
PRESIDIO OF SAN FRANCISCO



***HISTORIC STRUCTURES
ADAPTIVE REUSE
STUDY***

PRESIDIO OF SAN FRANCISCO

HISTORIC STRUCTURES ADAPTIVE REUSE STUDY

prepared for:
Jones & Stokes Associates, Inc.
Sacramento, California

prepared by:
Page & Turnbull, Inc.
San Francisco, California

1 May 1989

PROJECT TEAM

Page & Turnbull, Inc.

Jack Schafer, Project Manager
Jill Johnson, Preservation Technician
Frederick Knapp, Designer

Jones & Stokes Associates, Inc.

David Harper, Project Manager

TABLE OF CONTENTS

SECTION ONE - INTRODUCTION

Preface

PROJECT AND CONTRACT OVERVIEW	1
-------------------------------------	---

SECTION TWO - HISTORIC PRESERVATION AT THE PRESIDIO

BACKGROUND	3
The Presidio of San Francisco and Its Buildings	3
The Presidio and the Golden Gate National Recreation Area	4
Adaptive Reuse of Historic Buildings at the Presidio	5
ADAPTIVE REUSE STUDY	9
Selection of Example Buildings	9
Summary of Master Plan Recommendations	12
Uses Evaluated for Historic Buildings	12

SECTION THREE - EVALUATING THE REUSE POTENTIAL OF HISTORIC BUILDINGS

SPECIAL DESIGN CRITERIA FOR HISTORIC BUILDINGS	17
Definitions of Historic Preservation Project Terms	17
The Secretary's Standards for <i>Rehabilitation</i> Projects	18
The Secretary's Standards for <i>Historic Preservation</i> Projects	20
The State Historical Building Code	20
PROJECT LIMITATIONS AND AREAS FOR ADDITIONAL STUDY	22
Structural Evaluation	22
Cost Evaluation	22
Limited Design Development for Potential Uses	25
Limitations of Analysis Using Building Typology	25
Interpreting the Secretary's Standards	26
EVALUATING ADAPTIVE REUSE POTENTIAL	27
Methodology	27
Evaluation	27
Evaluation Matrix	28

DEFINITION OF EVALUATION FACTORS	29
Design Factors	29
Mission Factors	31
Cost Factor	32
Table 1 - Likely Construction Costs	35
Table 2 - Likely Project Costs	37

SECTION FOUR - HISTORIC BUILDING EVALUATIONS

SUMMARY MATRIX OF ADAPTIVE REUSE POTENTIAL	39
EXAMPLE EVALUATION MATRIX.....	40
Building Type Number	
85 - 87	41
106	47
201 - 204	53
218	59
220	65
222	71
223 - 227	77
228 - 229	83
230	89
643	95
661 - 668	101
1006	107
1007 - 1009	113
1012 -1014	119
1016	125
1050 - 1051	131
1060	137
1161 - 1188	143
1398	151
CG-2.....	157



INTRODUCTION

Preface

The Presidio of San Francisco was designated a National Historic Landmark in 1960 and is listed on the National Register of Historic Places. This landmark designation requires compliance with Section 106 of the National Preservation Act of 1966. In addition, as mandated by Public Law 92-589, the Presidio is included as an integral portion of the Golden Gate National Recreation Area. By virtue of these public policies, the "mission" of the Presidio has been expanded as it relates to historic properties. In an effort to comply with these public policies, the United States Army is exploring methods for the preservation of the over 400 historic buildings located at the Presidio. This project has been undertaken as a result of this compliance effort.

PROJECT AND CONTRACT OVERVIEW

On September 29, 1988, Jones & Stokes Associates, Inc., of Sacramento, California, working under contract with the U.S. Army Corps of Engineers, Sacramento District, contracted with Page & Turnbull, Inc., of San Francisco, California, to provide an Adaptive Reuse Study of twenty historic building types at the Presidio.

The purpose of the study is to investigate and identify potential Army adaptive reuse alternatives for some of the historic structures at the Presidio. Potential building types to be studied were chosen from the list of historic structures at the Presidio as identified in the Historic American Buildings Survey (HABS) inventory completed by the National Park Service in 1981.

The Adaptive Reuse Study (ARS) evaluates alternative potential *long-term* uses of the selected structures to determine their potential for accommodating the use requirements of the Army at the Presidio identified in the Master Plan - Tabulation of Existing and Required Facilities. Additional uses for the historic structures may be identified if the structures are particularly well suited to such use.

Development of the format for the Adaptive Reuse Study followed directly from the contract Scope of Work. (See Appendix.) The study is divided into four major sections:

- ONE - INTRODUCTION contains an introduction to the study and contract information.
- TWO - HISTORIC PRESERVATION AT THE PRESIDIO is a background summary of the historic buildings, preservation, and adaptive reuse at the Presidio; summary research and findings regarding the identification of the example building types; and the master plan recommendations regarding uses in the planning areas in which the example historic structures are located.
- THREE - EVALUATING THE REUSE POTENTIAL OF HISTORIC BUILDINGS is an overview of the project methodology that has been developed for evaluating the example structures; an explanation of special design criteria that must be considered in the evaluation of historic buildings; and project limitations and areas for additional study.
- FOUR - ADAPTIVE REUSE EVALUATIONS contains the adaptive reuse evaluations, sketches, and recommendations for the historic structures.

• 2 •

HISTORIC PRESERVATION AT THE PRESIDIO

BACKGROUND

THE PRESIDIO OF SAN FRANCISCO AND ITS BUILDINGS

The Presidio of San Francisco was formally established on September 17, 1776, the third of four military garrisons built by the Spanish in upper California. From that date on, the Presidio has seen almost continuous use by the armies of several nations - first Spain, then Mexico, and finally the United States - each occupying it as a primary military and colonial outpost.

From 1776 to 1822 the Presidio played a key role in the extension of Spanish settlement into northern California. From this outpost, the Spanish crown established four missions, two pueblos, a rancho, and an asistencia. Mexico succeeded Spain at the Presidio in 1822 upon gaining its independence and kept the post as its main base in northern California until 1835, when it transferred headquarters to Sonoma. From then until 1846, the Presidio lay idle. The base was returned to active use following its acquisition by the United States as a result of the Mexican-American War. During the Indian Wars of the 1850s and 1860s, the Civil War, the Spanish-American War, and the United States' territorial expansion into the Pacific basin, the Presidio was a cornerstone of U.S. military operations throughout the West. Although it currently plays a lesser role in national defense, the Presidio retains an active mission as home to the Sixth U.S. Army and to Letterman Army Medical Center. The Presidio was designated a National Historic Landmark by the secretary of the interior in 1960. It is recognized for its important role in the colonial and military history of the West.

Landmark designation acknowledges the national significance of the site, but the Presidio has also figured prominently in the history of the City of San Francisco. During the cataclysmic earthquake and fire of 1906, the post was a major center of rescue operations. The base sheltered thousands of refugees left homeless by the disaster. Less dramatic but no less significant was the Army's forestation program, which turned the barren sand dunes upon which the base was established into verdant hills, one of San Francisco's "crown jewels."

