



View of Golden Gate Dairy Looking South

(NPS Photo 2012)



Golden Gate Dairy (Lopes Brothers Dairy, Ranch M)

Cultural Resource Reports and Site Treatments: Cultural Landscape Report Historic Structure Reports Archeological Assessment and Treatment Report

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United States National Park Service,
Golden Gate National Recreation Area
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Introduction

How to Use This Document

This Cultural Resource Report combines historic structures reports, a cultural landscape report, and an archeological assessment for the Golden Gate Dairy (the historic Lopes Brothers Dairy or Ranch M) under one cover for the convenience of the user. Administrative data, contextual information and site history common to all these reports are placed into one common front section in order to avoid repetition. This document is intended to guide the Golden Gate National Recreation Area (GGNRA) and its tenants to manage the property to preserve its essential characteristics, conform to relevant planning documents, comply with the National Historic Preservation Act, and provide interpretive information for the benefit of park users. Historic structure reports are not yet prepared for structures that are not presently expected to be treated beyond basic stabilization measures. The precise location of sensitive archeological sites may be redacted from public versions of this document in accordance with National Park Service (NPS) policy and the provisions of the Archeological Resources Protection Act.

Preparation

The United States National Park Service, Golden Gate National Recreation Area, Division of Cultural Resources and Museum Management (CRMM) is the agency responsible for preparation of this report. Abby sue Fisher, Chief, and Stephen Haller, Branch Chief and Park Historian, directed the preparation of the report. Leo Barker, Archeologist and Peter Gavette, Archeologist, prepared the Archeological Assessment and Treatment Report; Amy Hoke, Historical Landscape Architect prepared the Cultural Landscape Report and Jason Hagin, Historical Architect prepared the Historic Structure Reports and created the architectural drawings. The report was arranged for publication by Jason Hagin and Stephen Haller.

Relevant Documents

The Golden Gate Dairy an historic ranch in Muir Beach in southern Marin County, California; part of the Golden Gate National Recreation Area. The *General Management Plan/Environmental Analysis* (GMP, September 1980) is the main planning document for the Golden Gate National Recreation Area. The GGNRA is currently updating the GMP and *Draft General Management Plan* has already received public comment. Other relevant documents that relate to the planning of the Golden Gate Dairy site include the *Incomplete Dairy Ranching History and Outline of Land Use in the Marin Headlands*, by Darcy Luce of the NPS, the 2001 *Golden Gate Dairy Ranch House: Physical History Report, Golden Gate Dairy, Muir Beach, California*, by Kristin Baron of the NPS, and the 2003 *Golden Gate Dairy Preservation Guide* by Jane Lehman of the NPS. More broadly based research studies that examine regional ranching are also relevant, of which

the revised 1994 *Ranching on the Point Reyes Peninsula: A History of the Dairy and Beef Ranches within the Point Reyes National Seashore* Historic Resource Study and the 1995 *A Good Life: Dairy Farming in the Olema Valley* Historic Resource Study, both by Dewey Livingston of the NPS, deal with closely related subjects. At the time of this writing, a 2006 *National Register of Historic Places Nomination Form* for the ranch, by Lissa McKee working with the NPS, which was submitted to the State of California Office of Historic Preservation, had been reviewed and a *Determination of Eligibility* to the National Register of Historic Places for the historic dairy farm has been issued. With the property determined eligible, it becomes subject to management via National Park Service Management Policies and *NPS 28: Cultural Resource Management Guidelines*. This Report is written in response to the 2012 *Marin Equestrian Stables Plan and Environmental Analysis*, which used “Choosing By Advantages” to establish an adaptive reuse concept for the Golden Gate Dairy site, which is the action alternative. At the time of this writing, a Finding of No Significant Impact and Errata for the *Marin Equestrian Stables Plan and Environmental Assessment* is being finalized in alignment with the new park *General Management Plan* (GMP), currently in review of public comments stage, which will be approved in the near future. It is intended that project treatments that are informed by the analysis and follow the guidelines in this document will result in no adverse effect to historic properties.

Executive Summary

The Golden Gate Dairy is an historic ranch in Muir Beach in southern Marin County, California, which has been determined eligible to be listed on the National Register of Historic Places. The site is significant on a local level as an example of a rare surviving Azorean Portuguese dairy ranch in Marin County, California.

First owner of the property in the 1830s was William Richardson who owned almost 20,000 acres of coastal lands he named El Rancho Del Sausalito. In 1858, ownership changed to Samuel Throckmorton and later to the Tamalpais Land and Water Company (TL&W), in 1889. By 1898, ranch land parcels designated alphabetically on TL&W Company maps were sold, largely to the Azorean Portuguese residents who had been tenant-farming there already. The Golden Gate Dairy was known as Ranch M on the TL&W Company maps, and was first purchased by Azorean Portuguese immigrants in 1898. The early ranch buildings, including the extant creamery and ranch house, were built soon after possession of the land was secured. The ownership of the dairy ranch changed hands over the years between 1898 and 1953, but was owned consecutively by Portuguese immigrant farmers who operated a dairy there. By the early 1960s, the dairy business had been abandoned and the ranch site, particularly the Sanitary Barn and Milking Barn began being used to stable horses. In 1972 the Muir Beach Volunteer Fire Department (MBVFD) remodeled the Creamery building into a garage and Fire Station. The NPS began stewardship of the site in 1974. At that time Richard and Evelyn Purvier were the tenants and had been operating a horse stables on the property since around 1965. The Purviers lived in the Sanitary Barn building at first since the house was at that time occupied by the Caddels who owned the property. The present partner group, Ocean

Riders of Marin developed out of the Purvier's operation and shares the site and Milking Barn with the Muir Beach Volunteer Fire Department (MBVFD).¹

The NPS has prepared this Report both to document and to provide Rehabilitation treatment recommendations for the site. Secondary historical research has been conducted and historic photographs have been analyzed to prepare the building's overall developmental history. Informal interviews of past and current tenants and NPS staff provided the history of the building's evolution just before and during the years of NPS stewardship. There is a lack of resource documentation needed to support adaptive reuse concepts for the historic site that are included in the *Marin Equestrian Stables Plan and Environmental Assessment*. The work of this report includes work to create a Cultural Landscape Report and Archeological Overview and Assessment for site resources. The Sanitary Barn building is currently used by the Ocean Riders of Marin, which has occupied the building under various names since 1962. Ocean Riders is currently under a Special Use Permit with the NPS for continued use and maintenance of the building and the equestrian facilities on the site. As a working document, this Report should address any proposed alterations as Rehabilitation concepts, evaluate their effectiveness at meeting the equestrian program needs without adverse effect on the buildings and site, and where applicable, make recommendations for Rehabilitation of the buildings and site features that are appropriate and in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties..

The historic dairy ranch suffers from deferred maintenance. At the rear of the Sanitary Barn building, attached to the north wall at the east end is a ramshackle "outhouse" tank toilet addition that is the only toilet facility available. Equestrian use of the site has brought to light conflicting and competitive approaches to management of cultural and natural resources. Also the adjacent Green Gulch tributary drainage ditch, an element of a much larger Redwood Creek Restoration project, is adjacent to the horse paddocks. At present, though thoroughly rusticated and aesthetically sympathetic to the landscape, the site is not easily recognized as a dairy ranch, save for the sign on the former Milking Barn that says "Golden Gate Dairy." The Sanitary Barn itself bears the sign of luck in the form of an upward turned horseshoe above an entry door on the front of building.

Statement of Significance

The Golden Gate Dairy is significant on a local level as a rare surviving Azorean Portuguese dairy ranch in Marin County, California. The period of significance is 1898-1953; the years that the ranch was owned by a series of Portuguese immigrants who operated a dairy there.

Administrative Data

Building name(s): Main House (Ranch House), Creamery (Garage), Sanitary Barn (Feed Barn), Hay Barn (Milking Barn), Dairy Shed

Date Eligible for National Register: 4 March, 2008

Location: Shoreline Highway/CA Route 1, Muir Beach, Marin County, California 94965

Date Built: ca. 1899 - 1942

Use: Historic use as a dairy ranch, presently horse boarding.

Plan Type: Loose campus

Acreage of ranch site: 191.86

Property Owner: United States National Park Service, Golden Gate National Recreation Area, Fort Mason Building 201, San Francisco, California 94123

Proposed Preservation Treatment of Buildings: Rehabilitation for adaptive reuse as equestrian boarding and riding program offices and stables.

Proposed Preservation Treatment of Landscape: Preservation and rehabilitation in association with the adaptive use of the site for equestrian operations and related NPS use.

NOTE: Future landscape and building stabilization efforts and preservation treatment actions shall be summarized and refer to this report as they occur, citing it where applicable. In no case shall construction occur without notification of the responsible agency. The Sanitary Barn building with adjacent and related buildings and features are protected by the Archaeological Resources Protection Act of 1979, as amended, and preservation actions are subject to review for compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.



View of Creamery and Sanitary Barn ca. 1965

Photo: Courtesy of Maureen Pinto

Historical Background and Context

The following was adapted, and greatly condensed, from Lissa McKee's 2006 *NRHP Nomination Form*:

Few records detail ranching history in western Marin County. The tenant dairy ranches in western Marin were largely invisible in public records during their tenancy periods. The tenant ranchers were Azorean Portuguese who settled the area in the 1880s. The area was part of the remnant of El Rancho Del Sausalito that was subdivided in 1898 by the Tamalpais Land and Water Company (TL&W). Very soon after subdivision, Portuguese immigrant Constantino Bello purchased 3 adjacent TL&W parcels at the mouth of Frank Valley: Ranch M (194.96 acres), Ranch K (161.4 acres), and Ranch T (132.6 acres). The Golden Gate Dairy was originally Bello's Ranch M property.

Bello was likely a partner of a tenant dairy company in the area. The land usage indicated on the TL&W subdivision map implies that ranching in the area prior to the subdivision tenant system took advantage of the natural terrain. In 1899, Bello (or his tenants) built ranch buildings for a dairy operation in an area sheltered between two rocky outcroppings on the north side of the road to Bolinas near the conjunction of Green Gulch and Frank Valley. The farm included a wood-frame two-story house with a gabled roof, a wood-frame one-story creamery to the rear of the house, a hay barn and a small shed. Since the creamery was so closely modeled on the main house architecture, it is possible that it could have functioned as a bunkhouse for hired help in the early years.

It is likely that Bello and a small 'family' of relatives and associates pooled their labor to operate the dairy and produced milk and cream for Sausalito, Mill Valley and San Francisco markets. It was not likely that cheese or butter was produced for sale, and the typical work day was likely similar to ranches throughout the California coast. The work day began as early as 3 A.M. as laborers drove the herd in from the surrounding pastures to be milked in or around the ranch corral. Each milker had a set number of cows to be milked. The milkers wore leather belts attached to milking stools, worked their way through their assigned cows using milk pails that held from 3-1/2 gallons to 4-1/2 gallons. When the pails were full they were taken to the creamery and poured into large containers to cool. The men then ate breakfast at the main house around 7 A.M. and dinner at noon. The process was repeated around 4 P.M. In between these activities the milk pails, pans and other equipment was washed, the cows were fed, repairs were made around the ranch, the barn was cleaned, the water troughs cleaned, the springs and fields were checked and cattle, generally the dry cows awaiting their next calf, were moved around by ranch hands on horseback.

Transport of milk to market was likely by schooner, which collected milk from Bolinas and points east along the coast. As cars and trucks became commonplace, milk was likely hauled over the ridge to the north to a transfer point on the highway along the Richardson Bay shoreline or to the Manzanita railroad station. Later, milk trucks collected milk from the ranches.

Seasonal labor was common to ranches in the area, and it was not uncommon for some laborers to become partners in dairy operations. In 1906, Constantino Bello granted an undivided one quarter interest in Ranch M each to Manuel Mattos, John Bello and Joseph Eugenio as well as one quarter interest to each of them in the personal property used in the dairy business known under the firm name of C. Bello and Company.²

The ranch most likely continued to operate during the next fifteen years by these and other Portuguese tenants. It was functionally compact with the dairy cows moving in and out from the various pastures, up the hill or across the highway. In 1923, Ranch T (across the road) was subdivided for vacation homes. Both the community and beach, first referred to as Bello Beach, were renamed Muir Beach, in honor of Muir Woods National Monument at the head of Frank Valley.

In 1929, Marin County Assessor's files indicate that Ranch M included 28'-0"x40'-0" (plus rear additions and a basement) thirty-year-old main house. To its rear was located a 16'-0"x14'-0" structure. To the right of that structure there was an open shed 14'-0"x16'-0" and somewhat to the right and front of that building there was a 24'-0"x12'-0" building. The property also included a 30'-0"x24'-0" milk house (Creamery Building) with an 8'-0"x16'-0" addition, a 22'-0"x22'-0" calf shed and a 90'-0"x40'-0" milking barn, also estimated to be some thirty years of age. The property also included extensive fencing as well as the cypress windbreaks that sheltered the compound on the north, west and east.

In 1929, the milking/feed barn burned and was replaced. It is unknown if it included a concrete floor, if any sanitary structures existed at that time, or if any mechanization at the dairy occurred³. By 1936, Bello was aging and around 1936 he retired and leased the ranch to M.C.C. Lemos, who operated a small dairy with 49 milking cows, 14 two-year olds, 5 one-year olds and 5 calves, which were mortgaged to Bello⁴. A dairy this size would have produced roughly 120 gallons of milk per day. It is presumed by this time the ranch was known as the "Golden Gate Dairy"⁵. The Lopes family rented the ranch starting in 1941 from Bello's nephew Joe Azevedo. Bello died in 1941.

Bello's nieces and nephews Joseph (Joe) and Manuel Azevedo, Helen A. Brown, Minnie Morrell, Mary A. Costello, and Louise E. Moran sold the ranch, presumably already named "Golden Gate Dairy" to Michael, Manuel E. and Mary Lopes in 1942.⁶ As property owners, it is presumed that the Lopes family mechanized since they upgraded to a Grade A dairy and increased their herd from 30 milk cows to 80 (a dairy this size would have produced roughly 200 gallons of milk per day).⁷ The actual construction date of the Sanitary Barn building is unknown, but it is presumed to have occurred during this period; the growth of local industry being reflected on the property. The Lopes Brothers Dairy was part of the Marin Dairymen's Milk Company, Ltd. in this period. The collective, known as Marin Dell eventually became the Foremost Milk Company. The following is quoted in its entirety from the dairy album entry on the "Lopes Brothers Dairy" from the Marin Dairymen's Milk Co., Ltd., Big Lagoon District, Sausalito, California:

“The Lopes Brothers dairy is located ten miles west of Mill Valley on the Mill Valley Muir Beach Highway in what is known as the Big Lagoon District. This particular locality is very well adapted for dairying, being close to the ocean yet well protected from severe wind and fog.

The Lopes Brothers father and mother were born on the Island of St. George of the Azores group, and as young people left their native land and came to California first locating in the San Joaquin Valley. There Mr. Lopes worked on and operated dairies at Sanger, Fresno County and also operated dairies at Crow’s Landing, Gustine and Palo Alto. During that time they raised a family of five children, two sons and three daughters.

In 1941 Mr. and Mrs. Lopes with their family moved to Marin County renting the ranch which is now operated by their two sons. One of the main reasons for locating in Marin County was due to the desirable climate, having spent so many years in the valley heat. After two years of renting, Mr. Lopes, satisfied he had chosen wisely the desirable location to carry on his dairy business, purchased the ranch and planned for the future. All of the family worked hard and prospered until November 1945 when sorrow came upon the family with the death of Mr. Lopes.

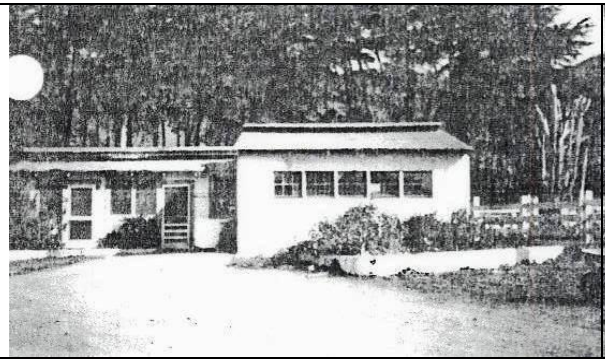
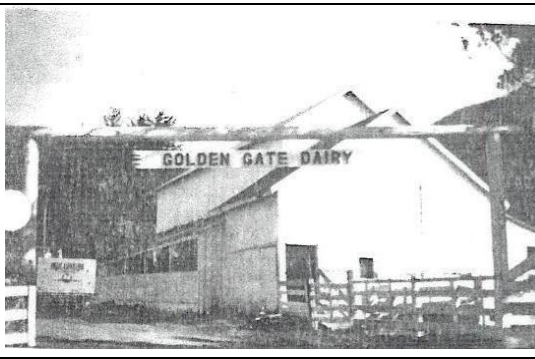
Although young in years the two sons in a very capable manner took over the management and operating of the dairy for their mother steadily making improvements and as a result today their dairy is one of the finest in the locality.

Michael the eldest of the two brothers was born in Fresno, is married and has a young son. Manuel was born at Crows Landing, served with the armed forces in World War II and is single.

The ranch consists of 200 acres, has a 12 stanchion single string barn with feed barn close by. The Lopes Brothers are partial to Holstein and Guernsey cows running 80 head of milk cows and 20 head of young stock of various ages. On account of the ranch not being too large they do not raise any of their feed utilizing all the land for pasture. Outside of the first two years of dairying in Marin County at which time they were milking 30 cows and shipping their milk to San Rafael they have sold their milk continuously to Marin-Dell. The Lopes Brothers have adopted a policy of vigorous culling of border line cows producing 23 cans at peak production and in the near future will have a well regulated market milk herd.”⁸

The dairy on Ranch M evidently declined between 1953 and 1967. Its limited capabilities were not suited to the dairy industry production requirements of the 1950s. Eventually the property was acquired by Harvey and Helen Coverly who granted joint tenancy in 1968 to William and Dorothy Caddell. The Caddells later became sole owners. Though the

Caddells reportedly planned a resort at the site, they rented the ranch to Richard and Evelyn Purvier who stabled horses there from 1962 into the 1990s.

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| <p>Sanitary Barn of Lopes Brothers Dairy ca. 1948 (Golden Gate Dairy sign appears on milk house wing of building – photo from Marin Dell Catalog, n.d., SFPL)</p> | <p>Milking Barn and Gateway to Lopes Brothers Dairy ca. 1948 (note Golden Gate Dairy sign – photo from Marin Dell Catalog, n.d., SFPL)</p> |

In the 1960s, conservationists worked to expand the boundaries of public land in east Marin. Beginning about 1961 all the ranches upstream in Frank Valley were acquired by California State Parks. The federal government started to acquire adjacent properties either directly or with the assistance of the Nature Conservancy. The government started to negotiate for the Ranch M property in the early 1970s and in 1973 the National Park Service appraised the Caddell ranch for purchase. Caddell deeded his holdings to the United States in 1974.⁹ The Caddell property included the ranch house, out-buildings used for storage, an equestrian riding track, hay barn and the former milk house building.¹⁰

The Caddells had rented the property to Richard and Evelyn Purvier who boarded horses on the property from around 1965 until the NPS took ownership of the property. The stable was called the “Golden Gate Dairy Stables” until Ocean Riders took over management in 1998. The Muir Beach Volunteer Fire Department, along with the Purviers, who managed the stables, occupied the site prior to NPS ownership. NPS began stewardship of the site in 1974.



