupapa Historical Society Album PG 8 #185)

Patients have recalled how beautiful it was to look up Waikolu Valley (Figure 181) when the ginger was in bloom, with its white blossoms streaked with red. There were also plants that were collected for food and objects, such as bamboo stalks that could be cut and used for fishing poles, and mountain apple, taro (*Colocasia esculenta*), bananas, and watercress (*Nasturtium samentosum*) for food. Opu was also collected for ulua bait. Interviewees Costales and Cathrine Puahala recalled hiking the rocky shoreline to reach and explore the Waikolu and Wai‘ale‘ia Valleys. They described swimming in the streams, exploring abandoned lo‘i (taro fields), and collecting foliage and flowers for lei, especially maile (*Alyxia oliviformis*) vines and white ginger (*Hedychium coronarium*) flowers. Costales noted that they would pick the ginger blossoms before they were open and wrap them tightly in ti leaves to keep them for the journey home, while making sure to put them in a place where they

262. Ibid., 12-13.

would not get crushed if they fell down since going to Waikolu required walking on wobbly rocks.²⁶³ Other residents are known to have hunted wild goats, mainly for dog food.²⁶⁴

Historic Conditions. Prior to the establishment of the Hansen’s disease settlement in 1866, the peninsula and the Waihānau, Wai‘ale‘ia, and Waikolu valleys were home to an extensive Hawaiian population. Based on the abundance of archeological evidence, the northeastern region of Kalaupapa Peninsula was heavily used and transformed by early Polynesian settlers in establishing fields for cultivation. The fields were so productive that settlers are known to have exported sweet potatoes (*Ipomoea batatas*) from the harvests.²⁶⁵ Molokai was renowned for food production within the Kingdom and was favored by Kamehameha I and his family for its fishponds and rich agricultural lands. The peninsula was divided or organized into three ahupua‘a, or mountain to sea land divisions, each attributed to an individual affiliated cultural group. The ahupua‘a provided a diversity of landscape resources to support food production, habitation, and ritual activities. The kula (drier peninsula interior) was well suited to sweet potato production and supported the extensive cultivation of fields. The more elevated, wet, and shaded land located on and near the pali was developed for lo‘i or taro pond fields. Polynesians brought approximately thirty cultivated plants to Hawai‘i, including taro, which became an important dietary staple. Fishing was also an important food and resource collection activity. Residents built heiau, ko‘a (fishing shrines), ahu (built stone markers), burial sites, hōlua (slide used for traditional Hawaiian land sledding), lo‘i, kula (dryland field systems), habitation sites, platforms, walls, and windbreaks, and left records in the form of petroglyphs. The landscape organization, patterning, spatial relationships and hierarchy exhibited by these resources reflect complex cultural systems that developed over more than 800 years of use and traditional Hawaiian lifeways.²⁶⁶



Figure 182. View of the landscape between Waihānau Valley and Wai‘ale‘ia Valleys on the road between Kalaupapa and Kalawao, noted as leading to Baldwin Home in the archival record, undated, circa 1890s. (Source: KALA Potter Collection_KALA17492.PALI).

263. KC 6/22/03), Juvik, *Ethnographic Study*, 51-52.

264. Elroy Malo 10/29/01, Patient 6, 9/25/01, Juvik, *Ethnographic Study*, 51.

265. Juvik, *Ethnographic Study*, 45–46; referencing Patrick V. Kirch, *From the Cliffs of Keolewa’ to the Sea of Papaloa’: an Archeological Reconnaissance of Portions of the Kalaupapa National Historical Park, Moloka’i, Hawai’ian Islands* (Berkeley, California: Archeological Research Facility, University of California, 2002), and Somers, G.F. *Kalaupapa: More than a Leprosy Settlement: Archeology at Kalaupapa National Historical Park*. Tucson, Arizona: Western Archeological and Conservation Center Publications in Archeology, No. 30, 1985.

266. Johnson, Draft NHL nomination update, 68.

Following the establishment of the Hansen's disease isolation Settlement at Kalawao in 1866, public policy suggested that existing groups be relocated to accommodate the new residents.²⁶⁷ The existing residents did not leave immediately, but are known to have helped the first Hansen's disease patients establish shelter, locate food, and learn to fish, collect salt, and cultivate sweet potatoes, until they were eventually relocated by edict.²⁶⁸ Settlement residents appear to have reused many of the food production resources established by earlier residents, including dryland agricultural field systems to grow sweet potatoes and pond fields used to grow taro. Settlement residents also reused rocks from existing dry stacked rock walls to build shelters and enclosures.²⁶⁹ Later, they established fields and pastures to raise livestock (Figure 182). While most of the settlement activities occurred or were concentrated within the village sites of Kalawao and Kalaupapa, residents also used other areas of the peninsula for recreation, agriculture, livestock grazing, and burials.²⁷⁰ Today, evidence of habitation and cultural activities and land use "cover the peninsula like a fish net."²⁷¹

After Kalawao Settlement was established in 1866, non-patient residents began to use two formalized routes to travel back and forth to topside Molokai—the 'Ili'ilikā and Pali Trails. Patients were forbidden to travel to topside Molokai via either trail. During the nineteenth century, the most popular route to topside Molokai was the 'Ili'ilikā Trail (also referred to as the Waihānau Trail, the Kalawao Trail, Damien's Trail, and the Kalaupapa Trail). This route traversed the western ridge over Waihānau Valley. It was steep and rugged, and accessed from the western ridge of Waihānau Gulch near Kalawao. The Ili'ilikā Trail was used for mail delivery, and by missionaries and those working at the settlement, including Saint Damien.²⁷² The Pali Trail (also referred to as the Kala'e Trail, Kukuiohāpu'u Trail, Pu'upāne'ene'e Road to Kalae, and Kalaupapa Road), was established circa 1890 at the western end of the peninsula.²⁷³ These trails were generally footpaths, although cattle were brought to the Settlements along the routes from topside, and mail was delivered by individuals traveling on mule or horseback, suggesting that the trails were wide and developed enough to accommodate livestock.

267. Juvik, *Ethnographic Study*, 31.

268. Johnson, NHL, 60.

269. *Ibid.*, 67.

270. *Ibid.*, 84.

271. *Ibid.*, 27, from S.J. Wells and R.J. Hommon, *An Archaeological Survey Plan for the Pacific Islands Cluster, Pacific West Region, National Park Service, NPS Systemwide Archaeological Inventory Program, Publications in Anthropology 76* (Tucson, Arizona: Western Archaeological and Conservation Center, National Park Service, 2000): 20.

272. Johnson, Draft NHL nomination update, 22.

273. The Pali Trail assumed the name Kalaupapa Trail after the earlier route was abandoned. It has also been suggested that the trail should be renamed the Kupele Trail after David Kupele who for many years rode up the steep path on horseback nearly every day to collect the mail and other items. In 1991, Dorothea Curtis prepared a study of the pali trails titled "Historical Pali Trails of Kalaupapa National Historical Park" for the National Park Service that provides information about the evolution of pali trails.



Figure 183. View of the guard house at the top of the pali trail used by a caretaker who policed those coming and going, circa 1930s. (Source: KALA Kalaupapa Historical Society Album E PG 4 #446-448)

In 1936, a gate and watchman station were built at the entrance to the trail topside to control access (Figure 183). The watchman station was removed in 1946 after the first successful medicinal treatment of leprosy with sulfone drugs.²⁷⁴ Despite restrictions on travel and the presence of the watchman station, many patients did find ways to sneak off topside for a day or two before the rules were relaxed. If their absences were noticed, they were punished when they returned by being put in the Kalaupapa jail.²⁷⁵ Kōkua regularly traveled the pali to visit with others topside, bringing back news to the patients.

After an airfield was constructed on the peninsula in 1933, visitors, food, and workers began to travel to Kalaupapa by plane and the nearly complete reliance on the Pali Trail for day to day needs diminished. The trail nonetheless continued to play an important role in settlement activities and the provision of certain needs. By 1939, the trail had been widened and realigned in several locations to include switchbacks and other features thought to facilitate the movement of cattle and other livestock to the peninsula. Mail continued to arrive on the backs of mules until airmail service was initiated in 1950.²⁷⁶

During the first 100 years of the Settlements, water was supplied by a perennial stream running through Wai‘ale‘ia Valley. The valley contains evidence of the water supply system developed to support life at Kalaupapa and Kalawao Settlements, along with several features located along Damien Road. During the early years of the Kalawao Settlement, water was transported in containers from the stream. Without running water, unsanitary conditions during the early years led to the spread of other diseases. In 1873, the Board of Health supplied enough one-inch iron piping to lay a supply line between the stream and Kalawao, helping to improve conditions.²⁷⁷ The piping ran along the eastern shoreline. As such, it was susceptible to damage from high waves and rock fall. When the settlement was relocated to Kalaupapa, a new conveyance system was needed to bring

274. Johnson, Draft NHL nomination update, 50.

275. Clarence Naia 2/08/02, Juvik, Ethnographic Study, 34.

276. Johnson, Draft NHL nomination update, 47, 51; from Greene, *Exile in Paradise*, 513.

277. *Ibid.*, 81, from Greene, *Exile in Paradise*, 85.

water to the western edge of the peninsula. The new system built on efforts conducted by the ali'i in the 1870s to establish an initial extension of the water system from Waikolu Valley to Kalaupapa, and the use of seasonal springs and a brackish well located near the beach.²⁷⁸

In 1888, the Board of Health built a water line from springs in Waikolu Valley to Kalaupapa as Bishop Home was being completed.²⁷⁹ In 1909, a new 8-inch line was added that was fed from a concrete reservoir in Waikolu Valley. Water initially flowed from the stream into the collection reservoir via a diversion ditch. The Board of Health replaced the ditch in 1912 with a 14- by 20-inch wooden flume. Later, the Board of Health added a new diversion dam and flume at a secondary source in Waikolu Valley in 1937–1938. The open flume was later replaced with a covered concrete conduit, while an aerator box and sedimentation chamber were added. The vulnerable sections of the line were also either rerouted or reinforced.²⁸⁰ Chlorinator and filter houses were added to treat the water in the 1950s and 1960s.

Following establishment of Kalaupapa National Historical Park, the NPS identified the need to improve the water supply system to meet contemporary use needs and address problems associated with the deterioration of the older system. Since the 1980s, the stream-fed water supply system has been replaced with a well and associated pump, storage, and purification systems. Although it no longer functions, elements of the historic water supply infrastructure remain in place. Some features are located within Waikolu Valley, while others edge Damien Road, or are located at Kalawao.



Figure 184. View of the pali and Waihānau Valley, circa 1950. (Source: KALA Kalaupapa Historical Society Album E PG 2 #442)

During the early twentieth century, goats being raised in the settlement managed to escape containment and began to roam free on the peninsula. The animals occupied any area with an available food source, including the pali.

278. Ibid., 33.

279. Ibid., 81, from Greene, *Exile in Paradise*, 130, 174.

280. Ibid., 81, from Greene, *Exile in Paradise*, 174, 212, 363–364, 462, 513, 520–522.

Over time, they reduced the pali into a denuded barren hillside (Figure 184), described by some as resembling a prison wall. Cathrine Puahala noted the appearance of the pali when she arrived at Kalaupapa in 1942:

All I know is when we first came up on the boat, we just looked at the mountain. It's just a long, long mountain because it starts from way down the other end, yeah. From the ground, then it starts to go up, up, up—and all we saw was dirt and kind of blue rocks, gray rocks. It didn't look nice at all—it was just barren.²⁸¹

Former nurse Julie Sigler recalled being told stories by the patients about seeing and hearing rock slides on the pali during the time it was denuded.²⁸²

After the establishment of Kalaupapa National Historical Park, the NPS endeavored to remove the animals. Following this arduous process, the vegetation began to return. The pali now appears again as a lush verdant mountainside. Another interviewee noted the change:

But today you look at it, it's green. It's green and it has trees. You know all the pine trees from the park up there? They're coming down to Kalaupapa. They're all on the side of the cliffs coming down. It's from the seed that grows. And soon someday they will be down to Kalaupapa alongside of the cliffs. The mountain is very beautiful—it was always beautiful. But there wasn't enough vegetation to make it look pretty and now, there's lots of things growing.²⁸³

Existing Conditions. The Kalaupapa Peninsula, Valleys, and Pali continue to contain evidence of the abundance of resources that have sustained the Kalaupapa community since the nineteenth century, as well as those who resided on the land before them. Traditional cultural uses and activities are closely tied to natural features and systems. Both the ocean and the land provide a diverse complement of resources that have been enjoyed for consumption, recreation, and cultural activities.²⁸⁴ Swimming, fishing, salt picking, picnicking, and other activities that have provided diversion and enjoyment for peninsula residents revolve around the Pacific Ocean. In an interview, a former administrator for the DOH, BJ Reid, considered the role of the ocean in peninsula lifeways:

It's just like the serenity of the woman's womb So it's the pali that is the father and the ocean is the mother and the land mass is the womb But isn't it so beautiful, considering the spiritual history that this is, when you look at the environment, it does create parentage of sorts for the orphans that came here with this disease. They had the father pali, and they had the mother ocean, and they had the womb to play in with each other, which they did do lot of that too.²⁸⁵

Along the northern and eastern shoreline are basalt flats where salt has traditionally been collected. In areas where black lava flows slope gently into the sea, ocean waves splash water into the depressions of the flat rocks. Once the sea water evaporates, thick crusts of salt are left behind. Residents enjoy “salt picking,” a painstaking process, on the basalt flats. Although salt picking is not unique to Kalaupapa, the salt collected on the peninsula is known to a wider audience because “it tastes better and has lower sodium content than other salts.”²⁸⁶ The white salt crusts stand out brightly against the black lava. Patients look forward to experiencing the attractive sight during the summer months of May through August when weather conditions are right for salt formation. Excursions to go “salt picking” are also a good excuse for a picnic. Patients pick salt whether or not they have an existing

281. CP 7/12/02, Juvik, *Ethnographic Study*, 32.

282. Juvik, *Ethnographic Study*, 33.

283. CP 7/12/02, Juvik, *Ethnographic Study*, 34.

284. Juvik, *Ethnographic Study*, 51–53.

285. BJR 7/10/02, Juvik, *Ethnographic Study*, 52.

286. Juvik, *Ethnographic Study*, 53.

supply because they like to do so, and it is considered relaxing.²⁸⁷ Kalaupapa salt finds eager takers all over the islands, especially amongst the Hawaiian population.²⁸⁸



Figure 185. View of nuns fishing, undated. (Source: KALA Kalaupapa Historical Society Album D PG 45 #152)

Fishing has also been a cherished pastime for peninsula residents. In interviews, many of the patients conveyed stories about the abundance of fish, opihi (limpet), limu (seaweed) and lobster available to those engaged in fishing. They also remember Sister Richard Marie Toal, who was nicknamed the Fishing Nun for her love of the sport (Figure 185). Residents often have their own favorite, even secret, places where they enjoy fishing. Related activities have included shell collecting for craft projects.

Another popular activity on the peninsula is visiting Nihoa for picnics and flower collecting. Nihoa is a beach and shoreline area located at the far southwestern edge of the peninsula. Nihoa is a relatively level densely vegetated coastal shelf. In an interview, Cathrine Puahala indicates that Nihoa is locally referred to as “the flat.” Although somewhat difficult to access, it was a favorite picnic area where there was an abundance of opihi.²⁸⁹

Spatial organization associated with the peninsula is also key component of community life, with the sense of isolation resulting from the boundaries formed by the pali cliffs and ubiquitous ocean waters, leaving many residents to refer to the peninsula as an island. Much of the peninsula is relatively level, although the conical peak of Pu‘u ‘Uao rises 402 feet above the surrounding plain, affording dramatic views of the Settlements and peninsula. The managed landscape of the Settlements contrast with the highly overgrown character of the rest of the peninsula, now a dense thicket of aggressive invasive plant species. The heavy growth limits views across the landscape in areas other than the top of Pu‘u ‘Uao, to the ocean from perimeter roads, and from the valleys today.

Historic road corridors continue to edge both coasts, and to connect the light station with Damien Road within the center of the peninsula. Patient and residents enjoy driving journeys around the “island” that entail following the

287. Ibid., 54.

288. Ibid., 53.

289. Ibid., 44.

road network around the perimeter of the peninsula. This ‘round the island’ tour offers a range of beautiful scenes involving windswept and rock strewn ground, magnificent seascapes, hazardous sea-cliffs, and places to stop for salt collecting and fishing.²⁹⁰ There are no surviving buildings, structures, or small-scale features located within the Peninsula, Valleys, and Pali landscape, although archeological evidence of traditional Hawaiian lifeways as well as Hansen’s disease Settlement uses exists throughout.

Character Area Assessment. Kalaupapa Peninsula and the pali remain an important traditional Hawaiian landscape that serves as the setting for the developed areas associated with Kalaupapa and Kalawao Settlements, with the connections between the natural environment and cultural traditions, and the evidence of historic activities and uses providing a sense of identity, continuity, and place. The dramatic natural environment, particularly the coastal shoreline composed of beaches and lava rock fields, as well as cliffs, and the steep face of the pali are constantly within view of developed area and a reminder of place. Both the peninsula shorelines, including the rugged and rocky coastline where residents have traditionally enjoyed fishing, salt picking, shell collecting, picnicking, and swimming, continue to survive today and help to convey their historic associations, along with the three historic road corridors that traverse the “island” from north to south. Missing, however, are built features, such as patient beach houses along the eastern shoreline, and the traditional Hawaiian buildings and landscape features that supported the needs of patients during the early decades of the Settlements. The formerly open character of the peninsula has become obscured by thick stands of invasive plants, altering the character of the space and views.

The pali and associated valleys have also changed over time, including an initial period of vegetation loss when introduced domesticated animals, namely goats, denuded the cliffs and valleys. Following removal of the goats by the NPS, these areas once again feature lush vegetation. However, many residents of the Settlements during the period of significance remember the pali as denuded, reminding us that this change post-dates the period of significance.

Other changes have occurred in association with the Pali Trail, which has been widened and the walking surface modified to accommodate tours. While the Pali Trail survives as an important historic travel and transportation route, the integrity of workmanship and materials are diminished by changes that have occurred since the 1970s to harden and widen the trail, improve its structural stability using walls, edging, and bridges, and guide users with wayfinding features and signs. The extent of vegetation associated with the trail has increased, contributing to the sense of the trail as a narrow opening through a dense stand of trees, and diminishing formerly expansive views of the peninsula and Settlements, except at a few overlooks. Previous archeological assessment of the trail indicated it is eligible for the National Register of Historic Places due to integrity of location, design, setting, materials, workmanship, feeling, and association, and the fact that it meets the listing requirements under Criteria A, B, and C. Additional evaluation may be needed on the integrity of workmanship and materials due to emergency repair and changes over time.²⁹¹ Despite these various changes, the landform and topography of the pali and the three valleys, the perennial and intermittent stream corridors, connection to the Pacific Ocean, historic road system, and Pali Trail that allows for passage between topside Molokai and the Settlements survive to convey their historic associations.

290. Ibid., 45.

291. Erika Stein, *Emergency Trail Repair: A Preliminary Cultural Resource Impact Assessment, Kalaupapa Trail*, Kalaupapa Ahupua‘a, Ko‘olau District, Island of Moloka‘i, Kalaupapa National Historical Park (National Park Service, 2008).

Kalawao Character Area

Summary Analysis. Located along the eastern shoreline at the southern edge of Kalaupapa Peninsula, Kalawao character area is among the most iconic areas of the Settlements. As the initial site of the Hansen's disease settlement, Kalawao holds a special place in the hearts of the patients and Settlements community. Although the focus of Settlement life shifted to Kalaupapa during the late nineteenth and early twentieth centuries, early roads, Siloama and St. Philomena Churches, several burial grounds, the site of the original Baldwin Home, and the future location of a new memorial exist within the Kalawao character area cultural landscape. The Kalawao character area is also tied to such notable individuals as Saint Damien and Joseph Sutton.

Although the integrity of Kalawao as it pertains to the period of its active use is diminished due to the loss of numerous buildings, fields and agricultural use patterns, and cultural plantings, the character area underwent the majority of these changes during the period of significance. Changes that have occurred to these patterns include the realignment of the eastern end of Damien Road to the north to follow the edge of the cliff to Judd Park. Surviving from the end of the period of significance are historic patterns of spatial organization, examples of cultural vegetation, rock walls, views, and circulation features that help convey historic associations. As such, it possesses a high degree of integrity for the end of the period of significance.



Figure 186. Siloama Church, undated, circa 1880. (Source: KALA Helen Keao_00373_Album 046)

Historic Conditions. The first Hansen's disease patients sent to the Kalaupapa Peninsula arrived in Kalawao in 1866. Surrounded on three sides by the Pacific Ocean, and the fourth by towering cliffs, the peninsula on the north shore of Molokai was determined to be a highly suitable location for a settlement in which to isolate those found to be afflicted with Hansen's disease from the rest of Hawai'i's population.

The first people sent to Kalawao were assisted in addressing their needs for shelter and food by those living on the peninsula, and the knowledge they possessed regarding how to grow fruit, taro, potatoes, and other vegetables on the flat land and in the deep valleys where fresh water was available. Native Hawaiian communities had been living on the peninsula for generations. The cultural features established by earlier residents, including home sites and shelters, areas used for fields and crops, livestock enclosures, trails, and rock wall enclosures were used

by the early patients to adapt to life on the peninsula with the help of those who remained, and often incorporated into the developing settlement.

Although the government expected those sent to the peninsula to be self-sufficient, within a few years it became evident that the patients were often too ill to care for themselves, and too numerous for the available housing and food supply. Over the next several years, the government began to make improvements to the settlement at Kalawao to better provide care for the growing community of patients.



Figure 187. St. Philomena Catholic Church in 1886 showing the nave and steeple added to original chapel by Saint Damien. View looking east. (Source: KALA Kalaupapa Historical Society Album A PG 2 #176)

Vernacular in character, the Settlement slowly grew along the existing road leading to the western shoreline and the fishing village at Kalaupapa, with community services sited along the central road and houses and makeshift shelters scattered nearby. A hospital was soon added to the development, while by 1872, two churches—the Congregational Siloama Church of the Healing Spring (Figure 186) and St. Philomena Catholic Church—also edged the northeast side of the road (Figure 187).

By 1873, there were over 800 patients at Kalawao Settlement. A Catholic priest, Saint Damien, who arrived that year, reported that conditions at the settlement were entirely inadequate, and advocated for additional services, and the immediate need for suitable housing. The following year a store providing basic supplies for the patients was built on across from the hospital on the south side of the road, and west of the churches creating a “center” for patient services at Kalawao. Additional funds for the settlement were appropriated and beginning in 1874, several more improvements were made. The hospital was enlarged to include twelve buildings arranged around a small open space. New buildings included dormitories and an office, dispensary, storehouse, cookhouse, bathhouse, morgue, jail, and schoolhouse. The buildings were all single-story structures and whitewashed giving a relatively uniform character. The entire complex was enclosed by a picket fence. Water from the Wai’ale’ia Valley was piped over 6,000 feet to provide fresh water to the hospital. Nine faucets were added along the line to allow others living in Kalawao draw water for crops and livestock.²⁹²

Kalawao continued to grow in population. In 1878 the Board of Health reported that only 129 wood frame houses and 171 grass houses were available for the growing patient population. After reviewing the report, the legislature

292. Greene, *Exile in Paradise*, 72.

provided funds to improve patient care, nutrition, and housing. As a result, 300 new wood houses were built over the next decade for the patients. A house was also built for Saint Damien next to the St. Philomena Catholic Church. Also, in the late 1870s, the Church of Jesus Christ of Latter-day Saints built a chapel west of the Siloama Church, and a dormitory with a kitchen and space for twelve boys was built west of Saint Damien's house.



Figure 188. Kalawao, with the hospital complex on the north side of the road enclosed by picket fence, and the store on the south side of the road, circa 1880s–1890s. View looking west. (Source: KALA Bruce Doneux_00372_Box 01_007, Hawaii State Archives)

By the 1880s, much of the settlement was concentrated along the central road corridor, with patient services creating a center, and individual houses generally to the east and scattered along the base of the pali, reflecting a blend of Hawaiian and western construction styles and spatial ordering (Figure 188). The land supporting Kalawao Settlement extended over a large area. Much of the land was open in character as a result of extensive use for agriculture and grazing.²⁹³ Kōkua raised fowl and pigs, and managed all varieties of gardens, growing sweet potatoes, banana, onions, beans, and cabbage. Large portions of the surrounding landscape supported the growth of seashore rush grass (*Sporobolus virginicus*) that offered fodder for settlement horses.²⁹⁴

Saint Damien and others also focused on improving the road and utility system infrastructure for the settlement during the early 1880s. In 1883, Saint Damien oversaw improvements to the government road between Kalaupapa and Kalawao that would ensure it remained passable throughout the year. After the work was complete, the road was named Damien Road. In 1886, the water system was further improved and a stone reservoir built along Damien Road to supply water to the Kalawao hospital; the reservoir is sometimes referred to as Damien Reservoir.²⁹⁵

Saint Damien died of Hansen's disease in 1889 and was buried in the St. Philomena Catholic Church churchyard. In 1894, with funding provided by businessman Henry P. Baldwin, Brother Joseph Dutton helped to found the Baldwin Home for Boys. The facilities associated with the group home replaced use of the dormitories built a decade earlier near Saint Damien's house.

293. Johnson, Draft NHL nomination update, 61.

294. Greene, *Exile in Paradise*, 131.

295. *Ibid.*, 151.



Figure 189. Bird's eye view looking northwest of Baldwin Home for Boys located across Damien Road from St. Philomena Catholic Church, undated. (Source: KALA Kalaupapa Historical Society Album A, page 7, #181)

The site selected for construction of the Baldwin Home for Boys was an open rocky area across from St. Philomena Catholic Church. The group home was designed with a relatively formal site plan that organized the twenty-nine buildings around a large central open area marked by a small garden and water fountain in the center sited near a large hala tree. Baldwin Home extended over approximately 2 ½ acres and was enclosed by a whitewashed fence. Large buildings were sited on the west and east sides of the built cluster. The large building located to the west was set apart and enclosed by a wood fence. The large building to the east had an open porch that faced onto the open central yard. A wooden walkway, also whitewashed, wrapped around the open yard, connecting the individual buildings. A single row of palm trees was planted along the east perimeter the fence. Over the years, the grounds were landscaped with Java plum, eucalyptus (*Eucalyptus spp.*), avocado, date palm, and croton trees, as well as pomegranate (*Punica granatum*) and hibiscus shrubs. By 1899 a large vegetable garden and plantation of 2,000 banana trees were growing behind the complex near the pali, and there was a windbreak along with fruit trees planted nearby. These plantings, along with the orderly arrangement of the buildings and formal layout of the complex, made the Baldwin Home for Boys one of the most cohesive and richly landscaped areas in Kalawao Settlement (Figure 189).²⁹⁶

Throughout the late nineteenth century, the population continued to grow. Poor health conditions at Kalawao prompted the Board of Health to consider moving the settlement to the west side of the peninsula where there was more space for development, a better climate for the patients, and proximity to a boat landing that would facilitate the delivery of goods. A slow transfer of the community began as early as the 1870s, accelerated in the 1880s, and continued into the second decade of the 1900s. The process was considered complete when the Baldwin Home closed in 1932 following Joseph Dutton's death in 1931. A new Baldwin Home was subsequently established at Kalaupapa on the site of an earlier hospital. Dutton was buried in the St. Philomena Catholic Church churchyard. The last occupants of Kalawao then moved to new accommodations on the west side of the peninsula.²⁹⁷ By 1936, the remaining buildings in the Baldwin Home complex were in poor condition. Whatever was left at the site was dismantled or demolished, and the garden areas and plantations largely abandoned.

296. Ibid., 302.

297. Johnson, Draft NHL nomination update, 34.



Figure 190. Bird's eye view to Baldwin Home for Boys (front), and U.S. Leprosy Investigation Station (beyond), circa 1913. View looking east. (Source: KALA Kalaupapa Historical Society Album B, page 31, #29)

During the early twentieth century, increased national and international attention on Kalaupapa led to a call for medical research to address treatment of Hansen's disease. In 1904, President Theodore Roosevelt recommended the establishment of a national laboratory for the study of leprosy in Hawai'i.²⁹⁸ In 1908, construction began on a facility at Kalawao. By 1909, the U.S. Leprosy Investigation Station opened as one of the largest public buildings in Hawai'i. The compound sprawled over a square mile along Damien Road in the southeast portion of Kalawao, and included three sections: a residential wing, the hospital, and administrative offices.²⁹⁹ The entire complex was fenced (Figure 190). Within a few years of operation however, it was evident that most patients had no intention of submitting to treatment at the facility. By 1913, the station had closed. The complex was razed in 1929. Most of the construction materials were reused at Kalaupapa.³⁰⁰

Although the physical structures and patient population was largely relocated to Kalaupapa by the mid-twentieth century, residents and families continued to visit Kalawao. In 1948, the Kalaupapa Lions Club used the land at the far eastern portion of the old settlement as a Boy Scout camp, and picnic area. In 1950, a picnic pavilion was built at the camp site and a park established that was officially named for Superintendent Judd. The Lions Club also planted a double row of coconut palm trees alongside the U.S. Leprosy Investigation Station in the 1950s as a monument to the former facility.

In 2009, the federal government authorized construction of the Kalaupapa Memorial on the site of the Baldwin Home for Boys to honor the dignity, sacrifice, and the strength of the people who were separated from families and sent to Kalaupapa.³⁰¹ When built, the monument is anticipated to attract many visitors.

298. Ibid., 44.

299. Ibid., 44.

300. Ibid., 23, Greene, *Exile in Paradise*, 292–293.

301. Johnson, Draft NHL nomination update, 55.



Figure 191. St. Philomena Church and walled churchyard precinct, view northwest, 2018.

Existing Conditions. Today, the cultural landscape at Kalawao remains highly valued by the residents and families of Kalaupapa as the site of the original Settlement on the east side of the peninsula. The physical landscape is pastoral in character, with wooded areas and clearings edging the road, along with the developed precincts of St. Philomena Catholic Church (Figure 191) and Siloama Church (Figure 192). Both church precincts are contained by rock walls. The church yards feature concrete walks leading to the building entrances, and grave markers. To the east of St. Philomena Catholic Church are two additional burial grounds, one enclosed by a rock wall, and the other open, with few grave markers. Other historic places that remain in evidence along the central corridor of Damien Road include the site of Baldwin Home, marked by a rock wall and entry gate posts along the road (Figure 193), and containing surviving evidence of the historic plantings as well as the foundation ruins of former buildings. Damien Road ends along the eastern shoreline at Judd Park. The park features a picnic pavilion and two small picnic shelters and continues to serve picnicking (Figure 194). Residents continue to visit Kalawao for religious services on special occasions, on drives “round the island,” or to go fishing or picnicking. Outside visitors are not allowed unless on an official park tour or accompanied by a host.³⁰²

302. Ibid., 87–88, from Juvik, *Ethnographic Study*, 39–41.



Figure 192. Siloama Church and churchyard, view southwest, 2017.



Figure 193. View south into the Baldwin Home site across the perimeter dry stacked stone wall, 2017.



Figure 194. View north past one of the picnic shelters at Judd Park, 2017.

Character Area Assessment. (Refer to Figure 195). Kalawao Settlement remains important to the sense of place and heritage of Kalaupapa and Kalawao Settlements community members as the site of the original community established in 1866. Although many of the buildings, structures, and landscape features present during the late nineteenth and early twentieth century have been removed, are in ruins, or have become obscured by volunteer vegetation, primary natural features and systems, patterns of spatial organization, circulation features, two historic churches, numerous rock walls, evidence of cultural vegetation, key views, cultural traditions and associations, and the recreational use of Judd Park established during the period of significance survive to help convey historic associations.

Judd Park, however, was established during the period of significance, but post-dates the period when Kalawao Settlement was residential. The shelters at Judd Park were established in the 1950s, during the period of significance, but after the early Settlement. Similarly, a restroom built at Siloama Church in 1966 also falls within the period of significance, but post-dates residential use of Kalawao Settlement. A grove of coconut palm trees planted in the 1950s as a commemorative gesture follow the eastern end of Damien Road near the foundation ruins of the 1909 U.S. Leprosy Investigation Station is a feature that similarly post-dates residential use of Kalawao.

Natural features and systems associated with Kalawao character area today include the Pacific Ocean shoreline that frames the settlement to the east and north, generally level landform and topography associated with evidence of the developed area, and evidence of the importance of natural features in the form of ruins of early settlement period docking facilities and water supply systems. Connections between the natural environment and cultural traditions, such as use of the area for fishing, picnicking, and paying homage to those who are buried and remembered at Kalawao, and the enjoyment of the dramatic and expansive views to and across the water, also survive today. The steep face of the pali is often within view of developed area as a reminder of place. Diminishing the integrity of natural features and systems and connections with land use and views are the stands of volunteer woody plants, many of which are invasive species, which limit physical and visual access to the shoreline in some places as well as the character of former open spaces.

The spatial patterns in evidence within the character area continue to reflect the linear form of the community as it edged the central travel corridor of Damien Road. Built complexes, burial grounds, and the ruins of former structures edge the road to either side throughout its length through the character area. Siloama and St. Philomena Churches, their associated churchyards, the walled compound of Baldwin Home, and the ruins of the U.S. Leprosy Investigation Station continue to closely edge Damien Road, while Judd Park continues to occupy the plateau overlooking the eastern shoreline and serve as a dramatic place for picnicking. Also helping to convey historic patterns of spatial organization and associations is the trace of the original alignment of Damien Road which survives within a wooded area east of Baldwin Home.

While the inspiring views of the Pacific Ocean, the pali, and the islets to the east of Judd Park and the cemeteries located near St. Philomena Catholic Church survive today, dense thickets of volunteer vegetation along the northern margin of Kalawao to the west of St. Philomena Catholic Church limit views of the ocean, which were traditionally available.

Cultural vegetation planted during the period of significance survives at St. Philomena Catholic Church and Siloama Church, Baldwin Home, and the U.S. Leprosy Investigation Station. Coconut palm trees, ironwood pines, as well as several other species planted for ornamental value and shade are present within these locations. Tobacco plants cultivated by Saint Damien are believed to survive near the site of his house. Evidence of historic cultural vegetation co-exists with stands of volunteer growth composed of several invasive species, such as Christmasberry, lantana, and Java plum. These stands occupy former open fields and village sites. Beneath the vegetation are burial sites, stone walls, terraces, house foundations, enclosures, and artifact scatters associated with both pre-Settlement and Settlement-era uses.

Few historic buildings and structures survive at Kalawao today, although the loss of historic buildings occurred during the period of significance. Surviving historic buildings and structures include the two churches and associated rock wall enclosed precincts and burial grounds, a small restroom at the Siloama Church, a picnic pavilion and two picnic shelters at Judd Park. Also surviving is a rock wall that historically defined the east boundary of Baldwin Home and served as a boundary wall for the U.S. Leprosy Investigation Station. The wall extends from the base of the pali to the ocean bluff.

Several historic circulation features survive, and no changes have been made to circulation systems at Kalawao since the period of significance. Damien Road remains a narrow, gravel, informal road corridor that forms the spine of cultural spaces associated with Kalawao Settlement. The eastern end of the road, however, has been rerouted from its direct line to Judd Park to an alignment that follows the northern shoreline. The current road alignment is considered potential unstable. The trace of the original route survives within a wooded area east of the Baldwin Home site. Damien Road is also being impacted by visitors and tours that park along the margins of the road near the churches and Baldwin Home. Use of the road margins for parking has contributed to erosion and rutting of the road surface. Other historic circulation features to survive include narrow concrete sidewalks providing access to Siloama and St. Philomena Church. These circulation features retain historic character and appearance except where accessibility improvements have been made.

Evidence of both traditional Hawaiian lifeways as well as the Kalawao Settlement is present throughout the character area. Traditional Hawaiian features such as heiau, enclosures, walls, tombs, landforms, habitation sites, fields, and shrines are located throughout the area. In many cases, use and adaptation of these features is known to have continued after the establishment of Kalawao. Kalawao Settlement era sites include dwelling foundations, structures associated with the original water system, Baldwin Home, and evidence of a bakery, slaughterhouse, hospital, rectory, the Kalawao store, and the U.S. Investigation Station, marked by concrete foundation piers and the double row of coconut palms planted by the Lions Club in the 1950s to honor residents of Kalawao.

While most of the settlement buildings in Kalawao were dismantled and removed during the period of significance, many of the components that characterized the settlement remain as archeological resources. As a result, Kalawao possesses high integrity to the end of the period of significance, with diminished spatial organization due to encroachment of vegetation. Dry stacked lava rock walls continue to indicate the locations of precincts and former properties, although many are overgrown. Dense stands of invasive vegetation have also transformed the formerly open character of the landscape, part of which was used for agriculture and pasture. Beneath the vegetation are burial sites, stone walls, terraces, house foundations, enclosures, and artifact scatters associated with both pre-settlement and settlement-era uses. This extensive evidence of the former community in the form of ruins and in the archeological record, in addition to the surviving historic alignment and overall character of Damien Road, reflect the historic layout and organization of the community. These elements, as well as evidence of the former “Downtown” Kalawao area, Baldwin Home for Boys, and United States Leprosy Investigation Station help to convey the historic associations of the site.

Kalawao character area thus possesses a high degree of integrity for the period of significance with numerous surviving features and landscape characteristic that help to convey its historic associations.

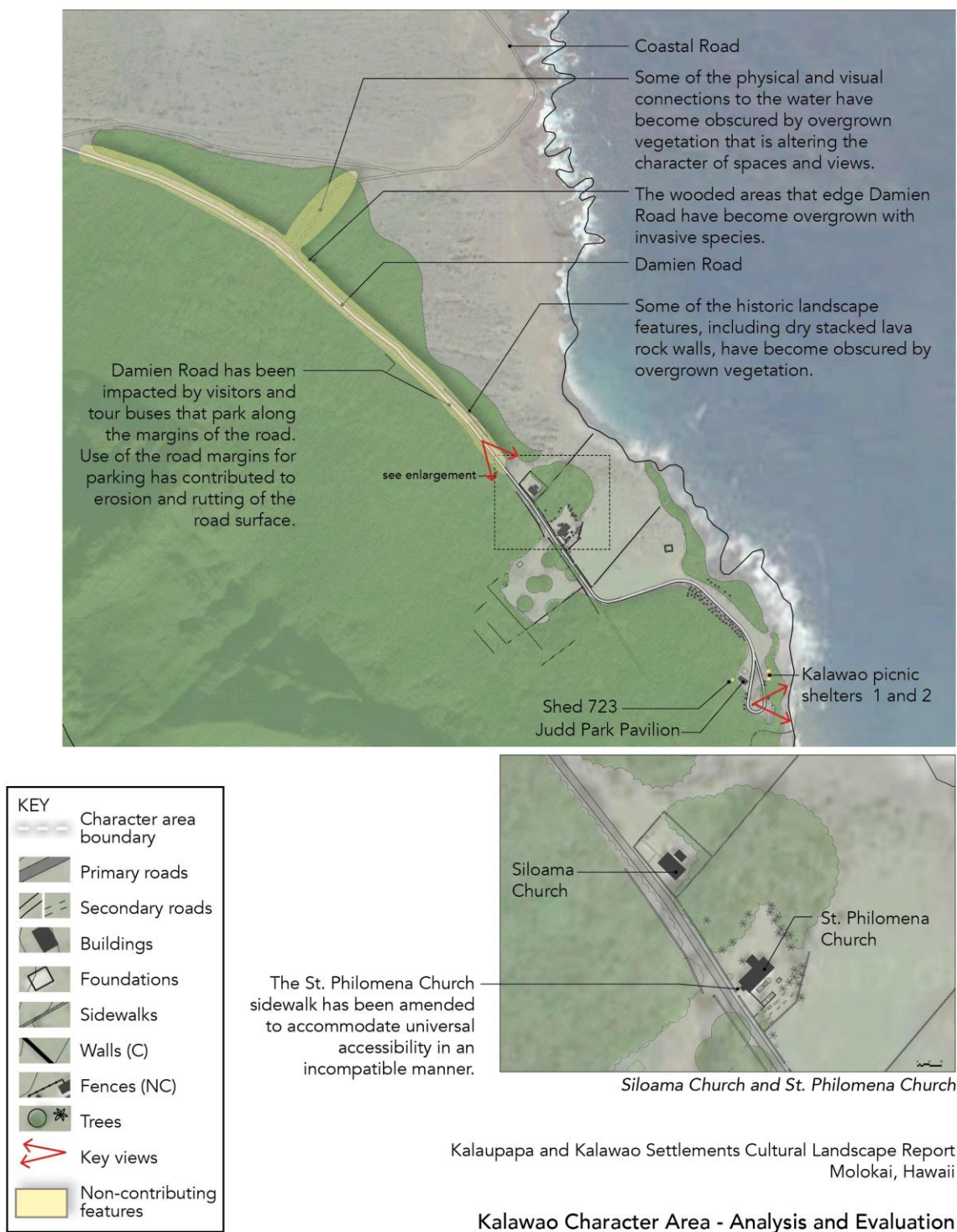


Figure 195. Kalawao character area assessment. (Source: LSHLA)

Damien Road Character Area

Summary Analysis. Damien Road character area forms a linear corridor along the southern edge of the peninsula that connects the Kalawao and Kalaupapa Settlement developed areas. Damien Road was established in the 1860s to connect Kalawao with the existing fishing village of Kalaupapa. The road was initially poor in quality and impassable during certain times of the year. The road was improved in 1883 under the direction of Saint Damien. Stone paving visible beneath the earth and gravel road today is believed to be associated with these improvements. The current road corridor reflects the character and composition established during the period of significance as an informal gravel-surfaced road variously edged by open fields, woodland, the Kahaloko Cemetery, water supply system features, dry stacked stone walls, and extensive evidence of traditional Hawaiian cultural sites. Although the integrity of the Damien Road corridor is diminished by the changes that made to the eastern and western ends of the route (changes to the eastern alignment are discussed above as part of Kalawao character area), the traces of the earlier routes remain present within wooded areas today. Other changes affecting the integrity of the road are the extensive groves of volunteer woodlands that occupy former open fields and obscure rock walls and other features of the historic settlement as well as the traditional Hawaiian landscape that preceded it. With the exception of the few modifications that have occurred along the road since the period of significance—the addition of the tsunami preparedness area, expanded tree cover, a wayside exhibit that interprets the heiau along the road, an identity sign associated with Kahaloko Cemetery, and the altered western alignment—the Damien Road corridor possesses a high degree of integrity resulting from other surviving historic patterns of spatial organization, examples of cultural vegetation, rock walls, views, and circulation features that help convey historic associations.

Historic Conditions. Damien Road was established to connect Kalawao Settlement with a fishing village that existed at Kalaupapa. In 1884, the Kalawao Settlement’s supervisor, Ambrose Hutchison, settled along Damien Road, establishing a dwelling and rock-wall enclosed residential precinct where he grew several plants for food and shade, including banyan, orange, Java plum, and mango. The road evolved as an informal corridor, paved with dirt and some rock, and edged by village features and open agricultural land (Figure 196).

Kahaloko Cemetery was established to the south of Damien Road circa 1887, although it may have been located on the site of an earlier burial ground. The cemetery is believed to have remained in use until 1920 or 1921, after which it was abandoned. Henry Law, Kalaupapa Settlement’s first superintendent, later planted java plum trees to shade the cemetery.³⁰³ The trees later became so thick that it could no longer be seen. Knowledge of the cemetery fell out of memory. In later ethnographic interviews, residents reported encounters with spirits near the site of the cemetery, despite not knowing of its existence: “We nevah [sic] know they [graves] were in there but we heard stories, spooky stories but not knowing that this was cemetery.”³⁰⁴ Prior to 1969, a dairy that supported Settlement operations existed to the south of Kahaloko Cemetery.

303. Personal communication, Momi, 2019.

304. 1K 8/2/02, Juvik, *Ethnographic Study*, 29.



Figure 196. Unidentified view along Damien Road. (Source: KALA Kenso Seki collection 12600_787)

Another feature developed along Damien Road during the nineteenth century was the water supply system. In 1894, the Board of Health added a water collection reservoir on the saddle between Kalawao and Kalaupapa to improve the supply available to the Settlements. In 1904, the Board added a second underground stone and concrete water reservoir nearby. Both extended aboveground for several feet and featured hipped corrugated metal roofs (Figure 197).³⁰⁵ Later, in 1908, the Board of Health built another 10,000-gallon water storage tank at Makanalua.³⁰⁶ These systems proved sufficient until the 1930s when the Board decided to modernize the Settlement infrastructure by expanding the power plant, power distribution system, and water supply system. In 1931, a new 750,000-gallon steel tank was added to replace the use of the older storage reservoirs, which were left in place. In the 1950s and 1960s, chlorinator and filter buildings were added to treat the water for Settlement use.

Since the early 2010s, the NPS, in partnership with several volunteer groups, has been clearing thickets of invasive vegetation that obscured Kahaloko Cemetery for years. The two primary plants colonizing the cemetery are Java plum and lantana. The work includes the establishment of metal scaffolding to protect the grave markers from falling tree limbs and other risks associated with the clearing work.³⁰⁷

305. Johnson, Draft NHL nomination update, 60.

306. Ibid., 43.

307. Ibid., 86.



Figure 197. Water tank reservoirs along Damien Road, undated, circa 1900. (Source: KALA Helen Keao_00373_Album 045)



Figure 198. View looking west along Damien Road, 2017.

Existing Conditions. The Damien Road character area is comprised of a historic unimproved vernacular gravel road corridor (Figure 198) that serves as the primary link between the Kalaupapa and Kalawao Settlements. The road follows the level terrain between the pali and the elevated form of Pu‘u ‘Uao. Along the road are relics of past land use and activity associated with Kalawao and Kalaupapa Settlements as well as previous eras of the peninsula’s history. Settlement era features include livestock corrals and fencing on the outskirts of Kalaupapa,

the rock wall enclosed Kahaloko Cemetery (Figure 199), the intersection with Crater Road, which travels north to the western rim of Kauhakō Crater, and the Interior Road, a rough dirt route that travels around the east side of Kauhakō Crater and continues to the Kalaupapa Airport and Molokai Light Station.³⁰⁸ A metal pipe that extends through the burial ground today is the only surviving evidence of the dairy operation that existed to the south of Kahaloko Cemetery. Portions of the road past the saddle are edged by traditional Hawaiian enclosures, heiau (Figure 200), and evidence of the ahupua‘a division system. In addition to an interpreted heiau along Damien Road, set within the woods near the pali further to the south of the road is a larger heiau composed of a basalt boulder and cobble platform that measures 75 feet by 55 feet, walls and pit enclosures, and evidence of cultural vegetation such as ti plants.³⁰⁹ To the north of the road is a large flat rock referred to as a birthing stone, as well as the surviving raised stone reservoir built in the 1880s to improve the water supply for the hospital (Figure 201). To the south of the road are a Chlorinator Building and Filter Building built in the 1950s and 1960s as part of the water supply system. These and the other water supply system features are no longer in active use due to their replacement with a well dug by the NPS.



Figure 199. View looking west across Kahaloko Cemetery, 2017.

308. Ibid., 75.

309. Ibid., 72.



Figure 200. View south toward a heiau along Damien Road, 2017.



Figure 201. View northeast of the stone water reservoir built in the 1880s to supply water to the Kalawao hospital along Damien Road, 2017.

Character Area Assessment. (Refer to Figure 203) Damien Road is a historic feature that remains important to the sense of place and heritage of the Kalaupapa and Kalawao Settlements as the route that has connected the developed areas on the eastern and western shorelines of Kalaupapa Peninsula since the 1860s, and continues to provide access to various features of the Settlements and the traditional Hawaiian landscape that preceded it. Although the eastern and western ends of the road have been realigned, former open fields and pastures have become overgrown with volunteer vegetation, and a few features have been added since the period of significance, natural features and systems, patterns of spatial organization, circulation features, the Kahaloko Cemetery, Ambrose Hutchison House site, rock walls, evidence of cultural vegetation, key views, and cultural traditions and associations survive to help convey historic associations.

Natural features and systems associated with the Damien Road character area today include the relatively level terrain over which the road passes, and evidence of the original water supply system that captured, directed, stored, and treated the flow of the perennial stream through Waikolu Valley to serve the needs of the settlement community. Connections between the natural environment and cultural traditions, such as the importance of the view of the Pacific Ocean from Damien Road as it approaches Kalawao also survive today (Figure 202). The steep face of the pali is often within view of developed area as a reminder of place.



Figure 202. Comparative views of Damien Road from a similar vantage point, undated, circa 1960s (top), and 2017 (bottom). (Source: KALA Kenso Seki collection 12600_542)

Also surviving today are historic patterns of spatial organization resulting from the consistent alignment and cross-section of Damien Road, and the presence of historic open spaces and built features located periodically along its length, such as Kahaloko Cemetery, the Ambrose Hutchison House site clearing, water reservoir

structures, heiau, and complexes of rock walls, enclosures, and other ruinous structures. The integrity of historic patterns of spatial organization is diminished by the loss of former pastureland, livestock corrals, and a dairy. After cattle raising and other agricultural activities were discontinued circa 1980 with establishment of Kalaupapa National Historical Park, former open fields began to be colonized by volunteer woody vegetation and were lost. Today a complex of livestock fencing that dates to the mid-twentieth century survives along Damien Road to convey the former use of the area for livestock and other agricultural uses during the period of significance; however, the loss of the fields diminishes the integrity of historic spatial patterns along Damien Road.

As a result of the proliferation of woody tree cover, the expansive views that occurred along the road during the period of significance have been reduced to the open spaces associated with Kahaloko Cemetery and the Ambrose Hutchison House site, sections of the road where woody trees have not colonized the margins, and the long view from the high point of the road towards the Pacific Ocean (Figure 189). Where woody vegetation closely edges the road, views are directed along the narrow, paved corridor.

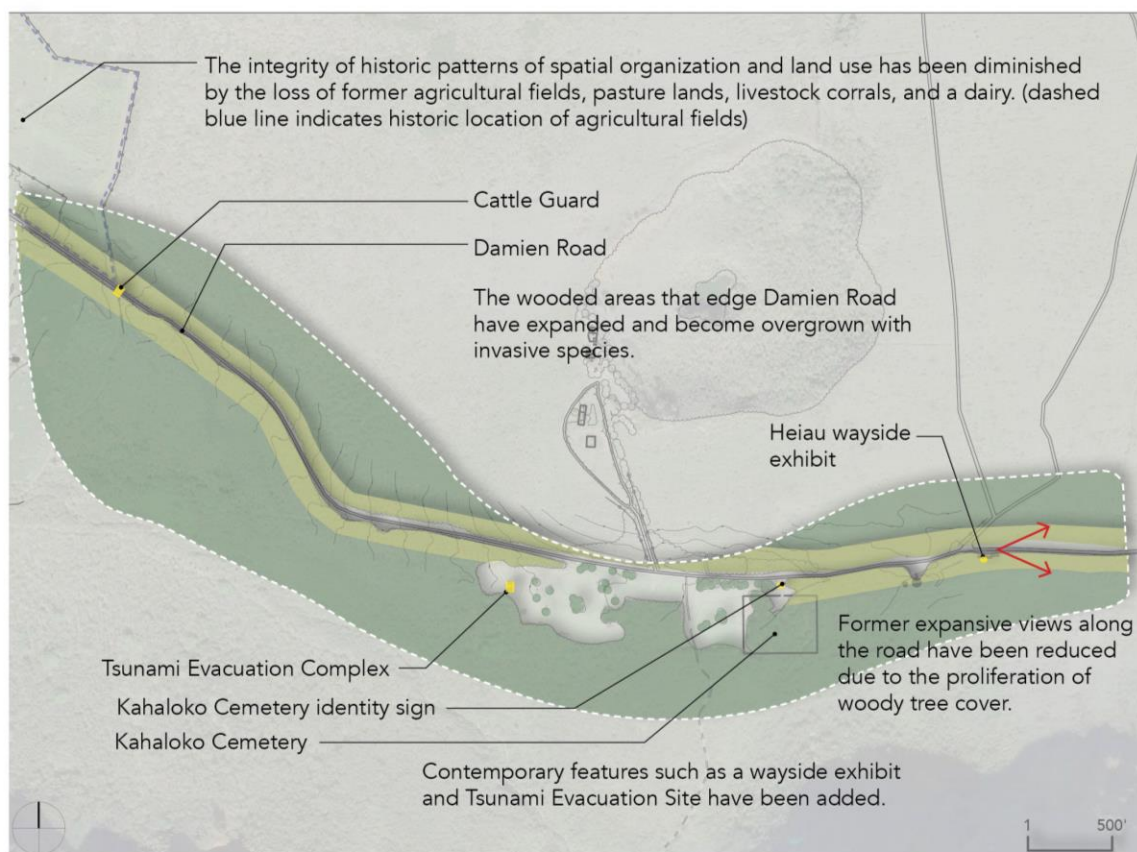
Other than Damien Road itself and the road's intersection with Crater Road and the Interior Road to the Crater, there are no other extant circulation features located within the character area. It is not known whether other circulation features existed during the period of significance. Although Damien Road survives as a historic road corridor, the original alignment followed a route several hundred feet to the south in the vicinity of the Ambrose Hutchison House site. A trace of the former alignment survives. Since 1969, as a result of the introduction of tours for visitors, several small parking pull outs have been established along the road to provide access to cultural features. These diminish the integrity of the road to a minor degree.

The historic buildings and structures related to the water supply system—reservoirs, filter and chlorinator houses—also survive from the period of significance but are now exhibits that are no longer in use. The only buildings present historically that are no longer extant were located at the Ambrose Hutchison House site. It is not known whether these were lost during or after the period of significance. Structures surviving from the period of significance include the dry stacked stone wall that surrounds the Kahaloko Cemetery, and other walls located within the overgrown woods further east.

Historic small-scale features surviving from the period of significance include the grave markers at the Kahaloko Cemetery. Other small-scale features present within the character area post-date the period of significance and diminish the integrity of the cultural landscape to a minor degree. These include an NPS identity sign marking Kahaloko Cemetery, and a wayside exhibit that interprets the heiau along Damien Road corridor near the high point and expansive view to the Pacific Ocean.

Archeological features include numerous traditional Hawaiian ahupua'a walls and heiau which were bisected by Damien Road, which can be traced to the traditional Hawaiian period, or the period when residents of the peninsula assisted the first patients with shelter and food production. Many are overgrown with vegetation. This extensive collection of resources offers insight into the complexity of the traditional Hawaiian cultural landscape present on the peninsula prior to the establishment of Kalawao Settlement.

Overall, Damien Road thus possesses a high degree of integrity for the period of significance with numerous surviving features and landscape characteristic that help to convey its historic associations.



Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii

Damien Road Character Area - Analysis and Evaluation

Figure 203. Damien Road character area assessment. (Source: LSHLA)

Kauhakō Crater Character Area

Summary Analysis. Kauhakō Crater is located within the south-central portion of the peninsula. The western rim of the crater, which is the collapsed dome of Pu‘u ‘Uao, is developed with several historic burial grounds, a 20-foot tall concrete cross, ironwood pine tree plantings, and an unimproved access road arising from Damien Road. Since the late nineteenth century, the level area to the west of the crater has served an important role in the community as a place of inspiration, religious services, and burial. From the rim, views are afforded north to the Molokai Light Station lighthouse, southwest to Kalaupapa Settlement, and east to the crater interior. Since the 1950s, a cross visible from many locations within Kalaupapa Settlement and from the approach by air has been a visible symbol of the cultural traditions and value placed on this location. From the rim, it is also possible to view evidence of the terracing of the crater interior to support agricultural activity likely during the traditional Hawaiian period as well as during the early days of Kalawao Settlement. Another traditional Hawaiian feature located within the character on the southern exterior slopes of Pu‘u ‘Uao is a hōlua slide.

The cultural landscape is generally vernacular in character. The stone burial ground enclosures and associated grave markers reflect local construction methods and materials, and appear to date to the late nineteenth and early twentieth centuries. The unimproved road is also a vernacular expression that was added in the 1930s to facilitate visits to the crater rim, where religious ceremonies were conducted. The evidence of earlier agricultural and dwelling activity belies a long-lost heritage of lifeways. The most formal element of the Kauhakō Crater character area is the concrete cross, erected in 1956. All features present within the character area date to the period of significance, and no features have been lost since the end of the period of significance.

Historic Conditions. Prior to establishment of the settlement at Kalawao, Polynesian settlers established sweet potato farms inside the crater using a method of terracing that remains evident today (Figure 204). Evidence of various traditional Hawaiian habitation sites, rock shelters, and storage enclosures have been documented within the crater by archeologists.³¹⁰ The crater also appears to have been used as a burial place. According to one patient, “just going in there you feel the presence” of those earlier peoples.³¹¹

There were multiple stages of agricultural development within the crater. Prior to establishment of the settlement at Kalawao, the Hawaiian population grew a variety of food and cultural plants within the crater, using terraces, mounds, enclosures, and walls. The crater provided humic soils protection against extreme weather conditions and helped with soil moisture retention. Archeological investigations have indicated the agricultural activities within the crater were likely for sustenance for the populations living within and near the crater. In addition to agricultural sites, there were numerous temporary as well as more permanent habitation sites. The sites within the crater exhibit the same formal structure as the sites interpreted by Somers (1971) as being pre-Contact (with a population living inside). They were likely reused into the proto-historic and historic era with a different style of construction. Investigations have also suggested that the former habitation structures may have been reused as animal pens.³¹²

In 1858, French botanist Jules Remy noted:

I continued on and directed my steps to the most swollen part of the plain of Kalaupapa, walking on a terrain slightly sloping, carpeted with pili grass and common shrubs . . . Soon I arrived at the end of a large

310. Ibid., 71.

311. Juvik, *Ethnographic Study*, 42–44.

312. R. B. Rechtman, J. D. Henry, and A. B. Corbin, *Archaeological Investigations at Kauhakō Crater*, Kalaupapa National Historical Park (2001).

ditch rounded in the form of a crater, which the natives had mentioned to me calling it Kauhakō. It was evidently an old crater. I went down into it through a jumble of interesting vegetation, having a vigor and variety more pronounced on the East than on the other coasts: frutescent violent plants (shrubby), *Cassia*, *Neraudia*, a *Caryophyllus*, ligneous *Euphorbia*, banana trees, rose apple, *Daphne*, *Phyllanthus*, *Cassytha* (dodder laurel, ‘*ohe* aralia (spikenard), candlenut, *Erythrina* (coral tree), *halapepe* (*Dracaena pleomele*), *kākalaioa* (a thorny bramble), ‘*ilima* (*Sida*), *Sonchus* (sow-thistle), etc.³¹³

Use of the Pu‘u ‘Uao landscape since establishment of Kalawao Settlement has centered on the western rim of the crater. There is a cluster of graves believed to have been associated with members of the Church of Jesus Christ of Latter-day Saints (LDS) that date to the late nineteenth or early twentieth century. A report prepared by a group of church elders who visited the settlement in 1888 suggests that leader, Jonathan Napela, who died in 1879 at the settlement, was buried near the crater and that his grave was covered with rock treated with lime mortar.³¹⁴ Napela is known to have held Sunday services inside the crater on the windward side where the trees were the thickest.³¹⁵

Settlement residents have described traveling to the crater to collect plants for food and flowers (Figure 205). According to one patient, there were beautiful breadfruit and wiliwili trees growing inside the crater. Wiliwili wood is known to have been collected and used as a material to build surfboards in the islands.³¹⁶

313. M. Remy, *Jules L’île de Molokai avant La Léproserie, Journal de M. Jules Remy Naturaliste voyageur du Museum*, “The Island of Moloka’i Before Leprosy, 1893” (entries from 1854).

314. Lane D. Chase, “Mormons and Lepers: The Saints at Kalaupapa,” *Mormon Pacific Historical Society* 13, no. 1 (1992), 16.

315. Alfons L. Korn, *News from Molokai: Letters between Peter Kaeo and Queen Emma, 1873–1876* (Honolulu: University of Hawai’i Press, 1976), 17–18.

316. RM (30/12/05), Juvik, *Ethnographic Study*, 42–43.



Figure 204. View of the Kauhakō Crater interior, 1886. Terracing and rock walls are visible. (Source: KALA Kalaupapa Historical Society Album C PG 31 #407)



Figure 205. Historic photo of the crater perimeter and hand-drawn sketch of its location within the peninsula, undated. (Source: KALA Potter collection KALA_17429)

The crater rim has traditionally served as a destination for religious ceremonies and other gatherings. The dramatic views and sense of prospect associated with the western rim of the crater have afforded residents

inspiration and reflection, and the crater is often visited by settlement residents for the sense of connection it provides to loved ones who have passed. As noted by one patient when asked about the cemetery atop the crater:

Very few people will say “I like cemeteries.” Kauhakō Crater is a place that if anyone wants to stop and I stop there and while I’m talking to them, one person will usually go to this one spot at the cemetery and I don’t tell them anything, some will go to this one spot and cry. And Kahu [the congregational minister] knows where this spot is because he’s experienced it when he goes to take his group. So I don’t know what it is about that spot, but everyone who goes there goes to that spot for some reason. Interesting. So most people don’t care to stop at the cemetery. All they’re interested in is Fr. Damien’s church, which I clarify as St. Philomena Church.³¹⁷

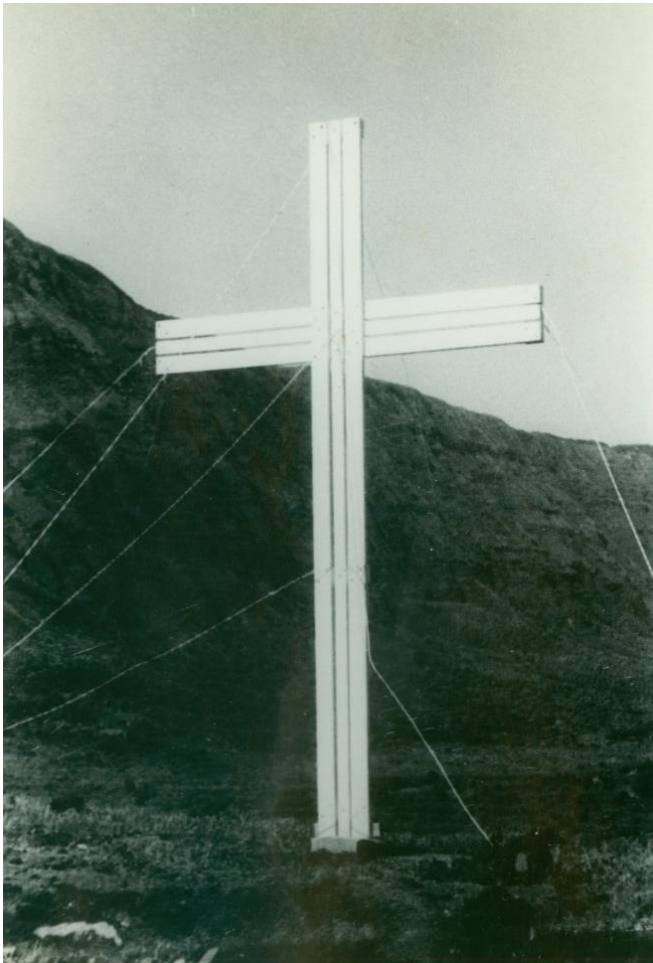


Figure 206. The original wooden cross sited atop the crater rim, circa 1947. (Source: KALA Kalaupapa Historical Society Album K PG 14 #1010)

The 20-foot-high concrete cross that stands on the northwest edge of the summit was erected in 1956 to serve as a focus of religious services conducted on the site, as well as a visible sign of inspiration for residents of the settlement below. The current cross is a replacement for the original wooden cross (Figure 206) believed to have been erected in 1947 by Henry Hori, who vowed in a prayer to God to “build you the biggest cross you could even imagine,” after recovering from a life-threatening kidney disease.³¹⁸ Hori erected the cross with the help of a Boy Scout troop. The following year, Rev. Alice Kahokuoluna (Mother Alice), the first female Congregationalist

317. PR 1/1/05, Juvik, *Ethnographic Study*, 30.

318. Johnson, Draft NHL nomination update, 86, from Juvik, *Ethnographic Study*, 43.

minister ordained in Hawai‘i, began holding Easter sunrise services at the cross site.³¹⁹ The services included music provided on the Kana‘ana Hou church organ, which was carried to the top of the rim for the service. In general, services held atop the crater were impressive for the logistical challenges overcome by the minister and the congregation. Mother Alice continued to hold the services until her departure from Kalaupapa in 1956.³²⁰ That year, Hori replaced the original wood cross with a sturdier concrete cross and plaque with the assistance of the Lions Club.³²¹

Since the 1990s, the NPS has fenced areas of the crater to exclude axis deer, hoping to prevent browse of the important native plant communities. The fences have been controversial due to historic associations of fencing with the segregation policy.³²²

Ironwood pine trees and other invasive species have expanded their presence within the crater landscape since the 1990s, impacting views and open space in key areas near the western summit. The NPS has conducted preservation maintenance of the grave markers atop the crater also since the 1990s, as well as restoration of the native plant communities present in association with the crater.



Figure 207. View from the western rim of Kauhakō Crater, with the Molokai Light Station visible in the distance, 2017.

Existing Conditions. The 402-foot-tall cinder cone of Pu‘u ‘Uao volcano is the centerpiece of the Kauhakō Crater character area. From the summit, expansive views are afforded to the north (Figure 207), west, and east that have traditionally inspired members of the Kalawao and Kalaupapa Settlements and served as a backdrop for religious services. Unimproved Crater Road provides access to the western rim where graves and a concrete cross (Figure 208) are located. The road was built in the 1930s to facilitate access for services. The lower section of the road passes through a grove of ironwood pine trees that was likely planted as a windbreak, but has expanded

319. Johnson, Draft NHL nomination update, 86.

320. “Reverend Alice Kahokuoluna ‘Mother Pastor’ at Kalaupapa,” *The Friend* 11, no. 1 (November 1939).; Cahill, *Yesterday at Kalaupapa*, 44.; Juvik, *Ethnographic Study*, 43.

321. Valerie Monson, “A word with God brings healing, monument for Kalaupapa,” *The Maui News*, April 7, 1996; and Juvik, *Ethnographic Study*, 44.

322. Johnson, Draft NHL nomination update, 66.

beyond the original planting and is beginning to obscure historically open views (Figure 209). As the road approaches the summit, dry stacked lava rock walls edge the road that enclose historic burials and grave markers. Residents generally agree that the crater is a sacred space that needs to be recognized as such, rather than just for its geologic history. Some have even suggested that the crater would rank among their favorite places at Kalaupapa because “it’s a beautiful place . . . It’s a nice place to be.”³²³ Human uses have contributed to this sacred feeling. As noted by Sonia Juvik in her *Ethnographic Study*, the quality may reflect the feeling imparted by the lavish tombs of earlier inhabitants found atop the hill that “it is a place to ho ohano, to honor the dead.”³²⁴ The level area at the rim is generally open and maintained in low grass cover, enhancing the visibility of the concrete cross. Visible within the crater interior is evidence of traditional Hawaiian and Settlement era occupation and agricultural use in the form of terraced landforms and remnant rock foundations and walls. The crater is also an important natural feature that contains a freshwater lake, caves, lava tubes. Within the interior and along the rim of Kauhakō Crater is a rare surviving example of a low elevation windward dryland forest, a native Hawaiian island plant community that has been nearly entirely lost and is found nowhere else in the world. This community has been restored by the NPS. Threatening the native plant communities are thick stands of invasive lantana and Christmas berry.



Figure 208. View northwest from Crater Road toward several graves with the concrete cross beyond, 2017.

323. BJR 7/10/02, Juvik, *Ethnographic Study*, 42.

324. Juvik, *Ethnographic Study*, 42–44.



Figure 209. View south along Crater Road, edged by ironwood pine trees, 2017.

Character Area Assessment. (Refer to Figure 211) Kauhakō Crater landscape possesses a high degree of integrity to the historic period of significance. Few changes have occurred within the landscape since the period of significance. The rim of the crater remains a place of cultural importance to the community of Kalaupapa for the inspiration afforded by the view, and the connection afforded to earlier residents through the presence of grave markers, traditional Hawaiian landscape features, and the concrete cross that reaches skyward atop the high point of Pu‘u ‘Uao.

Of the natural features and systems associated with the character area, the landform and topography of the mountain and crater, remain as present in 1969. Native vegetation communities, however, have been impacted by a proliferation of invasive species. Ironwood pine trees that were likely planted along the road or in association with the burial grounds during the period of significance are spreading and have begun to affect views from the summit of the mountain (Figure 210) as well as native plant communities, including the rare community of low elevation windward dryland forest, which has been restored by the NPS. The fencing that the NPS has erected to exclude deer is helping vegetation management efforts. Otherwise, it is not known to what degree native vegetation has changed within the character area since the end of the period of significance.



Figure 210. From the crater rim, expansive views are afforded to the north and west. Ironwood pine trees have begun encroaching on the view from the south as visible in the photo from 1991 (top) as compared with 2017 (bottom). (Source: Historic American Buildings Survey, 1991)

Patterns of spatial organization remain very similar to those present during the period of significance, with the exception of the impact of expanding colonies of ironwood pine trees on open space. Other spatial definition includes the dry stacked stone wall enclosures surrounding burial grounds along the margins of Crater Road, and the linear corridor of the road as it passes through the dense shade of ironwood pine trees. At the top of the mountain, where walls and trees end, the sense of expansive space opens up to reveal long views to the north, east, and west. These spatial qualities also survive from the period of significance.

The stand of ironwood pine trees was planted likely during the period of significance. However, the stand has spread beyond the original planting and is encroaching on the road and views.

Crater Road, the only circulation feature, which was established in the 1930s, remains an unimproved two-track route and retains all aspects of integrity.

There are no buildings within the character area. Structures and small-scale features include the dry stacked stone walls, concrete cross, grave markers, and deer fencing. The cross survives with all aspects of integrity from the period of significance, along with the walls and grave markers. The deer fencing, however, is a contemporary addition to the landscape. The fencing is relatively screened from view along the road and when occupying the rim of the crater. As such, it has little impact on the historic qualities and character of the landscape. Repair work has been conducted on the grave markers and walls to protect the integrity of these resources by maintaining them in good condition.

Kauhakō Crater character area thus possesses a high degree of integrity for the period of significance with numerous surviving features and landscape characteristic that help to convey its historic associations.

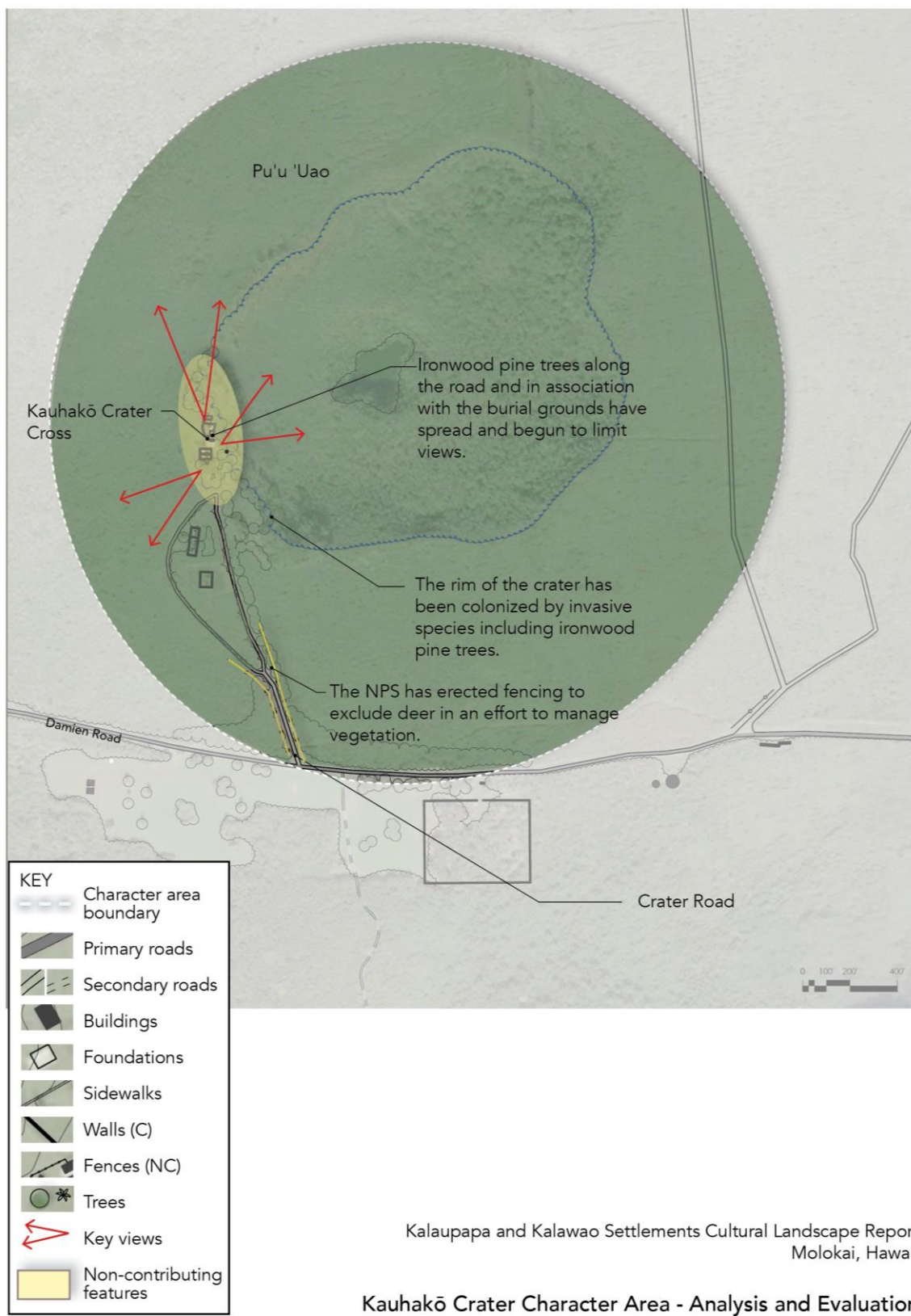


Figure 211. Kauhakō Crater character area assessment. (Source: LSHLA)

Administrative Area Character Area

Summary Analysis. Forming the core of the central and western portion of Kalaupapa Settlement, the Administrative Area character area features a relatively dense and tightly composed cluster of larger structures and work yard areas that have traditionally supported the needs of residents as well as administration of the Kalaupapa Settlement by DOH and NPS. The extensive collection of historic features and resources present within the Administrative Area demonstrates many aspects of life within the Settlement and the role of the government in managing the institution. Many of the built features associated with the Administrative Area were constructed during the 1930s, although there are also features that precede the 1930s era of institutional improvement, and numerous later additions, including some that post-date the period of significance. While many of the buildings are representative of the Hawaiian Plantation style of architecture, some are modern in style. Others are vernacular or simple utilitarian structures that reflect their purpose. Several uses are represented within the character area—administration, institutional, maintenance, services, medical, recreational, and residential—and the landscape of the Administrative Area is often zoned by use. Maintenance work yards and built clusters occur in the northeast and northwest quadrants, while public use buildings are located within the central part of the character area, and administrative and institutional buildings in the southern quadrant. The zones edge the spatial pattern established during the period of significance that continues to characterize the character area today—the circulation grid of primary roads along which most buildings and structures are sited. Plantings occur periodically along the road margins and help to distinguish public and private spaces as well as property boundaries. Coconut tree plantings around the social center of the Settlement—Paschoal Hall—mark the building as a special place. The historic characteristics of the area, including the wide range of land uses concentrated in a small area and arranged into somewhat discrete zones sited along a grid of primary roads continue to convey the historic associations of Kalaupapa Settlement as it evolved during the period of significance, and continues to accommodate the ongoing needs of the community today. As such, it possesses a high degree of integrity for the end of the period of significance.