Each successive use of the post has given rise to new construction and new construction techniques from adobe to steel frame. Generally, the earliest existing U.S. Army buildings (dating from the Civil War era) are relatively small wood frame structures originally built on mud-sills. In the late 19th century, many new structures were built using solid brick and stone masonry and were larger and clearly meant to last for the ages. By the time of the First World War, the use of reinforced concrete construction was becoming common in the United States, and many of the new building's at the Presidio were built using this then new construction technique, but wood frame construction also continued to be used for the more utilitarian structures, such as warehouses. During this era and continuing between the wars, other types of standard construction techniques were used to varying degrees throughout the Presidio. These included concrete frame with hollow tile walls, steel frame with pressed or prefabricated metal wall panels, and wood frame covered with stucco. During World War II, there was an increase of building activity that involved all types of construction including numerous new "temporary" type structures that were built quickly and easily of wood. Today, the new construction techniques at the Presidio match those of a typical medium-sized American city with fireproof and earthquake-resistant structures of concrete and structural steel.

THE PRESIDIO AND THE GOLDEN GATE NATIONAL RECREATION AREA

Today the Presidio of San Francisco lies within the boundaries of the Golden Gate National Recreation Area (GGNRA), which was established by Congress in 1972 and includes about 38,000 acres. The legislation establishing the park states the park's purpose as *"...to preserve for public use and employment certain areas of Marin and San Francisco Counties, California, possessing outstanding natural, historic, scenic, and recreational values, and in order to provide for the maintenance of needed recreational open space necessary to urban environment and planning..."*.

The mandate to preserve historic resources and to pursue adaptive reuse is stated in one of the six management objectives included within the park's 1980 General Management Plan, the "Preservation and Restoration of Cultural Resources." Specific elements identified as part of this objective include; *"to reuse existing buildings for visitor and management needs...; to retain the current character of cultural resources....and; to recognize the importance of the cultural resources....through a positive program of.....evaluation, preservation, management and interpretation."*

The importance of historic structures at the Presidio, as emphasized by the objectives of the GGNRA, would justify a greater effort and application of resources to ensure their retention and preservation. The standard Army guidelines for the reuse and demolition of historic structures may require modification when applied to historic structures at the Presidio.

Another of the six management objectives is the use of land management zoning, which establishes sub-zones within the park. The Presidio is included within a Special Use Zone, which included lands that (at the time of the adoption of the zoning regulations) were not expected to fall under the jurisdiction of the National Park Service.

THE ADAPTIVE REUSE OF HISTORIC BUILDINGS AT THE PRESIDIO

Because the Presidio contains one of the largest concentrations of historic buildings on the west coast and has functioned as an active military installation for over 200 years, a large number of its historic structures have been reused to meet functional requirements for which they were not originally designed. Until recently, this adaptive reuse has been of an informal nature where buildings have been modified and reused for a variety of new functions without a formal reorganization and/or restructuring of the interior features and services. Also, because there was no officially recognized survey of the historic structures, there was no method to distinguish the relative importance or significance of the existing building stock.

Examples of building reuse projects that might fall into the category of "informal" adaptive reuse include the original U.S. Army Hospital (Bldg. #2), which is now used as the Presidio Army Museum, and the #600 series stable buildings, which are now used for a variety of functions.

However, within the last decade several major adaptive reuse projects have occurred at the Presidio that have sought to rehabilitate historic buildings for new uses to increase their overall utility while at the same time preserving *or restoring* their historic architectural character. A prime example of this type of project is the rehabilitation of the #100 series brick barracks located along the Main Parade Ground. Several of these barracks (built in 1895) have been adaptively reused as office buildings while maintaining their overall historic character and appearance.

HABS Inventory of the Presidio

A comprehensive survey process to identify and explain the historic and architectural significance of the building stock at the Presidio was begun in 1981. The initial element of this effort was the completion in 1981 of the Historic American Building Survey (HABS) inventory of the Presidio conducted by the National Park Service Western Regional Office. This inventory identified and classified the historic structures into categories according to the level of contribution they make to the overall historic resource (per Army Regulation 420-40, Chapter 2, Section II, paragraph 2-12). This inventory is under currently review by the Army.

Maintenance Plan for Historic Structures at the Presidio

Following the 1981 HABS inventory, another major planning effort was undertaken to directly assist the Facilities Engineers in the sensitive upkeep and rehabilitation of the historic structures at the Presidio. This effort resulted in the *Maintenance Plan for Historic Structures within the Presidio of San Francisco Historic Landmark District*. The initial phase of this plan, completed in 1982 by Charles Hall Page & Associates (now Page & Turnbull, Inc.), addressed approximately one-half of the most significant historic structures at the Presidio. The second phase of the project, covering the remaining historic buildings, is to be completed in 1989. Both phases of this plan provide specific recommendations for maintenance and design treatments that are appropriate for the historic structures.

Historic Preservation Plan for the Presidio

An Historic Preservation Plan (HPP) for the Presidio has not been prepared yet but would provide the framework for the development of effective evaluation procedures for the appropriate reuse of historic properties. As defined in AR 420-40, Chapter 2, Section I, paragraph 2-3 a main objectives of the HPP is to:

- a. Integrate historic preservation requirements with the planning and conducting of military training, construction, other undertakings, and real property or land use decisions.*

This, the first of seven identified objectives for an HPP, is extremely important for it directly addresses a difficult aspect of the decision-making process regarding historic military properties. That is, it addresses the need to develop definitive evaluation criteria for making planning decisions that will effect both the continued operation of a functional military base and the preservation of national cultural resources.

As described above, this HPP would outline the goals and objectives for preservation of the recognized cultural resources at the Presidio and establish the criteria for the evaluation of their historical importance and adaptive reuse potential. From this defined set of goals and objectives, it would be possible to develop a more comprehensive and detailed system of evaluation using the factors identified in the HPP and weighing them according to their relative importance as established in the HPP. However, the results of the Adaptive Reuse Study can be applied directly to the preparation of the HPP by addressing the potential for reuse of Presidio structures.

Without an HPP, with an officially recognized set of planning policies regarding historic buildings, any evaluation system that is developed for the analysis of the adaptive reuse potential (including the economic, functional or restoration value) of historic buildings will be subject to the criticism that it does not respond to required, yet undefined, criteria. One of the main purposes of a HPP is to define these criteria.

A specific area in which an HPP could provide important policy guidance concerning historic buildings would be in the development of criteria for the economic evaluation of rehabilitation projects. Categorization of the historic structures according to their relative historic importance could provide some of this criteria. Such a categorization -which would be similar to the categorization in the 1981 HABS inventory- would provide the basis for the development of special evaluation criteria to be used in the "Special Requirements Paragraph 1 - Economic Analysis" of the 1391 form for projects affecting historic structures. (See *Presidio of San Francisco, National Historic Landmark District, Historic American Buildings Survey Report*, U.S. Department of Interior, 1985, for a complete discussion of the historic building categories at the Presidio.)