View of Milking Barn (Hay Barn) ca. 1965

Photo: Courtesy of Maureen Pinto

Chronology of Development and Use

| Year | Event | Description |
|-----------|------------------|--|
| 1812-1841 | Dairy Business | The Russian settlement at Fort Ross exports dairy products from California to Alaska |
| 1828 | Land Sale | William Richardson applied for Rancho Saucelito land grant |
| 1856 | Land Sale | Richardson died in debt, Samuel Throckmorton negotiated ownership of Rancho Saucelito with Richardson heirs |
| 1887 | Land Sale | Banking interests acquire Throckmorton holdings in Marin County, later incorporate to form the Tamalpais Land and Water Company. |
| Pre-1897 | Construction | Building situated across road from future Ranch M location |
| 1898 | Land Subdivision | Tamalpais Land and Water Company |

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| | | filed Subdivision Map of letter designated land parcels in eastern Marin County showing parcel "M" |
| 1898 | Land Sale | Constantino Bello purchases parcels K, M and T four days after December 8 th notarizing of Subdivision Map |
| ca. 1899 | Construction | House, creamery, storage shed, and 40' - 0" x 90' - 0" milking barn on "Ranch M" |
| 1899 | Dairy Business | The first commercial creamery in California opens in Ferndale. |
| 1900-1910 | Dairy Business | Cooperative dairies and creameries begin in Southern California |
| 1906 | Dairy Company Associations Formed | Bello granted ¼ interest in "Ranches K, M and T" to Manuel Mattos, John Bello and Joseph Eugenio including ¼ interest each in "C. Bello and Company" dairy business property. Several days later Eugenio granted a 1/8 interest to Faustino Fontes |
| 1907 | Dairy Business | Pasteurized milk becomes commercially practical |
| 1918 | Land Sale | Mattos dies. Mattos heirs sell to Manuel Azevedo who soon sells to Bello |
| 1919 | Dairy Business | Dairy Council of California Formed |
| Pre-1928 | Construction | From County Assessor's notes - to the rear of the house a 16'-0"x14'-0" building. To the right of that building an open storage shed 16'-0"x14'-0" and somewhat to the right and front of that building there was a 24'-0"x12'-0" building. The property also included a 30'-0"x20'-0" milk house with 8'-0"x16'-0" addition, and a 22'-0"x20'-0" calf shed |
| 1924 | Dairy Business | USPHS developed the Standard Milk Ordinance, known today as the Pasteurized Milk Ordinance (PMO). This is a model regulation helping states and municipalities have an effective program to prevent milk borne disease. |
| 1929 | Land Sale | Ranch K sold to L.B. Harris |
| ca. 1929 | Construction | Milking barn destroyed by fire and rebuilt. |
| 1930-1935 | Dairy Business | Homogenized milk becomes commercially practical |
| 1936 | Lease | Bello leased the dairy farm to L.C.C. Lemos who operated a small dairy on Ranch M with forty-nine milking cows, fourteen two-year olds, five one year olds and five calves which were mortgaged to |

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| | | Bello ¹¹ . Presumably known as “Golden Gate Dairy” at this time. |
| 1941 | Trust Instrument | Bello dies. Ownership transfers to his nieces and nephews Joseph E and Manuel J Azevedo, Helen A. Brown, Minnie Morrell, Mary A. Costello, and Louise E. Moran. |
| 1941 | Lease | The Lopes family leases Golden Gate Dairy from Joe Azevedo on the advice of their relatives who operate a dairy in Tennessee Valley |
| 1942 | Land Sale | Bello heirs sold Ranch M to Michael, Manuel E. and Mary F. Lopes |
| ca. 1942 | Construction | Sanitary Barn constructed by Lopes ¹² |
| 1945 -1953 | Dairy Business | The Lopes Brothers “Grade A” Dairy was part of the Marin Dell collective in this period. Marin Dell was dairy company formed by largely Portuguese operations in Marin which was eventually absorbed by larger Foremost Milk Company |
| 1953 | Land Subdivision | Lopes created small parcel at northeast corner of Ranch M |
| 1962 | Horse Boarding | Ranch was rented to Richard and Evelyn Purvier as horse stables named Golden Gate Dairy Stables. |
| 1964 | Trust Instrument | Deed of trust from Robert Winkelman to M.V. Lopes |
| 1967 | Trust Instrument | Deed of trust from M.V. Lopes to David Kline |
| ca.1967 | Land Acquisition | Harvey and Helen Coverly acquire Ranch M (excluding the small Lopes parcel), grant joint- tenancy to William D. and Dorothy L. Caddell, who later become sole-owners |
| 1970 | Community Involvement | Muir Beach Volunteer Fire Department (MBVFD) formed using community well pump house across the street from the Golden Gate Dairy property. |
| 1972-73 | MBVFD | MBVFD given permission by Caddells to use Creamery building as firehouse. Purviers provided security. MBVFD remodeled Creamery building: added plywood to interior walls, installed concrete floor and concrete block foundation, installed plywood roof sheathing and wood shingles, installed new electric garage door. |
| 1973 | NPS Appraisal | |
| 1974 | Land Sale | 191.86 acres belonging to William D. and Dorothy L. Caddell deeded to the United |

| | | States |
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| 1976 | Land Sale | Manuel Lopes deeded his holdings to the United States |
| 1997-99 | Horse Boarding | Ocean Riders takes over management of the Golden Gate Dairy Stables. Paddocks closest to the creek are deconstructed and new ones constructed on the old orchard grounds. Creek site is cleaned up and re-planted with native plants by NPS. Hot water is installed in the Sanitary Barn; the electrical system is improved. |
| 2004 | NPS Projects | Roof replaced on main house |
| 2006 | NPS Projects | Installation of new poured-in-place concrete foundation on main house |

¹ Interview with Maureen Pinto of Ocean Riders, October 2012.

² Records Book 102, page 335. Information provided in a September 1993 NPS memo included in the Luce report indicates that there was a six-year agreement between Bello and his partners. No citation for this information has been located.

³ In 1924, the United States Public Health Service (USPHS), a branch of the Food and Drug Administration, developed the Standard Milk Ordinance, known today as the Pasteurized Milk Ordinance (PMO). This is a model regulation helping states and municipalities have an effective program to prevent milk borne disease. The PMO contains provisions governing the production, processing, packaging and sale of Grade "A" milk and milk products. Between 1929 and 1936, it is plausible that the Sanitary Barn building and the concrete ranch road were built and that the milking barn had a concrete floor. The Depression was hard on the local dairy industry, but it likely responded to United States Public Health Service milk production sanitary regulations of the time by adding these minimum sanitary features. A lessee may have offered construction services in exchange for rent – See Note 5.

⁴ Records Book 335, page 246.

⁵ From 1936 to 1939, the Nunes family apparently rented the ranch, but from whom is unknown. It is possible that Joseph (Joe) Nunes gave the Golden Gate Dairy its name. On a site visit 10/16/12 the author of this report met Ed and Lorraine Nunes who said they lived on the farm from 1936 to 1939. According to Ed Nunes, the family of 6 moved from Sausalito in 1936 and their father Joe Nunes rented the property, operated the dairy and named it the "Golden Gate Dairy." Both siblings recalled going to the beach every day as children. Ed recalled that his father built a stable addition to the Sanitary Barn building in around 1937 when he was six years old. He also mentioned he recalled the Milking Barn collapsed, "killed a few cows" and had to be rebuilt in around 1937. The Nunes siblings had no recollection of the Shed Building or the Outhouse. They had fond memories of the House, and recalled there were 3 rooms on either side of the hall with the kitchen at the back. Lorraine recalled that her father built the bathroom as an addition while they lived there. The two did not recall the water tank on the hill, the terraced garden or a gasoline pump but did recall there was an orchard in the front of the property with "apples and cherries." Looking at 1960s photos of the property, they recalled a small garden with a white border wall on the south side of the Sanitary Barn building, which shows prominently in historical photos. They mentioned the Creamery Building as not being used much by their family but had two levels and was "full of junk" according to Mr. Nunes.

⁶ Records Book 434, pages 198. The exact roles and relationships of the Lopes operation are unclear. It does not appear that the NPS conducted interviews with them at the same time oral histories were conducted with Tennessee Valley residents. Furthermore, again common names and limited primary material make research a challenge. For instance the 1946-47 Marin County Directory lists both a Mary V Lopes, housewife and Mary H Lopes, housewife as residents of Muir Beach on Star Route [Highway 1]. The directory that year did not list a Manuel Lopes on that route but did list a Mike [presumably Michael] Lopes at Muir Beach on Star Route. The 1953 Marin County Directory lists no Mike Lopes, but does include a Manuel Lopes living on the Muir Woods Road [Highway 1] and a Manuel V. Lopes on the Tennessee Cove Road [presumably Ranch A/B in Tennessee Valley].

⁷ Luce

⁸ Photocopies of an album of Marin Dell dairies are on file at the Marin County Historical Society. The original is indicated as being in the possession of the Marin County Silveira family, one of the company founders.

⁹ Recorders Book 2999, page 521.

¹⁰ Caddell Appraisal File, NPS, 1973.

¹¹ See 3 above.

¹² See 3 above.

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Cultural Landscape Report

Golden Gate Dairy

(Lopes Brothers Dairy, Ranch M)

Golden Gate National Recreation Area

Marin County, California

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Cultural Landscape Report

Golden Gate Dairy (Lopes Brothers Dairy, Ranch M) Golden Gate National Recreation Area Marin County, California

Introduction

Management Summary

Contributing landscape features located within the boundaries of Ranch A/B (Miwok Stables) meet management criteria under Category B: Should be Preserved and Maintained. The landscape meets the necessary requirements for management under this category as a result of its compatibility with Golden Gate National Recreation Area's legislated significance and its continuing purpose or function that is appropriate to its traditional function or use.

Excerpted from the upcoming *General Management Plan*:

Evolved Cultural Landscape Zone (developed area only)

The area would be managed to preserve the historic structures and pastoral character while continuing to support park and community needs. Site improvements to accommodate a small trailhead and rural transit stop and enhance the creek corridor would be included. Equestrian facilities would be retained, with site improvements made to incorporate best management practices and protect the adjacent riparian area. The National Park Service would continue to work with the operator of the equestrian facilities to expand programs that benefit the public. Non-historic residences along State Route 1 could be removed if they do not contribute to essential community services or park operational needs. The National Park Service would continue to promote regularly scheduled transit service to reduce vehicle traffic and to work with Caltrans to improve the safety of State Route 1 for park visitors including traffic calming and improved pedestrian crossing.

Natural Zone (surrounding uplands)

The uplands surrounding the dairy would be managed to preserve and enhance the natural setting, protect the coastal prairie and scrub habitat, and provide connections to trails to the beach and the adjacent Mount Tamalpais State Park.

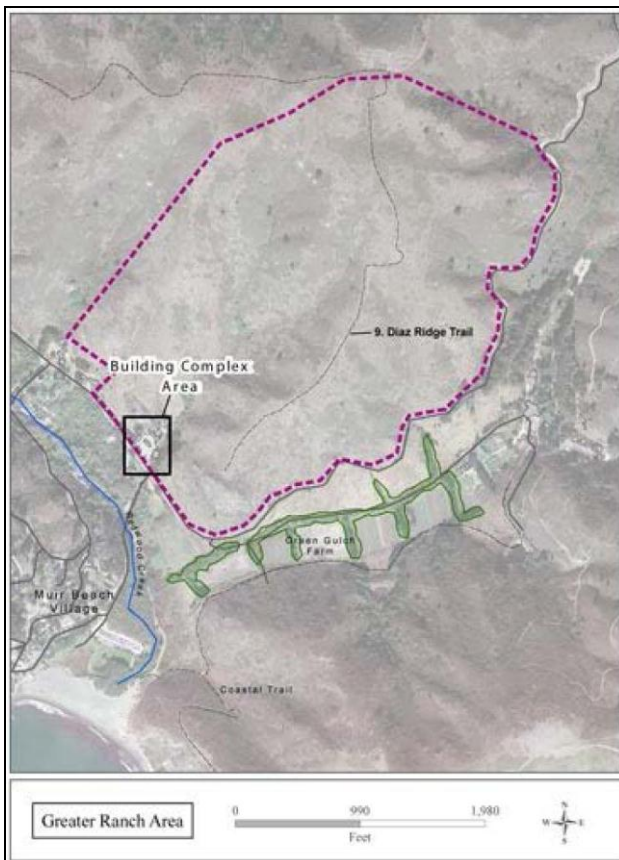
Scope of Work and Methodology

This document relies on the scholarship of existing documents, namely the 2007 Determination of Eligibility, which received SHPO concurrence March 4, 2008, and the Cultural Landscape Inventory which was approved by the Superintendent September 18, 2008. Limited historic research was conducted to complete this effort. The front matter for this report includes site history information. The contents of the Treatment Recommendations are influenced by the final action alternative for the area contained in the *Marin Equestrian Stables Plan and Environmental Assessment* of 2011.

Study Boundaries

Treatment is focused on the developed ranch zone which, contains the majority of the historic resources, although the entire ranch boundary corresponds to the Area of Potential Effect, as defined by the *Marin Equestrian Stables Plan*.

Ranch M is 191.86 acres, physically defined by Shoreline Highway / Route 1 on the east and south and by Mt. Tamalpais State Park on the north and west. Scattered sections of historic redwood fencing mark the east and south boundaries along Route 1, while portions of the shared State Park and Ranch M boundary are also fenced.



The boundary of Ranch M is represented by the dashed line, and constitutes the Area of Potential Effect for actions under the Marin Equestrian Stables Plan.

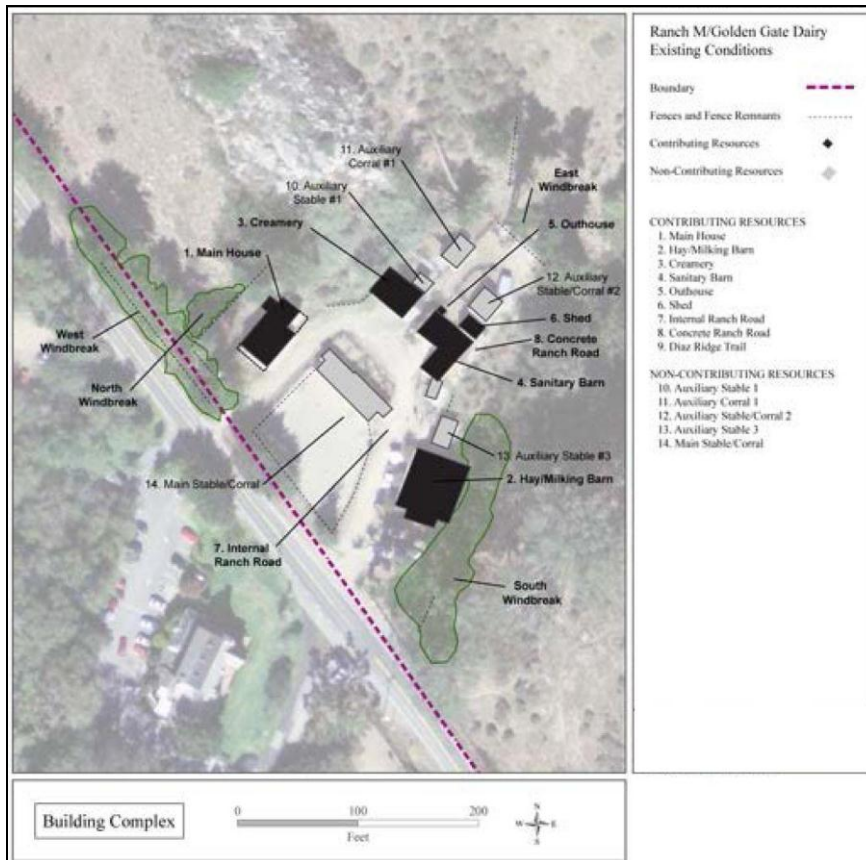
Summary of Findings / List of Contributing Resources

Though it has not formally been entered, Ranch M, or the Golden Gate Dairy, has been determined eligible for the National Register at the local level as a rare surviving Azorean Portuguese dairy in Marin County. It is a vernacular landscape comprised of a range of contributing resources and possesses a high level of physical integrity.

Ranch M is comprised of a number of contributing resources, which includes four buildings and two structures as well as the pasture lands used for grazing and trails used to move the cows. The buildings and structures are arranged around a central core area and include the Main House (MB-101), Creamery (MB-103), Sanitary Barn (MB-104), Hay Barn (Milking Barn) (MB-102), Outhouse, and Dairy Shed (MB-105) that formed the body of the operational dairy.

Contributing circulation features include the Internal Ranch Road, Concrete Ranch Road, and the Diaz Ridge Trail, used by ranchers to access the steep pasture lands and move the cows in for milking. In addition, historic cypress and eucalyptus windbreaks (located on the north, west and east sides of the ranch), and the kitchen garden also contribute to the character of the district. Redwood post and barb wire fencing, which demarcated the uphill pastures for the small herd of cattle, and a number of other small-scale features, such as a redwood picket fence and a boot scraper, help tie the landscape together.

Contributing landscape characteristics include spatial organization, natural systems and features, buildings and structures, circulation, vegetation, cluster arrangement, small scale features, and archeological sites. Collectively, these landscape characteristics help convey the overall design and function of the ranch and their association with early twentieth century dairy farming on the Marin Peninsula.



Contributing resources at Ranch M.

Existing Conditions

Historically the boundaries of Golden Gate Dairy, or Ranch M, were positioned to take advantage of grasslands located on a relatively flat narrow spit of land bordered by protrusions of rocky ledges, a seasonal creek, and a shallow draw. Highway One, the route by which dairy products were moved from farm to market, formed another edge. Buildings were arrayed around a central core free of buildings that may have been used intermittently for a garden. This central U-shaped core was an island completely encircled by roadway; a gravel ranch road formed the U while Highway One connected to either end. Other internal circulation included a concrete cow path that provided access for the herd to move between the milking barn and a grazing area. A trail along the east of the property provided access up the steep edges to the more remote pastures. Windbreaks were planted to surround the building core, which both limited views and created a somewhat uneven north, south, east and west line of vegetation. A kitchen garden, traditional within Azorean culture, was located between the residence and the Creamery and early photographs reveal that a small orchard may have intermittently occupied the central core.

Today much of the historic patterns of development are easily visible, though the use of the property has evolved from dairy ranching to a horse boarding operation, with use by the local Volunteer Fire Department. Change to the grassland vegetation includes more shrubs than historically present, having been altered both by the cessation of grazing practices and an effort by natural resource staff to manage the riparian corridor through

native plantings. The central core area has been maintained as an open space through its use as a horse turn out, with one edge filled in by stables. Highway One, defining the southwest property boundary, continues to serve as the main connector through the area, maintaining its historic alignment. Internal roads have been altered very little, though vegetation is beginning to obscure the concrete cow path. Diaz Ridge Trail, the earthen path along the eastern edge of the property used by both hikers and horseback riders, is in the same historic alignment, though it has been modified to meet modern equestrian safety standards in terms of guard rails and the addition of a bridge in the area to the southeast of the Milking Barn. The even-aged windbreaks are still largely visible, though losses of individual trees have created gaps within these features. The historic character of the ranch is intact, however, due to the remaining features and landscape characteristics that have persisted since the end of the period of significance.

Analysis and Evaluation of Landscape Characteristics

The evaluation of cultural landscape characteristics is documented in the Cultural Landscapes Inventory for Ranch M (CLI). Portions of the following evaluation are excerpted from the CLI, and are supplemented with additional information based on research conducted for this report. The focus of the analysis and evaluation is on the cultural landscape characteristics and features that support treatment recommendations informed by anticipated impacts from improving the site as a sustainable and economically feasible equestrian operation as described in the *Marin Equestrian Stables Plan* of 2011.

Landscape characteristics that contribute to the vernacular landscape of Ranch M are described in the following sections:

- Spatial Organization - Describes the relationship between site features.
- Natural Systems and Features – Describes the response of the development to the conditions of the environment including topography, water, and native vegetation.
- Buildings and Structures—Describes the structures as an expression of a vernacular architectural style.
- Circulation—Describes the designed systems that allow movement through the dairy, connecting to adjacent areas.
- Vegetation—Describes the overall character of the planted windbreaks and domestic plantings.
- Cluster Arrangement – Describes the arrangement of buildings in relation to each other.
- Small Scale Features— Describes the collection of features that remain in the landscape.
- Archeology—Both pre-historic and historic archeological remains are known to be on the property.

For each of these characteristics, the physical integrity is documented and evaluated in order to identify the landscape features and attributes that contribute to the significance of Ranch M and define its historic character. While Archeology is a landscape characteristic that contributes to the historic character of Ranch M, no archeology-specific evaluations or treatment recommendations are made in this CLR. Please refer to

the Archeological Assessment and Treatment Report included in this set of cultural resource reports.

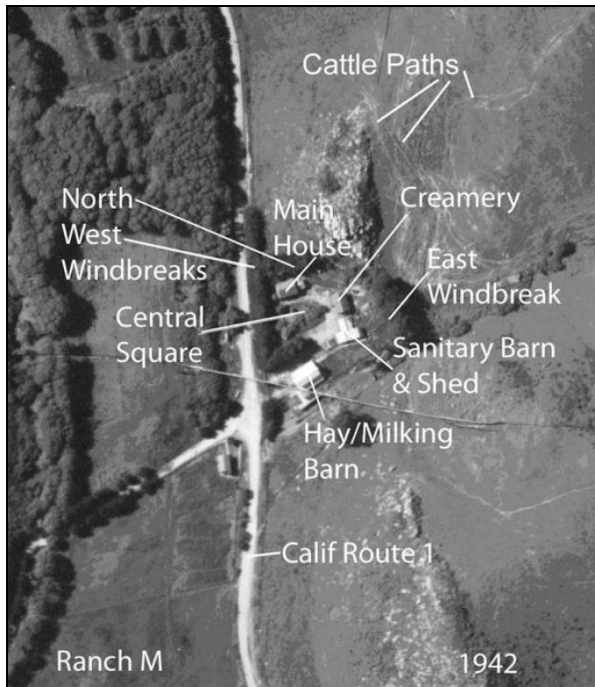
Spatial Organization

Spatial organization is the three-dimensional arrangement of physical form and visual associations of a landscape that result from the sum of its components. The agricultural landscape associated with the southern Marin ranches evolved into specific patterns that were influenced by topography, watercourses, circulation, boundary lines and other factors.

The slopes above the Ranch M complex were, and are, relatively treeless, with low coastal shrub cover or grasslands. Historically, constant grazing activities maintained their open quality with expansive views and vistas. Buildings were tightly clustered near the flat bottomlands of the drainage. Surrounded by windbreaks, they remained relatively inconspicuous in the total landscape. As a rule, dairy building complexes were decidedly nucleated and compact due to the need for close proximity of dairy functions: stable, to milking station, to feed station, to pasture and back in a continuous repeating cycle.

Physical boundaries around and between the ranches were delineated by barb wire fencing on redwood posts. Boundary fencing was universally important to control cattle but communal fencing of agricultural fields and pastures regardless of boundaries is also evident early in the ranching era. The spatial relationships of pasturage within the ranch and between the ranch and its neighbors are now less distinct, as only sections of fencing remain. However, the general impression of a limited building cluster located within an open windswept rural landscape and natural environment with is retained.

Ranch M's spatial organization remains intact and processes a high degree of integrity. The primary change made to accommodate the modern use, that of an equestrian facility, is the addition of plywood structures and a turn out area at the center of the historically building free core. The modifications are minor, reversible and do not compromise the historic character.



The topography and the physical requirements of a dairy operation heavily influenced the spatial organization, which is largely intact today.

Natural Systems and Features

The key natural features of the ranch are the rugged topography, the Frank and Redwood Creeks, and the native plant communities. The southern part of the Marin County peninsula is dominated by the steep slopes of 2,571-foot Mount Tamalpais, from which streams fall down canyons, depositing deep sediment on the lowlands and salt marshes before meeting the rough waves of the Pacific on the west and gentler tides of the San Francisco Bay on the east. The land's predominant rocks are sedimentary, the result of layers of material that formed on the bottom of the shallow sea that once covered the Bay Area and, with heat and pressure, fused into an assemblage of chert, sandstone, shale and serpentine. On ridges and seaward slopes only grasses, low shrubs, and lichen grow; small trees are confined to leeward slopes and hollows. The open coastal exposure here produces frequent wind and foggy conditions with dry, hot summers and wet, cool winters. The native plant communities present when dairy ranches were developed in the area in the 19th century consisted of Coastal Prairie Grasslands and Coastal Scrub. The Prairie Grassland communities were especially attractive to ranch prospectors because they required little effort for conversion to grazing without the need to remove thick vegetation or forested over-story.