Figure 212. Undated view of the Kalaupapa Settlement store, dispensary, and visitor house, circa 1910. (Source: KALA Kalaupapa Historical Society Album E PG 9 #461)

Historic Conditions. When Kalawao Settlement was established in 1866, a small village was located at Kalaupapa on the west side of the peninsula. As a result of the new conditions at Kalawao, Kalaupapa was closed to those afflicted with Hansen’s disease. As of 1886 in a report to the Board of Health, Saint Damien described the area near the Kalaupapa Landing as a “somewhat deserted village” with three or four wooden cottages and a few grass houses.³²⁵

By the late nineteenth century, aspects of life at Kalawao had begun to relocate to Kalaupapa to take advantage of better climate conditions and access to a safer boat landing site. By 1900, the landscape around the boat landing site had already become a center of activity with several buildings and structures present.

Between 1905 and 1908 several improvements were made to Kalaupapa Landing and the wharf to support the growing settlement. Most of the early buildings in the area were repaired and reused or removed during this period as part of an improvement initiative. Masonry walls were constructed on both sides of the landing in order to reinforce the structure. Two new warehouses were added east of the landing near the Patient Store (Figure 199), while a well house with a pump was built where people could draw fresh water. In order to create a more functional connection between the warehouses and the landing, the grade near the shore was raised 4 feet, and concrete steps were built linking the wharf with the landing. Steel railroad tracks were laid between the landing and the warehouses for use in conveying materials to the warehouses in carts. The Superintendent later proposed adding more track to the poi factory. The Superintendent of Public Works then had a new derrick erected, while a steam hoisting engine was installed at the landing.³²⁶



Figure 213. Paschoal Hall circa 1930s, showing the original picket fence and gate that surrounded the structure, before the coconut palm trees were planted. (Source: KALA Kalaupapa Historical Society Album G, page 33, #731)

Through the early twentieth century, the area around Kalaupapa Landing evolved into a more defined center for Settlement activity and administration as new food distribution, storage, medical services, and general operations and maintenance facilities were added. In 1916, a new social hall, present-day Paschoal Hall, was constructed for

325. Linda Greene, *Exile in Paradise*, 88.

326. *Ibid.*, 346–347.

the patients in the area east of the warehouses. The 2-½ story structure, measuring 120 by 40 feet in plan, was constructed using concrete pier and wood post foundation. It was one of the largest buildings in the settlement. Like many other early buildings in the settlement, the social hall had tongue and groove siding, wood sash windows, and a hip and gable roof with asphalt shingles. A lanai was added on the front with diamond-patterned railings and chamfered posts and pilasters. A picket fence and gate fronted the building (Figure 213).

Prior to major redevelopment in the 1930, the administrative center included several residences and more than a dozen primary structures including a Visitor Quarters near the landing, and a poi factory and provision room, an electrical plant, carpenter and blacksmith shops, paint shop, Patient Store, Gas Station, and Laundry (Figure 214).



Figure 214. Kalaupapa poi factory/food distribution building constructed in 1931–1932. (Source: KALA Kalaupapa Historical Society Album G, page 15, #674)

The Administrative Area was substantially altered between 1930 and 1940 as part of a larger settlement-wide improvement program (Figure 215). This important period of development refocused land use and spatial organization of the Administrative Area in relation to the settlement as a whole by consolidating administration functions, operations and maintenance, medical services, and community activities. Additional warehouses were added close to the wharf with utility buildings extending north along the shoreline. A hospital and associated medical buildings were clustered at the south end of the area, with community services such a Post Office, Patient Store, and Gas Station located close to the center. This allowed residents to socialize with friends while collecting mail or groceries. By the end of 1931, Kalaupapa Landing had a dock and a new derrick, and most of the breakwater stone was in place. A portion of the boat landing area was off-limits to patients and enclosed by an iron fence with steel cables.

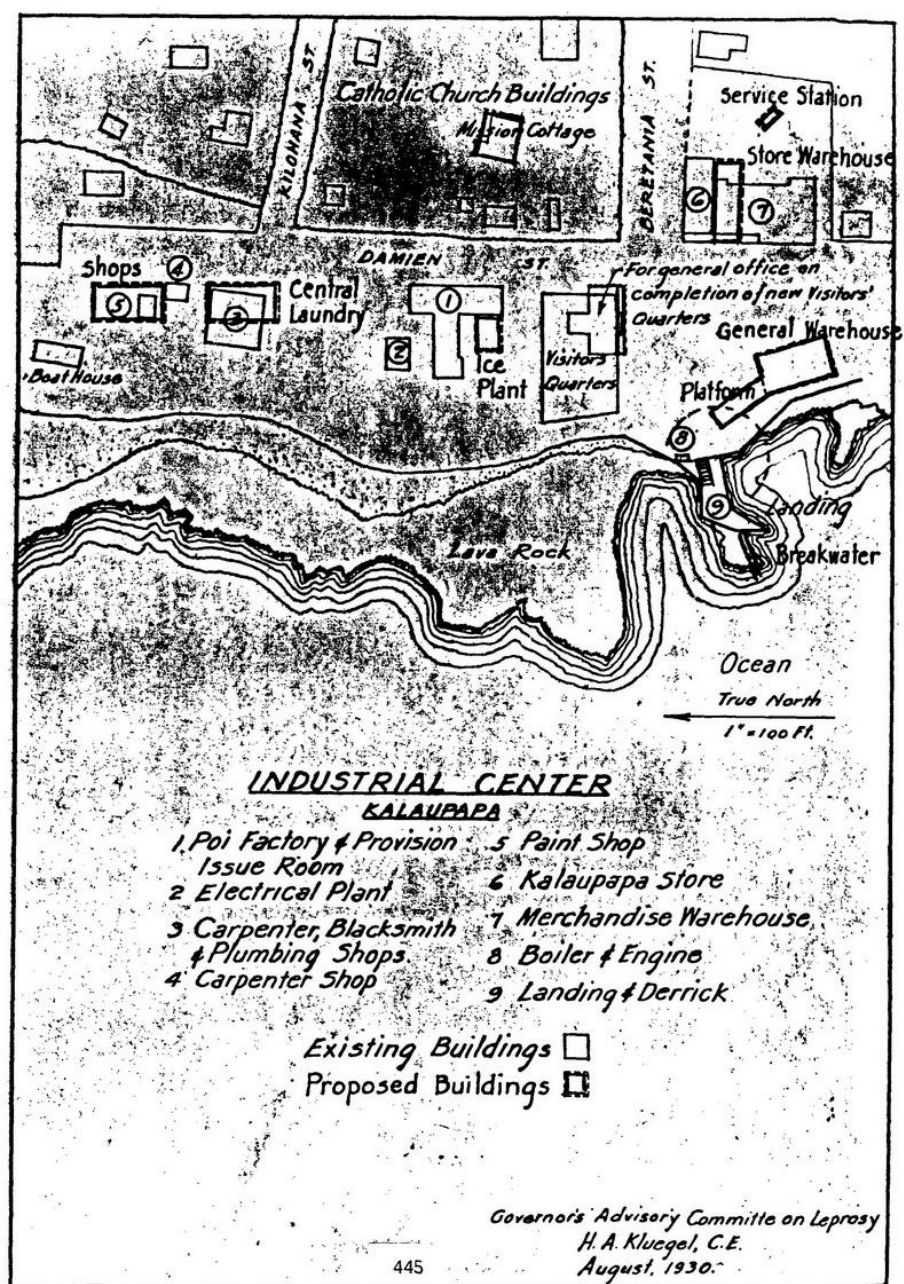


Figure 215. Detail of a 1930 map of a portion of the Administrative Area showing existing and proposed buildings. (Source Governor's Advisory Committee on Leprosy, H.A. Kluegel, C.E., August 1930; Greene, 445)

New buildings constructed during this period contributed to a relatively dense cluster around Kalaupapa Landing and streetscape (Figure 216). Buildings in the Administrative Area included a hospital, Material Shed, Laundry, Crematory, Maintenance Shop, Ice Plant, Poi factory/food distribution center, General Warehouse, Patient Store, Gas Station (Figure 217), Post Office, Motor Pool Garage, Police Headquarters, and Fumigation Room.

Building and structures added during the 1940s and 1950s included a Quonset Storage Hut, Library, Garage, Construction Camp Residence and Wash House, Outpatient Clinic, the Oceanside Pavilion, and a rebuilt Kalaupapa Landing with a new protective breakwater. Several roads were paved during this period as part of Settlement improvements. Damage from the 1946 tsunami contributed to the need for some of the repairs and modifications made during this period.



Figure 216. View of the streetscape looking north through the Administrative Area in the 1930s. (Source: KALA Kalaupapa Historical Society Album G, page 11, #660)



Figure 217. The Patient Store (left) and Gas Station (right) in the 1930s. (Source: KALA Kalaupapa Historical Society Album G, page 29, #720)

During the 1960s, with fewer patients arriving in the Settlement due to the discovery of treatments for Hansen's disease, building slowed, and few structures were added to the area. Additions include the Administrative Building across from the Post Office, Carport and Storage Shed, and Recreation Court. In personal interviews,

residents recall the importance of poinsettia plants growing in front of the Saint Marianne Cope library which opened in 1963; they were kept as short shrubs and when in season “they were just covered with flowers.”³²⁷

Several additional structures were built after 1969. The present-day Kalaupapa Memorial Hospital (Care Home) dates to 1979, while the NPS office and archives building—Hale Malama—was built between 2005 and 2011. Other contemporary structures have been added to address utilitarian needs of supply, storage, and maintenance. They include several garages and storage warehouses, as well as an Ambulance Garage and Generator Shed for the Care Home. In 1991, the hospital built east of Mission Street in the 1930s burned to the ground, impacting the character of the entire block.



Figure 218. View of Paschoal Hall and associated coconut palm tree plantings, 2017

Existing Conditions. Today, the Administrative Area remains the operational and symbolic center of Kalaupapa Settlement where community members meet and visit, participate in social events and activities, pick up their mail, and purchase food and drink. The physical landscape continues to reflect historic patterns of spatial organization and land use established by the late 1960s. Buildings, structures, and other landscape features edge the grid of primary roads that extends eastward from the Pacific shoreline and north-south between the road leading to the Pali Trail and the West Coast Cemeteries. In addition to the primary roads that structure the character area--Damien, Kamehameha, Puahi, Mission, Kilohana, Beretania, and School streets—there are unimproved access roads leading to the maintenance facilities, work yards, and parking areas that accommodate activity within the busy area. Although most buildings located within the character area are utilitarian in form, three buildings within the Administrative Area character area stand out for their architectural design and history. These include the General Warehouse, a two-story concrete structure with Art Deco detailing that overlooks Kalaupapa Landing; Paschoal Hall, an important example of Hawaiian Plantation style architecture at an institutional scale; and the Old Stone Church, built in 1853, which is the oldest structure on the peninsula. Paschoal Hall also stands out for the rows of coconut palm trees that surround the building and reflect an institutional planting pattern implemented in several places throughout Kalaupapa Settlement in the 1930s (Figure 205), as well as the large open space located to the east and north of the building, suggesting the importance of the

327. Juvik, *Ethnographic Study*, 68.

social hall to community life. Also important to community life are views of the Pacific Ocean afforded from the Administrative Area character area. These are captured by the historic Ocean View Pavilion located across from the Patient Store (Figure 206). Several historic buildings important to community life are present, such as the Library and Craft and Storage Shed (Figure 207). The purple bougainvillea growing along the mauka (mountain) side of Beretania Street between Puahi Street and Staff Row has been noted by residents as a favorite roadside planting that was also evident in areas of the administrative area.³²⁸ These are remnants of a lush planting palette that has declined over the years. Other changes have included the loss of the second hospital at Kalaupapa (Figure 208), destroyed by fire in 1991, and the construction of Kalaupapa Memorial Hospital in 1979, which is very different in character and scale than most other buildings located within Kalaupapa Settlement.



Figure 219. View north toward the Oceanside Pavilion along Damien Street, 2017

328. Ibid., 62.



Figure 220. View north of the Craft and Storage Building, 2017.



Figure 221. View east of the ruins of the second hospital at Kalaupapa, which burned in 1991, 2017.

Character Area Assessment. (Refer to Figure 222) The Administrative Area character area remains the heart of Kalaupapa Settlement as it emerged during the period of significance. Historic patterns of land use and spatial organization, circulation, and buildings and structures collectively illustrate the evolution of this important developed area during the early to mid-twentieth century following relocation of Settlement functions to Kalaupapa from Kalawao. The area also remains the administrative core of the Settlement today.

The proximity of the Administrative Area to the western shoreline and Pacific Ocean, where Kalaupapa Landing was established and improved in order to accommodate boats carrying visitors and other passengers as well as goods, helps to tie the developed area to natural features and systems.

Historic views of the ocean and broad expanses of open space within Kalaupapa Settlement, along with the pervasive views of the pali, also survive with integrity and help to convey important historic associations.

Circulation features present throughout the Administrative Area character area were nearly all developed during the first half of the twentieth century and survive with integrity from the period of significance. The historic road system follows the same alignment as that present during the 1930s and as paved during the 1950s. Most walks are also historic features constructed during the period of significance. Some of the walks have been adapted for accessibility through the addition of ramps and handrails to accommodate ongoing use by a living community. Changes that have occurred since 1969 include an expansion of the informal parking areas around the maintenance and storage facilities that have proliferated north of Beretania Street and east of Kamehameha Street, and along Damien Street north of Kalaupapa Landing. The Kalaupapa Memorial Hospital complex, built in 1979 after the period of significance, includes a substantial parking area that also post-dates the period of significance and diminishes the integrity of circulation systems.

The Administrative Area character area contains both the oldest standing structure on the peninsula—the Old Stone Church, which predates the Settlement—as well as the most recent additions, including the NPS cultural resource facility Hale Malama, Garage/HAZMAT structure, Vehicle/Equipment Storage structure, DOH Large Equipment Garage, NPS Garage, Store Warehouse, Ambulance Garage, Generator Shed and Container Structures used to ship goods to and from the Settlement on Barge Day. Among the greatest changes to have occurred within the character since the end of the period of significance are the addition of the large institutional building at the Kalaupapa Memorial Hospital and associated parking and infrastructure developments within the block between Puahi, Mission, and School Streets in 1979, and the loss of the earlier hospital across Mission Street to fire in 1991, both diminishing the integrity of the cultural landscape to a degree. Also impacting integrity has been the loss of several historic resources within the character area. Former buildings and structures that served as important anchors to the community, such as the superintendent’s office, poi factory, bandstand, Kalaupapa School, and YMCA Hall are no longer present to convey their historic associations. Also affecting the integrity of the character area is the sense of the diminishing community and the loss of the daily activities and use that historically animated the area as the center of daily life.

Otherwise, numerous historic buildings and structures, such as dry stacked stone walls and electrical and other utility infrastructure features, survive from the period of significance. Several of the historic buildings have been adapted to accommodate new uses since the end of the period of significance. These adaptations reflect ongoing use by the living community. Other additions post-dating the period of significance include small-scale features such as picnic tables, benches, and wayside exhibits placed by the NPS to interpret historic aspects of the Settlement. Although modest in scale, the wayside exhibits and the character of some of the benches present the greatest contrast to the historic character of Kalaupapa Settlement.

Despite the changes that have occurred within the landscape since 1969, the Administrative Area character area possesses a high degree of integrity for the period of significance with numerous surviving features and landscape characteristics that help to convey its historic associations.

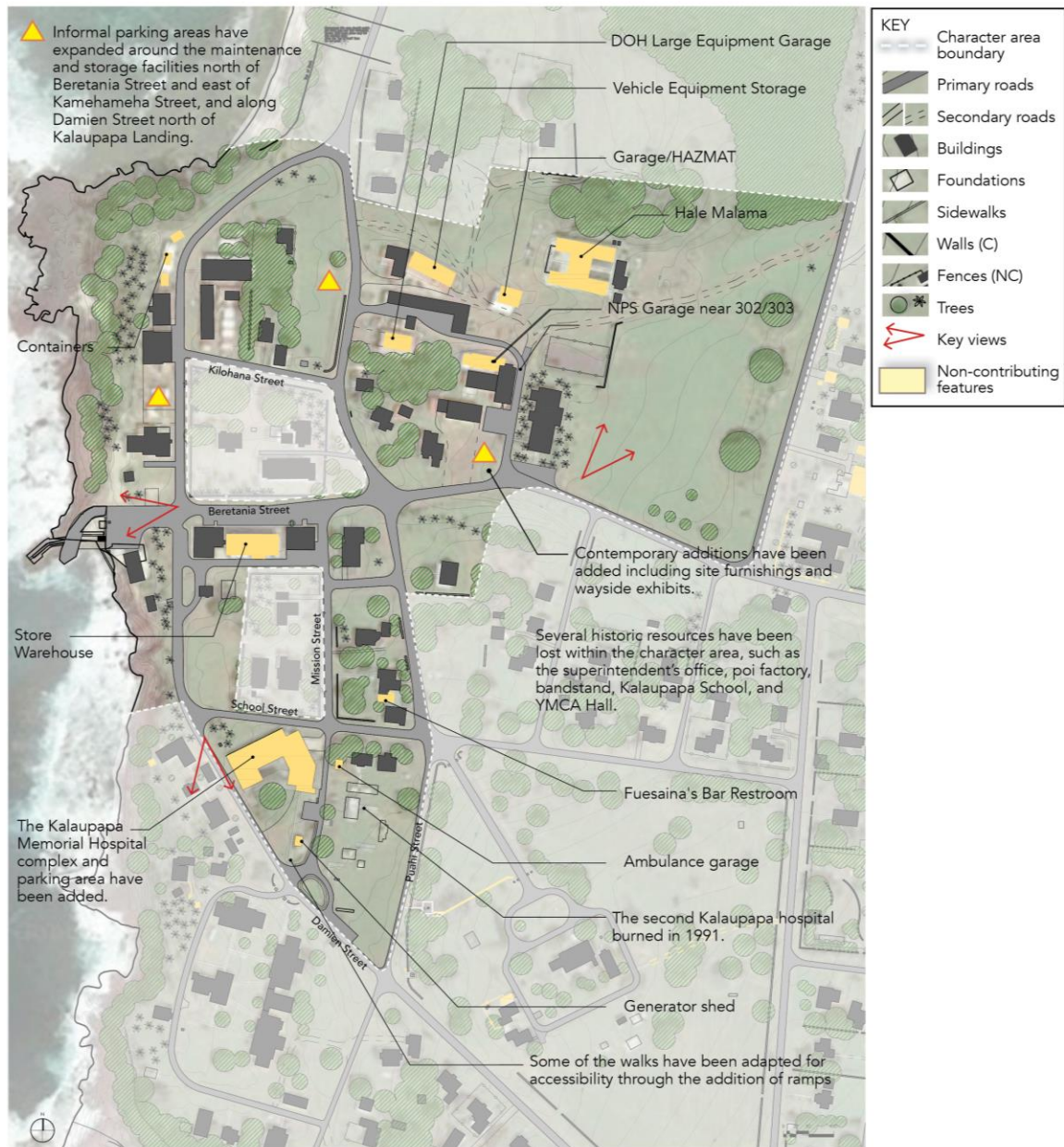


Figure 222. Administrative Area character area assessment. (Source: LSHLA)

Residential Area Character Area

Summary Analysis. Located east of the Administrative Area within the center-east portion of Kalaupapa Settlement, the Residential Area character area is composed of several north-south and east-west oriented road corridors edged by modest free-standing dwellings. The Residential Area character area represents independent life within an otherwise institutional complex, with an ongoing tradition of able patients residing in their own homes within the area since the 1910s. Most of the extant residences were built in the 1930s and 1950s through the 1960s during periods of Settlement improvement initiatives. Individual residential properties that characterize the Residential Area exhibit evidence of self-determination and vernacular development over time, with personal expressions that range from additions to the dwelling structure, outbuildings, boundary demarcations, definition of private yard areas, and gardens and other plantings.

Residences present within the character area are associated with three primary construction periods—the early twentieth century, the 1930s period of Settlement improvements, and the 1950s and 1960s. The streets typically contain examples of more than one of these periods. While the construction period and personal treatment of the individual residences varies throughout, the streetscapes comprising the character area are generally unified by consistent building set-backs, the use of features such as walls, fences, hedges, and tree plantings used to mark property boundaries, and variations on driveways, front walks, and front and rear yard delineation. The front yards are typically more formal, while the rear yards are more private and variable in terms of the composition of outbuildings, plantings, and living spaces. Many of the properties have driveways leading to garages or carports, and narrow concrete walks leading the front door. Entry walks typically end a few feet from the street, potentially indicating where a rock wall once marked the property boundary. Driveways vary in materials from concrete, to asphalt, and grass or dirt surfacing. Plantings also vary from sparse to dense and lush. The majority of these features were established by 1969, although some features have been lost while new additions have been built. Although modifications continue to be made to reflect the needs of individual residents, these typically relate to the ongoing lifeways of a living community. As such, the Residential Area character area possesses a high degree of integrity for the end of the period of significance.



Figure 223. Early residences in Kalaupapa before the roads were paved in the 1930s, view looking south. (Source: KALA Kalaupapa Historical Society Album E PG 16 #480)

Historic Conditions. During the early years of the Kalaupapa Settlement the majority of the patients lived in group homes where received assistance and medical attention as needed. Those who were physically able and self-sufficient, however, preferred to live in a home of their own. To accommodate the more independent residents, several private single-family residences were built at Kalaupapa as early as 1888. Many of these structures were constructed by the residents themselves or with the help of friends using available and occasionally salvaged materials. Most of these early residences were located near Kamehameha Street and sited on modest lots. They were typically supported by outbuildings that served as washhouses located in the side yards or backyards (Figure 223).



Figure 224. Two patient residences, circa 1930s. (Source: KALA Kalaupapa Historical Society Album G PG 36 #738; PG 37 #739)

Between 1904 and 1907, the Board of Health built twenty-seven new patient cottages. These were scattered throughout Kalaupapa Settlement. Most were modest dwellings of single-wall construction with board and batten siding and gable roofs, and little additional detail. Some, however, were more substantial, and reflected efforts being made by the Board of Health to improve the appearance of the settlement. Between 1922 and 1925, the Board of Health continued with the trend of providing patients with independent living opportunities by building five new cottages. Overall, the new living arrangements were considered to greatly improve housing in the Settlement (Figure 224).³²⁹

329. Greene, *Exile in Paradise*, 321–326.

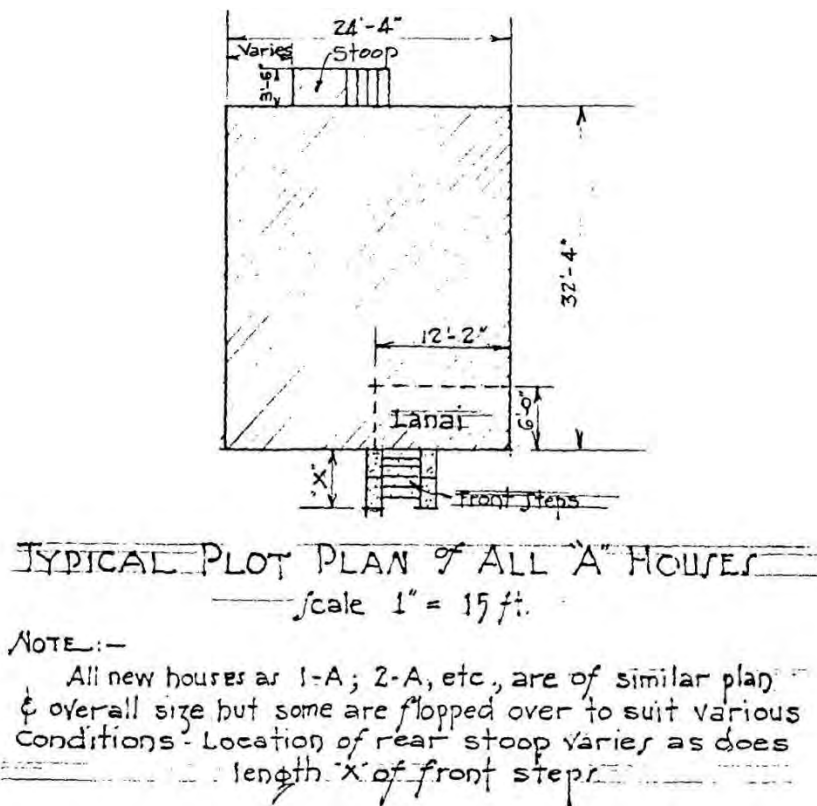


Figure 225. Typical plot plan of A Houses by the Board of Hospitals and Settlement. (Source: Greene, 405)

As part of an overall initiative to improve conditions within Kalaupapa Settlement that occurred in the 1930s, the Board of Health built twelve new single-story wood-frame residential cottages in 1931. These residences were scattered throughout the Settlement. Four additional cottages were added in 1935. All were constructed in a Hawaiian Plantation style, with an architectural character that became the standard for housing in Kalaupapa over the next decade. Key components of the style included wood post on stone or concrete pier foundations, vertical board siding and horizontal exterior girts to add stability, low angle gable or hip roofs with overhanging eaves, double-hung or sliding windows, and small porches or lanai on the front. The cottages, known as A Houses, included two bedrooms, a kitchen, dining room, living room, and bath (Figure 225). Most also featured a concrete walk leading to the front steps and the lanai from the road. Many of these new residences were built within the Residential Area character area. They were sited on individual lots, often developed with rock-wall-enclosed yards and outbuildings. Fences and hedges were also used to define the boundaries between lots.³³⁰ House lots between McKinley and Ka'iulani streets were quite large, extending the full width of the block. House lots between Ka'iulani and Kapi'olani streets, and those on the east side of Kapi'olani were similar in size. The houses on Goodhue, Bishop, and School Streets, as well as those on Damien Road, typically sat on smaller lots with shorter setbacks from the street. Most of the houses had small garden areas near the entry, in the yards adjacent to the lanai, and around the foundations. Significant attention often went into these gardens. Many residents also personalized their yards with a variety of plant materials that were both ornamental and culturally valuable. Particular favorites included cherry berries, mango trees, coffee plants, bougainvillea, hibiscus, and various flowers.

Many of the materials planted in residential gardens came from the Kalaupapa plant nursery. The nursery was built in 1935 on two residential lots within the Residential Area character area between McKinley, Haleakala,

330. Johnson, Draft NHL nomination update, 64.

and Baldwin streets that were cleared to make room for a facility large enough to propagate young plants and grow trees and shrubs for use in the settlement and patient's residential gardens (Figure 226). A large number of trees and other shrubs were shipped to Kalaupapa including 1,000 banana trees from Honolulu, and 2,000 young coconut trees from Kaua'i. Available local materials were also collected and grown for future use. The plant nursery included a lath house, tool house, fences, and gates. Rock walls defined the boundaries of the nursery. The nursery included an apiary (Figure 227).³³¹



Figure 226. Kalaupapa nursery on the left side of the photo, as it appeared in 1939. (Source: KALA Kalaupapa Historical Society Album G PG 23 #702)



Figure 227. Kalaupapa nursery-apiary, started in 1935. (Source: KALA Kalaupapa Historical Society Album G PG 24 #704)

331. Greene, *Exile in Paradise*, 467.

By 1940, roads through the residential area were paved, and along with the maturing trees and plantings throughout the area, the east side of the settlement had a more cohesive neighborhood character. Through the 1940s, as the needs of some patients changed, several houses were modified by the Board of Health to enhance accessibility and maintain the self-sufficiency of the residents. Many of these changes occurred on the interiors of the residences to make it easier for residents to operate doors and faucets. Others were structural such as the addition of wheelchair ramps. Many of these ramps were constructed using recycled materials, including plywood, and were constructed over original entry sidewalks and steps, creating a layered circulation system.³³²



Figure 228. The Lucy Kaona Residence, and example of the first style of Hicks Homes, 2017.

In the early 1950s, new treatments for Hansen’s disease had a positive effect on the health and quality of life for many patients living at Kalaupapa and residents requested the Board of Health to make improvements that would meet modern standards and provide even more autonomy. In 1954, an evaluation of housing by the agency revealed that about one third of the patient homes were beyond repair or uneconomical to maintain; those in the worst condition were targeted for replacement. Beginning in 1955, several older houses along Damien Street were removed and replaced with prefabricated two-bedroom structures known as Hicks Homes. The Hicks Homes were a standardized housing type popular in Hawai‘i after World War II.³³³ Three different forms of Hicks Homes were built at Kalaupapa between 1956 and 1964. The first style, characterized by a front gable (Figure 228), was introduced in 1956 with nine examples built. The second style, featuring a corner picture window on the front elevation, was introduced in 1962. A total of ten of these residences were sited within Kalaupapa Settlement. The final six houses, of the third style that featured a central picture window on the front elevation, were built in 1964.

332. Johnson, Draft NHL nomination update, 147, from a conversation between Edwin Lelepali and Richard Miller, exhibit specialist, November 27, 2015.

333. Johnson, Draft NHL nomination update, 148.



Figure 229. View looking east along Damien Street. Bishop Home, masked by mature vegetation is on the left, circa 1970s. (Source: KALA Kenso Seki_KALA 12600_547)

Since 1969, the need for patient housing has diminished with the number of patients living in the Settlement following changes to the laws surrounding the treatment of Hansen’s disease. Over time, houses that have deteriorated in condition due to lack of maintenance have been removed. Along Kapi‘olani Street, located along the eastern edge of the Residential Area, as well as Damien Street east of Ka‘iulani Street, most of the former dwellings have been lost. The residential character of the streetscapes, however, was retained along many of the roads (Figure 229).³³⁴

During the 1980s, the NPS assumed responsibility for grounds maintenance. With limited staff available to maintain the extensive plantings in the settlement, a significant amount of vegetation began to be removed in an effort to reduce maintenance. While those living in the individual residences generally continued to maintain their own yards and gardens, removal of planting along road corridors and in yards following a transition in ownership is known to have occurred. With an aging population, the high degree of personal attention that individuals have been able to pay to their gardens has declined. In interviews conducted in the early 2000s, several patients described the Kalaupapa landscape as formerly full of flowers and tended gardens and expressed regret at the loss of the garden-like environment that was the work of many hands—patients and kōkua alike.³³⁵ The plant nursery was rehabilitated during the early 2000s through the addition of fencing, new structures, and reoriented planting areas.

334. Ibid., 147

335. KG 6/22/03, Juvik, *Ethnographic Study*, 60.



Figure 230. Views of an individual residence with a sidewalk leading to the entrance, 2017.

Existing Conditions. The Residential Area continues to comprise the southeastern quadrant of the Kalaupapa Settlement as originally laid out and developed during the early- to mid-twentieth century. The landscape is characterized by a collection of primarily historic modest single-family houses, oriented along a grid of primary roads typically 12 to 18 feet in width to form streetscapes and neighborhoods. Most of the residences are oriented to roads that extend north-south, although there are also homes oriented to Damien Street and School Street, which extend east-west. Few residences remain along Kapi‘olani Street have been lost due to abandonment. Where houses once stood, volunteer vegetation now obscures the former lots and associated features.

Most residential lots have historic 3-foot-wide concrete walks that lead to the front of the house from the road (Figure 230). Individual lots are defined by boundary features that range from walls to hedges (Figure 231), fences, and tree plantings. Outbuildings such as garages (Figure 232), carports, garden sheds, and storage sheds are another historic element of the Residential Area that have been built for use by the patients since the period of significance. Also located within the Residential Area is the Kalaupapa plant nursery, which provides plants for use in individual gardens. All improvements to the landscape made by the residents remain the private property of those who built, use, and/or maintain them. Within each lot, the composition and character of the landscape varies to reflect the individuality of each resident; the way in which the gardens, outbuildings, and site furnishing are used is unique to each property. The Residential Area remains an important part of the fabric of life at Kalaupapa Settlement for the ability of individuals to determine the character and composition of their property and to enjoy and share the benefits of the social spaces and fruits produced in the gardens with others.



Figure 231. View of a hedge and variety of tree plantings along School Street, 2017.



Figure 232. View of a residence with an associated outbuilding, 2017.

Character Area Assessment. (Refer to Figure 233) The Residential Area character continues to reflect historic spatial organization and land use patterns established during the early- to mid-twentieth century associated with the development of an enclave and neighborhood of individual single-family homes to support the needs and interests of patients during the period of significance. The area also retains physical integrity as a collection of historic residences and associated outbuildings, boundary features, circulation elements, and gardens representing active use by a living community. Many of the residences and other features survive from the period of significance, while the streetscapes that comprise the character area continue to convey integrity of feeling, design, and association through the ongoing evidence of the platting of individual property lots, use of building setbacks, and spatial patterns associated with more formal front yards and more informal, private rear yards. However, it is important to note that vacancy and the loss of a

substantial resident patient community has had a profound impact on the integrity of feeling and association within the Residential Area.

While there are no specific natural features present within the character area, drainage systems have traditionally been avoided in the siting of residential lots. Lower lying land and drainageways occurs at the north end of the Residential Area character area along Beretania Street, where there are few residences. Historic culverts convey stormwater beneath the roads that extend north-south from Beretania Street.

As noted above, historic patterns of spatial organization, both at the scale of the street pattern, as well as the siting of individual residences along the streets, the use of consistent lot lines and building set-backs, and evidence of current and former boundary markers at front, side, and rear yards also survives with sufficient integrity to convey historic associations. During the period of significance, many dry stacked stone walls that lined many properties along the street were lost when the rock was reused for road paving, dramatically affecting patterns of spatial organization. The concrete walks that end several feet before the adjacent road suggests the former wall locations today. The integrity of the residential pattern of spatial organization is more substantially diminished along Kapiʻolani Street where all but one of the residences have been lost.

In terms of circulation, all streets located within the Residential Area are historic features that possess all aspects of integrity. The majority of the driveways and walks leading to individual properties are also historic resources that generally possess integrity. Diminishing integrity are the changes that have been made on an individual basis to enhance accessibility for residents through the provision of ramps and handrails. These changes, also, however, reflect accommodation of the ongoing needs of the living community and remain an important part of the character of the Settlement even if not historic.

The majority of the buildings and structures present are historic resources that survive with sufficient integrity to convey their historic associations. As with circulation features, some of the individual buildings and structures have been rehabilitated and altered since 1969 to reflect the individual needs of the residents. As noted earlier, several residences have been lost since 1969. Other changes that have occurred since 1969 have been the addition of several garage and shed outbuildings. These are typically modest and minor additions that often continue to reflect vernacular traditions of reusing materials for functional structures.

Plantings remain an important element within the residential landscape and continue to reflect a history of adaptation and personal expression in the landscape. The largest change that has occurred within the landscape since 1969 is the incremental loss of vegetation and personal gardens associated with individual residences. Despite an understanding of a general trend toward a loss of diversity in plant materials, documenting the extent of the changes that have occurred within the Residential Area is likely not possible.

Surviving historic small-scale features located within the character area include the Mother Clinton monument, erected in 1945, a fish pond associated with the John Arruda Residence, and the concrete worship feature located within the yard of the AJA Benevolent Society Hall. There are few examples of later small-scale feature additions to the historic landscape.

The Residential Area character area thus possesses a high degree of integrity for the period of significance with numerous surviving features and landscape characteristics that help to convey its historic associations.



Figure 233. Residential character area assessment. (Source: LSHLA)

Kalaupapa Churches Character Area

Summary Analysis. The Kalaupapa Churches character area is composed of three discrete parcels that fall within the larger Administrative Area character area. Since the early twentieth century, each of these churches have played an instrumental role in providing physical sanctuary, spiritual comfort, and opportunities for community gathering in Kalaupapa. Church services and other church events and activities continue to provide residents with a cherished opportunity for social interaction at Kalaupapa.³³⁶ Each of the three discontiguous parcels is framed by a dry stacked stone wall defining a churchyard precinct centered around a house of worship. The precincts also include supporting buildings, circulation features, plantings and turf lawn, and grottoes, memorials, monuments, and other commemorative features. All three retain a high degree of integrity, with nearly all features dating from the period of significance. Very little change has occurred within any of the three properties since the end of the period of significance.



Figure 234. The Catholic Church, Our Lady of Health of the Sick in Kalaupapa, following a circa 1881–1882 expansion. (Source: KALA Bruce Doneux_00372 Box 02_062; Sr. M. Wilma Collection, property of B. Doneux)

Historic Conditions. During the early nineteenth century, before Kalawao Settlement was established, missionaries were present throughout the Pacific Islands, including Molokai. In 1832 the first Christian mission was established on south side of Molokai. By 1839, a Hawaiian missionary was also stationed on the west side of the Kalaupapa Peninsula in a complex that included a stone meetinghouse and thatched house.³³⁷ In 1853, another missionary outpost that included a stone church was constructed in Kalaupapa on land granted by King Kamehameha III. After the establishment of Kalawao Settlement, the church served the community. However, it was generally too far away to be visited regularly for most Hansen's disease patients in Kalawao. To support the needs of the Settlement, two churches were built closer by 1872—Siloama, and St. Philomena—while a meetinghouse for the Church of Jesus Christ of Latter-day Saints was added west of Siloama soon thereafter. At the same time, Saint Damien built a Catholic church at Kalaupapa in 1873. In 1876, a Congregationalist chapel was completed nearby.³³⁸ The Catholic Church, known as Our Lady of

336. Juvik, *Ethnography Study*, 9.

337. Greene, *Exile in Paradise*, 40.

338. *Ibid.*, 109, 118.

Health of the Sick, was enlarged in 1882 (Figure 234). It remained too small for the growing congregation; a new, larger church was soon under construction.



Figure 235. St. Francis Church, completed in 1899, was destroyed by fire in 1906. After construction of the new church, Our Lady of Health of the Sick was moved and converted for use as a social hall. (Source: KALA Bruce Doneux_00372 Box 02_077; Sr. M. Wilma Collection)

The new Catholic church, completed in 1899 and dedicated in 1900 to St. Francis of Assisi, featured twin towers and three entrance doors on the west façade. The grounds were fully enclosed by a dry stacked stone wall, while palm trees were planted around the structure. The Old Catholic church was moved to the north side of the new St. Francis Catholic Church building and converted to a social hall (Figure 235). In 1906, however, a devastating fire destroyed St. Francis. Until a new church could be built, Our Lady of Health and the Sick was salvaged from the fire and again used for services.³³⁹

Within two years, a new St. Francis Catholic Church was constructed in the same location. The new church was a large building constructed using ferro-cement. The entrance on the west side of the building, including a three-bay portico, echoed the design of the first St. Francis Church. Pointed arched windows along with concrete buttresses on the north and south walls of the building conveyed a Gothic quality.

During the late nineteenth and through the early to mid-twentieth century, the Church of Jesus Christ of Latter-day Saints maintained a strong congregation within the Settlement, with more than 200 members. To accommodate the membership at Kalaupapa, a meetinghouse and social hall were constructed in 1901. In 1907, a monument was erected near the church to recognize the contributions of spiritual community leader, Jonathan Napela.

In 1915, a third denomination built a house of worship at Kalaupapa. Kana'ana Hou was built to the south of St. Francis Catholic Church for the Congregationalists living in the Settlements. A social hall was added soon thereafter in 1916.³⁴⁰

339. Ibid., 335.

340. Johnson, Draft NHL nomination update, 44–45.

The church properties continued to evolve through the 1930s and 1940s. At St. Francis, a rectory was constructed in 1930–1931, while a mission house was added in 1932. In 1935, a residence that served as the rectory for the Church of Jesus Christ of Latter-day Saints was built near the meetinghouse, while a parsonage was built at Kana'ana Hou Church later that year (Figure 236). A parish hall was later added at the Church of Jesus Christ of Latter-day Saints in 1940, while a social hall was added north of the St. Francis Catholic Church chapel that same year (Figure 237).



Figure 236. Kana'ana Hou Church and Calvinist Parsonage, 1930s. (Source: KALA Kalaupapa Historical Society Album H PG 4 #805-807)



Figure 237. View looking northwest of the south and east sides of St. Francis Catholic Church. Damien Hall, the social hall, is visible to the right, 1938. (Source: KALA Kalaupapa Historical Society Album H PG 14 #829)

In 1946, a tsunami washed over the western shoreline of the Peninsula, severely impacting the Settlement landscape, including destruction of the Church of Jesus Christ of Latter-day Saints meetinghouse. Following the tsunami, the other two churches continued to operate and serve their congregations. At Kana‘ana Hou, a maintenance building was constructed on the grounds in 1950. At St. Francis Catholic Church, a wood-frame garage was added sometime in the 1960s or 1970s. In 1965, a new meetinghouse was built at the Church of Jesus Christ of Latter-day Saints property. At Kana‘ana Hou, a new parish hall was added in 1968.



Figure 238. View of St. Francis Catholic Church, looking east, with the garage and Damien Hall located to the left, 2017.

Existing Conditions. St. Francis Catholic Church is an iconic feature of Kalaupapa Settlement, and prominently visible from the adjacent roads Beretania and Kamehameha Streets to the east and south, as well as Damien and Kilohana Streets that edge the parcel to the north and west. Services continue to be held in the church, which retains an active congregation. The five buildings clustered in the southern half of the property within a level area characterized by mown turf are all historic features, as are the coconut palm and other tree species that edge the perimeter walls to the south and east (Figure 238). Of the five buildings, the church and rectory are more formal, while the other three buildings are more vernacular in character. The grave of Father Maxime André, priest at the church from 1902 until his death in 1927, is marked by a statue of the Sacred Heart of Jesus and serves as a focal point at the western end of the open space. The northern half of the parcel is set topographically below the rest of the property and is heavily planted. A large historic stone grotto edges the space to the north. The primary circulation features associated with the property include a paved entrance drive, and stone stairs. Other circulation is informal. Colorful tile murals, added in the 2010s, flank the entrances into the property through the perimeter rock walls from the adjacent streets.



Figure 239. Views of the Church of Jesus Christ of Latter-day Saints meetinghouse complex, including the meetinghouse, walkway, gated entrance through the perimeter rock wall, and scattered plantings, 2017.

The Church of Jesus Christ of Latter-day Saints parcel is located to the north of St. Francis Catholic Church along Kamehameha Street. The Church of Jesus Christ of Latter-day Saints no longer supports an active congregation at Kalaupapa.³⁴¹ The church, set within a linear parcel, contains three historic buildings oriented to face Kamehameha Street and sited with a consistent set-back. A dry stacked stone wall frames the churchyard precinct on three sides; the fourth is marked by contemporary chain link fencing. The meetinghouse, built in 1965 as a replacement for an earlier building, is modern in architectural style (Figure 239), and thus incongruous with the other buildings that were designed in the Hawaiian Plantation style. Shade trees and foundation plantings edge the walls and buildings. Circulation occurs in the form of concrete walks that lead into the property through a pair of historic gates from Kamehameha Street, and provide access to the meetinghouse and the other buildings. Located between the meetinghouse and the parish hall, centered within a level green space, is an early twentieth century monument that adds a degree of formality to the site plan. Ramps have been added to enhance accessibility at building entrances.

341. Although Church of Jesus Christ of Latter-day Saints is currently used to refer to the religious affiliation and the meetinghouse building, the NHL uses the terms “Mormon” and LDS.



Figure 240. Views of Kana'ana Hou Church, with the parish hall beyond, 2017.

The Kana'ana Hou Church parcel is located to the south of St. Francis Catholic Church between School, Damien, and Mission Street. Services continue to be held at Kana'ana Hou Church, which retains an active congregation. Like the other two church parcels, Kana'ana Hou is edged by a perimeter wall composed of dry stacked stone, with gate piers marking four openings for access. Narrow concrete walks lead to some of the buildings from the gates. The parcel is heavily planted with ornamental, shade, and fruit trees and shrubs. Plantings around the church include golden shower (*Cassia sp.*) trees, an octopus (*Schefflera actinophylla*) tree, golden cane palm (*Dyopsis lutescens*) and croton shrubs near the entrance, and plumeria (*Plumeria spp.*), African tulip, and coconut palm trees, along with bougainvillea, cacti, noni, and bird of paradise shrubs. Plantings associated with the parsonage landscape include an allamanda (*Allamanda cathartica*) hedge, mock orange (*Murraya paniculata*) shrubs, and borders featuring coconut palms, royal pioncianna (*Delonix regia*), cane palm, dracaena (*Dracaena sp.*), lichi (*Litchi chinensis*), croton, breadfruit, mango, Philodendron (*Philodendron sp.*), and snake plant (*Sansevieria trifasciata*) and kamani. Views of the church are often limited due to the extent of the plantings. The church, constructed in 1915, is closely edged by a modern style parish hall constructed in 1968 to the west (Figure 240). Set behind a screen planting to the north is the 1935 parsonage, an associated garage, and a driveway. Directly behind the church near the south boundary wall is a small maintenance building erected circa 1950, and a hot house used to grow flowers for church services. The vast majority of the landscape features date to the period of significance. Ramps have been added to enhance accessibility at building entrances.

Character Area Assessment. (Refer to Figure 241) The Kalaupapa Churches character area possesses a high degree of integrity to the period of significance due to the ongoing presence of all building and landscape features established before 1969, and the fact that few changes or additions have been made to these properties after the period of significance. These properties continue to convey their historic associations with the religious organizations that established them to provide for the needs of the community. Two of the churches continue to offer regular services and minister to community residents. All three individual church properties retain historic patterns of use and spatial organization, pedestrian circulation, cultural vegetation, as well as buildings, structures, and small-scale features.

Each of the church properties occupies a relatively level parcel, with limited evidence of natural features or systems. The St. Francis Catholic Church property, however, contains a southern level lawn, and a northern lower lying area that serves as a swale. The lower lying area has been developed to convey stormwater moving westward beneath Kamehameha Street to a closed system that empties on the beach along the shoreline. This method of conveying stormwater has been in use since the period of significance.

As noted, historic patterns of spatial organization have also been retained in association with the three church parcels. The perimeter streets are historic corridors that retain integrity, as are the perimeter dry stacked stone walls that surround the church precincts. The siting, orientation, and alignment of the historic buildings within each parcel was also established during the period of significance and has been retained.

The prominent views of the St. Francis church and Church of Jesus Christ of Latter-day Saints meetinghouse from adjacent roads also survive and continue to convey the iconic importance of these buildings within the community. Kana'ana Hou is less visible from adjacent roads due to the density of the vegetation along the property margins. It is not clear whether this church building was formerly a more prominent presence visually within the community before the existing plantings matured.

With the exception of the ramp additions providing access to building entrances, all of the pedestrian and limited vehicular circulation associated with these properties appears historic and to retain integrity. The only exception may be the asphalt-paved entry drive leading into the St. Francis Catholic Church property from Kamehameha Street, which may present a more formal appearance and surfacing material today than it did historically.

All three properties also retain virtually all the structures from the historic period including the church buildings, parsonages, social halls, and other support structures, as well as the walls that frame their perimeters, indicating a high degree of integrity for buildings and structures. The only possible exception is the St. Francis Catholic Church Garage, which may post-date 1969. The commemorative markers, grotto, monuments, and statuary are all also historic and date to the period of significance. Later small-scale additions to the character area include the wood housing for the bell at Kana'ana Hou and an adjacent identity sign, the fire hose box at St. Francis Catholic Church, the tile murals at the entrance into the St. Francis Catholic Church property, the bell memorial shelter at St. Francis Catholic Church, and the fencing that edges the northern boundary of the Church of Jesus Christ of Latter-day Saints property.

The Kalaupapa Churches character area thus possesses a high degree of integrity for the period of significance with numerous surviving features and landscape characteristics that help to convey its historic associations.

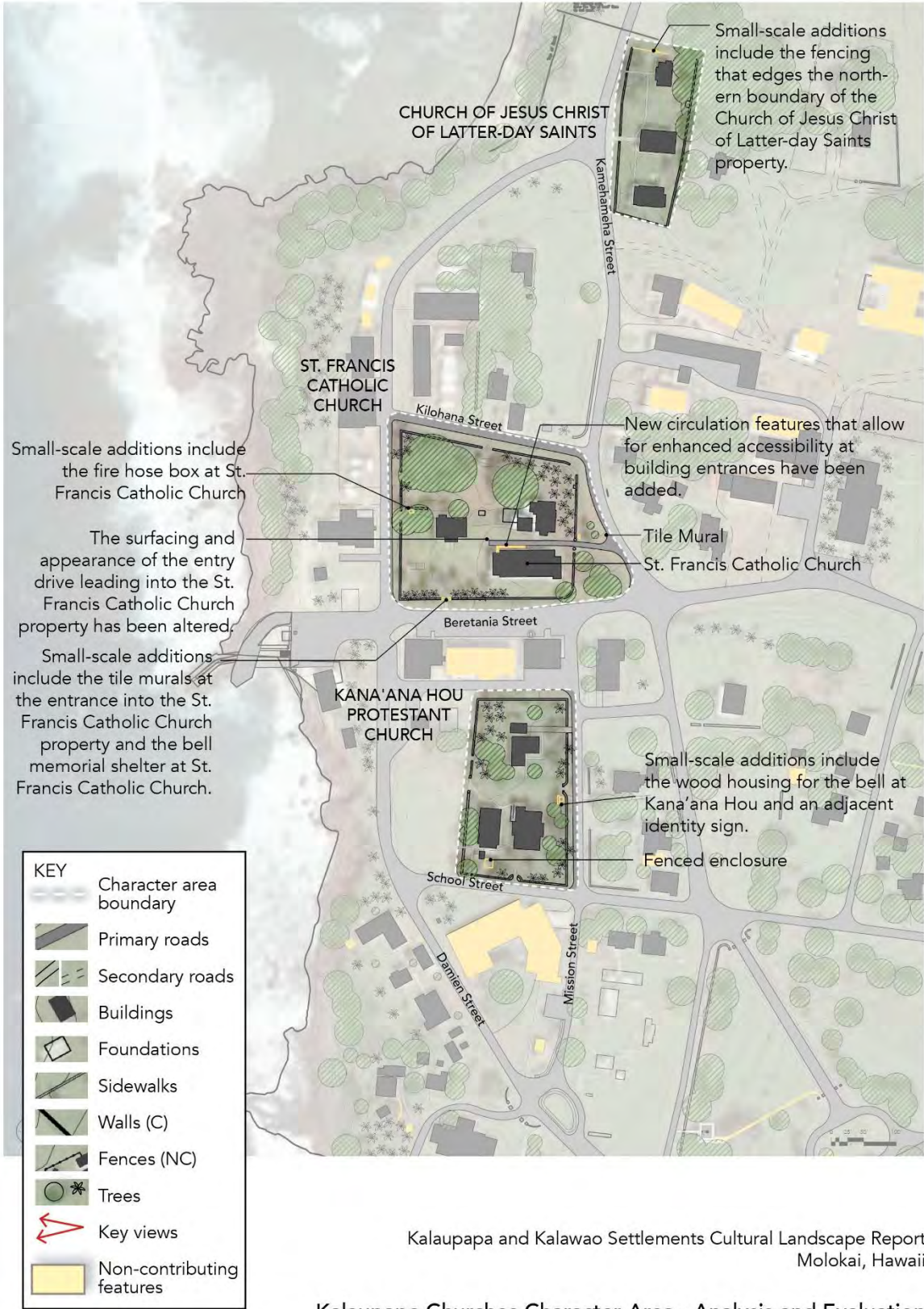


Figure 241. Kalaupapa Churches character area assessment. (Source: LSHLA)

Bishop Home Character Area

Summary Analysis. The Bishop Home character area is located in the heart of Kalaupapa Settlement, surrounded to the north, east, and south by the Residential Area character area, and to the west by the site of the second settlement hospital and other Administrative Area features. Bishop Home plays a prominent visual and spatial role in the Kalaupapa Settlement landscape due to its central location, elevated topography, unusually large block size, and formal site plan. The Bishop Home character area landscape is characterized by a geometrically arranged core precinct framed by pastoral open space to the east, south, and west, and an outer boundary demarcation of historic rock walls and trees. Despite a substantial loss of historic buildings, the central precinct remains evident due to surviving structuring elements such as the gated and tree-lined entrance drive, looped turnaround in front of the primary building cluster, the cottage built for the sisters in 1934 and the adjacent Elizabeth Chapel, as well as two surviving cottages built to accommodate nuns involved in operations at the group home. The landscape associated with the central precinct also continues to convey a pastoral feeling derived from expanses of turf grass and tree and shrub plantings. Beyond the central core, the landscape to the northeast, east, and south, is composed of open meadow. To the west is a historic developed enclave that contains the 1893 Saint Damien and 1918 Saint Marianne Cope Grave monuments along Puahi Street. While there are several extant features that survive from the period of significance, the loss of many other buildings and structures and the addition of statuary and commemorative markers since the end of the period of significance diminishes the integrity of the Bishop Home character area.



Figure 242. The original convent built on the top of the knoll at the center of the Bishop Home for Girls, undated. View looking southwest. (Source: KALA Bruce Doneux 00372, Box 02_014_label 013)

Historic Conditions. In 1887, Saint Damien and superintendent Rudolph W. Meyer set out to select a site on the west side of the peninsula as the location for a new group home needed for the growing population of young girls living at Kalawao Settlement. Named after its benefactor, Charles Bishop, the Bishop Home for Girls was built the following year on an elevated knoll in the central area of the expanding Kalaupapa Settlement. The facility, which was owned by the Hawaiian government and administered by the Board of Health, was ready for occupancy by mid-September of 1888. Shortly after completion, the day-to day operation of the Bishop Home for Girls was transferred to the Franciscan Sisters of Charity.

Early buildings at the site included a one-story convent with a large veranda, and four small cottages for women residents (Figure 242). Two of these were used for sleeping quarters, one was for cooking, and the fourth was for medical services. Within two years, twelve additional buildings were added to the group home, including four dormitories, a cookhouse, a schoolhouse and assembly or recreation room, a carriage shed, a bathroom. By 1890, the entire complex was fenced.

The Franciscan Sisters of Charity oversaw the day-to-day operation of Bishop Home for Girls. Among the members of the order was Saint Marianne Cope, who arrived at Kalaupapa in 1888, and remained until her death in 1918. Saint Marianne and the sisters who joined her implemented high standards of treatment and care for those diagnosed with Hansen's disease. At the Bishop Home, she both took care of patients, as well as the facilities and grounds, constantly advocating for repairs and site improvements. Based on her requests, Charles Bishop donated additional funds in 1904 for construction of two new wards, a new dining room, and a bathroom.

In 1893, the people of England dedicated a monument to Saint Damien, with funds contributed by the monarchy. The monument was sited along Puahi Street on the Bishop Home property.

Saint Marianne encouraged beautification of the grounds at the Bishop Home and throughout the settlement, as a way to lift the spirit while also providing the practical value of producing food. She personally oversaw the planting of many trees and shrubs at Bishop Home; by January 1905, there were more than 500 trees at Bishop Home, including oranges, lemons, plums, ironwood tress, and ornamental shrubs.³⁴²



Figure 243. Early plantings at the Bishop Home for Girls, undated. (Source: KALA Kalaupapa Historical Society Album D PG 22 #105)

Over the years before Saint Marianne's death, ironwood pine trees were planted along the property boundaries at McKinley, School, and Puahi streets. Ironwood pine trees were also planted along the east side

342. Ibid., 310.

of the entrance drive, creating a relatively formal and stately approach to the building cluster on the top of the knoll. Coconut and date palms, Java plum, kiawe (*Prosopis pallida*), orange, lemon, tamarind, and other trees were planted informally throughout the property providing shade in open spaces and along walkways. Ornamental and flowering shrubs were planted between buildings, along foundations, and near the entries, imparting a residential feel to the clustered group buildings such as the dormitories and the social hall (Figure 243). Near the central building complex, Saint Marianne also oversaw the planting of fruit and vegetable plants that provided fresh produce for use in the kitchens, and flowers that were often collected and taken to the hospital.³⁴³ A grove of shade trees, planted in the area northeast of the central built core of the property, grew up over the years to completely screen views into the Bishop Home from both School Street and the east end of Puahi Street. Collectively, these plantings transformed the grounds at the Bishop Home over many years, from a landscape of open fields, to a more formal composition.

When Saint Marianne died in 1918, she was buried on the grounds of the Bishop Home property within a formal arrangement of features including a statuary monument. Residents of Kalaupapa raised money for the monument, which was placed at the gravesite in 1919.³⁴⁴



Figure 244. Two of the early cottages/dormitories at the Bishop Home for Girls, undated. (Source: KALA Bruce Doneux 00372, Box 02_028_label 027)

In 1922, electric lights were added to the property. By this time, the Bishop Home contained as many as nineteen buildings, including a chapel and convent, an infirmary, several cottages (Figure 244), a dining room/kitchen, a dormitory, a heating plant, and a laundry, primarily clustered around the central developed core atop the knoll. A wood picket fence enclosed the convent, while a more extensive picket fence surrounded the entire central building complex, and a perimeter dry stacked stone wall edged the property as a whole, creating a series of physical transitions that served as reminders of the rules separating patients and visitors.³⁴⁵

343. Johnson, Draft NHL nomination update, 96-98.

344. The body of Mother Marianne Cope was exhumed in 2005 and reinterred in Syracuse, New York, prior to her canonization in 2012.

345. Johnson, Draft NHL nomination update, 96-98.

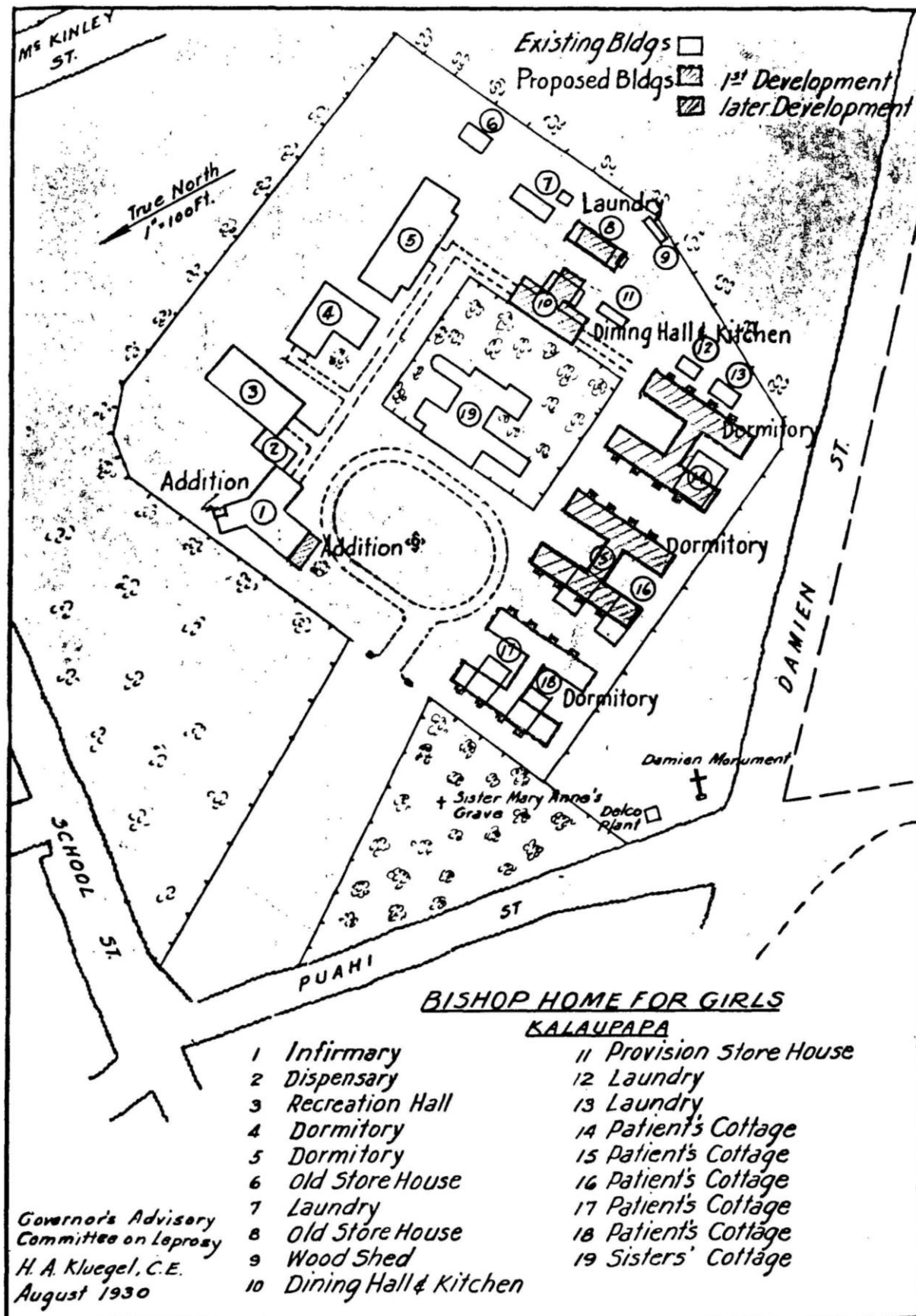


Figure 245. Plot plan of Bishop Home, 1930, indicating plans for future improvements. (Source: Governor's Advisory Committee on Leprosy; Greene, 401)

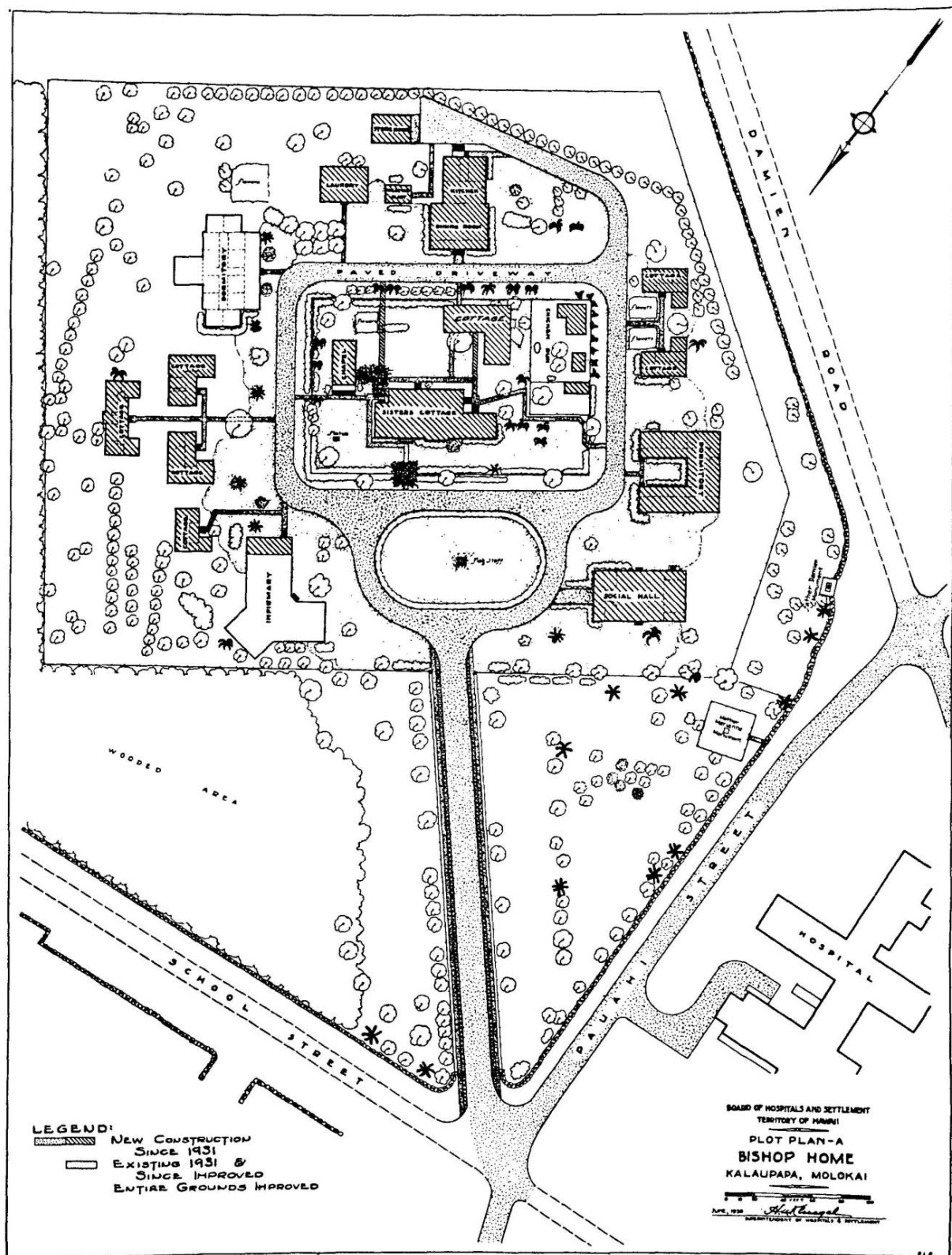


Figure 246. Bishop Home for Girls following completion of the improvements. (Source: Board of Hospitals and Settlement; Greene, 495)

The Bishop Home complex was almost entirely rebuilt during the early 1930s (Figure 245 and Figure 246). Twelve of the original buildings were demolished by 1932. New buildings included a kitchen/dining room, dormitory, social hall (Figure 247), laundry room, and central boiler plant. Improvements were made to other

buildings including the infirmary and chapel. In 1934, three patient cottages were added and a new frame cottage for the sisters replaced the original cottage in the same location (Figure 248). A wooden trellis with interior benches was built between the elongated oval that terminated the entrance drive and an entry walk leading to the building. The trellis was painted to match the white paint of the cottage. In 1937, three new patient cottages were added to the complex.³⁴⁶



Figure 247. The new Social Hall built at the Bishop Home for Girls was completed in 1932 along the west side of the entrance drive oval at the top of the knoll. View looking south. (Source: KALA Kalaupapa Historical Society Album D PG 37 #137)

346. Greene, *Exile in Paradise*, 404.

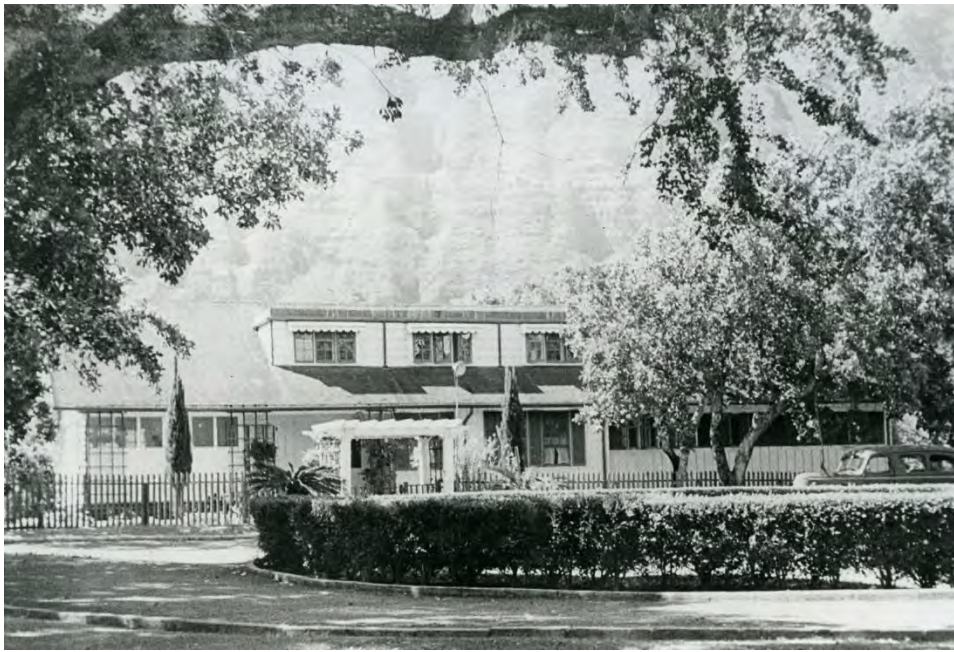


Figure 248. A new cottage for the sisters, built in 1934, replaced the original cottage in the same location. Note the wooden trellis near the entrance. (Source: KALA Bruce Doneux 00372, Box 02_008_label 007)

During this same period, in 1935–1936, the entrance road to the Bishop Home was re-graded and surfaced with asphalt macadam. Similar to improvements made to roads in other group home complexes during the 1930s, the entrance road was designed with concrete curbs, creating a spatial separation between pedestrian and vehicular circulation. A pair of stone masonry piers was built to flank the new road at the entrance east of Puahi Street, with metal gates that could be closed. Smaller piers were added to either side that supported gates marking the pedestrian entrance into Bishop Home (Figure 249). Concrete sidewalks, 3 feet wide, followed Bishop Home Road to the oval at the center of the building complex. Additional sidewalks were added between many of the buildings. These sidewalks were also 3 feet wide, and formal in appearance due to their angular and geometric alignments. Bishop Loop, a secondary access road, extended to the south of the oval, encircling the cottage for the sisters and adjacent St. Elizabeth Chapel, providing access to the kitchen and dining room building.³⁴⁷ Complementing the formal arrangement of the developed core was a flagpole erected in 1932 in the center of the oval.

347. Johnson, Draft NHL nomination update, 96–98.



Figure 249. The Bishop Home for Girls entrance, 1932. (Source: KALA Kalaupapa Historical Society Album D PG 32 #126)

With the introduction of sulfone drugs in 1946, the number of new patients arriving at Kalaupapa began to decline. Throughout the 1940s and 1950s, buildings that were no longer needed at Bishop Home were removed. Among these buildings was the 1938 infirmary (Figure 250), demolished in 1951. As part of Superintendent Lawrence Judd's initiative to diminish the use of barriers throughout the Settlement during the late 1940s, the outer fence at Bishop Home was removed.³⁴⁸

When roads throughout the Settlement were repaired and resurfaced between 1956 and 1958, rock was used that had been taken from walls associated with property boundaries.³⁴⁹ The lava rock was broken up for paving aggregate using a rock crusher. One of the walls that was impacted was located along the northern edge of Bishop Home along McKinley Street.

348. Ibid., 66.

349. Ibid., 75.



Figure 250. The Bishop Home Infirmary built in 1938 on the east side of the oval was removed in 1951. (Source: KALA Bruce Doneux 00372, Box 02_011)

Many other Bishop Home buildings were removed during the late 1960s and 1970s, including the social hall, laundry, storeroom, and kitchen/dining room. The last two dormitories were demolished after 1985, leaving only the Bishop Home for Girls (as the cottage for the sisters is known), St. Elizabeth Chapel, two cottages, and the concrete Boiler House. Surviving evidence of several former buildings, including foundation outlines and ruins, remains present in the landscape along the margins of the central road system. A statue to St. Anthony was added in front of the chapel at some time during the contemporary period. The roads were repaired and resurfaced the early 2000s.³⁵⁰

In 2004, a Historic Structures Report was completed to guide preservation needs associated with the Bishop Home for Girls, St. Elizabeth Chapel, and the two surviving cottages.³⁵¹ National Park Service records also suggest that preservation treatments have been applied to the stacked rock walls that edge much of the property, which have been subject to rock fall and dislodging as a result of vegetative growth and failure.³⁵² For several years, Bishop Home for Girls sat unoccupied following diminished need for the services of the sisters. Following the canonization of Saint Marianne Cope in 2012, members of the Sisters of Charity order returned to Kalaupapa and continue to reside at Bishop Home for Girls, helping to care for the grounds and surviving cultural vegetation.

350. Ibid., 75.

351. Spencer Architects, Inc., *Historic Structures Report; Bishop Home Convent, Chapel, and Cottages, AJA Hall and Outbuilding, Visitor Quarters, Staff Row Dormitory Phase One* (Honolulu, Hawaii: National Park Service, September 22, 2004).

352. Bishop Home wall repair records, Kalaupapa archives, undated.



Figure 251. View southeast toward the cottage built for the nuns now referred to as the Bishop Home for Girls, 2017.

Existing Conditions. The Bishop Home character area continues to command a prominent visual and spatial position within Kalaupapa Settlement due to its large block size and siting atop a knoll. The historic buildings sited atop an elevated knoll on the property include the Bishop Home for Girls, built as housing for the nuns (Figure 251), Elizabeth Chapel, Barbara Marks Residence, Bishop Home Residence 4, and a Boiler Plant (Figure 252). Three of the property boundaries are demarcated by historic dry stacked stone walls, while the fourth is lined with an informal row of shade trees. The historic entrance drive leads into the property on an angle from the corner of School and Puahi Streets. The entrance is marked by a pair of historic lava stone masonry piers located to either side of the Bishop Home Road, which is asphalt paved and edged by concrete curbs. Smaller pylons sit to either side of concrete walks providing access to the central core of the property (Figure 253). Surviving evidence of a historic linear planting of ironwood pine trees edges the entrance road, along with two grave markers (Figure 254). The central developed area occupying the top of the knoll features the circular terminus of the entrance drive, centered on the Bishop Home for Girls and the adjacent St. Elizabeth Chapel, several memorials and monuments, statuary, a flagpole, a covered entrance walk, and a variety of tree and shrub plantings. In front of the Bishop Home for Girls is a large wooden trellis with two wooden benches and a short section of picket fence and gate provide pedestrian access to both the Bishop Home for Girls and St. Elizabeth Chapel. A statue of St. Anthony, added after the period of significance, is located near the entrance in front of the chapel. Concrete walkways link the convent and the chapel, and areas on the south side. A commemorative plaque honoring Saint Damien, metal hand pumps for water, and a variety of foundational plantings and ornamental garden areas surround the convent. In these areas, vegetation continues to focus on fruiting trees such as mango, Kamani, banana, and avocado, as well as perennials, shrubs, and ornamentals that yield flowers and foliage for cutting such as bird of paradise, ferns, croton, ti, slipper flower, heliconia, and aloe.



Figure 252. View east of the Boiler House along the secondary loop road at Bishop Home for Girls, 2017.



Figure 253. View southeast of the entrance drive, walls, and pylons at the corner of Puahi and School Streets marking the road and walks leading to the Bishop Home for Girls, 2017.



Figure 254. View east of one of the graves located along the entrance drive to the Bishop Home for Girls, 2017.

Behind the Bishop Home for Girls is a secondary loop road system provides access to the two surviving cottages and the Art Deco style Boiler Plant. The foundation ruins of several former buildings edge the secondary loop road system. Beyond the central core, the expansive property is generally maintained in turf and field grasses with scattered woody plants and informal rows of trees along School Street. Species include banyan trees, Norfolk Island pine (*Araucaria heterophylla*), royal palm (*Roystonea regia*), ironwood, tamarind, golden shower tree, plumeria, and Java plum. Set within the field grasses within the northeast corner of the property is a mortared stone oven feature thought to have been built by a Portuguese resident, while to the south near McKinley Street is a grave marker.