The criteria for project cost evaluation (per AR 420-10) are not now sensitive to historic significance or the preservation of cultural resources, but the historical categorization of structures would most logically be applied here. For example, Category I buildings could be recognized as worthy of expenditures equal to 100% the cost of similar new construction; Category II buildings could be worthy of expenditures up to 80% of the cost of new construction; and Category III buildings could be worthy of expenditures up to 75% of the cost of new construction. This allowed elevated level of expenditure would recognize the expanded goals and objectives that pertain *only* to projects that preserve and rehabilitate historic properties.

These expanded goals and objectives should be considered a part of the unique "mission" of the Presidio as mandated by Public Law 92-589, which created the Golden Gate National Recreation Area and included the Presidio as an integral portion of it.

ADAPTIVE REUSE STUDY

The intent of this study, as described in the scope of work, is to investigate potential Army adaptive reuses for historic structures at the Presidio. The study evaluates the potential long-term uses for the selected structures and determines the buildings' potential for accommodating the use requirements of the Army at the Presidio.

An additional very important element of this study (though not specifically identified in the original scope of work) has been the development of an appropriate methodology to be used in the evaluation of the adaptive reuse potential of historic buildings at the Presidio. Though specific functional and economic factors were identified to be used in the evaluation, an *accurate* evaluation of nationally recognized cultural resources should not be reduced to simple operational terms for they assign *no value* to the cultural importance of the resource. Obviously, the type of evaluation required for cultural resources must be more complex than one based solely on functional or economic terms. The criteria developed for the evaluation of adaptive reuse potential in this study have included elements that directly contribute to the building's historic or cultural value.

SELECTION OF EXAMPLE BUILDINGS TO BE STUDIED

Buildings to be evaluated for the ARS were identified and selected from the large group of historic structures located at the Presidio. From a preliminary list of 37 buildings provided by the client, the contractors identified 21 potential historic structure types to be analyzed for the study. As requested in the scope of work, priority focus was placed on historic *"structures that have not been identified in the concept master plan for retention and operation in the present use."* In addition, the existing family housing, officers' club, theater, Sixth Army Headquarters, PSF Headquarters, and water treatment plant uses were to be excluded from the study because their present use was not expected to change.

Review of the HABS cards indicated that many of the individual buildings could be grouped together as examples of repetitive "types." All buildings of one type usually share similar original designs, as well as materials and dates of construction. By grouping the buildings into "types," the ARS references 46 buildings while evaluating only 20 structures as requested in the scope.

The final list of 20 buildings types to be evaluated was developed at a meeting attended by representatives from the U.S. Army Corps of Engineers, the Directorate of Facilities Engineering & Housing at the Presidio, Jones & Stokes, Associates, Inc. (prime contractor), and Page & Turnbull, Inc. (subcontractor). The buildings are listed below by building type number (indicating the spread or range of building numbers covered), the actual building numbers included in that type, and the building name or historic function.

TYPE	BLDG. #	NAME or HISTORIC FUNCTION
85-87	85.....	Latrine
	86.....	Enlisted Men's Barracks without Mess
	87.....	Enlisted Men's Barracks without Mess
106	106.....	Band Barracks without Mess
201/204	201.....	Exchange Store & Administration
	204.....	Exchange Store & Administration
218	218.....	Fire Station
220	220.....	Bakers' & Cooks' School
222	222.....	Warehouse
223/227	223.....	Warehouse
	227.....	Warehouse
228-229	228.....	Bakery
	229.....	Bakery
230	230.....	Warehouse
643	643.....	Aircraft Hangar
661/668	661.....	Stable
	662.....	Stable
	663.....	Stable
	667.....	Stable
	668.....	Stable
1006	1006.....	Bacteriological Lab
1007-1009	1007.....	Admin. & EW Barracks without Mess
	1008.....	Ward 76 BD
	1009.....	Ward 80 BD
1012-1014	1012.....	Ward 40 BD
	1013.....	Ward & Receiving Office
	1014.....	Outpatient Clinic

TYPE	BLDG. #	NAME or HISTORIC FUNCTION
1016	1016	Hospital Administration
1050-1051	1050	Psychiatric Ward
	1051	Detention Ward
1060	1060	Medical and Surgical Warehouse
1161/1188	1161	Storage
	1162	Warehouse
	1163	Warehouse
	1167	Warehouse
	1169	Storage
	1170	Storage
	1182	Warehouse
	1183	Warehouse
	1184	Storage
	1185	Storage
	1186	Storage
	1187	Storage
	1188	Storage
1398	1398	Battery Dynamite Powerhouse
CG-2	CG-2	Station House (Coast Guard)

SUMMARY OF MASTER PLAN USE REQUIREMENTS AND RECOMMENDATIONS

To evaluate the reuse potential of the example historic structures, it was necessary to identify the specific Army uses required in the areas in which the historic building are located. Existing master plan documents and numerous discussions and recommendations from the Corps of Engineers, Sacramento office, were used to determine this information. As identified in the draft master plan, major long-term uses required at the Presidio can be summarized as: office; storage; educational/Institutional (e.g., band training, substance abuse center); mixed-use (e.g., education center/command battalion hqtrs.); commercial (e.g., clothing store , printing plant); public (e.g., post office); recreation; maintenance; and housing.

These required uses could be divided geographically into five major areas at the Presidio: Main Post; Letterman Army Medical Center; Bayfront; Fort Scott; and the Southern Area.

USES EVALUATED FOR THE HISTORIC BUILDINGS

The potential uses evaluated for each example building type were developed from the following information and were identified and chosen in this order:

- 1.) master plan recommendations for the planning area in which the historic building type is located,
- 2.) master plan recommendations for immediately adjacent planning areas,
- 3.) master plan recommendations for the Presidio at large, and
- 4.) other logical uses for which the *original* design of historic building appears to be particularly well suited.

It should be noted that the historic building's primary spatial/use characteristics (as indicated for each type) were used as an initial guide to pair the historic buildings with potential and logical uses. This was done in an effort to eliminate the unnecessary evaluation of proposed uses that would be fundamentally incompatible with the historic design (e.g., the use of a historic barracks for a vehicular maintenance shop).

The example building types selected for the Adaptive Reuse Study lie in four of the five master planning areas. These areas are characterized below in terms of their existing historic building types, proposed master plan strategies for development, and the required uses to be accommodated in the near future.

PRESIDIO MAIN POST

Existing Uses of Historic Buildings:

Office; Education; Housing; Public (e.g., fire station); Warehouse

Master Plan Recommendations:

Redevelopment as an administrative and community service center, consolidating housing, community service and recreation facilities.