Ranch M was settled in 1898 by immigrants from the Azorean archipelago, a series of rugged volcanic islands benefiting from a temperate climate, but which are also subject to severe marine winds similar to the Marin County coast. The area is characterized by extreme natural topography with steep hillsides, interspersed with small rock outcrops. The declination of the slopes within the ranch boundaries range from 15% to 75%, and they are prone to erosion. There is little flat land available, resulting in the ranch's

development being kept small in comparison with ranches within the region which had larger areas of flat potential pasture land. Within these restrictions, the ranch complex was constructed in the late 1890s between the shelters of two rock outcroppings. The buildings directly fronted the Sausalito-Bolinas road, now California State Highway 1. A smaller stream, Frank Valley Creek, drops westward through the compound past the barn to join perennial Redwood Creek, the obvious dominant natural element on which ranch operations depend for water.

As a result of the rugged terrain and difficult access, development and land use on all the ranches was limited. Early ranch occupants did not have the means or machinery to manipulate the topography to any degree, therefore the size of ranch improvements, location of structures and other constructed features was dictated by the shortage of flat land on most ranches. Remote acreage and hillsides were devoted to grazing for dry dairy cows and some beef cattle. Ranches developed as dairy operations at different times, with those with adequate flat useable land and/or better access evolving first. Ranch boundaries were established on geographic and natural features, ridgelines, along streambeds, and roadways, creating an “organic” division of property.

Throughout the dairy ranching period of significance, pasture rangeland was the primary vegetative feature. This not only served as a functional, utilitarian part of the working dairy operation but also created a low-profile ground cover that defines the open character of the Ranch M landscape. The conversion of the land to a dairy ranch altered the native annual grasses and scrub vegetation as those that supported and withstood cattle grazing were the survivors. The native grasses were thinned by the compaction of soil by cattle and accumulated overgrazing.

With the reduction and then elimination of grazing, a mixture of coastal scrub plant communities, including coyote brush/sword fern scrub and coastal sage/coyote brush, have re-established on the steep rocky soils, as well as exotics such as annual grasses, fennel, poison hemlock and Pampas grass. The general appearance of seasonally green, then brown, low-lying vegetation, however, is similar to dairy pasturage. The topography of the site and the stream remain unchanged.

The minor changes in vegetation types does not compromise the integrity of the response to natural systems and features and it is a landscape characteristic that contributes to the significance of Ranch M and helps defines its historic character.



The native grasslands, topography and creek (located along the right side of the photo) all part of the natural systems and features that help define the Ranch M landscape.

Buildings and Structures

There are five contributing buildings and structures in the Ranch M building complex. The core buildings in the complex were constructed about 1898-1899 at the beginning of ownership by Bello and Company. These original buildings were the wood-frame two-story Main House with a gabled roof, a wood-frame one-story Creamery to the rear of the house, and a small shed. A Milking Barn constructed at this time and subsequently destroyed was replaced in 1928. A Sanitary Barn was built in ca.1942. The outhouse was presumably built in the 1960s. These buildings are character-defining and contribute to the historic integrity of Ranch M. The remaining four structures are temporary horse stables and corrals of plywood on single-wall wood frame without foundations constructed in the 1960s and 70s after the period of significance when the complex was converted to a horse boarding and riding facility.

Contributing buildings and structures include:

Main House MB-101 (built ca.1898)

This is a wood-frame two-story structure with gabled roof and measuring 28 by 40 feet with a 16 by 20-foot addition at the rear. It has horizontal redwood clapboard siding and a composition shingle roof. The foundation was, until recently, posts on concrete piers. In 2007 a poured concrete perimeter foundation was constructed, in order to stabilize the building. The front porch, which had been recently removed because of its dilapidated condition, was reconstructed using the original porch columns. A side-rear porch on the northeast elevation was also constructed in 2007 with simple railing matching the front porch.

Hay Barn MB-102 (Milking Barn) (built 1928)

This multi-story building is a replacement for the original milking barn that burned in the late 1920s. It is of similar materials in the original location and measures 44 by 50 feet. It is constructed of vertical redwood board siding on a timber frame with a corrugated metal roof. Each side of the barn has wooden stanchions and concrete floor and drainage channels typical of local milking operations. Its interior is open to the roof with exposed timber framing and roof trusses. Its foundation is a combination of perimeter concrete

and concrete piers. A later addition to the south end collapsed in 1978 and has not been replaced. At present, the building is utilized for hay storage and horse boarding.



The original milking barn was destroyed by fire in the 1920s. This replacement was constructed during the period of significance, and is a contributing resource.

Creamery MB-103 (built ca. 1899)

This is a one-story wood frame structure with unpainted horizontal redwood board siding with a composition shingle roof measuring 34 by 25 feet. It rests on concrete block foundations. It is presently utilized as a garage by the local fire department. A garage door has been installed on the south elevation to accommodate fire vehicles.

Sanitary Barn MB-104 (built ca. 1942)

This one-story “L” shaped structure is constructed of concrete slab floor with connecting concrete stem walls and corrugated metal on wood frame upper walls. The main portion measures 16 by 26 feet and an addition which was the original feed barn-is 20 by 31 feet. It has a corrugated metal roof and is unaltered except for its present use as offices and horse stables.

Shed MB-105(built ca.1899)

The shed is a wood frame 14 by 16 foot structure with vertical redwood board siding and a roll tar paper roof. It has concrete pier foundations and a heavy timber frame floor. The structure was extensively stabilized in 1965 for use as a studio and for storage.

Although some alterations have occurred, the buildings, as a collection, retain integrity and contribute to the significance of Ranch M and helps defines its historic character.

Circulation

The Frank Valley/ Muir Beach area was linked to services and markets at an early date through the construction of the Sausalito-Bolinas Road, which was built in 1870. Later, it

was designated as part of California State Route 1, or Shoreline Highway. This was the access route to market. It followed the topography of two drainages and surrounded Ranch M on the south and west sides. The road was historically limited to a relatively tortuous alignment and narrow footprint by the steep terrain, although it was minimally upgraded over time. Opposition by conservation groups prevented the expansion of the coast highway in the 1950s. This eventually restricted access for larger specialty vehicles, including large milk tankers in the 1950s and may have been a factor in the demise of the dairy, although also perhaps ensuring that this property was not modernized. The following circulation features contribute to the district:

Internal Ranch Road

Ranch M's internal driveway linking the ranch structures formed a rounded rectangle around the open space at the center of the complex. Today a corral or "turnout" and plywood structures occupy the space that was likely used as a garden, but the form, alignment and the road itself remain as originally constructed of compacted earth and gravel approximately 15 feet wide with no shoulders. The two sides of the corral paralleling the Main House and Hay Barn (Milking Barn) open on Highway 1 as dual ranch entrance/exits. The highway parallels the other side of the central corral fronting on the Creamery and the Sanitary Barn providing a continuous circulation pattern. Parking throughout the ranch's history has been undefined by structures, but most probably adjacent to and between ranch buildings fronting the corral.

Dias Ridge Trail

A system of trails among the ranches developed early in the ranch's history for access to pasture and cattle roundups. The 1886 Coast and Geodetic Survey map delineates a trail extending up to Dias Ridge from Frank Valley immediately west of Ranch M. This alignment is also present on the 1937 WPA map, "Roads and Trails in the Vicinity of Mount Tamalpais." In recent decades a fire road was routed down a part of this trail from the Miwok Trail, situated outside Ranch M to the east. The Dias Ridge Trail, as it is now called, crosses Ranch M, passing the massive rock outcropping southeast and above the ranch complex. Dias Ridge Trail, a contributing historic feature of the ranch, also became part of the progressive development of a complex of recreational hiking trails and activities during the first part of the 20th century on nearby Mount Tamalpais. This compatible, though non-agricultural use, has prevented the trail from being lost to overgrowth. The circulation system retains a high degree of integrity and contributes to the significance of Ranch M and helps defines its historic character.



Concrete Ranch Road

A concrete road (seen at left) was constructed along the east edge of the central complex, presumably to provide mud free entrance into the milking barn. It is approximately 10 feet wide and runs from just behind the shed to the milking barn. Although no records were discovered to establish its construction date, it is visible in aerial photographs from 1942.

Vegetation

Throughout the dairy ranching period of significance, pasture rangeland was the primary vegetative feature. This served as a functional, utilitarian part of the working dairy operation, and created a low-profile ground cover that defines the open character of the Ranch M landscape. The conversion of the land to a dairy ranch altered the native grasses and scrub vegetation and only those species that were able to support and withstand cattle grazing survived. The native grasses were thinned by the compaction of soil and over-grazing. In addition, early ranch settlers, faced with windy, foggy, damp conditions, utilized readily available, fast-growing exotics such as Monterey cypress and Eucalyptus to create windbreaks that also defined ranch boundaries.

The upland range of Ranch M was generally maintained by cattle grazing during the dairy ranching period. Much of the hills above the ranch were covered with perennial grasses. With the reduction and then elimination of grazing, a mixture of coastal scrub plant communities, including coyote brush/sword fern scrub and coastal sage/coyote brush, have re-established on the steep rocky soils, as well as exotics such as annual grasses, fennel, poison hemlock and Pampas grass. The general appearance of seasonally green, the golden brown, low-lying vegetation, however, is similar to dairy pasturage.

Ranch M exhibits evidence of plant husbandry over a long period of time. The ranch building complex retains historic character-defining windbreaks on three exposures that are contributing historic features. Early ranch settlers, faced with windy, foggy, damp conditions, utilized readily available exotics to create windbreaks and to define ranch boundaries. Fast growing Blue Gum Eucalyptus and Monterey Cypress were selected because of their ready availability, durability and ability to quickly create a buffer from winter storms. A 1942 aerial photo shows these as mature windbreaks defining the west,

east and north edges of the complex and fronting the ranch entrances along California Route 1. The Eucalyptus trees south-east of the complex are recent, having spread downhill to the south over time.

The central corral area also retains evidence of landscape planting in the form of stumps. In a 1942 aerial photograph, a row of fruit trees was visible, although it was not possible to identify the composition or age of the trees. Typically, any other ornamental plantings would have consisted of foundation plantings of annual or perennial flowers or low-growing shrubs at the front or sides of the residences. Transient materials and composition of the plantings would have reflected plants available at the time in the area and typically changed as new material became available. Although there is no evidence of these plantings at the site, a series of photos from circa 1950, large shrubs at the foundation of both the Main House and the Sanitary Barn. The same photographs reveal the central core free of trees, indicating it was an area given to change.

The ranch maintained a kitchen vegetable/herb garden located north of the residence. Several fruit trees existed into the 1970s north of the garden site behind the Creamery building. Today, however, this area is obscured and overgrown with vines and thick undergrowth, although at least two fruit trees and evidence of further historic plantings still survive. Historically, the front of the residence may have been mowed or cut in the semblance of an informal lawn that remains open and weed-covered today.

Contributing vegetation features include the north, east, and west windbreaks and the remnants of the kitchen garden (see Site Plan). Though somewhat compromised due to neglect of the kitchen garden and the age of the windbreaks, the collection of vegetation remnants retain integrity and contribute to the significance of Ranch M and help define its historic character.



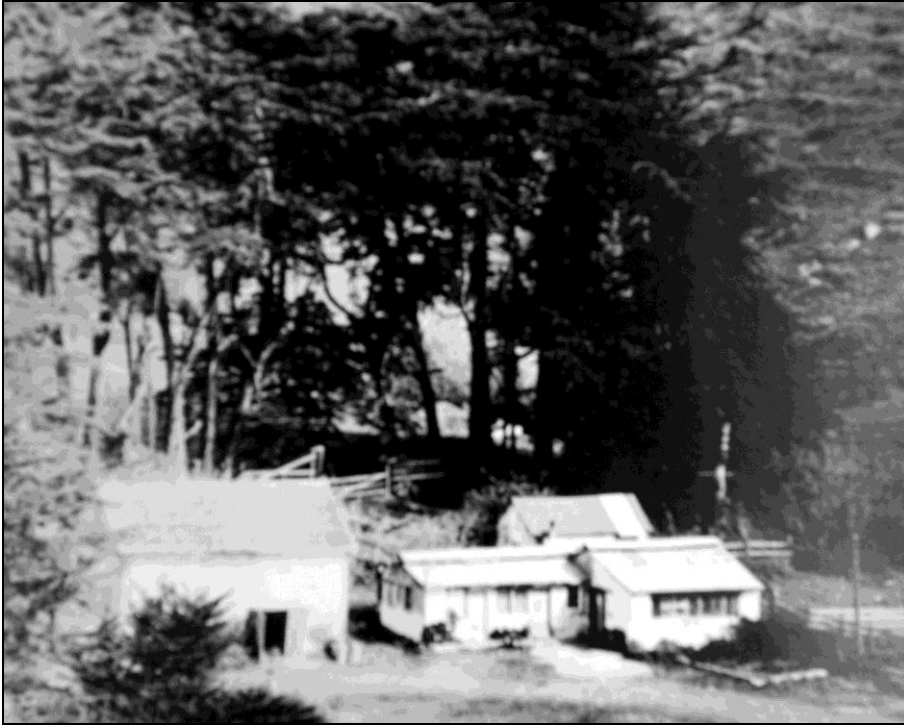
Windbreaks and the kitchen garden are highlighted in this 1942 photograph. The central core shows evidence of plantings, thought to be fruit trees.

Cluster Arrangement

The location and pattern of ranch buildings, structures and associated outdoor spaces lend character and uniqueness to the particular cultural setting. Although these southern Marin ranch complexes were each devoted to dairy ranching, their building arrangements differ somewhat. Most dairy operations were performed within a small footprint, with milking, milk processing, feed storage, living quarters and equipment storage all in close proximity. The routine of evening and early morning milking each day necessitated that milking barns and creameries be adjacent to quarters with holding corrals and pastures surrounding the main complex to insure maximum efficiency of operation.

Efficiency of space and a logical arrangement of the various elements of the dairy farm were essential in facilitating the labor-intensive effort involved in running a successful dairy. Today, this is evident in the cluster arrangement of Ranch M. Building clusters are compact, with related facilities adjacent to one another. Cows were driven down from the adjacent pasture slopes to the main barn for milking and other essential facilities, such as the Sanitary Barn, Creamery, and Main House were located nearby. The close proximity and the adjacency of structures reduced excess travel in the processing of the milk. Overall, the arrangement of Ranch M is a model of efficient site arrangement, characteristic of dairy ranches in general and of the ranches run by the Azorean Portuguese immigrants in particular.

The cluster arrangement of Ranch M possess a high level of integrity, contributes to the significance of Ranch M and helps define its historic character.



The cluster arrangement likely had as much to do with available buildable land as it did to the operations of a dairy farm. In this photo, from circa 1965, the Creamery is seen on the left and the Sanitary Barn on the right with the shed and the windbreak beyond.

Small Scale Features

Small scale features at the ranch are confined to a variety of utilitarian elements such as fences, gates, curbs, water tanks, wells and irrigation lines. Dairy ranch operator accounts state that fence repair and upkeep was a major spare time activity. Such features would have been constructed early during the history of the dairy ranch and subject to replacement over the sixty-year history of the ranch. Although remnant fences and other objects remain in the landscape and are important contributors to the character and association of the landscape, they are incomplete members of a larger system and of relatively inconsequential scale and are not individually counted.

Remnants of historic split redwood fencing with barbed wire remain around the ranch complex flanking the windbreaks, as well as the on the ranch perimeter. Much of the east boundary with Route 1 has split redwood posts with barb wire remnants scattered along this boundary that are character-defining historic features. Barb wire was originally developed in the 1860s and it quickly became the universal agricultural stock fencing throughout the West as it was settled. It still exists in scattered segments around the ranch perimeter, especially along the Route 1 boundary. This was obviously necessary to contain cattle from wandering onto the roadway. These remnants help define the functional land use and boundaries of the ranch.

A series of dry-laid stone retaining walls remain along the north-east slope above the Main House. In addition to forming garden terraces, the walls created a platform for the water tank. There is no information that supports exactly when the walls were

constructed, though the walls are somewhat distinguishable in a 1942 aerial. Although vegetation has largely obscured the walls, they still exist in good condition.



Detail of one the garden terrace stone walls, located east of the Main House.

Another remaining historic feature is a boot scraper, imbedded in a concrete block, which is located adjacent to the kitchen entrance at the rear of the residence. More recent and non-contributing features include fencing associated with the horse boarding operations consists of round “peeler core” posts and horizontal boards that enclose the modern horse corrals and adjacent pasture.

Though somewhat fractured, the collection of small scale features present across the landscape contributes to the significance of Ranch M and helps defines its historic character.

Treatment

Treatment is based on *The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (1996). Consideration was given to the historical significance and physical integrity of the resources as well as to the actions proposed within the Marin Equestrian Stables Plan Environmental Assessment (2012). To best accommodate these factors, the treatment proposed for above-grade landscape characteristics is rehabilitation which focuses on contemporary use of the cultural landscape and historic structures.

Rehabilitation is defined by the *Secretary’s Standards* as, “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.”

Treatment of archeological resources is not detailed in this Cultural Landscape Report. Specific treatments for these resources have been addressed in elsewhere in this set of cultural resource reports.

The period of significance for the Golden Gate Dairy spans more than 50 years, from 1898 – 1953 and the nature of dairy ranching necessitated continual physical changes to the property over those years to keep up with modernization and to remain profitable. Therefore, no attempt is made to “freeze” the landscape in a single year; rather the goal is to retain character-defining features that contribute to the integrity of the site and to guide future improvements to ensure modifications are compatible. Treatment focuses on the general attributes and appearances of the landscape and strives to preserve the features and qualities of the 1898 to 1953 setting, to enhance the character.

The *Main Equestrian Stables Plan Environmental Assessment* identifies alterations to the cultural landscape needed for programmatic, environmental, life/safety, and other purposes. The purpose of the Treatment section is to set parameters for modification of historic features and provide guidance for the introduction of new features into the landscape in a manner that improves the condition of, is compatible with, and results in no adverse effect to the historic district. This section provides both general preservation principles, and specific recommendations for treatment of cultural landscape resources. Recommendations are topically formatted into categories following the landscape characteristics presented in the analysis and evaluation. Specific design guidelines are presented to address resources identified within the *Marin Equestrian EA* and are intended to guide the design decision – making process for implementation of the final action alternative.

Treatment Principles

Secretary of the Interior’s Standards for Rehabilitation

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.*

Treatment Recommendations

The following Treatment Recommendations are provided by landscape characteristic, with an emphasis given to preserving the historic rural character.

Spatial Organization and Cluster Arrangement

- Preserve and maintain historic development patterns where feasible, including: the restrained nature of the development, the orientation, and the shape as defined by the unpaved semi-circular road, the open nature of the space within, the cluster of historic buildings that ring the road, and the windbreaks that form the backdrop and the boundary between the building core and the open space beyond.
- Restore the central open space to its historic condition.
 - Remove all non-historic structures within this area, including horse stalls and sheds.
 - If possible, retain the use of the central, open area as a single space, with only a perimeter fence and no interior divisions.
- Locate compatible existing or new program uses within existing historic structures, respecting the recommendations found within the Historic Structure Reports.
 - If it is not possible to re-use existing buildings, avoid siting new structures within the historic cluster of buildings, or on top of historic circulation routes.
- Avoid addition of new buildings, structures or circulation features within the historic core area.
 - New buildings or structures may be located to the rear (north) of the Sanitary Barn, Dairy Shed and Creamery or on existing foundations, provided they reflect a compatible, contemporary design that is distinguishable from the historic, but employ materials, massing, and the general vernacular style found at Ranch M.
 - New buildings or structures should be as non-intrusive as possible while allowing for utility, functionality, accessibility, and safety.

- New buildings or structures should recede visually into the landscape, unless they reinforce historic patterns of spatial organization.



Recommendations include removing structures from the central core. This photograph from 1968 shows the internal road encircling an area free of structures. The Main House is to the left and the Creamery is to the right.

Natural Systems and Features

- Preserve and maintain the natural systems and features that specifically include vegetation types, topography, and watercourse.
 - Remove non-native trees that may have escaped from the windbreaks.
 - Manage open grasslands and coastal scrub plant communities that surround the developed area and contribute to the historic character of the site.
 - Insure that all resident or guests horses are fed only weed-free feed to reduce the risk of invasive plant introduction.
 - Retain and manage the riparian corridor as a natural system.
 - Observe the riparian corridor set back of 50' for all structures and parking facilities.
 - Major changes to existing grades should be avoided, especially retaining walls in the historic core area.



With the cessation of grazing, vegetation surrounding the core building area has evolved from grassland to coastal scrub.

Buildings and Structures

- When accommodating programmatic needs, it is preferable to reuse existing historic structures rather than construct new facilities. Any modifications must conform with recommendations of historic structure reports and be approved by the park's historical architect.
- Retain the overall rural character by designing new features to appear minimally intrusive and to be compatible, yet distinguishable, from the historic resource.
- New features should match the historic elements of design, color, texture, scale, massing, orientation and materials.
- Any new development should be compatible and reversible.
 - Remove all non-historic additions to the historic buildings, including the outhouse on the south side of the Sanitary Barn.
 - Plywood stalls in the will be removed. Stalls outside of the historic core maybe replaced in the same general location, with an emphasis on organization of the space available. This may result in a less than one for one replacement.
 - Avoid additions to historic buildings. The most sensitive areas to change are those inward facing facades of any historic buildings. Should modifications to

buildings need to occur, every effort should be made to avoid interrupting the facades that face the open core.

- The recommended location for a new, accessible toilet facility is within an existing structure. If an alternative location is required, please refer to treatment recommendations for Spatial Organization / Cluster Arrangement for guidance.
- The recommended location for a covered manure shed, or other small auxiliary structure, is outside of the historic core, north of the Creamery, Dairy Shed and Sanitary Barn. If an alternative location is required, please refer to treatment recommendations for Spatial Organization / Cluster Arrangement for guidance.