To the west along Puahi Street are two commemorative features. One is the Saint Damien Monument, the other is the original grave site of Saint Marianne Cope, who helped establish and administer the Bishop Home for Girls and died in 1918. The Saint Damien Monument is comprised of a 6-foot-high Celtic cross, a marble medallion, and a bas-relief bust of Saint Damien. The monument sits on a 3-foot-square concrete foundation, and is surrounded by metal pipe fencing. The Saint Marianne Cope Grave Marker, just north of the Saint Damien Monument, includes a statue of Saint Francis with Jesus on the cross, mounted on a pedestal with a bronze plaque. The original tomb is in front of the statue and is surrounded by a concrete walkway with a concrete post and chain fence. Access to the grave is near Damien Road where a short set of stairs leads up to two chamfered columns and a short walkway. Access to the monument from the Bishop Home grounds is by way of a concrete sidewalk that crosses the lawn from Bishop Road. Both monuments have plantings associated with the design and commemoration.

Character Area Assessment. (Refer to Figure 256) The Bishop Home character area has undergone many changes since first established in 1888, with a nearly complete replacement of most buildings during the 1930s, removal of interior fencing systems in the 1940s, and removal of buildings after the number of patients entering the Settlement began to dwindle following the discovery of sulfone drugs in 1946. While many buildings had been removed by 1969, the trend continued after 1969, with numerous additional buildings having been lost after the period of significance. In addition, the perimeter dry stacked stone wall that marked the northern property boundary was removed in the mid-1950s for use as road paving material. There have also been substantive changes in plantings and vegetation over the years, including the planting of

a grove of trees northeast of the central core in the 1930s that is no longer extant, and rows of trees that once followed fence lines and the entrance drive. Of these only a few ironwood pine trees survive along the entrance drive. Despite these losses and changes, many of the cultural landscape elements that historically characterized Bishop Home remain present today, helping to convey historic associations.

The spatial organization and layout of the property, including the siting of the building complex atop a prominent naturally elevated knoll, the formal entry and circulation system, the orthogonal arrangement of buildings as evidenced in the surviving features as well as foundation outlines, and the use of vegetation to establish precincts around the buildings and monument remain today.

Views of the property along the axially arranged entrance drive also survive, along with views into the property from surrounding streets. The majority of the roads and walks are historic features that survive with integrity from the period of significance.

The Bishop Home Road and Loop Road and associated curbs built in the 1930s also remain in their original alignment with consistent materials and dimensions, along with the original concrete sidewalks. Diminishing the integrity of the roads are changes to the road profile resulting from repaving that has obscured portions of the curb system. The service road that formerly led to a storage building on the southeast side of the complex has also been lost, while walkways associated with buildings that have been removed are also no longer extant.³⁵³

The five surviving buildings and surviving portions of the dry stacked stone walls also help to convey the historic associations of the property.

While several trees and shrubs were removed when buildings were removed, and the historically wooded area in the northeast portion of the property is now an open grassy field, remaining vegetation at the Bishop home continues to convey a more formal pastoral character around the building complex. Mango, false kamani, avocado, and banana trees remain adjacent to the convent, while historic foundation plantings also exist adjacent to the remaining cottages and outbuildings. Ornamental plantings of trees and shrubs remain at Saint Marianne's Grave. Some of the ironwood pine trees planted along the east side of Bishop Home Road also remain and continue to convey the historic sense of arrival along the drive.³⁵⁴

353. Johnson, Draft NHL nomination update, 96–98.

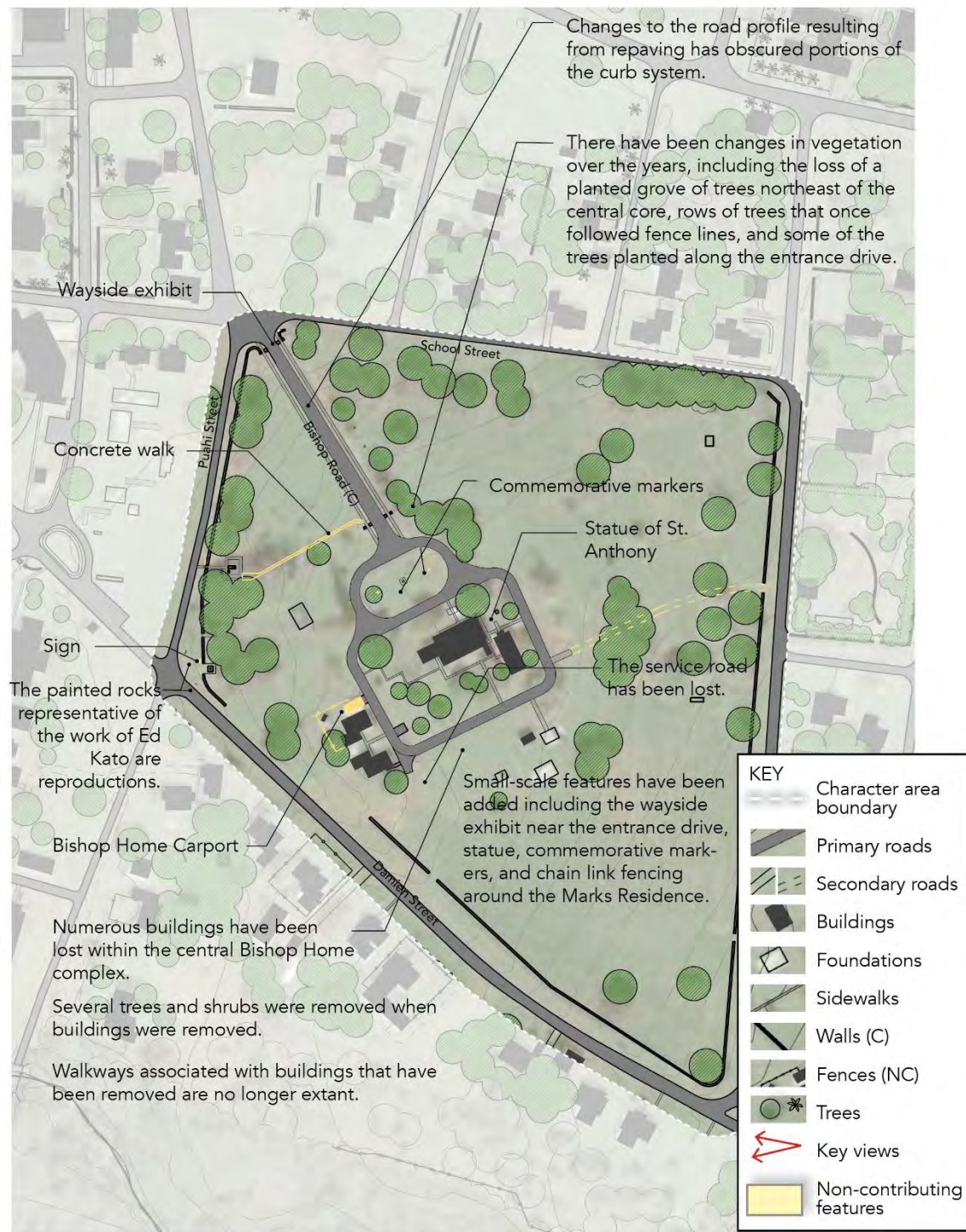
354. Ibid., 96–98.



Figure 255. Saint Marianne's grave, undated (top) and 2017 (bottom). (Source: KALA Kalaupapa Historical Society Album D PG 14 #085)

Small-scale features also survive from the historic period, such as the beehive shaped bake oven, the three grave markers, and elements of the Saint Marianne Grave site such as the concrete piers and chain surrounds (Figure 255). Small-scale features that post-date the period of significance and diminish the integrity include the wayside exhibit near the entrance drive, and chain link fencing around the Barbara Marks Residence yard. The painted rocks, representative of the work of Ed Kato, are reproductions. The original painted rocks began to fade and are now in the park collections.

Despite the several changes that have occurred at Bishop Home since the end of the period of significance, the character area possesses sufficient integrity to convey its historic associations due to the many surviving features and landscape characteristics.



Kalaupapa and Kalawao Settlements Cultural Landscape Report
Molokai, Hawaii

Bishop Home Character Area - Analysis and Evaluation

Figure 256. Bishop Home character area assessment. (Source: LSHLA)

Bay View Home Character Area

Summary Analysis. Located in the southwestern quadrant of Kalaupapa Settlement along the western Pacific Ocean shoreline, Bay View Home is one of the most intact historic group home complexes on the peninsula. Largely constructed between 1915 and 1917, Bay View Home is relatively formal in its layout and design, and cohesive in terms of architectural style and use of materials. Of the original designed complex, composed of five buildings set around a central open space and linked with concrete walks, only one of the buildings has been lost, while an additional building has been added. Built in 1937, the new building was constructed as a second dining facility for residents and was sited in such a way as to respect the original site plan. Also surviving is a perimeter access road, and the gate piers that historically marked the entrance into the complex. Residences and a Quonset Dormitory that line the perimeter access road to the south, and to the north, also post-date the establishment of Bay View Home, but were built during the period of significance. Two additional modest buildings were removed during the period of significance—a laundry and heating plant. The greatest changes that have occurred since the period of significance are the addition of concrete accessibility ramps, the loss of many of the plantings that once provided food and flowers used by residents for various purposes and a hedge that marked the boundary of the complex, expansion of ironwood pine tree stands, and increasing use of turf lawn areas for informal parking.

Also located within the Bay View Home character area is a cluster of buildings constructed in the 1930s to support the needs of those visiting the Settlement. These buildings closely edge Damien Street to the north of the Bay View Home entrance and are located in relatively close proximity to Kalaupapa Landing where visitors arrived at the Settlement. The buildings that form the visitor services cluster are all historic features that survive with integrity from the period of significance. Concrete walks at the visitor services complex follow historic alignments but are replacements of the historic sidewalks.



Figure 257. The first Bay View Home complex, circa 1907. View looking southeast. (Source: KALA Kalaupapa Historical Society Album G PG 43 #764)

Historic Conditions. The first Bay View Home was constructed in 1901 to provide care to residents with special needs. It was located along the shoreline in the southwestern part of Kalaupapa Settlement, west of the existing Bishop Home for Girls. The complex consisted of an eight-room building and a bathhouse. By 1911,

the building was enlarged to twenty-six rooms and whitewashed (Figure 257). Fire, however, destroyed both Bay View Home buildings in 1915.



Figure 258. Bay View Home, view south showing a concrete walkway leading from the entry on Damien Street to Building 4, now gone, circa 1938. The photograph also shows the concrete pier at the entrance edged by metal bollards and chain. (Source: KALA Helen Keao_00373 Album 023)



Figure 259. Bay View Home, view looking south showing layout of the buildings and walkways connecting the wards with the dining room in the center of the cluster, and the generally open character of the early landscape, undated. (Source: KALA Potter Collection KALA 17429)

Construction of a new Bay View Home began almost immediately. By 1917, the new facility consisted of four 12-room dormitory structures that could accommodate up to ninety-six residents and a dining room arranged in a formal, symmetrical layout around a central open space.³⁵⁵ Buildings had concrete pier

355. Ibid., 43.

foundations, single wall construction, tongue and groove siding, lanais across the front facade with diamond-patterned railings, and low overhanging roofs that were stylistically consistent with Hawaiian Plantation style architecture of the period. In 1918, the grounds at Bay View were graded, seeded with turf grass, and planted with fruit trees and ornamental trees and shrubs. Two large concrete piers were erected at the entrance to Bay View on the north side of the site along Damien Road, and a wood picket fence extended over 600 feet along the east, north, and south sides of the building complex.³⁵⁶ The shoreline of the Pacific Ocean formed the west boundary. In the 1920s, concrete walkways were added to connect the buildings (Figure 258 and Figure 259).

During the 1930s and 1940s, several buildings were added to the Bay View Home complex, including a serving kitchen located between the two dormitories on the east side of the complex, a Manager's Cottage, Heating Plant, Chapel, and Laundry. In addition to the Manager's Cottage (now Bay View Home Building 10A, a dwelling was built to the west potentially as housing for Settlement administrators (present-day Inouye Residence) (Figure 260). Hedges were planted inside the fence along Damien Street east of the entry gate and along the inside of the driveway further defining the boundaries. Additional plantings were placed near walkways and at the entrances to some buildings, generally giving an informal character to the landscape while maintaining the central open space surrounding the dining hall.³⁵⁷ A Transformer Station was built along Damien Street at the edge of the complex by 1950, while garages and a Telephone Station were built to the north of the Bay View Home complex prior to the end of the period of significance. In 1932, the dispensary building at Bay View burned down, and its functions were transferred to the Wilcox Memorial Building in the Visitor Quarters west of Damien Street.

356. Greene, *Exile in Paradise*, 296–297.

357. Johnson, Draft NHL nomination update, 103–104.

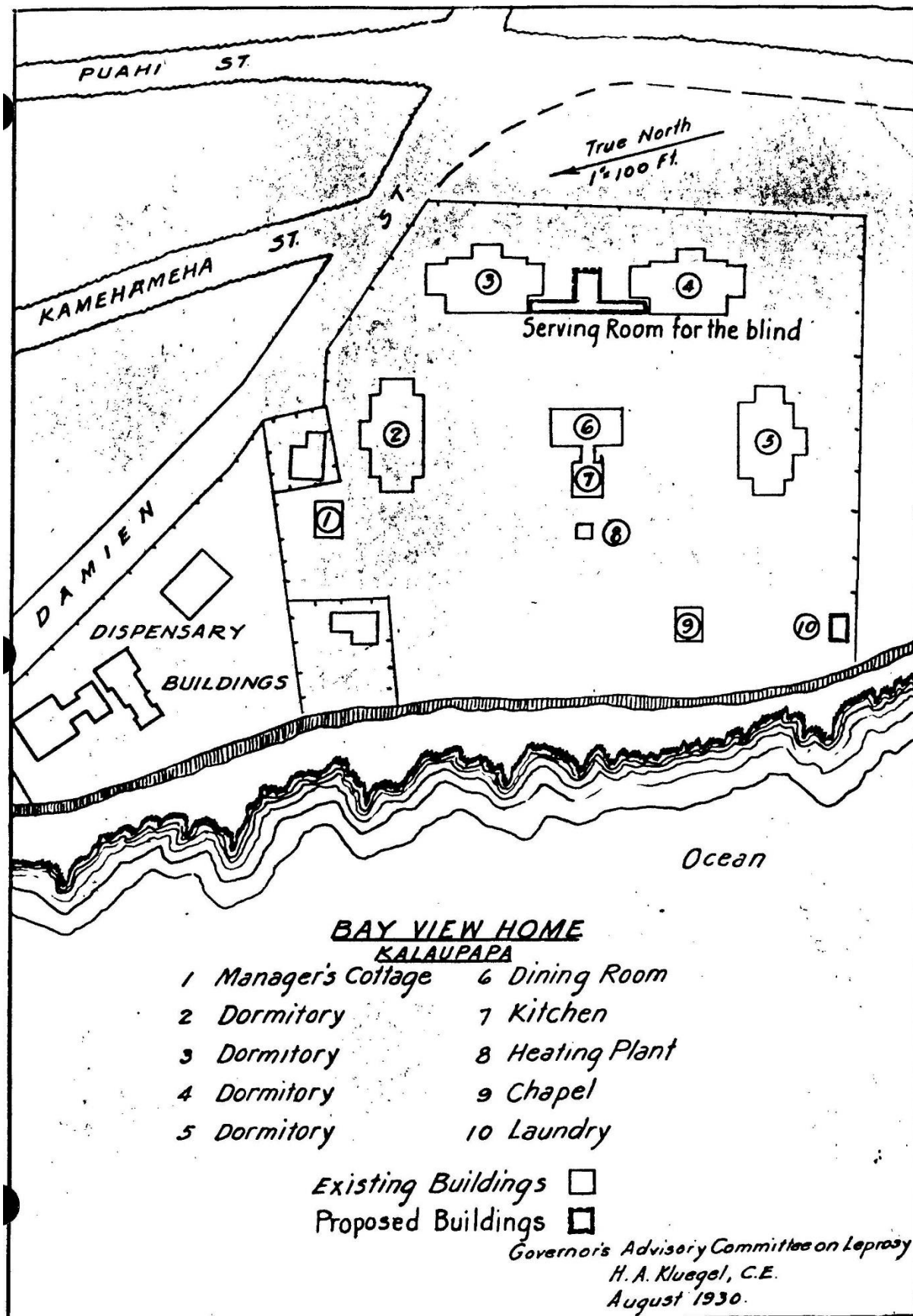


Figure 260. Plot plan of Bay View Home, 1930. (Source: Governor's Advisory Committee on Leprosy; Greene, 397)



Figure 261. Visitors' Pavilion, with fence and screen system to separate patients and visitors. View looking west, undated. (Source: KALA Kalaupapa Historical Society Album G, page 12, #667)

To the north, a cluster of visitor services facilities designed to accommodate friends and families traveling to the Settlement to visit with patients also emerged during this period. These buildings joined the existing Wilcox Dispensary (now Wilcox Memorial Building), constructed in 1906. They included the Visitors' Quarters, Visitors' Quarters Kitchen, and Visitors' Pavilion completed in 1933.³⁵⁸ The Visitors' Pavilion was an L-shaped building, 28 by 45 feet in size, and designed with different entrances for visitors and for patients (Figure 261). A long counter and wire screen extended the full length of the interior to maintain physical separation between patients and visitors. A double fence enclosed the buildings and a hedge was planted between the fences. Under the direction of Superintendent Judd, barriers between patients and staff and visitors began to be removed throughout the Settlement. At the Visitors' Pavilion, the fence was removed in the late 1940s.

During the mid-1930s, an access road was built at Bay View Home that extended between Damien Street and Puahi Street. In 1936–1937, the Bay View Loop Road was graded to between 12 and 18 feet and paved with asphalt macadam. Additional concrete walkways were added to the grounds connecting buildings with particular attention to the needs of the blind patients.³⁵⁹ This same year, a grove of coconut trees was planted along the shoreline, and in a row along the east boundary fence, behind the dormitories (Figure 262). A dwelling (present-day Elroy Malo Residence) and associated garage were built circa 1936 south of the Bay View Loop Road.³⁶⁰

358. With the exception of the Wilcox Memorial Building, which served as housing for the Sacred Heart Brothers for a short time, the visitors quarters complex did not specifically relate to the operation of Bay View Home. The complex, however, is grouped with the Bay View Home character area for its physical connection and present-day operational association.

359. Greene, *Exile in Paradise*, 398.

360. Johnson, Draft NHL nomination update, 44–45.

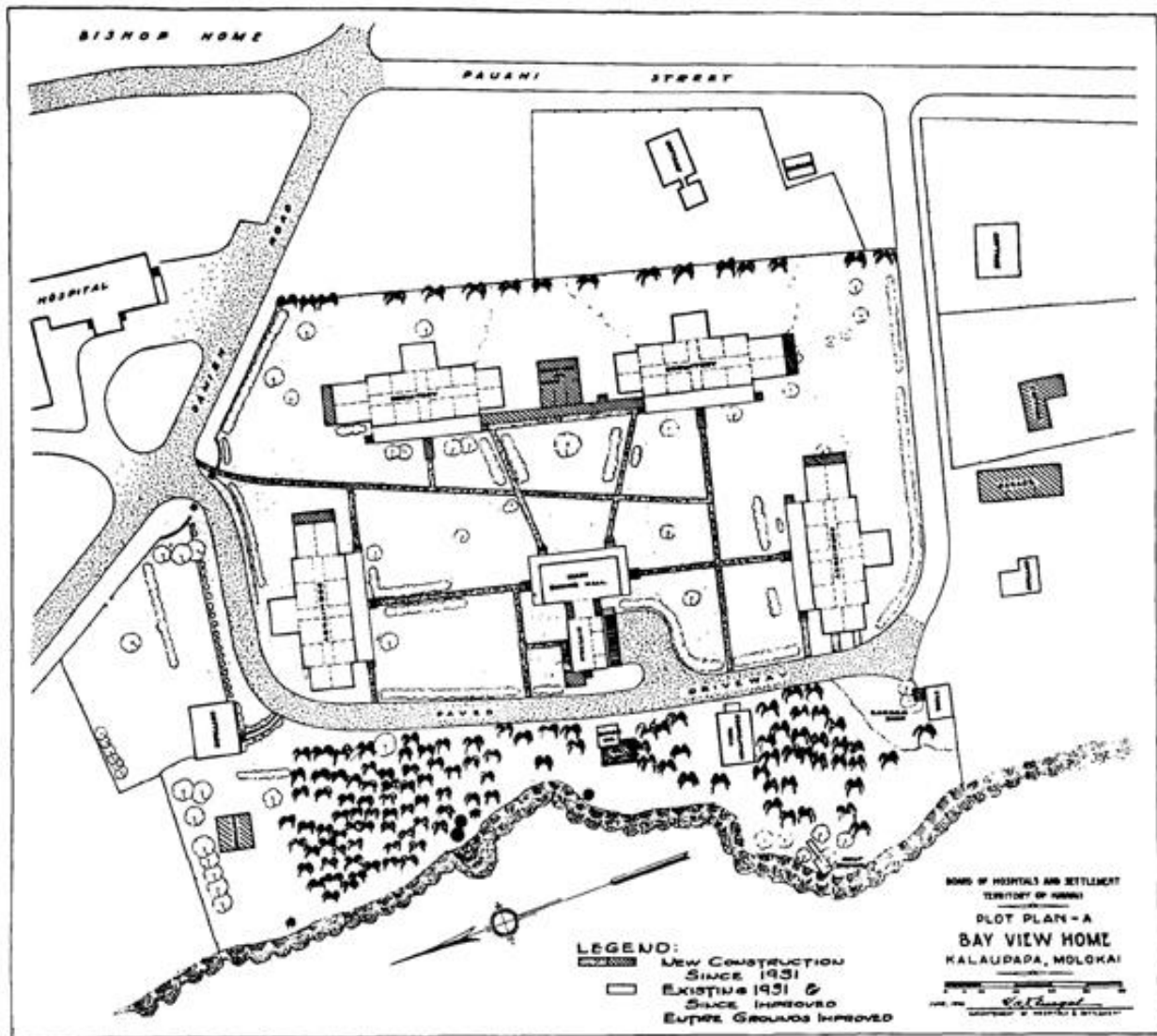


Figure 262. Bay View Home following improvements. (Source: Board of Hospitals and Settlement; Greene, 487)

In 1950, Bay View Home was renamed the Baldwin/Bay View Home for Men and Boys and placed under the management of the Brothers of the Sacred Heart. Within the number of patients entering the Settlement dwindling after the discovery of sulfone drugs to treat Hansen's disease in 1946, New Baldwin Home was no longer needed. In 1951, all remaining patients were relocated to Bay View Home and the vacant structures at the New Baldwin Home were demolished. Additional housing for Bay View residents was attained through acquisition of a surplus military Quonset hut which was placed next to the Elroy Malo Residence south of Bay View Loop Road.³⁶¹

Between 1956 and 1958, roads in Bay View were repaired and resurfaced with asphalt macadam.³⁶² At some point between 1964 and 1972, Bay View Home Building 4—the large dormitory on the south side of the built precinct—was removed, altering the original symmetry of the complex. The dormitory was not rebuilt.³⁶³ During the 1980s and 1990s, several of the walkways leading between the dormitories and dining hall were

361. Ibid., 51.

362. Ibid., 75.

363. Ibid., 102–111.

altered to accommodate wheelchairs through the addition of concrete ramps. Some of the ramps were constructed over the original sidewalks, cutting off the route of the original walkway.³⁶⁴



Figure 263. View southwest toward Bay View Home through the entrance piers from Damien Street, 2017.

Existing Conditions. Bay View Home is a relatively intact group home complex located in the southwestern corner of the Kalaupapa Settlement to the west of Puahi Street and overlooking the Pacific Ocean. Although the buildings have traditionally served as temporary housing for patients whose homes are being repaired, Bay View Home currently serves as staff and volunteer housing and National Park Service office space for the Natural Resource Program.³⁶⁵ The complex is comprised of three of the four original dormitories and Kitchen and Dining Hall built in 1916, and a second Dining Hall added in 1937 centered around open space (Figure 263). These historic buildings are similar in design, and representative of Hawaiian Plantation style architecture with concrete pier foundation, single-wall construction, tongue and groove siding, broad hip roofs, large lanais with diamond-patterned railings, and louvered gablets that project above the main entrances. The spatial organization of the Bay View Home is reinforced by the stylistically cohesive architectural complex of dormitory buildings or wards and dining room/kitchen buildings, all of which are painted a distinctive orange-tan color. Bay View Home is accessed via the asphalt-paved internal access Bay View Loop Road, built in the 1930s, that extends between Damien Street to the north and Puahi Street to the east. Metal bollard and chain edging edges Bay View Loop Road as it passes Bay View Home Building 1 to protect it from being hit by cars. Pedestrians enter via narrow, 3-foot-wide concrete walks that lead south from Damien Street to building entrances (Figure 264). Concrete piers mark the entrance at Damien Street. Dwellings and garages, as well as the former chapel/later recreation hall (Bay View Building 8) are sited along and outside Bay View Loop Road. Spur roads extend from Bay View Loop to provide access to service and utility areas associated with Bay View Dining Hall, a Tool Shed, and the garages. A grove of coconut palms and ironwood pine tree plantings edge the complex to the west, which overlooks cliffs associated with the Pacific Ocean shoreline. There are also other examples of cultural vegetation within the Bay View Home complex that historically were important to the community, such as a small stand of banana, avocado, mountain apple, and lemon trees, within the central courtyard. There are also three large mango trees located

364. Ibid., 103.

365. Juvik, *Ethnographic Study*, 97.

near the dormitories and kitchen. Other vegetation includes butterfly trees, bougainvillea, Christmas berry, plumeria, fan palm, and ti plants.



Figure 264. View southwest along the concrete walk and ramp system providing access to Bay View Home Residence 2, Bay View Home Dining Hall, and Bay View Home Residence 3, 2017.

To the north of Bay View Home is the linear arrangement of buildings that comprise the Visitor Quarters complex located along Damien Street south of Kalaupapa Landing (Figure 265). The Visitor Quarters buildings are managed by the DOH and continue to house short-term visitors. Specific structures include a Visitors' Quarters, constructed in 1933; the Wilcox Memorial Building, completed in 1906 as a dispensary; the Visitors' Pavilion, added in 1933 (Figure 266); and a Patients' Restroom constructed in 1940. Raised concrete walks link the buildings. The buildings are further unified through their consistent light yellow paint color and red trim. Located between the visitor services cluster and Bay View Home are several smaller buildings, such as Garage 524, built between 1950 and 1964; Garage 525, constructed by 1938; and a Telephone Station completed between 1938 and 1950. Further south is Bay View Building 10a, built as a manager's cottage for Bay View Home circa 1930.



Figure 265. View along Damien Street toward the visitor services complex, 2017.



Figure 266. View southwest of the Visitors' Pavilion, 2017.

Character Area Assessment. (Refer to Figure 267) All of the extant buildings and structures at Bay View Home are historic, along with the majority of the circulation features, helping to convey historic patterns of spatial organization, along with landform and topography and vegetation. Although diminished in extent, historic plantings survive, while key views also remain in evidence.

Natural systems and features associated with Bay View consist of the level landform and topography of the developed area, edged by steep cliffs and rock formations to the west along the Pacific Ocean shoreline. These conditions survive today similar to what was present historically.

Historic patterns of spatial organization, composed of the linear arrangement of buildings associated with the Visitor Quarter complex and the internally focused Bay View Home buildings as edged by Bay View Loop Road, Damien Street, and Puahi Street, also survive with integrity from the period of significance. Several historic buildings have been lost at Bay View, including one of the original dormitories, a heating plant, and a laundry. The loss of the dormitory, in particular, affects the integrity of the original design, although the building itself was lost during the period of significance. Additions to the complex include Bay View Dining Hall in 1937, which was sensitively sited between two of the dormitories, and several residential buildings along the outer edge of Bay View Loop Road. All of these changes occurred during the period of significance. The central open space, outer loop road, and pedestrian walkways, and groves of trees along the shoreline also survive from the period of significance to convey historic patterns of spatial organization.

Views that extend across open space to the Pacific Ocean and the pali are present throughout the character area, and are likely consistent in character as those present during the period of significance. Expansion of groves of ironwood pine trees along the shoreline has occurred and partially limits some historic views.

The Bay View Loop Road remains the only road through the site and retains its original alignment, although resurfacing projects have obscured the original concrete curbs in some locations. Damien Street remains in its historic location and continues to edge both the Visitor Quarter and Bay View Home complexes. While most of the pedestrian walkways retain their historic alignment, the physical character of several walkways at Bay View Home and some building entrances have been heavily altered through the addition of ramps and handrails to improve accessibility. These changes occurred after the period of significance in the 1980s and 1990s. While the concrete walks at the Visitor Quarter complex are in historic locations, the walks themselves have been replaced since the period of significance. These walks are elevated a few inches above the surrounding finished grade. It is not clear whether this was a historic condition that was matched when constructing the replacement walks.

The majority of the building complex constructed at Bay View between 1915 and 1917 survives, including three of the four original dormitories and the original Old Bay View Kitchen and Dining Room that frame the open space. A dining room structure, added in 1937, also survives between Bay View Home Residences 2 and 3. Additional buildings border Bay View Loop to the west and south. These include a Quonset hut, acquired from military surplus and added to the south side of the complex in 1950 to accommodate an influx of patients from New Baldwin Home; and several other residential buildings.

The Visitor Quarter complex also survives with good integrity. Most of the buildings date to the 1930s and have evidenced little change since their original construction. One of the most dramatic changes occurred during the period of significance when fencing and much of a hedge designed to maintain physical separation between patients and their visitors were removed on the authority of Superintendent Judd in the late 1940s. A segment of the hedge still marks the south alignment of the enclosure as a reminder of these features.³⁶⁶ The removal of the fence feature occurred during the period of significance, however.

Only fragments of the original plantings remain at Bay View today. Exceptions include the small bed of red hibiscus at the corner of the Old Bay View Kitchen and Dining Room, a remnant of a larger hedge that once surrounded the complex, and examples of several fruit trees that once were more prevalent at the home. The grove of coconut trees planted on the west side of the Bay View Loop road also remains. Much of the landscape continues to be maintained in turf grass. To the south, invasive ironwood pine trees have colonized the slopes at the edge of the complex, and the colony is expanding. Like other complexes throughout the

366. Johnson, Draft NHL nomination update, 336.

settlement, the loss of vegetation at Bay View Home, including most of the planting along driveways, walkways, and perimeters, has changed the character of the landscape from a lush tended place, to a sparser, institutional feel.

Several of the small-scale features present within the complex are historic. These include the metal bollards and chains along Bay View Loop Road and electrical system features. Non-contributing small-scale features include a wayside exhibit that interprets the Visitors' Pavilion, a fire hose box, and wooden trash can stand.

Bay View character area thus possesses a high degree of integrity for the period of significance with numerous surviving features and landscape characteristics that help to convey its historic associations.

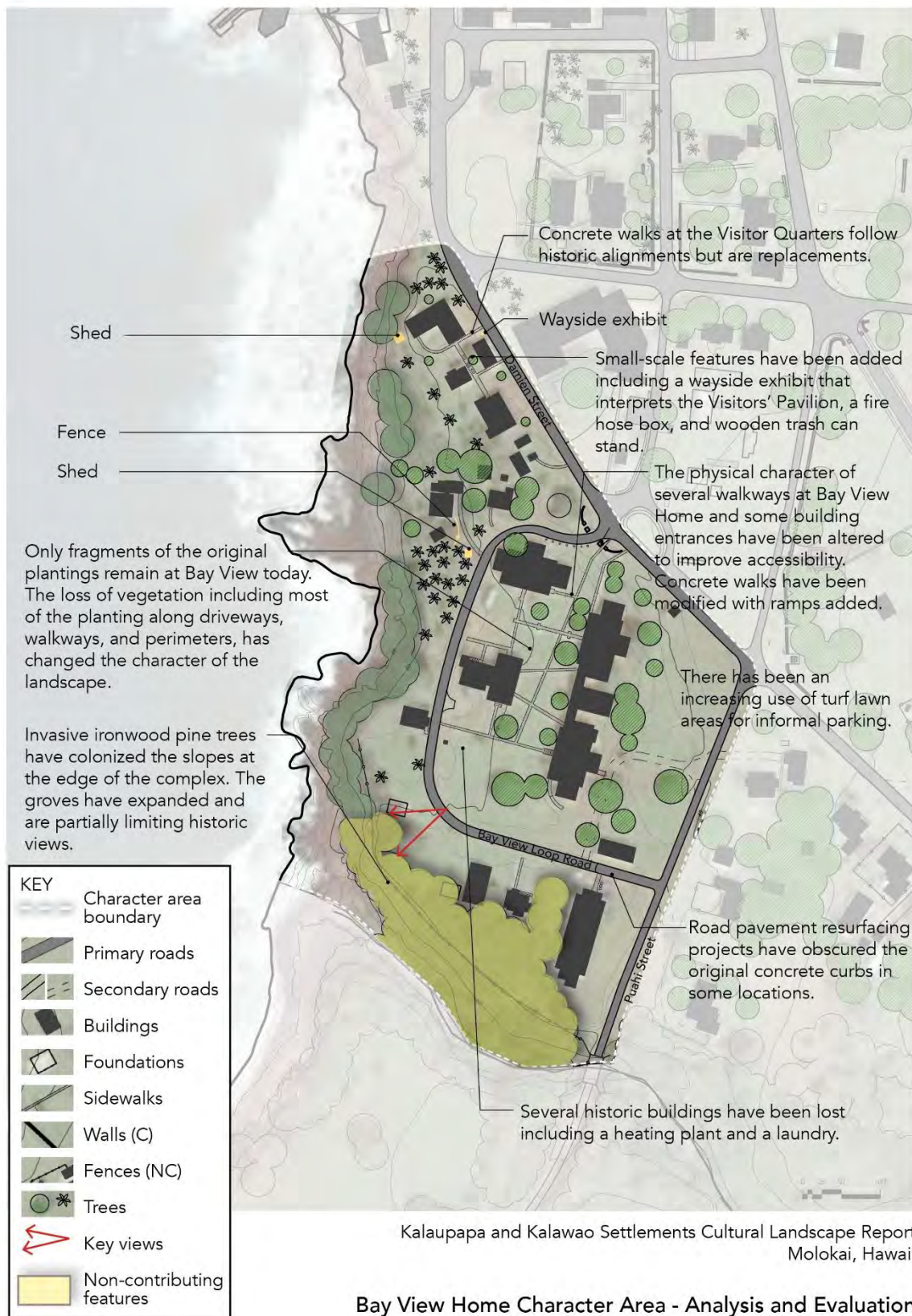


Figure 267. Bay View Home character area assessment. (Source: LSHLA)

McVeigh Home Character Area

Summary Analysis. Located the northeast corner of Kalaupapa Settlement, McVeigh Home remains one of the most intact historic complexes on the peninsula. Largely constructed between 1931 and 1938, the complex is relatively formal in design with similarly articulated buildings and structures closely edging a grid of internal access roads, and framed by plantings of trees, shrubs, hedges, windbreaks, and foundation plantings that help to distinguish public and private space as well as boundaries. Few of the buildings that comprised the original site plan developed in the 1930s have been lost. The majority of the remaining group-use structures and individual residential cottages are uniform and similar in design, scale, material, and orientation throughout the complex. Some residents have added fences to their yards, further dividing spaces that were not historically divided. There is variability in the material and style of these fences, most of which are not visually compatible with other historic structural components in the landscape. The historic internal road system follows the original alignment completed in the 1930s. Over the years, all of the roads have been resurfaced, resulting in a building up of the asphalt surfacing and a diminishment of the elevation of the original concrete curbs. This change in the original profile is compounded by the growth of turf grass over the top of the curbing in several locations. These conditions have altered the historic character of the road system. Narrow concrete walkways, many of which are historic, provide access from the road to stairs and the porches of individual buildings and cottages, including the McVeigh Social Hall. Concrete and wood ramps with handrails have been added to several of the individual buildings and cottages to facilitate entry for older residents and those with mobility impairments. Evidence of windbreak plantings of ironwood pine trees planted in the 1930s survives at the north and south ends of the complex, while a grove of coconut palm trees planted around the same time exists along Staff Street. Sections of these plantings have been lost as a result of later building additions and natural causes. Many other historic plants and groupings remain but are in poor condition, structurally unsound, or significantly overgrown.



Figure 268. The first McVeigh Home, which was lost to fire in 1928. View looking east, undated. (Source: KALA Kalaupapa Historical Society Album, G PG38 #745)

Historic Conditions. McVeigh Home was established in 1910 during the relocation and expansion of new facilities for patients on the west side of the peninsula. Initially known as the McVeigh Home for White Foreigners, the group home was designed to accommodate the lifestyles and dietary preferences of the small number of white patients in the settlement.³⁶⁷ By 1912, the McVeigh Home consisted of a 24-room dormitory, a hospital ward, a kitchen/dining room, and a social hall. Wood picket fence enclosed the buildings. Palm trees were planted in front of the fence, and ornamental shrubs were used as foundation plantings in front of the buildings (Figure 268).³⁶⁸ By the next year, however, there were only eight white patients living in the dormitory; by 1914, McVeigh Home was open to other nationalities.

In 1928, McVeigh Home burned to the ground. It was partially rebuilt in 1929 to include housing for men and women, a dining hall, and a kitchen. By the following year, plans and construction specifications were developed to significantly enlarge McVeigh Home. As proposed in 1930, the complex was spatially designed as a tightly knit community, with a recreational pavilion referred to as a Pool Hall and small common area within the center near the entrance edged by dormitories and a social hall. A picket fence edged the complex along the adjacent road (Figure 269). Surrounding these larger facilities were rows of modest patient cottages neatly sited on a grid of four narrow streets extending east from Staff Road (also known as McVeigh Home Street) and two interior cross streets within the central part of the development.



Figure 269. The pavilion or Pool Hall at McVeigh Home, before the walkways were added, 1932. Note the wood picket fence along the road enclosing the McVeigh Home. View looking northwest. (Source: KALA Kalaupapa Historical Society Album, G PG41 #759)

Construction occurred over several seasons beginning in 1930, with the building of two new eleven-room dormitories on the north and south sides of the new kitchen/dining room. This small grouping of buildings created a U-shaped enclosure around a small open area to the west. The small recreation pavilion planned for this open area was partially framed that year. The following year, a heating plant was added along with six wood-frame cottages for patients on the north side and eight cottages on the south side of the McVeigh Home complex. A boiler plant and the recreation pavilion were both completed in 1932. Similar to other group

367. Ibid., 44.

368. Ibid., Greene, *Exile in Paradise*, 311.

homes, the extent of the McVeigh Home complex was defined with a combination of dry-laid stone walls and vegetation. Stone walls marked the boundary on the north and east sides of the complex. The roads were laid out in a simple grid, graded, paved with asphalt macadam, and edged with concrete curbing in 1931. Windbreaks of ironwood pines was planted along the northern and southern margins of the complex (Figure 270 and Figure 271). On the west side along Staff Street, coconut palm trees were planted extending south across the full length of the development. An area dedicated to raising chickens was located just outside the precinct, separated by the wall system, to the southeast.

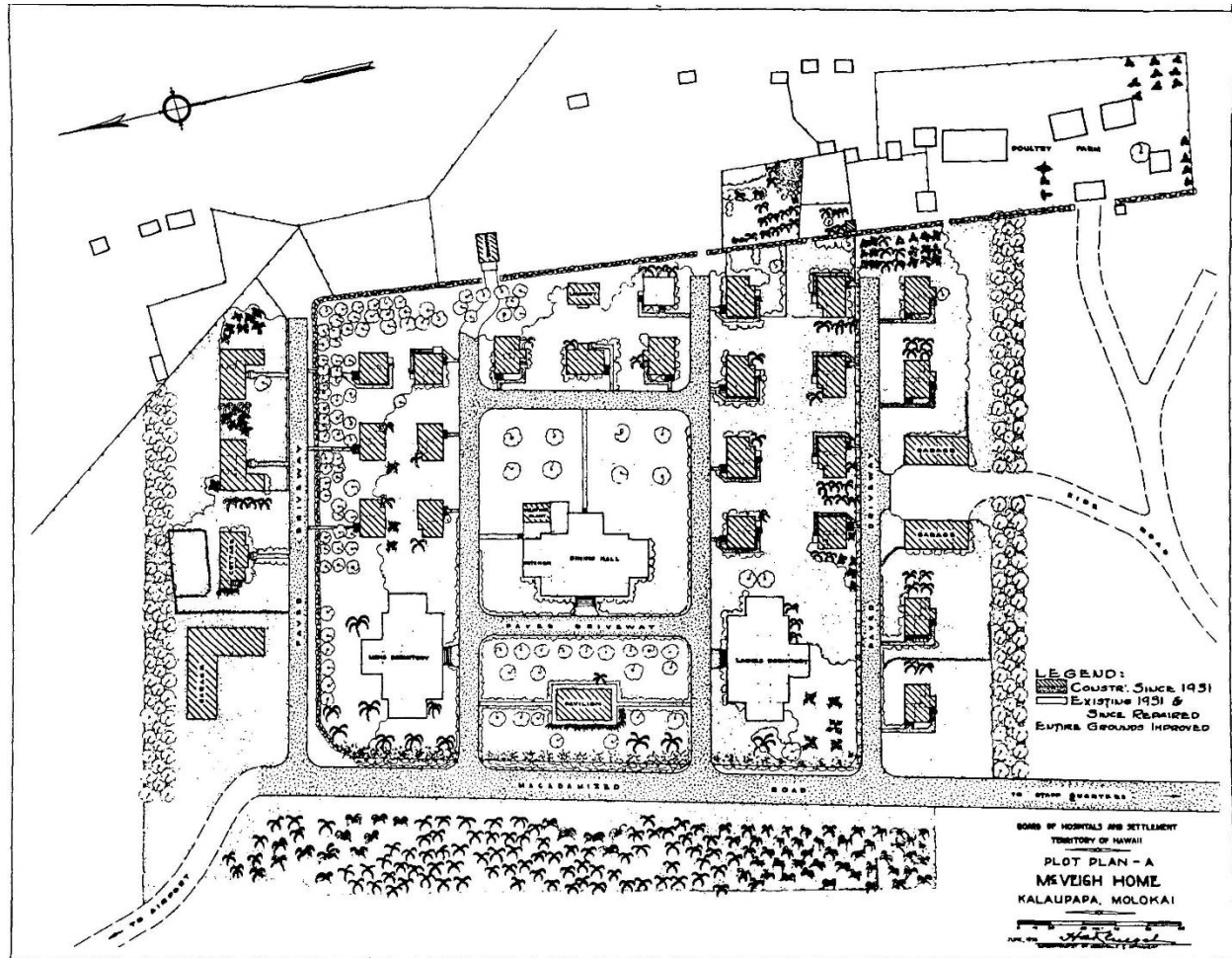


Figure 270. McVeigh Home plot plan showing improvements completed during the 1930s. (Source: Board of Hospitals and Settlement; Greene, 479)

Although there was some variation in the floor plans for individual cottages, they were architecturally similar in style, form, scale, material, and detail. Cottages included small porches, double-hung windows, and exteriors finished with either 1x3 board and batten, or vertical tongue and groove siding (Figure 272). The buildings were painted white, with green trim, creating a cohesive and unified character to the overall design of the complex. All quarters were equipped with electricity, indoor plumbing, and hot water.³⁶⁹ Sited with shallow setbacks, most cottages had short concrete walkways linking the front entrance to the access road.

Through the mid-1930s nine larger cottages were added to the complex, along with two, four-stall garages sited behind the cottages, and one “L”-shaped garage large enough for seven cars at the northwest corner of

369. Johnson, Draft NHL nomination update, 46.

the development. A final residence was added in 1936. This was a one-room house for the McVeigh Home manager.³⁷⁰



Figure 271. Aerial oblique view of the McVeigh Home, circa 1933, showing the formal spatial organization, circulation, building complex, and newly planted trees defining the edges of the development. View looking south. (Source: KALA Boland 015)



Figure 272. McVeigh Home under construction circa 1931, showing new roads and curbing, typical cottage styles, and ironwood pine windbreak behind. View looking southeast. (Source: KALA Kalaupapa Historical Society Album, G PG38 #745)

370. Ibid., 111–119.



Figure 273. View of McVeigh Home showing well-established shrub plantings and palm trees planted around the dormitory building. View looking northeast. (Source: KALA Kenso Seki_KALA 12600_858)

Formal vegetation patterns defined the communal areas of McVeigh Home during the 1930s through the 1950s. In addition to the double row of coconut palms to the west, formal plantings existed around the dining hall, kitchen, and pool hall. The private cottages, in contrast, were planted by the residents, especially in the later years and featured more individual preferences and a varied use of shade trees, fruit trees, plantings for windbreaks and privacy hedges, and foundation plantings, especially around the front facades of the cottages (Figure 273).³⁷¹

As the number of patients living at Kalaupapa began to decline in the 1950s, McVeigh Home was converted from a group home to general housing. Only a few additional residences and outbuildings were built in the 1950s and 1960s. During this time, the roads were repaired and resurfaced with asphalt between 1956 and 1958.³⁷²

By 1960 both dormitories had been converted to single occupancy apartments, affording residents more independence. Large enclosed boxes were added to the porches of the several cottages where patients could have meals delivered when the main dining room was closed and converted to use as a social hall.³⁷³

Beginning in the 1990s, individual cottages at the McVeigh Home were vacated as patient homes and converted to use for DOH and NPS personnel housing.³⁷⁴

All roads in the settlement were repaired and resurfaced again in the early 2000s, including those at McVeigh Home.³⁷⁵

371. Ibid., 79.

372. Ibid., 75.

373. Ibid., 51.

374. Ibid., 111–119.

375. Ibid., 75.



Figure 274. View east toward the Social Hall along one of the internal access roads associated with McVeigh Home, 2017.

Existing Conditions. McVeigh Home is a tightly-clustered development composed of cottages, dormitories, and shared recreational facilities closely edging an internal road system. The site plan focuses on a small central common area marked by community buildings (Figure 274) and edged by dormitories to the north and south and the adjacent public roadway—Staff Street—to the west. The central common area is edged beyond by the more personal and private spaces of a residential neighborhood formed by nineteen small cottages sited with narrow set-backs along four east-west and two north-south oriented narrow roads. Support and service structures are grouped beyond the cottages along the periphery of the complex. The narrow 10 foot set-backs of the cottages allow for small front yards. The lots are also narrow and short, so that side and rear yards are also relatively modest. Interior circulation remains in place from the early 1930s and consists of four narrow streets that extend east from Staff Street, and two connecting roads in the center of the complex. Interior roads are 12 feet wide and paved with asphalt. Concrete curbs also remain but the extent and character has been significantly diminished due to successive repaving projects that have raised the finished level of the road in relation to the curb, and in several areas, curbs are not fully visible because they are covered by vegetation. Short concrete walkways, 3- feet wide, link individual buildings to the roads. Pedestrian circulation throughout the McVeigh Home generally follows the roadways. There are no pedestrian sidewalks along the roads or linking the buildings.

One of the public recreational facilities, the Pool Hall (Figure 275), faces Staff Street at the center of an open lawn framed by three of the internal streets and Staff Street. To the east is the Social Hall, while McVeigh Dormitory and McVeigh Home Residence 12 frame the open space beyond the roads. Adjacent to the Social Hall is a concrete Art Deco style Boiler Room (Figure 276) and the foundation ruins of a former structure now planted with oyster plants. Nineteen single-story wood-frame cottages remain from the 1930s and comprise a uniform and cohesive residential building cluster. All of the cottages were constructed using standard plans and while there are some variations, most of the cottages are small, one-room or two room structures on wood post and concrete pad foundations with vertical skirting, and vertical tongue and groove or board and batten siding. All have a small front porch and double-hung wood windows. Utility structures associated with the cottages such as garages, carports, storage structures, and sheds are simple and vernacular in character, and are generally sited along the perimeter of the complex, behind individual cottages.

Plantings in the central area include heliconia, shell ginger (*Alpinia zerumbet*) and a variety of mature ornamental shrubs and trees including shower trees, cypress, butterfly trees, plumeria, hibiscus, and sago palm (*Cycas revoluta*). Landscaping around the historic cottages today varies considerably and tends to reflect the interests and efforts of the resident. Plants historically used to create privacy hedges between buildings, windbreaks, and foundation plantings largely remain, but many of these plantings have grown and matured beyond the original intent, and in some cases, have eroded the open and character of the landscape. Vegetation remaining around individual cottages today includes mango, papaya, ti, chili pepper, citrus, banana, hibiscus, bougainvillea, elephant ear, croton, shell ginger, oyster plant, and panax, which comprises most of the hedges and vegetated privacy screens between residences (Figure 277). The double row of mature coconut palm trees west of Staff Street planted during the period of significance also remains. Some of the individual trees may be potentially hazardous, or too tall for easily harvesting the coconuts that may also present a hazard. On the east and north sides of the complex, the historic dry stacked lava rock walls are present and continue to reflect the original extent of that built in the 1930s. Within the overall system, however, there are breaks in the walls and segments that are either missing or in poor condition, with loose and missing stones and vegetation growth covering some sections. Individual properties are often marked by wood, chain link, and lattice fencing, often with the appearance of a vernacular method of construction and the use of salvaged materials. These fences vary segment the landscape both physically and visually. Fencing appears to be a later addition to the complex that has served to change the spatial relationship between cottages.



Figure 275. View west toward the Pool Hall from one of the internal access roads associated with McVeigh Home, 2017.



Figure 276. View southwest toward the Boiler Room, 2017.



Figure 277. View southeast of one of the streetscapes illustrating hedge and tree plantings associated with individual cottage properties, 2017.

Character Area Assessment. (Refer to Figure 278) McVeigh Home possesses a high degree of integrity and continues to reflect the historic designed landscape proposed and built during the early 1930s. The character area possesses integrity of historic spatial organization, circulation, buildings and structures, and the use and character of vegetation. Although views have been impacted by proliferation of woody trees along the northern, eastern, and southern boundaries, views internal to McVeigh Home retain a good degree of integrity. The former site of a chicken farm that supported food production during the period of significance is obscured by volunteer vegetation east of the perimeter wall.

McVeigh Home continues to convey historic associations with natural features and systems, including siting of the complex on a relatively level land, and management of stormwater through the use of catch basins and culverts that convey water from roads and other areas beneath Staff Street to the lower lying ground to the west.

Patterns of spatial organization continue to reflect the broad principles of the original site design that focuses on a central common space edged by a small cluster of community-oriented structures, and further surrounded by individual residential cottages, sited along an internal road system of narrow streets with minimal setbacks. A few of the original buildings have been lost in the northern section of the complex, diminishing these patterns of spatial organization to a degree.

As noted, internal views within the complex retain a high degree of integrity as visual connections between central roads and historic built features remain visible except where tall hedges have been planted in the front yards of the cottages. Views to the north, east, and south have become obscured by volunteer vegetation that now forms thick stands of woody growth. Windbreaks planted in the 1930s along the northern and southern margins of the complex appear to have allowed for filtered views that are now blocked. The land to the east of the perimeter wall was formerly open and visually accessible but is now completely obscured by volunteer vegetation.

Circulation systems and features also possess a high degree of integrity with all of the original roads and most original sidewalks present. One significant exception is the missing sidewalk that provided access to the north and south entrances at the McVeigh Pool Hall. As noted, the concrete curbing that originally defined road margins has become obscured by subsequent road paving and the growth of grass over top of the curbing.

The majority of the original buildings at McVeigh Home survive with integrity from the period of significance. Only a few buildings have been lost or replaced, including two east of the Social Hall, and three east of McVeigh Dormitory. One of the cottages within the southern half of the complex is also on the verge of collapse. There are only three modest non-contributing structures within the character area, which are all outbuildings. The dry stacked stone wall built as part of the original site plan to the east of the complex also survives, although it has been broken in places and some sections are in poor condition.

Although a significant amount of the ornamental vegetation planted at McVeigh Home during the historic period has been lost, some vegetation does remain from early landscape work including ironwood trees on the north and south sides of the complex, and the double row of coconut palms along Staff Street. In addition, throughout the McVeigh Home, the continuous use of plants for privacy hedges, windbreaks, and foundation plantings around individual cottages is evident and reflects historic patterns and plant palettes.

Historic clothes lines and electrical system features are also present and convey historic associations. Fencing appears primarily to be a later addition that is non-contributing and impacts integrity of design by altering the relationships between some of the cottages.

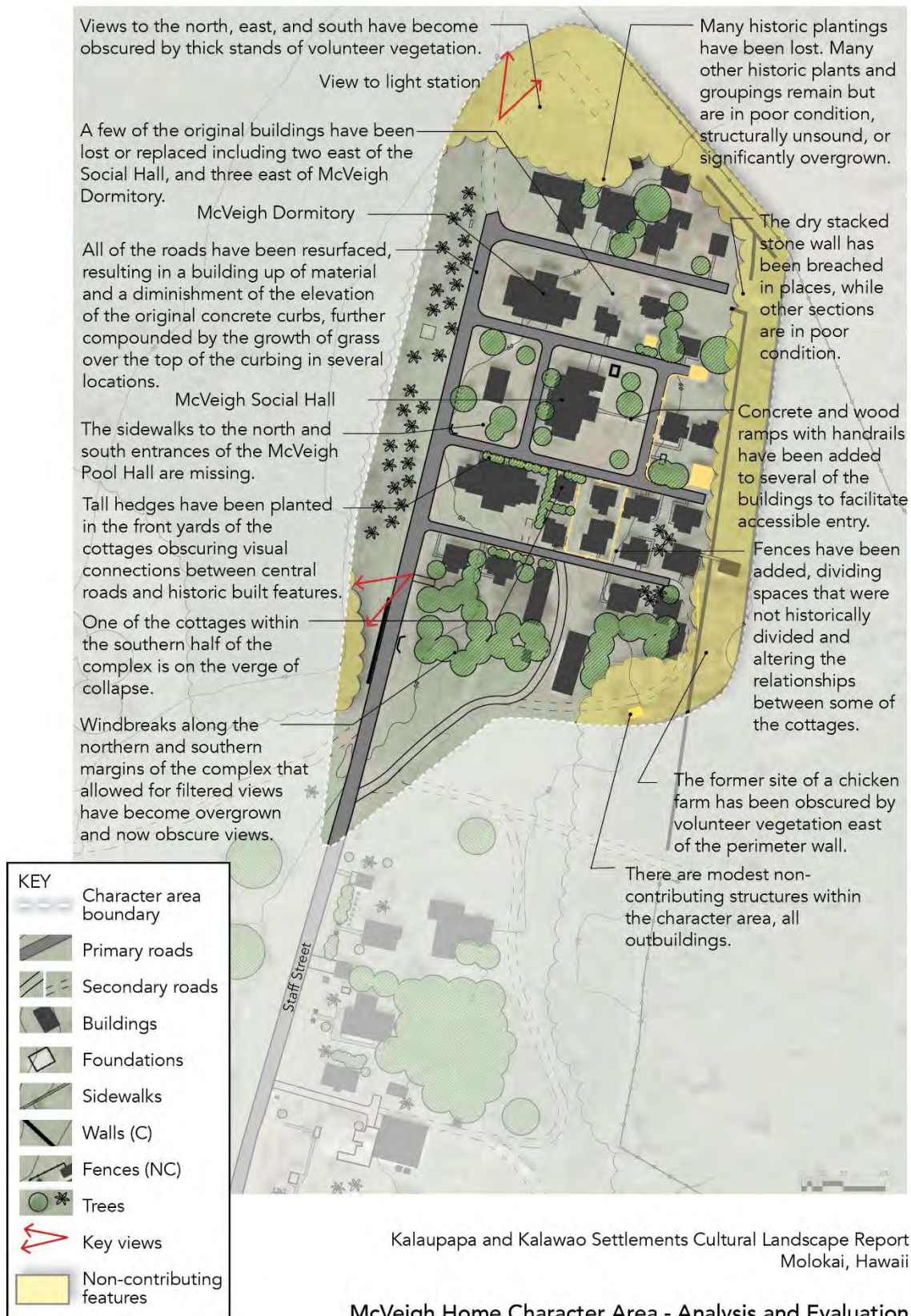


Figure 278. McVeigh Home character area assessment. (Source: LSHLA)

Staff Row Character Area

Summary Analysis. Staff Row character area is located in the east-central portion of Kalaupapa Settlement. It is edged by Staff Street to the west and overlooks the open greensward to the east of Paschoal Hall. The character area possesses modest integrity due to changes that have occurred since the period of significance. Examples of the late nineteenth and early twentieth century development of this cluster as a complex of staff housing include the Dentist's Residence, Resident Physician's Residence, and Assistant Resident Physician's Residence, built in 1892, 1901–1902, and 1905–1906 respectively. The first feature established at Staff Row was the Settlement Superintendent's Residence circa 1890–1891; the residence burned in a fire in 2016, however. Today, the foundation footprint and entrance stairs survive to indicate the location of the former structure. Other changes have entailed the addition of four garages and a Freezer Building after the period of significance, modification of building entrances to accommodate accessibility needs, and the addition of a replica fence at the Residence for Single Women, a building added to the complex in 1932. The fence recalls one the character defining features of the complex removed during the period of significance. As initially developed, the complex was separated from the remainder of the settlement by a system of fences and gates that signaled the mandated separation of staff and patients. The fences were removed in the 1940s on the recommendation of Superintendent Judd as part of a settlement-wide effort to remove barriers between patients and staff. The gate posts survive however to indicate the original location of the fences, along with the replica fence, and a row of shrubs that form a hedge. Other surviving historic features present within the complex are concrete walks that lead to the building entrances and between the Residence for Single Women and site of the former Superintendent's Residence, rows of coconut palm trees, and other ornamental plants around building foundations and yards.



Figure 279. The superintendent's residence at Staff Row was built in the late nineteenth century. Additional residences for other staff were built later along Staff Street. Picket fencing and gates marked the complex along the road. View looking east. (Source: KALA Potter Collection KALA17429)

Historic Conditions. Staff Row evolved over several decades to provide separate living quarters for doctors and medical staff working at the settlement.³⁷⁶ The earliest buildings were constructed at the eastern edge of the emerging Kalaupapa Settlement prior to the relocation of most of patients from Kalawao in the

376. Ibid., 62.

1890s. The first structure built was the Superintendent's residence, built circa 1890–1891 (Figure 279). This was followed by construction of a house used by the dentist on his visits to the settlement.³⁷⁷ The Resident Physician's house was added north of these two buildings in 1901–1902 and a residence for the Assistant Resident Physician built in 1905–1906. By 1908, these four buildings formed a row that faced the adjacent road with consistent setbacks. Wood picket fencing was built along the road in front of the houses, with gates on axis with the building entrances. Each house was designed for a family and included servant quarters and a small yard with outbuildings located behind the house. Ornamental plants were added around the houses. The complex was edged by a dry stacked stone wall to the north, east, and south.



Figure 280. The new cottage for nurses and single women, referred to as the Residence for Single Women, was built in 1932 at the south end of Staff Row. Coconut palm trees were planted along the fence. View looking southeast, circa mid-1930s. (Source: KALA Potter Collection KALA17429_A)

No additional development occurred at Staff Row until the 1930s when upgrades were made to existing buildings; new buildings were constructed, and significant improvements were made to the grounds. In 1932, a new building was added to staff row to provide housing for the nurses and single women working with the medical staff. Located along Beretania Street, the new building was a large H-shaped structure, 60 by 70 feet in plan with eleven bedrooms, shared baths between the rooms, a dining room, and a kitchen. Like many of the buildings in the settlement the Residence for Single Women was designed with elements of the Hawaiian Plantation style architecture, including tongue and groove siding, wood battens, and a hip roof. The building included a screened lanai that wrapped around the facade on the west side of the building creating a small interior courtyard with entrances to each wing of the building. A concrete walkway, 3 feet wide, extended from this interior courtyard all the way to the road (Figure 280).

377. Greene, *Exile in Paradise*, 423. As noted in Greene, when staff visitors came, they stayed in the dentist's house, and the dentist moved in with the resident physician. The building continued to be used this way, and in 1938 was labeled as a visitor's quarters on the plot plan of Staff Row illustrating proposed improvements by the Board of Hospitals.



Figure 281. The Resident Physician's Residence, July 1, 1932. Note the wood picket fence and gate, hedges against the fence, and vegetation surrounding the house. View looking southeast from the road. (Source: KALA Kalaupapa Historical Society Album F PG 49 #612)

In 1934, the Resident Physician's Residence received a new kitchen, bathroom, and laundry (Figure 281). Over the following years other residences were improved with additions and upgrades. New structures including two garages, servants' quarters, a laundry, and a small cottage, known as the Electrician's Residence, were added. With the exception of the new garages, all of these additions were sited behind and to the east of the residences in small yards.

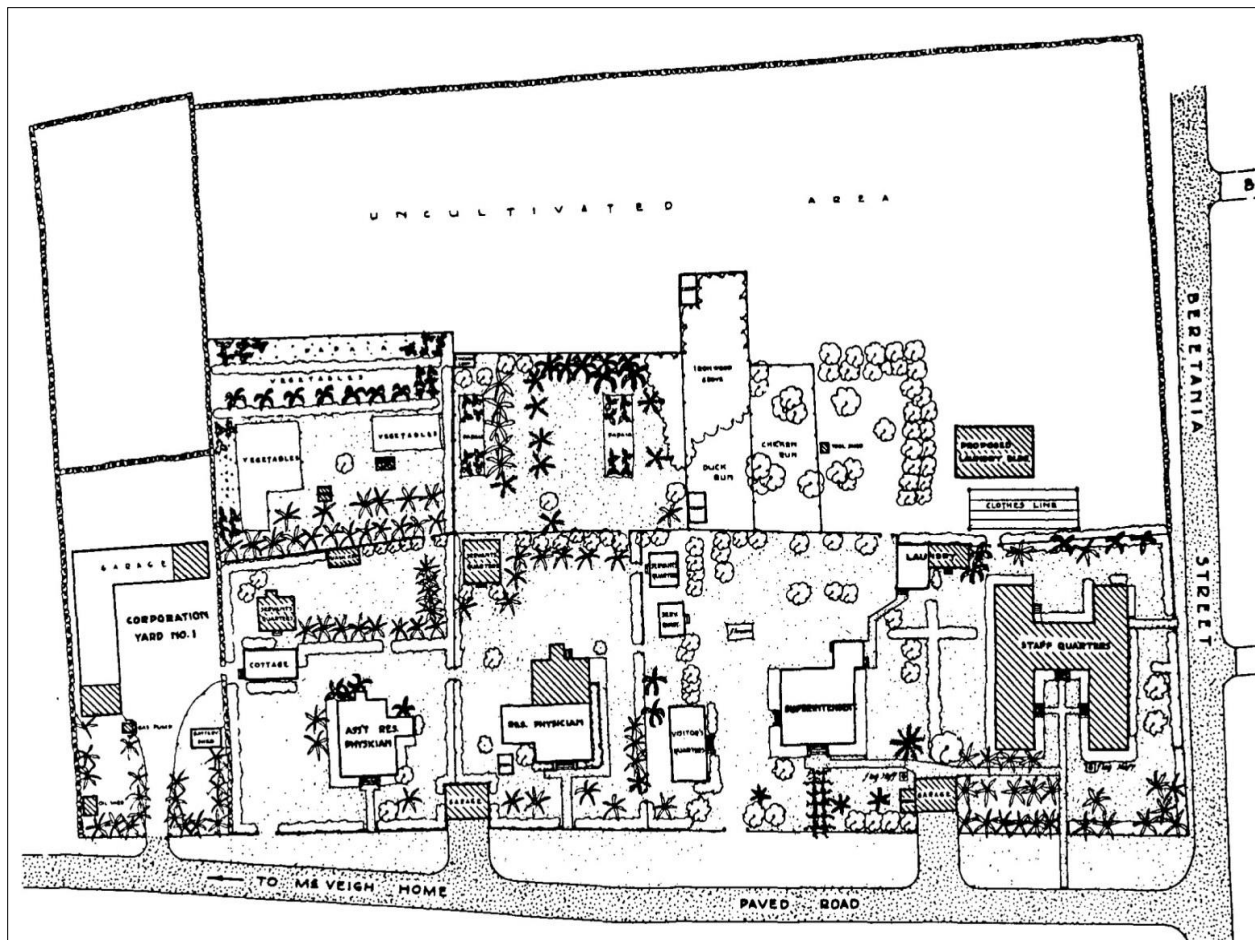


Figure 282. Detail of a circa 1930s plot plan for Staff Row showing vegetable gardens and utility areas behind the residences. (Source: Board of Hospitals and Settlement, June 1938, Annual Report for the Fiscal Year Ended June 30, 1938)

In addition to locating outbuildings, the yards behind the residences were used for outdoor recreation and to grow food. An area east of the rear yards was carved out of an uncultivated field east of the settlement to create spaces for gardens and farming-related activities including a chicken yard, duck run, and two large fenced areas with vegetable gardens. Each of these areas was further divided with fences and hedges creating a relatively contained agricultural yard behind each residence. In 1936, the stone wall on the south side of the Residence for Single Women was removed and a new fence and gate built with a concrete walkway providing access to the building from Beretania Street. Another building was added in 1940 to serve as a laundry room and apartment behind the Residence for Single Women. Yards shown on a 1930s plot plan (Figure 282) appear to be defined by trees, hedges, and windbreaks. A double row of palms in front of the Residence for Single Women echoed other plantings along the front of the residences and helped unify the character of the precinct. Panax hedges planted in the side yards between residences, and along fences in the rear yards, provided windbreaks and visual screening further defining and organizing functional areas. Other plantings included mango, date palm, plumeria, hibiscus, banana, and papaya. By 1938, a visitor observed that Staff Row was “overshadowed by huge coconut trees, and the homes were almost hidden by banana trees and banks of flowers.”³⁷⁸

378. Greene, *Exile in Paradise*, 476.



Figure 283. View of Staff Street prior to paving in 1935. Note the fences along Staff Row to the right, and the open character of the landscape west of the road that is now heavily impacted by tree cover. View looking north. (Source: KALA Kalaupapa Historical Society Album E PG 16 #479)

Internal circulation at Staff Row was minimal and limited to 3-foot-wide concrete walkways that provided access through the fenced gates on the west side. Concrete posts with chamfered edges and cap stones marked the entrances to the Superintendent's Residence and the Resident Physician's Residence through the picket fence, giving both a more formal and institutional character. Vehicular circulation to Staff Row was limited to Staff Street on the west side and short access roads and driveways leading to the garages along the road. Staff Street was paved along with most primary roads within the settlement in 1935–1936 (Figure 283).

After 1946, as restrictions requiring the separation of patients and staff were eased following discovery of new drugs to treat Hansen's disease, many of the physical barriers throughout the settlement were removed including the wood picket fence in front of the residences at Staff Row.³⁷⁹ Despite the declining patient population at Kalaupapa, new structures continued to be added to Staff Row. A new Guest Cottage was added south of the Residence for Single Women across Beretania Street, and a small building added east of the Assistant Physician's Residence between 1950 and 1964.³⁸⁰ In 1950, one of the buildings located at Staff Row was relocated to the open area near New Baldwin Home, and repurposed as the Slaughterhouse Restrooms.³⁸¹

After 1969, the Board of Health began to consolidate services at Kalaupapa and at Staff Row. The Superintendent's Residence was converted into a central kitchen and dining room that provided meals for Settlement residents. The building unfortunately burned to the ground in September 2016. Other changes at Staff Row since 1969 have included the addition of a large Freezer Building in 1975, and several carports to replace earlier garages.³⁸²

379. Johnson, Draft NHL nomination update, 50.

380. *Ibid.*, 122–126.

381. *Ibid.*, 120.

382. *Ibid.*, 122–126.



Figure 284. View north across the site of the former Superintendent's Residence, which burned in 2016, toward Dentist's Residence, 2017.

Existing Conditions. Staff Row remains a primarily linear arrangement of residential parcels located along the eastern edge of Staff Street overlooking Kalaupapa Settlement. All of the residences are historic buildings constructed during the late nineteenth and early twentieth centuries. Missing, however, is the first dwelling built at Staff Row in 1890–1891 for the Settlement superintendent. The building was lost in a fire in 2006, but the foundation ruins and stairs leading to the entrances survive today (Figure 284). Historic gates and a replica fence at the Residence for Single Women survive to suggest the alignment of picket fencing that fronted the dwelling cluster until the 1940s (Figure 285). Overall there are eight historic buildings located within the character area, and five buildings that are later additions. The historic buildings include, from north to south, the Electrician's Residence, Assistant Resident Physician's Residence (Figure 286), Resident Physician's Residence (Figure 287), Dentist's Residence, Laundry Room and Apartment, Residence for Single Women, and Guest Cottage. The Guest Cottage is the only building in Staff Row located south of Beretania Street. The extant residences are all relatively modest in size, and representative of the Hawaiian Plantation style of architecture found throughout Kalaupapa. The non-historic buildings include three carports, a shed, and a Freezer Building. The garages are vernacular in character, while the Freezer Building is industrial in character. The Freezer Building stands out visually due to its white color. Due to the loss of the Superintendent's Residence, the Freezer Building is visible from Staff Street. Other historic features include narrow, 3-foot-wide concrete walks that lead to the entrances of most of the buildings. A contemporary access road is one of two vehicular circulation features. The road arises from Staff Street as a paved route. East of the Freezer Building, it continues as an unimproved access road. Another unimproved access road leads from Beretania Street to the Laundry Room and Apartment building west of the Residence for Single Women. A historic grove of coconut palms associated with the Residence for Single Women survives as the southern end of Staff Row, while ornamental foundation plantings and trees and shrubs that produce edible fruits and nuts also dot the character area. Plants that provide a source of food and flowers for lei are also present, such as guava, mango, crown flower, and African tulip. Hedges at the north end of the complex follow and recall the historic fence line.



Figure 285. View east of the picket fence that the edges the Residence for Single Women, 2017.



Figure 286. View east of the Assistance Resident Physician's Residence, gate posts, and hedges that follow the historic alignment of former picket fencing, 2017.



Figure 287. View east of the Resident Physician's Residence, gate posts, and concrete walk, 2017.

Character Area Assessment. (Refer to Figure 288) Staff Row is a relatively intact historic complex within Kalaupapa Settlement. Most of the extant buildings and structures are historic, along with the majority of the circulation features, patterns of spatial organization, landform and topography, and plantings. Many of the key views also remain in evidence. Despite some changes to the historic composition of Staff Row, collectively the surviving historic buildings, original concrete walkways, gateposts, and mature plantings continue to convey the historic associations of the character area.

Natural systems and features associated with Staff Row consist of the level landform and topography of the developed area. These conditions survive today similar to what was present historically.

Historic patterns of spatial organization, composed of the linear arrangement of buildings sited along Staff Street overlooking the Settlement from the east, and evidence of a former fence line that edged the precinct historically survive with integrity from the period of significance. Diminishing integrity is the loss of the Superintendent's Residence. Although it does not survive in three-dimensions, elements of the foundation and entry stairs survive to depict its former location. Additions to the complex since the period of significance include three modest garages, which do not impact the overall spatial organization of the cluster, and a Freezer Building that is both incongruous in terms of form, scale, and color, as well as land use. Also impacting patterns of spatial organization is the access road that leads to the Freezer Building through the center of the complex and breaks up the linear streetscape.

Views are afforded across the open green space to the west from many of the buildings and spaces associated with Staff Row, although tree plantings along Staff Street filter some of these views. Views of the buildings also generally remain consistent with historic views, except for the Assistant Resident Physician's Residence, now partially obscured by a hedge that occupies the former fence location. Also impacting historic views is the loss of the Superintendent's Residence, which has altered the streetscape view, and also allows for views of the non-historic Freezer Building behind from Staff Street. Volunteer vegetation behind the buildings obscures former views to the east across the area where gardens and other food production spaces were historically located.

Staff Street and Beretania Street retain their historic alignment and continue to be paved with asphalt. The access road that extends from Staff Street east to Beretania Street behind the Residence for Single Women appears to have been added after the period of significance to access the Freezer Building. Four historic concrete entry walks remain and lead to the primary entrances of historic buildings along Staff Street—Assistant Resident Physician’s Residence, Resident Physician’s Residence, Residence for Single Women, and the site of the Superintendent’s Residence.

The majority of surviving buildings at Staff Row were built prior to 1969. Buildings added after the period of significance include three modest carports, a shed, and the Freezer Building. The picket fencing that exists today on the west and south sides of the Residence for Single Women is a replacement built on top of the original fence foundation. Elsewhere within Staff Row, original concrete gate piers survive in front of the Resident Physician’s Residence and Assistant Resident Physician’s Residence and hedges occupy the line of the former fencing in some locations. Also surviving is the dry stacked stone wall indicated in the 1930s plot plan of Staff Row to the north, east, and south of the complex.

Over time, the lushness and diversity of plantings has declined as the number of people available to maintain the plantings has decreased. Existing plantings include rows of coconut palms along the fence in front of the Residence for Single Women, and ornamental trees, shrubs, and hedges around the foundations of several buildings and along the road. Much of the remainder of the character area is maintained in turf grass. The ornamental species and those that produce food appear to be examples of culturally important plantings, although the date of origin of most of these plantings is not currently known.

Surviving historic small-scale features include a fish pond in front of the Resident Physician’s Residence and clothes lines associated with some of the dwellings. A wooden trash can box outside the kitchen door of the Residence for Single Women is a later addition.

Staff Row thus possesses a modest degree of integrity for the period of significance with numerous surviving features and landscape characteristics that help to convey its historic associations.