Proposed Facilities:

Type	Square Feet	Specific Use and Square Feet
Public	9,000	Post Office
Commercial	6,000	Bank
Office	100,000	6th Army Operations Center.....22,000
		Administrative..... 70,000
		Command Offices.....8,000
Storage	17,000	Museum Storage
Education	13,000	Band Training
Housing	165 Units	
Mixed-Use	15,000	Ed. Center and Command Battalion Headquarters

FORT WINFIELD SCOTT

Existing Uses of Historic Buildings:

Housing; Community Service; Fortifications

Master Plan Recommendations:

Retention of housing; Conversion of barracks into offices.

Proposed Facilities:

Type	Square Feet	Specific Use and Square Feet
Office	172,000	C.I.D.C. Field Operations Center.....16,000
		Administrative Offices..... 156,000
Public	7,000	Community Center
Maintenance	10,000	Vehicle Maintenance Shop

LETTERMAN ARMY MEDICAL CENTER

Existing Uses of Historic Buildings:

Housing; Hospital Facilities (including ward, administrative buildings, and structures serving support functions, such as storage)

Master Plan Recommendations:

Retention of medical care, research and support facilities; Introduction of community service facilities; Introduction of recreation facilities.

Proposed Facilities:

Type	Square Feet	Specific Use and Square Feet
Storage	119,000	Medical Logistics Warehouse
Recreation	25,000	Pool, courts, gym, locker room
Office		Medical Administration 4,000
		Preventive Medicine

B A Y F R O N T A R E A

Major Historic Building Types:

Housing; Maintenance Facilities; Office; Vehicle Storage; Airfield Operations; Fortifications.

Master Plan Recommendations:

Consolidation of auto-related community service facilities.

Proposed Facilities:

Type	Square Feet	Specific Use and Square Feet
Storage	170,000	Supply Facility..... 93,000
		Medical Warehouse..... 43,000
		G.G.N.R.A. Maintenance Facility..... 34,000
Mixed-Use	93,000	D.E.H. Facility
Maintenance	53,000	Motor Pool
Commercial	82,000	Clothing Store and Administration..... 69,000
		Printing Plant..... 13,000
Institutional	7,000	Substance Abuse Center

Other required uses, cited in the Tabulation of Existing and Required Facilities but not scheduled for accommodation in the near future, are as follows:

OTHER USES

Type	Square Feet	Specific Use and Areas
Mixed-Use	23,000	Airfield Operation Bldgs.....2,000
		Emgy. Operations Bldg. (Bat. Dynmt.).....21,000
Office	377,000	Company Headquarters Bldg.....25,000
		Engineer Administration Bldg.....28,000
		Supply Service Administration Bldg.....13,000
		Medical Administration Bldg.....8,000
		Provost Marshal/Mil. Pol. Adm. Bldg.9,000
		Exchange Administration Bldg.....5,000
		Administration Bldg., Gnl. Purpose.....279,000
		Administration Bldg.....2,000
		Morale Support Office.....8,000
Commercial	43,000	Exchange Retail Store.....37,000
		Branch Exchange.....4,000
		Credit Union.....2,000
Maintenance	23,000	Reserve Army Vehicle Maint. Shop.....2,000
		Non-TOE Support Maintenance Shop.....8,000
		Facilities Engineer Maintenance Shop.....13,000
Storage	326,000	Storehouse for Spare Parts.....14,000
		Cold Stor. Whse/Meat Cutting Plant.....9,000
		Salvage and Surplus Property Facility.....1,000
		General Purpose Warehouse.....71,000
		Vehicle Storage.....12,000
		Medical Supply Warehouse.....89,000
		Controlled Humidity Warehouse.....43,000
		Flammable Materials Storehouse.....3,000
		Lumber and Pipe Shed Facilities Eng.....3,000
		Facilities Engineer Storehouse.....35,000
		Division Breakdown Bldg.....12,000
		Record Holdings.....5,000
		Pipe and Lumber Shed.....5,000
		Exchange Warehouse.....24,000
Educational	43,000	Religious Education Facility.....18,000 S F.
		Army Continuing Ed. System Facility.....25,000

OTHER USES con't.

Type	Square Feet	Specific Use and Areas
Recreation	26,000	Recreation Center.....13,000
		Rec. Vehicle Check-out Facility.....11,000
		Scuba Diving Club..... 3,000
Public	175,000	Post Chapel.....18,000
		Bath House.....4,000
		Guest House.....84,000
		Open Dining Facility, N.C.O..... 24,000
		Post Restaurant.....27,000
		Youth Center.....14,000
		Rod-Gun Club.....4,000

• 3 •

EVALUATING THE REUSE POTENTIAL OF HISTORIC BUILDINGS

SPECIAL CRITERIA FOR HISTORIC BUILDINGS

All the evaluated structures in this report are listed on the National Register of Historic Places; therefore, in compliance with the National Historic Preservation Act of 1966, certain specific design criteria must apply to proposed changes in their historic or existing designs. A comprehensive explanation of these criteria and the requirements of their implementation by federal agencies is beyond the scope of this study. However, a brief summary of some of the criteria are indicated below.

DEFINITIONS OF HISTORIC PRESERVATION PROJECT TERMS

Throughout this report the words **Preservation**, **Rehabilitation**, and **Restoration** are frequently used to describe specific actions on the historic buildings. To prevent confusion, these terms should *not* be used interchangeably when referring to federal projects affecting buildings that are listed on the National Register of Historic Places. The following definitions for these terms have been developed by the department of the interior to describe the treatments that may be undertaken on historic properties listed in the National Register of Historic Places.

Preservation

The act or process of applying measures to sustain the existing form, integrity, and material of a building or structure, and the existing form and vegetative cover of a site. It may include initial stabilization work, where necessary, as well as ongoing maintenance of the historic building materials.

Rehabilitation

The act or process of returning a property to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those portions or features of the property which are significant to its historical, architectural, and cultural values.

Restoration

The act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular period of time by means of the removal of later work or by the replacement of missing earlier work.

THE SECRETARY OF THE INTERIOR'S STANDARDS

As all buildings evaluated in this study contribute to the National Historic Landmark at the Presidio, the adaptive reuse potential of the structures has been evaluated in conformance with the *Secretary of the Interior's Standards for Rehabilitation*. That is, the indicated adaptive reuse potential of the buildings assumes that any alteration(s) would be required to be acceptable within the definition of the *Standards*.

This special design criterion has a major impact on both the potential design development and construction costs for the rehabilitation projects. Additional time and effort will probably be required in the design development phase of the rehabilitation projects because designs proposed for these structures must be carefully and thoroughly developed to sensitively relate with the historic building design. Also, additional material and labor costs could be expected because many of the construction techniques will be somewhat specialized and possibly use materials that are costly or difficult to obtain.