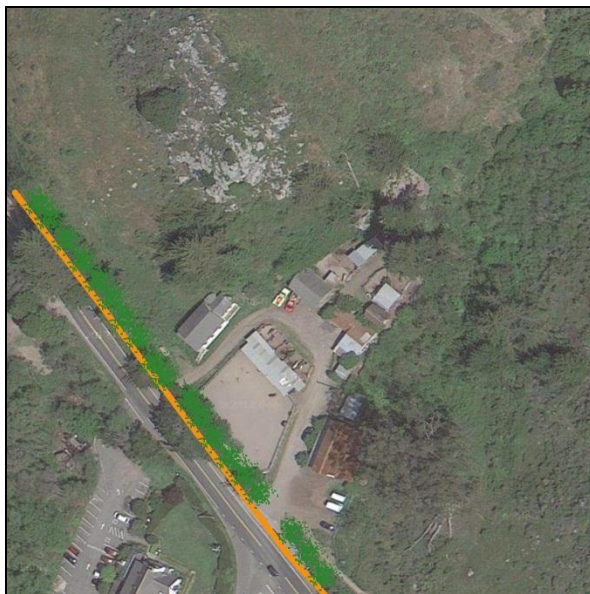


Recommendations include removal of non-historic attachments to historic buildings, such as this plywood stall behind the Creamery.

Circulation

- Maintain the historic circulation features in their rustic, understated character including specifically the alignment, width, paving, and absence of asphalt and striping.
- As feasible, restrict use of concrete to the historic limits which include the building aprons and Ranch Road north of the Main Barn only.
 - Any modifications to the historic concrete must be performed in consultation with the park's historical landscape architect.
- If a hardened surface is required, consider use of road base with a binding agent, such as Perma-Zyme®, TerraHold® or a triple shot of chip seal, as has been proposed for Satterlee Road at Fort Baker.
- Do not define parking spaces with stripes, wooden curb stops, or any other manufactured features.
 - Parking south of the Main Barn and Residence may include the addition of large stones or logs, set into the grade, to be used as bumper stops and to define the perimeter of parking areas.
- The use of historic building foundations for parking is discouraged.

- New circulation features should be located outside of the historic building core, where feasible.
- Modifications to trails both within and visible from Ranch M should minimize features that might be reflective or otherwise visible. For example, guardrails, signs, retaining walls, should be designed with consideration for reflectivity, and scale.
- Recommendations for a new AGODA compliant trail along Route 1 include:
 - Location and alignment should re-enforce the west edge of the central, open space.
 - Limit width to 5' maximum.
 - Surface material should be match the local dirt and gravel material, and be compacted and stabilized with a binding agent, such as Perma-Zyme® or TerraHold®.
 - New equestrian facilities associated with this trail feature, including tie ups and water mounts should be located with the approval of the park's historical landscape architect.
 - Construction of the trail may require partial removal of the west windbreak. It is preferable to remove and replace all the trees together to achieve an even aged stand. Individual trees that have been lost from this feature, especially south of the Milking Barn, should be replanted at this time. Species and spacing should be replicated, as possible.
- Acceptable locations for horse trailer parking include:
 - On the concrete ranch road.
 - On a gravel pad to be located within the footprint of the non-historic shed north of the Milking Barn (slated for removal).
 - Between the residence and Highway 1.
 - Trailers may also be parallel parked along the interior ranch road.
- New Bus stops on Highway 1 adjacent to the ranch core should conform to these treatment recommendations.



Conceptual plan for new trail alignment and tree replacement along Highway 1.

Vegetation

- Preserve and maintain the historic vegetation, which includes four windbreaks and kitchen garden remnants.
- In consultation with an arborist, preserve and maintain the historic windbreaks by pruning the trees for long term health.
 - Maintain the footprint and continuous canopy of the windbreaks as a primary character feature.
 - Windbreaks should be assessed by a certified arborist to ensure that there are no immediate threats to life/safety, buildings and structures, and the trees themselves.
 - Maintain screening qualities of the windbreaks along Highway 1 (don't limb up).
 - When it is no longer safe to maintain existing windbreaks, trees should be removed and replanted en masse in order to achieve an even aged stand.
 - Replacements should match in species and spacing, as possible.
 - Removal of any historic, or possibly historic trees, should be done in a manner that:
 - Adequately documents the species and location through both photography and GIS information (coordinate with Park GIS specialist).
 - Does not remove any structural components of the fence lines that use the trees as posts. Leave in place that portion of the tree (stump plus approximately five feet) that functions as part of the fence.
 - Any tree planting must be done in coordination with the park's historical landscape architect.
- A Fire Management Plan should be developed to specifically address preservation of historic vegetation and structures at Golden Gate Dairy. At minimum this plan should address specific strategies to:
 - Manage replanting of historic tree stands to minimize the creation of ladder fuels.
 - Manage condition of historic trees that are immediately adjacent to historic buildings.
- Conduct an inventory with an historic horticulturalist to inventory the remnants of the kitchen garden.
 - In consultation with an arborist/horticulturalist, consider emergency stabilization of the plum, fig, quince and grapes to the north and west of the house. Specifically:
 - Removal of encroaching vegetation that is beginning to overtake the grape, quince and fig
 - Pruning to stabilize the plum tree
 - Remove overgrowth, including suckers, to encourage new growth in the elderberry. Height should be maintained at approximately twelve feet.

- Maintain the area free of weeds by using both weed control fabric and mulch.
- Explore opportunities to establish the area as a hybridized community garden, one which maintains the historic species and allows for new plantings by local residents to maintain.
- An invasive exotics removal plan was recently coordinated with the natural resource division. Continued collaboration between cultural and natural resources is recommended.
- Introduction of woody material – even indigenous species - is not appropriate outside of the windrows.
- Non –invasive herbaceous ornamental plantings may be introduced along the building foundations, following approval of the natural resources division and in consultation with park’s historical landscape architect.
- Maintain the concrete ranch road free of encroaching vegetation by establishing a mow strip that extends three feet east of the road bed.

Small Scale Features

- Maintain and preserve the historic fence posts as contributing resources.
- Maintain historic utilities, as feasible.
 - Introduction of contemporary utilities and facilities associated with operations should be visually compatible with historic structures within the core.
- Conduct historical archeological investigations to document remnant historic small scale features throughout the historic district such as dump sites, fence lines, utilities and infrastructure, the location of non-extant structures and foundation ruins.
- Limit the addition of new small scale site features for contemporary use. If new small scale features are required, the following guidelines apply:
 - New features should be designed in keeping with the historic character of the district and reflect a vernacular and rustic style in terms of materials, style, color, and simplicity of design.
 - The use of unpainted wood for site furniture such as picnic tables, fence material, and footbridges is historically appropriate and compatible with the natural setting.
 - New fences may be unpainted wood or metal that is either stained or painted a dark color.
 - Fence design should be utilitarian and limited to simple post and rail.
 - The use of stone for marking trails and delineating vehicular and pedestrian circulation within the developed area is appropriate.
- Please also refer to *GGNRA Signage and Graphics Guidelines* (also known as the Hunt Guidelines), *GGNRA Parkwide Site Furnishings Standards* for additional guidance.

Design Treatments

The following treatments have been developed to ensure that new landscape features, anticipated to be altered through the actions proposed in the *Marin Equestrian Plan*, are designed in a manner compatible with the historic character of the project area. They have been listed separately to avoid repetition, because they pertain to multiple landscape characteristics.

- Recommendations for a new covered lunging ring include:
 - The ring should be located north of the east windbreak.
 - To keep the historic building pattern intact, cover the new lunging with a rectangular or square canopy or roof.
 - Special consideration should be given to the color and material of the canopy as it will be visible from the Dias Ridge Trail. Matte colors that easily blend into the hillside during the dry months are preferred, and the material should be absent of any sheen or reflective quality.
 - Posts or bracing for the canopy should be non-reflective and fit in the character of the buildings and structures of Ranch M.
- Location for a new water tank should include consideration of the site of the historic tank, south west of the residence, with the pump located inside an existing structure.
 - Prior to installation, a condition assessment of the historic stone walls and terrace should be conducted to assess stability as well to fully photo document the feature.
 - If an alternative location is required, please refer to treatment recommendations for Spatial Organization / Cluster Arrangement for guidance.
- New stalls should be located out of the historic core, north of the Creamery and Shed, and Sanitary Barn.
 - Construction should reflect a compatible, contemporary design that is distinguishable from the historic, but employ materials, massing, and the general vernacular style found at Ranch M.
 - Preferred fence types include unpainted wooden posts and rails. Metal fences may also be used, but these should be stained or painted to mitigate reflective qualities.
- Use historic building alignments to site new paddocks and stalls as possible. For example, align with new features with the east façade of the Creamery and either the east or west facades of the Shed or Sanitary Barn as spatial requirements and stream setback allows. Plans for utility upgrades should preserve and maintain historic infrastructure features and retain them in service to the extent feasible.
 - Utility upgrades should minimize impacts to the cultural landscape, especially changes to topography and archeological resources.
 - Minimize the visual impact of new above ground utility features to reduce the cumulative effect on the historic scene.



Watertank visible below the rock outcrop, north east of the Main House. Consideration should be given to locating a new watertank in this location, if at all feasible.

**Golden Gate Dairy
(Lopes Brothers Dairy, Ranch M)
Historic Structures Reports**

**Creamery (Garage)
Sanitary Barn (Feed Barn)**

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View of Golden Gate Dairy Creamery Building Looking Northeast
(NPS Photo 2008)

Historic Structure Report – Creamery Building (MB-103)

Golden Gate Dairy (Lopes Brothers Dairy, Ranch M) Golden Gate National Recreation Area Marin County, California

Physical Description and Condition Assessment

Exterior Materials

Summary

The Creamery building was constructed entirely of redwood but now suffers from a severe lack of maintenance. Generally, the exterior envelope is in fair to poor condition. The building is not, by any means, rodent proof and there is an active bee hive on the

west wall in the gable. The redwood siding appears to be original where extant, salvaged and reused where modifications occurred over the years, and ranges from good condition on the west to poor condition on the north and east. Original details such as wide rake boards and box gutters, and corner boards, are mostly missing. Windows and doors are in poor condition and pose a dilemma to the historian/historical architect because they may date to the period of significance but may not be in their original locations, or may not be original to the site. For example, the main entry door, a substantial redwood piece about a hundred years old, was salvaged by the MBVFD from a farm up the road.

Comparing the present arrangement of wall penetrations at the Creamery building to photographs from 1969 and 1970, it is evident that the location and size of wall penetrations was altered significantly just prior to the early years of NPS ownership, making it difficult to understand the historic use of the building and challenging to distinguish the placement of windows and doors through an association with dairy operations and function.

Traditionally, a Creamery building in a small operation would have been the “dairy building” or “milk room.” This would have been a room that was relatively clean and free of dust where the milk would have been brought once it taken from the cows in the milking barn. Generally the milk would have been cooled and separated there, and usually there would have been churn and butter worker, as well a sink inside. The connection to the milking barn is key, and by the early 1900s much care was being taken in the milking barn to avoid contamination, in cooling the milk to keep it longer from spoiling, as well in cleaning the milk containers with steam for sanitary operations. When the Sanitary Barn was constructed on site for a large operation, it is safe to say that the use of creamery likely changed, but given the changes to the building that have occurred in the 1970s, it is difficult to speculate exactly how. The MBVFD has noted that a “loading dock” on the northwest corner of the building was removed and that a raised floor existed on the interior of the building to the west, roughly where the locker room is today. However, no clues to the use of the space are left to connect it to the dairy operations, no refrigeration units, no bottling or canning equipment, no boiler for steam and hot water, none of the dairyman’s ghosts remain.

Walls

Walls are composed of 9” wide horizontal bead board redwood siding over 2x4 framed walls. The 2x4 framed walls have 2x4 full dimensional lumber bottom plates that are in good to fair condition and are visible from the exterior in some places (double 2x4 top plates are only visible at east on the interior). Exterior walls are built atop a short concrete block foundation wall on the west, north and east, with the south wall at grade, which is presumed to be bearing on a concrete grade beam. The concrete block stepped foundation is in fair condition, with some vertical mortar joints omitted or missing. It is a hollow block wall with weeping mortar joints on the exterior, constructed by community volunteers in 1972 and is 5’-0” tall at the highest, northwest corner and roughly half as tall in all other areas. Foundation wall construction details and evidence of steel reinforcement are lacking.

North Wall

Wood drop siding on the north wall is covered with a beige colored asphalt roll roofing membrane nailed to the siding in 3'-6" overlapping courses, which is in fair condition. Approximately 2'-0" of the block foundation is visible at the west corner. Architectural details are not visible. Wood siding is visible in minute areas where the roll-roofing is missing, and appears to be in fair to poor condition. A plastic residential gutter has been installed along the fascia with plastic downspout down the west side of the wall. There is one window penetration in this wall at ground floor level, close to finish grade, and a ramshackle 10'-0"x10'-0" horse stable abuts the wall at the northeast corner. The 3'-0"x4'-0" wood sash double hung window is in fair to poor condition, the wood sill is in poor condition and the metal hardware cloth covering the window in poor condition. A comparison of the wall with a 1970 photo shows a door (or possibly a full-width shutter) in the approximate location of the present window.

East Wall

Wood drop siding on the east wall is in fair to poor condition with some boards curling and highly weathered. Corner boards and box gutter returns are missing. There are three wall main penetrations: one wood louvered vent at attic level, and a 4'-0"x4'-0" wood sash double hung window and 4'-0"x7'-0" door opening at ground level. The louvered vent at attic level is present on a 1970 photo and for that reason may be original to the 1899 construction. The door location appears on a 1970 photo, though the door is missing then as well. The window at ground level is not at all similar to the window seen in the 1970 photo, which shows a wall opening that appears to have shelves on the interior (this could suggest a pass-through configuration for dairy operations, or merely the conversion on the interior of the window to wall space). There is evidence that the siding above the present window was repaired, in that a 3'-6" x 3'-0" seam is visible above the window.

An electrical service meter and drop, that penetrates the gable eave to a height above the roofline, is mounted on this wall nearer to the south end.

South Wall

Wood drop siding in the south wall is in fair to poor condition with some boards racked, some missing and replaced with plywood. Rake boards in the eaves and the corner board on the west are extant and in good condition. The corner board on the east is missing. There are three main penetrations in this wall: at the west a 3'-0"x3'-0" wood sash double hung window in poor condition, 3'-0"x9'-6" redwood entry door in fair condition (salvaged and introduced in the early 70s), and the aluminum garage door in good condition. The garage door opening trim is a haphazard assortment of 2x4s that appear to be placed to fill gaps in the wall opening. Framing for the garage door is accomplished by a precarious 4x10 post and beam system attached to the concrete grade beam with 5" steel flanges bolted in two places with ½" lag bolts. There are two exterior lights, one jar fixture over the entry door in poor condition and one lantern style fixture above the sign over the garage door in fair condition.

West Wall

Wood drop siding on the west wall is in good condition with one small area of siding missing adjacent to the window at attic level. The corner board and the box gutter return on the north are missing. The corner board on the north is in fair condition and the box gutter return on the north is extant, though in poor condition (this is the only extant original molding profile on the building). Approximately 4'-2" of the block foundation is visible at the north, and a drainage swale has been created along the foundation wall just below grade. There are three main wall penetrations: a 3'-0" x 4'-6" wood sash double hung window at attic level and two 4'-0" x 4'-0" wood sash double hung windows at ground level, all in fair to poor condition. The lower windows are covered in diagonal 1" wood lattice in poor condition.

An electrical drop is mounted on this wall near the top of the south gable rake board, and two threaded wood posts mark the spot of older electrical wiring locations nearby.

Roof

The roof membrane is a dimensional asphalt composition shingle in a gray color pattern giving the roof a heavy rustic appearance. The roof appears to be new and is in good condition, possibly installed in 1982 when the MBVFD re-roofed the building. Wood shakes are visible under the asphalt roof, over ½" plywood from the MBVFD's earlier 1973 work. The plywood was installed over 1x6 spaced sheathing with 3" gaps between boards that appears to be original to the structural framing system. The spaced sheathing is in fair to poor condition with beetle holes and dry rot throughout, and extensive rotting present at the eaves on the north.

There are no visible metal flashings or drip edges and no major roof penetrations. There is evidence in the existing wood framing of an 8" diameter vent stack penetrating the original ceiling into the attic and up through the ridge board slightly to the east of center, seen on the interior of the building. A plastic gutter and leader has been installed on the north, connected to a drain tube on the northwest corner of the building that enters a shallow drainage swale along the west foundation wall. The building originally had box gutters that matched the main house. All but the return at the southwest corner of the building have been removed.

The roof framing is composed of 2x4 rough sawn lumber rafters at 32" on center (O.C.), that are in fair to poor condition with beetle holes and dry rot throughout. Rafters have 2x4 collar beams at 64" O.C. that are in good to fair condition, but are either bowed or buckled by overstress. Rafters are braced by 1-1/2" x 6 rough hewn boards at 32" O.C. in good condition, and 2x4 rough hewn ceiling joists/tie beams at 16" O.C. are in poor condition with beetle holes and dry rot throughout, some joists missing sections or broken.

Interior Materials

Summary

The entirety of the building's interior was altered by the MBVFD in 1972. The floor of the structure is poured concrete, bound by the concrete block foundation wall on the west, north and east, which on the interior is covered with a cementitious parge. The ground level is programmatically split between west and east, expressed in change of material finish. An area approximately 24'-0"x14'-0" is finished in gypsum wall board painted off-white and is used as locker room. An area approximately 24'-0"x30'-0" is finished in plywood, is unpainted and is used as a garage. A steel spiral stair was installed in the southwest corner of the building to provide access to a mezzanine level built in 1980 by the MBVFD. The mezzanine has gray low pile carpet on a plywood floor, and the space is finished in plywood painted white. There is one interior hollow core door in the east mezzanine wall that leads to the open garage space below.

Electrical System

The electrical system is rudimentary and outdated, likely does not meet code, is likely overstressed and could pose a fire hazard. It is presumed that the MBVFD installed an upgraded system of circuits for lighting and receptacles in the early 80s. Power is received from the Sanitary Barn via an overhead line to the east wall of the Creamery where it is metered. A 100 amp main disconnect and four 20 amp branch circuits are mounted adjacent to the meter in an exterior subpanel. These exterior panels are in fair condition. On the interior of the east wall, a pass-through subpanel feeds the lights and receptacles in the Creamery, as well an overhead line on the west wall to the Main House. This panel includes a 50 amp double pole circuit breaker, four 20 amp single pole circuit breakers (for lighting, receptacles and the garage door opener) and one 70 amp double pole circuit breaker. Either the 50 amp or the 70 amp circuit feeds the Main House, and it is presumed the other circuit is used for the electrical charging needs of the firefighting and lifesaving equipment in the "squad" truck. It is unknown if wiring is sized to meet the voltage drop and usage levels at these amperes, but it is presumed that it does not. Lighting consists of a total of 14 ceramic PAR light fixtures surface mounted to the ceiling, six in the locker room area and four in the garage and mezzanine. None of the receptacles in the garage are ground fault circuit interrupted.

Plumbing and Fire Protection

There is neither plumbing in the building nor fire detection and alarm systems.

Appliances and Cabinetry

There are no appliances or built-in casework. All furnishings are non-fixed and tall units are not wall-braced.

Evaluation of Significant Features

Summary

The Golden Gate Dairy Creamery building shows its evolution of use over time, but nevertheless is able to convey the simple character of the 1899 farm building architecture. From the exterior, the unpainted and highly rusticated horizontal bead board siding, the extant wide rake boards visible in the eaves of the south wall and in the gabled roof end returns at west and east possess a good degree of integrity of design, workmanship and materials. These features should be repaired, replaced in kind, and brought back where they are missing. The building should be painted white to reflect a connection to the house and sanitary barn. Electrical supply lines should be attached to the building in the eaves of gables, where they have been consistently, and site lighting should be installed at the corner boards or in the eaves via a simple RLM down light or spotlight.

The interior of the building still conveys a sense of the original design volume of the space since the plaster-stripped ceiling joists remain over the garage (the lath and plaster has been removed), even though the attic and gabled roof rafters are now visible. The original interior volume should be brought back to restore integrity of design to the interior of the building. The mezzanine level installed in the 1980s destroys this sense of volume, and since there is little historical evidence of a second floor or loft in the building, it should be removed. As well, use of the mezzanine as it exists could trigger egress or other code related designs that could have adverse effect. For example, since there is no evidence that any exterior stairways or ladders existed to support adding a new exterior stair; a change at this level of impact would compromise what remains to this day as a good degree of integrity in the building's form and shape. Door and window locations have evolved over time and have been enlarged and relocated, based on a comparison of photos taken around 1970 that show all but the west wall. These photos show fenestration patterns and scars of wall penetrations that match those extant on the Main House. Some of these older wall patterns are still visible in some areas and can be brought back to restore integrity to that aspect of the original design. New doors and windows should be compatible with the existing and those shown on historical photos, though easily recognizable as modern.

Generally, the Creamery building retains the 1898-1900 period footprint, as well a reflection of use over time in the evolution of the relationship between it and the cluster of farm buildings, consisting of farm house, creamery, hay barn, shed and Grade A sanitary barn, sited to be sheltered by cypress windbreaks within the open landscape. This intentional design relative to the specific coastal location set in the rugged terrain conveys a relationship with the environment that is central to the story and remains today in a high degree of integrity. The Creamery building itself thus possesses integrity of location, setting, feeling, and association, and sufficient integrity of design, workmanship and materials to warrant its contributing status to the eligible National Register site and an appropriate Rehabilitation treatment approach.