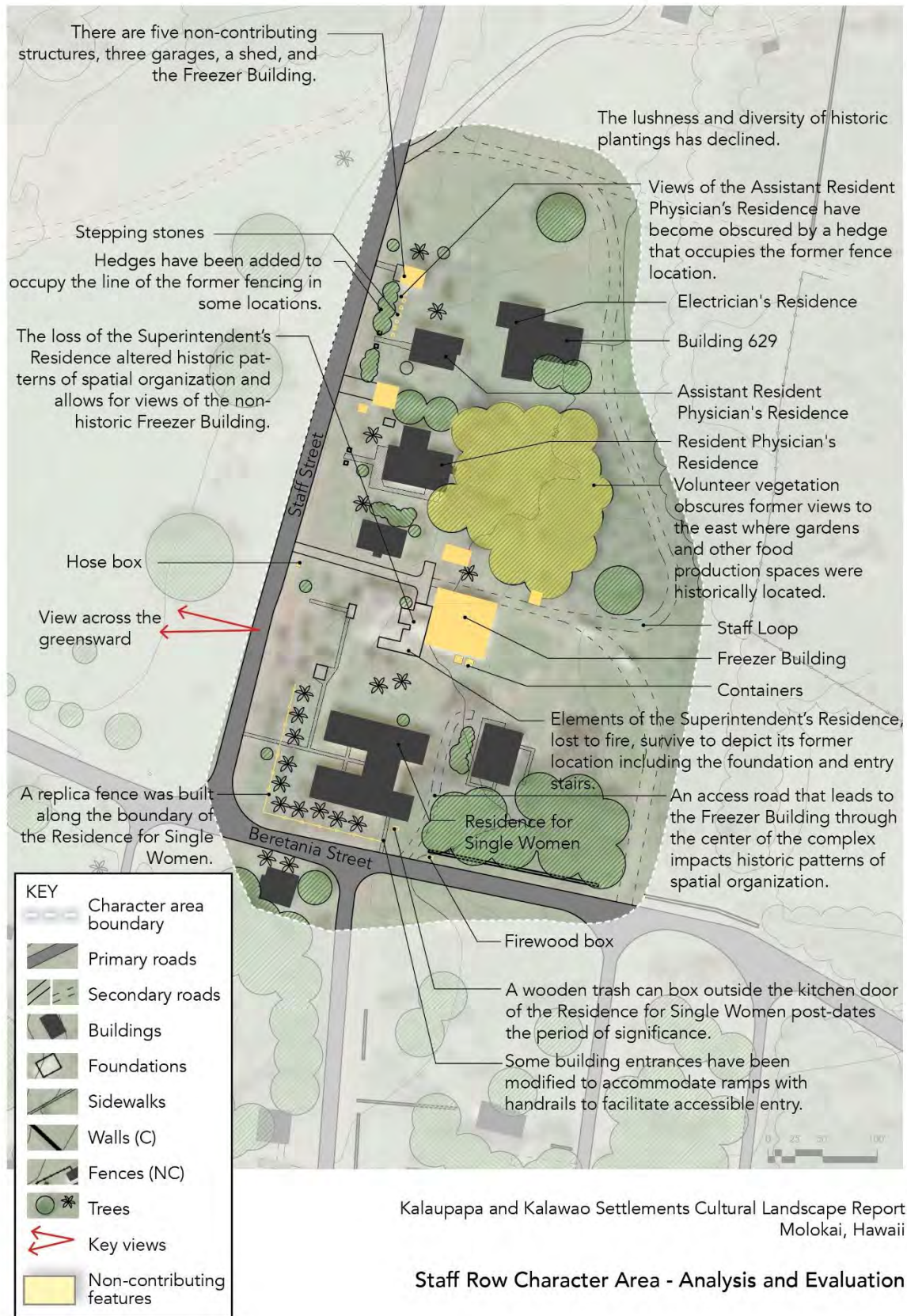


Figure 288. Staff Row character area assessment. (Source: LSHLA)

New Baldwin Home Character Area

Summary Analysis. New Baldwin Home character area is located at the southern margin of Kalaupapa Settlement. New Baldwin Home retains the least integrity of the developed areas associated with Kalaupapa Settlement due to the abandonment of the complex in 1950, the relocation of the residents to Bay View, and the subsequent removal of all buildings. These changes, however occurred during the period of significance.

Surviving evidence of the complex includes a dry stacked stone wall at the former entry and associated gate piers, a grotto, and a rock crusher. Land that formerly supported recreational activities outside of the perimeter walls now contain widely dispersed function areas, including a slaughterhouse complex, and contemporary dump and recycling facilities and concessionaire tour orientation facilities. The dump, recycling, and concessionaire facilities post-date the period of significance. Volunteer woody vegetation has proliferated in the western part of the character area, including the site of New Baldwin Home, obscuring some former open spaces, but also helping to screen contemporary land uses. The Trail Access Road, an unimproved route that extends through the character area, provides access to the Pali Trail trailhead. This route follows the alignment of the historic circulation but is now edged by spur roads leading to the contemporary land use areas and otherwise established by drivers during wet periods trying to avoid muddy conditions. A few examples of surviving cultural vegetation exist within the New Baldwin Home property. The eastern half of the character area is maintained in open grass cover. From the open area, views are afforded of the Pacific Ocean as were likely present historically.



Figure 289. The boy's dormitory at New Baldwin Home, undated. (Source: KALA Bruce Doneux_00372 Box 02_042_label 041)

Historic Conditions. The original Baldwin Home for Boys was established in 1894 at Kalawao and operated until 1932 when the group home moved to Kalaupapa, marking the final stages of the settlement

relocating to the west side of the peninsula.³⁸³ The New Baldwin Home for Men and Boys was sited at the south end of the settlement in the former Kalaupapa hospital at the base of the pali.

The New Baldwin Home was comprised of a large dormitory (Figure 289), recreation room, cottages, a chapel, a playground and a grove of papaya and banana trees. Marking the entrance to New Baldwin Home were tall concrete fence posts and a wooden fence. A cattle guard prevented livestock from entering the complex. There was also an outdoor recreation area associated with New Baldwin Home that included a swing set (Figure 290). The favorite outdoor recreational pursuits of the boys living at New Baldwin Home included ‘daredevil’ horseback riding and volleyball; these activities may have taken place in the open area north of the entrance gate.

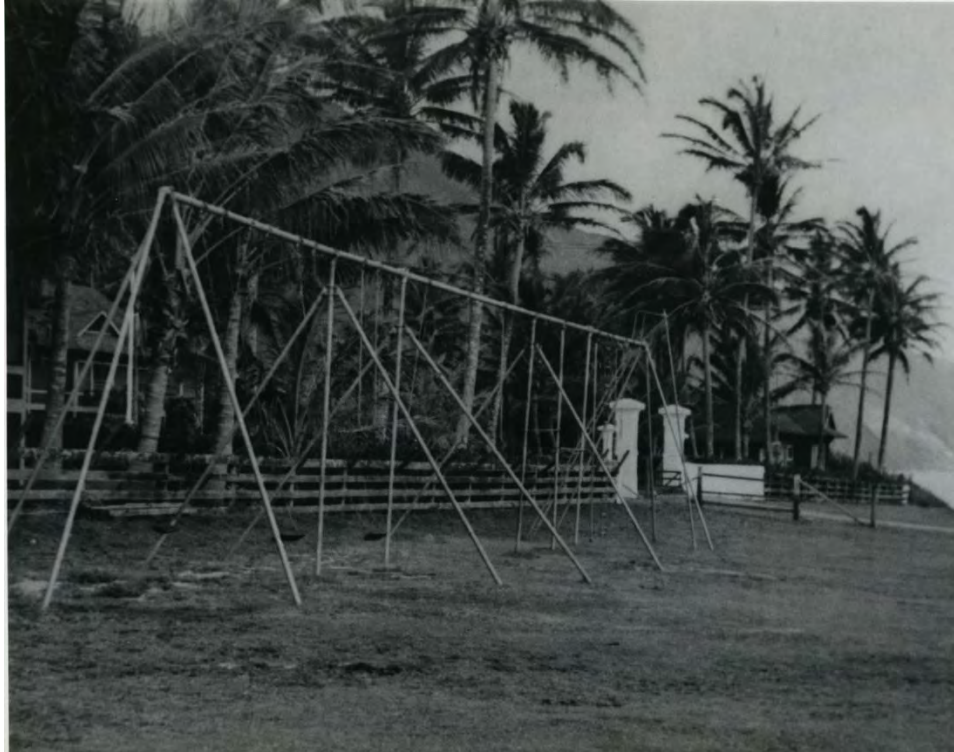


Figure 290. Playground located outside the New Baldwin Home entrance gates and original wooden fence. View looking southwest, undated. (Source: KALA Henry Kaanapu Collection. Bruce Doneux_00372_Box 02_44_label 043)

383. Greene, *Exile in Paradise*, 334.

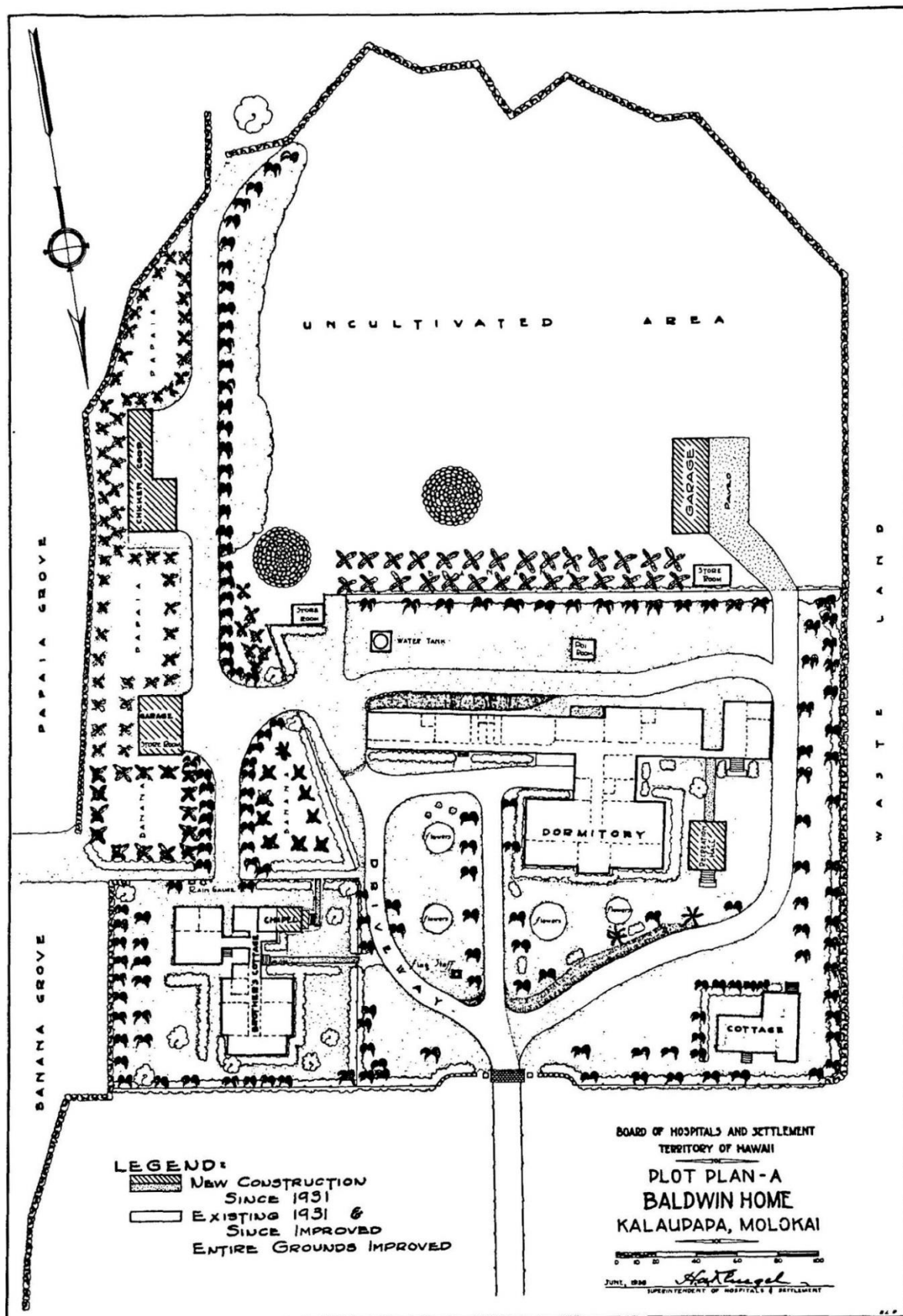


Figure 291. Baldwin Home plot plan, circa 1938. (Source: Board of Hospitals and Settlement; Greene, 483)

A plot plan was prepared in 1938 to illustrate the features and their arrangement within the complex. The plot plan indicates the extent of the walls, fences, and tree plantings marking the boundary of the complex, as well as the road system, building arrangement, and hedge and other garden plantings (Figure 291). The extant rock wall that marks the northern perimeter of the complex appears to have replaced the original fencing after 1938. By the late 1940s, the New Baldwin Home for Men and Boys was a well-established, carefully kept complex maintained in open cover with ornamental plantings (Figure 292).



Figure 292. The entrance to the old hospital and new Baldwin Home, circa 1949 just before it closed. (Source: KALA Kalaupapa Historical Society Album B PG 41 #316)

The Board of Health closed New Baldwin Home in 1950 and relocated the remaining residents to a military-surplus Quonset hut at Bay View Home.³⁸⁴ Members of the Brothers of the Sacred Heart continued to reside in the complex until a kitchen fire in 1951 forced them to relocate to Wilcox Memorial Hall. After the fire, the buildings located at New Baldwin Home were removed or relocated elsewhere within the settlement. The Kenso Seki Residence at the southeast corner of Puahi Street and Damien Street is one of the buildings relocated from New Baldwin Home.

In 1953, a Slaughterhouse was added in the open area on the west side of the character area. It survives as a reminder of the period during which a herd of cattle was maintained at Kalaupapa Settlement.

A Rock Crusher used to convert lava stone into paving aggregate in the 1950s was moved to the site of New Baldwin Home in 1960. A municipal solid waste dump was built in the area between 1964 and 1972, it was closed and fenced by the State of Hawai‘i in 2015. Another dump area east of the Baldwin Home was constructed between 1977 and 1992 and closed in 2016. The NPS later added a fenced area for recycling. A small structure and corral have been added to support tours operated by Kalaupapa Rare Adventure, which brings visitors from topside via the Pali Trail on mules.³⁸⁵

384. Ibid., 549.

385. Johnson, Draft NHL nomination update, 122.



Figure 293. View south of the gate posts at the New Baldwin Home entrance, 2017.

Existing Conditions. The New Baldwin Home character area extends over a relatively large land area south of the intermittent Waihānau Stream corridor. The character area is composed of several developed nodes. Most important among them is the site of New Baldwin Home, marked by dry stacked stone walls and an entrance gate feature (Figure 293), a stone grotto (Figure 294), and evidence of cultural vegetation associated with the former group home. The remnants of worship spaces at New Baldwin Home include a grotto featuring with white cross that is a relic of a chapel that stood next to a kukui nut tree northeast of New Baldwin Home. The grotto is believed to have been built during the mid-twentieth century by Brother Laschet.³⁸⁶ Before the proliferation of woody invasive species, there was a clear view of the Pacific Ocean from the grotto. Also located within the New Baldwin Home site is a wooden Rock Crusher used to develop paving material for Kalaupapa Settlement roads in the 1950s. West of the New Baldwin Home site is a broad, level open space that overlooks the western Pacific Ocean shoreline. The Trail Access Road passes through this open area as an extension of Puahi Street. The road crosses a wooden bridge that spans the intermittent Waihānau Stream. Unimproved two-track roads crisscross the open space. Arising from the Trail Access Road are spurs leading to a cluster of two buildings and corral fencing. The buildings include a Slaughterhouse and an adjacent restroom (Figure 295). Also located along the edge of the open space is a small cluster of features that support tour operations. A mule corral, aluminum seating stand, and small building comprise the cluster. Northeast of the New Baldwin Home site, set within a dense stand of volunteer woody, invasive vegetation is a contemporary recycling center and construction debris dump.

386. Juvik, *Ethnographic Study*, 96, from Sharon A. Brown, Laura Schuster, Cathy Gilbert, Robert Hommon, Bob Page, and David Uschold, *Draft Cultural Landscape Inventory, Kalaupapa National Historical Park* (National Park Service, 1997).



Figure 294. View of the grotto at New Baldwin Home site, 2017.



Figure 295. View of the Slaughterhouse (left), Slaughterhouse Restroom (right), and corral fencing, 2017.

Character Area Assessment. (Refer to Figure 296) While the New Baldwin Home site no longer possesses physical integrity as originally designed and developed as a group home, it retains sufficient integrity for the character and composition present at the end of the period of significance to convey its historic associations. By 1969, all of the built features had been removed with the exception of the perimeter wall and gate. This condition remains present today. The stone grotto and associated statue on the hillside east of the site of the former complex also survive to convey historic associations with the Brothers of the Sacred Heart, who operated the group home between circa 1932 and 1950. A Rock Crusher present on the site of New Baldwin Home was moved to this location in 1960. The remainder of the character area contains three historic features—the Slaughterhouse and Slaughterhouse Restrooms—present since the period of

significance, and the road corridor—the Pali Trail Access Road—that connects the bridge crossing of Waihanau Stream at Puahi Street to the Pali Trail trailhead. The bridge itself follows the historic alignment of a cattle guard and earlier bridge but is not historic.

Natural systems and features associated with the New Baldwin Home character area consist of the level landform and topography of the developed area and the steep cliffs and rock formations to the west along the Pacific Ocean shoreline. These conditions survive today similar to what was present historically.

Historic patterns of spatial organization, composed of the linear Trail Access Road corridor set within a large open space and the site of New Baldwin Home survive to a degree within limited integrity due to the proliferation of volunteer woody vegetation that has colonized the eastern half of the character area. The New Baldwin Home site itself is highly overgrown with volunteer woody vegetation.

Views that extend across the open space that characterizes the western half of the character area encompass the Pacific Ocean and the pali. These are likely consistent in character with those present during the period of significance. Views that formerly extended from New Baldwin Home to the Pacific Ocean are now blocked by woody vegetation, however, and do not retain integrity.

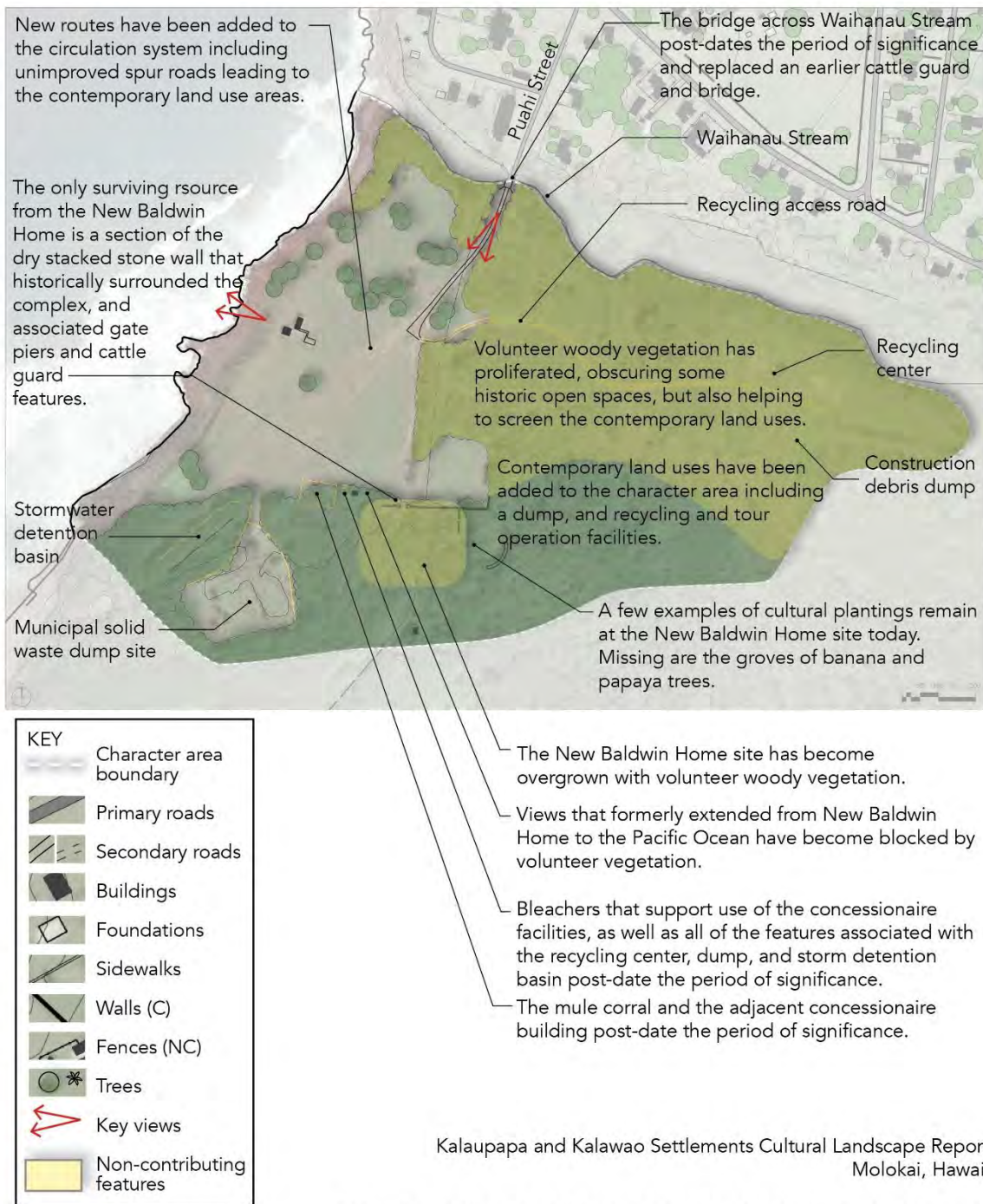
The Trail Access Road remains the only historic road through the character area. Other roads are later ad hoc additions that provide access to various contemporary land uses and features. Only the northern portion of the road trace that leads through the New Baldwin Home site is historic.

None of the buildings that comprised the New Baldwin Home complex survive today. Missing are the dormitory, recreation room, cottages, and chapel. These, however, were removed by the end of the period of significance. Surviving is a section of the dry stacked stone wall that historically surrounded New Baldwin Home, and the gate piers and associated cattle guard features that limited access. The historic Slaughterhouse was built in 1953. The Slaughterhouse Restroom is also a historic building that was moved to this location from Staff Row in 1950. The adjacent corral fencing is also a historic feature associated with the Slaughterhouse. The concessionaire building and adjacent mule corral are non-historic features added to the character area after the period of significance.

Only fragments of cultural plantings remain at New Baldwin Home site today. Missing are the groves of banana and papaya trees. The remaining vegetation associated with the character area is volunteer woody growth, much of which is composed of invasive species.

The bleachers that support use of the concessionaire facilities for tours, as well as all of the features associated with the recycling center and dump sites, including the fence at the storm detention basin, post-date the period of significance. There are no historic small-scale features within the character area. Missing is the playground equipment formerly located outside the wall marking the entrance into New Baldwin Home.

As noted, New Baldwin Home character area possesses diminished integrity related to its original composition, but is somewhat similar in character and composition to the end of the period of significance. Several historic features survive, but there are also numerous later additions and changes that have occurred within the character area since the end of the period of significance that also diminish integrity.



New Baldwin Home Character Area - Analysis and Evaluation

Figure 296. New Baldwin Home character area resources. (Source: LSHLA)

‘Īliopi‘i Beach Houses Character Area

Summary Analysis. The ‘Īliopi‘i Beach Houses character area is located north of the West Coast Cemeteries and west of Kamehameha Street. The character area contains a series of beach houses owned by patients, sited along a linear road corridor on the dunes overlooking the Pacific Ocean and ‘Īliopi‘i Beach. The beach houses were built by patients and other residents of Kalaupapa Settlement and used as a place of refuge from institutional living. Each residence was built using salvaged materials, resulting in an eclectic mix of dwelling sizes, styles, materials, and color palettes. Five of the eight beach houses were constructed prior to the end of the period of significance. The other three are relatively contemporary additions. Most of the residences convey a character that is similar to the Hawaiian Plantation style of architecture that pervades the rest of the Settlement, with modifications related to the salvaged nature of the materials. The older beach houses have been adapted continuously over the years to accommodate evolving needs as individual owners have addressed repair needs, or customized the structures and surrounding landscape, using whatever materials that may have been available. These changes are part of the important history of the place. The landscape is generally vernacular in character. In addition to the wooden residences, features present within the beach house character area include a limited number of outbuildings that support storage and garage needs, wooden post and rail fencing, dry stacked stone walls, and plantings. Views of the beach and shoreline are afforded from many of the residences, although overgrown vegetation sometimes limits the views. Historically, it appears that the beach house character area was more open in character. A historic sandy two-track road—Beach Road—parallels the cluster of beach houses that follows the route of the original road to the airport. Individual two-track access roads arise from Beach Road that provide access to the beach houses. Many of the buildings and structures, as well as the examples of cultural vegetation and small-scale features, are historic and contribute to the significance of the Settlement landscape. Overall, the vernacular and evolving character of the Beach Houses character area is character-defining.



Figure 297. Jack McVeigh's beach house. (Source: KALA Kalaupapa Historical Society Album J PG1 #916)

Historic Conditions. For some residents, the control and constraint on activities, and supervised living at Kalaupapa Settlement was too restrictive, and some sought more autonomy away from this authority. During the 1920s and 1930s, several individual residents constructed their own beach houses along the west coast of the peninsula. Some of the beach houses were located on the north side of the peninsula, and some along the east side, but by far, the majority were located at ‘Īliopi‘i Beach north of the settlement (Figure 297).³⁸⁷



Figure 298. Unidentified beach house. (Source: KALA Kenso Seki_KALA 12600_712)

The beach houses were far enough away from the settlement that they allowed patients to not only feel more autonomy, but also to form a different, and more familiar community, even as they remained separated from their homes, families, and society as a whole.³⁸⁸ Most of the early beach houses were built from recycled materials salvaged from elsewhere on the peninsula.³⁸⁹ They were edged by fences and plantings and often featured planted yards (Figure 298).

Beach houses built on the more remote eastern side of the peninsula afforded opportunities for traditional activities such as fishing, collecting shellfish, and harvesting salt.³⁹⁰ In addition, beach houses on the eastern shore allowed patients the opportunity to visit Kalawao Settlement, which retained a valued landscape and iconic place for most of the residents, and also allowed patients to “escape from the hustle and bustle of the community, to visit sites from their own memories or those described to them by the old-timers in Kalaupapa, or simply to explore and gain a sense of adventure in the bounded space to which they were quarantined.”³⁹¹

387. Johnson, Draft NHL nomination update, 23, 47.

388. Ibid., 49.

389. Juvik, *Ethnographic Study*, 103.

390. Ibid., 46.

391. Flexner, *Archaeology of the Recent Past at Kalawao*, 227.



Figure 299. The beach house area following the 1946 tsunami. (Source: KALA Kalaupapa Historical Society Album J PG 2 #914)

The 1946 tsunami that struck the west shore of the Kalaupapa Peninsula damaged several of the beach houses in the ‘Īliopi‘i area, and totally destroyed twelve homes (Figure 299). Some of damaged houses were repaired, while others were rebuilt; all of the beach houses have either been repaired or remodeled since 1946. After World War II, the availability of Quonset hut materials led to the use of recycled corrugated metal in repair and construction of the beach homes and outbuildings.³⁹²

392. Johnson, Draft NHL nomination update, 63.



Figure 300. The Lions Pavilion along Kamehameha Road, circa 1970s, view looking north. (Source: KALA Kenso Seki_KALA 12600_495)

In 1965, the Lions Club built a picnic pavilion along Kamehameha Road near the beach houses to provide a place for family gatherings, picnics, and beach access (Figure 300). The structure came to be known as ‘Ocean View’ following a naming competition. The pavilion and its role as a gathering place and picnic area played an important role in the lives of residents for many years:

And there’s another one I think should be remembered as a memorial... We have an Ocean View Pavilion [also known as Lions Club Pavilion] there now. That had a beach house over there. It was the biggest beach house in Kalaupapa. A big beach house, and the wave took it--took it out. All we could see was the roof going down, down, down until we couldn’t see the roof any more. I say it was about a half mile out.³⁹³

393. CP 7/12/02, Juvik, *Ethnographic Study*, 91.



Figure 301. View looking west across 'Īliopi'i Beach from one of the beach houses, 2017.

Existing Conditions. The 'Īliopi'i Beach Houses character area includes a linear collection of eight patient-owned beach houses and associated features sited along the western coastline of the Kalaupapa Peninsula overlooking 'Īliopi'i Beach (Figure 301). Five of the extant beach houses are historic, while three—the Meli and Randall Watanuki Beach House, Richard and Gloria Marks Beach House, and Shoichi Hamai Beach House—are contemporary additions. Although none survive today, several additional beach houses were once located along the eastern coastline of the peninsula north of Kalawao.³⁹⁴ Remnants of these former beach houses survive, such as the steps at the site of the Mormon Beach House. Access to the beach houses on the western shoreline occurs from a sandy two-track known as Beach Road (Figure 302) that arises from Kamehameha Street near the 'Īliopi'i Cemeteries (J, K, L, and M). The beach houses are associated with various landscape features—garages, storage sheds, secondary roads and driveways, walls, fencing (Figure 303), and plantings. Also included within the Beach House character area is the Lions Pavilion complex located north of Cemetery A along Kamehameha Street. The complex features the Lions Pavilion (Figure 304), Lions Club Restroom 687, and two shelters. A dry stacked stone wall edges the cluster along Kamehameha Street.

394. Johnson, Draft NHL nomination update, 63.



Figure 302. View looking south along Beach Road, 2017.



Figure 303. View toward one of the beach houses and associated fencing, 2017.



Figure 304. View west of the Lions Pavilion, 2018.

Character Area Assessment. (Refer to Figure 305) The ‘Īliopi‘i Beach Houses character area possesses integrity of spatial organization, land use, and circulation. While individual structures have been modified and some outbuildings lost, the siting and orientation of the individual structures, primary access roads and remnant features such as walls and fencing remain. The area is vernacular in character. The small cottages, outbuildings, roads, walls, and fencing features generally reflect the work of residents. Little is known about the detailed landscape around the houses or the exact configuration of individual beach houses through time.

Natural systems and features that serve as the basis for the siting of the beach houses include ‘Īliopi‘i Beach, one of the few readily available sandy beaches associated with the peninsula, and the level, yet elevated ground of ‘Īliopi‘i on which many of the houses were built. These conditions survive today similar to what was present historically, except for vegetation, the composition and density of which has changed a great deal since the end of the period of significance.

Historic patterns of spatial organization, composed of the linear arrangement of buildings that follow the western shoreline and take advantage of buildable land, views to the ocean, and access to the beach, survive with integrity from the period of significance. Over time, many of the individual beach houses have been rebuilt or modified since the 1920s. However, the historic patterns of the cluster survive even as three of the individual residences have been replaced since the end of the period of significance.

Views that extend to the Pacific Ocean and the beach are present from many of the houses. A proliferation of volunteer vegetation has served to significantly limit some historic views.

Beach Road and several spur driveways remain the only roads within the character area. Beach Road retains its original alignment and follows a portion of the original road to the airport, later replaced by Kamehameha Street. It is not known which spur drives might be historic.

The historic properties include the Richard Marks Beach House, Bernard Punikai‘a Beach House, Elizabeth Bell Beach House, Elaine Remigio Beach House, and Nicholas Ramos Beach House. The Nicolas Ramos Beach House is edged by a historic dry stacked stone wall. The Lions Pavilion and associated Restrooms are

also historic features built during the period of significance. Later additions include three beach houses—the Meli and Randall Watanuki Beach House, Richard and Gloria Marks Beach House, and Shoici Hamai Beach House—and two shelters at the Lions Pavilion. Fencing and a few modest outbuildings are also present within the character area. It is not clear which features were established during the period of significance, and which were built later.

Several examples of cultural vegetation remain within the Beach House character area. These are generally located around the houses themselves and any outdoor use areas. Ironwood pine trees edge the shoreline. These were likely planted in association with the ‘Īliopi‘i cemeteries, and have spread to the north and south, as well as filled in, creating a denser spacing within the groves. The ironwood pine trees may provide shade and other habitat for the monk seals that use ‘Īliopi‘i Beach.

The only small-scale feature present within the character area is a barbecue at the Lions Pavilion that post-dates the period of significance.

Overall, the Beach House character area appears to retain sufficient integrity to convey its historic associations, although determining the extent of change since the end of the period of significance is challenging due to a lack of documentation.

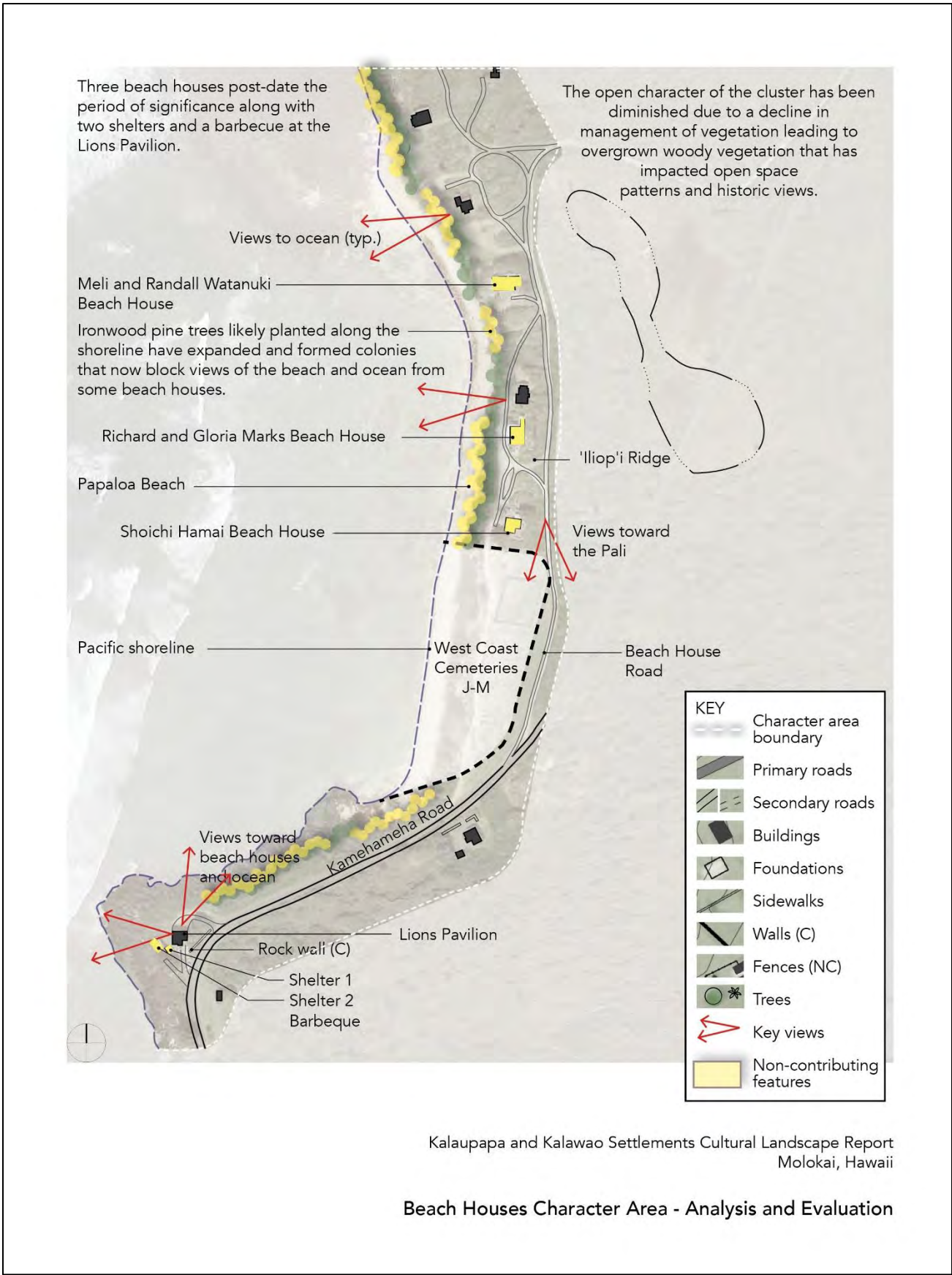


Figure 305. 'Iliop'i Beach Houses character area assessment. (Source: LSHLA)

West Coast Cemeteries Character Area³⁹⁵

Summary Analysis. Located along the western shoreline north of the intersection of Kamehameha Street and Damien Street, the West Coast Cemeteries are among the most iconic resources of the Kalaupapa and Kalawao Settlements. The cemeteries follow a linear arrangement on a broad rise overlooking the Pacific Ocean referred to as Papaloa, and a second rise to the north of the Lions Pavilion referred to as ‘Īliopi‘i. East of the Papaloa Cemeteries is a linear arrangement of historic residences and associated outbuildings, walls, fences, driveways, and walks. The collection of residences ends south of Barrel Field, a large open space maintained through mowing that is the site of the settlement’s first airplane landing strip. The character of the West Coast Cemeteries is, in part, derived from the expanse of green turf grass that pervades the cemetery system, the expanse of low, generally gray grave markers, visible over a long distance due to the relatively level topography and the low stature of cemetery features. A cluster of coconut palm trees punctuates the central section of the West Coast Cemeteries, while colonies of ironwood pine trees edge much of the shoreline, forming a dark backdrop and obscuring views of the ocean in some places. Groves of trees and thickets of vegetation edge the cluster of residences that face Kamehameha Street. The burial grounds are historic, having been established in association with a range of religious or place of origin affiliations during the late nineteenth and early twentieth centuries. Some of the burial grounds have been closed to new burials for some time, while others feature grave markers that post-date the period of significance. Eventually, all of the burial grounds are likely to be closed when those who currently have permission to be buried here have passed.

Small contemporary wooden signs mark the divisions between each burial ground. In many cases, the burial grounds are also distinguishable from one another by distinctions in the arrangement, materials, and form of the grave markers. Historically, many of the burial grounds were outlined with hedgerows and lines of trees. The 1946 tsunami altered or destroyed many of these boundary marking systems. Fencing once surrounded many of the burial grounds as well to exclude cattle. These were removed after cattle were no longer pastured on the peninsula beginning in the 1980s, possibly one of the biggest changes to character to post-date the period of significance.

395. This character area is addressed in more detail in the Cemetery Management Plan appendix to the CLR.



Figure 306. Catholic Mission Cemetery (Cemetery H), prior to 1900. (Source: KALA Kalaupapa Historical Society Album H PG 19 #841)

Historic Conditions. The death toll from the complications caused by Hansen’s disease, and the poor living conditions within the Settlement, was staggering during the initial era at Kalaupapa. Thousands of people were buried without formal services in unmarked graves. Many of these unmarked burials are at Kalawao in the open field east of St. Philomena Catholic Church (Cemetery S). After Siloama and St. Philomena Churches were constructed in the 1870s, the churchyards were used for burials (Cemeteries P and Q).³⁹⁶

By the late nineteenth century, designated cemeteries existed both at Kalawao and Kalaupapa. The earliest grave markers associated with the West Coast Cemeteries at Kalaupapa indicate burials dates during the 1890s, particularly within the Catholic Cemetery (Cemetery H) (Figure 306), the adjacent Old Hawaiian and A.J.A. Cemetery (Cemetery G), Church of Jesus Christ of Latter-day Saints Cemetery (Cemetery F), and C.E. Protestant Cemetery (Cemetery E).

In 1901, two resident benevolent societies were created to take care of graves in these sites and throughout the Peninsula. Part of their work involved building fences to protect the graves from feral animals and roaming livestock that often disturbed the burials. The Board of Health maintained known burial sites without fences.³⁹⁷

As part of the initiative to provide single-family residences for patients following the relocation of the Settlement from Kalawao to Kalaupapa during the early twentieth century, several dwellings were built across the road from Cemeteries G and H in the 1910s. One of these was the Cambria Residence, built in 1913. In 1929, the level area east of Cemeteries A through F was adapted for use as the Settlement’s first airfield, a use

396. Johnson, Draft NHL nomination update, 166.

397. Greene, *Exile in Paradise*, 291.

that continued until 1933 when the landing strip was moved to the present-day airport location. Barrel Field also served as a site for baseball games for many years.



Figure 307. Bird's eye view of Papaloa Cemetery and the residences built along Kamehameha Street, looking north, circa 1930s. (Source: KALA Boland004_Papaloa Cemetery_1930s)

During the 1930s, eight additional residences were added facing Kamehameha Street across from the cemeteries. These residences featured concrete walks leading the front entrances, outbuildings, rock wall enclosures (Figure 307), and plantings. A grove of coconut palm trees was planted along the road in front of many of the houses.

By this time, there were twelve individual cemeteries present along the western coastline of the peninsula, clustered into two groups, one with eight cemeteries and the other with four. The system extended for over a mile. Each cemetery was affiliated with a religious denomination or cultural group. Grave markers often reflected cultural and ethnic traditions in siting and orientation and in their design and use of materials. Each cemetery abutted the next. The cemeteries were variously bounded by rock walls, fences, and trees, with species including ironwood pine trees, date palms, and haole koa trees.



Figure 308. Grave marker carved by a patient prior to 1900. (Source: KALA Kalaupapa Historical Society Album H PG 19 #841)

Markers ranged from upright concrete headstones, to concrete slabs flush with the ground, crosses, mausoleums, elevated tombs and vaults, obelisks, posts, haka or urn houses, and concrete slurry-covered lava rocks configured in geometric forms. Some graves were marked with simple signs or crosses made of wood. Other materials used for grave markers included lava field stone, concrete, iron pipe, bronze plaques, granite, and marble. Patients often helped to fabricate grave markers (Figure 308).



Figure 309. Effects from the 1946 tsunami to Papaloa cemeteries included dislodged and damaged head stones, broken fences, scattered rock associated with walls, and the loss of vegetation. View looking northwest, 1946. (Source: KALA Kalaupapa Historical Society Album J PG 2, 1913)

On April 1, 1946, a tsunami swept over the west coast of the Kalaupapa Peninsula having a significant impact on the settlement and the cemeteries along the shoreline. The waves changed the morphology of the shoreline and washed away or dislodged many headstones, and damaged the fences and rock walls marking boundaries between cemeteries (Figure 309).

After the tsunami, many of the markers and monuments were repaired. The cemeteries continued to be used through the 1950s and 1960s. In 1966, the State of Hawai‘i conducted the first formal inventory of graves in Settlement cemeteries, and mapped landscape features such as fences, stone walls, gates, and major trees.

In 1980, the National Park Service assumed responsibility for maintaining the cemeteries. The fences used to exclude cattle were removed after cattle were no longer pastured on the peninsula, to facilitate maintenance and mowing procedures.

In 1991, a directory of grave markers listed 1,089 graves in the eight southern cemeteries and 238 graves in the four northern cemeteries. In 1994, this information was used as the basis for a comprehensive inventory of historic structures including grave markers for the National Park Service List of Classified Structures database (LCS). In 2003, the LCS (now referred to as the Cultural Resource Inventory System (CRIS)) for the Kalaupapa cemeteries was updated based on a condition assessment prepared by the National Park Service. The number of grave markers included in the inventory increased to more than 1,300 as a result of the assessment.³⁹⁸

398. Johnson, Draft NHL nomination update, 166. Coordination of these inventories and assessments is yet to be completed but has been identified by the NPS as an important future project



Figure 310. View north along Kamehameha Street of the West Coast Cemeteries character area with graves indicated to the left and residential features to the right, 2017.

Existing Conditions. The West Coast Cemeteries character area is composed of two discontinuous parcels, one located north of the intersection of Kamehameha Street and Damien Road that extends to the edge of Cemetery A and Barrel Field, and the second that arises to the west of Beach Road south of the beach houses. The character area contains twelve distinct burial grounds, nine residences east of Kamehameha Street, Barrel Field, a historic open space. Kamehameha Street (Figure 310) provides access to the eight burial grounds and various residences south of the intersection of Beach Road. The individual cemeteries are marked along the road with modest brown wood signs (Figure 311). Located within the various cemeteries are dry stacked stone walls, fenced burial plots, tree plantings, and grave markers (Figure 312). A single dwelling—Olivia’s Beach House, falls within Cemetery H (Figure 313). Ironwood pine trees, historically planted to indicate the boundaries between cemeteries and along the shoreline, are presently found edging much of the western margins of the cemeteries. There also date palm trees, coconut palms, and haole koa scattered within the West Coast Cemetery character area. Tree plantings are primarily found within Cemetery G and across Kamehameha Street in front of several residences. The cluster of residences to the east of Kamehameha Street date from the early period of development through 1938. Some were moved to this area from McVeigh Home and Bay View Home. Several of the residences have outbuildings and garages on the side and back yards. North of the houses the field that served as an airstrip between 1929 and 1933, is mown and maintained and is occasionally been used by residents for recreation.³⁹⁹ The NPS stores materials along the eastern margin of the field.

399. Juvik, *Ethnographic Study*, 92.



Figure 311. View west of one of the low brown signs serving to identify the individual burial grounds comprising the West Coast Cemeteries, 2017.



Figure 312. View west of features associated with the West Coast Cemeteries, such as grave markers and plantings, 2017.



Figure 313. View southwest of Olivia's Beach House, located within Cemetery H, 2017.

Character Area Assessment. (Refer to Figure 314) The West Coast Cemeteries continue to provide meaningful connections for residents, families, and friends to the personal stories, memories, and cultural history of Kalaupapa Settlement. The historic burial grounds established during the late nineteenth and early twentieth centuries survive today as originally laid out and arranged. Natural events and changes in maintenance practices led to the loss of boundary features such as fences and plantings both before and after the period of significance. The extent of ironwood pine tree colonies along the coast have expanded and conveyed a more enclosed character at the western edge of the cemetery system.

Natural systems and features associated with the West Coast Cemeteries, including the elevated sand dunes of Papaloa and 'Īliopi'i, and the rocky shoreline and Papaloa Beach to the west survive today similar to what was present historically.

Historic patterns of spatial organization, composed of the linear arrangement of cemeteries along the western shoreline, the linear cluster of residences to the east of Cemeteries G and H, and the open space of Barrel Field survive at a broad scale to convey their association with the period of significance. Missing are the finer details of the historic patterns associated with the delineation of individual cemeteries using walls, fences, and plantings, most of which have been lost.

Views that extend across open space to the Pacific Ocean to the west, and Barrel Field to the east with the pali beyond remain present throughout the character area and are likely consistent in character as those present during the period of significance. Expansion of groves of ironwood pine trees along the shoreline has occurred and partially limits some historic views in this direction.

Kamehameha Street, an access road, and Beach Road survive as historic road corridors within the character area, along with limited driveway and paved walk features associated with the residences east of Cemeteries G and H.

Most residences built during the period of significance along Kamehameha Street and Olivia's Beach House within Cemetery H survive today with integrity. These include the Brown Residence, Cambra Residence,

Kamehameha Street Residences 7, 9, and 15, the Norbert Palea Residence, and Residence 22. There are also historic outbuildings located within the residential cluster. Rock walls also survive in association with some of the residences and continue to enclose segments of burial grounds, including at Cemetery H, Cemetery C, and Cemetery L.

While hedgerows that separated burial grounds A, B, C, D and E have been removed, historic plantings survive within Cemetery G and along the shoreline, as well as along Kamehameha Street in front of several residences. Date palm trees, coconut palms, haole koa, are present along with ironwood pines. As noted, ironwood pine trees edge the shoreline that were also planted but have expanded in area.

Post-period of significance changes that have occurred in association with smaller-scale features include the addition of small wooden signs, a utility pole carrying wiring to a beach house, the removal of fencing used to exclude livestock, and the addition of new burials.

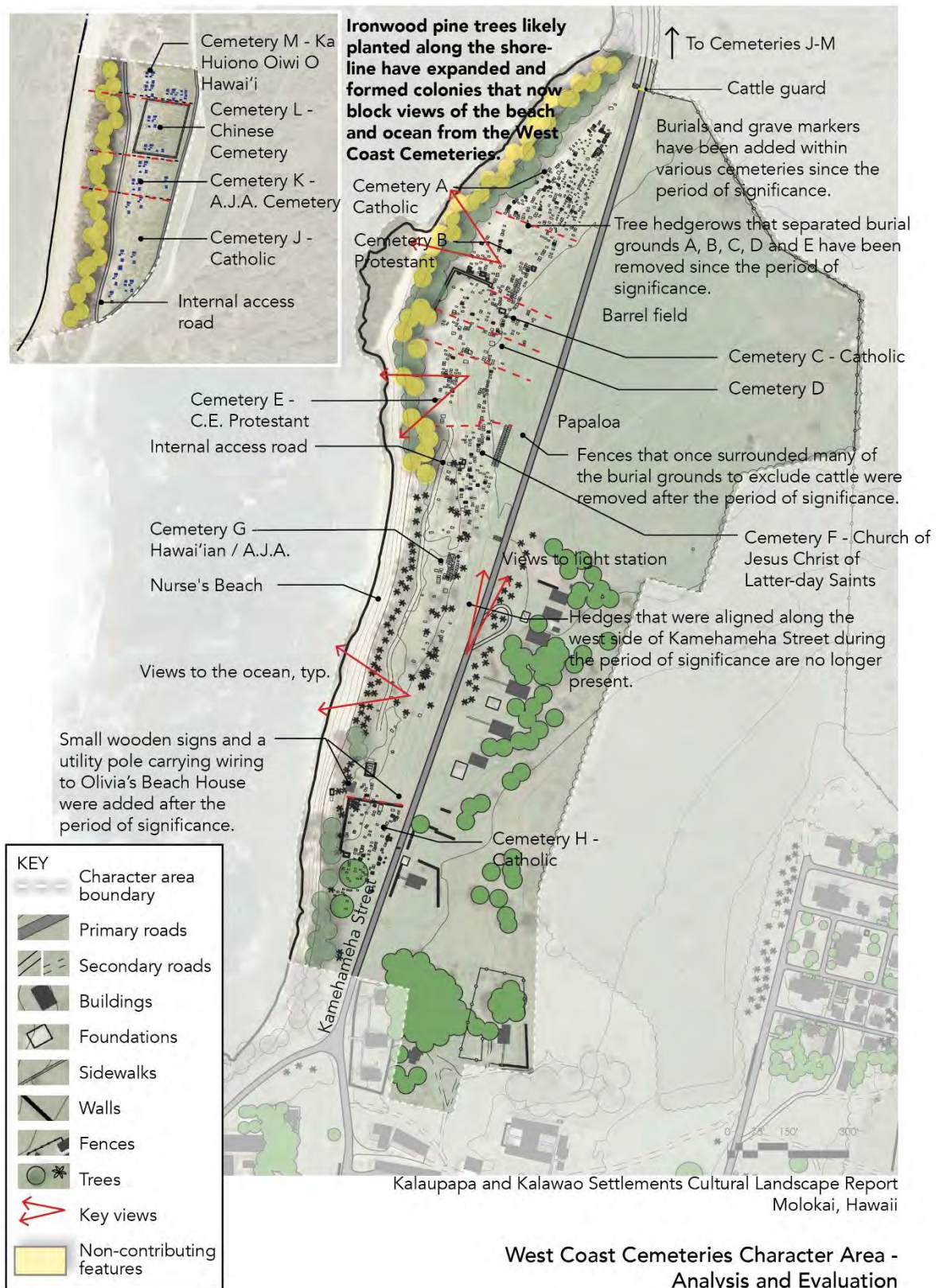


Figure 314. West Coast Cemeteries character area assessment. (Source: LSHLA)

Molokai Light Station Character Area

Summary Analysis. Located at the northern end of Kalaupapa Peninsula on a high point overlooking the Pacific Ocean, the Molokai Light Station is among the most intact developed clusters on the peninsula. The majority of the buildings and landscape features were developed circa 1908 and 1909, with additional features added through the 1930s without diminishing the integrity. Developed by the U.S. Light House Board, the light station complex is institutional in character and relatively formal in terms of the landscape design and architectural style of the built structures. Few of the original features associated with the development of the light station have been lost. The light station property is composed of two adjacent complexes—a walled precinct that contains two keeper residences and associated outbuildings, and the lighthouse and associated support buildings. A historic concrete walk connects the two precincts. The lighthouse sits atop a prominent knoll and is visible from many locations around the peninsula. The open vegetative character of the complex allows for expansive views of the surrounding terrain and the shipping lanes to the north. From the lighthouse, expansive views are afforded in all directions. The residential precinct is marked by a perimeter dry stacked stone wall enclosure, a road network edged by allées of ironwood pine trees, and the protective shelter afforded by the adjacent hillside to the east. Other historic roads lead to the lighthouse. All extant features were built by the end of the period of significance. Over the years, a few of the historic features have been lost. These include a flag pole, oil storage tank, oil drum, and loading tank. Additionally, the lighthouse has been automated and the original Fresnel lens replaced, diminishing integrity of association.



Figure 315. View of the Molokai Light Station complex, undated. (Source: KALA 1925-1928 AB Potter_KALA-17429h-1)

Historic Conditions. The Molokai Light Station was constructed by the U.S. Coast Guard between 1908 and 1909 to provide guidance to mariners traveling through the dangerous Kaiwi Channel between Molokai and O‘ahu (Figure 315). To accommodate construction, a water line was extended to the site from Kalaupapa and a road was built from Kalaupapa Landing to the future complex in 1908.

As positioned atop a knoll at the north end of the peninsula, and designed in terms of its height, the light can be seen for up to 28 miles seaward. The area in which the light station was developed exhibits evidence of traditional Hawaiian lifeways, including a heiau referred to as Boki Ku Manomano (also Boki Kumanomano,

Kumanomano, and the dog heiau). The lighthouse was sited atop the heiau, portions of which remain visible at the base of the structure.

Built as part of the initial development of the light station in 1908-1909 was the lighthouse, oil storage vault, oil drum loading dock, and water tank. Three dwellings and a wash house were constructed to accommodate those overseeing light station operations. The extent of the light house property was marked by a five-strand wire fence anchored to redwood posts. The residential precinct containing the three dwellings was surrounded by a dry stacked stone wall. It was located to the west of the lighthouse.

After the lighthouse was built, the Board of Health officially forbade patients from the Settlement from visiting with light station staff. Nonetheless, oral histories indicate that residents regularly enjoyed walking, riding, or driving to the light station to visit with the light station staff.⁴⁰⁰



Figure 316. The Molokai Light Station visible beyond the airport complex, circa 1930s. (Source: KALA Helen Keao_00373_Album035)

Additions were made to the complex in the late 1910s or early 1920s with construction of a garage outside the walled precinct of the keeper residential precinct, a tool house/storage building behind the principal keeper's residence, and the planting of numerous ironwood pine and palm trees, both along the entrance road in the form of an allée and around the walled residential precinct as a windbreak. Circa 1927–1930, a concrete walkway was added to connect the residential and lighthouse precincts. In 1927, the principal keeper's residence was expanded through construction of an addition. In 1934-1935, a new generator shed was added just north of the lighthouse designed to hold two generators. During the 1930s, the Kalaupapa Airport was laid out nearby, and a portion of the light station property transferred for development of the landing strip (Figure 316). In 1950, one of the three dwellings in the residential precinct was removed. In 1950-1951, a new concrete block residence was added on the site of the demolished building, while the storage building

400. William Chapman, Molokai Light Station Historic Resources Report (National Park Service, November 2001), 9–10.

behind the principal keeper's residence was also removed. In 1952, a second keeper's residence was removed, leaving the stone Principal Keeper's Residence and the circa 1950-1951 concrete block residence.⁴⁰¹

Lighthouse keepers and resident Coast Guard personnel maintained the light until 1966, when it was automated. After they deemed in poor condition in 1974, the oil storage tank and oil drum loading dock were removed. A flagpole associated with the light station was also lost at some point after automation was introduced. In 1986, the original Fresnel lens was removed and replaced with a new illuminating device. The replacement project entailed modifications to the original lens platform and construction of a mounting for the new device.⁴⁰² Residents of Kalaupapa protested the removal of the historic lens, noting its importance to the community and to the history of Hawai'i. Richard Marks was quoted as saying "Every one of our people...can remember this light looking over us. You could always look out and see it sweeping across the cliff. It is the Kalaupapa light."⁴⁰³ In 1993, the lens was returned to Kalaupapa. It is currently in storage on the Molokai Light Station property.⁴⁰⁴



Figure 317. Views of the Molokai Light Station lighthouse with the storage vault in the foreground, 2018.

Existing Conditions. Molokai Light Station occupies a prominent knoll overlooking the Pacific Ocean. The Molokai Light Station character area is composed of two precincts—one that contains the lighthouse and associated support structures atop the knoll (Figure 317), and another built to support the needs of those operating the light house complex. Evidence of the wire fencing strung from redwood posts used to mark the perimeter of the property survives today, along with the dry stacked stone wall that encloses the residential keepers precinct. Historic unimproved access roads lead into the light station property from Airport Road to the west—referred to as the Principal Access Road—and to the lighthouse—referred to as the Internal Access Road. Additional roads lead into the precinct from the peninsula's Internal Road, and Coastal Road to the east

401. National Park Service, *Cultural Landscapes Inventory: Molokai Light Station, Kalaupapa National Historical Park* (San Francisco: Pacific West Region Cultural Resources Program, 2012), 27–29.

402. Chapman, "Molokai Light Station," 110, 112.

403. Ibid., 112; from Matthew Thayer, "Historic Light: Coast Guard Delivers Kalaupapa Lens to Lahina," *The Maui News*, July 17, 1986.

404. National Park Service, *Molokai Light Station CLI*, 60–61.

and south, and from the north. The Principal Access Road leading to the residential precinct is edged by an allée of ironwood pine trees planted in the 1910s. Additional ironwood pine trees edge the walls to the north, east, and south that were planted in the 1910s as a windbreak. In addition to the ironwood pine tree allées and windbreak, there are foundation plantings around the residential buildings and evidence of a former residential garden area, as well as date palms that have naturalized. Otherwise, much of the landscape of the northern peninsula is characterized by low-growing vegetation. The elevated terrain and lack of tree covers allows for 360 degree views from the lighthouse and its environs. The residential complex, however, is more contained by the knoll and tree plantings, and views are more limited. The light house precinct was constructed within a traditional Hawaiian landscape and was sited atop a heiau (Figure 318).

Historic buildings that comprise the lighthouse precinct include the Molokai Light Station Lighthouse, Molokai Light Station Generator Shed, and Molokai Light Station Storage Vault. Structures at the lighthouse precinct include the Molokai Light Station Water Tank. Structures associated with the residential precinct include the perimeter stone wall. Historic buildings that comprise the residential precinct include the Principal Keeper's Residence, First Assistant Keeper's Residence, and Wash House/Storage Shed (Figure 319). Outside of the walled residential precinct is the historic Molokai Light Station Garage. Pedestrian circulation features include the concrete walk built to connect the residential and lighthouse precincts (Figure 320). There is also a child's grave located near the lighthouse.



Figure 318. View from the lighthouse environs and stone work associated with the heiau present on the knoll, 2018.



Figure 319. View of the wash house/storage shed with ironwood pines and the lighthouse beyond, 2018.



Figure 320. View toward the lighthouse along the concrete walk built circa 1927-1930, 2018.

Character Area Assessment. (Refer to Figure 321) The Molokai Light Station character area possesses a high degree of integrity due to the extent of surviving features that date to the period of significance, and the limited number of changes that have occurred since 1969. Historic patterns of spatial organization, views, buildings, structures, circulation features, and plantings survive from the period of significance to convey the historic associations of the property to its development and use as a light station. Diminishing integrity is the automation of the facility, which occurred during the period of significance, but resulted in the removal of residents and later the Fresnel lens from the property. A few of the support structures associated with the lighthouse—an oil vault and oil drum loading dock—were removed in 1974, after the period of significance. Additional changes, namely the removal of two keeper dwelling structures and the construction of one replacement, occurred during the period of significance.

Natural systems and features associated with the Molokai Light Station consist of the elevated and prominent knoll in the north-central portion of peninsula that served as the basis for siting the lighthouse, and the leeward side of the knoll used to develop the associated residential precinct. The elevated knoll affords views in all directions, while the lighthouse and its beam could be clearly seen for up to 28 miles to the north, east and west from its position. These conditions survive today similar to what was present historically.

Historic patterns of spatial organization, composed of the rectilinear arrangement of the residential precinct and the tightly grouped cluster of the lighthouse features nearby, connected by roads and walks, survive from the period of significance to convey their important associations with the intended design and layout of the facility.

Views that extend across the vast open space of the northern peninsula and to the Pacific Ocean are likely consistent in character to those present during the period of significance. The views within the residential precinct are more limited due to the position of the knoll to the east and the plantings of ironwood pine trees as allées and windbreaks along the margins of the complex. These are also consistent with historic conditions.

The three historic roads that provide access to the complex—Primary Access Road, Internal Access Road, and Northern Access Road—also survive from the period of significance and have been little altered since 1969. The concrete sidewalk that connects the residential and lighthouse precincts was built between 1927 and 1939, and also survives with integrity today.

Most buildings and structures constructed during the period of significance to support light station operations survive today. Two original dwellings were removed during the period of significance with one replaced by 1951. Two oil storage related structures were removed in 1974, however, diminishing integrity of the built environment to a degree.

Numerous historical plantings survive today from the period of significance. These include the ironwood pine trees, date palms, and foundation plantings associated with the residential complex. The location of the former residential garden area is evident.

Evidence of a former wire fence survives in the form of redwood posts with some wire attached. A former flagpole has been lost. There are no contemporary small-scale additions to the Molokai Light Station cultural landscape.

The Molokai Light Station character area thus possesses a high degree of integrity for the period of significance with numerous surviving features and landscape characteristics that help to convey its historic associations.

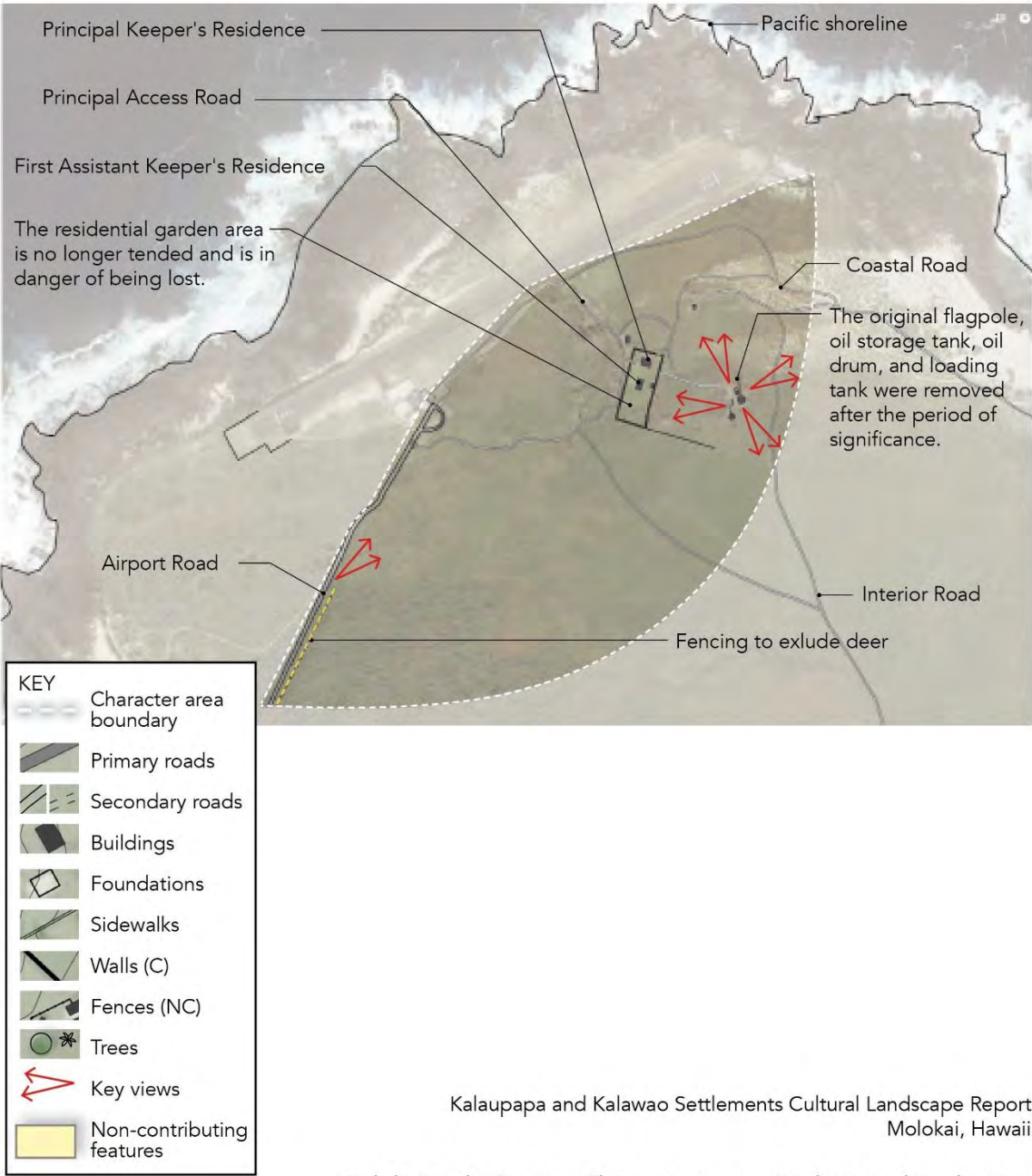


Figure 321. Molokai Light Station character area assessment. (Source: LSHLA)

Treatment Plan

Introduction

This treatment plan has been prepared to provide the National Park Service (NPS) with an overall vision for the cultural landscape of the Kalaupapa and Kalawao Settlements and is intended to guide and support long-term management and interpretation of the site and its resources. The plan includes treatment guidelines and recommendations. CLRs are not compliance documents. Implementation of specific recommendations indicated in the treatment plan will need to be preceded by and coordinated with Section 106 review and compliance. Another essential effort that needs to precede implementation is consultation with the Kalaupapa community and stakeholders. Although the CLR was developed with input provided by the community along the way, specific individual recommendations should be discussed in more detail before implemented. Ongoing consultation is envisioned as a key part of the process of implementation in the future. The treatment plan should also be revisited in ten to fifteen years to update the goals and objectives associated with cultural landscape management as well as what recommendations have been implemented. An updated CLR could be prepared at that time to guide management and maintenance objectives as they have evolved.

As noted previously, the purpose of the CLR treatment plan is to provide long-term strategies for the preservation of cultural landscape resources and characteristics that contribute to the significance of the Kalaupapa and Kalawao Settlements cultural landscape. Because cultural landscapes are inherently assessed and managed at several scales, the treatment plan addresses recommendations at the settlement-wide level as well as more site-specific scale. The recommendations provided herein consider the preservation needs of each individual resource, while also taking into consideration specific goals, issues, and concerns identified by park personnel, and the park-related issues of programming, health and safety codes, accessibility, parking, and interpretation. Also taken into consideration are the legislative and policy issues related to Kalaupapa's status as a unit of the National Park System and the cooperative management agreements and partnerships that guide actions conducted on within the park. As noted, the NPS maintains cooperative agreements with state agencies including the State of Hawai'i DLNR, DOT, DHHL, and DOH, as well as the religious organizations that administer properties. The director of DOH, for example, is responsible for determining the rules and regulations for operating the property and providing care for the patient community.

The primary document establishing the approach to treatment of the cultural landscape is the 2018 Draft General Management Plan and Environmental Impact Statement for Kalaupapa National Historical Park (GMP). The preferred alternative articulated in the GMP emphasizes stewardship of Kalaupapa's land and waters to ensure the long-term preservation of Kalaupapa stories through collaboration with a wide range of partners throughout Hawai'i, nationally, and abroad. The diverse resources would be managed from uka to kai to protect and maintain their character and historical significance.⁴⁰⁵ The GMP addresses both near-term, and

405. National Park Service, Kalaupapa GMP, 18.

longer-term strategies for preservation and management. In the near future, Kalaupapa will continue to be co-managed with the Hawai‘i DOH and other partners to ensure patient care, and maintain and preserve the “character of the community” including the preservation of historic structures, cemeteries, cultural landscape resources, and intangible resources such as stories, customs, and living traditions.⁴⁰⁶ As a document that reflects input from numerous sources and stakeholders, and is available to the public, the GMP considers a range of potential preservation strategies and promotes—in partnership with other agencies and organizations—compatible adaptive use of historic buildings and management of the landscape in a manner that preserves historic patterns and features, materials, spatial organization, and historic character. In this regard, the GMP sets the overall framework for preservation treatments and schematic designs described in this report. Where the GMP includes potential treatment for specific areas and cultural landscape resources, that guidance is excerpted and used to support the treatment recommendations.

In addition to the GMP, several NPS reports and technical documents were reviewed to ensure consistency and compatibility with existing goals and objectives for the treatment of resources. Key among these were ethnographic reports, historic structure reports for individual buildings, completion reports for infrastructure projects, cemetery and grave marker conservation reports, archeological reports, and vegetation inventories and management documents. In most cases, management goals for diverse resources were consolidated to direct a holistic approach to treatment of the cultural landscape. In some cases, this required balancing resource values in consultation with the park or employing a phased approach to treatment based on potential future adaptive uses and interpretive goals. For example, treatment of historic vegetation requires on-going consultation with natural and cultural resource professionals to ensure the re-introduction of historically important cultural vegetation is compatible with the larger goal to control invasive plants, while also taking into consideration the preservation of historic character, sustainability, and interpretation within the context of future adaptive use.

The treatment plan is organized into five sections:

1. **Park Management Goals, Issues, and Concerns**, which describes the issues raised by the park for consideration by the CLR treatment plan.
2. **Treatment Approach**, which presents the four approaches recognized by the Secretary of the Interior for treating historic properties, and identifies the CLR’s recommended approach for Kalaupapa.
3. **Settlement-wide Treatment Recommendations**, which provides a series of specific guidelines for resource management within the Kalaupapa cultural landscape that form a framework for all specific treatment recommendations.
4. **Treatment Recommendations by Character Area**, which describes the future desired character of each landscape character area based on implementation of the CLR treatment plan.

406. Ibid., 18. It is important to note that based on the National Register of Historic Places and NPS policy, the CLR only addresses the treatment of tangible resources. In some cases, cultural traditions that have physical attributes in the landscape, and have previously been documented at Kalaupapa and are included in treatment under the guidance of park management.

5. **Design Guidelines**, which identifies the process by which implementation of the recommendations should be undertaken, arranged by categories such as rock walls, roads and parking, walks, views, trees, and invasive control.

Park Management Goals, Issues, and Concerns

The following goals, issues, and concerns were conveyed to the CLR team by NPS regional and park personnel over the course of the project initiation period for consideration in developing the treatment plan.

Molokai Light Station. The NPS seeks recommendations on appropriate rehabilitation and interpretation of the property. Currently the buildings are vacant. The garage currently houses the historic Fresnel lens.

Concessions. The NPS seeks recommendations for where food and beverages and other amenities for visitors should be located, including appropriate buildings for rehabilitation to accommodate this need. Features such as water bottle filling stations would also be included in these recommendations.

Tours. The NPS seeks guidance on where it is appropriate for tours to stop, and what issues need to be addressed to accommodate tours in a way that protects the cultural landscape.

Tour bus parking. The NPS seeks guidance on where the tour buses should be parked and staged when drivers are off duty, and where they should park when stopping to let visitors out at prescribed locations. Guidance is needed regarding the types of circulation improvements that might prevent damage where buses park.

Statues and commemorative features. The Park regularly receives requests to erect statues and other commemorative features at Kalaupapa and Kalawao Settlements. NPS Management Policies address the placement of statues and commemorative features within National Park Units. The Director can also authorize installation of a commemorative feature within a park. The NPS seeks guidance regarding the appropriate siting, scale, and materiality for commemorative features should they be approved, as well as other considerations that may impact the cultural landscape in case commemorative features are planned.

Cemeteries. The Park as well as the DOH is often asked by patient descendants and family members for permission to install grave markers at unmarked graves. With potentially 7,000 unmarked graves at Kalaupapa and Kalawao Settlements, this request could become challenging to accommodate. The Park anticipates that individuals born at Kalaupapa, descended from someone who lived at Kalaupapa, or who maintain another association to the Settlements might request to be buried with a parent or another relative. The Park seeks guidance regarding the idea of establishing a policy for these situations.

Rock walls. The NPS seeks specific guidance regarding appropriate treatment of the many rock walls located within the Settlements.

Walks. The NPS seeks guidance regarding the integrity of the concrete walks located throughout the Settlements, and appropriate techniques for repair, rehabilitation, and replacement.

Vegetation management. The NPS seeks guidance regarding appropriate techniques for maintaining cultural vegetation, including coconut palm and fruit trees, replacing overmature stands, managing foundation plantings around residences and other buildings, and controlling plantings composed of invasive species that are of cultural importance.

Signage and other small-scale infrastructure features. Signage, site furnishings, and other small-scale infrastructure features, including cell phone boosters and antennae, are contemporary components of the cultural landscape. The NPS would appreciate guidance on future siting, scale, and materiality of such features, and possible ways to diminish their visual impact on the cultural landscape.

Interpretive opportunities. Information derived from research into the history of the Settlement cultural landscape affords a wealth of material that may be useful for interpretation. The NPS seeks guidance regarding interpretive opportunities emerging from the work done to complete the CLR.

Facility improvements. Current and future residents will benefit from facility improvements that might occur in the future. The NPS seeks guidance on where appropriate facility improvements might occur within diminishing the integrity of the cultural landscape.

Rehabilitation of specific sites. Specific areas of the Settlements that have not been the regular focus of maintenance activities may merit rehabilitation to return historic character, reestablish missing features, or accommodate a new use. The NPS seeks guidance on where and how rehabilitation of specific sites might take place.

Electric system upgrades. The Kalaupapa Settlement electrical system has been determined eligible as a contributing resource in the NHL. Future upgrades will need to respect the contributing status of the system. The Park would be interested in guidance regarding how to address electrical system upgrades within this context.

Garages and garden sheds. There are many garages located within Kalaupapa Settlement. Some are in deteriorated condition, while others have been lost, with only the foundation remaining. Residents sometimes request permission to rebuild garages or sheds that have been lost, resurface the floors, or build temporary carports or sheds. Large equipment storage is also a need that arises from time to time. The park seeks guidance on how to rehabilitate existing garages, and how to address requests to build new structures.

Large equipment storage. The NPS is interested in suggestions for where heavy maintenance equipment might be best stored.

Containers. Shipping containers are a relatively recent addition to the Kalaupapa Settlement cultural landscape, and their numbers keep increasing. They are used for storage and for moving goods on Barge Day. The NPS seeks guidance regarding appropriate locations to store shipping containers.

Fencing at quarters. Residents sometimes request the ability to erect fencing to contain their dogs in the yard or to exclude deer from residential gardens. The NPS seeks guidance regarding the potential to add fencing at individual properties.

Treatment Approach

Treatment of the cultural landscape is directly influenced by two related conditions. One is the remnant nature of the physical landscape today. Preserving the physical attributes of the landscape is increasingly imperative as with each loss, an understanding of historic patterns of spatial organization, land use, and character become more elusive. At Kalaupapa and Kalawao Settlements there has been a significant loss of built features—potentially as much as 50 percent of the buildings—since the 1930s, likely the most developed period of the Settlements. In addition, character-defining components of the cultural landscape have been lost, or are not well managed due to a lack of articulation. Thus, one of the greatest threats to the historic character and

integrity of the cultural landscape remains the incremental loss of historic fabric through lack of care, maintenance, or appropriate management. Contributing to the threat are environmental factors, such as the humid, saline climate, encroachment by invasive plants, natural attrition of activity potentially resulting from a lack of appropriate adaptive use, erosion or damage by feral animals, maintenance capacity to address the needs of individual gardens, and removal of historic features to reduce the level of routine maintenance.