THE SECRETARY'S STANDARDS FOR REHABILITATION PROJECTS:

1. *Every reasonable effort shall be made to provide a compatible use for a property which requires minimal alteration of the building, structure, or site and its environment, or to use a property for its originally intended purpose.*
2. *The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.*
3. *All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.*
4. *Changes which may have taken place in the course of time are evidence of the history and development of a building, structure, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.*

5. *Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.*
6. *Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.*
7. *The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.*
8. *Every reasonable effort shall be made to protect and preserve archaeological resources affected by, or adjacent to any project.*
9. *Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material, and character of the property, neighborhood or environment.*
10. *Wherever possible, new additions or alterations to structures shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.*

When using the *Standards* to evaluate rehabilitation projects, it is clear that determination of whether a particular design solution *would* or *would not* be acceptable under the *Standards* is open to some interpretation. For the ARS, sketches have been developed for those design schemes which, in the opinion of the contractor, could be reasonably expected to be acceptable under the *Standards*. Further detailed design development would of course be necessary to guarantee compliance. However, final determination of compliance with the *Standards*, lies with the department of the interior.

All of the the historic buildings at the Presidio, including the building types in this study, have been evaluated and analyzed for historic building maintenance and design problems. These historic maintenance and design problems are described, along with recommended solutions, in *The Maintenance Plan for Historic Buildings within the Presidio of San Francisco Historic Landmark District*. The first phase of this plan, covering approximately half of the historic structures at the Presidio, was completed in 1982. The second phase, covering the remaining historic structures, is to be completed in 1989. The *Maintenance Plan* provides specific preservation and restoration design recommendations for the historic buildings that are in keeping with the *Secretary's Standards*.

THE SECRETARY'S STANDARDS FOR HISTORIC PRESERVATION PROJECTS

In addition to the design requirements for work on designated historic structures, there are also federal guidelines for the design and construction of new buildings located within National Register Historic Districts. These design criteria are described in the the *Secretary's of the Interior's Standards for Historic Preservation Projects*. Because the entire Presidio is a National Historic Landmark and is listed on the National Register of Historic Places, new construction within the Presidio should comply with these *Standards*.

To encourage the development of suitable designs for new construction at the Presidio, the Army has prepared a *Design Guide for the Presidio of San Francisco* that illustrates the appropriate architectural characteristics for new construction at the Presidio. This ARS assumes that all new construction would be required to follow the recommendations of the *Design Guide* and also be acceptable within the definition of the *Standards for Historic Preservation Projects*.

THE STATE HISTORICAL BUILDING CODE (CALIFORNIA)

The State of California codified and adopted a series of comprehensive performance regulations relating to historic buildings in 1979. These regulations - TITLE 24 • PART 8 - are known as the State Historical Building Code, (SHBC) which has as its stated purpose "...to provide alternative building regulations for the rehabilitation, preservation, restoration or relocation of buildings or structures designated as historic structures. Such building regulations are intended to facilitate, by means of alternative solution, the restoration or change of occupancy so as to preserve their original or restored architectural elements and features....and to provide for the safety of the building occupants. These regulations control and allow alternatives to any and all prevailing codes when dealing with qualified historical buildings or sites."

The schematic design solutions proposed in this ARS have been developed within the provisions of the SHBC. Specific chapters of the code that are particularly relevant to the adaptive reuse evaluation are paraphrased here for assistance in understanding the potential impact of the SHBC on the historic buildings at the Presidio. (Note: these brief summaries should be used for informational only, actual interpretation should be based on the SHBC language.)

Chapter 8-4 Occupancy Classification and Use

Provides for a change in occupancy without conforming to all construction requirements as set forth in the prevailing code.

Chapter 8-6 Mechanical Requirements (Energy)

Exempts historic buildings from compliance with energy conservation standards.

Chapter 8-5 Alternative Structural Regulations, and**Chapter 8-9 Archaic Materials and Methods of Construction**

Calls for a structural study of the historic building by engineers qualified in historic building analysis and provides alternative regulations allowing broad judgment regarding the strength and performance of existing historic materials that are not recognized by the prevailing code (e.g., provides an allowance in calculating the performance of unreinforced *solid* brick masonry walls based on the condition of the material and the walls past performance during earthquakes.).

Chapter 8-7 Exiting

Allows for the following: previously approved fire escapes that are reasonably equivalent to the exiting requirements; alternative methods to safely evacuate the building; reasonable exceptions to specific provisions (e.g., existing historic door and corridor widths to be maintained, existing historic risers to be maintained, etc.). However, specific approval for each exception is required.

Chapter 8-13 Alternative Handicapped Provisions

Provides important *qualified* exceptions to the standard application of the code. Allows for a lower standard of access to a historic building if it can be shown that providing the required access will destroy the historical aspects of the structure. If the historical aspects are threatened, alternative provisions for access may be applied provided the following conditions are met:

- (a) alternative provisions can be applied on a case-by-case basis only,
- (b) the alternative with the most access preferred, and
- (c) written documentation with public opinion and comment shall be provided.

As can be seen by reading these summaries, the SHBC does not make the design development process any *easier* for historic buildings, it simply provides the potential to preserve the significant design aspects of the historic structure through the development of alternative design solutions not normally recognized in the code. The development of these alternative design solutions will require additional design development effort.

PROJECT LIMITATIONS AND AREAS FOR ADDITIONAL STUDY

STRUCTURAL EVALUATION

Evaluation of the structural performance of the example building types in this report is limited to a determination of the compatibility of the significant characteristics of the historic structural design to the probable structural requirements of the proposed uses. No engineering evaluation or determination of structural adequacy has been conducted.

Complete engineering studies will be required for each historic building design to analyze all factors relating to structural stability and worthiness. These engineering studies would include, but are not limited to soil and foundation analysis, termite and pest control inspections, core analysis to determine strength of historic masonry materials, and complete seismic analysis to determine the expected structural performance and the required structural modifications.

The development of seismic stabilization systems that can be sympathetically integrated into the existing architectural design of historic buildings requires an imaginative analysis and a thorough understanding of the performance characteristics of historic materials. The body of knowledge relating to this field is increasing and evolving every day. A study and evaluation of the required remedial treatments that was completed years ago could be considered inadequate considering the potential design solutions available today.

COST EVALUATION

The evaluation of project costs which are based on a standardized comparison of rehabilitation costs versus new construction costs can be misleading when the evaluation involves National Register historic properties. Some of the reasons for this are described below.

Projects with Dissimilar Goals and Objectives May Be Used For Comparison

A comparison of the costs for construction, operation and maintenance of a *typical* new building versus the similar costs for the appropriate rehabilitation of a building listed on the National Register of Historic Places will possibly "favor" the new building project by

indicating that it will have a lower cost. However, it is questionable whether this is a valid comparison of two similar projects with similar goals and objectives.

The obvious additional objective which the rehabilitation project must achieve is the continued preservation (possibly including substantial restoration) of the historic cultural resource. The new construction project will possibly result in a building that is less expensive and easier to operate but may require the destruction of a historically significant property. On the other hand, a sensitive rehabilitation project would result in the continued preservation of a recognized National Register historic property that may be less serviceable overall, as well as more expensive to operate and maintain.