Exterior Significant Features

The following exterior features of the Creamery building are highly sensitive to alteration:

- Building form and shape (rectangular single story, gabled roof with end returns and box gutters)
- Building Siting and Adjacencies (building should not be moved)
- Siding and Scars of Former Wall Penetrations (redwood horizontal drop siding with wide rake boards, corner boards)
- Moldings (simple flat wood door and window casings and sills, turned moldings at gutters)
- Attic Louvered Vent
- Door Opening At East Wall Ground Level
- Power Line Drops

The following exterior features of the Creamery building are less sensitive to alteration:

- Roofing Membrane (dimensional shingles)
- Foundation Wall (concrete block)
- Windows
- Doors on South Wall
- Lighting

Interior Significant Features

The following interior features of the Creamery building are highly sensitive to alteration:

- Volume (±12'-0" high ceiling with attic)
- Plan (rectangular)
- Wood (structural) Framing

The following interior features of the Creamery building are less sensitive to alteration:

- Wall and Ceiling Finishes (gypsum wall board and plywood)
- Mezzanine (finishes and structural elements)
- Windows and Doors
- Lighting and Electrical
- Concrete Floor and Concrete Block Foundation wall

Treatment and Use Recommendations

Requirements

Architectural treatments for creamery building are subject to the *Code of Federal Regulations CFR 36 Part 68*, the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

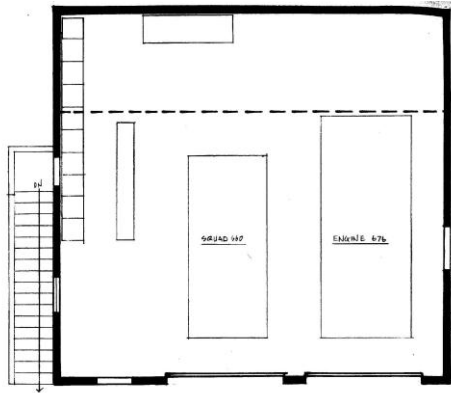
Review of Proposed Mill Valley Volunteer Fire Department Alterations

The NPS reviewed a proposal for the continued use of the Creamery Building by the MBVFD in 2008. Although this proposal is no longer under consideration, the analysis provides useful guidance for potential future use of the building and is retained in this report for that reason.

It is clear however that the program needs of the fire station cannot all be met in the creamery without creating an adverse effect on the historic structure and the historic building cluster. Therefore it is the overarching recommendation of this report that the Creamery Building be remodeled using a Rehabilitation Treatment for reuse suited to housing only the emergency response program needs of the MBVFD. Non-emergency response program elements should be met in other locations, including the Main House. However, before proposals for reuse of the Main House or other site buildings and features can be discussed, planning documentation must be in place that will create a framework for decision-making, including a new Park GMP, Equestrian Environmental Assessment, HSR for the house and CLR for the Dairy Site. The internal ranch road, fences, trees, vegetation, and other features of the cultural landscape shall be maintained but not significantly altered until a CLR provides additional treatment recommendations.

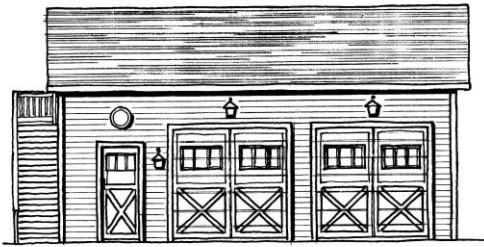
The MBVFD submitted a "Proposed Barn Remodel" conceptual drawing package dated 02/03/2008 for review by the NPS. The proposal shows existing conditions at ground floor level via a plan drawing, front (south) elevation drawing and side (east) elevation drawing. The proposed changes can be summarized as follows and as shown below:

- Interior spiral stair is removed and a new stair is proposed on the exterior (west wall), shown as an extension on the floor plan and east elevation drawings.
- Windows and doors on the south façade are altered such that the existing window is converted into an entry door, the entry door is removed and the 16'-0" garage door is replaced by two separate 10'-0" doors, shown on the floor plan and on the south elevation drawings.
- The roof of the north gable has been extended along the entire length of the north wall to create a shed addition that extends and lowers the roofline, and a dormer is added, shown on the floor plan and on the east elevation drawings.



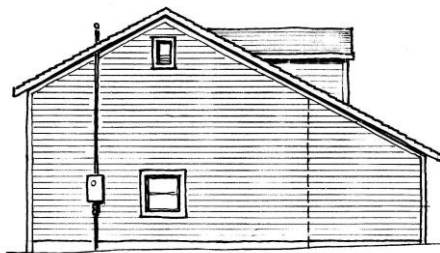
MBVFD Barn Remodel Concept Floor Plan

Not Recommended: Changing the building form and shape by adding a stair on the west where there was not one historically; altering the original footprint with an addition along the whole of the north wall, modifying the roofline.



MBVFD Barn Remodel Concept Front (South) Elevation

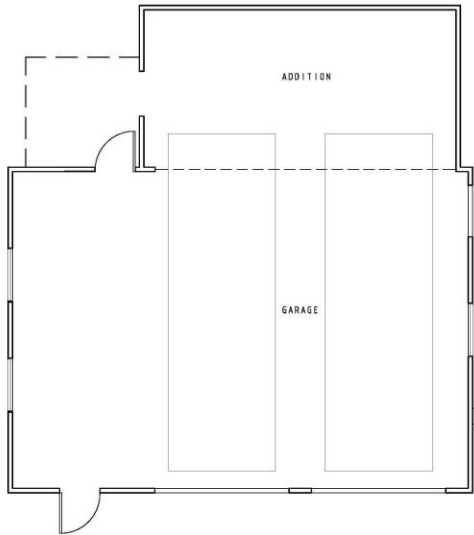
Not Recommended: Changing the building form and shape by adding a stair on the west where there was not one historically; changing the character of the main façade by the addition of contrasting stylistic treatments and appurtenances; altering important elements of the building style (rake boards and corner returns).



MBVFD Barn Remodel Concept Side (East) Elevation

Not Recommended: Changing the building form and shape by extending the north wall and modifying the roofline, adding a dormer; changing important elements of the building style (rake boards and corner returns).

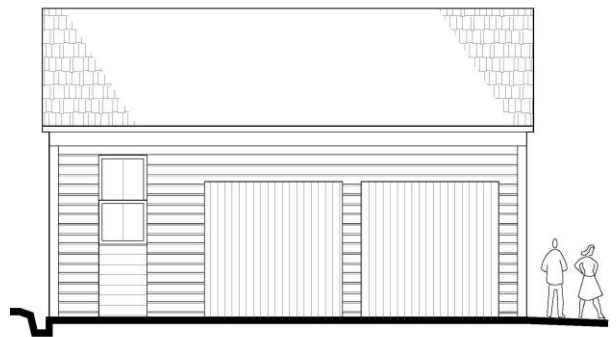
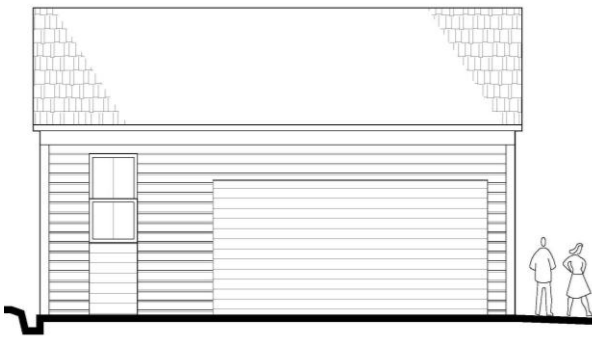
Recommended Approach to Rehabilitation Alterations



Recommended Rehabilitation Concept Floor Plan

Recommended: Modifying the plan so that the original footprint is to some degree intact, extending the north wall in a simple gable or shed addition without modifying the roofline, creating a clear opening through only part of the north wall, using a door in the north wall to another addition if extra program space is needed; removing the mezzanine level and interior stair to restore the historic interior volume.

Recommended Rehabilitation Concept South Elevations



Recommended: Converting the existing window into an entry door with transom that reflects the character and size of the historic window, using simple door treatments that complement the important elements of the architectural style yet can be easily distinguished as modern



Recommended Rehabilitation Concept West and North Elevations

Recommended: Designing an addition on the less significant façade; using a simple shed or gable addition that allows the expression of the historic roof line and wall; choosing wall finishes that complement the simple architectural style

Near Term Use Recommendations

1. Remove the horse stable at the north wall of the building and relocate it away from the building. Re-grade the corral behind the creamery from the rock outcropping on the west and horse stable at the north to divert runoff toward the southeast and the roadway and drainage ditch. Re-grade the corral in the central square to improve site drainage.
2. Re-examine and update the scope, compliance requirements, estimate of probable construction cost and feasibility of NPS project PW03-069 (GOGA 03-031) “Build New Septic System...at Golden Gate Dairy.” If feasible, consult a civil engineer to work with NPS natural resources staff to address site drainage at current use in the context of the Redwood Creek and Big Lagoon watershed restoration projects currently underway. Implement infrastructure improvements so that the site as a whole is examined and site drainage issues are resolved.

Short-term Use Recommendations

1. Consult a structural engineer to evaluate the existing condition of the building envelope and make recommendations for structural repairs and upgrades based on a revised Rehabilitation concept. Structural upgrades shall, to the greatest extent feasible, pair an existing member with a new member, brace, or otherwise supplement and reinforce the existing structural member, replacing existing materials with like materials only where necessary to meet requirements for life safety in a seismic event.
2. Consult an electrical engineer to evaluate the existing condition of the site electrical infrastructure and make recommendations for electrical repairs and upgrades to the creamery based on a revised Rehabilitation concept. The electrical system at the creamery building shall be evaluated in concert with the Sanitary Barn and the Main House and deficiencies in the systems of those two buildings shall be documented. If feasible, then the electrical systems on the site and for each building should be upgraded so that the site as a whole receives a uniform level of treatment.
3. Prepare baseline cultural resource surveys and inventories, including Historic Structure Reports for the farm house, creamery, hay barn, shed and Grade A sanitary barn; and Part 1 of a Cultural Landscape Report for the site. Manage vegetation to stabilize important features such as roads, fences, gardens and wind breaks.

Long-term Use Recommendations

1. Following completion of the Park's new general management plan, complete a Cultural Landscape Report for the site. Include with the CLR treatment recommendations for archeological resources and associated museum collections. Include a preservation plan for the tiered gardens associated with the Main House. Include an examination of program use at current level in order to mitigate conflicts with vehicular use of the internal ranch road and parking. Include with the CLR a management plan for vegetation, including any designs for habitat restoration on the site and a graphic and narrative description of the evolution of the site showing the relationship of the building cluster to the landscape and archeological features. Identify the features of the site that are important in defining its overall character.

APPENDIX

Creamery Building Annotated Photos and Record Drawings



Golden Gate Dairy Aerial View 2007

[Google Earth Photo]

Road is Highway 1. Main House is photo top left, at the top of the U-shaped ranch road is the Creamery building on the northwest and the Sanitary Barn on the southeast. The Milking Barn is at photo bottom right. In the center of the U-shaped ranch road, and north of the Creamery and Sanitary Barn are an outhouse, storage building and horse stables.



Golden Gate Dairy Creamery Building South Façade ca. 1970

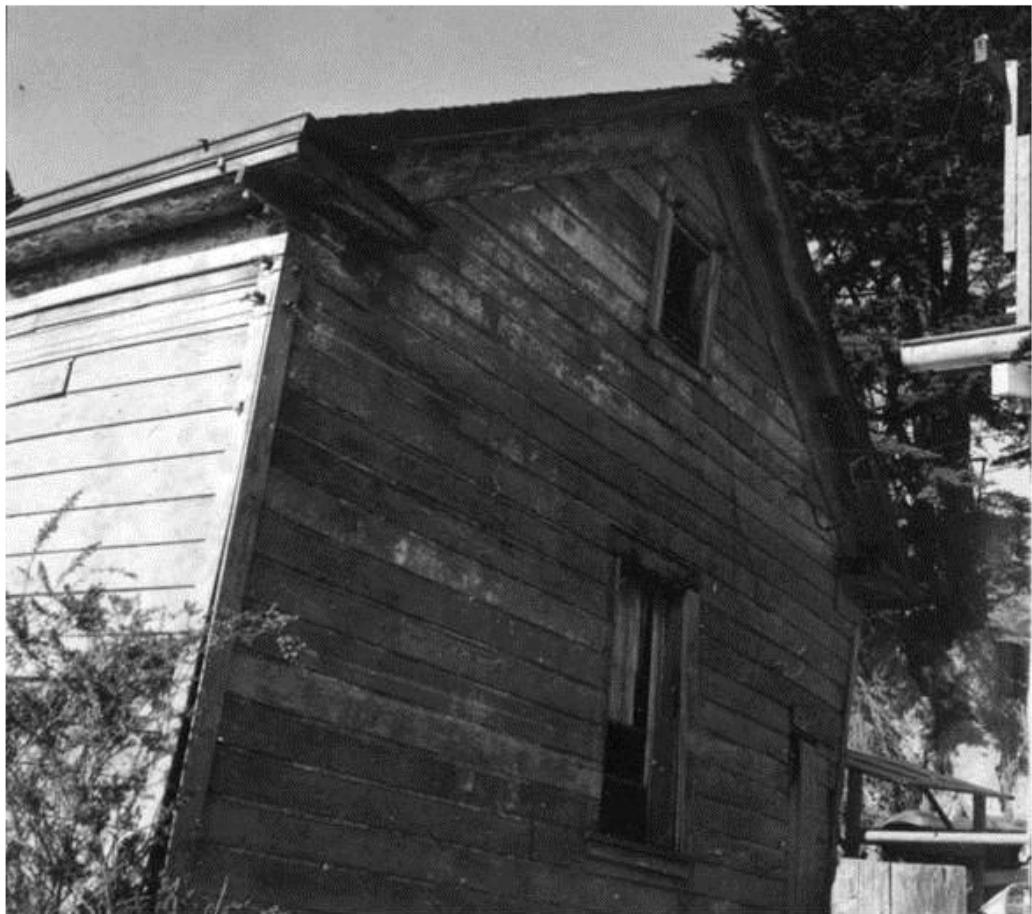
[PARC Photo]

Note the window penetration on the west, the in-filled window penetrations on the south, and the door penetrations. There is no exterior porch. The window at photo left matches windows extant on the Main House. Object in foreground is believed to be a gasoline pump.



Golden Gate Dairy Creamery Building South Façade 2008

[NPS Photo]



Two Views of the Golden Gate Dairy Creamery Building East Façade 1970

[Photo courtesy of D.S. Livingston]

Note the window that appears to have been closed off but has shelves on the interior. Note also the lack of (or extreme foreshortening) of the door penetration in this location.





View of the Golden Gate Dairy 1970

[Photo courtesy of D.S. Livingston]

This view of the rear of the Main House shows the west gable of the Creamery in the background. Note what appears to be a louvered vent in the gable.

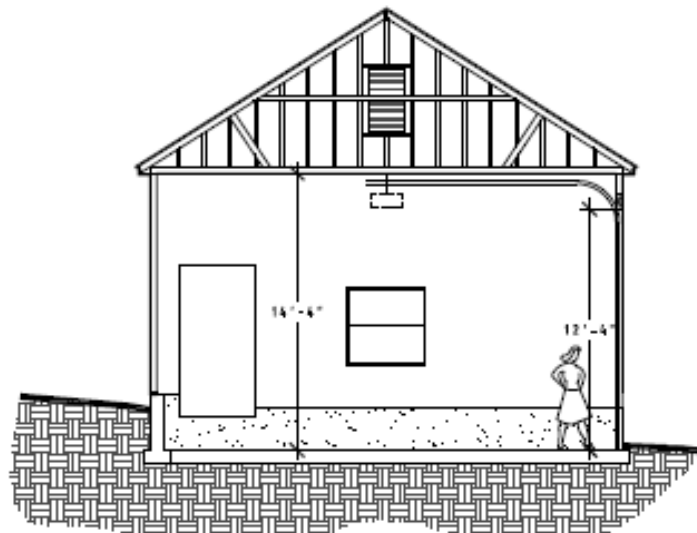
**Golden Gate Dairy
Creamery Building West
Façade 2008**

[NPS Photo]

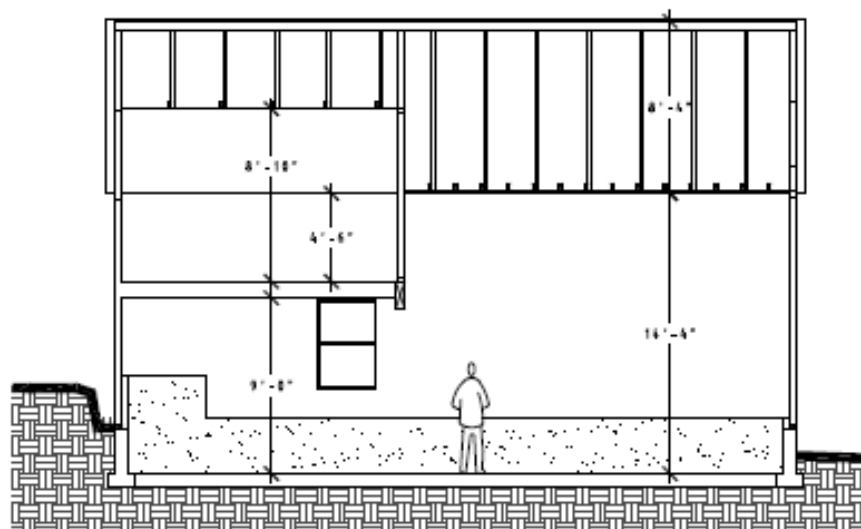
Windows on the ground level are covered in wood lattice, making them difficult to distinguish in this photo.



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|---------|-------------------|---|------------|---------|---------|----|
| Park | GGNRA | NATIONAL PARK SERVICE GOLDEN GATE NATIONAL RECREATION AREA | | | Sheet | 02 |
| Area | GOLDEN GATE DAIRY | | | | of | 04 |
| Project | CREAMERY BLDG | By | HAGIN | Checked | Pkg. | |
| Feature | SECTIONS | Date | 03/21/2008 | Date | Account | |



LATITUDINAL SECTION LOOKING EAST
SCALE: $\frac{1}{4}$ " = 1'-0"

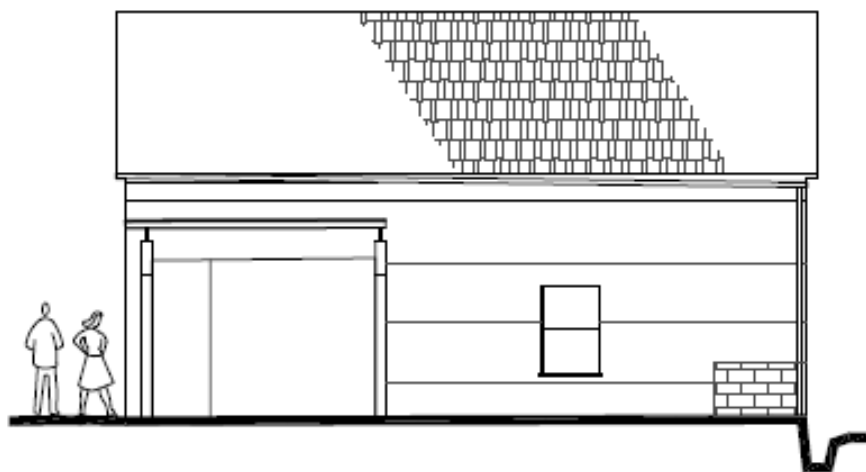


LONGITUDINAL SECTION LOOKING NORTH
SCALE: $\frac{1}{4}$ " = 1'-0"

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|---------|-------------------|--|------------|---------|---------|
| Park | GGNRA | NATIONAL PARK SERVICE GOLDEN GATE NATIONAL RECREATION AREA | | Sheet | 03 |
| Area | GOLDEN GATE DAIRY | | | of | 04 |
| Project | CREAMERY BLDG | By | HAGIN | Checked | Pkg. |
| Feature | ELEVATIONS | Date | 03/21/2008 | Date | Account |

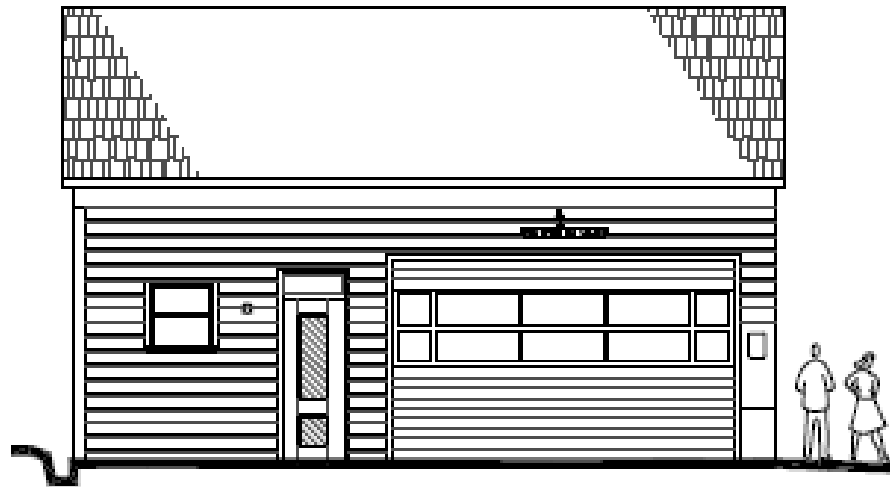


WEST ELEVATION
SCALE: $\frac{1}{4}$ " = 1'-0"

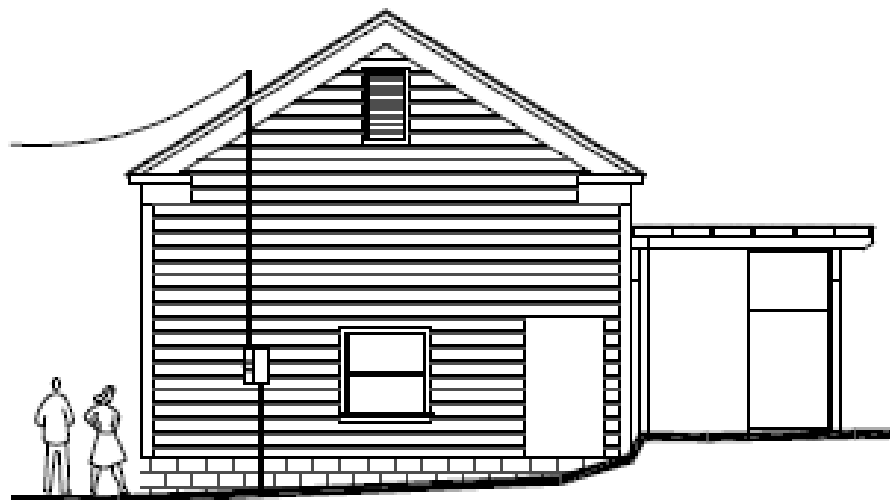


NORTH ELEVATION
SCALE: $\frac{1}{4}$ " = 1'-0"

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| Park | GGNRA | NATIONAL PARK SERVICE GOLDEN GATE NATIONAL RECREATION AREA | | Sheet | 04 |
| Area | GOLDEN GATE DAIRY | | | of | 04 |
| Project | CREAMERY BLDG | By | HAG N | Checked | Pkg. |
| Feature | ELEVATIONS | Date | 03/21/2008 | Date | Account |



SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



EAST ELEVATION
SCALE: 1/8" = 1'-0"



Sanitary Barn at the Golden Gate Dairy Looking Southeast (NPS Photo, 2010)

Historic Structure Report – Sanitary Barn (MB-104)

Golden Gate Dairy

(Lopes Brothers Dairy, Ranch M)

Golden Gate National Recreation Area

Marin County, California

Statement of Significance

The Sanitary Barn building is significant on a local level as one of the component buildings of a rare surviving Azorean Portuguese dairy ranch in Marin County, California. The period of significance is 1898-1953; the years that the ranch was owned by a series of Portuguese immigrants who operated a dairy there. Built around 1942, the Sanitary Barn building is simple vernacular dairy building constructed of concrete with wood frame and corrugated steel roof.