Another key consideration for treatment is the uncertainty of how the Settlements are likely to change in the future in terms of management entities, activities and uses, and the resident population. A key goal for the future is preserving a sense of place and “community spirit” as articulated by the residents over many years of calling Kalaupapa home. Some of the physical attributes of community life at Kalaupapa—the churches, Paschoal Hall, Fuesaina’s Bar, the Patient Store and Post Office, Kalaupapa Landing, Judd Park, and the Lion’s and Oceanside Pavilions—remain to convey their historic associations. It is important to consider how active community uses might continue into the future, including the perpetuation of an active community on the Peninsula. Stories of personal experiences and perceptions about Kalaupapa remain strong threads that connect people to this landscape, and could be continued through different traditions.

These issues have been taken into consideration in identifying an appropriate treatment approach for the Kalaupapa cultural landscape as it pertains to the guidance afforded by *Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. The Standards are comprised of four distinct treatments for historic properties—preservation, rehabilitation, restoration, and reconstruction.

Preservation is the act or process of applying measures necessary to retain the existing form, integrity, and materials of a historic property. Work, including preliminary measures to protect and stabilize the property, generally focus on the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

Rehabilitation is the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

Restoration is the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by removing features from other periods in its history and reconstructing missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

Reconstruction is the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

At Kalaupapa, the near term recommended treatment approach is **Preservation**. Preservation will ensure protection and stabilization of resources that contribute to the NHL. The focus of the approach is appropriate preservation maintenance of historic structures, vegetation, views, circulation elements, etc., and working with cultural resources specialists to remove or mitigate damage caused by invasive vegetation throughout the landscape. The goal of preservation as a treatment philosophy is to prevent additional loss and fragmentation

of the cultural landscape until future uses are determined. At Kalaupapa, near-term represents the period during which decisions are made regarding the future use of areas of the Settlements not involved in supporting patient care.

The Secretary of the Interior's Standards for **Preservation** are as follows:

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection and properly documented for future research.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color and texture.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

Over the longer term, **Rehabilitation** is the recommended primary preservation treatment approach, which is intended to addressing proposed changes in use and operation of the Settlement holistically. This includes reestablishment of native plant communities over various areas of the peninsula, accessibility improvements to circulation including vehicular parking areas and walkways to ensure accessible routes are provided to all improved areas and facilities, and adaptive reuse of historic structures for interpretation, housing, and other needs associated with stakeholders through approved planning processes. Additional needs that might be addressed through rehabilitation include changes in land use to reflect new partnerships and programming. At Kalaupapa, the rehabilitation approach relates to the accommodation of proposed new uses as areas of the Settlements transition based on the planning efforts being conducted by the NPS and DOH.

The Secretary of the Interior's Standards for **Rehabilitation** are as follows:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations or related new construction will not destroy historic materials, features and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Through consultation with Native Hawaiians groups and the Hawai‘i State Historic Preservation Division, the GMP identifies possible **Restoration** treatments for some archeological and other structures, such as rock walls, heiau, and the hōlua slide. Restoration treatment would be undertaken in partnership with cultural resource specialists and preservation maintenance crews possessing appropriate skills, knowledge, and abilities, including traditional building techniques and construction of traditional Hawaiian architecture.

The Secretary of the Interior’s Standards for **Restoration** are as follows:

1. A property will be used as it was historically or be given a new use that interprets the property and its restoration period.
2. Materials and features from the restoration period will be retained and preserved. The removal of materials or alteration of features, spaces and spatial relationships that characterize the period will not be undertaken.

3. Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve materials and features from the restoration period will be physically and visually compatible, identifiable upon close inspection and properly documented for future research.
4. Materials, features, spaces and finishes that characterize other historical periods will be documented prior to their alteration or removal.
5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize the restoration period will be preserved.
6. Deteriorated features from the restoration period will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials.
7. Replacement of missing features from the restoration period will be substantiated by documentary and physical evidence. A false sense of history will not be created by adding conjectural features, features from other properties, or by combining features that never existed together historically.
8. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
9. Archeological resources affected by a project will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
10. Designs that were never executed historically will not be constructed.

Because standards for treatment are not necessarily mutually exclusive, the CLR supports the application of more than one treatment approach to the landscape. For example, preservation of spatial organization is critical to the integrity of the historic district, but within that organization, individual structures may be rehabilitated to accommodate a new compatible use. In all cases, the recommendations provided for the treatment of individual features are not made in isolation, but the relationship of the feature to the larger cohesive whole of the cultural landscape. With an extended period of significance, the Settlement reflects an evolution over many decades. The contemporary landscape represents a palimpsest of change over time within the parameters of a living community setting. The evolving needs of the patient and kōkua community continue to influence the character and composition of Kalaupapa today. As it is not possible to identify a single period during which the Settlement can be said to reach a key era of development, the CLR does not advocate restoration of the cultural landscape to a specific date or even short range of dates. Evidence of Settlement evolution between 1866 and 1969 should be allowed to co-exist, with missing land uses and built features that were important to the community potentially interpreted rather than restored. Expressions of patient life that post-dates 1969 is also important to consider in future plans for adaptive reuse. Although not prescriptive, the goal for treatment is to balance preservation of historic resources that can be traced to the period of significance, with potential adaptive use needs in the future. Sensitive design strategies are warranted in the rehabilitation process that protect character-defining features while accommodating contemporary needs. Active and ongoing use of buildings and structures will help to preserve these features, and thus some trade-offs may be necessary to make sure that they remain viable spaces.

Collectively, the treatment approaches presented herein promote protection of historic resources and

community character while acknowledging that future use of the settlement will involve collaboration with many organizations and partners to identify compatible new uses, enhance visitor services, support educational and interpretive opportunities, and encourage sustainable maintenance practices to protect and ensure the character of the cultural landscape remains a legacy to the people who made Kalaupapa their home.

All work associated with implementation of these recommendations requires consultation with and review by the Hawai‘i State Preservation Division to ensure compliance with Hawai‘i Revised Statutes Chapter 6E, and the National Historic Preservation Act, as Amended, and outlined in 36 CFR Part 800.

Settlement-Wide Treatment Recommendations

Treatment recommendations are prescriptive actions related to stabilization and/or repair of contributing cultural landscape features as part of an overarching preservation or rehabilitation approach. Treatment recommendations provide a framework of “what” to do to protect and enhance the cultural landscape of the Kalaupapa and Kalawao Settlements.

The treatment recommendations provided below are organized by the landscape characteristics addressed throughout the CLR. Neither cultural traditions nor archeological resources are addressed as separate categories. See footnote 406 related to cultural traditions. For archeological resources, treatment should be based on the assessment and recommendations made by a qualified archeologist; the CLR includes recommendations of a general nature to guide protection of known archeological resources until such time that an archeologist can address more substantive needs. Otherwise, the Settlement-wide Treatment Recommendations are tied to a set of guidelines that address “how” implementation of specific recommendations should or can occur. These are referenced in the text and can be found at the end of this chapter.

The treatment recommendations consider specific preservation issues and management concerns that apply to the entire Kalaupapa and Kalawao Settlements cultural landscape. Specific actions pertaining to individual character areas are provided in the subsequent section. Character-area recommendations provide site or location-specific action items to address preservation, repair, and stabilization, while suggesting opportunities for interpretation.

Natural Features and Systems

Natural features and systems are the landform and topography, geologic and water resources, and native plant communities that form the environmental conditions within which cultural activities have taken place. Protection of natural features and systems, and cultural responses to natural resources, is essential to the management and care of the cultural landscape; without these features the understanding of the significance of the place is no longer possible. Thus preservation of natural features and systems is an essential core goal of long-term management of the Kalaupapa and Kalawao Settlements cultural landscape.

Treatment Recommendations

1. Preserve and protect all natural features and systems located within and impacting the Kalaupapa and Kalawao Settlements cultural landscape, including landform and topography, geological and water resources, and native plant communities.
2. Address the threat to native plant communities posed by invasive plant and animal species by developing a long-term action plan for control of these species.

Spatial Organization

Historic spatial organization occurs at several scales within the Settlements landscape and defines overall patterns of land use throughout Kalaupapa. Early Native Hawaiian settlement patterns on the peninsula were spatially organized by the three ahupuaʻa and use of natural resources. A portion of the traditional Hawaiian landscape organization influenced the early development of the community at Kalawao, including the linear pattern of organization along a road corridor that continued until the settlement was relocated to the leeward side of the peninsula at Kalaupapa. The *relationship among these patterns* over time has defined a good deal of the cultural landscape on the peninsula.

Kalaupapa Settlement reflects components of more formal institutional planning and design, including zoning of land use such as patient care, administration, community services, and residential areas. The character-defining patterns of spatial organization—the grid of primary roads that define blocks, the concentration of institutional and administrative buildings and structures near the center of Kalaupapa Settlement, articulated and self-contained group homes and staff housing, the linear system of cemeteries along the west coast, resident beach houses, and the residential neighborhoods that wrap the administrative core—define community development and landscape character.

While many landscape changes have occurred at Kalaupapa, including the loss of buildings and the encroachment of vegetation, the overall layout of the settlement including the location and concentration of building clusters, patterns of land use, and systems of movement through the landscape have remained remarkably intact over time. Treatment recommendations address preservation of these patterns for the peninsula, Kalawao, and Kalaupapa as they contribute to the significance and integrity of the cultural landscape holistically.

Recognizing and respecting historic patterns of spatial organization and land use, along with the attributes that spatially characterize the designed landscape such as building set-backs, use of plantings, and components of circulation is a key consideration for ensuring compatible development in the future.

Based on the work conducted to prepare this CLR, removal of invasive vegetation to reestablish historically open fields and selected viewsheds is recommended to enhance historic Spatial Organization and linkages; and rehabilitation of the two entry corridors—between the Pali Trail and Bay View Home along Puahi Street, and along Kamehameha Street between the West Coast Cemeteries and St. Francis Catholic Church—is also recommended to improve visual quality.

Other specific issues related to siting new land uses and related landscape features currently under consideration by the park that impact spatial organization include:

- Locating new services and amenities to accommodate visitors, staff, and residents, including restroom facilities, orientation and interpretive information, food concessions, bottle refill stations, benches, and bike racks.
- Locating an appropriate place for a burn pile.
- Locating an appropriate place for a nursery where larger numbers of plants can be propagated.
- Providing appropriate locations for maintenance equipment and excess vehicles that can be screened from view.

- Addressing cultural landscape treatment issues anticipated to accompany future sea level rise, increased frequency/severity of storms, and tsunamis.



Figure 322. Diagram illustrating former agricultural lands at Kalaupapa Settlement. (Source: LSHLA)

Treatment Recommendations

1. Preserve large-scale spatial organization within the study area including components defining the traditional Hawaiian community landscape, and the extent of historic development at Kalawao, the Damien Road corridor, Kauhakō Crater, Pali Trail, Molokai Light Station, the West Coast Cemeteries, and Kalaupapa Settlement, by documenting the important physical relationships between environmental conditions and historic built features, and between historic built features, and respecting these relationships when considering future change.
2. Identify areas for potential future agricultural use based on knowledge of areas where agricultural activities occurred during the period of significance (Figure 322).
3. Undertake selective removal of invasive vegetation where it obstructs historic views and physical relationships among key areas within the developed areas. Selective removal would consist of the identification of individual trees and clumps of trees to be removed based on the reestablishment of a specific missing spatial condition or view, rather than wholesale removal of all trees in a grove. Trees to

be removed could be flagged and the locations reviewed by those involved in vegetation management, and removed individually with care taken not to disturb trees to remain. Locations where removal might be considered include selected view points along the Damien Road corridor as it approaches Kalawao near the Lions Club sign, at the New Baldwin Home site where volunteer vegetation renders an understanding of the former layout of the complex difficult to understand, and visual access to the former pastures and open fields north and west of McVeigh Home. These views are considered in more detail at the character-area scale. See *Settlement-wide Guidelines: Tree Removal and Clearing* for guidance.

4. Ensure adaptive use of historic structures echoes historic uses and patterns of spatial organization to the degree possible.
5. Rehabilitate individual historic buildings and structures within the Administrative Area character area, at entry points into the Settlement near the airport and Pali Trail, and in other key areas related to visitor tour routes to accommodate orientation and interpretive information, as well as public facilities and services, concessions, and amenities such as benches, and bottle refill stations. Locations to consider for siting these features include the Slaughterhouse Restrooms at the New Baldwin Home character area, within buildings at Bay View Home considered for adaptive reuse to accommodate visitor needs, the Oceanside Pavilion, Paschoal Hall, McVeigh Social Hall, the environs of the Patient Store, and at the AJA Benevolent Society Hall. In some cases, the new features might be located inside the building or structure, while in other cases, they may be discretely sited outside the historic building or structure. These recommendations are considered in more detail at the character-area scale.
6. Evaluate the potential to locate maintenance and operational needs, such as a burn pile, plant nursery, and storage of excess vehicles and containers in former open pasture and field areas that have become overgrown with invasives. Invasives would first have to be cleared to establish sufficient open space to accommodate the proposed maintenance or operational needs. Woody vegetation that helps to screen these uses from view would be retained. Locations to be evaluated for accommodating the burn pile and excess vehicle storage include north of New Baldwin Home and north of Beretania Street east of Staff Row. Locations to be evaluated for accommodating an expanded plant nursery include along Kapiolani Street where only one dwelling currently survives, and east of Staff Row. These locations are considered in more detail at the character-area scale. See *Settlement-wide Guidelines: Control of Invasives* for guidance.
7. Ensure that all historic resources along the shoreline, which are at risk due to the potential for a tsunami or other weather event to cause harm, are adequately documented in terms of location, materials, and form, and information is archived. Consider the use of advanced technology such as electronic scans as potential tools for documentation.
8. Consider options for protecting the shoreline from impacts related to wave action, rising sea level, and severe weather events using strategies that protect historic character but introduce additional safeguards. Consider using an adaptive management strategy to control erosion along the western shoreline that explores the efficacy of different vegetation types at holding banks and slopes. First conduct research to determine the most effective strategy for controlling erosion, including plant types and species with effective soil retention capabilities. Consider managing ironwood pine trees along the western shoreline to ensure that the erosion is controlled using the most appropriate plant species based on research. Should research suggest an approach that might include the use of other species, introduce the new species in a limited area and evaluate the effectiveness of the planting before proceeding to implement the strategy over a larger area. Also consider conducting research on the potential for reef enhancement to help protect

vulnerable areas of the shoreline.

- Monitor the condition of the reef along the western shoreline of the peninsula. Consider the reef a key element of the protection strategies against storm damage and the potential impacts of climate change. Consider options for enhancing reef conditions at Papaloa to protect against future effects of increased storms and sea level rise should the condition of the reef merit intervention.

Views and Vistas

Historically, the cultural landscape at Kalaupapa was much more open in character. Over time, invasive vegetation has encroached on formerly open areas of the peninsula, obscuring important viewsheds that historically provided linkage among developed areas. This is especially true for the Damien Road Corridor, Kalawao, the Kauhakō Crater, and the Pali Trail. Treatment guidelines address rehabilitation of selected *historic views* to enhance visitor understanding of the cultural landscape holistically, while also working to reestablish historic connections among historic developed areas.

Treatment Recommendations

1. Selectively thin and/or remove vegetation to reestablish the visual connections to, and physical relationships among, historic developed areas and natural features on the peninsula, and to maintain key viewsheds from overlooks and viewpoints. Specific viewsheds for rehabilitation are addressed in more detail at the character area scale, including:
 - Views from Kauhakō Crater to the north and west
 - Views along Damien Road, especially on the approach to Kalawao where portions of the both the pre-settlement landscape and portions of the Kalawao settlement are obscured by vegetation.
 - Views from Kalawao to the Pacific Ocean and south into the valleys
 - Views within Kalaupapa Settlement of the pali and Pacific Ocean
 - Views from additional switchbacks along the Pali Trail
2. Enhance the historic character and visual quality of the entrance corridors leading from the airport and the Pali Trail by removing storage containers and abandoned cars and buses, and screening maintenance yards and vehicles between West Coast Cemeteries and St. Francis Catholic Church; and establishing a healthy stand of field grasses and a single road system within the open area north of the mule corral to the Puahi Street bridge.
3. Identify locations for storing containers and vehicles that are not in use that is outside of historic viewsheds. Alternatively consider options for screening these features by establishing hedges or tree plantings that limit views from adjacent road corridors. Consider alternatives on a case-by-case basis taking into account the setting and compatibility of the proposed screen material. This recommendation is addressed in more detail at the character-area scale.
4. Consider alternatives for screening new vehicular and bicycle parking that include hedge plantings and low walls on a case-by-case basis taking into account the character of the setting and the compatibility of the proposed screen material.

5. Design new walls to be built from stone or concrete using a construction technique that is distinct from the vernacular dry stacked or piled form of historic walls. Consider the use of stone that is worked rather than fieldstone to distinguish it from the historic vernacular walls.

Circulation

Primary roads within Kalaupapa and Kalawao Settlements are historic resources that serve as essential character-defining features of the cultural landscape. Damien Road that connects Kalawao and Kalaupapa Settlements, the north/south routes along the east and west shorelines, and the Interior Road to Kauhakō Crater, along with the grid of streets within Kalaupapa survive largely intact and remain the primary system for vehicular movement on the Peninsula. Secondary roads and informal spur roads provide limited access to discrete areas; many of these roads are historic while others are more vernacular routes established more recently through repeated use and in some cases, adversely affect the character of the cultural landscape. Maintenance of historic primary and secondary roads *as a system* of movement is important for understanding the extent of the developed settlement and reducing the potential impact to vegetation along shoulders and open spaces. Treatment recommendations for non-historic roads are addressed in the recommendations for the character areas where they occur.

Vehicular parking is informal throughout the Settlements. A few designated parking areas exist to support maintenance and shop areas, administrative offices, services, some operations, and group use and residential areas. As future uses change, there is the possibility that new parking areas will be needed. Establishment of formal parking areas to support public use of certain buildings, and less formal temporary parking to accommodate tour buses, is addressed within the character areas where relevant. The use of bicycles for transportation should be encouraged as a more sustainable method of individual access throughout the settlement. In the near term, no new routes are recommended and bicyclists are encouraged to share the road. Bike racks are recommended as additions in key locations. See *Settlement-wide Design Guidelines: Site Furnishings* for more information.

The majority of formal pedestrian circulation is comprised of concrete walks that lead to the entrances of primary buildings and grounds from adjacent roads. Although most of the original walks have been replaced in kind over the years, the replacement walks have been built to match the historic features as closely as possible in terms of finishes and surface texture. With the exception of the Pali Trail, other pedestrian circulation is generally informal or unarticulated in that pedestrians use road corridors, foot trails between buildings, and informal social trails.

Treatment of circulation features should be focused on preservation and stabilization of the historic road grid; a phased approach for adding new parking areas to address the needs of operations and administration; preservation and maintenance of existing pedestrian circulation; and thoughtfully considered articulation of new pedestrian circulation based on future adaptive use.

Universal design and conformance with accessibility code requirements will continue to guide circulation improvements throughout the Settlements. Guidelines for improving accessibility are addressed in the *Settlement-Wide Design Guidelines: Accessibility* section. Standards and conceptual examples are provided for individual building types within the character area treatment recommendations. Specific accessibility guidance is provided for individual character areas.

Treatment Recommendations

1. Maintain the design attributes and character of paved historic roads throughout the Settlements including the width, alignment, paving material, and drainage structures described in the CLR, and the character of closely mown turf margins and shoulders. Reveal the original curbing associated with roads and road systems, such as those at McVeigh and Bishop Homes, which have become buried by layers of pavement. These issues are addressed in more detail at the character area scale.
2. Stabilize and repair damaged segments of road pavement. Otherwise maintain the historic road system in good condition.
3. Rehabilitate and improve unpaved roads only when needed to address a specific need related to adaptive use, and on a case-by-case basis. Limit the extent of the improvements to the least needed to accommodate the proposed use. Improve rather than pave unpaved roads. Consider the viability of using gravel as an improved road surface before paving with asphalt.
4. Avoid adding new roads within the Settlements unless required to accommodate a proposed future adaptive use. Consider the width and paving materials used for similar types of roads as the proposed new road, and match the profile and surface. Limit the extent of the improvements to the least needed to accommodate the proposed use.
5. Allow use of non-motorized vehicles, such as bicycles and mountain bikes, but confine use to the historic road grid. Provide bicycle racks at public buildings to support bicycle use within the Settlements. Use signs to inform cyclists that bicycles are to remain on road surfaces. See *Settlement-wide Design Guidelines: Signage* for guidance.
6. Address accessibility through the provision of designated parking spaces, appropriately sloped walks that meet Architectural Barriers Act Accessibility Standards (ABAAS), and ramps with handrails or lifts that provide access to building interiors.
7. Enhance visitor safety by reinforcing edging and placing warning signs along dangerous shoreline areas such as near Judd Park and the Oceanside Pavilion, and steep cliffs such as along Damien Street, at Bay View Home, the crater rim, and the Pali Trail. The use of contemporary yet simple bollards, limited fencing, and simple routed wood board warning or informational signs, is recommended. See also *Settlement-wide Design Guidelines: Safety* for guidance.
8. Preserve the character of historic concrete walks located in Kalawao and Kalaupapa Settlements, including the finished surface texture, color, size, and type of exposed aggregate documented. Replace walks in kind that are assessed as in poor condition, especially those that exhibit areas of broken pavement that present a trip hazard. However, preserve sidewalks etched with the names of patients and kōkua located in the Administrative and Residential Areas and at the Lions Pavilion.
9. Maintain sidewalks in good condition by repairing and repaving where needed. Repair cracks, breaks, and dips to avoid trip hazards. Keep walk surfaces and edges clear of vegetation, and prune tree roots that threaten to uproot and damage sidewalks.
10. Avoid adding additional circulation features.
 - Undertake the rehabilitation of historic walks as required to accommodate the adaptive use of historic

buildings and address accessibility associated with those new uses. Also address accessibility issues associated with restroom and picnic facilities. Address accessibility requirements related to future building and structure improvements following the guidance afforded in the *Accessibility Guidelines* section.

11. Use metal pipe handrail as the standard material and detail when complying with accessibility code requirements. See also the *Settlement-Wide Design Guidelines: Accessibility* section for guidance.
12. Ensure accessibility requirements are met on all design decisions associated with ongoing maintenance and rehabilitation of historic buildings. Undertake careful and thoughtful design to determine alternatives when planning new accessible routes so that all solutions are effective, compatible with the historic building and the cultural landscape.
13. Conduct additional research and documentation of the Pali Trail, including the historic evolution of the route followed, the use of specific surfacing and edging materials, the character of vegetation along the trail, the locations of key views to the settlement over time, and an inventory of archeological sites and features. The lower one-third of the trail also intersects an archeological site complex. Use this information to develop a treatment plan that will protect historic character and features; address stabilization of natural systems and resources along the trail route; improve uneven and potentially hazardous surface materials; provide a typology of appropriate materials; improve historic views from the lower portion of the trail; and incorporate measures to make repair work on rock features distinct from traditional Hawaiian features.

Cultural Vegetation

The treatment recommendations below address three specific types of vegetation on the peninsula— plants of cultural importance, native plant communities, and invasive species.

Plants of cultural importance includes plant materials that survive from the period of significance and were purposefully planted, such as fruit trees and coconut palms; are associated with individual patients, their personal gardens, and their life at Kalaupapa; were used for specific purposes, such as hedgerows to screen private yard areas; and/or are culturally significant and valued by residents for traditional food, cultural craft, and for aesthetic, decorative, and medicinal purposes. In addition to the use of these plants in gardens at Kalaupapa, many of culturally valuable plants materials can still be found within the valleys. These plants provide opportunities to interpret Hawaiian culture and the larger environmental history of the Kalaupapa Peninsula.⁴⁰⁷ While there has been significant loss of plants of cultural importance at Kalaupapa, many historic plantings still remain in the Settlement. Some of the species that are of cultural importance are also considered invasive, suggesting consideration be paid to how they may need to be controlled and not allowed to spread into areas where they are not desirable.

Native plant communities are present in several locations within the peninsula. These communities include endemic and other native species that often possess both natural and cultural resource value. Treatment targets preservation and rehabilitation of native plant communities and associations as part of a broader goal to improve the health, diversity, and integrity of the peninsula's natural environment and its

407. There is a valuable collection of patient interviews specifically describing the rich character of plantings in the settlement and the values of specific plants that have very strong associations for them and to their time at Kalaupapa. For example, see Juvik, *Ethnographic Study*.

larger ecological and cultural context. The park's current goal for restoring and enhancing native plant communities is compatible with the recommendations provided in the CLR, but need to be informed by long-term interdisciplinary planning, and preparation of a vegetation management plan. Plant reintroductions need to be considered within the context of how they might impact archeological resources, for example, or how they might obscure the traditional Hawaiian ethnobotanical record. Thus interdisciplinary planning should include both cultural and natural resource personnel working together on long-term vegetation management strategies.

Invasive species are found throughout the peninsula. Many of the species that are present today were planted for specific purposes, including designed allées and windbreaks, and for ornamental purposes, but have spread and colonized large areas where not controlled through mowing and other techniques. Control and removal of invasive species where they are impacting cultural resources is recommended. The preferred treatment for invasive species that are important to historic design characteristics of the Settlements is control. However, when control is not possible, consideration should be paid to replacement of the invasive with plant that approximates the form, scale, and texture of the designed species. The locations where invasive vegetation is recommended for removal are indicated within the individual character area recommendation sections. The *Settlement-wide Design Guidelines* section provides strategies for management and control of invasive vegetation in consultation with natural resources staff.

Treatment Recommendations

Plants of cultural importance

1. Preserve plants of cultural importance, including shade and screen plantings, row plantings marking key edges and boundaries, hedgerow plantings, windbreak plantings, fruit and other food and medicine producing plants, plants used in local crafts, and plants of ornamental value to the community, located in both public and private settings based on current conditions.
2. Conduct a detailed inventory of Settlement plantings to identify species by location, assess health, and address horticultural requirements for preservation maintenance. Map and inventory culturally significant introduced plants within the Settlements, using GPS technology to record plant locations.
3. Establish a database of plant records. Include information about the value of the plant to the community as collected through personal interviews, historical accounts, and ethnographic studies.
4. Remove volunteer vegetation that has resulted from the expansion of a cultural plantings, such as a hedgerow or windbreak, particularly when the species in use is classified as invasive.
5. Stabilize, and where feasible, enhance the longevity of cultural vegetation through rejuvenation and restorative pruning techniques. Prioritize stabilization and other efforts based on the following criteria:
 - Highest priority should be given to vegetation that is known to have been important to a specific patient's residential garden or is associated with the design of an important community site, such as the coconut palms around Paschoal Hall, or the ironwood pine trees lining the entry drive to the Bishop Home.
 - High priority should be given to plants that offer interpretive value, such as remnant fruit trees at the Ambrose Hutchison house site, and remnant vegetation associated with the Old Baldwin home in

Kalawao.

- Priority should also be placed on care of plants related to traditional cultural use such as the wiliwili, plumeria, and bougainvillea flowers used for making lei, and plant materials used for functional purposes, such as windbreaks and boundary elements.
 - Historic plants that mark the locations of former buildings, structures, or sites. These might be used to support interpretation and/or depiction of historic patterns of spatial organization.
6. Work with a preservation horticulturalist and residents to determine the maintenance protocols required to sustain plant health and structural integrity.
 7. Follow appropriate pruning procedures to enhance the natural growth of the plants that consider and incorporate traditional pruning practices. Ensure that those involved in caring for plants are trained in these practices.
 8. Document the protocols for maintaining important cultural vegetation species and specimens that can be included in FMSS. Identify assets, document deficiencies, and articulate treatment recommendations to ensure significant landscape resources are maintained.
 9. Conduct preservation maintenance training for maintenance staff and cultural resources staff to build capacity for long-term stewardship of historic plant materials.
 10. Consider the use of cultural vegetation as one of the materials used for screening new features associated with rehabilitation accommodating adaptive reuse.
 11. Maintain foundation plantings around buildings using pruning to correct shape and height. The pruned height of plantings should not overwhelm the building nor or introduce moisture or other deterioration. See *Settlement-wide Design Guidelines: Foundation Plantings* for guidance.
 12. Consider rehabilitating foundation plantings that have become overgrown, selecting appropriate compact, relatively low growing, aesthetically pleasing species from a list of appropriate plants.
 13. Protect vegetation likely to be impacted when a building is rehabilitated. Consider establishing protective fencing around the plant or plants anticipated to be impacted, and directing those working on the building to avoid running equipment over the roots of the plant or disturbing the soil around its base. Where protection measures are not likely to be effective, consider digging up the plant and heeling it in where it can be watered and protected from the sun until it is safe to replant in the original location.
 14. Consider developing an abbreviated (one- to two-page) guide that addresses vegetation management associated with historic structures where adaptive use is anticipated. Key elements of the guide might include:
 - A thumbnail history of the landscape and key aspects of the specific plant material or garden associated with the structure historically, illustrated with historic photographs.
 - Objectives for preservation of vegetation in relation to the structure.
 - Interpretive information about the cultural values associated with specific plants.

- A proposed process for participating in rehabilitation of the garden.
15. Consider restoring cultural vegetation where sufficient documentary evidence survives in the form of written descriptions, historic photographs and plans. Restoration is most likely possible in public and institutional settings.
 16. Expand plant nursery operations to enhance production of historic plant materials. Consider sites that are accessible from existing roads, can be fenced to exclude deer, and where water can be made available. Consider the potential to hire a horticulturalist or other qualified individual to manage the plant nursery.
 17. Consider establishing an educational tour of the ethnobotanical resources in the Settlement focusing on traditional use native plants by the residents.

Native plant communities

1. Map and inventory native plant communities and populations of rare, threatened, and endangered native plant species.
2. Develop management protocols for individual zones identified on the peninsula that address historic cultural and native community resource values.
3. Continue to protect and promote native vegetation throughout the peninsula, including important plant communities such as the windward dryland forest, coastal spray/strand, and Pu‘u Ali‘i.
4. Continue, and expand, the monitoring program to include all major plant communities on the peninsula.
5. Continue to propagate rare and threatened native plant species for use in restoration efforts.

Invasive and volunteer species

1. Continue efforts to control invasive species, and introduce and enhance native vegetation where invasives are removed and other areas indicated for restoration of native plant communities.
2. Control rather than remove invasive species known to have been planted as cultural vegetation.
3. Retain and maintain in good health the cultural vegetation plantings of invasive species such as ironwood pines, Java plum, date palm, and haole koa trees throughout the Settlements.
4. Monitor examples of invasive species maintained as cultural vegetation. Immediately remove and otherwise control the spread of the cultural vegetation beyond the extent of the historic planting.
5. Clear stands of invasive vegetation where historic viewsheds and patterns of spatial organization are to be reestablished for interpretive or other purposes.
6. Maintain archeological resources by monitoring conditions and removing vegetation that threatens to dislodge or disturb resources through its growth or if it were to be blown over or to drop limbs. Engage an archeologist to determine plant removal protocols that are appropriate for protecting archeological resources.
7. Ensure that any modification or removal of cultural vegetation is done in consultation with the patient

community, and other stakeholders.

Buildings and Structures

There are more than 250 historic buildings and structures associated with the Kalawao and Kalaupapa Settlements. These features are documented in the NHL and listed in the NPS Cultural Resources Inventory System (CRIS) records for Kalaupapa National Historical Park.⁴⁰⁸ These historic buildings can be grouped into four primary categories: residential, religious, community/administrative/institutional, and industrial/maintenance buildings. Although designed and constructed and for specific uses, most of the buildings at Kalaupapa Settlement exhibit a relatively similar style, form, scale, and use of material, creating an overall cohesive character in the landscape that remains present today.⁴⁰⁹

Buildings. Historic structure reports have been completed for several buildings, and some buildings have received treatments to stabilize and preserve historic fabric and character. Stabilization, preservation, and or adaptive use of historic buildings should be based on targeted treatment plans and documentation in historic structure reports. The topic of adaptive use continues to be explored by the agencies responsible for managing historic buildings and structures. For example, the NPS has conducted planning workshops to tie potential future uses to individual buildings and structures as a way to consider necessary next steps in the process of identifying preservation and stakeholder needs and input. Factors considered in the discussions included current use, future use, occupancy, significance, condition, potential use, partnerships, and revenue opportunities.⁴¹⁰

Treatment Recommendations

1. Implement a regular building inspection program that results in review of all buildings and structures approximately every three years for signs of deterioration. Complete necessary updates to the Facility Management Software System (FMSS) to coordinate historic assessments with resource data.
2. Complete historic structure reports for historic buildings that reflect a standardized approach and standards for best practices.
3. Stabilize and preserve all historic buildings and structures that contribute to the NHL Historic District.
4. Adaptively reuse existing buildings and structures whenever possible rather than adding new features. Limit the addition of new infrastructure and utilities on the peninsula to ensure and support sustainability. Modifications for new uses of buildings contributing to the NHL Historic District should be compatible with the historic character of the resource.
5. Rehabilitate historic buildings and structures that have been identified for compatible adaptive use. This may include historic buildings where
 - future interior use will be different than its historic use. For example, the interior of historic residences that may be used for interpretive exhibits.

408. The NHL nomination update for the Kalaupapa Leprosy Settlement Historic District lists 234 buildings, 46 structures, 67 sites, and 10 objects as contributing to the historic district. Johnson, NHL, 56.

409. Johnson, Draft NHL nomination update, 63.

410. Regional Civil Engineer, PWR, Trip Report—Kalaupapa National Historical Park, May 8-10, 2018.

- future changes are required to comply with health and safety codes.
 - future changes are required to comply with accessibility standards, and to employ universal design principles as practicable.
6. Ensure all historic buildings and structures have undergone condition assessment prior to implementation of any stabilization or preservation treatment.
 7. Remove vegetation growing on and within buildings.
 8. Provide ramps, walks, and parking spaces as needed to support accessibility needs designed to have the least impact possible on the historic character of the buildings and landscape. See the *Settlement-Wide Design Guidelines: Accessibility* section for guidance.
 9. Ensure maintenance work or activities conducted to rehabilitate or repair the exteriors of historic buildings does not negatively impact landscape resources including vegetation, planting beds, walkways, fences, soils, and utilitarian structures.
 10. Ensure that all landscape features associated with the environs of the building undergoing preservation treatment are documented and protected. Where landscape features will be impacted, document and replace the feature in kind following the work. Exceptions include providing ramps as needed to comply with accessibility requirements in accordance with the Architectural Barriers Act Accessibility Standards (ABAAS) and the design guidelines provided herein. Where foundation plantings are impacted, consider the guidance in the *Settlement-wide Design Guidelines: Foundation Plantings*.
 11. All buildings and structures in ruins or on the verge of being in ruins should be stabilized.
 12. Conduct all preservation work on historic buildings and structures in consultation with a historical architect and employing individuals skilled in preservation maintenance and conservation as appropriate.
 13. Ensure documentation and condition assessments have been prepared for historic buildings and structures potentially at risk from earthquake, fire, hurricanes, sneaker waves, storm surges, or sea level rise. Investigate technologies and rehabilitation options for increasing resiliency to future storm, flooding, or wave events. Avoid using extensive modification of the landscape, such as contour grading or intensive re-vegetation, as a means to protect buildings, structures, and sites in fragile coastal areas. If loss of a historic building or structure is imminent, undertake documentation and removal, or relocation if feasible. Consideration should be paid to relocating buildings to sites where historic buildings have been lost, and the loss has impacted historic patterns of spatial organization.

Dry stacked stone walls. One of the character-defining historic structures associated with Kalaupapa and Kalawao Settlements is the dry stacked (or piled) stone wall. These are pervasive throughout the peninsula. Historic rock walls specifically refer to those built after 1866 in support of Settlement development. The peninsula also contains numerous examples of rock walls that preceded the establishment of the Settlement, and are components of the traditional Hawaiian archeological complex.

Treatment Recommendations

1. Document all dry stacked lava rock walls using GPS technology for inclusion in GIS files.

2. Record the condition of all rock walls, and record examples of workmanship for future reference.
3. Ensure that traditional knowledge of wall construction is available to guide wall stabilization and repair in the future.
4. Prioritize preservation and rehabilitation of historic dry stacked or piled stone walls.
5. Ensure that walls are structurally sound and do not present a safety hazard, particularly in public use areas.
6. Establish a monitoring program to regularly check on the condition of walls, and to identify the need to remove vegetation and stabilize or repair sections impacted by tree or limb fall or other condition.
7. Establish protocols for wall repair, and train personnel to be involved in repair. Respect the unique character of individual dry laid stonewalls throughout the settlement.
8. Record, protect, and leave inside any artifacts found within the rock walls.
9. Remove vegetation growing on and within the rock walls and repair stone work as needed to ensure that they remain in good condition. Follow the guidance afforded in the *Settlement-wide Guidelines: Rock Walls*.
10. Ensure all repairs and stabilization efforts conducted on historic wall segments are consistent with the overall character of the wall. The effect of time, weather, water, and vegetation, sometimes referred to as patina, is part of the character of the wall and should be considered in the repair technique.
11. Ensure that all walls are maintained clear of volunteer vegetative growth. Remove tree saplings, vines, and other vegetation as it begins to grow within the wall or in proximity to the wall with the potential to dislodge stones. Cut all tree saplings flush with the ground or as far back as possible without disturbing the rock work. Allow designed or purposefully maintained vegetation growing on walls to remain, such as the bougainvillea on the wall at the Church of Jesus Christ of Latter-day Saints. Recordation of these examples of cultural vegetation should be included in the documentation stage to protect these values. Treatment of individual trees that have matured and are beginning to threaten wall structures should be evaluated on a case by case basis. Where the potential impact is great, consider removing the tree, and replacing it at a location that is further removed from the wall structure. Only remove trees that constitute cultural vegetation (distinct from volunteer growth) after careful consideration.
12. Reduce potential ground disturbance by limiting the use of large mechanical equipment to excavate areas or remove vegetation.

Small-scale Features

Small-scale features in Kalaupapa include site furnishings—flagpoles, turnstiles, signage; decorative elements, such as painted rocks and tile mosaics; fences; and statuary and commemorative markers. Historic shrines and memorials are found throughout the Kalaupapa and Kalawao Settlements. These include Saint Marianne Cope’s Grave, the Saint Damien Monument, the Mother Clinton Monument, and the Statue of the Sacred Heart of Jesus at St. Francis Catholic Church. Collectively these monuments carry great value and meaning for those who live in the settlement, and for those who visit Kalaupapa. Treatment recommendations address long-term preservation of these resources. Treatment recommendations address repair issues, but also

discuss the potential to include contemporary small-scale features in the future that meet anticipated future operational needs.

1. Preserve historic small-scale elements throughout the settlement.
2. Avoid adding new statues and commemorative features within the Kalaupapa and Kalawao Settlements.
3. Avoid adding signs within the Kalaupapa Settlement except for those that are needed for safety, wayfinding, information, and interpretation. Concentrate signs at visitor contact areas and cluster signs whenever possible. Provide limited signage that indicates ‘private’ where appropriate. Consider sign design and placement through preparation of a Settlement-wide wayfinding and interpretation plan. Ensure that all signs are consistent in terms of size, color, and material. Avoid placing wayside exhibits in the landscape. Instead consider alternative methods for providing information for visitors, such as recyclable pamphlets, virtual exhibits, and audio tours. See *Settlement-wide Design Guidelines: Signage* for guidance.
4. Consider providing a few additional benches and trash receptacles to support the needs of visitors in the recommended visitor services co-location sites. Ensure that trash receptacles are simple and contemporary in character, and that the design and materials of the benches are compatible with the cultural landscape. See *Settlement-wide Design Guidelines: Site Furnishings* for guidance.
5. Consider providing a few bicycle racks at often visited locations within the Settlements to accommodate bicycle use within the peninsula, such as the Patient Store, Paschoal Hall, Bay View Home, McVeigh Home, Residence for Single Women, Quonset Dormitory, maintenance complex, Pali Trail trailhead, and other locations where adaptive use is anticipated and bicycles may serve as a means of transportation. Ensure that the bicycle racks are simple and contemporary in character, and the design and materials of the benches are compatible with the cultural landscape. See *Settlement-wide Design Guidelines: Site Furnishings* for guidance.
6. Retain examples of personal expression using small-scale elements and found objects such as buoys and shells that have traditionally been used to decorate individual residential properties.

Cemeteries. Cemeteries and burial places in Kalaupapa are collectively among the most powerful imprints on the cultural landscape, reflecting cultural values and practices, evoking reverence for the story of those who were exiled to Kalaupapa, and perhaps most importantly, are profoundly personal and significant for the families, descendants, and friends of all those who lived here.

Known and documented cemeteries are located in each of the three ahupua‘a on the peninsula: Kalawao, Makanalua, and Kalaupapa. The known cemeteries, including those located along the West Coast of the Kalaupapa Settlement, along the Damien Road Corridor, in the vicinity of Kauhakō Crater, and at Kalawao, are actively managed by the NPS.

The NPS CRIS includes records for 1,551 tombs and grave markers at Kalaupapa and Kalawao Settlements.⁴¹¹ Markers vary in size, style and forms, and include tombs, vaults, temporary markers, burial mounds, and simple concrete slabs over individual gravesites. Materials used for grave markers include wood,

411. There remains the possibility that more markers and/or cemeteries may be identified in the future. National Park Service, Kalaupapa GMP, 190.

lava stone, concrete, granite, marble, and sand.⁴¹²

Preservation of cemetery features includes repair and restoration of individual grave markers, rock walls, signs, and care of plantings and turf. CLR treatment guidelines provide general preservation principles for the cemeteries within the context of the larger cultural landscape, while Appendix B: *Cemetery Management Plan* provides more detailed recommendations.

Treatment Recommendations

The following general recommendations for treatment apply:

1. Respect the historic boundaries of the individual denominational and ethnic cemeteries along the West Coast (Cemeteries A through M).
2. Address repair needs associated with grave markers and monuments, including treatment of biological growth.
3. Work with historic preservation crews and partners to complete the inventory and condition assessment of all known cemeteries. Documentation should include the current condition of grave markers, boundary walls and other structural components, vegetation, damage from wildlife, drainage issues, etc.
4. Work with *Ka 'Ohana O Kalaupapa*, park partners, anthropologists, archeologists, and other preservation professionals as appropriate, to determine the location, or probable location, of undocumented burials and gravesites within each cemetery.
5. Continue to maintain all identified and known cemeteries by stabilizing boundary walls, removing volunteer vegetation that limits access, and stabilizing individual gravesites.
6. Work with historic preservation crews to restore grave markers by repairing broken markers, re-stacking stone rubble masonry, clearing overgrown vegetation from tombs, and repairing damage from roots. Reset tilted markers and settled grave slabs if tilted more than 15 percent and additional movement may compromise their integrity.
7. The Kalaupapa Memorial in Kalawao will be a site for publicly recording the names of and honoring the individuals who rest at Kalaupapa in marked and unmarked burial areas. Beyond this monument, no new markers, monuments, statuary, signs, or structures of any kind should be used to mark individual gravesites, except for new internments that have already been prearranged.

412. Richard Miller, *Grave Markers at Kalaupapa, A Study of Two Material Types, Determining Causes of Damage and Repair Methods* (Savannah, Georgia: Savannah College of Art and Design, Conservation Science and Technology, 2012).

Treatment Recommendations by Character Area

Kalawao

Kalawao remains an iconic part of the Kalaupapa and Kalawao Settlements as the site of the initial community established in 1866, the ongoing location of two early churches—St. Philomena Catholic Church and Siloama Church—the burial grounds where hundreds of community members are buried, and the Baldwin Home for Boys. The informal, vernacular quality of the landscape and the more formal and carefully tended spaces and materials should be preserved. In addition, all surviving historic resources at Kalawao should be preserved and maintained in good condition to avoid further loss of the iconic Kalawao cultural landscape. Minimal rehabilitation recommendations are included below. These include the establishment of an accessible parking space to allow visitors to reach the churches via an accessible route, and designation of overflow parking at Judd Park for groups of visitors to the future proposed Kalaupapa Memorial and St. Philomena Catholic Church.

Today, the margins of Damien Road as it passes through Kalawao are closely edged by thickets and woodlands that form a deep shade, obscure historic views, and overrun former open spaces associated with agricultural activities and developed precincts. Clearing stands of invasive species in key locations to restore historic views and spatial patterns is recommended where removal will not lead to erosion or other impacts on the natural environment or archeological resources. Removal can be considered as a thinning process that allows trees and other vegetation to stay where needed to protect natural or archeological resources. Where invasives are removed, native field species should be established that can be maintained. Specific key views to be considered include toward the ocean from the Lions Club sign, and the margins of Damien Road, which were historically substantially more open. Within the stands of invasives and elsewhere, surviving examples of cultural vegetation tied to residents of Kalawao should be identified, documented, preserved, and maintained.

Kalawao is currently visited as part of bus tours offered to visitors. Rehabilitation of some limited features to better accommodate visitors, including repair of Damien Road, which is rutted and exhibits rainwater induced ponding in selected areas near St. Philomena Church. Provision of designated bus parking areas, and accessibility improvements at both churches are warranted. Judd Park, and the associated dramatic view of the Pacific shoreline and nearby three islets, provide a welcome place for visitors to rest and admire the breath-taking views.

Parking in Judd Park is currently causing erosion, and attention should be paid to formalizing appropriate locations for parking and addressing treatment of the road surface to limit the potential for erosion. Judd Park follows the eastern shoreline of Kalaupapa Peninsula, which features dangerous cliffs. Provision of additional signage and barrier elements to protect visitors should be addressed.

The proposed new memorial at the Baldwin Home site will introduce both a larger audience and a dramatic new addition to the historic landscape. Future parking for the Kalaupapa Memorial should occur at Judd Park following treatment to address erosion problems. Establishing appropriate parking facilities along the margins of Damien Road does not appear feasible due to the extent of archeological sites and resources present. Consideration should be paid to establishing a drop off location near St. Philomena Church and Baldwin Home, and encouraging use of Judd Park for parking. Consideration should also be paid to screening incompatible views of the memorial from other key locations, such as the nearby cemeteries, and the Damien

Road corridor. Consideration should also be paid to establishing a single accessible parking space west of St. Philomena Church that can be connected to an accessible route and entry into the church.

Treatment Recommendations

Refer to Figure 323, Treatment plan for the Kalawao Character Area.

Natural Systems and Features

- Preserve all natural systems and features associated with the Kalawao character area, which include the Pacific shoreline and extant landform and topography.
- Avoid erosion along the shoreline by maintaining plant cover with a root system effective at holding the soil.
- Avoid activities in the character area that will disturb soil and lead to erosion, or cause notable changes to the topography.
- Promote stands of native field plants that can be maintained in areas where invasive plants are removed.

Spatial Organization

- Preserve historic patterns of spatial organization at Kalawao including the Damien Road corridor, churchyards, Baldwin Home precinct, Cemeteries P, Q, R, and S, ruins of the U.S. Leprosy Investigation Station, Judd Park, built features to the west of Siloama Church, and rows of coconut palm trees at the U.S. Leprosy Investigation Station, Baldwin Home, and St. Philomena Catholic Church.
- Consider targeted removal of invasive vegetation that is obstructing the historic physical and visual relationships between Damien Road and the ocean to the north and east. Targeted removal might include selective thinning in some areas, and wholesale removal of trees and other woody growth in others. Targeted removal might follow a seen-area analysis to determine the extent of the desired view, and an adaptive strategy of limited initial removal, followed by evaluation of the results.
- Avoid altering existing spatial organization within Kalawao, except for the proposed Kalaupapa Memorial planned for the old Baldwin Home site. Carefully evaluate proposed memorial designs for their impacts on the historic qualities of the cultural landscape, and adopt mitigation strategies as possible to diminish anticipated impacts.

Views and Vistas

- Preserve and protect views of St. Philomena Catholic Church and Siloama Church from the adjacent Damien Road corridor.
- Preserve and protect the view of the Pacific Ocean afforded from the overlook at Judd Park.
- Consider reestablishing key historic views, as noted above under Spatial Organization, by removing invasive vegetation that obstructs the visual relationships between Damien Road and the ocean to the north and east.

Circulation

- Locate parking for visitors to St. Philomena Catholic Church and the proposed future Kalaupapa Memorial at Judd Park, with a designated drop off location near the church. Locating parking at Judd Park will minimize the visual and physical impacts to historic spatial organization at St. Philomena and Baldwin Home, as well as the Damien Road corridor, as well as the potential damage to burial sites, archeological resources, historic structures, and cultural vegetation. See *Settlement-wide Design Guidelines: Parking* for guidance.
- Preserve and maintain contributing circulation features and their historic character including Damien Road and the concrete walks associated with the two churchyards.
- Establish accessible parking along Damien Road connected to an accessible route leading to accessible entrances into St. Philomena Catholic Church and Siloama Church that conform with ABAAS scoping requirements.
- Address accessibility associated with all site features and visitor amenities, including but not limited to parking, accessible routes, picnic shelters, and signage at Judd Park. See *Settlement-Wide Design Guidelines: Accessibility* for guidance.

Cultural Vegetation

- Preserve and maintain naturalized tobacco near St. Philomena Catholic Church, which might be associated with Saint Damien, as well as rows and groves of coconut palms and other cultural vegetation at the church.
- Preserve and maintain the grove of coconut palm trees that edge Damien Road as it passes the foundation ruins of the U.S. Leprosy Investigation Station. The grove appears consistent today with the historic planting undertaken in the 1950s by the Lions Club in honor of Settlement residents. Replace trees as they are lost in the approximate location of the original to perpetuate the grove.
- Preserve and maintain the row of ironwood pine trees that edge the wall marking the Baldwin Home precinct along Damien Road. Remove volunteer ironwood pines suckering or seeding from the cultural planting.
- Preserve and maintain all other cultural vegetation located at the former Baldwin Home site as identified in a survey. Consider mitigation measures for cultural vegetation anticipated to be impacted by construction of the proposed future Kalaupapa Memorial.
- Preserve and maintain the use of mown grasses and forbs within the churchyard precincts, at the Baldwin Home site, and with the cemeteries and Judd Park. Maintain the mown grass within the churchyards and at Judd Park with an upper maximum height of 6 inches to convey a manicured appearance and reveal the spatial relationship between the historic buildings and landscape. Grasses and forbs within Baldwin Home, the cemeteries, and along Damien Road can be allowed to grow taller before they are mown, with an upper maximum height of 18 inches.

Buildings and Structures

- Preserve and maintain contributing buildings within the Kalawao character area, including Siloama Church, St. Philomena Church, Siloama Restroom, Judd Park Pavilion, and Kalawao Picnic Shelters 1 and 2. Ensure that any work conducted to repair the exteriors of historic buildings does not negatively impact associated landscape features.
- Consider expanding the number of picnic shelters at Judd Park. Consider adding up to four new shelters that are similar in size and scale to those present. Site the shelters so that they are as minimally intrusive as possible. Consider siting the shelters along the outer edge of Damien Road to the north of the existing shelters.
- Preserve and maintain contributing structures within the Kalawao character area, including the Siloama Church Stone Wall, St. Philomena Church Stone Wall, Old Stone Reservoir, Baldwin Home Gate and Walls, retaining wall and pipe railings at Cemetery Q, and rock walls at Cemetery R. See *Settlement-wide Design Guidelines: Rock Walls* for guidance.

Small-scale Features

- Preserve and maintain contributing small-scale features within the Kalawao character area, including the St. Philomena Sundial, and grave markers in Cemeteries P, Q, and R. See Appendix B: *Cemetery Management Plan* for specific guidance regarding management and maintenance of the cemeteries.
- Co-locate any desired new visitor amenities within the Judd Park Pavilion.

Preserve evidence of historic patterns of spatial organization at Kalawao including the Damien Road corridor, churchyards, Baldwin Home precinct, Cemeteries P, Q, R, and S, ruins of the U.S. Leprosy Investigation Station, Judd Park, built features to the west of Siloama Church, and rows of coconut palm and eucalyptus trees.

Consider targeted removal of invasive vegetation that obstructs the historic physical and visual relationship between Damien Road and the Pacific Ocean to the north and east. Targeted removal might include selective thinning in some areas, and wholesale removal of trees and other woody growth in others. Targeted removal might follow a seen-area analysis to determine the extent of the desired view, and an adaptive strategy of limited initial removal, followed by evaluation of the results.

Preserve and maintain the use of grasses and forbs throughout the enclaves of the two churches, Baldwin Home, the cemeteries, and Judd Park that can be maintained through mowing. Maintain the grass at the churches and Judd Park to a maximum height of 6 inches to convey a manicured appearance and reveal the spatial relationship between the historic buildings and landscape. Mowing within Baldwin Home, the cemeteries, and along Damien Road can occur at a maximum height of 18 inches.

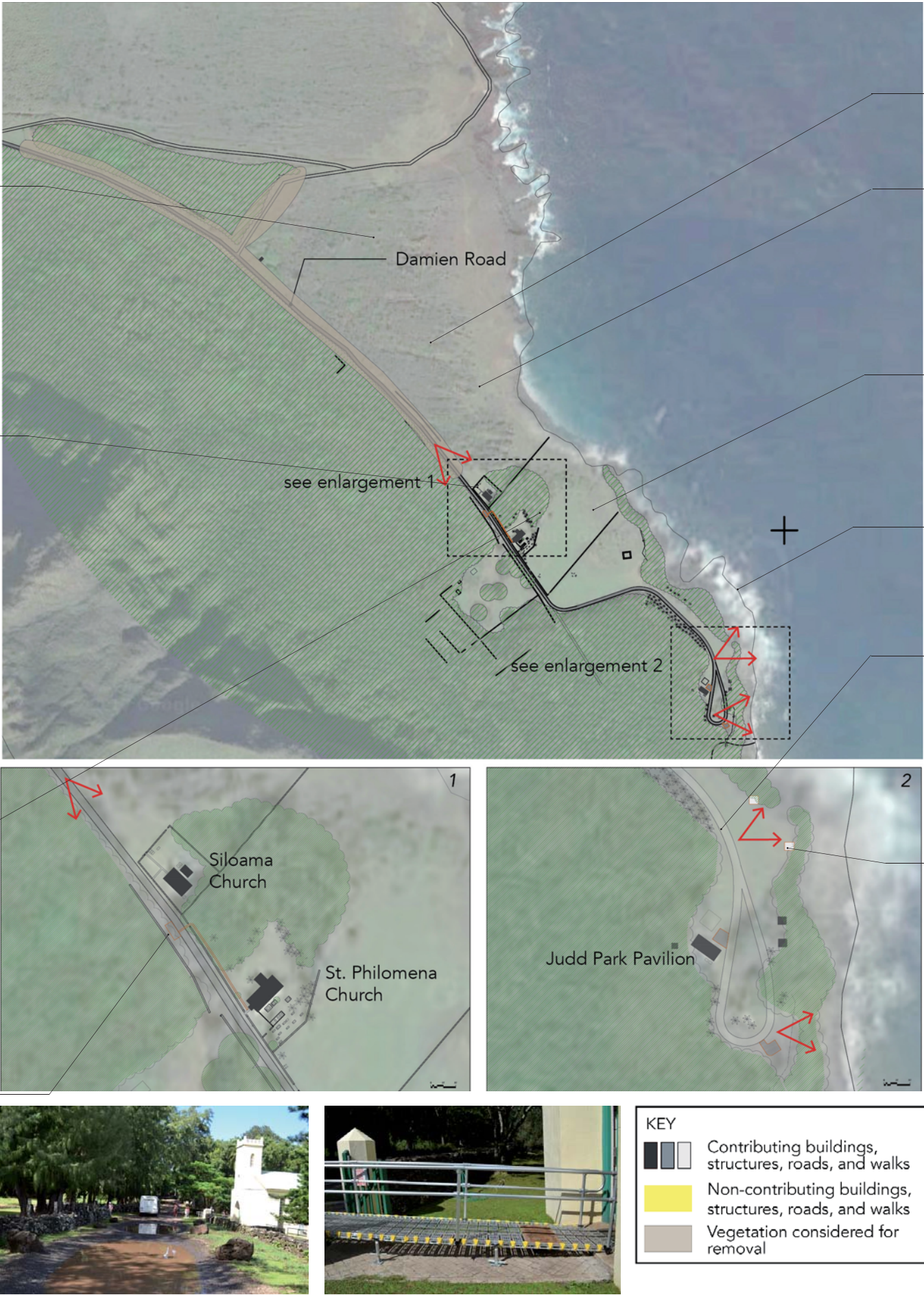
Preserve and maintain contributing buildings within the Kalawao character area, including Siloama Church, St. Philomena Church, Siloama Restroom, Judd Park Pavilion, and Kalawao Picnic Shelters 1 and 2. Ensure that any work conducted to repair the exteriors of historic buildings does not negatively impact associated landscape features.

Preserve and maintain existing cultural vegetation, including shade and screen trees, fruit and other food producing trees such as mango, avocado, breadfruit, tamarind, banana, papaya, citrus, guava, litchi, coffee, and coconut palm. Include specimens on the property in a Settlement-wide inventory and documentation project.

Avoid new development within Kalawao, except for the proposed Kalaupapa Memorial planned for Baldwin Home.

Establish accessible parking along Damien Road (the number of spaces to be determined by ABAAS scoping) connected to an accessible walk leading to an accessible entrance into St. Philomena Catholic Church.

Maintain sidewalks in good condition by repairing and repaving where needed. Repair cracks, breaks, and dips to avoid trip hazards. Keep walk surfaces and edges clear of vegetation, and prune tree roots that threaten to uproot and damage sidewalks.



Maintain the road surface in good condition.

Avoid adding additional circulation features within Kalawao.

Preserve and maintain contributing circulation features and their historic character including Damien Road and the concrete sidewalks associated with the two churchyards.

Preserve and maintain contributing structures within the Kalawao character area, including the Siloama Church Stone Wall, St. Philomena Church Stone Wall, Old Stone Reservoir, Baldwin Home Gate and Walls, retaining wall and pipe railings at Cemetery Q, and rock walls at Cemetery R. See *Settlement-wide Design Guidelines: Rock Walls* for guidance.

Preserve and maintain contributing small-scale features within the Kalawao character area, including the St. Philomena Sundial, and grave markers in Cemeteries P, Q, and R. See Appendix B: *Cemetery Management Plan* for specific guidance regarding management and maintenance of the cemeteries.

Preserve and maintain the open grove of coconut palm trees that edge Damien Road as it passes the foundation ruins of the U.S. Leprosy Investigation Station. Replace trees as they are lost in the approximate location of the original.

Locate parking for visitors to the Kalaupapa Memorial at Judd Park, with a drop off location near the church. Locate parking at Judd Park to minimize visual and physical impacts to historic spatial organization and potential damage archeological resources, historic structures, and vegetation. Ensure parking at Judd Park meets accessibility standards. See *Settlement-wide Design Guidelines: Parking* for guidance.

Provide additional picnic shelters for visitors along the edge of Damien Road near the existing shelters.

Provide consistent signage to guide wayfinding, site orientation, and interpretation. Cluster signs to minimize visual clutter. See *Settlement-wide Design Guidelines: Signage* for guidance.

Address accessibility associated with all site features and amenities at Judd Park, including but not limited to parking, accessible routes, picnic shelters, and signage. See *Settlement-wide Design Guidelines: Accessibility* section for guidance.

Co-locate any desired visitor amenities within the Judd Park Pavilion.

Kalawao Character Area Treatment Recommendations

Figure 323

Damien Road

Refer to Figure 324, Treatment plan for the Damien Road Character Area.

Damien Road remains an important historic route of travel for Kalaupapa community members and visitors as part of the experience of iconic places within the Kalaupapa and Kalawao Settlements, such as Kahaloko Cemetery, Kauhakō Crater, and as a means for visiting Kalawao. The informal, vernacular quality of the landscape and the more formal and carefully tended spaces and materials of the developed areas should be preserved. In addition, all surviving historic resources associated with Damien Road should be preserved and maintained in good condition. Minimal rehabilitation recommendations are included below. These include the establishment of minimal prescribed parking pull-offs for tour buses designed to protect the natural environment along the road margins.

Treatment Recommendations

Natural Systems and Features

- Preserve all natural features and systems associated with the Damien Road character area, which include the extant landform and topography and any native plant communities.
- Avoid activities in the character area that will disturb soil and lead to erosion, or cause notable changes to the topography.
- Promote stands of native field plants that can be maintained in areas where invasive plants are removed.

Spatial Organization

- Preserve and maintain the Damien Road corridor, marked by a central gravel road, variations in open and wooded conditions along the margins, the presence of water system features, Kahaloko Cemetery, and various stone features related to traditional Hawaiian and Kalaupapa and Kalawao Settlements cultural activities, all of which are essential to conveying historic patterns of spatial organization. The only non-contributing features present include a single wayside exhibit, a tsunami evacuation complex, and an identity sign marking the entrance to Kahaloko Cemetery.
- Thin and clear invasive woody vegetation along the margins of Damien Road to re-establish historically open conditions. Consider thinning and clearing within a band of variable width, between 25 and 100 feet, that allows trees to remain where needed to protect archeological resources and natural features.

Views and Vistas

- Maintain views of the eastern shoreline and Pacific Ocean from the high point of the road near the heiau by managing trees within the viewshed. Remove trees that obscure or limit the view.

Circulation

- Preserve and maintain the Damien Road corridor as a relatively narrow informal gravel road corridor that connects Kalaupapa and Kalawao Settlements.

- Document the locations of stone work along the road believed to be associated with the improvements overseen by Saint Damien in the 1880s. Protect any examples of stone work along the road when addressing any grading, levelling, or gravel paving needs.
- Preserve and maintain the Interior Road to Kauhakō Crater and the Coastal Road as informal unimproved road corridors.
- Establish an appropriate location for future tour bus parking at stop locations, such as the Kahaloko Cemetery, Crater Road, and heiau and view. Ensure that the stop locations are established as narrow bump-outs along the edge of the road that have positive drainage and enough hardened surface area that they are not subject to erosion, but that the parking area is limited in size so that it does not impact the character of the road corridor. Also ensure that stops are considered in terms of meeting accessibility requirements.

Cultural Vegetation

- Preserve and maintain examples of cultural vegetation located within the Damien Road character area, including the examples at the Ambrose Hutchison Home site.
- Clear invasive lantana vegetation from Kahaloko Cemetery. Consider options for maintaining the ground plane once lantana is removed, such as field grasses.
- Evaluate the potential for Java plum trees to be associated with cultural plantings. Consider thinning and removing smaller, volunteer Java plum trees, but allowing a few widely-spaced older trees to remain as examples of cultural vegetation planted for shade.

Buildings and Structures

- Preserve and maintain contributing buildings and structures within the Damien Road corridor that include the chlorinator and filter buildings, water tanks, rock wall enclosure associated with Kahaloko Cemetery, and livestock fencing and cattle chutes.

Small-scale Features

- Repair the grave markers associated with Kahaloko Cemetery. Follow the guidance afforded in Appendix B: *Cemetery Management Plan*.

Preserve and maintain the Damien Road corridor, marked by a relatively narrow, informal gravel road, variations in open and wooded conditions along the margins, the presence of water system features, Kahaloko Cemetery, and stone features related to pre-Settlement cultural activities, all of which are essential to conveying historic patterns of spatial organization. Non-contributing features include the wayside exhibit, tsunami evacuation complex, and Kahaloko Cemetery identity sign.

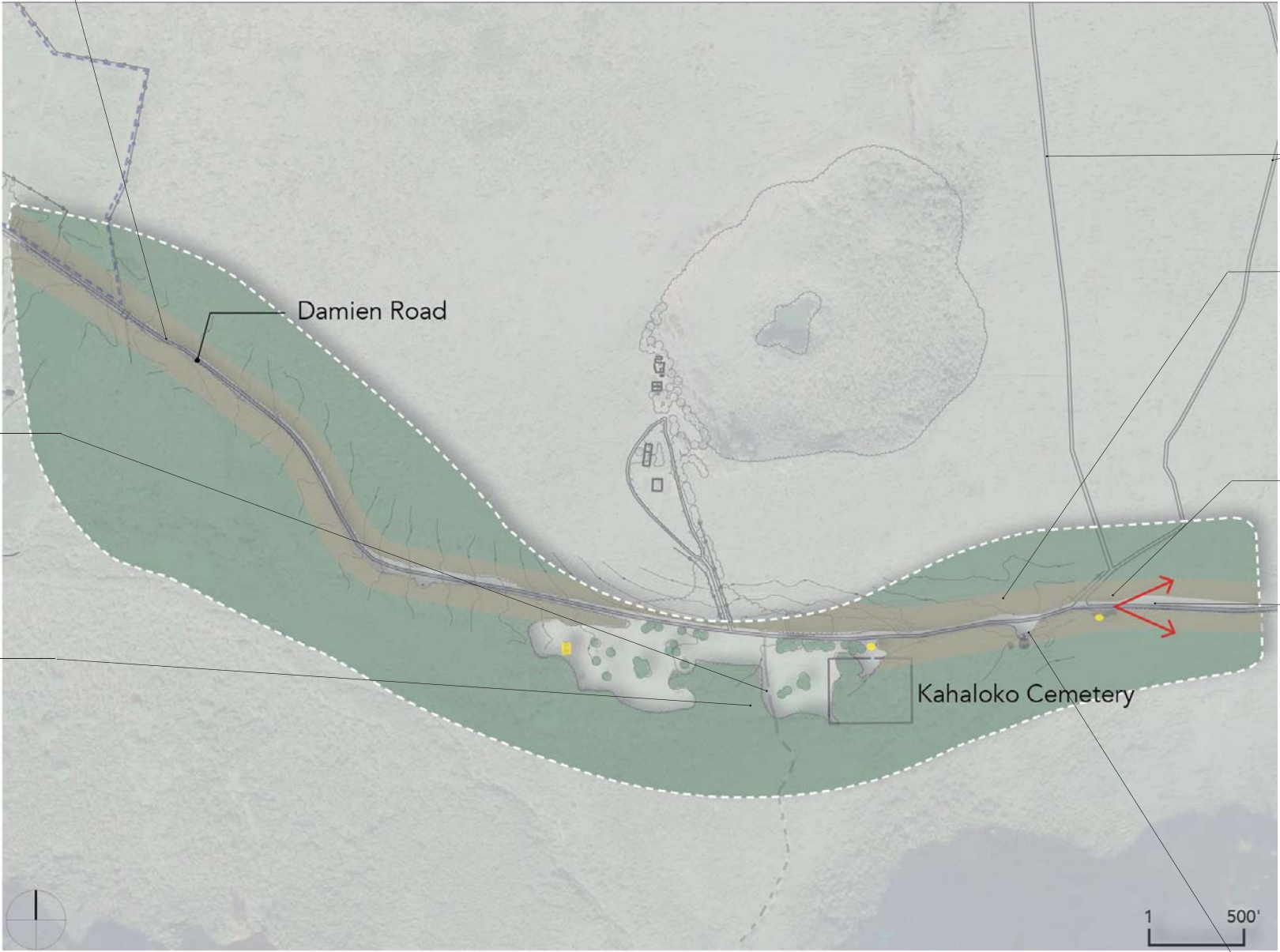
Preserve and maintain existing cultural vegetation. Include specimens on the property in a Settlement-wide inventory and documentation project.

Avoid adding additional small-scale features within the character area.

Remove vegetation growing on and within the rock walls, water reservoir, buildings, and other cultural features and repair stone work as needed to ensure that they remain in good condition. Follow the guidance afforded in the *Settlement-wide Guidelines: Vegetation*.

Clear invasive vegetation from Kahaloko Cemetery. Remove lantana entirely. Remove younger volunteer Java plum trees. Retain larger Java plum, widely spaced, as examples of cultural vegetation. Consider establishing turf grass cover within the cemetery that can be maintained through mowing.

Repair the grave markers associated with Kahaloko Cemetery. Follow the guidance afforded in Appendix B: *Cemetery Management Plan*.



Preserve and maintain the Interior Road to Kauhakō Crater and the Coastal Road as informal unimproved road corridors.

Thin and clear invasive woody vegetation along the margins of Damien Road to reestablish historically open conditions. Consider thinning and clearing within a band of variable width, between 25 and 100 feet, that allows trees to remain where needed to protect archeological resources and natural features.

Maintain views of the eastern shoreline and Pacific Ocean from the road near the heiau by managing trees within the viewshed.

Establish an appropriate location for future tour bus parking at stop locations, such as the Kahaloko Cemetery, Crater Road, and heiau and view. Ensure that the stop locations are established as narrow bump-outs along the edge of the road that have positive drainage and enough hardened surface area that they are not subject to erosion, but that the parking area is limited in size so that it does not impact the character of the road corridor. See *Settlement-wide Design Guidelines: Parking* for guidance.

Preserve and maintain contributing buildings and structures within the Damien Road corridor that include the chlorinator and filter buildings, water tanks, rock wall enclosure associated with Kahaloko Cemetery, and livestock fencing and cattle chutes.



Images of areas to be managed by controlling woody vegetation for views and resource protection.

Damien Road Character Area Treatment Recommendations

Figure 324

Kauhakō Crater

Refer to Figure 327, Treatment plan for the Kauhakō Crater Character Area.

Kauhakō Crater remains an important place for reflection and introspection, and may continue to serve as a location for religious and other services and ceremonies. The informal, vernacular quality of the cultural landscape along the rim, composed of the concrete cross, graves, ironwood pine trees, and unimproved access road, along with the adjacent rare native plant communities should be preserved. There are no rehabilitation treatments proposed for the Kauhakō Crater character area.

Treatment Recommendations

Natural Systems and Features

- Preserve all natural features and systems associated with the Kauhakō Crater character area, which include the extant landform and topography and native plant communities, both naturally occurring and those being restored by NPS.
- Avoid activities in the character area that will disturb soil and lead to erosion, or cause notable changes to the topography.
- Promote stands of native plants in areas where invasive plants are removed.

Spatial Organization

- Preserve and maintain the open character of the western rim, Crater Road, the rock wall enclosures that mark the burial grounds, the grave markers, and the concrete cross that comprise historic patterns of spatial organization and have been important to use of the area for Easter Sunday sunrise services.
- Enhance historic spatial patterns and views by thinning volunteer stands of ironwood pine, Java plum, lantana, and other invasive species that are currently encroaching on the burial grounds, western rim, and views of Kalaupapa Settlement, Molokai Light Station, and crater interior (Figure 325).



Figure 325. Examples of woody vegetation encroaching on views and altering patterns of spatial organization associated with the western rim of Kauhakō Crater.

Views and Vistas

- Preserve the expansive views from the western rim toward the lighthouse and Kalaupapa Settlement, as well as into the crater.
- Reestablish views in association with the burial grounds west of Crater Road where volunteer ironwood pine trees are encroaching on the view (refer to Figure 325).
- Remove invasives that are encroaching on the views into the crater (refer to Figure 325).

Circulation

- Preserve and maintain Crater Road as a narrow informal unimproved earthen corridor that connects Damien Road with the western rim.
- Preserve and maintain the Interior Road to Kauhakō Crater as an informal unpaved road corridor.

Cultural Vegetation

- Retain and maintain cultural plantings of ironwood pine trees along Crater Road, and elsewhere where identified as such. Remove volunteers where the pines have spread beyond the original planting.
- Continue to protect and enhance existing rare native plant communities within the Kauhakō Crater character area.
- Clear invasive vegetation from the western rim of Kauhakō Crater, including ironwood pine, Java plum, lantana, and other species encroaching on native plant communities, the views of the crater interior, and features associated with the burial grounds.
- Manage vegetation within the walled burial enclosures by removing woody volunteer species as identified through monitoring. Otherwise maintain in low grass cover and allow existing shade trees to remain unless they pose a threat to walls and grave markers (Figure 326). See *Settlement-wide Design Guidelines: Vegetation* for guidance.



Figure 326. Maintain the burial grounds in low grass cover and mature shade trees as shown. Immediately remove woody volunteer species.

Buildings and Structures

- Preserve and maintain the rock wall burial ground enclosures that constitute historic structures within the Kauhakō Crater character area. Remove vegetation growing on and within rock walls to ensure that they remain in good condition. Follow the guidance afforded in the *Settlement-wide Guidelines: Rock Walls* for repair and stewardship.

Small-scale Features

- Preserve and maintain the concrete cross, concrete footer, and grave markers that constitute historic small-scale features within the Kauhakō Crater character area. Avoid adding additional small-scale features within the character area.

Maintain views of the northern shoreline, lighthouse, Kalaupapa Settlement, and crater interior by managing trees within the viewshed.

Preserve and maintain the open character of the western rim, the access road, rock wall enclosures that mark burial grounds, the grave markers, and the concrete cross that comprise historic patterns of spatial organization.

Preserve and maintain the concrete cross, concrete footer, and grave markers that constitute historic small-scale features within the Kauhakō Crater character area. Avoid adding additional small-scale features within the character area.

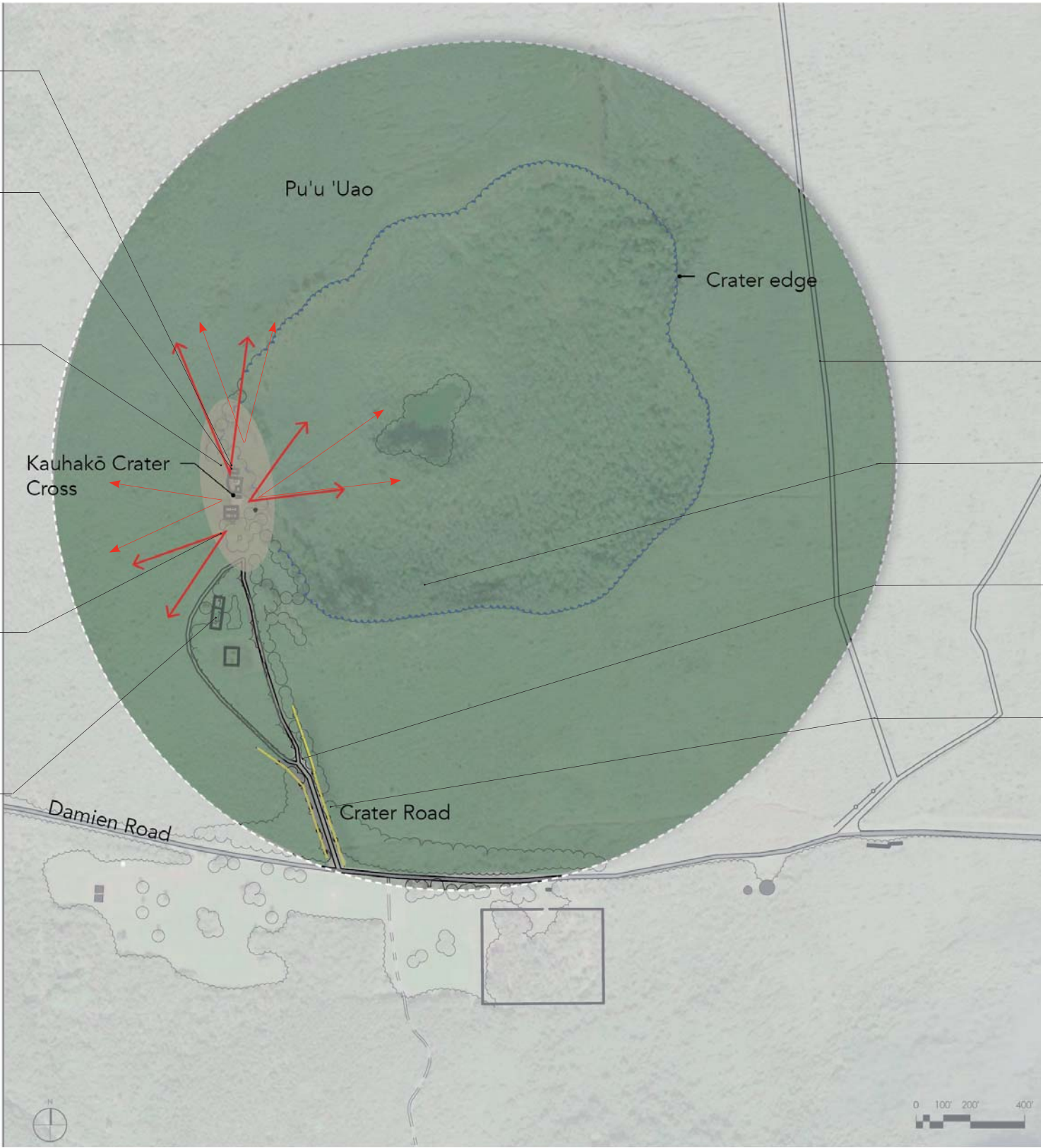
Preserve and maintain existing cultural vegetation. Include specimens on the property in a Settlement-wide inventory and documentation project.