It would appear that, even though the basic architectural aspects of the projects may be the same, in fact the two projects are of a different nature and the goals and objectives of the rehabilitation project are greater than those of the new construction project. These additional goals and objectives should be specifically addressed within a historic preservation plan. In the plan, specific allowances should be outlined for preservation projects in which expanded goals and objectives could be expected to require an increased effort, whether economic or otherwise. The primary questions then become:

- *What actual value is associated with the expanded goals?*
- *What additional effort is justifiable for the accomplishment of these goals?*
- *Who will bear the burden of the increased effort required to accomplish the goals?*

Special Criteria for Federally Funded Projects Involving Historic Structures

As required by the National Historic Preservation Act of 1966, recognized historic properties owned by federal agencies are subject to special consideration. As discussed previously, projects involving properties listed on the National Register of Historic Places and utilizing federal funding are required to meet the special design criteria defined in the *Secretary's Standards*. These criteria would frequently dictate that certain more costly designs and materials be used to maintain the historic character of the building (e.g., the use of paneled doors, multilight windows, ornamental carpentry, etc.).

The design research and analysis required for the development of appropriate designs may be more difficult and costly because of the amount of information about existing conditions that will need to be defined. However, AR 420-40, Section 4-2, Paragraph *e*. indicates that some of these additional costs would be allowable for historic preservation activities if they are classified as:

- (1) *Field Surveys, Analysis, or Testing.*
- (2) *Historical Documentation.*
- (3) *Material Analysis.*
- (4) *Work related to the above.*

Many of the major tasks required in the development of appropriate design and engineering solutions for historic buildings rehabilitation projects could potentially be categorized as one of these four tasks.

In addition to greater design development and construction costs, it could also be expected that the spatial configuration(s) permitted by the the historic building would tend to be less efficient operationally than the configuration of a typical new building designed specifically to house that same function. Not only would the "fit" between a building designed for one use, (possibly now archaic, such as the #600 stables buildings) and now intended for another use inevitably cause a loss of efficiency, but also, building design criteria have changed dramatically since World War II. A design comparison of two buildings built for the same use, one built in 1910 and one built in 1980, would indicate that they have have substantially different design characteristics. The potential economic impact of all these special design criteria are very difficult to anticipate and generalize prior to the development of specific design solutions.

Does the Cultural Value of an Historic Building Increase with Age

If a historic property is recognized as having an inherent cultural value in addition to an economic value, does this cultural value increase as the structure ages? For example, at the Presidio, will structures built ca. 1890-1905 that derive their significance from their association with the Spanish-American War be of substantially greater cultural value in 50 or 100 years? If so, how is this increased cultural value to be calculated and included with a life-cycle cost? Similarly, while the new or improved portions of the rehabilitated structure may depreciate in value (mechanical and electrical systems for example) the restored or preserved portions of the building (those areas of significance) would retain or potentially increase in value.

What are the "Hidden" Costs of Compliance with Federal Historic Preservation Legislation

Additional hidden costs will be incurred for either the appropriate rehabilitation of a historic building or the demolition and replacement of a historic building with new construction because of the required approval process (Section 106 of the National Historic

Preservation Act of 1966). These additional costs would be related to the in-house staff time required for project review and analysis, determination of impact, development and enforcement of mitigation measures, initiation of appropriate design remedies and solutions, etc. It is possible that such compliance costs for rehabilitation projects could be substantially reduced if the historic rehabilitation projects were addressed in a master plan format (as has been done in the *Maintenance Plan* or would be done in a historic preservation plan). However, projects involving the demolition of historic properties would probably have to be addressed on an individual case-by-case basis.

LIMITED DESIGN DEVELOPMENT FOR POTENTIAL USES

Only conceptual design solutions relating to the organization of space within the historic buildings have been developed for this evaluation. Architectural plans or designs were not developed, and no existing adaptive reuse designs for the buildings were evaluated.

The evaluation of a building's ability to meet the specific requirements for a particular use were aided by the use of diagrammatic solutions. More fully developed space planning documents showing specific layout and arrangement of spaces and functions that could be directly compared to the Army's specific design requirements (as spelled out in detail in *Architectural and Engineering Instructions*, 13 March 1987) will be required. This type of schematic design development and analysis would also identify unusual programmatic design requirements that are not covered at the conceptual level of design.

LIMITATIONS OF ANALYSIS USING BUILDING TYPOLOGY

The evaluations in this report are based on identified building "type" categories. This categorization (as described in Section 2 - Building Typology and Examples Studied) is an effort to cover as many historic buildings in as wide a range of designs as possible, and also to develop schematic designs and conclusions that could be used as a guide for *planning* purposes. However, even though they may share similar original designs, no two historic buildings can be expected to be alike in detail; therefore, this approach inevitably results in an imprecise *architectural* analysis for dealing with specific design and use requirements.

INTERPRETING THE SECRETARY'S STANDARDS

For this study the *Secretary's Standards* have been applied primarily in respect to the design of the historic buildings' exterior appearance. This follows the same methodology that was used in the development of the design recommendations (developed under the guidance of the National Park Service) that are part of the *Maintenance Manual for Historic Structures within the Presidio of San Francisco National Landmark District*.

EVALUATING ADAPTIVE REUSE POTENTIAL

METHODOLOGY

The ranking of the Adaptive Reuse Potential for each building type was developed by comparing the historic building designs with selected evaluation factors. The factors were outlined in the scope of work as the "key factors" to be used in evaluating the reuse potential of the buildings. The factors are:

- structural configuration
- functional requirements
- flexibility of historic design
- condition of historic fabric
- location
- fire rating
- emergency egress
- restoration potential
- square footage
- likely rehabilitation cost
- spatial configuration
- handicap accessibility
- site considerations
- utilities

Because such factors can have a wide range of meanings and interpretations, definitions have been provided to indicate the way in which they were interpreted for this study.

Each factor was assigned a value multiplier indicating its relative importance as compared to the other factors. The multipliers used were: 1 - low relative importance, 2 - medium relative importance, and 3 - high relative importance. These multipliers remained constant throughout the study for all buildings and all uses.

EVALUATION

The evaluations are presented in Section Four. Each evaluation begins with a location map and photograph(s) giving an overall view, either historic and/or contemporary, of the building. Next is a page of important data on the building type indicating the date of construction, size, primary materials and structural systems, and the significant design characteristics of the structure(s). The descriptions of the evaluations are next, starting with a list of the evaluated uses, an overall summary of the reuse evaluation, and a brief explanation of each factors' evaluation.

Each factor is evaluated based on the relative ability of the historic building design to satisfy the factor's requirements within *The Secretary of the Interior's Standards*. The buildings'

potential is numerically ranked in the evaluation matrix according to one of three levels of Adaptive Reuse Potential:

5 - HIGH

3 - MODERATE

1 - LOW

EVALUATION MATRIX

An evaluation matrix is included at the end of each individual building evaluation to quantify the evaluation by providing a numerical summary of the the relative adaptive reuse potential for each building type. Within the matrix the building's evaluated potential (1, 3, or 5) is multiplied by the factor multiplier (1, 2, or 3) to indicate the score for that factor. The sum of the scores indicates the relative adaptive reuse potential for each evaluated use; the higher the total, the greater the relative potential.