Administrative Data

Other Building name(s): Milk House, Golden Gate Dairy Sanitary Barn, Lopes Brothers Dairy Feed Barn, Ocean Riders of Marin Stables, MB-104

Date Eligible for National Register: 4 March, 2008

Adjacent and related buildings and features: Milking/Feed barn Addition, Outhouse Addition, Milking/Hay Barn, Concrete ranch road

Location: Shoreline Highway/CA Route 1, Muir Beach, Marin County, California 94965

Date Built: ca.1942

Use: Historic use primarily as a “milk house” for where milking equipment was cleaned and milk was cooled and stored; milking stable addition was used as a feed barn or calving barn; current use as horse boarding offices, locker room and stables.

Plan Type: Single story simple vernacular dairy house building with attached milking stable constructed of concrete with wood frame and corrugated steel gabled roof with capped vented ridge, having concrete floors with built-in drains and gutters. A walk-in milk cooling room addition is partially intact.

Acreage of ranch site: 191.86

Square footage of building: 1130

Property Owner: United States National Park Service, Golden Gate National Recreation Area, Fort Mason Building 201, San Francisco, California 94123

Proposed Treatment of Sanitary Barn: Rehabilitation by partner/tenant for adaptive reuse as equestrian boarding and riding program offices and stables.

Proposed Preservation Treatment of Landscape: Stabilization until a planning strategy is set via a new park GMP.

NOTE: Future landscape and building stabilization efforts and preservation treatment actions shall be summarized and refer to this report as they occur, citing it where applicable. In no case shall construction occur without notification of the responsible agency. The Sanitary Barn building with adjacent and related buildings and features are protected by the Archaeological Resources Protection Act of 1979, as amended, and preservation actions are subject to review for compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and conformance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties.

Sanitary Barn - Physical Description and Condition Assessment

System of Evaluation

The condition assessment of interior and exterior materials, fixtures and finishes consists of a three-part evaluation system ranging from good to poor condition. This system creates a general assessment of material physical condition. No destructive testing or laboratory analysis of materials was performed and no rigorous analysis of the structural system was undertaken. This Physical Description and Condition Assessment is a record of the existing condition of the Sanitary Barn that indicates generally the amount of effort required for stabilization repairs and replacements. The following evaluation system was employed:

Good Condition: Item requires minor, if any, maintenance or repair such as minor concrete patching, scraping paint, patching small holes in wood or metal, etc., but is essentially intact.

Fair Condition: Item requires considerable amount of repair and/or minor replacement such as concrete wall and foundation repairs, wood and/or metal repairs that include some replacement, rebuilding and repairing wood framing, replacing fixtures and features, etc.

Poor Condition: Item has lost the majority of its physical integrity and requires extensive repairs and/or replacement.

Exterior Materials

Summary

The Sanitary Barn building was constructed of roughly 3'-6" high steel reinforced poured in place concrete stem walls with wood frame walls and wood frame with metal panel roof above. The general plan and layout of the simple gabled building closely resembles free "dairy house" plans distributed by the Department of Agriculture's Cooperative Extension programs throughout the country in the late 1930s and is clearly a local expression of rural architectural functionalism. The building is obviously a "dairy house" with attached milking stable that presumably was later used as a calving barn when the herd grew in size. Concrete walls and floors with central drains were utilized for their "sanitary" characteristics and is perhaps how the building came by its name. Corrugated galvanized sheet metal panels oriented vertically were employed as exterior siding and used for roofing, and interior walls and ceilings were finished in painted cementitious plaster. Generally the exterior envelope is in fair condition with many exposed wood elements that are severely rotted and in poor condition. Years of deferred maintenance has contributed to the deterioration of many wood rafter tails, wall studs and sill plates. The concrete stem walls are mostly in fair condition; however the north wall has a severe 1/2" wide full height crack that is likely due to settlement of the adjacent driveway entrance; perhaps caused from use by heavy vehicles and farm equipment. The roof appears original, is in fair condition overall and has rusted and badly deteriorated areas mostly at the seams. Generally, windows and doors are in fair to poor condition and are in need of extensive repairs and/or replacement.

Comparing the present arrangement of the building to other site elements of the dairy and to photos from the early 1950s and 60s, one can see a small number of obvious changes. Interior furnishings and fixtures associated with the present use as an equestrian boarding facility conceal many interior walls and do not easily permit examination of the building for evidence of the building's evolution. Unmanaged vegetation makes examination of the exterior walls extremely difficult. A shed addition with attached paddock on the southern side of the stable portion of the building obscures a major building façade and although constructed of old rough cut redwood boards, is likely to have been constructed of salvaged materials in the 1960s or later. The outhouse addition constructed on the north side of the dairy house portion of the building is constructed of similar rough cut redwood boards and also appears that it is not from the period of significance. Evidently,

the four main spatial divisions of the building have evolved in ways that cannot be easily determined by the historian/historical architect, and no verbal or written story of the building evolution exists.

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| Looking south-southeast at dairy house and stable (NPS Photo, 2012) | North east corner at outhouse (NPS Photo, 2012) |
| | |
| East wall (north end) milk cooler door and outhouse (NPS Photo, 2012) | South end stable wall (NPS Photo, 2012) |

Walls

A 26'-0" long 16'-0" wide gabled dairy house has an attached 20'-0" long 31'-4" wide stable, which extends downslope and past the dairy house wing to the south, forming an ell-shaped plan oriented on a northwest by southeast axis. The northern end of the building is presently divided into three interior spaces that adjoin the milking stable. Walls are concrete from grade to a height of about 3'-6", have 6" horizontal form board patterns or are covered with a cementitious stucco parge and vary in thickness from 6" to 6 1/2". A wood stud wall is anchored to the top of the stem wall with wall studs on 2'-0" centers. All lumber is full dimensional and is covered on the outside by painted galvanized steel corrugated sheet panels oriented vertically and nailed at close centers to wall studs. Wall finish on the inside is either cementitious stucco painted white or unpainted wood beadboard siding.

North Wall

The 16'-0" wide north wall of the dairy house wing of the building is gabled and has two 6-lite wood frame with wood sash hopper windows set on top of the concrete stem wall. Walls of concrete and corrugated steel are painted white and are in fair condition.

Window trim is 1x6 wood painted deep green and is in fair condition with one piece missing. Window sash and frames are painted white and are in fair condition. The roof has a full length ridge vent that is capped such that the vented opening and ridge cap is expressed on this façade. The majority of this wall was obscured by dense ivy at the time of survey and is presumed damaged, rusted or rotted. Ivy has intruded into the building and can be seen on the interior and in the attic space. In the northeast end of the gable is a patched 6" diameter hole from a vent stack – possibly from a water heater on the building interior. A corresponding section above the hole at the roof overhang is further evidence of the vertical chimney vent. Under the easternmost window is a full length crack in the concrete wall that is severe and may need extensive repairs. Window sash of this eastern window appears to be original, although it appears as though sash hinges on the interior have been replaced. Into the bottom trim under this window is an armored electrical cable protected ground for the electrical panel on the interior side of the wall. Adjacent to the east trim board of the westernmost window is a PVC conduit that runs into the ground. Window sash of this western window is a shoddy replacement. Somewhere above this window is presumed an historic wood mast for the electrical power supply to the Creamery, which formed support structure for the ivy but it was completely obscured by dense vegetation at the time of survey. This vegetation should be removed immediately and the electrical power supply and circuits inspected by a licensed electrician.

Also visible on the north, offset from this façade 26'-0" is the adjoining section of the stable portion of the building that has one 3'-0"x7'-0" swinging door. The door is composed of 1x8 boards oriented vertically with 1x4 horizontal battens and a diagonal brace in good condition. This door is not historic. Originally a hanging door sealed this entry to the stable and one piece of rail hardware is extant on the wall. The concrete stem wall in this gabled wall of the stable wing has varying height due to grade changes as the ground gradually slopes to the south. In the concrete pavement in front of this portion of wall are inscribed the words "Manuel" with presumably the date underneath, which is illegible (possibly "SET 1943" for Setembro or September). This wall has 3 modern lights installed along the eaves line. The roof has a full length ridge vent that is capped such that the vented opening and ridge cap is expressed on this wall above the descending roof of the dairy house wing and aligned with its exterior wall. The corrugated steel siding and concrete stem wall is painted white and is in good condition. At the far south end of the wall is a 1x4 vertical end board painted green in fair condition. The shed addition wash room extends from there, is not original to the period of significance, but is in fair condition overall.

East Wall

The 26'-0" long east wall is roughly 7'-6" tall to the top plate. On the farthest north end of the wall is located the 5'-0" square wood shed outhouse addition. The outhouse addition is founded on a concrete slab at ground level that appears to be integral with exterior concrete wall and/or floor slab. The shed addition encloses a small portion of the exterior building wall, where there is extant abandoned water piping – perhaps from a water heater on the opposite side of the wall. On the floor of the outhouse is a small raised housekeeping pad that could be a mount for an electric pump motor. Adjacent to the outhouse addition to the south is a small modern ramshackle wood shed roof porch

addition that protects the extant front wall and door of a walk-in milk storage room addition. The extant wall is constructed of cementitious plaster painted gray over wood studs with 4" cork insulation. The extant door opens inward (3" below existing grade) and is a manufactured refrigerator door dating from the late 1930s. The wall between the outhouse and the refrigerator door is typical, unpainted and there is a knob from the early electrical wiring extant. A three foot section of vertical siding adjacent to the door on the north is missing and the exposed wood studs and sills are badly rotted and damaged by insects. The wall adjacent to the refrigerator door to the south is composed of salvaged plywood patches abutting a unique wood sash window with raised concrete floor slab below. The window is composed of a fixed 36" square window divided horizontally into two lites by 2" thick wood framing and is adjacent to a narrow 38"x 17" wood sash casement window divided into 6 lites by narrow wood muntins set into the remaining 2x4 framed opening. This window (both frame and sash) has insect damage and is in fair condition. The bottom pane of the divided sash is missing and is covered with plywood. The wall at this window has cementitious plaster up to the top of the window frame on both sides, which is unusual. The transition between the low-walled dairy house wing and the attached stable is not expressed on the building exterior on this façade; neither in the wall nor the roof. The wall at this location has a full height plywood patch perhaps indicating the presence of an in-filled doorway. The exterior wall of the stable portion of the building is composed of concrete with form board patterns and corrugated steel, is unpainted and is in fair condition. At the far end of the wall (centered in the stable room) is a 6'-6"x 4'-0" wooden 2-panel sliding window. Sliding wood panels are composed of three 1x12 boards and one 1x6 board oriented vertically, butt-joined with 1x4 horizontal batten boards on the exterior – 2x4 framing is exposed at bottom and covered with 1x4 trim at top. Window panels, framing and trim is unpainted redwood and is in fair condition. Faintly carved lettering was noticed on the wood window panels. Vegetation along this wall of the building is overgrown, set too close to the building and should be removed.

South Wall

The south wall is the 31'-4" long gabled wall of the stable room, is composed of concrete and corrugated steel, is unpainted and is in fair condition. As with the north wall, the roof has a full length ridge vent that is capped such that the vented opening and ridge cap is expressed on this façade, but in this case the stable room is almost twice as wide and the ridge vent is centered above a 7'-0" wide door opening. This main door opening has been modified with 2 paddock gates inset in the opening and the original sliding door is no longer extant (a sliding door is evidenced by extant rail brackets and the "ghosts" of the rails are visible on the corrugated steel wall panels for a door that opened to the east). Similarly, a sliding door is evidenced at the far west side of the wall where the feed alley is located. This 3'-0"x 6'-4" opening has been in-filled with a Plexiglas and wood. The concrete stem wall on the east side of the main door has a 10" wide form board pattern finish whereas the wall on the west side of the main door is finished in a smooth cementitious plaster.

West Wall





The west wall of the building is the front, street-facing wall, both of the dairy house portion of the building and the attached stable. At the far south end of the wall onto the stable wall is a shed addition built of dimensional lumber with rough hewn redwood siding and translucent corrugated fiberglass roof. Attached to the shed addition is a horse paddock and the entirety of both structures is overgrown with vegetation. The shed addition is built on grade with 4x4 posts and 2x4 rafters nailed to the rafter tails of the stable roof. The posts and rafters have beetle holes and are in fair condition. The corrugated fiberglass panel roof is in good condition and the plywood floor rests upon heavier wood structure in ground contact, rotted and in poor condition. The shed addition has the only running water in the building in the way of a two compartment wash sink hung from a wood partition wall. A small 10 gallon electric hot water heater, elevated on a shelf and mounted to the stable wall framing provides hot water. A row of five 6 lite divided wood sash windows, which are evidenced in historic photos from the late 1940s, and later translucent corrugated fiberglass panels oriented vertically, which are evidenced in photos from the early 1960s, were evidently removed in the area covered by the shed addition to provide a pass-through.

The west wall of the low gabled dairy house portion of the building has a 4'-0" wide concrete sidewalk in front of it with two steps at the north end and a short ell at the door to the stable. This is the only façade with a modern gutter nailed to the exposed rafter tails. Near the intersection of the stable portion gable is a wood sash awning window that is divided into 6 lites by narrow muntins. This window is in fair condition and appears to be original, however it may have been altered from a hopper window to an awning window. It is centered in the smallest room in the wing which is accessed from the stable through a hanging door on the stable side. Slightly to the north is a 2'-8"x6'-0" five-panel (right hand) wood door and a pair of 6 lite wood sash windows of the adjacent (milk cooling) room. One of these windows is a replacement and the other is in poor condition with missing muntins. North of that is a 3'-0"x 6'-1" right handed five panel wood door and single 6 lite wood sash window of the northernmost room. Both the window and door are in poor condition. The wood frame hopper windows painted white are again set directly atop the concrete stem wall and trimmed with 1x6 board painted green. The wood panel doors are cut short to a height of about 6 feet such that the interior floor slab (painted white to match the wall) is visible on the exterior as a step up from the concrete sidewalk in the front. Corrugated galvanized steel panels oriented vertically painted white comprise the exterior siding and are in fair condition. Photographic evidence does not prove the doors are original, since historic photos show screen doors in white and either a dark painted door or an open door behind, though the age and condition of the extant doors is consistent with such a conclusion. No window or door screens are extant.

Roof

The Roof of the building is composed of overlapping heavy gauge corrugated galvanized steel sheet nailed to 2x4 purlins on 3'-6" centers atop 2x4 rafters on 3'-6" centers forming a gridded framing plan. The galvanized sheet is in fair condition overall with some rust and evidence of repairs using overlaying sheet of a different pattern. In the stable, the galvanized sheet, bearing the maker's mark of "USS Columbia Steel" is 1½"

nominal height and composed of 1½” wide by ¾” high corrugations on 3” centers. There are no roof penetrations. Similar sheeting (without maker’s mark) is used on the milk house wing of the building and on the milking/hay barn.

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| <p>North room entry door (NPS Photo, 2012)</p> | | <p>Looking southeast at stable and shed addition (NPS Photo, 2012)</p> |
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| <p>Northeast corner inside outhouse; abandoned water piping possibly from boiler or heater on opposite side; north room (NPS Photo, 2012)</p> | | <p>Capped ridge vent detail (NPS Photo, 2012)</p> |

Interior Materials

Summary

The entirety of the Sanitary Barn interior has been adaptively reused since the early 1960s as an equestrian boarding facility. Although no major episodes of construction are known to have occurred and the interiors have received little periodic maintenance, the visible evidence of remodeling is difficult to date without destructive testing and laboratory analysis. The office areas have been painted recently and the building still retains a good deal of historic character. In the low gabled section of the building, two of the rooms are very close in size and are roughly 15’-0” wide by 9’-0.” The partition wall between the rooms, which are currently used as office and locker rooms, appears to be rudimentary wood frame wall installed in the space where an historic wall once stood but was at some point removed – the rooms were originally separated by a partition wall, the partition wall was removed to create one large room, and later the rooms were separated again to create the present situation. Obvious similarities between this layout and

presumed use of this portion of the Sanitary Barn and typical dairy houses of the time cannot be substantiated but should not be ignored.

Although there is oral testimony that indicates the milk house portion of the sanitary barn was built in the mid 1930s, it is presumed in this report that the Sanitary Barn was constructed in the 1940s to bring the small local 30 head dairy herd up to Grade A standards (within the wholesale milk trade) with 80 milk cows in a herd of 100 cows as was outlined in the Historical Background section above. As the Marin Dairymen's Milk Company album entry mentions, for the 80 milk cows the Lopes Brothers ranch had a "12 stanchion single string barn with feed barn nearby" and so might have required 7 changes of cows at each milking. At about 2 to 3 minutes each cow, 2 men with portable milking machines could have had 12 cows milked in about half an hour. If this were indeed the case, after 7 changes the Lopes brothers would have the herd milked in about 4 hours.

The layout of the south stable portion of the Sanitary Barn is a two-string milking stable, which with parallel stanchions, would have had enough space for 6 stanchions on each side of the central litter alley. Having only one entry/exit for cows and litter, this would not have been the most efficient (or sightly) of arrangements for milking 12 cows at a time, but it would function well for feeding. Photos included in the Marin Dell company album appear to show a pen on the west side of the building between it and the larger milking barn that could indicate a lounging pen for either building. Making sense of this information then, the stable portion of the Sanitary Barn building may have originally been built/used by the smaller dairy for milking, and as the dairy grew, its use evolved for specialized feeding, segregating sick cows or cows in heat, or it was divided into several pens and used as a calving barn. One wonders whether the milk house functions of the Sanitary Barn were gradually outmoded to where these functions occurred in the milking barn (present day Hay Barn) building. The interior north wall of the stable space in the Sanitary Barn incorporates the exterior gable wall of the milk house, indicating that it was a later addition. The stable may have been added very soon after the milk house was built and involved only the removal of metal wall siding and the installation of stucco. Aspects of the Sanitary Barn building function and use are unclear. For example it is a necessary function of the milk house to have a boiler for a steam cleaning cabinet (or hot water heater), sinks for cleaning equipment and a toilet room with lavatory for herders and milkers yet evidence of a toilet room within the building was not found. As for a toilet room, currently there is an outhouse attached to the east side of the Sanitary Barn building. The outhouse is built over a concrete pad and it makes little sense that this would have been the historic condition and a toilet would not have been installed somewhere and connected to a septic system since there must have been one used for the bathroom in the nearby house. Construction of an outhouse on top of a concrete pad also goes against the temporal nature of such structures, even though the convenience of portable sewage pumping is a Victorian invention. Currently hot water is located in the shed addition to the stable; nowhere near the walk-in milk cooler. The evidence of the vent stack and water piping at the northeast corner of the north room leads to the conclusion that this infrastructure was likely there at one time, very near the milk cooler. . If there was no boiler for steam, then the sanitary requirements of the dairy would have

required use of chlorine wash. It is conceivable that the floor drains for the milk house (Sanitary Barn north rooms), due to their carrying harsh chemicals were seen as problematic for drainage into the septic system as so were contained in a concrete vault and pumped out as needed. This drain system could have been remodeled into the current outhouse configuration by the early tenants of the equestrian boarding facility and should be verified if the outhouse is remodeled. But no reasonable explanation can be found for a lack of toilet facility, save for the notion that in the family business all farm hands used the ranch house facilities, or a combination of hot water and traditional outhouse was used. Both the outhouse addition on the east and the shed addition on the west appear to be relatively modern installations that contribute to the vernacular but not the historic dairy farm.



View of Power Pole at Golden Gate Dairy ca. 1965

Photo: Courtesy of Maureen Pinto

Electrical System

The electrical system is rudimentary and outdated, likely has many code violations, is likely overstressed and could pose a fire hazard. In the north room is a rudimentary surface mounted electrical panel with three 15 amp circuits and one 20 amp circuit. This panel has a convenience outlet below it and an armored cable ground wire loosely hanging and penetrating the window trim to the exterior (the electrical panel does not appear to meet current electrical code). Circuits in the building are a tangled collection of abandoned knob and tube, exposed NM sheathed wire, armored cable and extension cords that supply roughly a dozen PAR floodlights and a one fluorescent shop light both on the exterior and in the storage rooms and stable. Knob and tube wiring in the attic appears relatively intact and should be preserved in place where possible.