Enhance historic spatial patterns and views by removing volunteer ironwood and Java plum trees and lantana that are currently encroaching on the burial grounds, western rim, and views of Kalaupapa Settlement, Molokaʻi Light Station, and crater interior.

Preserve and maintain the rock wall burial ground enclosures that constitute historic structures within the Kauhakō Crater character area. Remove vegetation growing on and within rock walls to ensure that they remain in good condition. Follow the guidance afforded in the *Settlement-wide Guidelines: Rock Walls* for repair and stewardship.

Allow existing shade trees within the walled burial ground to remain until they pose a threat to walls and grave markers. Remove volunteer vegetation discovered in the future through monitoring. Otherwise maintain in low grass cover. See *Settlement-wide Design Guidelines: Trees* for tree care and removal guidance.

Preserve and maintain the grave markers in accordance with the guidance afforded in Appendix B: *Cemetery Management Plan*.



Preserve and maintain the Interior Road to Kauhakō Crater as an informal unpaved road corridor.

Continue to conduct efforts to protect and enhance existing rare native plant communities within the Kauhakō Crater character area.




Preserve and maintain the unimproved access road as a narrow informal earthen corridor that connects Damien Road with the western rim.

Retain historic ironwood pine plantings along Crater Road.

Avoid adding new circulation features within the Kauhakō Crater character area.



Images of view areas to be managed by removing woody vegetation.

KEY	
	Contributing buildings, structures, roads, and walks
	Non-contributing buildings, structures, roads, and walks
	Vegetation considered for removal

Kauhakō Crater Character Area Treatment Recommendations

Figure 327

Administrative Area

Refer to Figure 333, Treatment plan for the Administrative Character Area.

The Administrative Area remains the heart of the Kalaupapa Settlement community. The tidy arrangement of buildings sited along an irregular grid of primary roads, and associated historic landscape features, should be preserved and maintained in good condition. With the potential of adaptive reuse anticipated to be high in this area, documentation of historic features that are likely to be altered is an important consideration for the future. In addition to preservation of historic resources, several rehabilitation recommendations relate to the Administrative Area. Accessibility has been provided in an ad hoc way to support the needs of residents for several decades now. Future adaptive use is likely to suggest the need to replace ad hoc features with other accessible solutions that meet current codes and regulations. Accessibility needs to be considered for parking, paths, and walks, as well as building entrances. Documentation of features to be replaced, and careful consideration of how new features will impact the character, appearance, and integrity of historic resources, both building and landscape features, is recommended. Future development of new parking areas to accommodate adaptive use is also addressed herein in terms of appropriate locations, materials, and form. Also considered herein is how to accommodate visitors and tour groups in terms of the provision of interpretive information and visitor services. Finally, work yards, maintenance facilities, and storage areas have expanded over the course of the more recent past. Views of work and storage areas have begun to impact views along Kamehameha and Damien Streets. Screening of these views, and relocation of some stored equipment and containers to less visually prominent locations is considered herein.

Treatment Recommendations

Natural Systems and Features

- Preserve all natural features and systems associated with the Administrative Area character area, which include the extant landform and topography, shoreline and ocean interface, and drainages.
- Avoid activities in the character area that will disturb soil and lead to erosion, or cause notable changes to the topography.
- Maintain stormwater management systems that include culverts and swales as a response to site hydrology in good condition.

Spatial Organization

- Preserve and maintain the streetscapes that comprise the Administrative Area, including the primary roads, turf grass rights-of-way, and the boundary demarcations that relate to some individual properties, all of which are essential to conveying historic patterns of spatial organization.

Views and Vistas

- Preserve the open views associated with primary road corridors, the expanse of open space to the east and north of Paschoal Hall, and views of the Pacific Ocean from Damien Street, Kamehameha Street, and Beretania Street.

- Screen views of stored shipping containers and vehicles located along Damien Street and Kamehameha Street. Alternatively, relocate stored containers and vehicles to open field areas screened from primary roads by vegetation.

Circulation

- Preserve and maintain the existing circulation patterns that reflect the historic character during the period of significance. Preserve the names of patients and kōkua etched into some of the sidewalks.
- Screen or relocate stored cars, maintenance vehicles, and buses along Kamehameha Street north of St. Francis Catholic Church (Figure 328) to a temporary storage location that can be screened to enhance the viewshed of the entrance corridor.



Figure 328. View of row of stored cars, buses, and construction vehicles along Kamehameha Street that should be screened or relocated to enhance the settlement entrance corridor.

Cultural Vegetation

- Preserve and maintain examples of cultural vegetation located within the character area, including shrubs and trees along the road, the coconut palm around Paschoal Hall, and coconut palms along the western shoreline. See *Settlement-wide Design Guidelines: Perpetuating Designed Plantings* for guidance regarding how to rejuvenate the coconut tree plantings once they become overmature, or can no longer be scaled to remove the coconuts as a safety precaution.
- Preserve and maintain the use of turf grass around buildings and in association with road rights-of-way. Maintain mown areas along roads and around buildings at a maximum height of 6 inches. Maintain field areas, such as the open space northeast of Paschoal Hall, at a maximum height of 18 inches.
- Consider the use of reduction pruning to reduce the size of individual trees at risk of interfering with electrical lines or the roofs of buildings as an alternative to removal.
- Replace cultural vegetation in kind with a younger specimen when the plant in question outgrows its planting bed, has become unrecognizable in terms of the plant's natural form or habit, or poses an imminent threat to the stability of a building, and cannot be rejuvenated through pruning.

- Consider establishing a hedge of flowering plants, using a species selected in consultation with the patients, along Beretania Street to replace current shrubs maintained as sheared globes to recall the historic appearance of the road corridor (Figure 329). Select a shrub that can be maintained at a height of between 4 and 5 feet without excessive pruning and that can retain its original form to the degree possible.



Figure 329. View to row of clipped shrubs that might be replaced with a hedge of flowering shrubs.

Buildings and Structures

- Preserve and maintain, or assist owners to preserve and maintain, contributing buildings and structures within the Administrative Area character area. See *Settlement-wide Design Guidelines: Rock Walls* for guidance regarding care and stewardship of historic rock walls.
- Clear and thin overgrown volunteer vegetation associated with the Benjamin Residence, and repair the structure. Determine whether it is possible to clear debris and trash from the area around the house (Figure 330).
- Begin to return excess storage containers currently sited along Damien Street and elsewhere within Kalaupapa Settlement that are no longer needed via barge. The large number of containers are visually incongruent with the character of the settlement, especially where they are visible near the wharf and St. Francis Catholic Church (Figure 331). Screen in place or relocate storage containers to open fields that can be screened by woody vegetation. Consider shrub and tree plantings to screen the containers in place.
- Preserve and maintain dry stacked lava rock walls.



Figure 330. View to the Benjamin Residence that is overgrown and has trash in the yard.



Figure 331. View of some of the containers that line Damien Street near the wharf.

Small-scale Features

- Repair or replace in kind the concrete planters in front of Paschoal Hall that are cracked and broken (Figure 332).
- Consider the Oceanside Pavilion, Gas Station, Patient Store, Paschoal Hall, and Library as co-location sites to accommodate benches, water bottle refill stations, orientation and interpretive information, and concession sales.
- Provide additional safety features along the margin of Damien Street where the western shoreline follows a steep cliff and could pose a danger to visitors. Consider alternatives such as bollards, or fencing.



Figure 332. View of one of the two concrete planters in front of Paschoal Hall. Both are cracked and broken.

Preserve and maintain the streetscapes that comprise the Administrative Area, including the primary roads, turf grass rights-of-way, and the boundary demarcations that relate to some individual properties, all of which are essential to conveying historic patterns of spatial organization.

Clear and thin overgrown volunteer vegetation associated with the Benjamin Residence, and repair the structure. Determine whether it is possible to clear debris and trash from the area around the house.

Screen, or alternatively relocate, cars, maintenance vehicles, and buses stored west of Kamehameha Street north of St. Francis Catholic Church to a location that can be screened as a way to enhance the viewshed of the entrance corridor.

Begin to return excess storage containers currently sited along Damien Street and elsewhere within Kalaupapa Settlement that are no longer needed via barge. The large number of containers are visually incongruent with the character of the Settlement, especially where they are visible near the wharf and St. Francis Catholic Church.

Consider the Oceanside Pavilion, Gas Station, Patient Store, Paschoal Hall, and Library as places to co-locate and accommodate benches, water bottle refill stations, orientation and interpretive information stations, and concession sales. See *Settlement-wide Design Guidelines: Visitor Services* for guidance.

Provide additional safety features along the margin of Damien Street where the western shoreline follows a steep cliff and could pose a danger to visitors.

Preserve and maintain existing ornamental plantings. Rejuvenate coconut palm plantings when they become too tall to harvest coconuts. See *Settlement-wide Design Guidelines: Vegetation* for guidance.

Record cultural vegetation as part of a settlement-wide inventory and documentation project.



KEY	
	Contributing buildings, structures, roads, and walks
	Non-contributing buildings, structures, roads, and walks
	Vegetation considered for removal

Preserve and maintain the use of turf grass around buildings and in association with road rights-of-way. Maintain mown areas along roads and around buildings at a maximum height of 6 inches. Maintain field areas, such as the open space northeast of Paschoal Hall, at a maximum height of 18 inches.

Maintain concrete sidewalks in good condition. Repair and replace sidewalks in kind as needed. Protect sidewalks etched with the names of patients and kokua. Keep walk surfaces and edges clear of vegetation, and prune tree roots that threaten to uproot and damage sidewalks.

Repair or replace in kind the concrete planters in front of Paschoal Hall that are cracked and broken.

Maintain foundation plantings around buildings to ensure that they do not become overgrown, obscure views of the buildings, and introduce moisture and other problems that will lead to deterioration of the buildings. See *Settlement-wide Design Guidelines: Vegetation* for guidance.

Consider establishing a hedge of flowering shrubs along Beretania Street to replace individual shrubs maintained as sheared globes, might be replaced to reestablish plantings of historic character.

Preserve and maintain dry stacked lava rock walls. Maintain walls free of volunteer vegetation. See *Settlement-wide Design Guidelines: Rock Walls* for guidance.

Preserve and maintain the existing circulation patterns that reflect the historic character during the period of significance. Maintain road surfaces in good condition.

Avoid adding new circulation systems within the Administrative Area except where needed to address accessibility needs.

Address accessibility requirements related to future building and structure improvements following the guidance afforded in the *Settlement-wide Design Guidelines: Accessibility* section.

Administrative Area Character Area Treatment Recommendations

Figure 333

Residential Area

Refer to Figure 334, Treatment plan for the Residential Character Area.

Residential Area buildings and associated landscapes are important ties with the lives of patients. Although the overall recommended treatment approach within the Residential Area is preservation, there are several rehabilitation recommendations included herein. With the potential of adaptive reuse, documentation of historic features that are likely to be altered is an important consideration for the future. Accessibility has been provided in an ad hoc way to support the needs of residents for several decades now. Future adaptive use is likely to suggest the need to replace ad hoc features with other accessible solutions that meet current codes and regulations. Documentation of features to be replaced, and careful consideration of how new features will impact the character, appearance, and integrity of historic resources, both building and landscape features, is recommended.

The Residential Area contains a wealth of culturally important plant materials cultivated and nurtured by patients and kōkua. In many cases, plants have been shared among community members, and moved from property to property over time. Documenting the cultural legacy of these plantings is recommended through mapping and establishing a database that records known information about individual plants. Some residential properties are no longer occupied. Volunteer vegetation and other plantings that are no longer being managed are encroaching on buildings and other structures such as rock walls. This vegetation needs to be controlled and managed.

Many tours bring visitors to the AJA Benevolent Hall, which serves as the park bookstore. There is currently no designated parking for tour buses near the building, and the site lacks other visitor amenities such as benches, bottle refill stations, and restrooms. Adding visitor services and a designated bus parking space are recommended rehabilitation elements at AJA Benevolent Hall.

Some of the individual residences, or individual properties within the Residential Area, are good candidates for interpreting the lives of patients and kōkua at Kalaupapa. Careful consideration should be paid to providing access, managing and treating features, and providing interpretive information related to individual buildings as exhibits. At the same time, consideration should be paid to establishing sections of the Residential Area that might be indicated as off-limits to visitors to provide privacy for residents.

Treatment Recommendations

Natural Systems and Features

- Preserve all natural features and systems associated with the Residential Area character area, which include the extant landform and topography and drainages.
- Avoid activities in the character area that will disturb soil and lead to erosion, or cause notable changes to the topography.
- Maintain stormwater management systems that include culverts and swales as a response to site hydrology in good condition.

Spatial Organization

- Preserve and maintain the residential streetscapes that comprise the Residential Area, including the primary roads, turf grass rights-of-way, the boundary demarcations of individual properties, and the individual residential buildings aligned along the roads following a consistent set back, which are essential to conveying historic patterns of spatial organization.
- Consider locating an expanded plant nursery to Kapiʻolani Street, where only one residence survives.

Views and Vistas

- Preserve the open views associated with primary road corridors.

Circulation

- Preserve and maintain the existing circulation patterns that reflect the historic character during the period of significance. Maintain the road surfaces in good condition. Preserve the names of patients and kōkua etched into some of the sidewalks.

Cultural Vegetation

- Preserve and maintain examples of cultural vegetation located within the character area.

Buildings and Structures

- Preserve and maintain, or assist owners to preserve and maintain, contributing buildings and structures within the Residential Area character area.
- Locate new garages and sheds on residential properties on the sites of former outbuilding structures, or in areas that can be screened from view along the street. See *Settlement-wide Design Guidelines: Outbuildings* for guidance on the character of new outbuildings within the Residential Area.
- Retain, maintain, reveal, and stabilize existing dry stacked lava rock walls, including those associated with properties no longer in use. See *Settlement-wide Design Guidelines: Rock Walls* for guidance regarding care and stewardship of historic rock walls.

Small-scale Features

- Consider the potential to provide interpretive information about specific individual residential properties through means other than signage, such as recyclable printed pamphlets, virtual exhibits, and audio tours. Consider interpreting the Residential Area within the AJA Benevolent Society building that serves as the park bookstore.
- Consider providing limited signage that indicates ‘private’ where appropriate.

Preserve and maintain the residential streetscapes that comprise the Residential Area, including the primary roads, turf grass rights-of-way, the boundary demarcations of individual properties, and the individual residential buildings aligned along the roads following a consistent set-back, which are essential to conveying historic patterns of spatial organization.

Preserve and maintain existing ornamental plantings. Include specimens on the property in a Settlement-wide inventory and documentation project.

Maintain foundation plantings around buildings to ensure that they do not become overgrown, obscure views of the buildings, and introduce moisture and other problems that will lead to deterioration of the buildings. See *Settlement-wide Design Guidelines: Vegetation* for guidance.

Preserve and maintain the existing circulation patterns that reflect the historic character during the period of significance. Maintain the road surfaces in good condition.

Preserve and maintain, or assist owners to preserve and maintain, contributing buildings and structures within the Residential Area character area.

Address accessibility requirements related to future building and structure improvements following the guidance afforded in the *Settlement-wide Design Guidelines: Accessibility* section.

Maintain all existing walks in good condition by repairing and repaving where needed. Ensure that walks do not exhibit cracks, breaks, or dips that constitute trip hazards. Keep walk surfaces and edges clear of vegetation. Prune tree roots that threaten to uproot and damage sidewalks.



Preserve and maintain, or assist owners to preserve and maintain, contributing buildings and structures within the Residential Area character area.

Ensure that any work conducted to repair the exteriors of historic buildings does not negatively impact associated landscape features.

Locate new garages and sheds on residential properties on the sites of former outbuilding structures, or in areas screened from view along the street. See *Settlement-wide Design Guidelines: Outbuildings* for guidance on the character of new outbuildings within the Residential Area.




Consider locating an expanded plant nursery along Kapi'olani Street where only one residence survives.

Consider the potential to provide interpretive information about specific individual residential properties through recyclable pamphlets, virtual exhibits, and in the park bookstore.

Consider providing limited signage that indicates 'private' where appropriate.

Retain, maintain, reveal, and stabilize existing dry stacked lava rock walls, including those associated with properties not currently in use. Remove vegetation growing within and on the walls. See *Settlement-wide Design Guidelines: Rock Walls* for guidance regarding repair and treatment of vegetation.



KEY	
	Contributing buildings, structures, roads, and walks
	Non-contributing buildings, structures, roads, and walks
	Vegetation considered for removal

Residential Area Character Area Treatment Recommendations

Images of vegetation management, accessibility, and interpretation issues to be addressed.

Figure 334

Kalaupapa Churches

Refer to Figure 336, Treatment plan for the Kalaupapa Churches Character Area.

Cultural landscape treatment recommendations for the Kalaupapa Churches character area are limited due to the fact that the properties remain in church ownership. Although they are co-managed with the NPS through cooperative agreements, the NPS is not currently responsible for maintaining the grounds of any of the three churches within Kalaupapa. This relationship would continue, and the churches continue to serve the related congregations and visitors with religious affiliations to the churches. No changes are currently anticipated to occur within these properties. Preservation and appropriate repair of all historic resources is recommended as indicated below. No alteration of the associated cultural landscape is recommended.

Treatment Recommendations

Natural Systems and Features

- Preserve all natural features and systems associated with the Kalaupapa Churches character area, which include the extant landform and topography and drainages.
- Avoid activities in the character area that will disturb soil and lead to erosion, or cause notable changes to the topography.
- Maintain stormwater management systems that include culverts and swales as a response to site hydrology in good condition.

Spatial Organization

- Preserve and maintain each cluster of historic buildings, access roads and walks, tree and shrub plantings, rock wall enclosures, and statuary and commemorative markers that comprise the three church properties at Kalaupapa Settlement and are essential to conveying historic patterns of spatial organization.

Views and Vistas

- Maintain views of the church buildings that are the focus of each property from adjacent street corridors.

Circulation

- Preserve and maintain the existing circulation patterns that reflect the historic character during the period of significance such as the access roads and walks that connect the churchyard features with adjacent roads and the buildings with each other. Retain the existing character of each circulation feature as described in the CLR.

Cultural Vegetation

- Preserve and maintain examples of cultural vegetation.
- Preserve and maintain the use of turf grass within the character area.

Buildings and Structures

- Preserve and maintain contributing buildings and structures within the Kalaupapa Churches character area that include St. Francis Catholic Church, St. Francis Rectory, Damien Hall, St. Francis Church Garage, Church of Jesus Christ of Latter-day Saints Meetinghouse and Parish Hall, Kamehameha Street Residence 256, Kana'ana Hou Church and Parish Hall, Calvinist Parsonage, and Garage.
- Preserve and maintain the Our Lady of Lourdes Grotto at St. Francis Catholic Church.
- Preserve, maintain, and repair dry stacked lava rock walls and entry piers that frame each of the Kalaupapa church properties. Repair entry piers and rock walls at Kana'ana Hou Church that exhibit fallen rock or are chipped and broken and need repainting or whitewashing (Figure 335).



Figure 335. Several of the entry piers as well as the dry stacked lava rock walls at Kana'ana Hou Church are in need of repair.

Small-scale Features

- Preserve and maintain the historic small-scale features associated with the Kalaupapa Churches character area that include the Statue of the Sacred Heart of Jesus, St. Francis Church Bell Memorial, Latter-day Saints Monument, and bell at Kana'ana Hou.

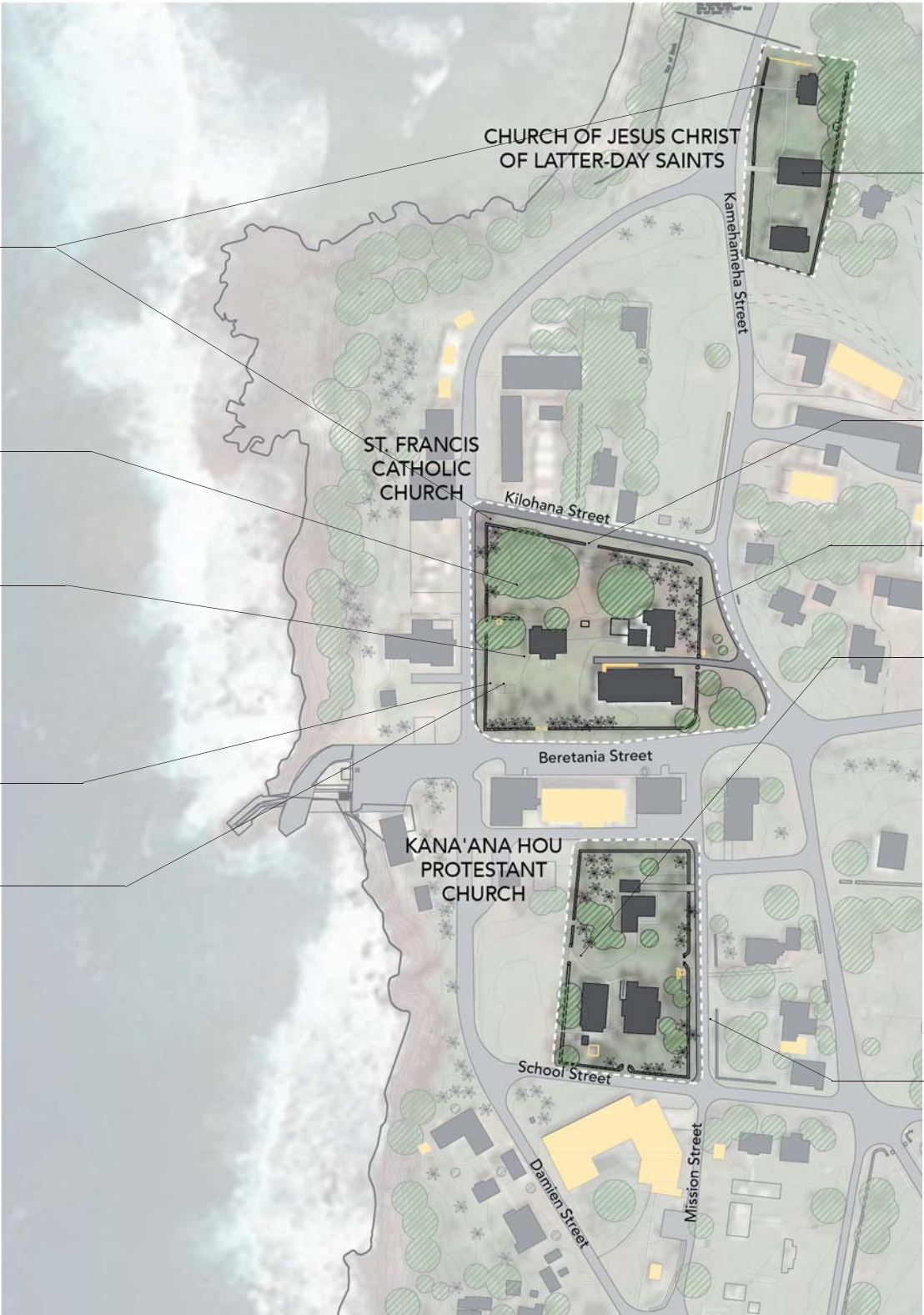
Preserve and maintain each cluster of historic buildings, access roads and walks, tree and shrub plantings, rock wall enclosures, and statuary and commemorative markers that comprise the three church properties at Kalaupapa Settlement and are essential to conveying historic patterns of spatial organization.

Preserve and maintain existing ornamental plantings. Include specimens in a Settlement-wide inventory and documentation project.

Maintain foundation plantings to ensure that they do not become overgrown, obscure views of the buildings, and introduce moisture and other problems that will lead to deterioration of the buildings.

Preserve and maintain the use of turf grass within the character area.

Preserve and maintain the historic small-scale features associated with the Kalaupapa Churches character area that include the Statue of the Sacred Heart of Jesus, St. Francis Church Bell Memorial, Church of Jesus Christ of Latter-day Saints Monument, and bell at Kana’ana Hou.



Preserve and maintain contributing buildings and structures within the Kalaupapa Churches character area that include the St. Francis Catholic Church, St. Francis Rectory, Damien Hall, St. Francis Church Garage, Church of Jesus Christ of Latter-day Saints Meetinghouse and Parish (Cultural) Hall, Kamehameha Street Residence 256, Kana’ana Hou Church and Parish Hall, Calvinist Parsonage, and Garage.

Preserve and maintain the Our Lady of Lourdes Grotto at St. Francis Catholic Church, and culverts.

Preserve, maintain, and repair dry stacked lava rock walls and entry piers that frame each of the Kalaupapa church properties.

Preserve and maintain the existing circulation patterns that reflect the historic character during the period of significance such as the access roads and walks that connect the churchyard features with adjacent roads and the buildings with each other. Retain the existing character of each circulation feature as described in the CLR.

Maintain road and sidewalk surfaces in good condition.

Provide ramps, walks, and parking spaces as needed to support accessibility needs designed to have the least impact possible on the historic character of the buildings and landscape.

Maintain views of the church buildings that are the focus of each property from adjacent street corridors.



KEY	
	Contributing buildings, structures, roads, and walks
	Non-contributing buildings, structures, roads, and walks
	Vegetation considered for removal

Kalaupapa Churches Character Area Treatment Recommendations

Images of resources to be preserved and maintained.

Figure 336

Bishop Home

Refer to Figure 339, Treatment Plan for the Bishop Home Character Area

Preservation is the primary approach recommended for the Bishop Home character area. All surviving historic features provide important connections to the original design and layout of Bishop Home. Ongoing incremental loss of historic resources continues to impact the Settlements. Every effort should be made to protect, preserve, and maintain historic and culturally important resources. Several historic features are currently in need of repair to ensure their continued viability. These include one of the piers at the entrance to the property, the Saint Marianne Cope Grave, and the Saint Damien Monument. Additionally, repaving efforts over the years and turf grass management have led to the concrete curbs that define the formal road system becoming obscured from view. The rock walls remain important character-defining elements of the Bishop Home character area. These are threatened by rock fall, dislodgement and displacement due to vegetation, and inappropriate repair. Regular maintenance of the rock walls that addresses volunteer vegetative growth, the impacts of designed planting elements, and correction of slumping and rock fall is needed to ensure the viability of the rock walls.

Another element that has diminished over time due to incremental loss is the sense of ornamental plantings and associated texture within the core precinct. Replacement of trees and shrubs in kind as they are lost will be an important consideration to avoid ongoing incremental loss.

Rehabilitation/restoration recommendations include the potential to add plantings that recall or capture historic conditions, as well as to provide interpretation of the historic property. As the first group home established at Kalaupapa, and for its association with Saint Marianne Cope, Bishop Home holds interest for interpretation. Currently, the property is understood through a wayside exhibit located near the entrance drive. Additional information should be made available to visitors for interpretive purposes that explains the property as it existed during the period of significance with the original formal site design, allées of trees, rock walls that extended the full length of the property perimeter, interior fencing systems that related to segregation practices, and several additional buildings and their associated uses.

Treatment Recommendations

Natural Systems and Features

- Preserve all natural features and systems associated with the Bishop Home character area, which includes the extant landform and topography, particularly the prominent knoll on which the complex is sited.
- Avoid activities in the character area that will disturb soil and lead to erosion, or cause notable changes to the topography.
- Maintain the cistern that addresses responses to natural features at the individual property level.

Spatial Organization

- Preserve and maintain the entrance road, oval in front of the Bishop Home for Girls and St. Elizabeth Chapel, and the Bishop Loop Road, which are essential to conveying historic patterns of spatial organization.
- Consider restoring the historic planting of ironwood pine trees along the entrance drive.

Views and Vistas

- Maintain views into the property from adjacent streets by ensuring that there are openings between perimeter trees that allow for visual access.

Circulation

- Preserve and maintain the existing circulation patterns that reflect the historic character during the period of significance. Maintain the primary road surfaces in good condition and avoid duplicative routes that break up the spatial cohesiveness of the character area.
- Clear turf grass growing into and over concrete curbs and address the thickness of the pavement when repaving is next scheduled in order to lower the profile of the road and reveal the historic concrete curbing. Replace in kind any missing curb sections.
- Repair, and potentially replace in kind the concrete walks associated with Saint Marianne Cope's Grave, which have become broken and uneven.
- Establish an accessible route to Saint Marianne Cope's grave that avoids the stair entry through the perimeter dry stacked lava rock wall along Puahi Street. Alternative routes include through the break in the wall to the south via a new concrete ramped walk that connects with the existing walk around the grave, and evaluation of the existing walk leading from the entrance drive to determine whether it meets accessibility standards in terms of slope, cross slope, and handrail requirements. Consider the addition of a handrail where the slope exceeds a 5 percent grade.
- Establish an accessible route to the Saint Damien Monument from Puahi Street.

Cultural Vegetation

- Preserve and maintain examples of cultural vegetation located within the character area.
- Maintain turf grass areas that characterize the majority of the property at a consistent height that allows visitors to walk through the property comfortably and access the various features on the site.
- Protect the stone ruins, grave marker, and bake oven in the field east of the central core by taking care during mowing operations to avoid damage. Use string trimmers with a nylon rather than a metal string to maintain the grass around these features. Similarly, maintain the grave markers along the entrance drive using string trimmers rather than mowers.
- Preserve and maintain the ironwood pine trees along the eastern side of the entrance drive that survive from the original formal design for Bishop Home. Ensure that ironwood pine tree plantings are regularly monitored to prevent volunteer growth of the highly invasive species.
- Consider restoring the ironwood pine planting along the entrance drive by adding additional trees to replicate the 1930s plot plan and match historic photographs.
- Consider restoring rows of tree plantings based on the 1930s plot plan between the Saint Marianne Cope Marker and Saint Damien Monument, and the cottages and Social Hall ruins.

- Rejuvenate foundation plantings around individual structures to better reflect historic and sustainable character by pruning to reestablish natural form and structure, health, scale, and function. If foundation plantings cannot be rejuvenated, replace the plants in kind with new materials and maintain through careful pruning. Consider rehabilitating foundation plantings where rejuvenation or replacement in kind is not possible by adding new foundation plantings using selections indicated in the Settlement-wide plant palette developed as part of the CLR. See *Settlement-wide Design Guidelines: Foundation Plantings*.
- Prune, potentially including restorative pruning, to reduce the extent of the tree growth surrounding the Saint Damien Monument and Saint Marianne Cope Grave marker taking into consideration the character of these areas indicated in historic photographs. Consider limbing trees to allow clear site lines from the west and south to allow for views from Puahi Street.
- Maintain the groundcover and flower beds in front of the Saint Marianne Cope Grave with a tidy appearance.
- Consider restoring the historic plantings around the Saint Damien Monument using photographs to guide the effort.

Buildings and Structures

- Preserve and maintain the contributing buildings and structures within Bishop Home character area.
- Repair the stone masonry gate pier at the entrance to Bishop Home that is currently protected with plywood and a metal clamping system (Figure 337).
- Stabilize existing dry stacked lava stone walls along the perimeter of the Bishop Home property where stones have fallen, or sections have collapsed. See *Settlement-wide Design Guidelines: Rock Walls* for guidance regarding care and stewardship of historic rock walls.
- Clean the base of the Saint Damien Memorial.
- Repair and repaint or whitewash the piers at the entrance to the Saint Marianne Cope Grave to match historic conditions (Figure 338).



Figure 337. View of the stone pier that requires repair at the entrance to Bishop Home.



Figure 338. View of the piers at the entrance to the Mother Marianne Grave that require repair and repainting.

- Repair, reset as needed, and repaint the posts and chain that surround the Saint Marianne Cope Grave to reflect historic conditions.
- Repair the curb at the Saint Marianne Cope Grave Marker to reflect historic conditions.
- Modify maintenance practices at the base of the Saint Damien Memorial to prevent further damage from maintenance equipment.
- Consider interpreting the missing section of dry stacked lava rock wall along School Street and the history of road work that employed the rock crusher at New Baldwin Home and rock from some property boundary delineations to pave roads within Kalaupapa Settlement in the 1950s.
- Consider removing the chain link fence associated with the Barbara Marks Residence, which is rusted, sagging, and broken in places when it is no longer needed.

Small-scale Features

- Preserve and maintain contributing small-scale features located at Bishop Home.
- Treat as cultural resources the monuments and statuary that are not historic, including the Statue of St. Anthony, stone monument at Saint Marianne Cope Grave, and the plantings and plaques in the central island of the entrance drive oval dedicated to Saint Marianne Cope and Alice Pake Kamaha.
- Address repair needs associated with grave markers and monuments, including treatment of biological growth.

Preserve and maintain the entrance road, oval in front of the Bishop Home for Girls and St. Elizabeth Chapel, and the Bishop Loop Road, which are essential to conveying historic patterns of spatial organization. (Non-contributing features highlighted in yellow.)

Preserve and maintain the existing circulation patterns that reflect the historic character during the period of significance. Maintain the primary road surfaces in good condition and avoid duplicative routes that break up the spatial cohesiveness of the character area.

Repair, and potentially replace in kind the concrete sidewalks and curbs, repair the posts and chain edging, and repaint the piers associated with Mother Marianne’s Grave.

Clear turf grass growing into and over concrete curbs, and address the thickness of the pavement when repaving is next scheduled, to lower the profile of the roads in order to reveal the historic concrete curbing at Bishop Home. Replace in kind any missing curb sections.

Consider removing the chain link fence at the Barbara Marks Residence, which is in poor condition.

Maintain all existing sidewalks in good condition by repairing and paving the pathways where needed. Where path segments adjoin, ensure a level plain to avoid trip hazards. Keep path surface and edges clear of vegetation. Prune roots that threaten to displace walks.

Preserve and maintain contributing buildings and structures within Bishop Home character area.

Ensure that repair work to historic building exteriors does not negatively impact associated landscape features.



Preserve and repair the stone ruins, grave markers, and bake oven along the entrance drive and in the field east of the central core. Protect these features by maintaining the grass throughout at a single height to allow people to walk to the features if they are interested in exploring. Use string trimmers with a nylon rather than a metal line. Address repair needs associated with grave markers and monuments, including treatment of biological growth. See Appendix B: Cemetery Management Plan for guidance.

Thin and prune plantings at Mother Marianne’s Grave to recall the historic character of the landscape.

Limb up trees to allow site lines from Puahi Street to Mother Marianne’s Grave and the Father Damien Monument.

Maintain the groundcover and flower beds in front of the Mother Marianne’s Grave with a tidy appearance.

Restore flower beds at the Father Damien Monument.



Establish accessible routes to Mother Marianne’s Grave and the Father Damien Monument from Puahi Street that avoid the stair entry through the perimeter dry stacked lava rock wall. See *Settlement-wide Design Guidelines: Accessibility* section.

Clean the base of the Father Damien Monument and repair and repaint the piers at the entrance to Mother Marianne’s Grave.

KEY

■

Contributing buildings, structures, roads, and walks

■

Non-contributing buildings, structures, roads, and walks

■

Vegetation considered for removal

Repair the mortared rock gate pier at the entrance to Bishop Home that is currently protected with plywood and a metal clamping system

Consider interpreting the missing section of dry stacked lava rock wall along School Street and the history of road work involving the rock crusher at New Baldwin Home.

Consider restoring historic tree plantings along the entrance drive and that formed precincts around the build precinct as indicated in the 1930s plot plan.

Preserve and maintain existing ornamental plantings. Include specimens on the property in a Settlement-wide inventory and documentation project. Rejuvenate foundation plantings

Consider alternatives for interpreting missing buildings and structures.

Address accessibility requirements related to future building and structure improvements following the guidance afforded in the *Settlement-Wide Design Guidelines: Accessibility* section.

Stabilize existing dry stacked lava rock walls along the perimeter of the Bishop Home property where rocks have fallen or sections have become collapsed. Follow the guidelines indicated herein for stabilizing and restacking rock walls. See *Settlement-wide Design Guidelines: Rock Walls*.

Avoid adding any other circulation systems within Bishop Home.

Bishop Home Character Area Treatment Recommendations

Figure 339

Bay View Home

Refer to Figure 344, Treatment plan for the Bay View Home Character Area.

Preservation is the primary approach recommended for the Bay View Home character area. All surviving historic features provide important connections to the original design and layout of the property. Several historic features are currently in need of repair to ensure their continued viability. Repair is recommended for the walks, turf lawn, gate posts, and bollard edging along the Bishop Road Loop Road. Another element that has diminished over time due to incremental loss is the sense of ornamental plantings and associated texture within the core precinct. Replacement of trees and shrubs in kind as they are lost will be an important consideration to avoid ongoing incremental loss.

Rehabilitation of the Bay View Home character area entails removal of the non-historic concrete ramps placed over top of the original walks in the 1990s, provision of designated parking spaces that can be surfaced to prevent further erosion, provision of improved features to meet or exceed accessibility requirements, and consideration of ways to reintroduce cultural vegetation described by residents as present historically but lost since the 1980s. Removal of volunteer vegetation and other invasive vegetation colonizing the southern and southwestern margin of the character area and portions of the shoreline is also recommended.

This area is highly important to the story of Kalaupapa. Based on the role of Bay View Home in the support of blind and aged Settlement residents, the character area landscape provides interpretive themes and educational opportunities for visitors to learn about unique aspects of life during the period of significance. Meaningful stories about the lives of the residents and koku who resided at Bay View Home, and the features that supported life but also marked the era of segregation should be considered for interpretation. Additionally, consideration be paid to interpreting how visitors and patients were purposefully separated from each other during visits through depiction of historic fencing and hedge features used to create physical boundaries. Interpretive aids might include a recyclable pamphlet, virtual exhibit, or audio tour.

Treatment Recommendations

Natural Systems and Features

- Preserve all natural features and systems associated with the Bay View Home character area, which include the extant landform and topography, shoreline and ocean interface, and drainages.
- Avoid activities in the character area that will disturb soil and lead to erosion, or cause notable changes to the topography.

Spatial Organization

- Preserve and maintain in good condition the historic road and walk system, the arrangement and use of buildings, boundary features, and plantings that convey historic patterns of spatial organization at Bay View Home. All features are contributing with the exception of a shed behind the Visitors' Quarters, fencing at the Inouye Residence, a fire hose box near Bay View Home Building 8, and the informal access road behind Bay View Home Residence 3.
- Preserve and maintain in good condition extant historic boundary components of Bay View Home including the grove of coconut palm trees, gate post and wall features, bollard and chain edging, and

remnants of historic hedges.

- Allow for the addition of compatible new garages and utility structures within the historic cluster arrangement by siting them on the footprint of a previous missing structure.

Views and Vistas

- Preserve and maintain views of the Pacific Ocean from Bay View Home complex by selective thinning and removal of invasive species and other volunteer vegetation. Ironwood pine trees have colonized the southern portion of the character area as well as the western shoreline beyond the extent of historic plantings, altering views in these directions. Remove volunteers while retaining historic plantings.

Circulation

- Preserve and maintain in good condition Bay View Loop Road and associated asphalt surfaces. Avoid adding new roads within the character area. Discourage use of the turf grass for vehicular circulation.
- Remove the concrete ramps placed over top of the original walks in the 1990s to reestablish historic patterns of circulation (Figure 340). Where concrete ramps are removed, rehabilitate the walks to match historic conditions. Provide an alternate accessible route that minimizes the impact on the historic scene. See *Settlement-Wide Design Guidelines: Accessibility* for guidance.
- Establish designated parking spaces to replace ad hoc use of the turf grass area at the southern end of the complex. Consider siting new parking south of Old Bay View Kitchen and Dining Room where parking was historically located to replace use of the turf grass (Figure 341). See *Settlement-wide Design Guidelines: Parking* for guidance.



Figure 340. The concrete ramps placed over top of the historic concrete walks at Bay View Home are intrusive.



Figure 341. Use of the turf grass along the southern section of Bay View Loop Road has led to erosion.

Buildings and Structures

- Preserve and maintain in good condition contributing buildings and structures within the Bay View Home character area. Consider adaptive reuse or removal of non-contributing buildings and structures. Ensure that maintenance work or activities conducted to rehabilitate or repair the exteriors of historic buildings does not negatively impact landscape resources, including vegetation, planting beds, walks, and other features. Co-locate visitor amenities such as restrooms, concessions, and interpretation within existing buildings as they are adaptively reused.
- Repair and repaint the existing Bay View Home gate posts at the intersection of Damien Road and Bayview Loop Road, which are cracked and chipping (Figure 342).



Figure 342. The gate posts at the entrance into Bay View Home are in need of repair and whitewashing or painting.

Cultural Vegetation

- Preserve and maintain examples of cultural vegetation located within the character area.
- Preserve and maintain the use of turf grass throughout Bay View. Maintain the turf grass at Bay View Home at a maximum height of 6 inches throughout to convey a manicured appearance and reveal the spatial relationship between the historic buildings and landscape.
- Preserve and maintain in good condition the grove of coconut palm trees along the shoreline that was planted during the period of significance. Conduct a hazard assessment of the grove and initiate a replacement program for individual trees based on the assessment. Replace trees as they are removed or lost in the approximate location of the original. See *Settlement-wide Design Guidelines: Perpetuating Designed Plantings* for how to maintain the grove.
- Rejuvenate foundation plantings around individual structures to better reflect historic and sustainable character by pruning to reestablish natural form and structure, health, scale, and function. If foundation plantings cannot be rejuvenated, replace the plants in kind with new materials and maintain through careful pruning. Consider rehabilitating foundation plantings where rejuvenation or replacement in kind is not possible by adding new foundation plantings using selections indicated in the Settlement-wide plant palette developed as part of the CLR. See *Settlement-wide Design Guidelines: Foundation Plantings* for guidance.
- Control and manage the grove of planted ironwood pine trees along the shoreline. Remove volunteers to provide filtered views of the Pacific Ocean. Regularly monitor to prevent additional volunteer growth and expansion of the grove.
- Remove the stand of invasive ironwood pines along the sloped terrain south of Bay View Home. Replace with native vegetation.
- Consider introducing a screen planting along the eastern side of the Quonset Dormitory to enhance views along the Settlement entry corridor.

Small Scale Features

- Repair, reset, and repaint the metal and concrete posts and chain that edge Bay View Loop road to reflect historic conditions (Figure 343).
- Provide a bike rack in association with the parking area to promote and support bicycle use by park staff and visitors.



Figure 343. The metal and concrete posts that edge Bay View Loop along the north edge are in need of repair.

Preserve and maintain in good condition the historic road and sidewalk system, the arrangement and use of buildings, boundary features, and plantings that convey historic patterns of spatial organization at Bay View Home.

Preserve and maintain in good condition Bay View Loop Road and associated asphalt surfaces. Avoid adding new roads within the character area. Discourage use of the turf grass for vehicular circulation.

Preserve and maintain in good condition the grove of coconut palm trees along the shoreline that was planted during the period of significance. Conduct a hazard assessment of the grove and initiate a replacement program for individual trees based on the assessment. Replace trees as they are removed or lost in the same location as the original. See *Settlement-wide Design Guidelines: Vegetation* for how to maintain the grove.

Preserve and maintain historic concrete sidewalks in good condition by repairing the concrete as needed. Ensure that there are no cracks, dips, or breaks that might present a trip hazard. Keep sidewalk surfaces and edges clear of vegetation. Maintain existing sidewalks by pruning tree roots that threaten to uproot and damage sidewalks.

Establish designated parking spaces to replace ad hoc use of the turf grass area at the southern end of the complex. Consider siting new parking south of Old Bay View Kitchen and Dining Room where parking was historically located. Provide a bike rack in association with the parking area. See *Settlement-wide Design Guidelines: Parking* for guidance.

Preserve and maintain views of the Pacific Ocean from Bay View Home complex by selective thinning and removal of volunteer growth.

Consider interpreting the former original dormitory and other buildings that were part of Bay View Home historically. Options include using mow patterns or low bollards or posts to mark building and fenceline locations.

Allow for the addition of compatible new garages and utility structures within the historic cluster arrangement by siting them in the footprint of a previous structure.

Remove and/or control ironwood pine trees that are not part of a historic planting.

Address accessibility requirements related to future building and structure improvements following the guidance afforded in the *Settlement-wide Design Guidelines: Accessibility* section.



- Repair, reset, and repaint the metal and concrete posts and chain that edge Bay View Loop Road.
- Repair and repaint the existing Bay View Home gate posts at the intersection of Damien Road and Bayview Loop Road.
- Preserve and maintain the use of turf grass throughout Bay View. Maintain the turf grass at Bay View Home at a maximum height of 6 inches throughout to convey a manicured appearance, and reveal the spatial relationship between the historic buildings and landscape.
- Preserve and maintain in good condition historic trees, shrubs, and foundation plantings within Bay View Home. See *Settlement-wide Design Guidelines: Vegetation* for further guidance. Include specimens on the property in a Settlement-wide inventory.
- Remove the concrete ramps over top of the original sidewalks to reestablish historic patterns of circulation. Where concrete ramps are removed, rehabilitate the sidewalk to match its historic condition. Replace the ramps with accessibility features that provide for equal access to all improved buildings and site features. See *Settlement-wide Design Guidelines: Accessibility* section for guidance.
- Maintain foundation plantings to ensure that they do not become overgrown, obscure views, or introduce moisture and other problems that will lead to deterioration of the buildings. Where foundation plantings have become too overgrown or are missing, consider replacing them from the foundation planting palette provided. See *Settlement-wide Design Guidelines: Vegetation* for appropriate species.
- Preserve and maintain in good condition contributing buildings and structures within the Bay View Home character area. Consider adaptive reuse or removal of non-contributing buildings and structures. Ensure that maintenance work or activities conducted to rehabilitate or repair the exteriors of historic buildings does not negatively impact landscape resources, including vegetation, planting beds, sidewalks, and other features. Co-locate visitor amenities such as restrooms, concessions, and interpretation within existing buildings as they are adaptively reused.
- Consider introducing a screen planting along the eastern side of the Quonset Dormitory to enhance views along the entry corridor.



Images of resource repair and accessibility issues to be addressed.

Bay View Home Character Area Treatment Recommendations

Figure 344

McVeigh Home

Refer to Figure 349, Treatment plan for the McVeigh Home Character Area.

Preservation is the primary approach recommended for the McVeigh Home character area. All surviving historic features provide important connections to the original design and layout of the property. Several historic features are currently in need of repair to ensure their continued viability. Repair is recommended for the curbs. Specific cultural plantings merit special care.

Several rehabilitation recommendations are provided for McVeigh Home. Primary among them is the provision of enhanced accessibility, particularly in association with the Social Hall and other public buildings in the complex. The Social Hall is one of the places recommended for consideration to provide additional co-located visitor services. Recommendations address rehabilitation of existing parking near the Social Hall and new accessible walks leading to the public buildings, as well as schematic concepts for providing enhanced accessibility for individual cottages. Because of the tight configuration and minimal setback, accessible routes to individual cottages may require use of secondary entrances, and/or additional proximity parking. Interpretation of the historic of McVeigh Home is also recommended herein.

Treatment Recommendations

Natural Systems and Features

- Preserve all natural features and systems associated with the McVeigh Home character area, which include the extant landform and topography, and drainages.
- Avoid activities in the character area that will disturb soil and lead to erosion, or cause notable changes to the topography.

Spatial Organization

- Preserve and maintain in good condition the road network, the arrangement and use of buildings, boundary features, and plantings that convey historic patterns of spatial organization at the McVeigh Home.
- Preserve and maintain in good condition, extant historic boundary components of the McVeigh Home including the grove of coconut palm trees on the west side of Staff Street, the rock walls on the north and east sides, and the windbreak. See *Settlement-wide Design Guidelines: Vegetation and Rock Walls* for guidance.
- Allow for the addition of compatible new garages and utility structures for residents within the historic cluster arrangement at McVeigh Home. All new garages should be sited behind the cottages or along the periphery of the cluster where service and support structures are located. Whenever possible, orient new garages and utility structures in the footprint of a previous structure. Guidance for ensuring the compatible design of new outbuildings including the size, form, and material is found in the *Settlement-wide Design Guidelines: Outbuildings*.

Views and Vistas

- Rehabilitate and reestablish historic viewsheds at the McVeigh Home by selective thinning or removal of

invasive and volunteer vegetation in three key areas including:

- Views from within the complex to the boundary components, including the perimeter rock wall on the east side of the property.
- Views from within the complex to the agricultural fields and open areas north of the complex.
- Views southwest towards Paschoal Hall and the associated open green.

Circulation

- Preserve all historic roads.
- Remove turf grass growing into and over concrete road curbs and reestablish a clean edge between turf grass and the curb (Figure 345). Rehabilitation and repaving of the road surface in the future should include specifications for lowering the finish grade of the asphalt to ensure the historic profile and character of concrete curbing throughout the McVeigh Home is visible. Replace in kind any missing curb sections.



Figure 345. View of one of the McVeigh Home internal road curbs overgrown with turf grass.

- Preserve historic walks between the road and individual cottages.
- Rehabilitate circulation throughout the McVeigh Home to address accessibility requirements related to future building and structure improvements following the *Settlement-Wide Design Guidelines: Accessibility* section. Ensure designated parking areas, walks, and access points to buildings create a unified system of access, taking into consideration appropriate design guidelines related to the use of compatible materials, forms, and transitions.
- Reestablish the concrete walk that historically provided access to the McVeigh Pavilion (Pool Hall) as an accessible route (Figure 346).



Figure 346. Detail of McVeigh Home showing locations of new accessible walks to the Social Hall and Pool Hall, accessible parking, screened utility features, and picnic tables and benches. (Source: LSHLA)

- Rehabilitate the existing ramp on the east side of the Social Hall to ensure it meets code and provide an accessible parking space in association with the ramp (Figure 347).



Figure 347. Illustrations indicating the provision of accessible parking and an accessible route for entering the McVeigh Social Hall. (Source: LSHLA)

Cultural Vegetation

- Preserve and maintain examples of cultural vegetation located within the character area.

- Maintain historic character of turf grass areas in proximity to buildings by mowing at a height not to exceed 6 inches. Maintain grass in adjacent field areas at a height not to exceed 18 inches (Figure 348).
- Preserve and maintain in good condition, the grove of coconut palm trees west of Staff Street. Conduct a hazard assessment for the grove and initiate a replacement program for individual trees based on that assessment. The grove as shown on historic plans is relatively informal, with the trees planted irregularly within a band along the road. Due to this informality, it is not necessary to replace the entire grove at one time since replacement trees will not be noticeable. See *Settlement-wide Design Guidelines: Perpetuating Designed Plantings* for guidance.
- Restore the windbreak plantings to the north and south of the McVeigh Home developed core indicated in the 1930s plot plan.
- Rejuvenate foundation plantings around individual structures to better reflect historic and sustainable character by pruning to reestablish natural form and structure, health, scale, and function. If foundation plantings cannot be rejuvenated, replace the plants in kind with new materials and maintain through careful pruning. Consider rehabilitating foundation plantings where rejuvenation or replacement in kind is not possible by adding new foundation plantings using selections indicated in the Settlement-wide plant palette developed as part of the CLR. See *Settlement-wide Design Guidelines: Foundation Plantings* for guidance.



Figure 348. Diagram showing recommended mow height zones. (Source: LSHLA)

Buildings and Structures

- Preserve individual contributing buildings and structures within the McVeigh Home, and maintain in good condition.
- Stabilize and repair existing dry stacked lava rock walls along the eastern edge of the McVeigh Home and associated with the culvert that daylight west of Staff Street. Remove vegetation growing on the wall and east of the wall approximately 10 feet. See *Settlement-wide Design Guidelines: Rock Walls*.
- Site upgrades to existing building systems that require the location of support components—e.g. compressors, electrical panels, and generator units—outside the buildings close to the building and screen them with foundation plantings or fencing to reduce visual impacts to the cultural landscape. See *Settlement-wide Design Guidelines: Vegetation and Fencing* for guidance.

Small-scale Features

- Work with residents to assess the location, need, and type of fencing used to enclose areas around the cottages. Remove unnecessary fences around cottages.
- Adaptively use the east side of the McVeigh Social Hall as an area in which to site benches, picnic tables, and bike racks (refer to Figure 348 above). Direct necessary visitor amenities to the interior of McVeigh Social Hall. These may include restrooms, bottle refill stations, orientation signage, and interpretive information that could be offered virtually using Wi-Fi or through pamphlets or signage.
- Consider interpreting the use of group homes within Kalaupapa Settlement, the transition for some patients to live independently or in an apartment style residence, and the important role of centrally-located community facilities, such as McVeigh Social Hall. Meaningful and compelling stories of the residents and kōkua who lived at McVeigh Home can also be illustrated through the personalization of individual cottages, such as the Watanuki Residence and Ed Kato's Studio.

Preserve and maintain in good condition the road network, the arrangement and use of buildings, boundary features, and plantings that convey historic patterns of spatial organization at the McVeigh Home.

Preserve individual contributing buildings and structures within the McVeigh Home, and maintain in good condition. (Non-contributing buildings and structures highlighted in yellow.)

Preserve historic roads and maintain asphalt paving surfaces in good condition. Avoid adding new roads.

Remove turf grass growing into and over concrete road curbs, and reestablish a clean edge between turf grass and the curb. Rehabilitation and repaving of the road surface in the future should include specifications for lowering the finish grade of the asphalt to ensure the historic profile and character of concrete curing throughout the McVeigh Home is visible. Replace in kind any missing curb sections.

Preserve historic walkways between the road and individual cottages and maintain in good condition by repairing and paving where needed. Where path segments join, ensure a level plain to avoid trip hazards. Keep path surface and edges clear of vegetation and prune roots that threaten to displace or damage the concrete.

Preserve and maintain in good condition historic trees, shrubs, and foundation plantings around public buildings and individual cottages. Include specimens on the property in a Settlement-wide inventory and documentation project.

Allow for the addition of compatible new garages and utility structures for residents within the historic cluster arrangement at McVeigh Home. All new garages should be sited behind the cottages or along the periphery of the cluster where service and support structures are located. Whenever possible, orient new garages and utility structures in the footprint of a previous structure. Guidance for ensuring the compatible design of new outbuildings including the size, form, and material is found in the *Settlement-wide Design Guidelines: Outbuildings*.



Rehabilitate and reestablish historic viewsheds at the McVeigh Home by selective thinning or removal of invasive and volunteer vegetation to view the eastern boundary wall, the northern fields, and the greensward east of Paschoal Hall.

Work with residents to assess the location, need, and type of fencing used to enclose areas around the cottages. Remove unnecessary fences around cottages.

KEY

Contributing buildings, structures, roads, and walks

Non-contributing buildings, structures, roads, and walks

Vegetation considered for removal

Reestablish bands of trees that historically marked the northern and southern edges of the McVeigh Home cluster to better define the extent and character of the historic boundary. Clear existing invasive trees within the proposed bands ahead of planting new trees.

Rehabilitate foundation plantings around individual structures to better reflect historic and sustainable character by pruning to reestablish natural form and structure, health, scale, and function. If rehabilitation is not an option, replace in kind, or with materials for foundation planting from the Settlement-wide plant palette. See *Settlement-wide Design Guidelines: Vegetation*.

Stabilize and repair existing dry stacked lava rock walls along the eastern edge of the McVeigh Home and associated with the culvert that daylight west of Staff Street. Remove vegetation growing on the wall. See *Settlement-wide Design Guidelines: Rock Walls*.

Address accessibility requirements related to future building and structure improvements following the guidance afforded in the *Settlement-wide Design Guidelines: Accessibility* section. Ensure designated parking areas, walkways, and access points to buildings create a unified system of access. Design new features to to be compatible with the historic character of the area in materials, forms, and transitions.



McVeigh Home Character Area
Treatment Recommendations

Figure 349

Staff Row

Refer to Figure 352, Treatment plan for the Staff Row Character Area.

Preservation is the primary approach recommended for the Staff Row character area. All surviving historic features provide important connections to the original design and layout of the property. Specific cultural plantings merit special care along with repair of historic features with observable condition issues of concern and stabilization of the Superintendent's Residence foundation for safety.

Several rehabilitation recommendations are provided for Staff Row. Primary among them is the provision of enhanced accessibility. Also included is the need to diminish the use of ad hoc roads and parking, and manage volunteer woody vegetation and invasives. Overall, Staff Row also affords an important opportunity to discuss the mandated separation of staff and patients, and the landscape features, such as fences and gates, used for exclusionary purposes prior to the 1940s. Interpretation would be considered here within the context of a larger interpretive plan for the Settlement, and the methods and vehicles for story-telling.

Treatment Recommendations

Natural Systems and Features

- Preserve all natural features and systems associated with the Staff Row, which include the extant landform and topography.
- Avoid activities in the character area that will disturb soil and lead to erosion, or cause notable changes to the topography.

Spatial Organization

- Preserve and maintain the cluster of historic buildings, the grove of coconut palms along the fence line at the Residence for Single Women, the gate piers, the views across the open space northeast of Paschoal Hall, and the remaining cultural vegetation that defines the Staff Row character area, which are essential to conveying historic patterns of spatial organization.
- Consider alternatives for marking the location of former buildings and fence lines that were historically part of Staff Row. Options include using mow patterns or low bollards or posts to mark fence line locations. Replace or prune the shrub hedge in front of the Assistant Resident Physician's Residence as part of this effort.
- Consider removing volunteer vegetation east of Staff Row to reestablish areas used historically as gardens and fields. Consider adaptive use of these areas as the site for an expanded plant nursery for the Settlements.
- Consider removing volunteer vegetation east of the Resident Physician's Residence to reestablish the former volleyball court and garden area.

Views and Vistas

- Maintain views toward Paschoal Hall across the greensward.

Circulation

- Preserve and maintain the existing circulation patterns that reflect the historic character during the period of significance including Staff Street and the concrete walks leading to the building entrances.
- Maintain all existing walks in good condition.
- Establish an accessible parking space east of the Residence for Single Women that provides access to the accessible ramp leading to the building entrance (Figure 350).
- Address accessibility requirements related to future building and structure improvements following the guidance afforded in the *Settlement-Wide Design Guidelines: Accessibility* section.



Figure 350. Illustrations showing proposed guidance regarding the provision of an accessible route for entering the Residence for Single Women. (Source: LSHLA)

Cultural Vegetation

- Preserve and maintain examples of cultural vegetation located within the character area.
- Preserve and maintain the rows of coconut palm trees along the fence line at the Residence for Single Women that was planted during the period of significance. Replace trees as they become over mature or their health declines following the guidance afforded in the *Settlement-wide Design Guidelines*:

Perpetuating Designed Plantings.

- Preserve and maintain the use of turf grass throughout Staff Row. Maintain the turf grass in the built precinct environs at a maximum height of 6 inches throughout to convey a manicured appearance, and reveal the spatial relationship between the historic buildings and landscape. Maintain grasses in the adjacent field areas at a maximum height of 18 inches (Refer to Figure 348).
- Rejuvenate foundation plantings around individual structures to better reflect historic and sustainable character by pruning to reestablish natural form and structure, health, scale, and function. If foundation plantings cannot be rejuvenated, replace the plants in kind with new materials and maintain through careful pruning. Consider rehabilitating foundation plantings where rejuvenation or replacement in kind is not possible by adding new foundation plantings using selections indicated in the Settlement-wide plant palette developed as part of the CLR. See *Settlement-wide Design Guidelines: Foundation Plantings* for guidance.

Buildings/Structures

- Preserve and maintain contributing buildings and structures within the Staff Row character area, including the Residence for Single Women, Guest Cottage, Laundry Room and Apartment, Dentist's Residence, Resident Physician's Residence, Assistant Resident Physician's Residence, Electrician's Residence, and Building 629.
- Preserve and maintain dry stacked lava rock walls. See *Settlement-wide Design Guidelines: Rock Walls* for guidance.
- Repair and repaint the existing gate posts at the entrances to the Assistant Resident Physician's Residence and Resident Physician's Residence (Figure 351).
- Consider, when new buildings are proposed for Staff Row, that the locations of historic structures be used to recall the historic spatial organization of the character area.
- Screen views of the Freezer Building from Staff Street using shrub plantings.



Figure 351. The gate posts associated with entrance walks at Staff Row are in need of repair and whitewashing or repainting.

Small Scale Features

- Repair and maintain the fish pond outside the Resident Physician's Residence.
- Consider interpreting early development of Kalaupapa Settlement, features used to separate patients from visitors and staff, vegetable gardens and fields that supported food needs, cultural vegetation, and recreational activities related to a former volleyball court using Staff Row resources.

Preserve and maintain the cluster of historic buildings, Staff Loop, grove of coconut palms, gate piers, the views across the open space northeast of Paschoal Hall, and cultural vegetation that defines the Staff Row character area and are essential to conveying historic patterns of spatial organization.

Preserve and maintain contributing buildings and structures within the Staff Row character area. (Non-contributing buildings and structures highlighted in yellow.)

Repair and repaint the gate posts and fish pond at the Assistant Resident Physician’s Residence and Resident Physician’s Residence.

Preserve and maintain the existing circulation patterns that reflect the historic character during the period of significance including Staff Street, Staff Loop, and the concrete sidewalks leading to the building entrances.

Maintain road surfaces in good condition.

Maintain existing sidewalks in good condition. Repair and repave walks where needed to avoid trip hazards due to breaks, dips, and cracks. Keep walk surfaces and edges clear of vegetation. Prune tree roots that threaten to uproot and damage sidewalks.

Preserve and maintain existing ornamental plantings. Include specimens on the property in a Settlement-wide inventory and documentation project.

Rehabilitate foundation plantings around individual structures to better reflect historic and sustainable character by pruning to reestablish natural form and structure, health, scale, and function. If rehabilitation is not an option, replace in kind, or with materials for foundation planting from the Settlement-wide plant palette. See *Settlement-wide Design Guidelines: Vegetation*.

Preserve and maintain the rows of coconut palm trees along the fenceline at the Residence for Single Women See *Settlement-wide Design Guidelines: Vegetation* for guidance.



Preserve and maintain dry stacked lava rock walls. See *Settlement-wide Design Guidelines: Rock Walls* for guidance.

Address any accessibility requirements related to future building and structure improvements following the *Settlement-wide Design Guidelines: Accessibility* section.

Avoid adding any other circulation features within Staff Row.



KEY

Contributing buildings, structures, roads, and walks

Non-contributing buildings, structures, roads, and walks

Vegetation considered for removal

Preserve and maintain the use of turf grass throughout Staff Row. Maintain the turf grass in the built precinct environs at a maximum height of 6 inches throughout to convey a manicured appearance, and reveal the spatial relationship between the historic buildings and landscape. Maintain grasses in the adjacent field areas at a height of 12 to 18 inches

Consider removing volunteer vegetation east of the Resident Physician’s Residence to reestablish a former volleyball court and garden area.

Consider alternatives for marking the location of former buildings and fencelines that were historically part of Staff Row. Options include using mow patterns or low bollards or posts to mark building and fenceline locations.

Consider, when new buildings are proposed for Staff Row, that the locations of historic structures be used to recall the historic spatial organization of the character area.

Consider removing volunteer vegetation east of Staff Row to reestablish areas used historically as gardens and fields. Consider adaptive use of these areas as the site for an expanded plant nursery for the Settlements.

Maintain views toward Paschoal Hall across the greensward.

Establish an accessible parking space east of the Residence for Single Women that is connected to an accessible route into the building.

Staff Row Character Area
Treatment Recommendations

Figure 352

New Baldwin Home

Refer to Figure 356, Treatment plan for the New Baldwin Home Character Area.

Stewardship of surviving historic features, including repair and maintenance are the focus of treatment recommendations for New Baldwin Home. Removal of volunteer vegetation to reestablish historic spatial patterns at New Baldwin is recommended.

Rehabilitation recommendations address the potential for siting operational and visitor service functions within the parts of the character area that are screened from view, or as an expansion of current uses. The existing recycling center and construction debris site is proposed to be expanded to include a burn pile and a possible location for parking tour buses when not in use. The mule corral and slaughterhouse complexes are recommended for expansion of available visitor services as part of the broader concept of co-locating visitor amenities, such as bottle refill stations and benches. Also recommended is the provision of interpretive information within the New Baldwin Home character area due to its location as one of the Settlements entry points.

As the southern gateway and entrance into Kalaupapa Settlement, the New Baldwin Home character area is recommended for additional rehabilitation in the form of reducing the number of eroded two-track roads and weedy vegetation by establishing a stand of native grasses and forbs in the open area around the slaughterhouse complex, establishing a single road system connecting sites and features, and revegetating the other spur roads. Consultation with the community and other stakeholders should precede implementation of this recommendation, which suggests a new treatment for the entrance corridor rather than a preservation or restoration approach, and may require expansion of deer fencing to successfully establish native field grasses due to the impacts of axis deer and feral hogs on the landscape.

Treatment Recommendations

Natural Systems and Features

- Preserve all natural features and systems associated with the Bay View Home character area, which include the extant landform and topography, shoreline and ocean interface, and drainages.
- Avoid activities in the character area that will disturb soil and lead to erosion, or cause notable changes to the topography.
- Consider establishing a stand of native field grasses and forbs within the open space east of the shoreline to rehabilitate the degraded conditions present.

Spatial Organization

- Preserve and maintain the New Baldwin Home cluster, marked by dry stacked lava rock walls and gate posts, evidence of cultural vegetation, and a grotto, as well as the historic Slaughterhouse cluster, which are essential to conveying historic patterns of spatial organization.
- Consider interpreting the former buildings and landscape features that comprised New Baldwin Home using a recyclable pamphlet, virtual exhibit, or audio tour.
- Consider expanding the open area near the recycling center to include a burn pile location and bus

parking area. Clear invasives to establish open space sufficient for these needs. Establish native field grasses and forbs where invasives are cleared.

Views

- Maintain views of the Pacific Ocean from the open space associated with New Baldwin Home by managing trees along the shoreline.

Circulation

- Identify a single vehicular route for future use that includes only the historic access roads. Improve the route to address rutted areas and locations with poor drainage. Consider adding gravel to improve the durability of the surface.
- Revegetate the unnecessary alternative circulation routes that crisscross the open landscape, and discourage further use.
- Establish an appropriate location for future tour bus parking that is screened from view within visitor use areas. Consider a site that can be screened using existing woody vegetation north of New Baldwin for this purpose. Ensure that positive drainage can be effected, and that the proposed parking area can be used and accessed without causing erosion or damage to the environment.

Buildings/Structures

- Preserve and maintain contributing buildings and structures within the New Baldwin Home character area that include the Slaughterhouse, Slaughterhouse Restroom, Slaughterhouse Corral, New Baldwin Home Entrance Gate and Rock Walls, Grotto and Garden Structure, and Rock Crusher.
- Provide structural shoring of the rock crusher to allow vegetation removal. Remove vegetation growing on and within the Rock Crusher (Figure 353). Cut trees and other woody species growing through the wall flush with the ground, or as close to the ground as can be reached. Apply a systemic herbicide to the cut end to avoid regrowth. Stabilize the structure and interpret it for visitors. If the Rock Crusher can be stabilized, consider opening it up for visitor interpretation, after adding signage that asks visitors to refrain from accessing the Rock Crusher.



Figure 353. The historic Rock Crusher is currently overgrown with vegetation that poses a threat to preservation of the structure.

- Repair the dry stacked lava rock wall and concrete wall segments and repair and repaint the gate piers at the entrance to New Baldwin Home (Figure 354). Maintain the wall free of vegetation. See *Settlement-wide Guidelines: Rock Walls* for guidance.



Figure 354. The gate piers and rock walls at New Baldwin are overgrown with vegetation and in need of repair.

Vegetation

- Preserve and maintain examples of cultural vegetation located at the New Baldwin Home site.
- Clear vegetation away from the road corridors and features such as the gate piers.
- Establish shrub plantings between the Rock Crusher and the nearby electrical line to discourage visitor access. Include warning signs in front of the shrubs to further discourage visitor access.
- Revegetate the alternative circulation routes that have arisen over time through the open space northwest of New Baldwin Home, and establish a grass and forb field within the open space to enhance the

appearance and prevent further erosion (Figure 355). Work with the community to determine their interest in implementing this recommendation. Establish new fencing to exclude axis deer and feral hogs in the least intrusive manner possible.



Figure 355. The open space northwest of New Baldwin Home is rutted and eroded, with numerous roads in use. Repair of the road and establishment of a grass and forb field would enhance the appearance of this Settlement entrance corridor.

Small Scale Features

- Co-locate visitor amenities and interpretive and orientation information in association with the mule corral and Slaughterhouse Restroom areas. New Baldwin Home is located within walking distance of the Pali Trail trailhead, and is proximate to the area where visitors wait to begin their tours. Visitors could be provided with orientation and interpretive information within proximity to the tour waiting area, including near the entrance to New Baldwin Home. New Baldwin Home possesses historic interest for visitors as a group home that replaced Old Baldwin Home at Kalawao in the 1930s. Baldwin Home was one of the last facilities to be transferred to Kalaupapa from Kalawao. It also occupies the site of a former hospital. The history of the group home is of interest for the fact that it closed following the decline of entering patients in the late 1940s after the introduction of sulfone drugs to treat Hansen's disease. Also of interest is the rock crusher used to improve the roads at Kalaupapa in the 1950s that is stored at New Baldwin Home.
- Consider interpreting the grotto and statue and former buildings and structures at New Baldwin, as well as sporting use of the field to the north, and the role of the Slaughterhouse in community life. Also note that cattle were brought down the Pali Trail to the Settlements.
- Install safety fencing and provide signage notifying visitors of the danger associated with accessing the cliffs along the western shoreline.

Preserve and maintain the New Baldwin Home cluster, marked by dry stacked lava rock walls and gate posts, as well as the historic Slaughterhouse cluster, which are essential to conveying historic patterns of spatial organization.

Preserve and maintain contributing buildings and structures within the New Baldwin Home character area that include the Slaughterhouse, Slaughterhouse Restroom, Slaughterhouse Corral, New Baldwin Home Entrance Gate and Rock Walls, Grotto and Garden Structure, and Rock Crusher.

Repair the dry stacked lava rock wall and repair and repaint the gate piers at the entrance to New Baldwin Home. Maintain the wall free of vegetation. See *Settlement-wide Guidelines: Rock Walls* for guidance.

Provide consistent signage to guide wayfinding, site orientation, and interpretation. Cluster signs to minimize visual clutter.

Place safety fencing along steep sections of the shoreline and provide signage notifying visitors of the danger associated with accessing the cliffs along the western shoreline.

Co-locate visitor amenities and interpretive and orientation information within the Slaughterhouse complex. Consider interpreting the grotto and statue and former buildings and structures at New Baldwin, as well as sporting use of the field to the north, and the role of the Slaughterhouse in community life. Also note that cattle were brought down the Pali Trail to the Settlements.

Maintain views of the Pacific Ocean from the open space associated with New Baldwin Home by managing trees along the shoreline.

Identify a single vehicular route for future use that includes only the historic access roads. Improve the route to address rutted areas and locations with poor drainage. Consider adding gravel to improve the durability of the surface.

Revegetate the alternative circulation routes that have arisen over time through the open space northwest of New Baldwin Home, and establish a grass and forb field within the open space to enhance the appearance and prevent further erosion. Establish new fencing to exclude axis deer and feral hogs in the least intrusive manner possible.

Maintain the Trail Acces, New Baldwin Home, and Slaughterhouse Access Roads. Avoid adding new circulation features within New Baldwin Home except to address accessibility requirements.

Preserve and maintain existing cultural vegetation. Include specimens on the property in a Settlement-wide inventory and documentation project.

Address any accessibility requirements related to future building and structure improvements following the guidance afforded in the *Settlement-wide Design Guidelines: Accessibility* section.

Establish an appropriate location for future tour bus parking that is screened from view within visitor use areas. Consider a site that can be screened using existing woody vegetation north of New Baldwin for this purpose. Ensure that positive drainage can be effected, and that the proposed parking area can be used and accessed without causing erosion or damage to the environment.

Consider alternatives for interpreting former buildings and landscape feautres part of New Baldwin Home historically.

Consider expanding the open area near the recycling center to include a burn pile location. Clear invasives to establish a site sufficient in size to accommodate a burn pile.

Remove vegetation growing on and within the Rock Crusher. If the Rock Crusher can be stabilized and made safe, interpret it for visitors. Add signage that asks visitors to refrain from accessing the Rock Crusher.

Establish shrub plantings between the Rock Crusher and the nearby electrical line to discourage visitor access. Include signs to discourage visitor access.



**New Baldwin Home Character Area
Treatment Recommendations**

Figure 356

‘Īliopi‘i Beach Houses

Refer to Figure 357, Treatment plan for the ‘Īliopi‘i Beach Houses Character Area.

Treatment of the ‘Īliopi‘i Beach Houses is at the discretion of the patients who own them. Any treatment undertaken within the ‘Īliopi‘i Beach Houses character area should be conducted based on community consultation. The NPS should support preservation needs by guiding repair of the structures as needed through the provision of assistance to property owners, helping to manage cultural vegetation and remove volunteer vegetation should it be of interest to the owners as a way to reestablish historic views and protect building, outbuildings, fencelines, and plantings of cultural importance. Ironwood pine trees are currently colonizing the shoreline. Although plantings of ironwood pine may have occurred during the period of significance, the extent of the stand of ironwood trees has expanded since the end of the period of significance. Control of this and other invasive species is recommended.

Future sea level rise, increases in the severity and frequency of storms, and potential tsunamis needs to be taken into consideration in planning for the protection of cultural landscape values associated with the ‘Īliopi‘i Beach Houses character area. Potential actions might include careful documentation ahead of the threat of loss, and enhancing the resilience of shoreline vegetation communities and of reef features that might protect the shoreline. Further research is warranted to determine what plant community along the shoreline might offer the best resiliency to anticipated changes and serve to protect against erosion and other deleterious impacts to the shoreline and cultural features located just beyond.

The ‘Īliopi‘i Beach Houses provide insight into a very special aspect of community life, which was the development of spaces where administrative oversight was limited. The Lions Pavilion, which falls within the Beach Houses character area, is an important place for group activities used by park staff, partners, and visitors. It is recommended that the beach houses be interpreted from the pavilion.