It should be noted that a high or low rating does not guarantee that a historic building will or will not ultimately be adaptable for the evaluated use. The score indicates only the relative *potential* of the historic building to meet the factor's requirements.

DEFINITION OF EVALUATION FACTORS AND RANKING

The evaluation factors are grouped into three major categories according to their overall character:

- DESIGN FACTORS relate primarily to the building's architectural elements and tend to show the relative compatibility of the historic building design and the evaluated use;
- MISSION FACTORS relate primarily to the building's ability to meet master planning and operational requirements;
- COST FACTORS relate to the economic components of the building's adaptive reuse compared to construction of a new facility.

Design Factors

The design factors have been evaluated relative to the *Secretary of the Interior's Standards for Rehabilitation*. The factors are evaluated and ranked by comparing the historic design of the building with the proposed use. The ranking is based on the potential of the historic building design to satisfy the factor's basic functional requirements within the *Secretary of the Interior's Standards*. From highest to lowest, the ranking typically indicates:

5 - High: The basic historic design and/or existing alterations are compatible with the proposed use, and they probably **would be allowable** under the *Standards*.

3 - Moderate: Some changes in the historic and/or existing design are required for the proposed use, but they probably **would be allowable** under the *Standards*.

1 - Low: Substantial changes to the historic design and/or retention of existing inappropriate alterations would be required, they probably **would not be allowable** under the *Standards*.

Structural Configuration:

Appropriateness of bearing wall location or column spacing and location. (Note: The ability of existing structural systems to support required loads and the changes required to resist seismic activity are not included in this evaluation.)

Fire Rating

Ranking indicates the building's ability to meet the requirements of the 1982 *Uniform Building Code* in the following areas: classification by type of construction, allowable areas, allowable number of stories, rating of exterior walls, presence and rating of openings in exterior walls.

Spatial Configuration

Compatibility of the building with the requirements for the number, size and layout of interior spaces.

Functional Requirements

Ability of the building to meet special functional requirements (e.g., access for people and vehicles, room for machinery and furniture, acoustic properties, and natural light).

Emergency Egress

Presence, location and size of doors, stairs, corridors and exit paths required by the 1982 *Uniform Building Code*.

Handicap Accessibility

Presence of handicap accessible toilet rooms and level access to the building as required by the 1982 *Uniform Building Code*.

Flexibility of Historic Design

Degree to which the historic building design may accept appropriate changes that would possibly be required for the evaluated use.

Restoration Potential

Potential for restoring missing or deteriorated significant architectural features while rehabilitating the building.

Site Considerations

Presence on the site of desirable features and the absence of undesirable features.

Condition of Historic Fabric

An overall assessment of the current integrity of the historic building materials.

Mission Factors

The mission factors have been evaluated as they relate to the Presidio *Draft Master Plan* documents. The factors are ranked by comparing the ability of the historic building to meet the requirements of the plan documents for the proposed use(s). From highest to lowest, the ranking typically indicates:

5 - High: The historic building is **able** to meet the requirements of the *Draft Master Plan* documents.

3 - Moderate: The historic building is **partially able** to meet the requirements of the *Draft Master Plan* documents.

1 - Low: The historic building is **substantially unable** meet the requirements of the *Draft Master Plan* documents.

Square Footage

Comparison between the gross square footage of the building type and the square footage required. *(Note: A lower evaluation is shown when more than one building type would be required for a proposed use.)*

Utilities

Presence of required utility services to the building. *(Note: This evaluates only the presence, and not the adequacy, of these utilities.)*

Location

Comparison of the evaluated uses with the proposed uses identified in the Master Planning documents. The indicated score is high for uses that comply with the Master Plan documents; moderate for uses assigned to adjacent planning areas; and low if the use is recommended for the Presidio at large.

Cost Factor

The cost factor evaluated the economic component of adaptive reuse. The factor was ranked by comparing the likely cost of an adaptive reuse project to the likely cost of a similar, new building. The costs for the rehabilitation project and the new construction project represent both the one-time construction cost of the project as well as the operation and maintenance (O&M) costs of the project over a 25-year period. The costs outlined below were developed from information provided by the Army and the contractor's cost consultant. From high to low, the ranking of potential for reuse indicates:

5 - High: The likely overall cost for rehabilitation would not exceed 50% of the cost of new construction.

3 - Moderate: The likely overall cost for rehabilitation would be between 51% and 75% of the cost of new construction.

1 - Low: The likely overall cost for rehabilitation would be between 76% and 100% of the cost of new construction.

0 - None: The likely overall cost for rehabilitation would exceed 100% of the cost of new construction.

The 50% figure used in the High ranking above was determined from Army Regulation 420-10, Chapter 3, paragraph 2, section *a.*, which states:

a. Projects costing \$2 million or less.

MACOM commanders may approve all maintenance and repair projects when the conditions in (a), (b) ... are met.

(a) The funded project cost does not exceed \$2 million.

(b) The repair cost does not exceed 50 percent of the replacement cost of the facility...

The 75% figure used in the Moderate ranking was determined from the DD Form 1391 - Special Requirements Paragraphs - Economic Analyses for a previous rehab project (#0124000, conversion of the #1200 series barracks into enlisted barracks w/ dining), which compared estimated rehabilitation costs with new construction costs and used a percent figure that was identified as *"the 75% administrative threshold limitation for consideration of new*

construction," which would indicate that rehabilitation costs up to this limit would also potentially be considered.

Projects with costs between 75% and 100% of the cost of new construction were determined to have some potential, based on the conclusion that rehabilitation projects at the Presidio have expanded goals and objectives (as outlined in *Project Limitations and Areas for Additional Study*). Because of the expanded goals, it would seem that a historic rehabilitation project would potentially constitute an overall economic savings even if it equalled (but did not exceed) the cost of new construction. However, these projects were indicated as having LOW potential for rehabilitation. Projects whose costs exceeded 100% of the cost of new construction were assigned a "0" (zero) cost factor score.

It should be noted that a recognized survey and evaluation of the historic buildings (as discussed in *Section 2 - Historic Preservation Plan for the Presidio*) should be integrated into the economic analysis process so that the more significant historic structures would automatically be permitted a higher percentage of rehab costs versus new construction costs because of their greater cultural value.

Determination of Likely Construction Costs

Table 1 - Likely Construction Costs indicates the potential construction costs per square foot for the adaptive reuse of a historic building and the cost of building an equivalent new structure. The costs shown are for an appropriate rehabilitation of the historic building (per the *Secretary's Standards*) and the construction of a similar new building of appropriate design (per the *Presidio Design Guide*).