Plumbing and Fire Protection

Plumbing consists of one supply line that originates across Highway 1 at a Muir Beach Community Water District main that crosses under the road to a check valve on federal property that feeds the Ranch House, Sanitary Barn and Hay Barn, and then crosses back under the road to the stables at Green Gulch. There are no fire detection and alarm

systems in the building. Very little abandoned historic piping is extant except in the area of the stable and in the vicinity of the outhouse. This piping provides important clues on the past use, but does not contribute significantly to historic character.

Appliances and Cabinetry

There are no appliances. Built in casework consists of plywood lockers that appear to be well anchored to the walls and/or floors/ceilings, installed in the late 1970s. On the north side of the building outside is a two-compartment concrete wash sink that may be from the historic period of significance, although it's original location is unknown.

North Room

The north room is 15'-0"x9'-1" and is characterized by a sloping concrete floor with center drain, cementitious stucco walls and ceiling all painted white. The floor drain grate is missing, but otherwise the room features are worn but in good condition. Windows are trimmed in 1x6 wood, and are flush with the wall for sanitary purposes, as is the ceiling access hatch, which is no longer extant. On the ceiling there is one single ceramic light socket mounted on a surface mounted junction box. Built-in plywood lockers obscure the walls on the east and south. On the north wall are two similar 6 lite wood sash windows. To the right of the electrical panel is a small ceramic light socket mounted to a wood block embedded flush in the stucco wall. Below the panel the stucco finish is severely cracked. On the west wall are a single window and door. The window sash is a shoddy replacement and the door trim is not flush with the wall, which could indicate a later remodel. The south wall shows evidence that the wall was removed at an earlier period before the present wall was installed. Because of this it is not possible to discern whether or not there was a door or passage between this room and that to the south, however because of an extant trim board stranded in the wall it appears there may have been a wall opening. At present, the connection between the two rooms is served by an exterior concrete walkway.

Milk Cooler Room

The central room in the low gabled milk house portion of the building is 15'-0"x9'-7" and is characterized by a sloping concrete floor with center drain, cementitious stucco walls and ceiling all painted white. The complete floor drain with grate is extant. Unique to this room is the manufactured refrigerator door centered in the east wall and painted an unusual combination of white and deep green with cream colored hardware. On the ceiling there is one single ceramic light socket with wire cage mounted on a surface mounted junction box. The ceiling hatch is covered with salvaged boards. Also on the ceiling in the south east corner of the room is a pipe base flange and a penetration, perhaps from a water pipe or conduit. The wall on the north is a non-historic plywood partition and the south wall is stucco.

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| <p>North room interior looking northeast (NPS Photo, 2012)</p> | | <p>North room ceiling, attic hatch and ceiling light looking east (NPS Photo, 2012)</p> |
|  | |  |
| <p>Milk cooling room ceiling hatch and ceiling light looking west</p> | | <p>Milk cooling room floor drain (NPS Photo, 2012)</p> |

Room With Raised Floor

The room furthest south in the low gabled milk house portion of the building adjacent to the stable is 15'-0" by 5'-6" and is characterized by its stepped and raised floor platform and unique window. Ceiling height at the raised floor is 5'-10" and typical (7'-5") elsewhere. Although there is a boxed wood vent duct in the attic to the ridge, it is not expressed in the ceiling or is obscured by casework. Built-in plywood lockers obscure the walls on the east and north, and a narrow gutter can be seen on the floor at the base of the south wall. A hanging sliding door on the stable side of the south wall connects this space with the stable, and the ghost of a doorway, which connected this space with the milk cooler room can be seen in the west corner of the north wall. On the west wall is a 6-lite divided wood sash awning window in fair condition. Adjacent to the window is a flush wood mount plate for a piece of equipment, possibly a telephone.





Milking Room

The milking room is 19'-0" deep by 30'-4" wide and is characterized by its built-in concrete floor with manger, alleys and gutters. Stanchions are missing but the top plate of the wood structure that would have supported the stanchions is still extant and functions to hold the horse pens in place. There are alternating 2x4 ties at the bottom of the trussed rafters that tie the north and south plates together. Fastened to the southern truss tie is an extant section of galvanized steel $\frac{3}{4}$ " ID piping (vacuum, hot water or steam) with ball valve hose spigot/check valve at the west and pressure gauge at the east. The ceiling is open to the gable vent in the ridge and two rudimentary wood trusses with 1x 6 diagonal braces and the gridded framework of the rafters and purlins of the roof framing system

are visible. The steel corrugated galvanized sheet roofing panels are rusted mainly at the seams, are in fair condition and still bear the mark of Columbia Steel (the company that most notably supplied the steel for the San Francisco/Oakland Bay Bridge). The wood roof framing appears to be in good condition - some wood members have insect damage. In the northwest corner of the south feed alley there is a concrete tank that was most likely used to hold grain or feed. The majority of the interior wood frame walls are finished in horizontal tongue and groove redwood beadboard in four foot sections (spanning three wall studs) laid up to form vertical joints at every other stud. The board appears to be in good condition though the age of this finish is unknown; it could be a 1960s installation or salvaged material. In the northwest gable wall the beadboard is vertical and is in two sections with a horizontal battened joint at 4'-0" above the stem wall. There is a cementitious stucco gable outline of the low gabled milk house portion of the building on this wall, and this gives the appearance that the stable was an addition, perhaps built very soon after the dairy house portion of the building. Following the line of the south wall of the dairy house, a heavy wood beam (top plate from the dairy house wing) is cantilevered one foot out into the stable space and a rudimentary 4-prong metal hook is hung from it, presumably for hanging tack. The beadboard in the south gable is oriented horizontally but does not extend the full height of the gable (perhaps the salvage material ran short). The stable is accessed via a 9'-0" wide doorway at the south, which spans the length of the central litter alley. A small doorway at the north connects to the sidewalk at the front of the building. Historic photos show the south wall of the stable had windows that are no longer extant, and the majority of this wall has been removed to create a pass-through with the shed addition to the south. The pass-through in this area allows for the hot water heater to feed the sink in the wash room shed addition.

Milk House Attic

Above the three rooms that compose the low gabled north portion of the building is a low attic accessed by hatches in the room ceilings. Since no original ceiling hatch doors are extant, it is possible that the hatches had mesh covers to allow the gravity ventilation system of the full length ridge vent to function. The north room hatch opens to the attic and the ridge vent. The ceiling hatch openings in the milk cooling room and the room with raised floor are boxed-in with wood up to the ridge vent above (the attic space being open including at the eaves, except for the 3 wood box-ducts). The design must have made for sufficient cooling especially at night in the coastal climate. The 2x4 rafters are tied beneath the ridge by a 2x6 collar tie on alternating rafters, and by the ceiling joists at the bottom. A 2x6 stiffening member spans the full 26' on center from wood box to wood box, stiffening the ceiling from north to south.

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| <p>Milk room cooler door (NPS Photo, 2012)</p> | <p>Attic framing in ceiling of north room looking south at milk cooler room hatch and boxed duct (NPS Photo, 2012)</p> |
|  |  |
| <p>Milking stable north end gable showing ridge bracing and gabled end of milk house (NPS Photo, 2012)</p> | <p>Milking stable south gable showing beadboard wall finish, wood bracing and piping (NPS Photo, 2012)</p> |

Sanitary Barn - Evaluation of Significant Features

Summary

The Sanitary Barn has a high degree of character relative to its use as a dairy farm building in the 1940s. Although the exact evolution of the building is unclear, some basic elements of the dairy farm building remain as significant character elements, and include the gabled corrugated steel roofs with ridge vents and vertical corrugated steel wall siding, the concrete and stuccoed stem walls, wood sash 6 lite hopper windows and wood 5-panel doors with knob hardware, stuccoed rooms with sloped and drained concrete floors, the manufactured door to the milk storage room and the concrete stable floor with built-in alleys, drains, mangers and a concrete tank. These features possess a good degree of integrity of design, workmanship and materials. They should be repaired, replaced in kind where required, and brought back where they are missing. Ideally the building should be painted white along with the milking barn (MB-102) to create a visual connection between the main dairy buildings. Trim color may remain the same unless a paint layer analysis reveals a color more appropriate to the historic period of significance. Electrical supply lines should be attached to the building in the eaves of gables, where they have been consistently, and site lighting locations should be carefully chosen at the

corner boards or in the eaves via a simple RLM down lights or spotlights. The building should be rodent-proofed and all vegetation should be cut back at least 3'-0" from the building foundation line (planters on the west wall should be maintained).

The interior of the building feels like a cramped space today that during its heyday must have been mostly empty except for drying and storage racks, cooling equipment and wash room supplies and furnishings. Doors and windows should be repaired to full operation and replaced where necessary, interior walls patched and painted, floors steam cleaned. When the roof is repaired, the attic should be cleaned and screened vents installed in the milk cooling room ceiling hatch. The partition wall between the north room and milk cooling room should be maintained if feasible in a reuse plan, and if interior passage is needed it should be made in the west end.

Exterior Significant Features

The following exterior features of the Sanitary Barn building are highly sensitive to alteration:

- Building form and shape (rectangular ell-shaped plan, single story, gabled roofs with open capped ridge vents)
- Building Siting and Adjacencies (building should not be moved)
- Siding (concrete with form board patterns or stucco parge and vertically oriented corrugated galvanized steel siding matching the roof panels)
- Trim (simple flat wood door and window casings and sills).
- Window and door locations
- Original windows (6-lite wood sash hopper windows and wood slider in stable)
- Doors (2 five-panel doors with knob hardware - 3 (missing) hanging doors)
- Concrete pad at outhouse (verify function and design)

The following exterior features of the Sanitary Barn building are less sensitive to alteration:

- Outhouse and shed additions
- Foundation (board formed and poured concrete stem walls with or without stucco parge)
- Replacement and salvaged windows
- Stable doors
- Lighting (replace with RLM downlights where feasible)

Interior Significant Features

The following interior features of the Sanitary Barn building are highly sensitive to alteration:

- Concrete mangers, alleys and drains; and concrete tank in stable
- Hanging sliding door in stable
- Visible volume in stable
- Circulation pattern (along west wall of milk house, centered on the stable and through the alleys of the stable if possible)

- Wood (structural) framing in attic and stable
- Sloped concrete floors and drains
- Walls and ceiling materials (trimless windows flush with interior wall finish, cement stucco and wood beadboard)
- Lighting in the north room and milk cooling room (ceramic socket with wire cage)
- Knob and tube wiring (abandon in place)
- Manufactured refrigerator door in milk cooling room

The following interior features of the Sanitary Barn building are less sensitive to alteration:

- Modern lighting and electrical circuits
- Plywood cabinets and moveable furnishings
- Partition wall between north room and milk cooling room

Sanitary Barn - Treatment and Use Recommendations

Requirements

Architectural treatments for the Sanitary Barn building are subject to the *Code of Federal Regulations CFR 36 Part 68*, the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.



Milking Room Stables Today

(NPS Photo, 2013)

Equestrian Use

The NPS supports the continued use of the Sanitary Barn building in a horse stabling operation as this is a compatible reuse. In fact, it may be true that the program needs of the current stables operator are currently being met without any major improvements to the Sanitary Barn building over the course of the last 47 years. The building suffers badly from deferred maintenance and needs conservation and stabilization measures. Further damage or loss of the resource could present an adverse effect on the historic structure and the historic building cluster. Therefore it is the overarching recommendation of this report that the Sanitary Barn building be remodeled using a Rehabilitation Treatment for reuse suited to equestrian stabling operation. Proposals for reuse of the Sanitary Barn or other site buildings and features will be fully developed within the planning framework

of the final action alternative of the *Marin Equestrian Stables Plan and Environmental Assessment* of October 2011 and subsequent *Errata* and *Finding of No Significant Impact*. The internal ranch road, fences, trees, vegetation, and other features of the cultural landscape shall be maintained but not significantly altered until a CLR provides additional treatment recommendations.

Near Term Use Recommendations

3. Remove all vegetation within 3 feet of the building footprint and manage planter boxes on the front.
4. Perform an inspection to determine the extent of insect and rodent infestation and needed repairs.
5. In consultation with the GGNRA staff, create concepts for access for people with disabilities to all equestrian lease program offerings.
6. Patch the roof, repair the concrete stem wall, replace insect damaged, rotted and missing structural members (including rafter tails) where needed; replace wall siding where needed with matching materials; paint building exterior where previously painted. Leave previously unpainted surfaces unpainted.
7. Perform an inspection and correct deficiencies in the electrical system.
8. Re-examine and update the scope, compliance requirements, estimate of probable construction cost and feasibility of NPS project PW03-069 (GOGA 03-031) "Build New Septic System...at Golden Gate Dairy." If feasible, consult a civil engineer to work with NPS natural resources staff to address site drainage at current use in the context of the Redwood Creek and Big Lagoon watershed restoration projects. Implement infrastructure improvements so that the site as a whole is examined and site drainage issues are resolved.

Mid-term Use Recommendations

4. Consult a structural engineer to evaluate the existing condition of the building envelope and make recommendations for structural repairs and upgrades based on an approved Rehabilitation concept. Structural upgrades shall, to the greatest extent feasible, pair an existing member with a new member, brace, or otherwise supplement and reinforce the existing structural member, replacing existing materials with like materials only where necessary to meet requirements for life safety in a seismic event.
5. Consult an electrical engineer to evaluate the existing condition of the site electrical infrastructure and make recommendations for electrical repairs and upgrades to the building based on an approved Rehabilitation concept. The electrical system at the Sanitary Barn building must be evaluated in concert with the Creamery, Main House and Hay Barn and deficiencies in the systems of those three buildings must be documented. If feasible, the electrical systems on the site and for each building should be upgraded and divided by tenancy such that the site as a whole receives a uniform level of treatment.

6. Prepare baseline cultural resource surveys and inventories, including Historic Structure Reports for the farm house, milking/hay barn, and shed. Manage vegetation to stabilize important features such as roads, fences, gardens and wind breaks.
7. Relocate equestrian program additions to the rear of the building where feasible, restoring the west façade of the stable and the connected garden, stockyard fencing and gate.
8. If feasible and compatible with adaptive reuse plans, relocate water heater to historic location in the building's northeast corner and design new toilet room in the location of the existing outhouse.

Long-term Use Recommendations

2. Manage the building in concert with the recommendations of the Cultural Landscape Report for the site. Restore the Sanitary Barn (MB-104) building and Milking Barn (MB-102) as the focal points of the adaptively reused dairy farm campus. Sensitively rehabilitate the buildings to retain the integrity of the historic dairy ranch district while allowing it to function as an equestrian operation. This could include interpretation of the dairy ranch through signs and publications, and selected building and landscape features.

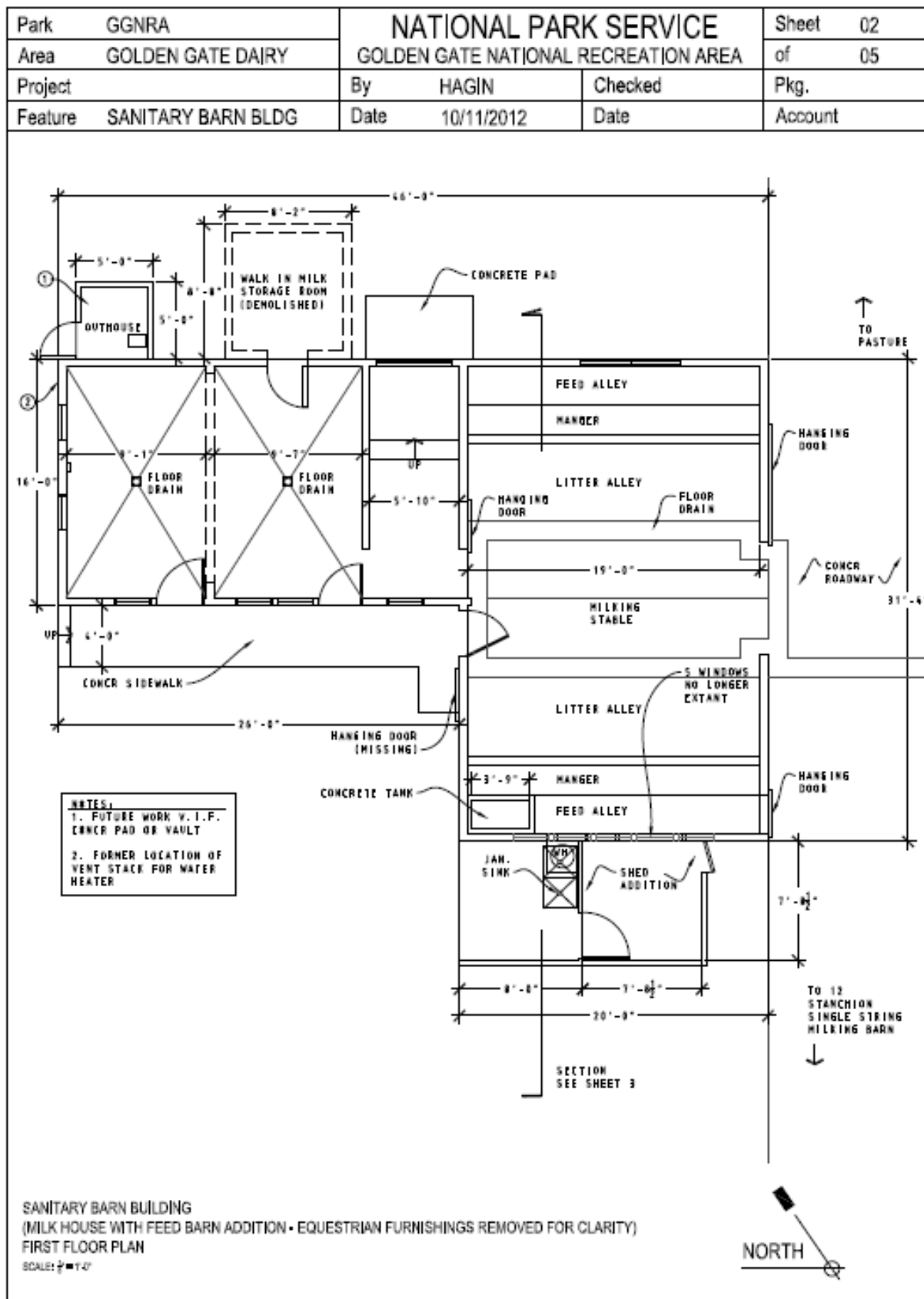
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Appendix

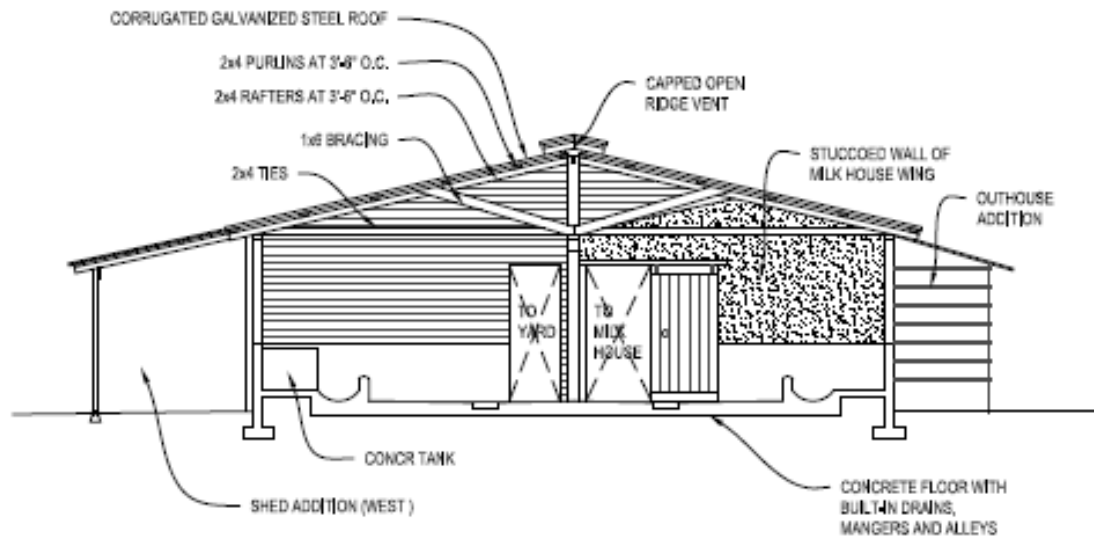
Sanitary Barn Building Drawings

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|---------|-------------------|--|------------|---------|---------|
| Park | GGNRA | NATIONAL PARK SERVICE GOLDEN GATE NATIONAL RECREATION AREA | | Sheet | 01 |
| Area | GOLDEN GATE DAIRY | | | of | 05 |
| Project | | By | HAGIN | Checked | Pkg. |
| Feature | SITE PLAN | Date | 10/16/2012 | Date | Account |

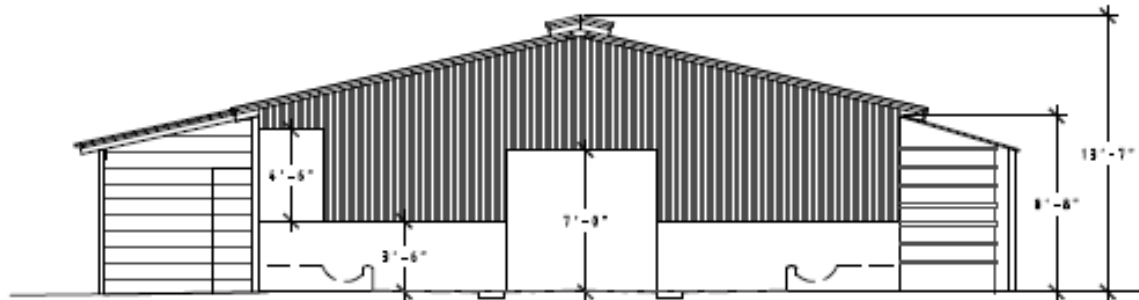




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| Park | GGNRA | NATIONAL PARK SERVICE GOLDEN GATE NATIONAL RECREATION AREA | | Sheet | 03 |
| Area | GOLDEN GATE DAIRY | | | of | 05 |
| Project | | By | HAGIN | Checked | Pkg. |
| Feature | SANITARY BARN | Date | 10/11/2012 | Date | Account |