Treatment Recommendations

Natural Systems and Features

- Preserve all natural features and systems associated with the ‘Īliopi‘i Beach Houses character area, which include the extant landform and topography, shoreline, beach, and ocean interface, and drainages.
- Avoid activities in the character area that will disturb soil and lead to erosion, or alter topography.
- Conduct further study to determine the plant community best suited to protecting the shoreline from erosion and the current and future likely increased impacts of storms, waves, and sea level rise to support protection of the area in the event consultation with the community suggests future rehabilitation of shoreline vegetation.

Spatial Organization

- Support community preservation and maintenance of the linear cluster of historic buildings, the access road, and associated individual property delineations including fencelines and plantings that define the ‘Īliopi‘i Beach Houses character area, which are essential to conveying historic patterns of spatial organization.

- Support community preservation and maintenance of surviving historic buildings to prevent further diminishment of patterns of spatial organization.
- Conduct further study to determine options for enhancing reef conditions at Īliopi‘i to protect against future effects of increased storms and sea level rise should the need arise.

Views and Vistas

- Work with the community to determine the need to thin and clear volunteer vegetation that obscures views from the beach houses. See *Settlement-wide Design Guidelines: Tree Removal and Clearing and Control of Invasives* for guidance.

Circulation

- Support community preservation and maintenance of existing circulation patterns that reflect the historic character during the period of significance such as individual property access roads and walks.
- Preserve and maintain in good condition the historic public roads within the character area that include Kamehameha Street/Airport Road and Beach Road.

Cultural Vegetation

- Support community preservation and maintenance of examples of cultural vegetation located in association with the beach houses.
- Work with the community to determine whether to manage ironwood pine trees along the shoreline to prevent further expansion. Evaluate the role of ironwood trees in providing monk seal habitat prior to developing a plan for control.
- Support community preservation and maintenance of the use of grasses and forbs that can be maintained through mowing around the beach houses.
- Support community preservation and maintenance of cultural plantings around the beach houses, including managing foundation plantings so that they do not become overgrown, obscure views of the buildings, and introduce moisture and other problems that will lead to deterioration of the buildings.
- Conduct research to determine the resilience of ironwood pine trees and other coastal vegetation to saltwater inundation and their effectiveness for shoreline stabilization.

Buildings and Structures

- Support community preservation and maintenance of contributing buildings and structures within the Beach Houses character area that include the Richard Marks, Bernard Punikai, Elizabeth Bell, Elaine Remigio, and Nicholas Ramos Beach Houses, as well as the Lions Pavilion and Restroom buildings.
- Support community preservation and maintenance of dry stacked stone walls. See *Settlement-wide Design Guidelines: Rock Walls*.

Small-scale Features

- Consider the potential to provide interpretive information about the beach houses at the Lions Pavilion.
- Provide signage that indicates ‘private’ where appropriate.

Work with owners to preserve and maintain the linear cluster of historic buildings, the access road, and associated individual property delineations including fencelines and plantings that define the ʻĪliopiʻi Beach Houses character area, which are essential to conveying historic patterns of spatial organization.

Work with owners to preserve and maintain surviving historic buildings to prevent further diminishment of patterns of spatial organization.

Work with owners to preserve and maintain existing ornamental plantings. Include specimens on the property in a Settlement-wide inventory and documentation project.

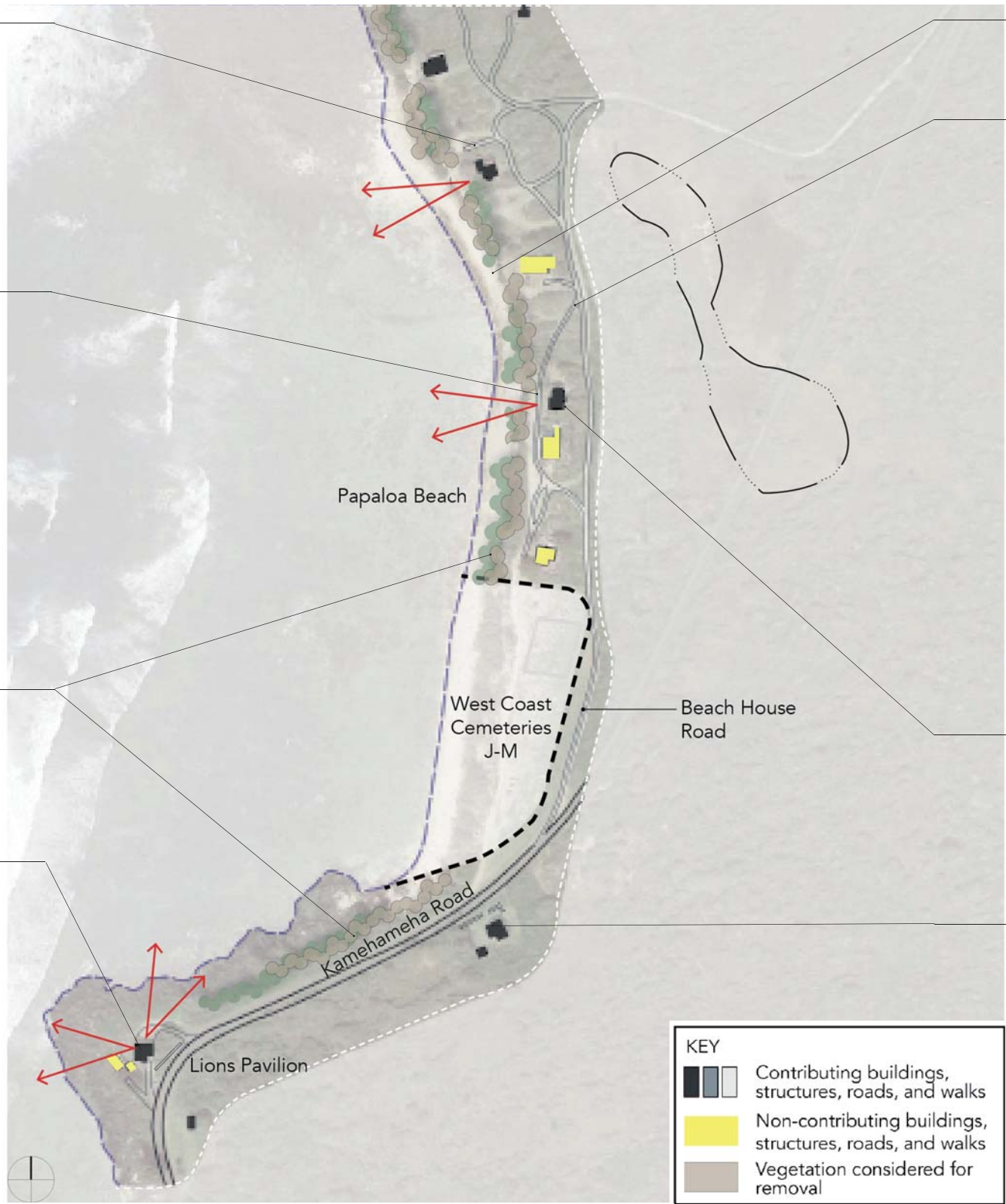
Work with owners to maintain foundation plantings around buildings to ensure that they do not become overgrown, obscure views of the buildings, and introduce moisture and other problems that will lead to deterioration of the buildings.

Work with owners to preserve and maintain the areas of mown grass around buildings at a maximum height of 12 inches and in adjacent field areas at a maximum height of 18 inches.

Work with owners to manage ironwood trees along the shoreline to prevent further expansion. Consider thinning and clearing trees not present during the period of significance and not important to monk seal habitat in order to restore historic views of the beach and ocean. See *Settlement-wide Design Guidelines: Vegetation*.

Consider the potential to provide interpretive information about the beach houses at the Lions Pavilion.

Provide limited signage that indicates ‘private’ where appropriate.



Work with owners to thin and clear volunteer vegetation that obscures views of the buildings and the Pacific Ocean.

Preserve and maintain existing circulation patterns that reflect the historic character during the period of significance such as Kamehameha Street and Beach Road.

Work with owners to preserve and maintain property access roads, and walks.

Maintain existing walks in good condition. Repair concrete sidewalks in fair to poor condition. See *Settlement-wide Design Guidelines: Circulation* for guidance. Ensure that walks are level and do not include cracks or heaved section that constitute a trip hazard. Keep path surface and edges clear of vegetation. Remove volunteer vegetation growing in cracks or joints in existing walks, and prune tree roots that threaten to uproot and damage sidewalks.

Work with owners to address accessibility needs. Follow the guidance afforded in the *Settlement-wide Design Guidelines: Accessibility* section.

Work with owners to preserve and maintain contributing buildings and structures within the Beach Houses character area that include the Richard Marks, Bernard Punikaia’s, Elizabeth Bell, Elaine Remigio, and Nicholas Ramos Beach Houses, as well as the Lion Pavilion and Restroom buildings.

Work with owners to preserve and maintain dry stacked lava rock walls. Remove vegetation growing within and on the walls. See *Settlement-wide Design Guidelines: Rock Walls*.



Images of areas to be managed by controlling woody vegetation for views and resource protection.

ʻĪliopiʻi Beach Houses Character Area
Treatment Recommendations

Figure 357

West Coast Cemeteries

Refer to Figure 358, Treatment plan for the West Coast Cemeteries Character Area.

Recommendations related to the West Coast Cemeteries character area address stabilization, preservation, and rehabilitation treatments associated with condition issues of concern, protection of historic resources, and accommodation of visitor access and interpretation. Ongoing care of the cemeteries with the utmost respect is the goal of future treatment. Specific recommendations related to maintaining the highest standards of stewardship are included in Appendix B: *Cemetery Management Plan* of this report. The Cemetery Management Plan addresses the particular needs of cemetery resource—grave markers, walls, plantings, turf grass, ephemera, accessibility, grave location, and ongoing use of the cemetery for burials—in addition to management of issues surrounding shoreline erosion and the potential for sea level rise and tsunamis to impact the historic landscape. The recommendations provided below suggest broad treatment principles that are considered in more detail in Appendix B.

Treatment Recommendations

Natural Systems and Features

- Preserve all natural features and systems associated with the West Coast Cemeteries character area, which include the extant landform and topography, shoreline, beach, and ocean interface, and drainages.
- Avoid activities in the character area that will disturb soil and lead to erosion, or alter topography, other than those associated with future burials.
- Conduct further study to determine the plant community best suited to protecting the shoreline from erosion and the current and future likely increased impacts of storms, waves, and sea level rise to support protection of the area.
- Conduct further research into strategies that might enhance reef conditions at Papaloa should their condition deteriorate as one of the means of protection against future effects of increased storms and sea level rise.

Spatial Organization

- Preserve and maintain the linear system of West Coast Cemeteries that align Kamehameha Street and Beach Road.
- Preserve and maintain the linear cluster of residences that edge Kamehameha Street to the east.
- Preserve and maintain the open space associated with Barrel Field, a historic open space that served as the first air landing strip for the Settlements, as well as a site for baseball games. Limit the use of the margins of the field for storage unless screening is improved.

Views and Vistas

- Preserve and maintain the expansive views of the linear cemetery system from Kamehameha Street and Beach Road.

- Preserve and maintain the expansive views across Barrel Field toward the pali, Pu‘u ‘Uao and the concrete cross sited along the western rim of Kauhakō Crater.
- Consider enhancing views of the Pacific Ocean from the cemeteries by thinning and clearing the extent of ironwood pine groves along the shoreline, which have expanded since the period of significance. See *Settlement-wide Design Guidelines: Tree Removal and Clearing*.

Circulation

- Preserve and maintain the existing circulation patterns that reflect the historic character during the period of significance such as Kamehameha Street and the individual access roads and walks associated with residences. Maintain the road surfaces in good condition.

Vegetation

- Preserve and maintain examples of cultural vegetation located within the character area, including plantings of ironwood pine trees along the shoreline, the cluster of coconut palms, date palms, and haole koa located within Cemetery G, coconut palms located along the eastern side of Kamehameha Street in front of several of the residences, and examples of cultural vegetation associated with the individual residences.
- Manage ironwood pine trees along the shoreline to prevent further expansion. See *Settlement-wide Design: Vegetation*.
- Maintain foundation plantings around the residences to ensure that they do not become overgrown, obscure views of the buildings, and introduce moisture and other problems that will lead to deterioration of the buildings. See *Settlement-wide Design Guidelines: Foundation Plantings*.
- Preserve and maintain the use of turf grass within the character area. Maintain the turf grass east of the residences and within the cemeteries at a maximum height of 12 inches and in adjacent field areas at a maximum height of 18 inches.

Buildings and Structures

- Preserve and maintain, or assist owners to preserve and maintain, contributing buildings and structures within the West Coast Cemeteries character area that include Olivia’s Beach House and the Miriam Mina Residence, Brown Residence, Cambra Residence, Norbert Palea Residence, Kamehameha Residences 7 and 9, Kamehameha Street Building 65, Residence 22, a Storage Shed, and a Chicken Coop.
- Preserve and maintain dry stacked lava rock walls. Remove vegetation growing within and on the walls. See *Settlement-wide Design Guidelines: Rock Walls*.

Small-scale Features

- Preserve, maintain, and repair grave markers and piers within the West Coast Cemeteries. See Appendix B: *Cemetery Management Plan* for guidance.
- Continue to mark the individual cemeteries with signs. See *Settlement-wide Guidelines: Signage* for guidance.

Manage ironwood trees along the shoreline to prevent further expansion. Thin and clear trees to match historic conditions during the period of significance to allow for periodic views of the Pacific Ocean where not found to support monk seal habitat. See *Settlement-wide Design Guidelines: Vegetation*.

Preserve, maintain, and repair grave markers and other burial features within the West Coast Cemeteries. See Appendix B: *Cemetery Management Plan* for additional guidance regarding the treatment of the West Coast Cemeteries.

Preserve and maintain the linear arrangement of cemeteries along the western shoreline, the row of residences to the east of Kamehameha Street, the grave marker arrangement specific to each cemetery, existing rock walls, gates, and burial enclosures, and groves of trees located to either side of Kamehameha Street within the central portion of the southern group of cemeteries, which are essential to conveying historic patterns of spatial organization.

Preserve and maintain the use of turf grass within the character area. Maintain the turf grass east of the residences and within the cemeteries at a maximum height of 12 inches and in adjacent field areas to a maximum height of 18 inches.

Continue to mark the individual cemeteries with signs. See *Settlement-wide Guidelines: Signage* for guidance.



Preserve and maintain the existing circulation patterns that reflect the historic character during the period of significance such as Kamehameha Street and the individual access roads and walks associated with residences. Maintain the road surfaces in good condition.

Preserve and maintain existing ornamental plantings. Include specimens on the property in a Settlement-wide inventory and documentation project.

Maintain, or work with owners and residents to maintain, foundation plantings around buildings to ensure that they do not become overgrown, obscure views of the buildings, and introduce moisture and other problems that will lead to deterioration of the buildings. See *Settlement-wide Design Guidelines: Vegetation*.

Preserve and maintain, or assist owners to preserve and maintain, contributing buildings and structures within the West Coast Cemeteries character area that include Olivia’s Beach House and the Miriam Mina Residence, Brown Residence, Cambra Residence, Norbert Palea Residence, Kamehameha Residences 7 and 9, Kamehameha Street Building 65, Residence 22, a Storage Shed, and a Chicken Coop.

Preserve and maintain dry stacked lava rock walls. Remove vegetation growing within and on the walls. See *Settlement-wide Design Guidelines: Rock Walls*.



KEY	
	Contributing buildings, structures, roads, and walks
	Non-contributing buildings, structures, roads, and walks
	Vegetation considered for removal

West Coast Cemeteries Character Area
Treatment Recommendations

Images of resources to be preserved and maintained.

Figure 358

Molokai Light Station

Refer to Figure 359, Treatment plan for the Molokai Light Station Character Area.

Preservation is the primary approach recommended for the Molokai Light Station character area. All surviving historic features provide important connections to the original design and layout of the property. Specific cultural plantings merit special care, along with repair of historic features. Examples include care of the ironwood pine trees that edge the road corridor, which require specific care and management to maintain a proper appearance while the potential for these invasive species to spread is minimized.

Rehabilitation recommendations relate to the potential for the NPS to provide tours of the property in the future, and the need to address how to accommodate accessibility requirements associated with visitor access and interpretation. The Molokai Light Station character area is not currently accessible to visitors. The park has expressed an interest in providing future access to the complex for visitors, or interpreting the light station from other areas where it can be viewed, such as the airport or along Kamehameha Street. These options are addressed in the treatment recommendations.

Treatment Recommendations

Natural Systems and Features

- Preserve all natural features and systems associated with the Molokai Light Station character area, which include the extant landform and topography.
- Avoid activities in the character area that will disturb soil and lead to erosion or alter topography.

Spatial Organization

- Preserve and maintain the two clusters of historic buildings, three access roads, rock walls and remnant fence lines, allées and windbreaks of ironwood pine trees, evidence of former residential gardens, and foundation plantings associated with the residential precinct dwellings that define and characterize the Molokai Light Station and are essential to conveying historic patterns of spatial organization.

Views and Vistas

- Protect views from the lighthouse toward the Settlements, pali, and Pacific Ocean by managing trees that would obscure views, and by avoiding the construction of features that might negatively impact the views.

Circulation

- Preserve and maintain historic circulation features including the three access roads and the concrete walk that connects the residential and lighthouse precincts.

Cultural Vegetation

- Preserve and maintain existing cultural vegetation composed of allées of ironwood pine trees that follow the access road to the residential precinct, the windbreaks along the wall margins, and specimen trees and foundation plantings present within the residential precinct. Conduct proper care of the ironwood pine trees by pruning. Enhance the foundation plantings, residential garden, and other yard plantings with

species that existed during the period of significance. Control the spread of palm trees, which were planted historically, but have spread. Regularly monitor ironwood pine and palm trees to determine if they are spreading beyond the area where originally planted. Remove volunteers discovered through monitoring. See *Settlement-wide Design Guidelines: Vegetation*.

- Re-establish the residential garden at the residential precinct as part of the interpretive plan for the character area.

Buildings and Structures

- Preserve and maintain contributing buildings and structures within the Molokai Light Station character area.
- Address accessibility needs associated with interpreted buildings should the light station be opened to the public. Follow the guidance afforded in the *Settlement-Wide Design Guidelines: Accessibility* section.
- Stabilize and repair dry stacked lava rock walls. Remove vegetation growing within and on the walls. See *Settlement-wide Design Guidelines: Rock Walls*.

Small-scale Features

- Preserve and maintain all contributing small-scale features.
- Consider options for interpreting the light station and the heiau, either on site or from the adjacent road or airport. See *Settlement-wide Design Guidelines: Signage*.

Preserve and maintain existing cultural vegetation composed of allées of ironwood pine trees that follow the access road to the residential precinct. Conduct proper care of the ironwood trees by pruning. Monitor ironwood pine and palm trees to determine whether they are expanding beyond the original plantings. Remove volunteer trees. See *Settlement-wide Design Guidelines: Vegetation*.

Include cultural vegetation in a Settlement-wide inventory and documentation project.

Enhance the foundation plantings, residential garden, and other yard plantings with species that existed during the period of significance. Re-establish the residential garden at the residential precinct as part of the interpretive plan for the character area

Stabilize and repair dry stacked lava rock walls. Remove vegetation growing within and on the walls. See *Settlement-wide Design Guidelines: Rock Walls* for guidance.

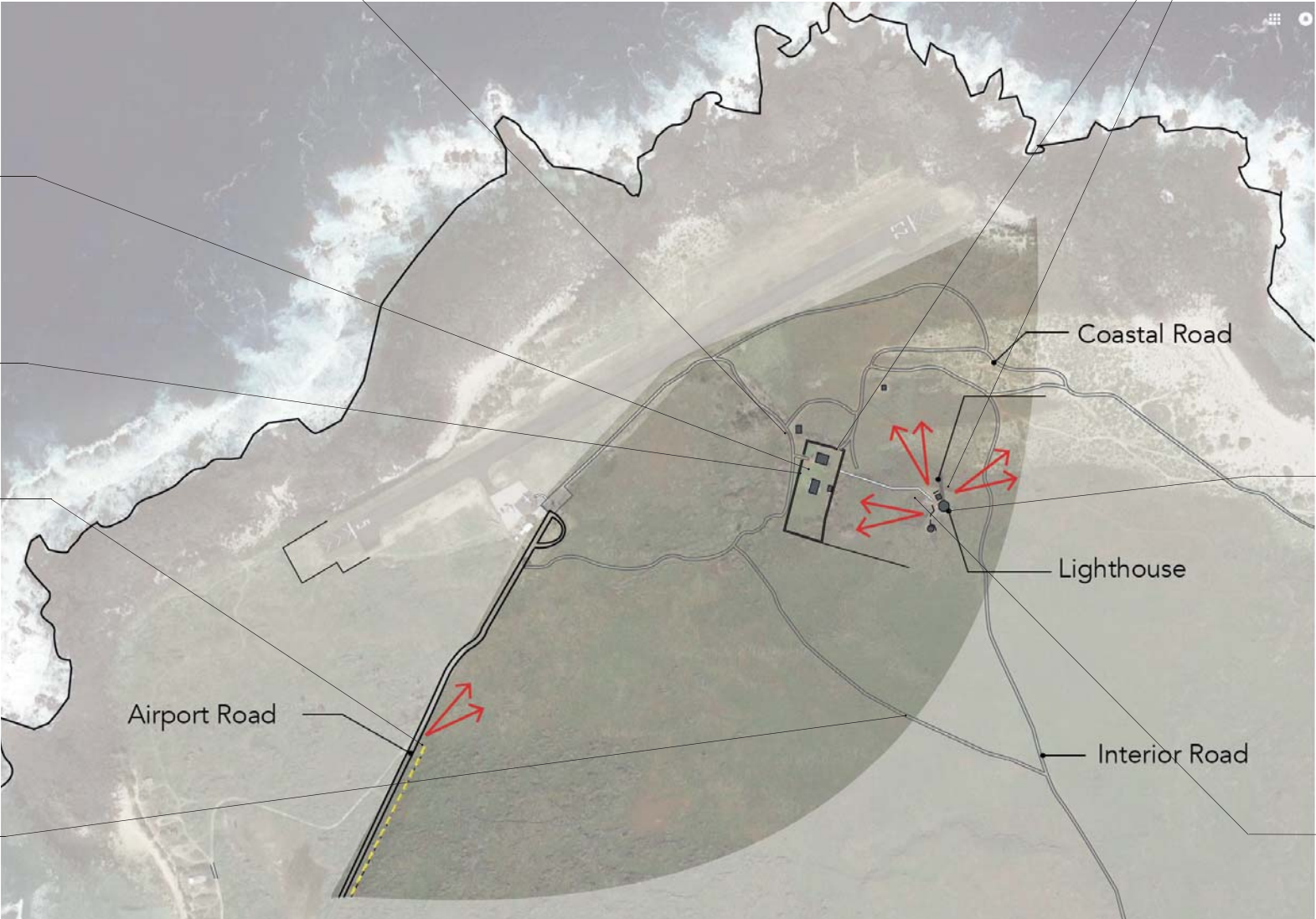
Protect views to the lighthouse from Airport Road and from the lighthouse toward the Settlements, the pali, and the Pacific Ocean by restricting the growth of trees that would obscure views, and by avoiding the construction of features that might negatively impact the views.

Consider options for interpreting the light station and associated heiau, either on site or from the adjacent road or airport. See *Settlement-wide Design Guidelines: Signage*.

Preserve and maintain historic circulation features that include the unimproved access roads and narrow concrete walk. Maintain the road surfaces in good condition.

Avoid adding new circulation systems within the Moloka'i Light Station character area other than those intended to accommodate accessibility.

Preserve and maintain the two clusters of historic buildings, the access roads, tree plantings, and fencelines that define and characterize the Moloka'i Light Station and are essential to conveying historic patterns of spatial organization. With the exception of deer fencing along the eastern margin of Airport Road, there are no non-contributing features located within the Moloka'i Light Station character area.






Preserve and maintain contributing buildings and structures within the Moloka'i Light Station character area that include the lighthouse, two keeper's residences, wash house, garage, generator shed, storage vault, and water tank.

Address accessibility requirements related to future building and structure improvements following the guidance afforded in the *Settlement-wide Design Guidelines: Accessibility* section.

Maintain existing walk in good condition. Repair concrete sidewalks in fair to poor condition. See *Settlement-wide Design Guidelines: Circulation for guidance*. Keep path surface and edges clear of vegetation. Remove volunteer vegetation growing in cracks or joints in existing walks, and prune tree roots that threaten to uproot and damage walk.



KEY	
	Contributing buildings, structures, roads, and walks
	Non-contributing buildings, structures, roads, and walks
	Vegetation considered for removal

Images of areas to be managed by controlling woody vegetation for views and resource protection.

Moloka'i Light Station Character Area Treatment Recommendations

Figure 359

Settlement-wide Design Guidelines

Design guidelines are protocols and methods for implementing recommendations intended to guide good practice in design; for historic sites, design guidelines are also intended to respect the character and unique identity of place so that historic values and resources remain honored even as change to accommodate contemporary needs is facilitated. Design guidelines are intended to provide a clear framework for designers and site managers regarding how to adopt and achieve specific design principles. Design guidelines support implementation of the broad principles outlined in a vision statement without being entirely prescriptive, allowing designers and site managers leeway in addressing individual circumstances. Design guidelines address the “how” of cultural landscape treatment, including the introduction of new features as well as the care of existing historic features.

For the Kalaupapa and Kalawao Settlements cultural landscape, design guidelines provide basic guidance for new development and for managing existing resources within the physical and historical context articulated in the Part 1 CLR. They are directly tied to the specific action items indicated in the treatment recommendations sections of the CLR. The guidelines factor in the degree to which change and the introduction of new uses and materials affects the physical character and integrity of the cultural landscape. They also focus on retaining historic character to the extent possible. The guidelines are also intended to meet sustainability goals in terms of materials and maintenance practices by seeking to minimize impacts to the environment, recycle available materials, and incorporate life-cycle cost analysis in the choice of materials. The guidelines are also intended to help ensure that new features blend and do not detract from the integrity of the Settlement landscape by emphasizing non-intrusive design that is sensitive to the existing historic character, simplicity and restraint in design, and local construction traditions, materials, and practices. Finally, the guidelines also address the need to enhance site access for as wide an audience as possible by considering ways in which to implement universal design principles and accessibility standards within the context of historic structures.

Several design principles are essential to the guidelines that follow:

- Preserve and enhance historic character
- Preserve the sense of place
- Screen incompatible uses and appurtenances
- Maintain consistent design character
- Minimize obstruction of views
- Facilitate pedestrian access
- Maintain human scale

At the settlement scale, the guidelines address

- Spatial Organization, Views, and Land Use
- Circulation
- Accessibility

- Vegetation
- Buildings and Structures
- Small-scale Features
- Shoreline Management

Spatial Organization, Views, and Land Use Guidelines

The historic landscape of the Kalaupapa and Kalawao Settlements is grounded in patterns of spatial organization that reflect specific aspects of development over time. These patterns respond to environmental conditions, such as the half-oval-shaped landform contained on three sides by the Pacific Ocean, and on the fourth by the steep cliffs of the pali, the different climatic conditions of the east and west shorelines, and the adaptation of existing cultural settlement activities to the patient communities at Kalawao and Kalaupapa. At a broad scale, spatial organization reflects orderly village development comprised of built structures aligned along road networks that follows a linear pattern at Kalawao and an irregular grid pattern at Kalaupapa. Within the broader landscape of the Settlements are examples of orthogonal patterning representative of institutional development, such as the group homes, and zoning of uses. At a more detailed scale, many of the individual properties exhibit unique, individual expressions of spatial organization and vernacular irregularities that are essential features of the living community. These individual expressions are important to the rich visual character and sense of discovery possible in visiting the many areas of the Settlements and help to protect against the potential sterility that result from removal of the evidence of daily life.

Another essential quality of the Settlement landscape is maintaining a balance between ensuring visual access to the built environment as well as the setting, while also allowing for the benefits and cultural value of plantings and individual expression in garden areas. Managing and maintaining the prolific growth of vegetation is, and will remain, one of the greatest challenges to protecting the cultural landscape of the Settlements. In the short term, removal of stands of invasives that occupy former open space, overgrown hedges and windbreaks, and overmature foundation plantings to reestablish long views as well as views of individual buildings will help protect the integrity of the cultural landscape. The design guidelines presented below to address Spatial Organization, Views, and Land Use are intended to guide protection and reestablishment of some important former open spaces and views.

Guidelines

- Perpetuate historic land uses to the extent possible by identifying appropriate compatible future uses that require the least alteration to historic and ongoing active use.
- Perpetuate the existing streetscapes of Kalaupapa and Kalawao Settlements, comprised of Damien Road at Kalawao, and the irregular grid of streets at Kalaupapa by respecting the existing set-backs of each built cluster and the way in which buildings and walks address adjacent roads. Consider that the front yards of many residences and institutional building are often characterized by a more open appearance, while rear yards are often enclosed by plantings and outbuildings, and screened from view from the road to afford a sense of privacy and individual expression.
- Perpetuate the use of a variety of property boundary marking elements, including rock walls, fences, and plantings, that help to articulate the set-backs of each cluster and the spatial organization of each road corridor of space by maintaining the structures and vegetation.

- Perpetuate the open character of road corridors edged to either side by bands of mown turf with limited examples of shade trees and flowering shrubs.
- Preserve and restore historic views to significant spaces, environmental elements, and architectural features by ensuring that vegetation does not obscure the views.
- Preserve the character of the streetscapes and individual properties by locating new plant material so as to not obstruct important views or vistas.
- Encourage the use of low foundation plantings around individual buildings that allow for views of the architecture. Maintain foundation plantings to remain in scale with adjacent buildings such that plantings do not obscure views of the building, or trap and retain moisture that will lead to deterioration of the building. Replace overmature plantings with new foundation plantings preferably selected for their lower stature, that do not overwhelm the building, and can be maintained through pruning to correct shape and height.
- Selectively thin and prune overgrown vegetation around buildings and structures such as walls to ensure the features remain visible.
- Selectively thin and prune vegetation along the Pacific shorelines to open up views that may serve as “windows” rather than expansive clearings.
- Selectively clear vegetation within areas that were formerly open and are now colonized by woody vegetation by marking the extent of the area to be cleared following the guidance afforded in the CLR treatment plan and comparison of the area with historic aerial and ground photographs (Figure 360 through Figure 363). Use mechanical equipment to remove woody trees and shrubs within formerly open areas that are colonized by invasive species. Ensure that clearing work is overseen by an archeologist. Cut stumps flush with the ground using the least intrusive method possible. Seed the cleared area to establish grass fields that can be maintained.
- Selectively clear, thin, and prune trees and other woody vegetation along the western shoreline to reestablish “windows” that afford views of the Pacific Ocean, including west of the West Coast Cemeteries (Figure 364) and the Beach Houses where views were formerly afforded and part of the character of the landscape. Consider the extent of the tree cover at the end of the period of significance, and use that information to guide the degree of thinning or clearing that is appropriate. Adopt an adaptive management strategy for clearing. Begin by removing trees and shrubs that are clearly volunteers from around trees and shrubs that are part of an intentional planting. Cut the woody stems of the volunteer trees and shrubs flush with the ground. Evaluate the result to determine whether volunteer plant removal allows for the extent of the view that is desired. If views are not sufficiently restored, carefully identify a limited number of additional trees and shrubs that, with removal, will allow for the desired view based on review of historic aerial or ground photographs (Figure 365). As vegetation is thinned, low growing coastal strand should be planted with native species in order to protect these coastal areas from erosion.



Figure 360. Diagram indicating the relationship between key views and proposed areas recommended for selective clearing at Kalaupapa. (Source: LSHLA)



Figure 361. Diagram indicating the key views (red arrows) at Moloka'i Light Station. (Source: LSHLA)



Figure 362. Diagram indicating the relationship between key views (red arrows) and proposed areas recommended for selective clearing (yellow hatching) at Damien Road corridor and Kauhakō Crater. (Source: LSHLA)



Figure 363. Diagram indicating the relationship between key views (red arrows) and proposed areas recommended for selective clearing (yellow hatching) at Kalawao. (Source: LSHLA)



Figure 364. Diagram indicating the relationship between key views (red arrows) and areas recommended for selective thinning and clearing along the western shoreline (yellow hatching). (Source: LSHLA)

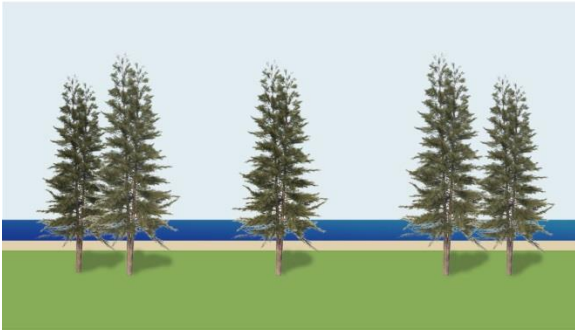
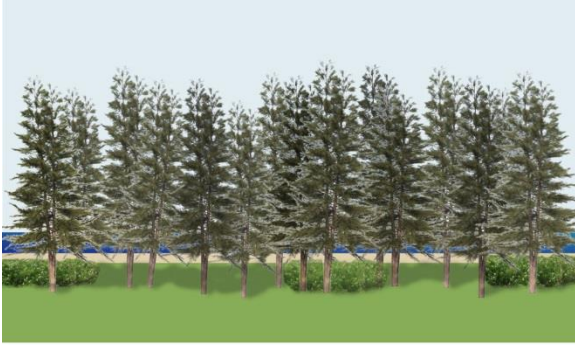


Figure 365. Diagram indicating the adaptive strategy for clearing windows to reestablish views of the Pacific Ocean from the West Coast Cemeteries, illustrating existing conditions (top), initial removal (middle), and potential expanded removal (bottom). (Source: LSHLA)

Circulation

Historic circulation at Kalaupapa and Kalawao Settlements is comprised of four key components that collectively comprise a system of movement through the landscape and define the framework of the historic design. These four components include points of entry; unpaved roads providing access across the peninsula; a simple hierarchy of primary and secondary roads within the Settlement; and a more articulated and distinct internal system of roads and pedestrian walks designed for specific group homes and neighborhoods. Each of these components are addressed below following a set of overarching guidelines related to circulation.

Guidelines

- Apply new paving in a manner that matches the character of the existing and conforms to accessibility standards.
- Avoid adding new roads.
- If new roads are required for access or improved accessibility design new roads to be visually compatible with the character of historic roads including the width, surface material, and shoulder treatment.
- New routes should be determined in a manner that is consistent with the goals to protect natural, scenic and aesthetic values, ensure safety, and protect of park resources.
- Bicycles and solar or electric vehicles should be considered as a sustainable alternative to the use of gas vehicles but should remain confined to the historic road grid. Consider this recommendation within the context of the GMP and in consultation with the community and stakeholders.

Points of Entry

Each of the four historic entrance corridors at the edges of the Kalaupapa Settlement has a distinct landscape character.

On the east side, the Settlement is approached from Damien Road, the primary road linking Kalawao and Kalaupapa, Damien Road is between 12 and 15 feet wide, and surfaced with gravel. It remains the primary road linking the settlements and the only road to, and through Kalawao. (See the Damien Road Character Area in chapter four for more detailed description of Damien Road) As Damien Road enters Kalaupapa Settlement via a threshold composed of a cattle guard connected to fencing designed to exclude deer, it transitions from a road largely enclosed on both sides by encroaching vegetation to the more open character associated with Kalaupapa described as an important pattern of spatial organization above. At this point, Damien Road is referred to as Beretania Street, a primary east-west road through the settlement. The margins of Beretania Street between the cattle guard and the first built cluster encountered at Staff Row have become overgrown and no longer convey the open character that was present historically.

On the south side, access to the settlement is from the Pali Trail, which has been used since the 1890s and is one of two historic trails to topside Molokai. The Pali Trail ascends the steep slope of the Pali in twenty-six switchbacks before reaching the base of the cliff. Over many years, trail has been widened to accommodate livestock and mules, and areas of the trail have been realigned and reinforced with concrete block, metal rebar, and stacked rock walls to stabilize the route and improve safety. From the base of the Pali Trail, an unpaved road transitions to Puahi Street, which crosses Waihanau Stream over a single lane bridge before entering the settlement near the Quonset hut. From the bridge into the settlement, Puahi Street becomes an asphalt-paved road, 15 feet wide, and remains a primary north-south road in the settlement. The character of

the landscape at this entry point has changed over the years due to land use changes, the introduction of incompatible repairs, and the loss of historic resources. The landscape between the New Baldwin Home site and the Pacific Ocean that contains the slaughterhouse and tour concessionaire operational facilities is crisscrossed by dirt roads. Vegetation is scrubby. These conditions present a poor visual introduction to Kalaupapa Settlement.

Access to the settlement from the north is along Kamehameha Street. Since 1933, it has been the primary vehicular route to the settlement from the airport. The road is between 15 and 20 feet wide and paved with asphalt. Approaching the settlement the road provides open views to the North Shore Cliffs (Pali) and larger peninsula landscape before passing the beach houses, Lions Club Pavilion, the West Coast Cemeteries at Papaloa, and resident cottages. As the road approaches the Administrative Area of the Settlement near the Mormon Church and the principal intersection with Beretania Road, it passes through an area that is used for maintenance. A large number of parked cars and construction vehicles and views of work yards, service roads, and overgrown properties diminishes the experience of arriving in Kalaupapa.

A fourth entry point is the wharf and dock located along the Pacific shoreline within the Administrative Area. Although the wharf is little used today for arriving visitors, it remains a powerful feature of the cultural landscape recalling the history of visitors and goods arriving from the outside world, and of use of the wharf for swimming events.

Guidelines

- Perpetuate the four historic points of entry by maintaining the trails and roads, and ensuring ongoing preservation of the wharf and dock.
- Consider the importance of the experience of arrival at Kalaupapa in managing the points of entry for visual quality. Address areas where visual quality is diminished by repairing eroded soils and road corridors, selectively thinning and clearing vegetation, replacing scrubby vegetation with well-maintained turf grass, and removing stores vehicles and other maintenance equipment where it can be screened from view. Historic integrity should be prioritized over visual quality.

Damien Road

Damien Road is the primary east west road linking Kalawao and Kalaupapa Settlement, and the only road through Kalawao. Within Kalawao, Damien Road is a narrow dirt and gravel- surfaced road, rural in character. Segments of the road are lined with stone walls that are considered integral to the road character. The road today remains a fundamental structuring element of the Kalawao landscape. (See the Damien Road Character Area in chapter four for more detailed description of Damien Road). Vehicular parking in Kalawao occurs on the shoulders and margins of Damien Road, especially near the churches. The only location for designated vehicular parking is at Judd Park.

Damien Road through Kalawao is in poor to fair condition. The road bed in some areas—such as the segment between the site of the Old Baldwin Home for Boys and St. Philomena Church—is significantly worn and degraded to the degree that the road has developed large areas of uneven compacted soils, low areas and depressions, pot holes, and notable drainage issues. Drainage issues are, in part, related the poor condition of the road, but also to surface runoff from areas adjacent to the road exacerbated by informal pull-offs for vehicular parking, including tour buses. Similar road conditions are evident in segments between the cemeteries and Judd Park.

Guidelines

- Repair the eroded and degraded sections of Damien Road by filling depressions, low areas, and pot holes with a soil and gravel mixture and grading to establish a smooth wearing surface. Ensure that the road is either crowned to swales on either side or pitched toward a lower side where the water can be conveyed to a swale or open ground. Grading anticipated to lead to any ground-disturbance will require archeological testing and monitoring.
- Consider establishing modest gravel pull-offs along the margins of Damien Road to accommodate tour bus stops. Establish the smallest-possible rounded bump out alongside the road to accommodate a single small bus (Figure 366). New construction will need to include accessible landings and routes from the bus stop area to visitor destinations.



PARKING PULL-OFFS AT DAMIEN ROAD

- Single allocated accessible van space added on north side of Damien Road
- Single allocated accessible van space added on south side of Damien Road
- Existing parking area improved to allow up to 5 vehicles with potential spillover parking options during larger events



Figure 366. Diagrams indicating the proposed locations (top) and form (bottom) of parking pull-offs recommended for Damien Road. (Source: LSHLA)

- Establish accessible parking along Damien Road between St. Philomena and Siloama Churches that meets ABAAS scoping requirements. Evaluate the most suitable grade and conditions for creating a level pull-off. Provide accessible surface conditions for the parking and an accessible aisle, and connect it to the churchyards and entrances into the buildings with an accessible route (Figure 367).

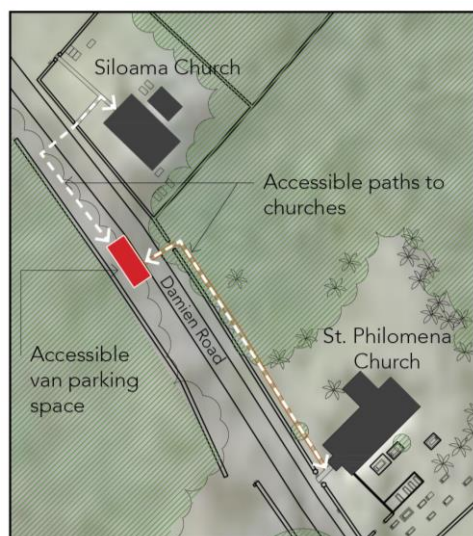


Figure 367. Diagram illustrating the establishment of an accessible parking space between Siloama and St. Philomena Churches and accessible routes to the buildings. (Source: LSHLA)

Primary Roads at Kalaupapa

In contrast to this very rural character, roads in Kalaupapa Settlement are arranged in an irregular grid pattern that provides access to all the developed areas in the settlement. Driveways, parking areas, and walks provide access to individual residences, public buildings, and administrative offices. Primary roads average 18 feet in width and are paved with asphalt. The roads are slightly crowned and drain to the mown grass shoulders abutting the edges of the asphalt paving. The roads do not have painted centerlines or shoulder striping, giving the roads an informal appearance and character. The roads remain in good condition.

Guidelines

- Stabilize the historic alignment of Damien Street east of Kapiolani Street on the southeast edge of the Kalaupapa Settlement.
- Maintain all primary roads in good condition, as well as the articulated design attributes and character of primary historic roads throughout Kalaupapa Settlement, including the alignment, width, paving material, and grass shoulders.
- Stabilize and repair damaged segments of primary roads as needed to ensure that they remain in good condition. Apply new paving in a manner that matches the character of the existing.
- Rehabilitate informal pullouts along historic roads used by the tour busses to mitigate damage to road shoulders. Designate and improve parking for tour buses in a limited number of locations, based on route information. Pull-offs should be modest in size and designed to accommodate one to two vehicles. Wherever possible parking pull-offs should be surfaced with grass pavers to perpetuate the character of road margins and to avoid adding additional impervious surface to the Settlements (Figure 368). Materials that offer a firm and stable substrate should be used at accessible landings and aisles. Alternative compatible surface treatments can also be considered.

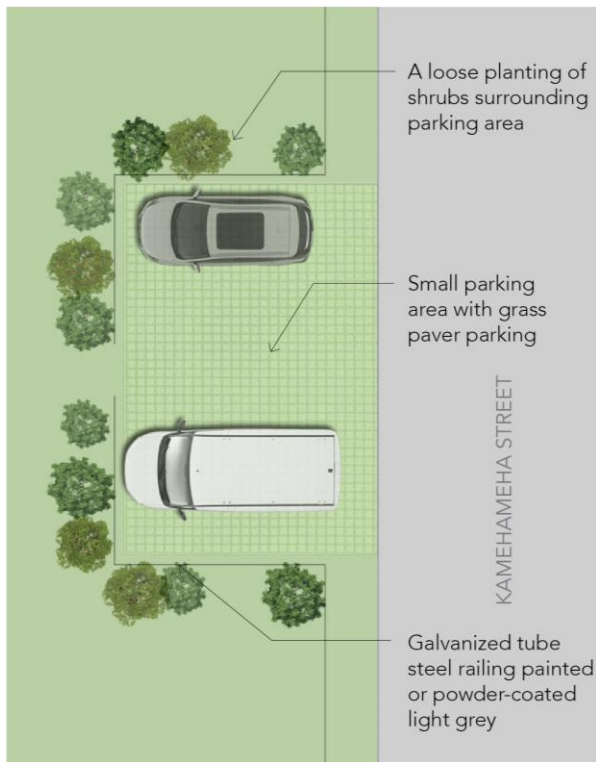


Figure 368. Diagram illustrating the use of grass pavers to establish modest parking pull-offs for tour bus stop locations. (Source: LSHLA)

Secondary Roads at Kalaupapa

Secondary roads in Kalaupapa Settlement are utilitarian in character. All are unpaved, providing local and limited access to garages, agricultural areas, and in some cases, survive as road remnants from realignments, or access routes to non-extant developments and land uses.

Guidelines

- Preserve existing secondary roads until future uses are determined.
- Improve rather than pave roads as possible using techniques that maintain the unpaved character but improve safety, accessibility, and sustainability. Strategies might include soil hardening or the limited use of aggregate rather than asphalt or comprehensive gravelling.

Internal Roads

Each of the three historic group home complexes in Kalaupapa has a distinct system of internal roads and walks. Historic circulation at the Bay View Home is largely intact and consists of a driveway from Damien Road that loops around the grounds connecting back to Puahi Street on the south side of the complex. The driveway is 18 feet wide, paved with asphalt and historically had raised concrete curbs, which are not evident today. Walks provide access to the buildings and structures in the complex. Historic walks were concrete and 2 feet wide providing access from Damien Road to the dormitories and continued to link other buildings. These walks have been considerably altered with the installation of concrete ramps between the main dining hall and the dormitories. Some of these ramps were placed over the original walks, and metal pipe railings added to help patients. Parking is somewhat random though Bay View, near the old dining hall (NPS Natural Resources office) and on the grassy area near building entrances.

Road and walks at the Bishop Home were functional in design and included a main drive into the complex from the corner of School and Puahi streets, that continues up the hill to the Sisters' cottage. This drive was perhaps more formal than other internal roads with groupings of ironwood pine trees lining the east side of the road providing shade and strong sense of arrival. The road is 18 feet wide and paved with asphalt. Concrete walks, 3 feet wide, and raised curbs line both sides of the road. The entry road continues forming an oval at the top of the hill. Additional walks provide access from the driveways to the individual buildings and structures, although they are not always accessible routes. Most vehicles park on the sides of the road at the top of the hill.

Roads in the McVeigh Home are designed as a simple grid with short concrete walks providing access from the edge of the road to individual cottages in a very tight configuration. The roads are between 12 and 18 feet wide and are paved with asphalt. All internal roads have concrete curbs. Concrete was also used for the walks around the community buildings. These walks are 3 feet wide. Parking is informal and occurs in driveways, in front of individual residences, and behind public buildings.

Treatment recommendation for these areas are addressed in the treatment section for individual character areas.

Guidelines

- Preserve internal roads as a key cultural landscape element of each group home cluster by continuing to use the roads and maintain them in good condition.
- Protect and maintain the articulated design attributes and character of internal roads throughout Kalaupapa Settlement, including the alignment, width, paving material, and grass shoulders.
- Stabilize and repair damaged segments of primary roads as needed to ensure that they remain in good condition. Apply new paving in a manner that matches the character of the existing.
- Repair eroded areas along the margins of internal roads resulting from ad hoc parking. Consider the use of grass pavers to establish designated parking spaces where repeated use of the road margins is anticipated.

Parking

Within the Settlement, parking areas were historically associated with community buildings, group homes and visitor area, maintenance, and administrative areas. All were small, sited in proximity to a building, and surfaced with gravel or asphalt pavement. With these few exceptions, and largely a result of limited use, vehicular parking in the Settlement was historically informal at best, based on individual needs, personal habits, and easy access. This character continues today where it is not uncommon to see individual vehicles parked under the shade of a canopy tree, next to the back door of a public building, on the front lawn of a neighbor's house, or just pulled along the side of the road near the post office.

Design guidelines for new vehicular parking areas are predicated on future adaptive use and to a degree, on principles of sustainability, specifically management goals to reduce reliance on gasoline, and increase the use of energy efficient vehicles and alternative modes for travel within the settlement landscape. The establishment of new parking areas should only be considered when it is determined to be essential to a proposed adaptive use, or to providing accessibility improvements.

Parking within areas of administration and operations use has become a challenge in terms of visual quality and deterioration of road margins used informally for parking. Guidelines herein are for consideration with proposed parking areas where work vehicles, tour buses, and other equipment can be stored and screened to prevent further impacts to the character of the cultural landscape.

New parking around historic cottages and residences is generally discouraged.

In some cases, new parking will be needed to address specific proposed changes within the Settlement. However, new on-site parking is not planned for the Kalaupapa Memorial at Kalawao. These are site specific and should consider use of the design guidelines to support development of the overall landscape design of the memorial in Kalawao.

Guidelines

- Ensure that new parking areas are small in scale, designed to accommodate no more than three to five cars, and designed to meet accessibility standards.
- Design new parking areas added near historic buildings in such a way that they are sited in proximity to existing parking or in a manner that retains historic egress and reduces visual impacts to historic structures.
- Design and site new parking areas in a way that minimizes the need for grading, and avoids impacts to vegetation, including compaction of soils over the root area of trees.
- Design, site, and surface new parking areas in such a way as to minimize visual impacts to the cultural landscape.
- Design designated pull-outs and short-term parking areas along roadways to be informal in character. Use stabilized turf or grass pavers to minimize the visual impact on the landscape.
- Use screening to reduce the visual impact of new or expanded parking areas throughout the Settlement. In cases where screening is needed the following guidelines apply:
 - The use and placement of screening materials should be compatible with the landscape setting and the materials used and their arrangement contextual in relation historic structures and historic spatial organization.
 - Vegetation is an appropriate material for screening. Plant materials for screening should be between 3 and 5 feet in height and selected from the foundation planting palette included below in the *Vegetation Guidelines* section.
 - Stone walls that are compatible with the historic character of the site can also be considered for screening. If used, stone walls should follow traditional Hawaiian construction but be distinct as a product of their own time.

Pedestrian Circulation

Pedestrian circulation with the Settlement is primarily composed of narrow concrete walks that connect building entrances with adjacent roads and parking areas and has been present since the historic period. The addition of ramps and other elements intended to provide improved access has occurred on an ad hoc basis and is often insufficient to meet the needs of residents and visitors. Currently, features often do not meet accessibility codes and need to be upgraded, and some facilities will require improvements to make them accessible. Many of the guidelines below focus on expanding accessibility throughout the settlement and compatible design.

Guidelines

- Preserve the character of historic concrete walks including the finished surface texture, color, size, and type of exposed aggregate documented.
- Prioritize and implement the rehabilitation of historic walks throughout the settlement to improve accessibility.
- Evaluate options for providing access to landscape areas that are currently not accessible due to stairs, or surfaces that do not meet code in terms of slope and firmness and implement the option that requires the least change to the historic landscape.
- Consult and work with residents and historic architects to ensure existing accessible ramps into historic structures are structurally safe, functional, and meet accessibility standards.
- Use traditional materials such as concrete, wood, and pipe rail to construct accessible ramps, walks, and structures.
- Ensure that accessible routes to buildings and landscape areas are connected to accessible parking.

Accessibility

Accessibility is one of the issues anticipated to impact the historic character of the Kalaupapa and Kalawao Settlements landscape as ABAAS scoping requirements are addressed. Accessibility will need to be considered in association with all site features and visitor amenities, including, but not limited to, parking, accessible routes, site features, and signage.

Guidelines

- Refer to Architectural Barriers Act Accessibility Standards (ABAAS) for all rehabilitation and new construction activities in providing accessibility solutions for parking and the provision of accessible routes and equal access to all improved buildings and site features.

The following illustrations (Figure 369 through Figure 376) provide guidance on how accessibility improvements may be accommodated. Note that design and construction projects will require referencing and

conforming to ABAAS for all elements as applicable.

GUIDANCE FOR ACCESSIBLE RAMPS AT BUILDINGS INTENDED FOR PUBLIC USE*

- Provide an accessible route to a primary entrance or an entrance that is visible from the adjacent roadway.
- Provide an uninterrupted connection from the adjacent road to the ramp.
- Provide a clear width of 36" minimum, and an ideal width of 60" where possible.
- Provide a level landing at the top and bottom at least as wide as the ramp leading to it and a landing length 60" minimum.

- Provide a handrail along both sides of the ramp - suggested material is steel, powder coated a dark color. Maintain consistency of rail profile and color.
- Maintain a smooth, clear and consistent surface - suggested surfaces include concrete and wood.


*See Architectural Barriers Act (ABA) Standards for Outdoor Developed Areas for additional guidance.



Wooden ramp with metal handrails powder coated in black
Herbert Hoover National Historic Site - photo by NPS. (<https://www.nps.gov/heho/planyourvisit/accessibility.htm>)

Figure 369. Diagram illustrating ramp guidelines for buildings for public use. (Source: NPS)


**GUIDANCE FOR WALKWAYS AND ACCESSIBLE RAMPS AT BUILDINGS AND FEATURES
INTENDED FOR PUBLIC USE ***



CLEAR WIDTH
Provide a minimum clearance of 36" for all walks and ramps, and an ideal width of 60" where possible at primary building entries. Maintain a consistent width except where ramp landings may be required to be wider. If a walk leads to a ramp, the ramp should be the same width as the walk. Vegetation and other impediments should be kept off all surfaces.

MATERIAL CONSISTENCY
Construct walks and ramps entirely of concrete to access public buildings and features, unless unachievable based on site conditions. Maintain a smooth, clean and consistent surface.


On ramps over 5%, utilize handrails painted or powder-coated grey to match the color palette of the concrete ramp.



VISUAL COHESION & MAINTENANCE
Retain concrete in its natural color to maintain visual cohesion and avoid unnecessary maintenance that would be required for painted surfaces. Maintain a clean surface and repair when needed to maintain the surface color and consistency.

EASE OF ACCESS
Maintain shallow slopes where possible to provide ease of access.

Avoid placing ramps on top of existing stairs that provide public access unless building or site conditions exclude other options for an accessible entry. Consider, instead, ramps that are adjacent to stairs and utilize the same landing.



HANDRAILS
Handrails should be added on all slopes over 5%. Handrails should be provided on both sides of ramps over 36" wide and maintain a consistent rail profile.

CONTIGUOUS CONNECTION
Provide an accessible route to a primary entrance or a public entrance that is visible from the adjacent roadway. Ensure an uninterrupted connection from adjacent road or driveway to the walk or ramp utilizing a consistent material.



*For more guidance on accessible routes, see Architectural Barriers Act Accessibility Standard (ABAAS)

Figure 370. Additional guidance regarding ramps for buildings for public use. (Source: LSHLA)

GUIDANCE FOR ACCESSIBLE RAMPS AT BUILDINGS AND FEATURES INTENDED FOR PUBLIC USE*



< ISSUE: Path does not connect to an adjacent roadway.

> ISSUE: Ramp material is visually incompatible, ramp is set on top of existing public access stair, slope isn't accessible.



< Handrails are provided on both sides of ramp

ISSUES:
A landing is required at the top and bottom of the ramp. The ramp should not exceed a 1:12 slope. Handrails should extend 12 inches minimum beyond the bottom of the ramp run.

> ISSUE: Missing handrail.



< ISSUE: Surface changes from concrete to wood.

> ISSUE: Ramp placed on top of existing stair.

ISSUE: Lower landing is inconsistent with adjacent ramp and roadway.

ISSUE: Ramp is missing appropriate handrails and a landing at the bottom that meets requirements.



< ISSUE: Handrail is painted yellow.

*For more guidance on accessible routes, see Architectural Barriers Act Accessibility Standard (ABAAS)

Figure 371. Additional guidance regarding ramps for buildings for public use. (Source: LSHLA)

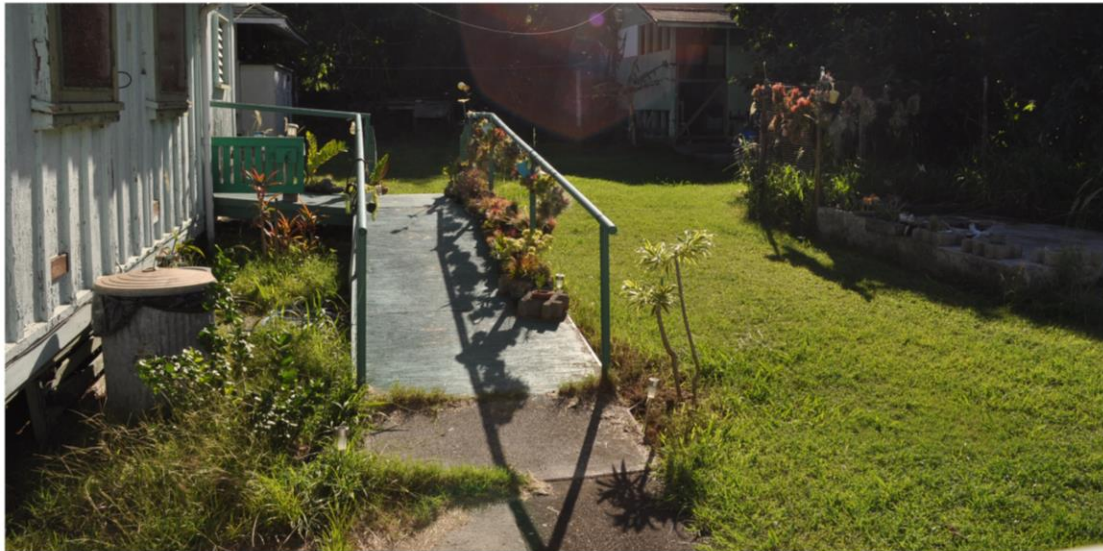
GUIDANCE FOR ACCESSIBLE RAMPS AT BUILDINGS INTENDED FOR PRIVATE USE*

- If an accessible route to the primary entry isn't feasible, provide an accessible route to a secondary entrance.
- Provide an uninterrupted connection from the adjacent road to the ramp.
- Provide a clear width of 36" minimum.
- Provide a level landing at the top and bottom at least as wide as the ramp leading to it.
- Maintain a smooth, clear and consistent surface - suggested surfaces include concrete and wood.
- Provide a handrail along both sides of the ramp - suggested material is steel, powder coated a dark color. Maintain consistency of rail profile and color.

*See Architectural Barriers Act Accessibility Standard (ABAAS)



Wooden plank ramp with metal handrails
Kalaupapa Settlement - photo by LSHLA



Wood on concrete base with metal handrails
Kalaupapa Settlement - photo by LSHLA

Figure 372. Guidelines for ramps for buildings for private use. (Source: LSHLA)

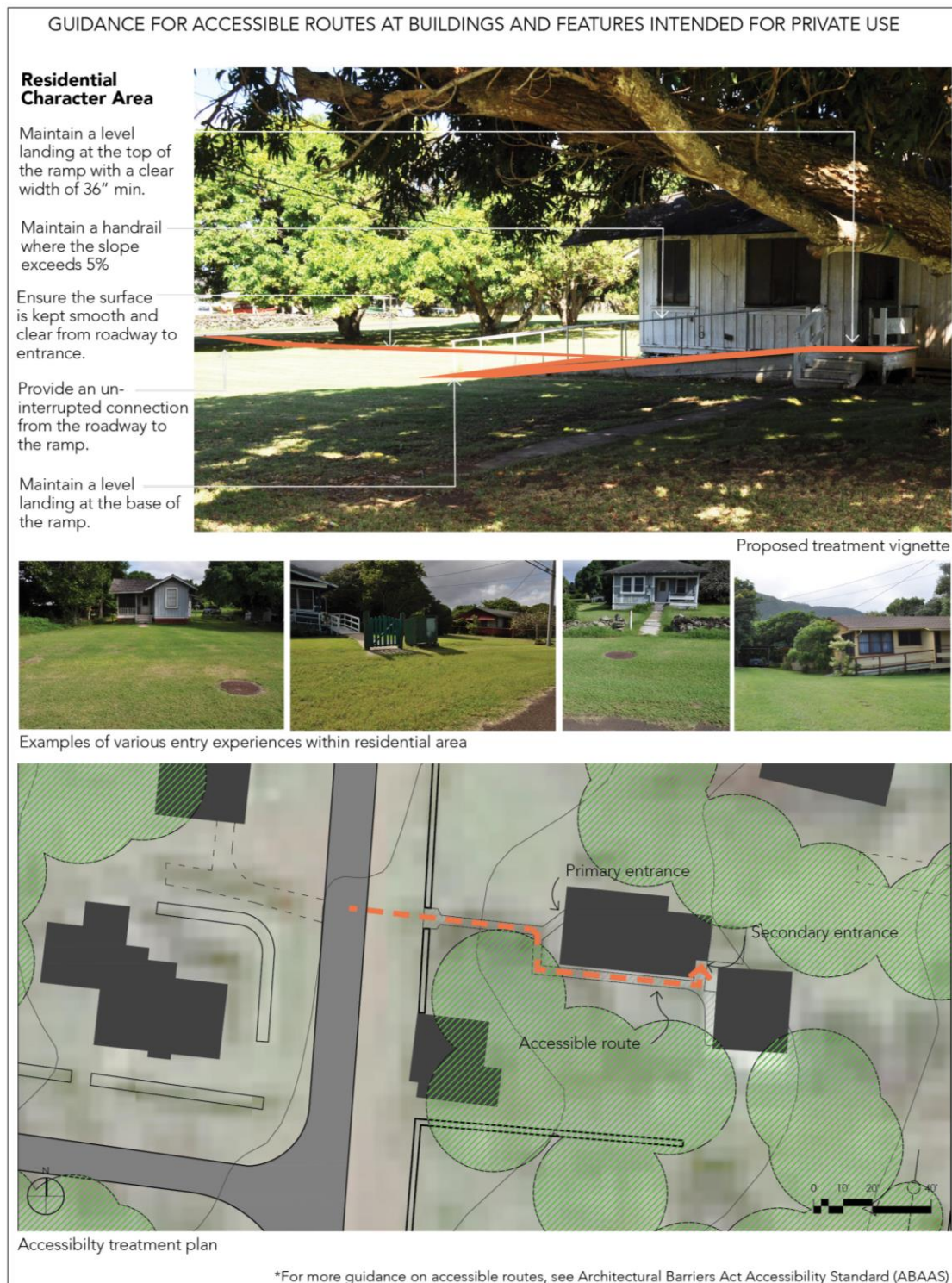






Figure 373. Additional guidelines for ramps for buildings for private use. (Source: LSHLA)

GUIDANCE FOR ACCESSIBLE ROUTES AT BUILDINGS AND FEATURES INTENDED FOR PRIVATE USE*


EASE OF ACCESS
Maintain shallow slopes where possible to provide ease of access.

 **CONTIGUOUS CONNECTION**
Provide an accessible route from the adjacent road or driveway that is uninterrupted.



CONSISTENCY
Maintain consistency from access route to walk or ramp ensuring width is maintained at a minimum of 36". Maintain a consistent width for entire length except where landings may be required to be wider. Where possible, maintain material consistency.




GUIDANCE FOR ACCESSIBLE RAMPS AT BUILDINGS AND FEATURES INTENDED FOR PRIVATE USE*



 

MATERIALITY
When needed, construct ramps out of wood boards to access private residences and other buildings.

VISUAL COHESION
Paint wood light grey to provide visual cohesion. Maintain a clean and smooth surface. Utilize galvanized tube steel handrails painted or powder-coated light grey to match the color of the wood ramp.



CLEAR WIDTH
Provide a minimum clearance of 36" for all ramps. If a walk leads to a ramp, the ramp should be the same width as the walk, with a minimum width requirement of 36". Vegetation and other impediments should be kept off all surfaces. Provide a level landing at the top and bottom at least as wide as the ramp leading to it.

PLACEMENT
Avoid placing ramps on top of existing stairs that provide access. Instead, place ramps adjacent to utilize the same landing.

HANDRAILS. Handrails should be added on all slopes over 5%. Handrails should be provided on both sides of ramps over 36" wide and maintain a consistent rail profile.



*For more guidance on accessible routes, see Architectural Barriers Act Accessibility Standard (ABAAS)

Guidance for Accessible Routes at Private Residences and Buildings

Figure 374. Additional guidelines for ramps for buildings for private use. (Source: LSHLA)

GUIDANCE FOR ACCESSIBLE ROUTES AT BUILDINGS AND FEATURES INTENDED FOR PRIVATE USE*



<
Direct accessible route provided
from adjacent carport to
secondary entry.

Path is minimum 36" wide

>
ISSUE: Path is too narrow
and doesn't connect
to adjacent roadway or
driveway.



<
ISSUES:
Ramp surface material changes.

Ramp surface and handrail are
painted green.

Ramp width is not clear with
impediments and vegetation
growing on it.

Handrails should extend 12
inches minimum beyond the
bottom of the ramp run.



>
Ramp and path is provided
to secondary entrance.

Path and ramp are same
width, minimum 36"



<
ISSUE: Handrail is in need of
repair.

*For more guidance on accessible routes, see Architectural Barriers Act Accessibility Standard (ABAAS)

Figure 375. Additional guidelines for ramps for buildings for private use. (Source: LSHLA)

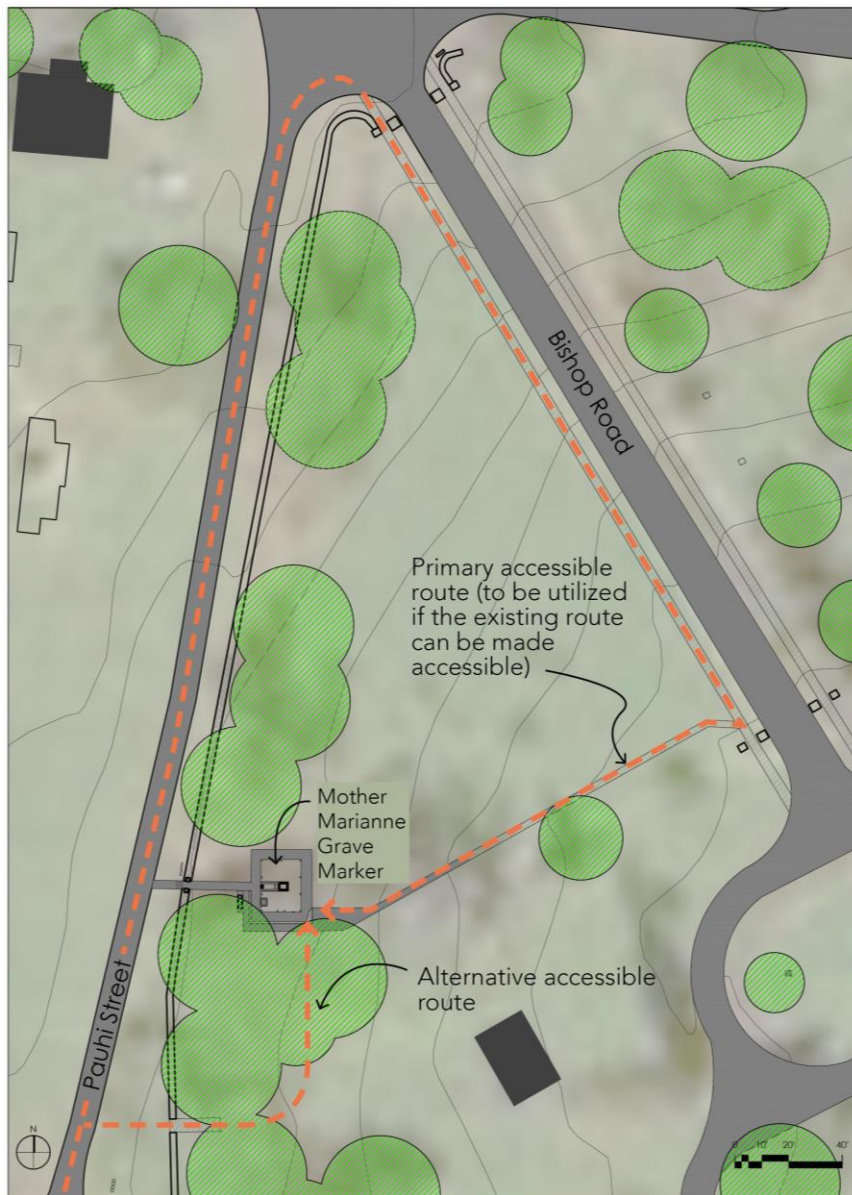


Figure 376. Diagram illustrating accessibility plan for a landscaped area. (Source: LSHLA)

Vegetation

The historic landscape of the Kalaupapa and Kalawao Settlements is characterized to a great degree by the composition of cultural vegetation. The cultural vegetation associated with the Kalaupapa Peninsula is a highly complex assemblage of native and introduced plants that reflect past land uses and activities, including pre-Settlement agriculture, institutional and vernacular plantings associated with the Kalaupapa and Kalawao settlements, and colonization by invasive species that has proliferated since a 1946 tsunami and removal of livestock from the landscape circa 1980.

Within the developed areas, turf grass is a dominant cultural vegetation feature. Lush verdant turf grass serves to unify the sense of place within the Settlement; mown turf edges most primary roads within the right of way to either side, and is characteristic of most institutional and residential properties. Tree and shrub plantings are associated with residential and institutional properties throughout the Settlement. Trees provide shade, serve

as windbreaks, and continue to reflect institutional design and development from the 1930s in the form of row and groves of coconut palms and ironwood pine trees.

Cultural vegetation has been an integral part of life in the Settlement and served a wide range of needs within the community since the nineteenth century. Cultural vegetation contributes to the beauty and aesthetics of place, provides fresh fruit and other foodstuffs, produces the flowers, leaves, seeds, and husks used to make leis, decorate church and home interiors, and create crafts, and offers medicinal properties that have provided relief to residents for a variety of ailments. The shade afforded by trees within the Settlement offers welcome relief from the sun, while hedgerows and other linear plantings are used to diminish the force of the winds.

Unlike Kalaupapa where gardens remain an integral part of the community, little evidence of settlement plantings survive at Kalawao. Historical garden areas and ornamental vegetation disappeared quickly after patients were transferred to Kalaupapa circa 1900. Plantings at St. Philomena and Siloama continue to be maintained by the active church organizations. Lands to the north, south, and east of the developed area of Kalawao, however, have been colonized by woody plants and invasive species since they are no longer used for residential purposes, cultivation, or pasture.

Proper and appropriate management and maintenance of cultural vegetation is an important consideration for preserving the integrity of Kalaupapa and Kalawao Settlements. Documentation and care of desirable vegetation to remain is a critical part of management and maintenance, while removal of invasive and volunteer vegetation where it impacts views, encroaches on important open space, and has the potential to damage cultural features is also a key consideration of treatment.

Specific elements addressed in the guidelines below to support proper and appropriate management and maintenance of cultural vegetation include tree removal and clearing, perpetuating designed plantings, foundation plantings, screen plantings, and control of invasives.

Guidelines

- Assess the potential for the limited reintroduction on non-extant culturally significant vegetation in selected areas to enhance historic character of the Settlement landscape. Take into consideration the following:
 - The degree to which the plant(s) added to the character of the Kalaupapa Settlement cultural landscape, either as an endemic or introduced species, as documented between 1866 and 1969
 - The growth habit of the plant and if it is potentially invasive
 - Its potential interpretive value
 - Its value to support cultural practices and cultural traditions
 - The potential impacts of wildlife on the vegetation and surrounding resources

Tree Removal and Clearing

- Address the need to remove historic vegetation that has failed, presents a safety hazard, obstructs site rehabilitation required for accessibility improvements or potential adaptive use, by documenting, removing, and replacing the plant(s) in kind as appropriate.

- Remove volunteer vegetation found to be growing on or within buildings and structures, including walls. Cut tree saplings flush with the grade, or at the lowest possible point that can be reached and apply systemic herbicide to the cut end to prevent regrowth. Regularly monitor walls for volunteer growth in order to remove promptly.
- Remove individual trees by sectioning and lowering limbs and trunk to the ground where felling the tree has the potential to impact nearby cultural resources.
- Consider, when clearing large areas, the use of mechanical equipment, evaluating the impact of the equipment and determining methods for minimizing ground disturbance. If machinery is required to remove vegetation near or adjacent to known archeological sites, structures, and features, ensure all work is planned and implemented under the supervision of an archeologist. It is important to recognize that only a small portion of the peninsula has been surveyed, and primarily only for surface features. Subsurface testing for larger scale projects must meet both Section 110 and Section 106 requirements. Also consider the following:
 - Manage tree removal operations to protect environmental resources.
 - Avoid clearing woodland in areas with slopes steeper than 15 percent.
 - Avoid vegetation clearing or thinning in sensitive ecological areas and plant communities. Park wetlands should be delineated before field clearing begins.
 - Minimize the use of heavy vehicles, use low tire-pressure vehicles, and avoid working the soil when wet to reduce the potential for ruts and compaction. Employ measures to stabilize soil and minimize erosion.
 - Employ silvicultural methods that minimize the impacts and threats to cultural and natural resources and known and potential archeological resources.
 - Cut stumps to the ground; do not uproot them. Grind stumps after testing the perimeter for archeological resources. Fill any resulting pits with local soil. Alternatively, leave the stumps, and treat those anticipated to sprout with a systemic herbicide, such as glyphosate, to discourage and control woody regeneration. Chemical control of woody plant regeneration should be conducted by a certified herbicide applicator.
- Remove felled trees without dragging, which gouges the ground surface.

Screen Plantings

- Consider using trees and shrubs to screen views of incompatible features from primary roads. Consider species that are effective in limiting views, but are of themselves attractive to look at and compatible with the plant palette already present within the Settlements (Figure 377).



Figure 377. Diagram illustrating the character of screen plantings to limit views of incompatible features from primary roads. (Source: LSHLA)

Control of Invasive Species

- Consider the potential for grazing animals, such as sheep, to be used in controlling invasive vegetation. Ensure that the use of any grazing animals can be contained and does not lead to the reintroduction of undesirable free-roaming populations. The introduction of grazing animals would need to occur in conjunction with new fencing or pen development, and this change should be considered in consultation with the community and stakeholders.
- Before starting any ground-disturbing activities, identify the extent of the invasive plant infestation.
- Begin activities in uninfested areas before operating in infested areas.

- Use uninfested areas for staging, parking, and cleaning equipment. Avoid or minimize all types of travel through infested areas, or restrict to those periods when spread of seed or propagules are least likely.
- When possible, to suppress growth of invasive plants and prevent their establishment, retain relatively closed canopies.
- Minimize soil disturbance and retain desirable vegetation in and around the area to the maximum extent possible.
- Plant desirable species after removing invasives.
- Monitor infested areas for at least three growing seasons following completion of activities. Provide for follow-up treatments based on inspection results.
- Quarantine soil from infested areas to prevent off-site spread.
- Inspect material sources at site of origin to ensure that they are free of invasive plant material before use and transport as invasive plants can be introduced and spread by moving infested equipment, sand, gravel, borrow, fill, and other off-site material.

Revegetating Cleared Areas

- Re-vegetate all disturbed soil in a manner that optimizes plant establishment for that specific site, unless ongoing disturbance at the site will prevent establishment of invasive species.
- Use local seeding guidelines and appropriate mixes. Use locally native material where appropriate and available. Re-vegetation may include planting, seeding, fertilization, and mulching.
- Minimize disturbance to the surface when planting new cover.
- Monitor and evaluate the success of revegetation.
- When re-vegetating areas that were previously dominated by invasive plants, try to achieve at least 90 percent control of the invasive before attempting restoration.

Tree and Shrub Care

- Conduct cyclic pruning and tree care for cultural vegetation following a set of established protocols that can easily be followed by park staff and volunteers as needed.
- Document, through personal interviews, traditional pruning and plant care techniques used in the Settlements to promote fruit production and to make fruit picking more accessible. Techniques for cyclic pruning as well as restorative pruning where reductive cuts are made over time depending on the height of the vegetation should be documented.
- Determine whether traditional techniques can be followed by park staff and volunteers in caring for cultural vegetation for interpretive and other purposes.
- Maintain views through proper pruning and limbing of trees and shrubs (Figure 378).

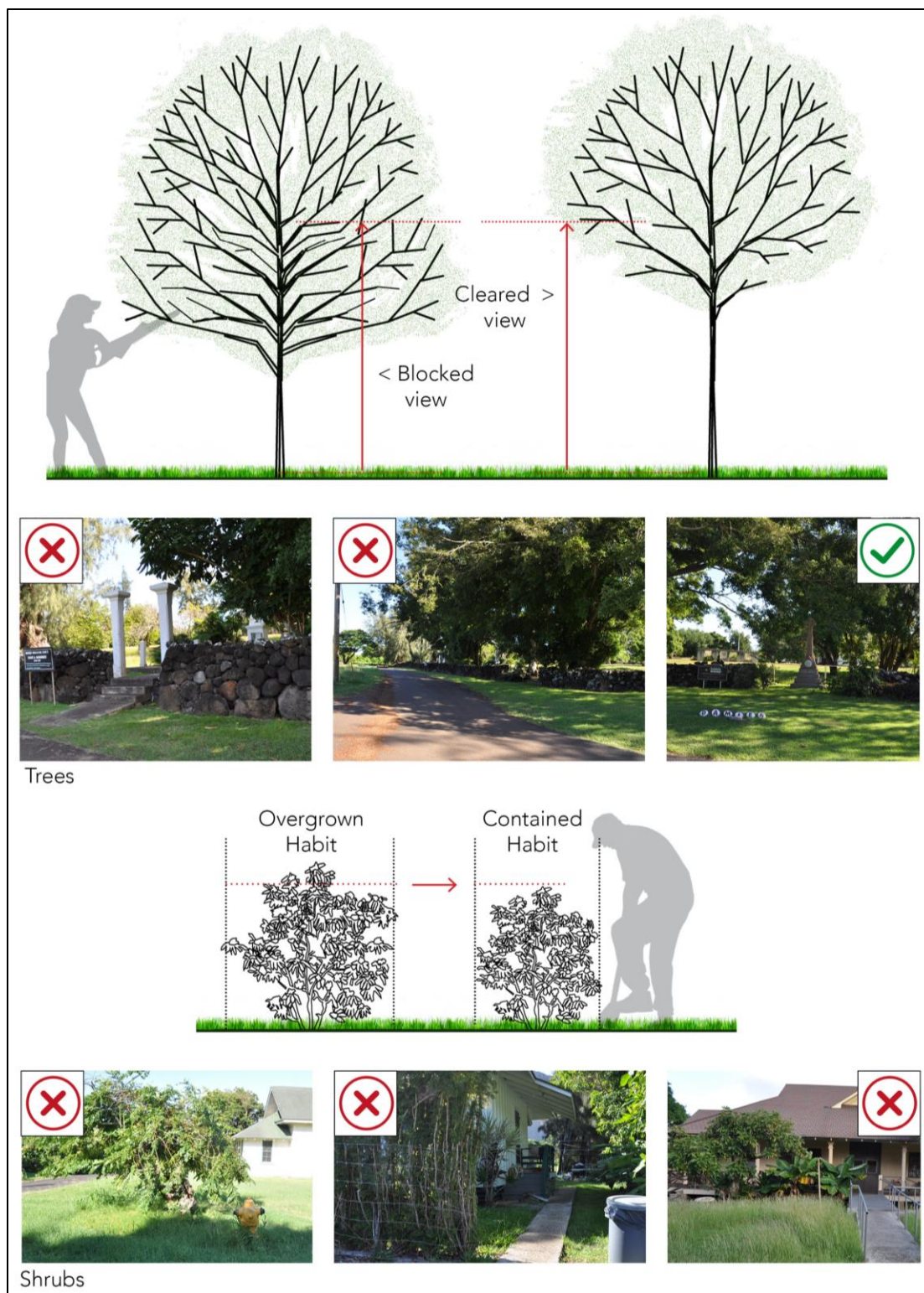


Figure 378. Tree and shrub care to maintain views. (Source: LSHLA)

Perpetuating Designed Plantings

Two types of coconut palm tree groves exist at Kalaupapa and Kalawao Settlements, groves and row plantings. The groves are irregular in the arrangement of the trees, while the row plantings are more orderly.

- Maintain groves, such as those located across Staff Street from McVeigh Home, at West Coast Cemeteries, and along the shoreline at Bay View Home, by replacing individual trees as they grow too large for easily harvesting coconuts. If the majority of the grove needs to be replaced due to declining health, the entire grove should be replaced at one time rather than individually. Replace trees by planting a coconut in the hollowed-out root ball of the tree that is cut rather than planting nearby. Follow the tree removal guidance above.
- Maintain row plantings, such as those located around the perimeter of Paschoal Hall and along Damien Road near Judd Park, by replacing the entire stand at a time when the trees become too large to harvest the coconuts. This will perpetuate an even-aged stand that will have an appropriate orderly appearance consistent with that of the row planting.

Foundation plantings

- Manage foundation plantings by working with a palette of cultural vegetation typically found within the Settlements that can be maintained at a height that does not overwhelm the building with pruning to correct shape and height.
- Select plants for inclusion in individual foundation plantings based on the character of the plants designed to complement the historic setting and architecture (Figure 379).
 - The recommended composition for foundation plantings is a mix of native or culturally valued materials such as those that add color or fragrance. Use of a single species as a foundation hedge, is not recommended.
- Consider the plants in the palette that follows for inclusion in foundation plantings (first evaluating the potential for any of these species to become problematic for management or maintenance):
 - Allamanda (*Allamanda* spp.)
 - Aloe (*Aloe vera*)
 - Flamingo flower (*Anthurium andraeanum*)
 - Bird's nest fern (*Asplenium nidus*)
 - Snow bush (*Breynia disticha*)
 - Chili pepper (*Capsicum frutescens*)
 - Turmeric (*Curcuma longa*)
 - Blue ginger (*Dichorisandra thyrsiflora*)
 - Dracaena (*Dracaena* sp.)
 - Night blooming cereus (*Epiphyllum oxypetalum*)
 - Slipper flower (*Euphorbia lomelii*)

- Poinsettia (*Euphorbia pulcherrima*)
- Geranium (*Geranium* sp.)
- White ginger (*Hedychium coronarium*)
- Lobster claw (*Heliconia bihai*)
- Heliotrope (*Heliotropium anomalum*)
- White hibiscus (*Hibiscus waimeae*)
- Iris (*Iris* sp.)
- Ixora (*Ixora macrothyrsa*)
- Lily (*Lilium* sp.)
- Palapalai fern (*Microlepia strigosa*)
- Oleander (*Nerium oleander*)
- Panax ginseng (*Panax ginseng*)
- Monarch fern (*Phymatosorus scolopendria*)
- Common plantain (*Plantago major*)
- Plumeria (*Plumeria* sp.)
- Psilotum (*Psilotum nudum*)
- Rose (*Rosa* sp.)
- Mother-in-Law's tongue (*Sansevieria trifasciata*)
- Apple of Sodom (*Solanum capsicoides* or *S. aculeatissimum*)
- Oyster plant (*Tradescantia spathacea*)
- Vervain (*Verbena litoralis*)
- Wild (or shampoo) ginger (*Zingiber zerumbet*)
- Lobelias (*Cyanea*, *Clermontia*, *Brighamia*, *Delisea*, *Lobelia*)



Figure 379. Example of how to implement recommended foundation planting rehabilitation. (Source: LSHLA)

Turf care

- Consider establishing zones for mowing that address the need to mow more frequently along road margins, around buildings, and within cemeteries, and less frequently in open fields (Figure 380).

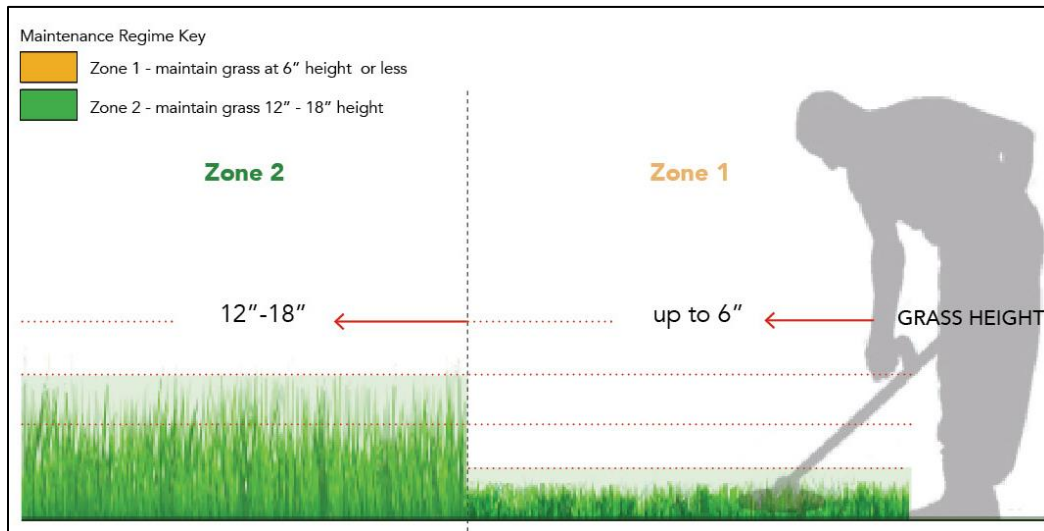


Figure 380. Diagram illustrating the difference in mowing height for roadsides and around buildings and in cemeteries, and field areas. (Source: LSHLA)

Buildings and Structures

There are more than 250 historic buildings and structures associated with the Kalawao and Kalaupapa Settlements, most of which were constructed during the period of significance and retain a high degree of integrity, although the ongoing needs of the community continue to be addressed through rehabilitation and adaptive use as required. These modifications illustrate aspects of a living landscape that are important in and of themselves. Although individual buildings vary in terms of use, date of construction, scale, and materials, there is an overall cohesion of the built environment due to the way buildings sit within the landscape, are all generally modest in size, and the pervasive use of the Hawaiian plantation style of architecture that suggests a deep connection with the natural environment. Where buildings have been lost and the early density is now absent, the sense of cohesiveness is diminished.

The guidelines below address the need to maintain and retain historic buildings as one of the measures for protecting integrity and how new buildings should be added in the future. The guidelines also address the management of rock walls, fences, culverts, and utilities.

Buildings

- Stabilization is recommended for contributing buildings and structures that have an immediate use, including those used for staff housing and maintenance. Maintenance activities related to stabilization may include: exterior painting, roof replacement, pest control, structural bracing, correcting any moisture or ventilation issues, and upkeep of utility systems.
- Preservation is recommended for contributing buildings and structures that retain original materials and character-defining features in good condition, and only requiring cyclic maintenance to maintain the integrity of the building. This may include buildings proposed or already in park operations or partner use, staff housing, and buildings identified for community use.

- Rehabilitation is recommended for contributing buildings and structures that have been identified for compatible adaptive use. This may include historic buildings where
 - future interior use will be different than its historic use. For example, the interior of historic residences that may be used for interpretive exhibits
 - future changes are required to comply with health and safety codes
 - future changes are required to meet accessibility standards
- Consider the removal of non-contributing structures that are intrusive to the historic landscape only if they are found to be without historical or functional merit or value.
- Stabilize all buildings in ruins or on the verge of being in ruins.
- Avoid conjectural reconstruction of historic buildings and structures.
- Avoid altering existing features or adversely affecting the landscape's historic character when adding new features to support interpretive, management, and visitor access functions. Features that facilitate access and interpretation should be designed to minimize adverse impacts on the character and features of the landscape. Limit the construction of new buildings to those that are absolutely necessary.
- Site new buildings and structures either out of key viewsheds, or in such a way as to complement the spatial organization of the Settlements. Ensure that new buildings are contemporary structures but compatible with the existing architectural character of the community. Ensure that new buildings are designed with sufficient detailing and with a muted palette that they blend with their surroundings. New buildings and structures should be compatible with local traditions of design and use of materials. The design of new buildings and structures should also be sympathetic to local traditions in terms of scale, massing, roof form, and details. New buildings and structures should be situated to lie lightly on the land, minimizing soil disturbance, particularly cut and fill. Sustainability should be considered in the choice of materials and energy use. Consider incorporating passive solar energy conservation strategies into the design of new buildings and structures. Also consider the local climate in the siting and design of buildings and their relationship to solar orientation, heat gain, shading, prevailing winds, and seasonal average temperatures to minimize energy costs. Limit the footprints of new buildings and structures by optimizing use and flexibility of both indoor and outdoor spaces.
- Design and site new additions and alterations to the landscape in such a way that, if removed in the future, the essential form and integrity of the cultural landscape would be unimpaired.
- Design new features, systems, and programs to be accessible.

Outbuildings

- Site garages, storage structures, and garden-related outbuildings within the Residential Area in the rear and side yards of individual properties and use vegetation to diminish the visual impact of outbuildings from adjacent primary roads. Ensure that new structures are modest in size and do not interfere with outdoor use of the property.

Rock Walls

One of the character-defining historic structures associated with Kalaupapa and Kalawao Settlements is the dry stacked stone wall. These are pervasive throughout the peninsula. Historic rock walls specifically refer to those built after 1866 in support of Settlement development. The peninsula also contains numerous examples of rock walls that preceded the establishment of the Settlement, and are components of the traditional Hawaiian archeological complex.

- Prioritize preservation and rehabilitation of historic dry laid stonewalls based on the following general criteria:
 - structural stability of the wall and safety concerns, especially in public areas
 - risk of loss or further deterioration
 - the degree to which historic character and design attributes—height, dimension, extent, material, and construction—remain intact
 - the degree to which the existing wall continues to define historic spatial organization—setting, proximity, and function
- Ensure all preservation and rehabilitation work on historic stone walls is carried out by preservation maintenance crews and individuals with experience, skills, and knowledge of traditional Hawaiian construction methods and technologies.
- Respect the unique character of individual dry laid stonewalls throughout the settlement.
- Every effort should be made to repair walls by reusing rather than replacing individual stones, and respecting individual construction methods where feasible, especially on the face of the wall.
- If new stones are required for repairs, ensure they are compatible with the type, size and color of stones used to face and fill the original wall.
- Ensure all repairs and stabilization efforts conducted on historic wall segments are consistent with the overall character of the wall. The effect of time, weather, water, and vegetation, sometimes referred to as patina, is part of the character of the wall and should be considered in the repair technique.
- Reduce potential ground disturbance by limiting the use of large mechanical equipment to excavate areas or remove vegetation. All clearing of vegetation on or around historic walls, and all deconstruction work, should be accomplished in consultation with, and under the oversight of an archeologist.

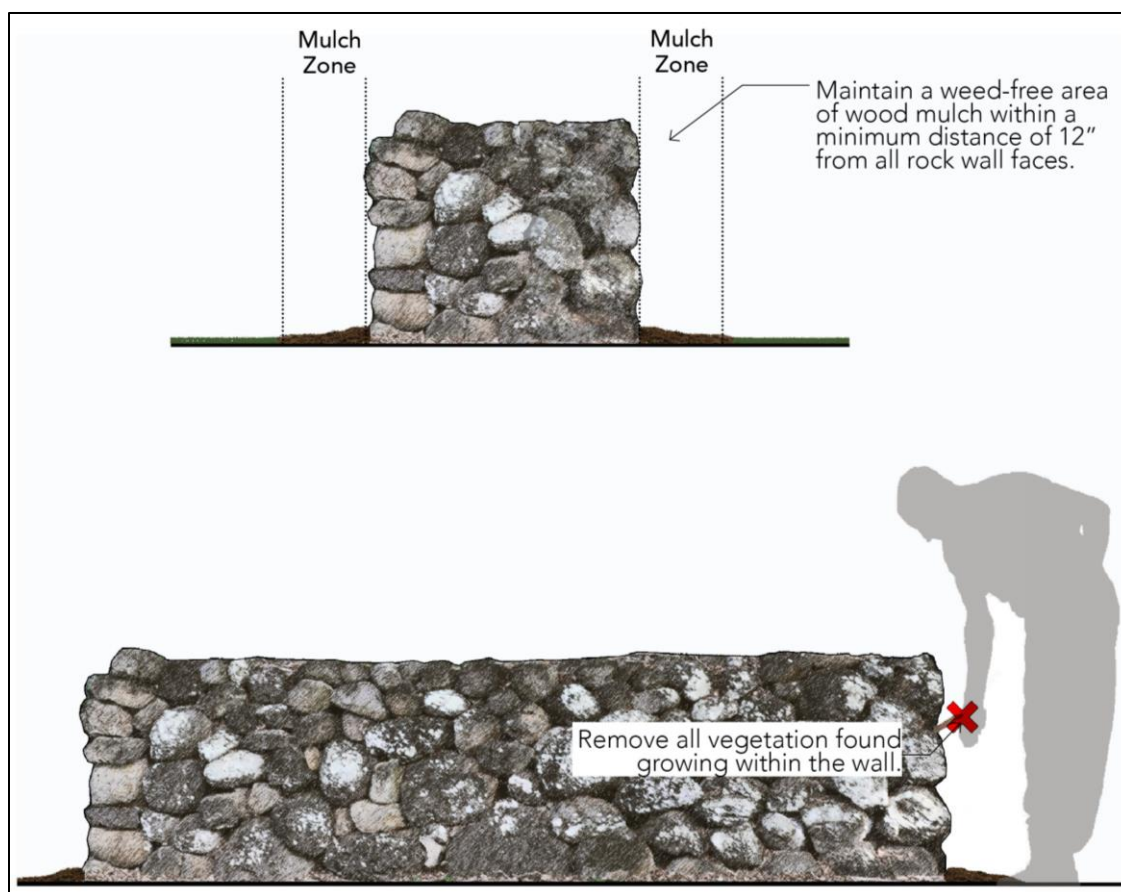


Figure 381. Diagram illustrating vegetation management related to rock walls. (Source: LSHLA)

- Maintain rock walls free of vegetation (Figure 381). Consider adding a mulch strip at the base of rock walls to facilitate mowing and vegetation management. Remove vegetation found growing within the wall.
- Monitor the growth of trees located adjacent to the walls. When trees begin to impact the wall structure, consider removing the tree, and replacing it in kind further away from the wall.
- All clearing of vegetation on or around historic walls, and all deconstruction work, should be accomplished in consultation with, and under the oversight of an archeologist.

Culverts

- Maintain culverts free of vegetation. Cover openings with wire mesh to prevent the movement of debris through the culvert. Maintain the wire mesh free of debris.

Fencing

At McVeigh, some residents have added fences to their yards, further dividing spaces that were not historically divided. Removal of fencing where it post-dates the period of significance is recommended, following consultation with the community and stakeholders. The addition of new fencing should be avoided.

Where fencing is retained, it should be replaced in kind when it deteriorates and the vernacular use of a variety of fencing types, as demonstrated on the pages that follow, be protected.

In considering new fencing, use of one of the proposed standards below should be considered as a way to distinguish contemporary fencing from historic fencing, and discussed in consultation with the community and stakeholders.

Fence typologies observed at the Settlements are shown in Figure 382.



fencing at mule corral



fencing near Judd Park



fencing at Staff Row



fencing at residence



fencing at residence



fencing at residence



fencing at residence



fencing at residence



fencing at residence



deer fencing near McVeigh Home



deer fencing along Kamehameha St.



deer fencing near New Baldwin Home



fencing at airport



fencing at Kana'ana Hou



fencing at Father Damien Monument

Figure 382. Fence typologies at Kalaupapa and Kalawao Settlements, 2018. (Source: LSHLA)

- Based on review of the fencing typologies (refer to Figure 382), the fence styles shown in Figure 383 through Figure 385 are recommended for proposed new fencing, including safety fencing along the shoreline margins.

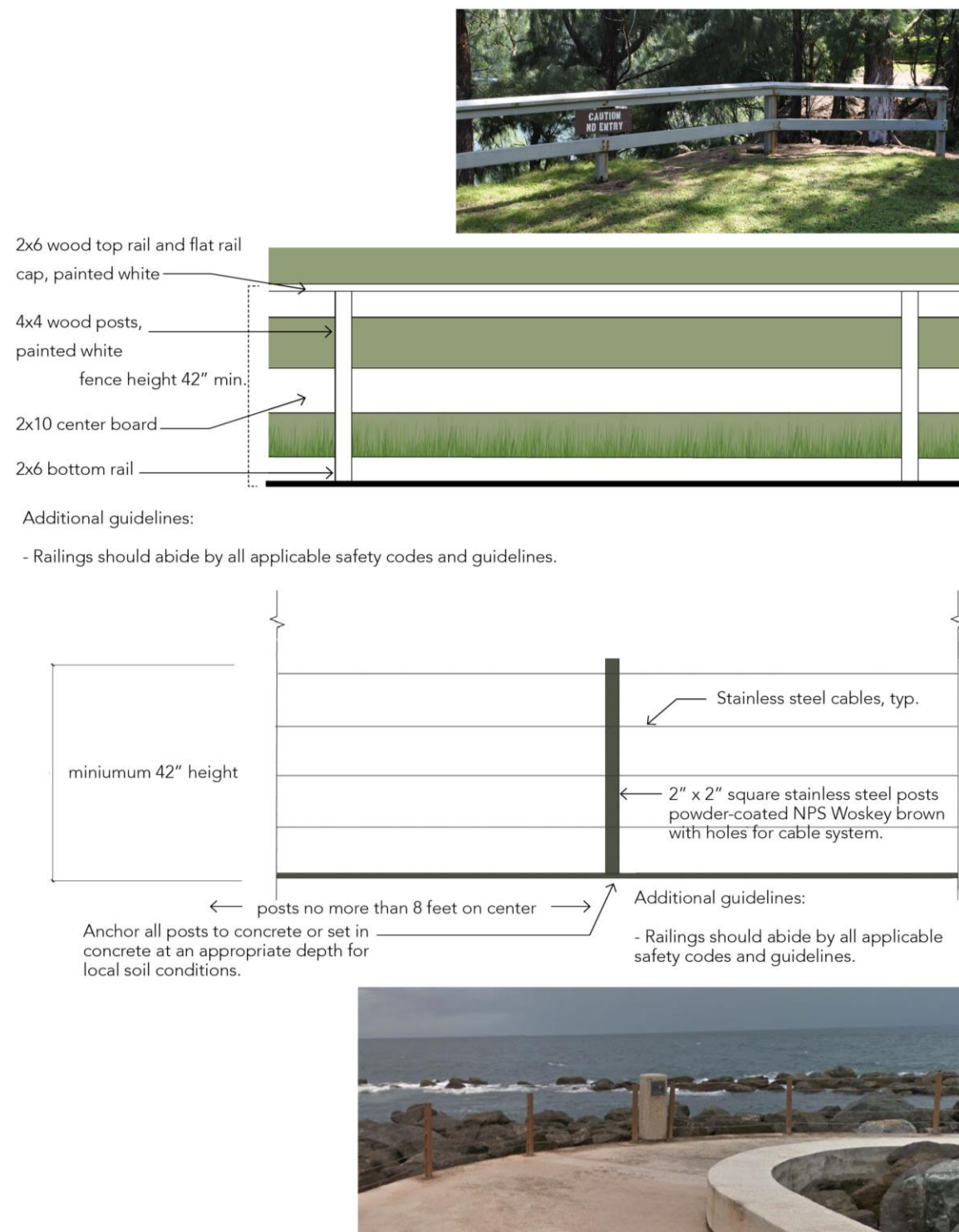


Figure 383. Fence style recommendations for contemporary additions within Kalaupapa and Kalawao Settlements. (Source: LSHLA)

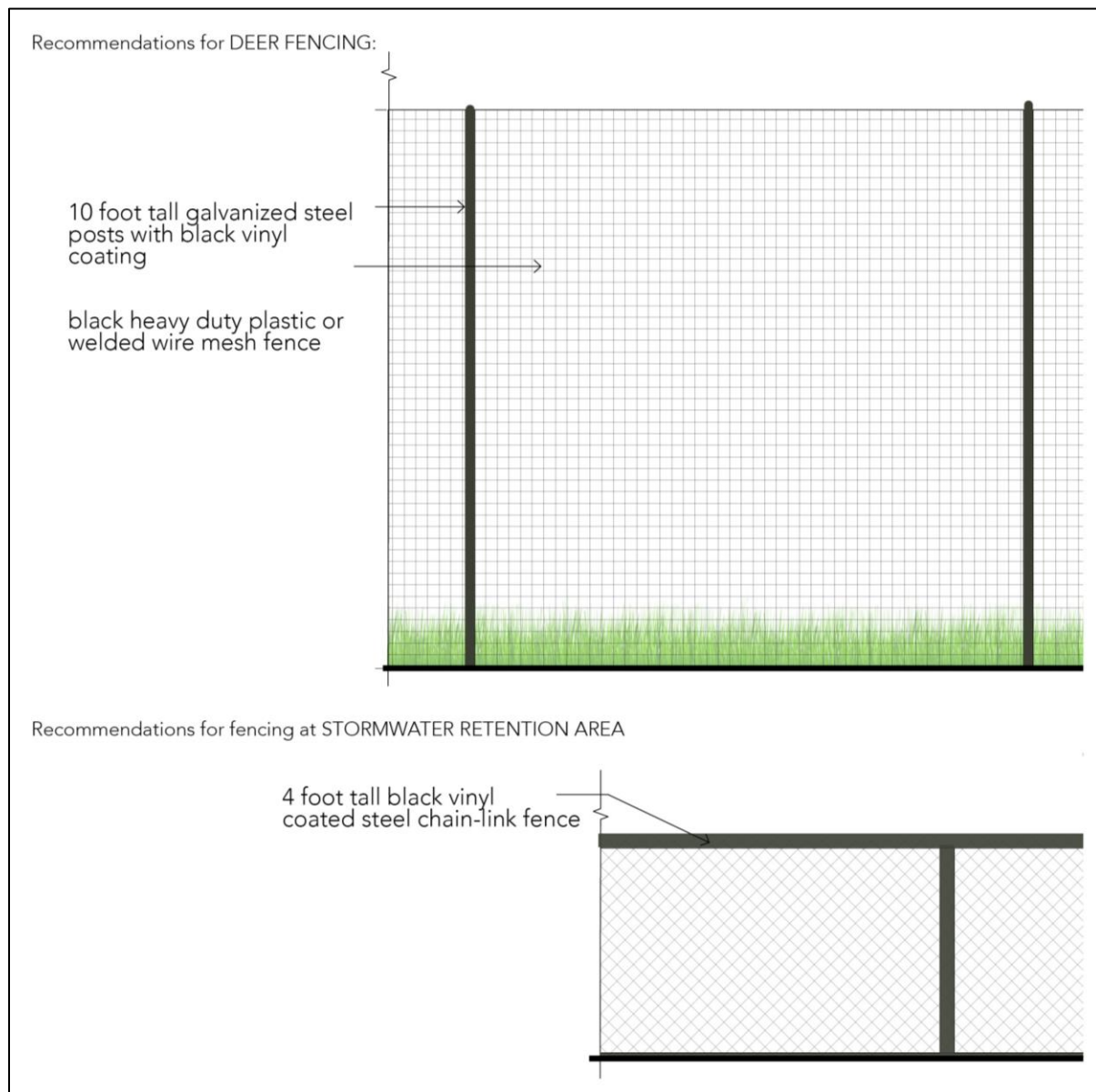


Figure 384. Fence style recommendations for contemporary additions within Kalaupapa and Kalawao Settlements. (Source: LSHLA)

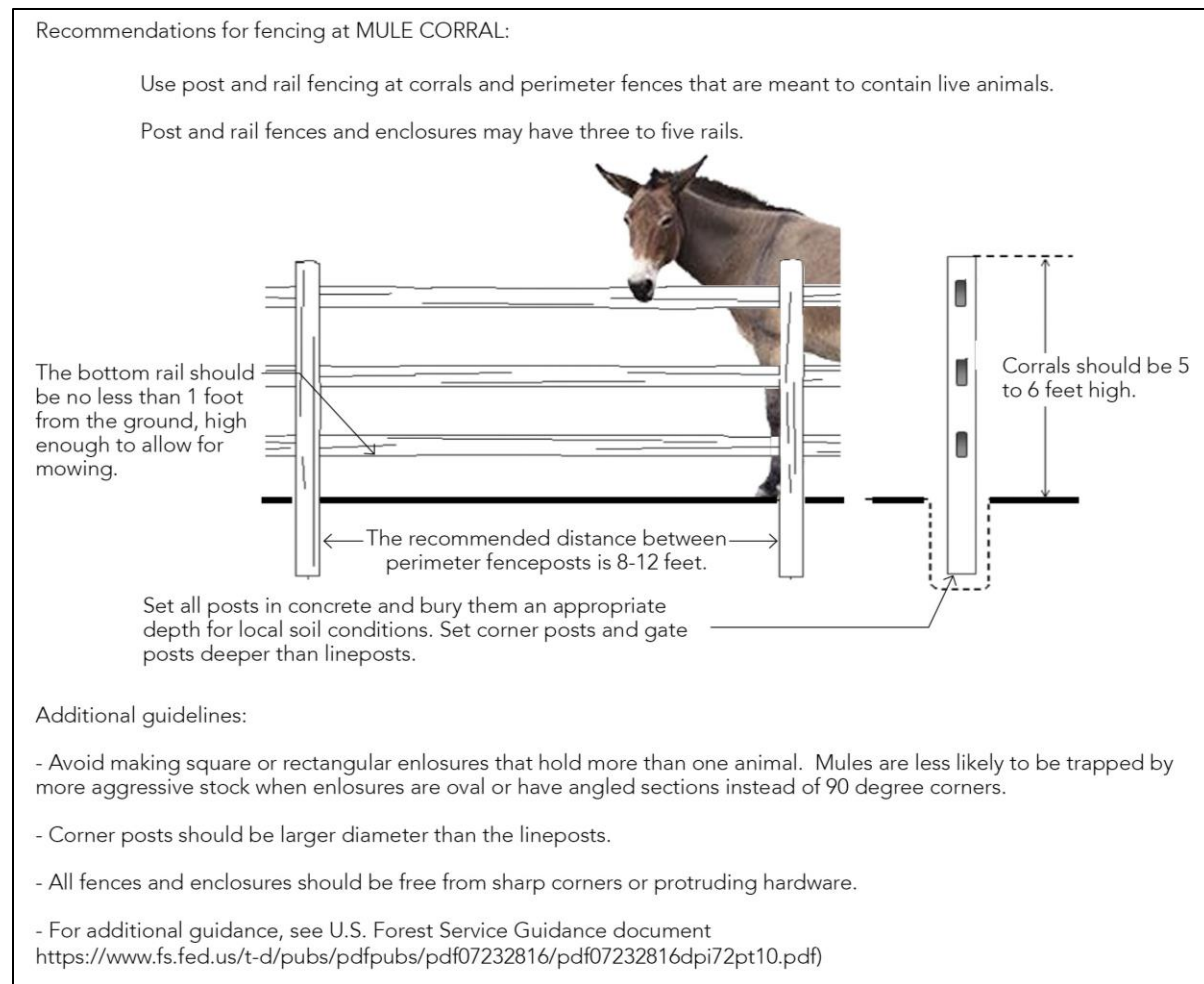


Figure 385. Fence style recommendations for contemporary additions within Kalaupapa and Kalawao Settlements. (Source: LSHLA)

Utilities

- Site building utilities and orient service areas to limit their impact on historic patterns of spatial organization and views.
- Use trees, shrubs, fencing, and other landscaping features to provide screens for service areas and utilities.

Small-scale Features

Small-scale features serve a variety of uses within Kalaupapa and Kalawao Settlements related to operations, safety, interpretation, and residential activities. Small-scale features fall within several categories—signage; site furnishings; statuary; monuments; memorials; art installations; edging materials, and utilities. These features demonstrate both utilitarian, decorative, and spiritual aspects of life within the settlement. Guidelines address signage, site furnishings, and edging materials.

Signage

Sign typologies observed at Kalaupapa and Kalawao Settlements are shown in Figure 386 through Figure 389.

- Limit the amount of NPS signage introduced into the landscape in order to avoid altering the feeling of the community to be more like a park.
- Avoid the use of wayside exhibits throughout the Settlements. Consider alternative means of presenting interpretive information.
- When new signs are needed, ensure that they are informal in character and constructed using contemporary materials and in such a way as to be compatible with the historic district. Avoid replicating historic signs and historic sign design when developing new signage.
- Establish a standard palette of sign forms, colors, and typography styles taking into consideration the sign typologies observed on site (Figure 390) and the guidance afforded in the Harpers Ferry Center Programmatic Accessibility Guidelines for National Park Service Interpretive Media.

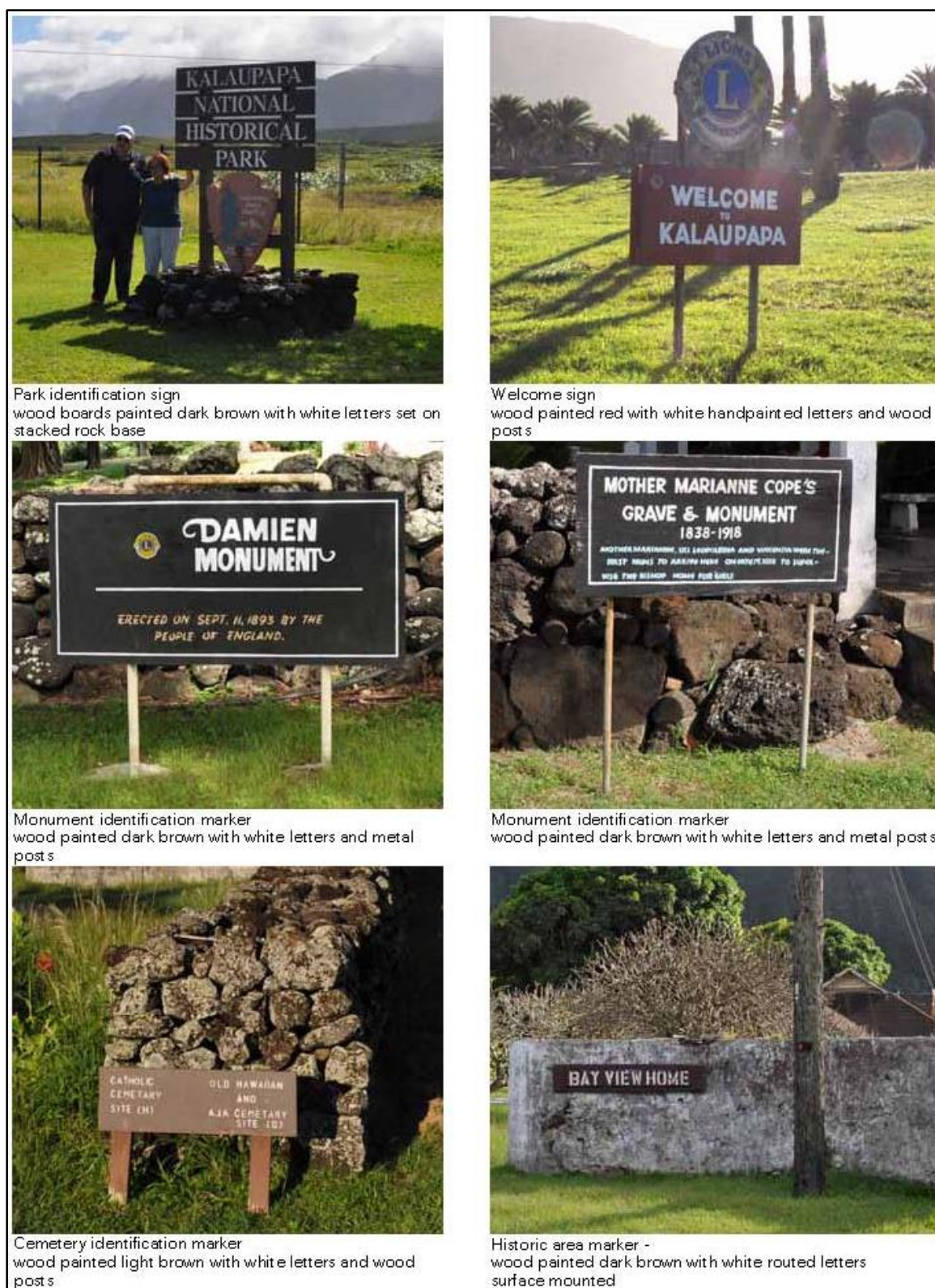


Figure 386. Sign typologies at Kalaupapa and Kalawao Settlements, 2018. (Source: LSHLA)



Lion's Club International sign - acrylic with wood post painted yellow



Ocean View pavilion sign - wood with natural with white stenciled letters



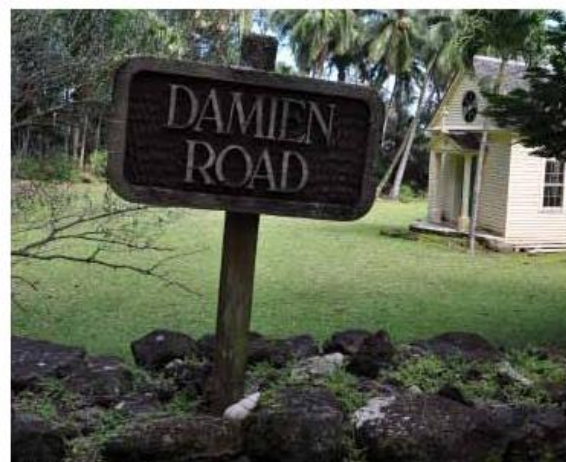
Bishop Home identity sign - bronze inlaid in stone column



Firewood sign - wood and metal with white handpainted letters



Welcome sign - wood painted red with white handpainted letters and wood posts



Damien Road sign - routed wood with wood post

Figure 387. Sign typologies at Kalaupapa and Kalawao Settlements, 2018. (Source: LSHLA)



Book and gift store sign
plastic sandwich board with inlaid yellow/red poster



Community information sign
wood framed chalkboard



NPS wayside
unpainted steel frame with inlaid sign



NPS wayside
unpainted steel frame set on stone base.



Firewood sign



Church identity sign

Figure 388. Sign typologies at Kalaupapa and Kalawao Settlements, 2018. (Source: LSHLA)



Book and gift store sign
plastic sandwich board with inlaid yellow/red poster



Community information sign
wood framed chalkboard

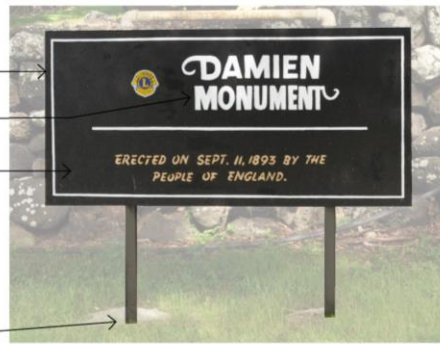


NPS wayside
unpainted galvanized steel frame with inlaid sign

Figure 389. Sign typologies at Kalaupapa and Kalawao Settlements, 2018. (Source: LSHLA)

GENERAL SIGNAGE RECOMMENDATIONS:

- sign material: galvanized steel or wood
- sign lettering: white
- sign color: dark brown (see color palette)
- sign mounting: 2" - 4" galvanized tube steel, powder-coated brown to match sign. Alternative mounting may be 2" - 4" wood posts painted brown to match sign.
- posts or stakes to be mounted in concrete footer



Additional recommendations for SPECIAL PLACES, CEMETERIES and MONUMENTS:

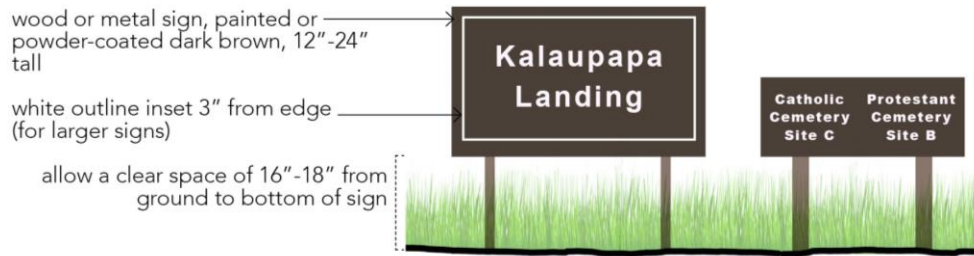


Figure 390. Sign palette for consideration of standards for Kalaupapa and Kalawao Settlements. (Source: LSHLA)

Site Furnishings

- Reduce the impact of new features on the cultural landscape by limiting the number of new site furnishings such as benches, and considering ways that they might be sited that reduces visual clutter and conforms with accessible standards.
- Consider grouping or co-locating new small-scale features into small nodes with circulation that meets accessibility standards and are related to existing public buildings.
- New site furnishings, bollards, and walls for screening areas such as new parking should be fashioned from sustainable materials and compatible with the character of the cultural landscape (Figure 377). Metal features such as bollards and light fixtures should be finished in NPS Wesley brown.

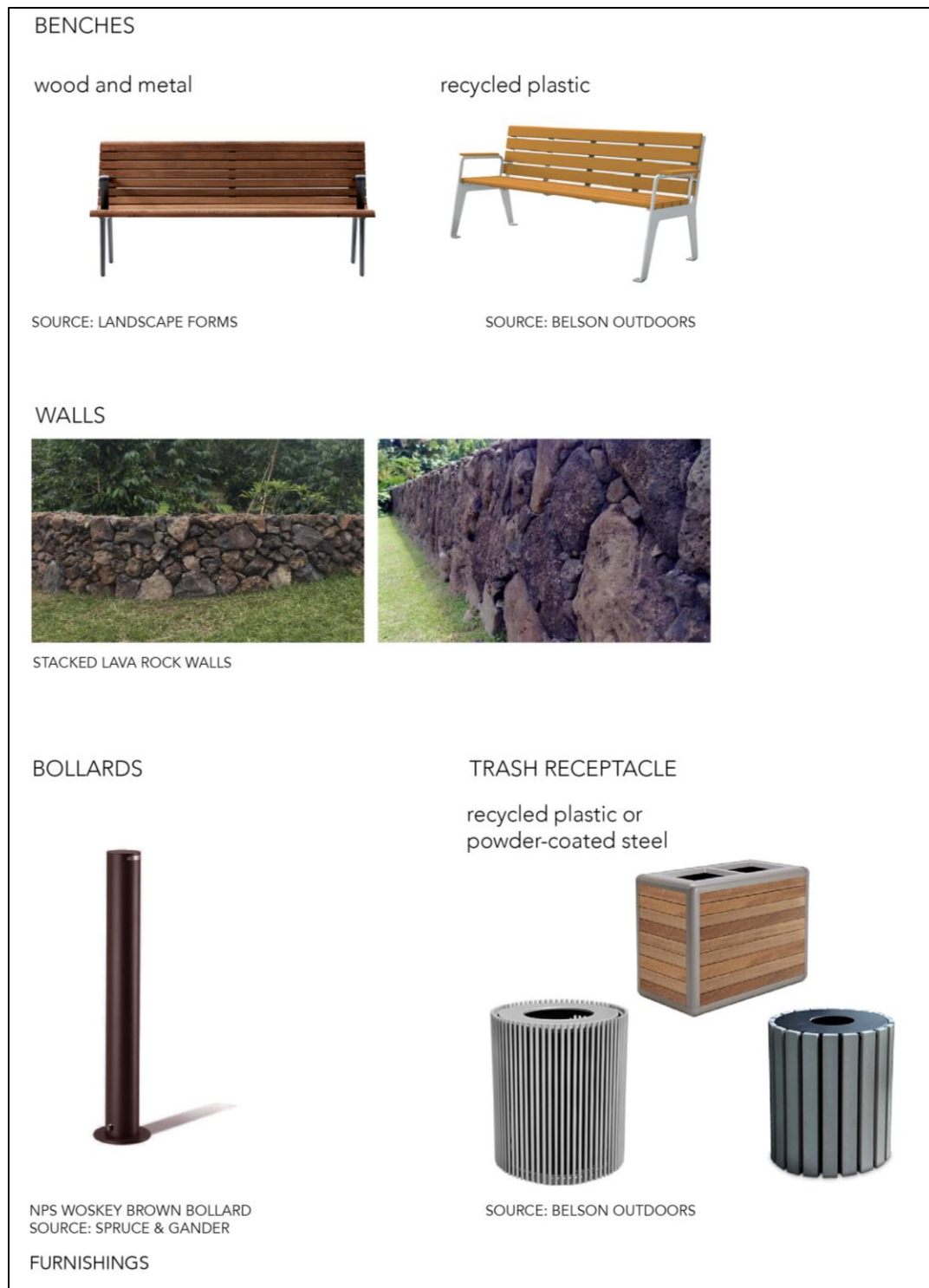


Figure 391. Illustrations of appropriate site furnishings, bollards, and walls. (Source: LSHLA)

- Consider adding a limited number of simple contemporary metal bike racks in association with existing parking areas within the Administrative Area and the group home complexes (Figure 392).

Single, ground mounted:



Figure 392. Illustrations of an appropriate bike rack style. (Source: Bola)

- Motion-activated lighting may be needed in the future at public paths and select parking areas. Lower bollard-style path lighting may be needed in the future as well. Ensure that lighting is dark sky compliant (Figure 393).



Figure 393. Illustrations of appropriate light fixtures. (Source: Millennium Lighting and Steel Lighting Company)

Shoreline Management

Like coastal locations around the planet, Hawai‘i, and Kalaupapa, are at risk of being affected by an anticipated 3 foot rise in sea level by 2100. The western side of the Kalaupapa Peninsula is at particular risk for coastal flooding from sea level rise as well as tsunamis. According to an analysis of the effect of a possible future 3 feet of sea level rise on Hawai‘i, the northwestern portions of the airport in particular, and much of the Kalaupapa Peninsula shoreline, including the West Coast Cemeteries would be susceptible to chronic

coastal flooding.⁴¹³ Flooding could be exacerbated as the frequency and severity of tropical storms, and the surges they bring, increase. With the coastal flooding and storm surges anticipated to occur in association with sea level rise the potential for coastal erosion to occur increases, putting Kalaupapa and its historic resources at risk. It will be important in the future to conduct a vulnerability assessment for the cultural landscape of the Kalaupapa and Kalawao Settlements as pertaining to the risks associated with changing climate and developing solutions through partnerships.

Several strategies are currently being explored around the world to combat coastal erosion. While beach nourishment and coastal armoring are perhaps the most familiar, these efforts are often expensive and may have limited effectiveness. Beach nourishment is only a temporary maintenance activity that does not address broader strategies. Coastal armoring in particular, through the creation of bulkheads, sea walls, and rip rap, is a controversial strategy.⁴¹⁴ Bulkheads, for example, are considered to substantial habitat impacts while also potentially increasing, rather than diminishing, erosion. The National Park Service's Coastal Adaptation Strategies Handbook offers a thorough discussion of many of these strategies, and their advantages and disadvantages for sites around the country.⁴¹⁵ These strategies can be considered on a spectrum from “green” or “soft” infrastructure, which is often primarily based on vegetation, to increasingly “hard” or “gray” infrastructure, which is usually comprised of stone and concrete.

Coastal restoration efforts must be considered as part of a more holistic effort to understand the impacts of environmental change on island environments. A “ridge-to-reef” strategy invites consideration of how coastal features exist in relation to other components of the landscape, such as offshore reefs and upland watersheds.⁴¹⁶ These efforts should be conducted in partnership with the broad range of stakeholders interested in the management of Hawaiian coastal resources, including the U.S. Army Corps of Engineers, National Park Service, state and local agencies, and the Hawaiian people, who have a long history of cultural knowledge and practice regarding shoreline management.

Guidelines

- Work with partners to complete a vulnerability assessment to identify all of the risks associated with changing climate on the cultural landscape of Kalaupapa Peninsula.
- Work with partners and experts to develop strategies to minimize or mitigate identified vulnerabilities.

-
413. Hawai'i Climate Change Mitigation and Adaptation Commission, *Hawai'i Sea Level Rise Vulnerability and Adaptation Report* (Prepared by Tetra Tech, Inc. and the State of Hawai'i Department of Land and Natural Resources, Office of Conservation and Coastal Lands, under the State of Hawai'i Department of Land and Natural Resources Contract No: 64064, 2017) Available at https://climateadaptation.hawaii.gov/wp-content/uploads/2017/12/SLR-Report_Dec2017.pdf (accessed August 1, 2019).
414. G.B. Griggs, “The Impacts of Coastal Armoring” in *Shore and Beach* 73(1, January 2005):13–22. https://www.researchgate.net/profile/Gary_Griggs/publication/285969581_The_impacts_of_coastal_armoring/links/568fe4b708aee91f69a13733/The-impacts-of-coastal-armoring.pdf (accessed August 1, 2019).
415. National Park Service, *Coastal Adaptation Strategies Handbook* (2016). Available at https://www.nps.gov/subjects/climatechange/upload/NRSS_CASH_Ch8_111016.pdf (accessed August 1, 2019).
416. University of Hawaii Economic Research Organization, “Linking land and sea to inform ahupua'a (ridge to reef) management in Hawai'i—NSF Coastal SEES” Available at <https://uhero.hawaii.edu/news/view/328> (accessed August 1, 2019).

coastal flooding.⁴¹³ Flooding could be exacerbated as the frequency and severity of tropical storms, and the surges they bring, increase. With the coastal flooding and storm surges anticipated to occur in association with sea level rise the potential for coastal erosion to occur increases, putting Kalaupapa and its historic resources at risk. It will be important in the future to conduct a vulnerability assessment for the cultural landscape of the Kalaupapa and Kalawao Settlements as pertaining to the risks associated with changing climate and developing solutions through partnerships.

Several strategies are currently being explored around the world to combat coastal erosion. While beach nourishment and coastal armoring are perhaps the most familiar, these efforts are often expensive and may have limited effectiveness. Beach nourishment is only a temporary maintenance activity that does not address broader strategies. Coastal armoring in particular, through the creation of bulkheads, sea walls, and rip rap, is a controversial strategy.⁴¹⁴ Bulkheads, for example, are considered to substantial habitat impacts while also potentially increasing, rather than diminishing, erosion. The National Park Service's Coastal Adaptation Strategies Handbook offers a thorough discussion of many of these strategies, and their advantages and disadvantages for sites around the country.⁴¹⁵ These strategies can be considered on a spectrum from “green” or “soft” infrastructure, which is often primarily based on vegetation, to increasingly “hard” or “gray” infrastructure, which is usually comprised of stone and concrete.

Coastal restoration efforts must be considered as part of a more holistic effort to understand the impacts of environmental change on island environments. A “ridge-to-reef” strategy invites consideration of how coastal features exist in relation to other components of the landscape, such as offshore reefs and upland watersheds.⁴¹⁶ These efforts should be conducted in partnership with the broad range of stakeholders interested in the management of Hawaiian coastal resources, including the U.S. Army Corps of Engineers, National Park Service, state and local agencies, and the Hawaiian people, who have a long history of cultural knowledge and practice regarding shoreline management.

Guidelines

- Work with partners to complete a vulnerability assessment to identify all of the risks associated with changing climate on the cultural landscape of Kalaupapa Peninsula.
- Work with partners and experts to develop strategies to minimize or mitigate identified vulnerabilities.

-
413. Hawai'i Climate Change Mitigation and Adaptation Commission, *Hawai'i Sea Level Rise Vulnerability and Adaptation Report* (Prepared by Tetra Tech, Inc. and the State of Hawai'i Department of Land and Natural Resources, Office of Conservation and Coastal Lands, under the State of Hawai'i Department of Land and Natural Resources Contract No: 64064, 2017) Available at https://climateadaptation.hawaii.gov/wp-content/uploads/2017/12/SLR-Report_Dec2017.pdf (accessed August 1, 2019).
414. G.B. Griggs, “The Impacts of Coastal Armoring” in *Shore and Beach* 73(1, January 2005):13–22. https://www.researchgate.net/profile/Gary_Griggs/publication/285969581_The_impacts_of_coastal_armoring/links/568fe4b708aee91f69a13733/The-impacts-of-coastal-armoring.pdf (accessed August 1, 2019).
415. National Park Service, *Coastal Adaptation Strategies Handbook* (2016). Available at https://www.nps.gov/subjects/climatechange/upload/NRSS_CASH_Ch8_111016.pdf (accessed August 1, 2019).
416. University of Hawaii Economic Research Organization, “Linking land and sea to inform ahupua'a (ridge to reef) management in Hawai'i—NSF Coastal SEES” Available at <https://uhero.hawaii.edu/news/view/328> (accessed August 1, 2019).

Bibliography

Publications

- n.a. "The Concept of the Ahupua'a on Molokai." N.p., n.a., n.d.
- n.a. "Mortarless Wall Repair and Reconstruction Kahaloko Cemetery." "Kana'ana Hou Church." "Mormon Church." "St. Francis Church." N.p.
- n.a. "Reverend Alice Kahokuoluna 'Mother Pastor' at Kalaupapa." In *The Friend* 11 (1, November 1939).
- n.a. "Hawaiian Methods of Interment." In *Journal of William Ellis: A Narrative of a Tour through Hawaii in 1823* (1825).
- n.a. "The Honolulu Almanac and Directory." *Pacific Commercial Advertiser Steam Print*. Honolulu, 1887.
- Alexander, Dean. "Managing Historic Resources in an Evolving Hawaiian Community." *Cultural Resources Management* 19, no. 8 (1996): 40–43.
- Apple, Russell A. and Edmund J. Ladd. National Register of Historic Places nomination: "Kalaupapa Leprosy Settlement." Honolulu, Hawaii: Office of State Director, September 5, 1975. NR #76002415.
- Breitha, Olivia Robello. *Olivia: My Life of Exile in Kalaupapa*. Honolulu: Arizona Memorial Museum Association, 1988.
- Brown, Sharon A., Laura Schuster, Cathy Gilbert, Robert Hommon, Bob Page, and David Uschold. Draft "Cultural Landscape Inventory, Kalaupapa National Historical Park." National Park Service, 1997.
- Cahill, Emmett. *Yesterday at Kalaupapa: A Saga of Pain and Joy*. Honolulu, Hawaii: Editions Limited, 1990.
- Carper, Robert L. with H. Thomas McGrath, Paul C. Cloyd, Linda W. Greene, Catherine H. Blee, and Gary F. Somers. *Historic Structure Report: St. Philomena Catholic Church (Father Damien's Church), Kalaupapa National Historical Park, Moloka'i, Hawai'i*. Denver Service Center, Alaska/Pacific Northwest/Western Team, Branch of Design, National Park Service, Department of the Interior, January 1985.
- Cerny, Jennifer L. "Social Value: An Essential Step Toward Cultural Landscape Understanding; Kalaupapa National Historical Park Molokai, Hawaii." Minor Thesis, Master of Cultural Heritage Studies Program. Townsville, Queensland (Australia): James Cook University, December 2001.
- Chapman, William. *Moloka'i Light Station Historic Resources Report*. Kalaupapa National Historical Park: National Park Service, 2001.
- Chase, Lane. "Mormons and Lepers: The Saints at Kalaupapa." In *Mormon Pacific Historical Society* 13 (1):article 5.

- Clague, D. A., C. Dao-Gong, R. Murnane, M. H. Beeson, M. A. Lanphere, G. B. Dalrymple, W. Friesen, and R. T. Holcomb. "Age and Petrology of the Kalaupapa Basalt, Molokai, Hawai'i." In *Pacific Science* 36, no. 4: 411–420.
- Curtis, Dorothe B. *Historic Pali Trails of Kalaupapa National Historical Park*. Honolulu: National Park Service, U.S. Department of the Interior, 1991.
- Department of Hawaiian Homelands. *Moloka'i Inland Plan* (2005).
- Flexner, James Lindsey. "After the Missionaries: Historical Archaeology and Traditional Religious Sites in the Hawaiian Islands." In *The Journal of the Polynesian Society* 125 (3):307–332.
- _____. "An Institution that was a Village: Archaeology and Social Life in the Hansen's Disease Settlement at Kalawao, Moloka'i Hawai'i." *International Journal of Historical Archaeology* 16 (1):135–163.
- _____. "Archaeology of the Recent Past at Kalawao: Landscape, Place, and Power in a Hawaiian Hansen's Disease Settlement." Ph.D. diss.: University of California, Berkeley, 2010.
- Greene, Linda W. *Exile in Paradise: The Isolation of Hawai'i's Leprosy Victims and Development of Kalaupapa Settlement, 1865 to the Present*. Denver Service Center: U.S. Department of Interior, National Park Service, Branch of Planning, Alaska/Pacific Northwest/Western Team, 1985.
- Griggs, G.B. "The Impacts of Coastal Armoring." In *Shore and Beach* 73(1, January 2005):13–22. Available at https://www.researchgate.net/profile/Gary_Griggs/publication/285969581_The_impacts_of_coastal_armoring/links/568fe4b708aee91f69a13733/The-impacts-of-coastal-armoring.pdf (accessed August 1, 2019).
- Gugelyk, Ted and Milton Bloombaum. *The Separating Sickness: Ma'i Ho'oka'awale, Interviews with Exiled Leprosy Patients at Kalaupapa, Hawaii* fifth edition. Sarasota FL: First Edition Design Publishing, Inc., 2013.
- Hawai'i Climate Change Mitigation and Adaptation Commission. *Hawai'i Sea Level Rise Vulnerability and Adaptation Report*. Prepared by Tetra Tech, Inc. and the State of Hawai'i Department of Land and Natural Resources, Office of Conservation and Coastal Lands, under the State of Hawai'i Department of Land and Natural Resources Contract No: 64064, 2017. Available at https://climateadaptation.hawaii.gov/wpcontent/uploads/2017/12/SLR-Report_Dec2017.pdf (accessed August 1, 2019).
- Hussein, Susan. "'Super corals' give glimmer of hope for world's dying reefs." Available at <https://phys.org/news/2019-05-super-corals-glimmer-world-dying.html> (accessed August 1, 2019).
- Inglis, Kerri A. *Ma'i Lepera; Disease and Displacement in Nineteenth-Century Hawai'i*. Honolulu: University of Hawai'i Press, 2013.
- Johnson, Adam, Mary Slater, Laura Vater-Schuster, and Mary Jane Naone. "The 2006 Earthquake Project at Pu'ukoholā Heiau National Historic Site, Hawai'i."
- Johnson, Christopher E. Draft National Historic Landmark nomination update "Kalaupapa Leprosy Settlement Historic District." National Park Service, August 7, 2017.
- Jury, Christopher P. and Robert J. Toonen. "Adaptive responses and local stressor resilience in warmer, more acidic oceans." In *Proceedings of the Royal Society B* (May 15, 2019). Available at <https://royalsocietypublishing.org/doi/10.1098/rspb.2019.0614> (accessed August 1, 2019).

- Juvik, Sonia P. *Kalaupapa Landscape: An Ethnographic Study*. United States Department of the Interior, National Park Service, Pacific West Region Social Science Series, Publication Number 2007-03, 2007.
- _____. “Doctoral Dissertation Research: The Development of Irrigated Agriculture in Wailau Valley, Moloka‘i Hawai‘i.” Undated.
- Kamakau, Samuel. *Ruling Chiefs of Hawai‘i*. Honolulu, Hawaii: Kamehameha Schools Press, 1992.
- Kamakau, Samuel. *The Works of the People of Old, Na Hana a ka Po‘e Kahiko*. Honolulu, Hawai‘i: Bishop Museum Press, 1976.
- Ka‘Ohana O‘Kalaupapa. “The Kalaupapa Names Project.” Available at <http://kalaupapaohana.org/names-project.html> (accessed August 15, 2018).
- Kennedy/Jenks Consultants, MKE Associates, LLC, SPCC & Consulting. *Structural Investigation Repair the Failing Surface of the Lighthouse, Molokai Light Station*. National Park Service, March 6, 2017.
- Kepler, Angela Kay. *Hawaiian Heritage Plants*. Honolulu: University of Hawai‘i Press, 1998.
- Kirch, Patrick V. *From the Cliffs of Keolewa’ to the Sea of Papaloa’: an Archeological Reconnaissance of Portions of the Kalaupapa National Historical Park, Moloka‘i, Hawai‘ian Islands*. Berkeley, California: Archeological Research Facility, University of California, 2002.
- Korn, Alfons L. *News from Molokai: Letters between Peter Kaeo and Queen Emma, 1873–1876*. Honolulu: University of Hawai‘i Press, 1976.
- Lane, Chase D. “Mormons and Lepers: The Saints at Kalaupapa.” *Mormon Pacific Historical Society* 13, no. 1 (1992), 16.
- Langlas, Charles. *Final Report on the Kalaupapa Ethnographic Project*. N.p., January 2007.
- Langlas, Charles. “Final Report on the Kalaupapa Ethnographic Project. January, 2007.
- Langlas, Charles with Ka‘ohulani McGuire and Sonia Juvik. *Kalaupapa 2002–2005: A Summary Report of the Kalaupapa Ethnographic Project*. National Park Service, 2008.
- Law, Anwei Skinsnes. *Kalaupapa: A Collective Memory (Ka Hokuwelowelo)*. Honolulu: University of Hawai‘i Press, 2012.
- “Love Never Faileth,” *Ohana Conections: Family Stories*, http://www.kalaupapaohana.org/Newsletters/news_pg6.html (accessed August 2019).
- Mason Architects, Inc. Determination of Eligibility “Kalaupapa National Historical Park Electrical System.” National Park Service, April 2018.
- McCoy, Mark D. “The Development of the Kalaupapa Field System, Moloka‘i Island, Hawai‘i.” In *The Journal of the Polynesian Society* 114 (4):339–358.
- _____. “Hawaiian Limpet Harvesting in Historical Perspective: A Review of Modern and Archaeological Data on *Cellana* spp. from the Kalaupapa Peninsula, Moloka‘i Island.” In *Pacific Science* 62 (1):21–39.
- _____. “Landscape, Social Memory, and Society: an Ethnohistoric-Archaeological Study of Three Hawaiian Communities.” In *ProQuest*, 2006.
- _____. *The Lands of Hina: An Archaeological Overview and Assessment of Kalaupapa National Historical Park, Moloka‘i*, Technical Report 135, edited by David Duffy. Honolulu: Pacific Cooperative Studies Unit, University of Hawai‘i at Mānoa, 2005.

- _____. “Wind Erosion and Intensive Prehistoric Agriculture: A Case Study from the Kalaupapa Field System, Moloka‘i Island, Hawai‘i. In *Geoarchaeology: An International Journal* 22 (5):511–532.
- Miller, Richard. *Gravemarkers at Kalaupapa; A Study of Two Material Types; Determining Causes of Damage*. Savannah, Georgia: Savannah College of Art and Design, Conservation Science and Technology, Fall 2012.
- _____. *A Study of the Stone Materials Used to Mark Kalaupapa Burials from the Time of Exile to 1930*. Fall 2010.
- _____. “Living with the Dead: A Socio-Technical Look at Gravemarker Preservation at Kalaupapa.” PowerPoint presentation, Winter 2017.
- Miller, Richard and William Chapman. “A Study of the Stone Materials Used to Mark Kalaupapa Burials from the Time of Exile to 1930.” Fall 2010.
- Moblo, Pennie. “Blessed Damien of Moloka‘i: The Critical Analysis of Contemporary Myth,” *Ethnohistory* 44, no. 4 (Autumn, 1997): 691–791.
- Monson, Valerie. “A Word with God Brings Healing, Monument for Kalaupapa.” *The Maui News*, April 7, 1996.
- Motooka et al. *Weeds of Hawai‘i’s Pastures and Natural Areas; An Identification and Management Guide*. Mānoa, Hawai‘i: University of Hawai‘i, College of Tropical Agriculture and Human Resources, 2003.
- Moran, Michelle. *Colonizing Leprosy: Imperialism and the Politics of Public Health in the United States*. Chapel Hill: The University of North Carolina Press, 2007.
- National Park Service. *Airport Road Survey, Kalaupapa National Historical Park, Molokai (including Archeological Monitoring in Kalaupapa Settlement, 1991*. Honolulu, Hawaii: Pacific Area Office, 1992.
- _____. National Park Service, “Asian American and Pacific Islander Heritage.” Available at <https://www.nps.gov/subjects/aapiheritage/index.htm> (accessed August 2019).
- _____. *Biennial Report of the President of the Board of Health to the Legislature of the Hawaiian Kingdom, Session of 1888*. Honolulu: Gazette Publishing Company, 1888.
- _____. *Coastal Adaptation Strategies Handbook*. 2016. Available at https://www.nps.gov/subjects/climatechange/upload/NRSS_CASH_Chp8_111016.pdf (accessed August 1, 2019).
- _____. *Construct Memorial to Commemorate Kalaupapa Patients Environmental Assessment*. November 23, 2010.
- _____. *Cultural Landscapes Inventory: Kalaupapa and Kalawao Settlements, Kalaupapa National Historical Park*. San Francisco: Pacific West Region Cultural Resources Program, 2011.
- _____. *Cultural Landscapes Inventory: Moloka‘i Light Station, Kalaupapa National Historical Park*. San Francisco: Pacific West Region Cultural Resources Program, 2012.
- _____. *Cultural Resources Management Plan, an Addendum to the General Management Plan, Kalaupapa National Historical Park*. 1984.
- _____. *Foundation Document, Kalaupapa National Historical Park*. National Park Service, August 2017.

- _____. *Historic Structures Record of Treatment*, KALA PKG. 211, PMIS # 004802, Kalaupapa National Historical Park, Island of Moloka‘i, Kalaupapa, Hawai‘i. Frederick, MD: Historic Preservation Training Center, Department of Interior, National Park Service, 2003–2007.
- _____. *Historic Structures Record of Treatment*, KALA PKG. 212, Kalaupapa National Historical Park, Kalaupapa, Moloka‘i, Hawai‘i. Frederick, MD: Historic Preservation Training Center, Department of Interior, National Park Service, 2005–2010.
- _____. *Historic Structures Record of Treatment: Stabilization of National Historic Landmark Garages*, PMIS #100573, FY06, Kalaupapa National Historical Park, Kalaupapa, Hawai‘i. Frederick, MD: Historic Preservation Training Center, Department of Interior, National Park Service, 2006.
- _____. *Historic Structures Record of Treatment: Repair Historic Rock Walls St. Philomena Church & Cemetery*, PMIS #113027, FY06, Kalaupapa National Historical Park, Kalaupapa, Hawaii. Frederick, MD: Historic Preservation Training Center, Department of Interior, National Park Service, 2006.
- _____. *Draft Kalaupapa National Historical Park General Management Plan and Environmental Assessment*. Pacific West Region, Park Planning and Environmental Compliance, November 2018.
- _____. “Kalaupapa National Historical Park Hawai‘i.” Available at <https://www.nps.gov/kala/planyourvisit/index.htm> (accessed May 14, 2019).
- _____. “Kalaupapa National Historical Park Hawai‘i: Cemeteries.” Available at <https://www.nps.gov/kala/learn/historyculture/cemtrs.htm> (accessed June 26, 2019).
- _____. *Long-Range Interpretive Plan Kalaupapa National Historical Park*. Kalaupapa, Hawaii: Kalaupapa National Historical Park, and Interpretive Planning, Harpers Ferry Center, September 1999.
- _____. *National Register Bulletin: How to Prepare National Historic Landmark Nominations*.
- _____. National Register of Historic Places Inventory – Nomination Form: “U.S. Coast Guard Molokai Light.” NR #82001724. Prepared by 14th Coast Guard District, 1982.
- _____. Regional Civil Engineer, Pacific West Region. Trip Report—Kalaupapa National Historical Park. May 8–10, 2018.
- _____. Resource Management Plan, Kalaupapa National Historical Park, Kalaupapa, Hawaii. 1994.
- _____. Statement for Management, Kalaupapa National Historic Park. 1987.
- Neller, Earl (Buddy). “Home gardens and cultural resources management in Hawaii.” Unpublished article. Urbana-Champaign: Illinois Transportation Archaeological Research Program, Department of Anthropology, University of Illinois, 1999.
- Nordstrom, Karl F. “Living with shore protection structures: A review.” In *Estuarine, Coastal and Shelf Science* 150, Part A (October 5, 2014):11–23. Available at <https://www.sciencedirect.com/science/article/pii/S0272771413004861> (accessed August 1, 2019).
- Okubo, Chris H. “Geologic Map of Kalaupapa Peninsula, Moloka‘i, Hawai‘i, USA. In *Journal of Maps* 8 (3), September 2012.
- Parsons, “Site Inspection Report Makanalua Bombing Range, Island of Molokai, Hawaii.” Honolulu, Hawai‘i: U.S. Army Corps of Engineers, Fort Shafter, 2008.
- Rechtman, R.B., J.D. Henry, and A. B. Corbin. *Archaeological Investigations at Kauhakō Crater*, Kalaupapa National Historical Park. 2001.

- Reith, Timothy and M.J. Tomonari-Tuggle. *FINAL Anything but Hardscrabble: An Archeological Inventory Survey of a Colluvial Slope Agricultural Complex; Kalaupapa National Historical Park, Kalaupapa Ahupuaʻa, Koʻolua District, Molokaʻi*. Makawao, Hawaiʻi: National Park Service, January 2013.
- Remy, M. *Jules L'île de Molokai avant La Léproserie, Journal de M. Jules Remy Naturaliste voyageur du Museum* “The Island of Molokaʻi Before Leprosy, 1893” (entries from 1854).
- Richardson, Janine M. “‘None of Them Came for Me:’ The Kapiʻolani Home for Girls, 1885–1938.” *The Hawaiian Journal of History* 42 (2008): 1–26.
- Somers, G.F. *Kalaupapa: More than a Leprosy Settlement: Archeology at Kalaupapa National Historical Park*. Tucson, Arizona: Western Archeological and Conservation Center Publications in Archeology, No. 30, 1985.
- Soulliere, Laura E. and Henry G. Law. *Architectural Evaluation, Kalaupapa –Hawaii*. National Park Service, Western Region, July 1979.
- Spencer Architects, Inc. *Historic Structures Report Bishop Home Convent, Chapel, and Cottages, AJA Hall and Outbuilding, Visitor Quarters, Staff Row Dormitory*. Honolulu, Hawaii: Phase One September 22, 2004.
- State of Hawaiʻi State Historic Preservation. “Summary of Hawaiʻi Burial Laws.” Available at <https://dlnr.hawaii.gov/shpd/about/branches/ibc/hawaiian-burials/> (accessed August 6, 2019).
- State of Hawaiʻi Department of Land and Natural Resources, Land Division, Coastal Lands Program. *Hawaii Coastal Erosion Management Plan*. Undated. Available at <http://climateadaptation.hawaii.gov/wpcontent/uploads/2015/07/COEMAP1.pdf> (accessed August 1, 2019).
- Stein, Erika. *Emergency Trail Repair: A Preliminary Cultural Resource Impact Assessment, Kalaupapa Trail, Kalaupapa Ahupuaʻa, Koʻolau District, Island of Molokaʻi, Kalaupapa National Historical Park*. National Park Service, 2008.
- Stein, Erika. *Layered Landscapes: Archaeological Investigations and Identification Report Associated with the Kalaupapa Memorial Project (MEMO)*; Kalawao Ahupuaʻa, Kalawao County, Island of Molokai, National Park Service. 2010.
- Summers, Catherine. *Molokai: A Site Survey*. Honolulu, Hawaiʻi: Bishop Museum Press, 1971.
- Thayer, Matthew. “Historic Light: Coast Guard Delivers Kalaupapa Lens to Lahina.” *The Maui News*, July 17, 1986.
- University of Hawaii Economic Research Organization, “Linking land and sea to inform ahupuaʻa (ridge to reef) management in Hawaiʻi—NSF Coastal SEES” <https://uhero.hawaii.edu/news/view/328> (accessed August 1, 2019).
- Wells, S.J. and R.J. Hommon. *An Archaeological Survey Plan for the Pacific Islands Cluster, Pacific West Region, National Park Service, NPS Systemwide Archaeological Inventory Program, Publications in Anthropology* 76. Tucson, Arizona: Western Archaeological and Conservation Center, National Park Service, 2000.
- Woods, Fred E. “A Most Influential Mormon Islander: Jonathan Hawaiʻi Napela.” *Hawaiian Journal of History* 42 (2008): 135–157.
- _____. *Kalaupapa: The Mormon Experienced in an Exiled Community*. Provo, Utah: Brigham Young University, 2017.

_____. *Reflections of Kalaupapa*. La‘ie, Hawai‘i: Polynesian Cultural Center, 2017.

Drawings

n.a. “Renovation Staff Kitchen Kalaupapa Settlement.” Drawing No. 491/60915, April 1965. 1 sheet.

Board of Hospitals and Settlement, Territory of Hawaii. “Plot Plan – A McVeigh Home, Kalaupapa, Molokai.” June, 1938.

_____. “Plot Plan – A Staff Row, Kalaupapa, Molokai.” June, 1938; May, 1941.

_____. “Plot Plan – A Calvinist Mission, Kalaupapa, Molokai.” June, 1938.

Department of Public Works, Territory of Hawaii. “Roads & Utilities Kalaupapa, Molokai, McVeigh Home.” N.d. Sheet 5 of 5.

Department of Transportation, State of Hawaii, Airports Division. “Various Repairs and Improvements to Kalaupapa Airport, Airport Access Road, Pier, and Local Streets Kalaupapa, Molokai, Hawaii, Project No. AM5031-11.” 1991. NPS Drawing No. 491/41900. 43 sheets.

National Park Service. “New Kalaupapa Trial [sic] Bridge.” Drawing No. 491/106053A, Sept. 2010. 16 sheets.

_____. “Waihanua Bridge Repairs.” Drawing No. 491/80035, 2009. 9 sheets.

National Park Service. Bishop Home wall repair records. Kalaupapa archives. Undated.

Robert M. Kaya. “Seaside Pavilion for Kalaupapa Lions Club at Kalaupapa, Molokai, Hawaii.” Drawing No. 491/60936, April, 1964. 1 sheet.

Tani Photogrammetric Service. “Settlement Area & Landing Strip Topographic Map Kalaupapa National Historic Park Western Region.” National Park Service, December 1983.

Photograph Collections

Boland.

Bruce Doneux. Reference KALA-00372.

Frank Mark Album. Reference KALA-00366.

Helen Keao. Reference KALA-00373.

Kalaupapa Historical Society. Reference KALA-00251.

Kenso Seki.

Potter Collection.

U.S.G.S. Aerial Photography.