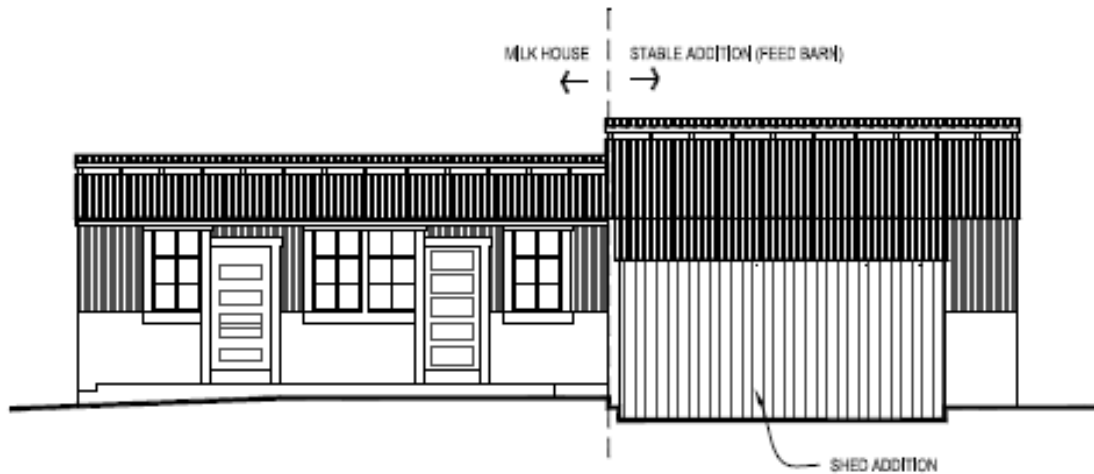
SECTION THROUGH FEED BARN ADDITION (LOOKING NORTH)
SCALE: $\frac{1}{4}'' = 1'-0''$



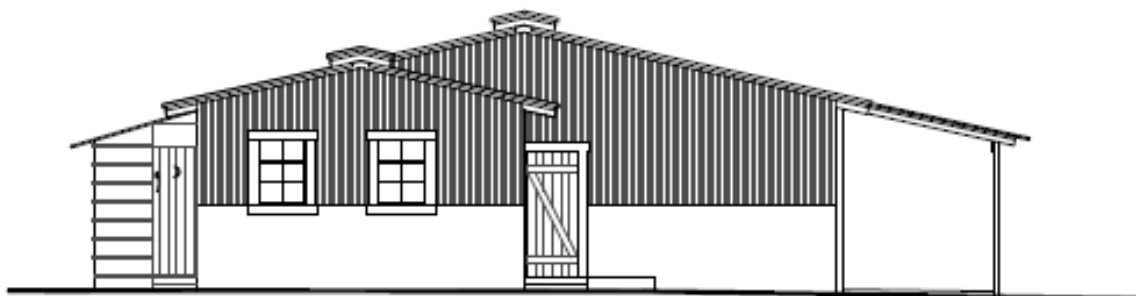
SOUTH ELEVATION
SCALE: $\frac{1}{4}'' = 1'-0''$

SANITARY BARN BUILDING
ELEVATION & SECTION
SCALE: $\frac{1}{4}'' = 1'-0''$

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|---------|-------------------|---|------------|---------|---------|
| Park | GGNRA | NATIONAL PARK SERVICE GOLDEN GATE NATIONAL RECREATION AREA | | Sheet | 04 |
| Area | GOLDEN GATE DAIRY | | | of | 05 |
| Project | | By | HAGIN | Checked | Pkg. |
| Feature | SANITARY BARN | Date | 10/11/2012 | Date | Account |



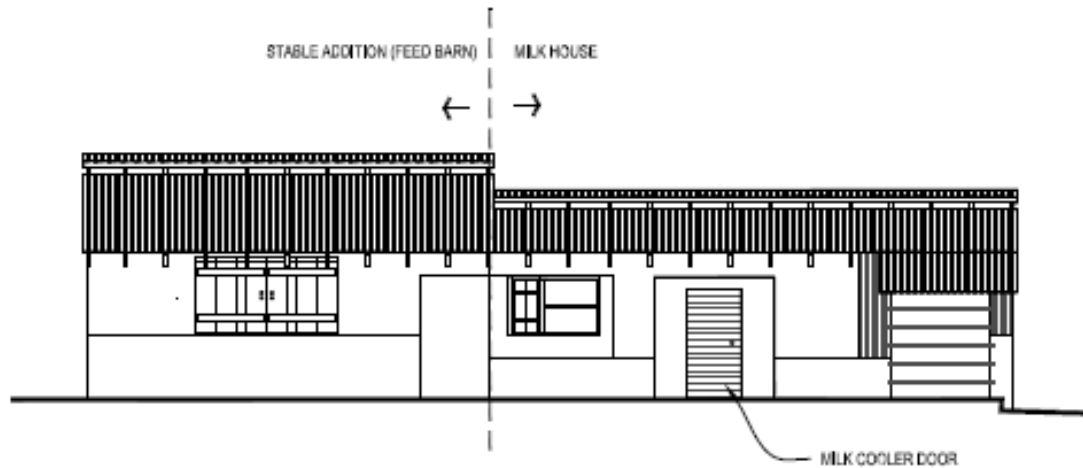
WEST ELEVATION
SCALE: $\frac{1}{4}$ " = 1'-0"



NORTH ELEVATION
SCALE: $\frac{1}{4}$ " = 1'-0"

SANITARY BARN BUILDING
ELEVATIONS
SCALE: $\frac{1}{4}$ " = 1'-0"

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|---------|-------------------|---|------------|---------|---------|
| Park | GGNRA | NATIONAL PARK SERVICE GOLDEN GATE NATIONAL RECREATION AREA | | Sheet | 05 |
| Area | GOLDEN GATE DAIRY | | | of | 05 |
| Project | | By | HAGIN | Checked | Pkg. |
| Feature | SANITARY BARN | Date | 10/11/2012 | Date | Account |



EAST ELEVATION
SCALE: $\frac{1}{4}$ " = 1'-0"

SANITARY BARN BUILDING
ELEVATIONS
SCALE: $\frac{1}{4}$ " = 1'-0"

**Golden Gate Dairy
(Lopes Brothers Dairy, Ranch M)**

Archeological Assessment and Treatment Report

AATR Restricted Appendix

Archeological Sites and Survey Coverage Map

CHRIS Primary Form P-21-002798

Supplementary Archeological Information

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Archeological Assessment and Treatment Report (AATR)

Golden Gate Dairy (Lopes Brothers Dairy, Ranch M)

Golden Gate National Recreation Area Marin County, California

Confidentiality Statement

Cultural resource information is protected from public disclosure under Section 304 of the National Historic Preservation Act of 1966, as amended, the Archaeological Resources Protection Act of 1979 (43 CFR 7.18 – Confidentiality of archaeological resource information), and Director’s Order 28, (Cultural Resource Management). Park managers are authorized to restrict information relating to the location or character of the resources when the disclosure of such information may create a substantial risk of harm, theft, or destruction to resources or to the place where resources are located. Sensitive locational information regarding archaeological resources shall be either redacted from general public access, or separated into a restricted appendix.

Context

Historic studies which provide a contextual framework for understanding the archaeological resources present or expected at this project location can be found in the front section of this study and the following sources (Barnaal and Barker 2003; Eastman 1998; Lehman 2003a, 2003b; Stewart and Praetzelis 2003; Waghorn 2003; Wulzen and Osanna 2006, 2007).

Sensitivity

Prehistoric or precontact archaeological sites are known in the vicinity along Redwood Creek, and are expected in association with landforms such as the alluvial fan the Golden Gate Dairy was constructed on. A GIS-based archaeological sensitivity model

constructed in 2003 identifies the location as sensitive to the discovery of prehistoric or precontact sites (Barnaal and Barker 2003)

Historic archeological features have been found at Golden Gate Dairy that have association with dairy functions and with one or more of the families that owned and operated it between 1889 and 1953. No written or artifactual evidence has been discovered that suggests an earlier historic occupation. Archaeological features dating after the mid-1950s are not considered historically significant.

Survey and Identification

To date, approximately 65% of the Golden Gate Dairy area has been archeologically surveyed, and two historic refuse deposits have been documented (California Historic Resource Information System (CHRIS) # P-21-002798 – NPS Archeological Sites Management Information System (ASMIS) # GOGA00052 and GOGA00145) (See AATR Restricted Appendix for supplemental site information). Ruinous structure and landscape features have also been documented as a part of the cultural landscape that compose archeological features of the historic property.

Reconnaissance survey of the built area of the Golden Gate Dairy was conducted by Leo Barker and Doug Worley in September 2003. At that time only GOGA00052 was documented. Features in the garden area to the east and northeast of the residence were also noted at that time, including stone lined terraces, what appeared to be remnants of a ~500 gallon redwood water tank, and a variety of introduced plants and fruit trees. It was thought that this area and other parts of the residence gardens might have been considered a “quintal”, or backyard subsistence garden common in Portuguese culture. It was also noted that ruinous concrete features (a road, concrete pads) apparently from sanitary dairy or “Grade A” operations existed on the southern half of the property around the feed barn.

In 2003 two 1.3 inch hydraulic cores were recovered from the western side of the Golden Gate Dairy in order to assess if buried prehistoric archeological deposits exist at the dairy site. Neither Core #BLO23 or #BLO27 showed any sign of prehistoric occupation (Meyer 2005: 7, 57, 60).

Additional survey on Ranch M was conducted in 2006 as a part of the planning for the rehabilitation of the Dias Ridge Trail which extends from the neighboring Dias Ranch to the Golden Gate Dairy. No archeological properties were found in the current APE(Wulzen and Osanna 2006).

In the winter of 2007-2008 clearing of dense underbrush revealed another historic trash deposit, documented as GOGA00145.

As the Marin Equestrian Plan developed, GOGA00052 and GOGA00145 were merged into one CHRIS archeological property, P-21-002798. Structural and landscape ruins have been documented under CHRIS Primary # P-21-002797 (Golden Gate Dairy Historic District).

Dense vegetation on the northern and southern edges of the location have restricted completion of surface survey efforts (See AATR Restricted Appendix for survey coverage and supplementary resource information).

Significance

No prehistoric sites have been identified at the Golden Gate Dairy, although the properties location near the confluence of Green Gulch and Redwood Creek at Muir Beach is very sensitive to the discovery of such properties. The Muir Beach Archeological Site (CA-MRN-333/H (GOGA00014)), a nearby partially buried precontact site, was listed on the National Register of Historic Places in 1981. Since 2002, four additional prehistoric sites have been found within a half mile or less of the Golden Gate Dairy, all obscured by natural and/or cultural fills or covers (CA-MRN-685 (GOGA00050); CA-MRN-674 (GOGA00051); CA-MRN-694 (GOGA00377); and, GOGA00378)). These properties are considered a significant historic district whose eligibility for or listing on the NRHP will be sought by the park in the future.

Formal test excavations have not been conducted on any of the historic archeological features of the dairy. The research value of such sites has been developed by multiple authors, and is discussed in Waghorn's historic archeological context for the park (2003: 283-293):

"A comprehensive discussion of property types found on dairying and farming sites on California's central coast is provided by Eastman (1998)... As Mires and Bullock note (1995:13-14), farmsteads can present profitable sites for archeological inquiry. Farmsteads can have long, continuous histories of occupation and use, often by multiple generations of the same family. As such, they often have extensive associated documentation, including family genealogy, oral histories, and land and taxation records. The long-term occupation that characterizes many farmsteads makes them particularly suitable to archeological investigations focusing on both diachronic and synchronic processes. In addition, the main infrastructure of farms tends to be highly centralized around the homestead and principal barns, even if the farm itself covers large areas of land (Mires and Bullock 1995:13). The centralization of many farming activities allows for their investigation using archeological techniques."

Research themes include (Waghorn 2003:283-293)

- Effects of modernization on the technology and cultural landscape of dairies and farms;

- Victorianism and the modernization of the farm and dairy industries;
- Economic, ethnic, and social landscapes of the farm and dairy industries;
- Cultural landscape of the dairies and farms;
- Environmental adaptation of farming practices to local environments

Archeological features (historic trash deposits, ruinous structures and foundations, and landscape vestiges) associated with the values for which the resources are considered eligible are a part of those eligible resources. These properties also have the potential to add to our knowledge about an historic place as primary, ancillary, or auxiliary sources.

Plan Actions and Effects

The purpose of the *Marin Equestrian Stables Plan* is to provide for comprehensive improvement of equestrian sites, facilities, programs and stables management at the Golden Gate Dairy (Lopes Brothers Dairy, Ranch M), the Tennessee Valley Stables (DaCunha/Rapozo Ranch, Ranch A/B) and the Rodeo Valley Stables (Fort Barry Balloon Hangar and Motor Vehicle Sheds). These actions are intended to improve visitor services and to preserve, protect and enhance cultural resources therein.

Implementation of the plan will involve many actions with the potential to expose, impact, or remove archeological sites, features, or other ruinous material remnants of Golden Gate Dairy. Common actions will be the removal of non-historic structures and additions, the construction of new structures (e.g., horse facilities such as a riding ring, tie-ups, mounting blocks, stalls, troughs, paddocks, manure and other sheds, water tanks). Changes on site will include: grading; construction of gravel or paved parking pads for horse trailers; addition of a water tank, generator, and pump for firefighting; installation of toilet facilities; and associated drainage and utility upgrades.

At Golden Gate Dairy, the intention is to continue an equestrian program while stabilizing and improving the condition of the site's historic buildings, landscape, and features. The historic Outhouse will be stabilized, and rehabilitations will be conducted on the main residence as an office or residence, the sanitary barn as an office, and the creamery for stalls, office, meeting, or storage space. A trail segment along the western side of the property along Highway Route 1 will also be constructed to connect the Diaz Ridge Trail with Muir Beach and the California Coastal Trail.

Archeological features, either documented or discovered as the *Marin Equestrian Stables Plan* is implemented at Golden Gate Dairy, will not be adversely affected by actions planned. The park and any future lessee of the property will manage the archeological resources of the property by specific conditional processes and treatments (listed below). These conditions are designed to allow continued assessments of actions as they are clarified, designed, and implemented, providing for long-term monitoring, inventory, review, and avoidance of physical damage and/or deterioration to significant archeological features.

All work areas subject to ground disturbance, such as grading, trenching and installation of foundations or footings, will be surveyed prior to work being performed, and monitoring and/or further testing as appropriate will be required in the vicinity of known archeological sites or areas of high archeological sensitivity, in accordance with the recommendations of archeological assessments. Such monitoring will include representation from and/or consultation with the Federated Indians of the Graton Rancheria whenever ground-disturbing activities are within 100 feet of known pre-contact archeological sites, or in areas of high sensitivity to the discovery of such resources.

Archeological Treatments and Conditions

The following protocols, conditions, and treatments shall be incorporated into management of the Golden Gate Dairy historic property:

- Building, structure, and landscape stabilization and rehabilitation shall follow the Secretary of the Interiors Standards at 36 CFR 67.7 (b)(8): Significant archeological resources affected by a project shall be protected and preserved;
- All actions or future plans with the potential to damage a known or expected archeological property, remove vegetation, or disturb the ground surface will be assessed for their effect on archeological resources. Appropriate actions will be taken (survey, monitoring, design alteration, etc.) to avoid adverse effect to significant archeological properties;
- Significant archeological sites and features will be protected from adverse effects by avoidance. Any action or plan that would adversely affect an archeological feature or site the park considers significant or contributory to the Golden Gate Dairy historic property, will require consultation with the SHPO on the eligibility of that property as a contributing feature of an existing eligible property or for separate listing on the National Register of Historic Places (NRHP) under 36 CFR 63;
- Inability to avoid adverse effect to any significant archeological feature or site will require separate consultation with the SHPO under 36 CFR 800.4 (Identification of historic properties) or 36 CFR 800.13 (Post-review discoveries) depending on the circumstances;
- Portions of the Golden Gate Dairy remain unsurveyed due to dense vegetative cover and low surface visibility during field survey. An intensive archeological survey will be conducted along the creek on the south side of the property, around the rock outcrop north of the creamery and residence, and on the western edge of the property adjacent Highway Route 1. Survey should occur when planned actions on the dairy site provide the best opportunity for ground visibility.
- The residence and creamery dumps will have fieldwork performed prior to ground disturbing activity in the immediate vicinity, including subsurface exploration, to identify and document clear boundaries for each feature.

- The "garden" area adjacent the southside of the Creamery and Residence will be mapped, and a botanical inventory will be prepared of its vegetation.
- Remnant roads, pads, foundations and other landscape features will be mapped and incorporated into cultural resource documentation on the Golden Gate Dairy;
- Significant archeological properties will be protected and stabilized if exposure, vandalism, erosion or other factor may be adversely impacting the site or feature. The residence and creamery dumps at Golden Gate Dairy will be monitored for any necessary stabilization action.
- During any construction or vegetation clearance, work will stop around any archeological sites or features discovered until the park archeologist and project manager can determine best treatment options in accordance with laws including the National Historic Preservation Act (NHPA) (36 CFR 800.13 - Post-review discoveries), and the Native American Graves and Repatriation Act (NAGPRA) (43CFR10.4 - Inadvertent Discoveries). A discovered site shall be documented to NPS ASMIS and State CHRIS standards, and assessed for its value and the effects expected from the relevant action.
- Discovery of or work within 100' of a precontact archeological properties will require consultation with the Federated Indians of Graton Rancheria.

References

Barnaal, Hans, and Leo Barker

2003 Archeological Sensitivity Modeling for Northern GGNRA. On file, GGNRA Archeology Lab, Fort Cronkhite, Sausalito, California.

California Office of Historic Preservation

1990 Archaeological Resource Management Reports (ARMR): Recommended Contents and Formats. Sacramento, California.

Eastman, Bright

1998 Guidelines for Documenting and Evaluating Historic Agricultural Properties on California's North and Central Coast. Master's Thesis, Cultural Resources Management, Department of Anthropology, Sonoma State University, Rohnert Park, California.

Gavette, Peter

2013 Revised Archeological Sensitivity Modeling for Northern GGNRA. Golden Gate National Recreation Area, National Park Service, San Francisco, California.

Lehman, Jane

2003a Preservation Guide, Part One, History and Existing Condition : Golden Gate Dairy. National Park Service, Golden Gate National Recreation Area, San Francisco, California.

2003b Preservation Guide, Part Two, Treatment Recommendations: Golden Gate Dairy. National Park Service, Golden Gate National Recreation Area, San Francisco, California.

Mayer, Martin

2002 Personal Communication with Leo Barker regarding surface collection of disturbed artifacts at Golden Gate Dairy.

Meyer, Jack

2003 An Overview of Geoarchaeological Research Issues. In, Archaeological Research Issues for the Point Reyes National Seashore - Golden Gate National Recreation Area, edited by Suzanne Stewart and Adrian Praetzelis, pp.1-34, Anthropological Studies Center, Sonoma State University, Rohnert Park, California.

2005 Geoarchaeological Study of Big Lagoon, Lower Redwood Creek, Marin County, California. Final Report. Anthropological Studies Center, Sonoma State University, Rohnert Park, California.

Mires, Peter B., and Margaret E. Bullock

1995 The Farmer and Gatekeeper: Historical Archaeology and Agriculture in Early Carson City, Nevada. Intermountain Research, Silver City, Nevada. Prepared for Nevada Department of Transportation, Environmental Services Division, Carson City.

Stewart, Suzanne, and Adrian Praetzelis (editors)

2003 Archaeological Research Issues for the Point Reyes National Seashore - Golden Gate National Recreation Area. Anthropological Studies Center, Sonoma State University, Rohnert Park, California.

Waghorn, Annita

2003 An Overview of Research Issues for Historical Archaeology (Agricultural Archaeological Resources). In, Archaeological Research Issues for the Point Reyes National Seashore - Golden Gate National Recreation Area, edited by Suzanne Stewart and Adrian Praetzelis, pp.283-293, Anthropological Studies Center, Sonoma State University, Rohnert Park, California.

Wulzen, Warren, and Dan Osanna

2006 DPR 649: Archaeological Survey Report: Dias Ridge and Coast View Trails, Rehabilitation and Access Improvement Project, Golden Gate National Recreation Area, and Mount Tamalpais State Park, Marin County, California. Project Number 003133. Department of Parks and Recreation, Acquisition and Development Division, Northern Service Center, Sacramento, California.

2007 Dias Ridge and Coast View Trails Rehabilitation and Access Improvement Project, Historic Property Summary Report with Finding of Effect. National Park Service, Golden Gate National Recreation Area. California Department of Parks

and Recreation, Mount Tamalpais State Park. Marin County, California. DPR
Acquisition and Development Division, Northern Service Center Resources
Section. Sacramento, California.

Restricted Archeological Appendix
Archeological Assessment and Treatment Report
Golden Gate Dairy
(Lopes Brothers Dairy, Ranch M)

Archeological Sites and Survey Coverage Map

CHRIS Primary Form P-21-002798

Supplementary Archeological Information

Confidentiality Statement

Cultural resource information is protected from public disclosure under Section 304 of the National Historic Preservation Act of 1966, as amended, the Archaeological Resources Protection Act of 1979 (43 CFR 7.18 – Confidentiality of archaeological resource information), and Director’s Order 28, (Cultural Resource Management). Park managers are authorized to restrict information relating to the location or character of the resources when the disclosure of such information may create a substantial risk of harm, theft, or destruction to resources or to the place where resources are located. Sensitive locational information regarding archaeological resources shall be either redacted from general public access, or separated into a restricted appendix.

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