The calculated **Rehabilitation** costs are based on three variables:

- the basic type of CONSTRUCTION to be rehabilitated- wood, brick, or concrete.
- the type of rehabilitated USE - office, storage, education, etc.
- the approximate level of construction EFFORT required in the rehabilitation as inferred from the results of the design factors analysis - three levels are identified:
 "LITTLE" rehab effort: indicated when the building's basic configuration and materials of construction are adequate and the rehabilitation will consist primarily of maintenance and repair work. These would include; new paint, new flooring, new roof, some new lighting, etc.

"MEDIUM" rehab effort: indicated when new construction would be required to meet the programmatic needs of the new use. These would include installation of new stairs, relocation of some interior partition walls, some new plumbing and electrical service, etc.

"GREAT" rehab effort: indicated when there are major repair and/or restoration issues that must be addressed during the rehabilitation and/or when there are major programmatic design and construction issues to be solved. These would include; stabilization and repair of deteriorated masonry, installation of substantial new construction to create habitable spaces (e.g., turning warehouses into offices); or the wholesale removal of existing interior fabric.

No structural engineering analysis was completed for this study, but likely costs for seismic upgrading have been included in the indicated rehab costs. These costs are based on the typical costs for this type of work for the three construction types covered in the evaluation. The likely costs for typical seismic work that have been added to the basic construction costs are: \$8.00/sq.ft-wood, \$12.00/sq.ft-concrete, and \$15.00/sq.ft-brick. These figures were included in the indicated costs for each effort level.

The calculated **New Construction** costs are based on two variables:

- the type of USE - office, storage, education, etc.
- general finish QUALITY required at the specific location, two levels were identified:

STANDARD finish: new construction costs reflect that new buildings at the Presidio are required to fit into their surroundings and exhibit a design awareness of the National Register Historic District (massing, fenestration, roof line, etc. must be appropriate to the site).

PREMIUM finish: new constructions costs reflect the specialized location of the new building and the possible requirement that special exterior design and construction methods be employed. This would include primarily the use of brick sheathing materials, wood windows, tile roofs, etc. to complement the surrounding historic buildings.

Note: Demolition costs are included in new construction costs but do not include removal of hazardous materials from the building or site. It was assumed that the new building would be in the same general area as the historic building and that all supporting utilities would be found within 50 feet of the site.

Determination of Likely Operation & Maintenance Costs

Likely O&M costs were taken from previous rehabilitation economic analysis studies, provided by the Army, that identified similar O&M costs for other new and historic buildings at the Presidio. Economic analyses from the DD Form 1391 - Special Requirements Paragraphs for two previous projects (#0124000, conversion of the #1200 series barracks into enlisted barracks w/ dining; and #T31800, the conversion of #104 barracks into general purpose administration) indicated that typical O&M costs for these historic buildings would average approximately \$4.00/sq.ft./year. The same analysis indicated that O&M costs for modern buildings would average approximately \$3.45/sq.ft./year.

These average per year costs were calculated for a 25-year period using a factor of 9.528 that indicated an approximate O&M cost of \$38.30/sq.ft./25 yrs. for a typical rehabilitated building and \$32.90/sq.ft./25 yrs. for a typical modern building.

TABLE 1

LIKELY CONSTRUCTION COSTS (\$/sq.ft.)

CONSTRUCTION TYPE	EFFORT LEVEL	U S E					
		Office	Storage	Cmnty. Service	Educa-tion	Mainte-nance	Commer-cial
Rehab Wood	little	30	30	40	40	30	40
	medium	60	40	70	70	40	70
	great	90	60	120	120	60	120
Rehab Brick	little	25	25	35	35	25	35
	medium	70	50	80	80	50	80
	great	130	110	140	140	110	140
Rehab Concrete	little	25	25	35	35	25	35
	medium	60	40	70	70	50	80
	great	120	100	130	100	100	130
New Construction	standard	140	95	155	155	95	120
	premium	185	185	185	185	185	185

Determination of Likely Project Costs

Table 2 - Likely Project Costs shows the calculated construction costs for both the rehabilitation projects and new construction projects, it indicates the following:

- Building Type and Total Square Footage
- Evaluated Re-Use
- Rehabilitation Costs showing:
 - Anticipated Rehab Effort Level
 - Likely Construction Costs
 - Likely Operation & Maintenance Costs
 - Total Rehab Costs
- New Construction Costs showing:
 - Anticipated Finish Level
 - Likely Construction Costs
 - Likely Operation & Maintenance Costs
 - Total New Construction Costs
- Rehab Cost as a Percentage of New Construction Cost showing:
 - Calculated for Construction Costs Only
 - Calculated for **TOTAL** Project Costs

TABLE 2**LIKELY PROJECT COSTS**

Construction, Operation, and Maintenance (\$ X000)

BUILDING TYPE	SQ. FT.	EVALUATED USE	REHABILITATION				NEW CONSTRUCTION				REHAB % NEW	
			Effort	Const.	O & M	Total	Finish	Const.	O & M	Total	Const	Total
85-	21,400	office	med	1,455	819	2,274	std.	3,959	704	4,663	37%	49%
87	21,400	storage	med	1,027	819	1,846	std.	2,140	704	2,844	48%	65%
	21,400	ed./off.	med	1,669	819	2,488	std.	3,317	704	4,021	50%	62%
	21,400	band training	med	1,669	819	2,488	std.	3,317	704	4,021	50%	62%
106	8,900	office	med	756	340	1,097	prm.	1,646	292	1,939	46%	57%
	8,900	cmnty. serv.	med	756	340	1,097	prm.	1,780	292	2,072	43%	53%
	8,900	ed./off.	med	845	340	1,186	prm.	1,780	292	2,072	48%	57%
201-	24,200	office	med	1,645	926	2,572	std.	3,388	796	4,184	49%	61%
204	24,200	education	great	3,097	926	4,024	std.	3,751	796	4,547	83%	89%
	24,200	comm./off.	great	3,097	926	4,024	std.	3,388	796	4,184	91%	96%
	24,200	mus. stor.	little	919	926	1,846	std.	2,420	796	3,216	38%	57%
218	6,000	office	med	408	229	637	std.	840	197	1,037	49%	61%
	6,000	storage	little	228	229	457	std.	600	197	797	38%	57%
	6,000	cmnty. serv.	med	468	229	697	std.	930	197	1,127	50%	62%
220	30,200	office	med	2,174	1,156	3,331	std.	4,228	993	5,221	51%	64%
	30,200	storage	little	1,117	1,156	2,274	std.	3,020	993	4,013	37%	57%
222	4,800	office	med	345	183	529	std.	672	157	829	51%	64%
	4,800	storage	little	177	183	361	std.	480	157	637	37%	57%
223-	19,600	office	med	1,666	750	2,416	prm.	3,626	644	4,270	46%	57%
227	19,600	storage	med	1,274	750	2,024	prm.	2,842	644	3,486	45%	58%
	19,600	education	med	1,862	750	2,612	prm.	3,920	644	4,564	48%	57%
	19,600	ed./off.	med	1,862	750	2,612	prm.	3,626	644	4,270	51%	61%
228-	7,000	office	great	1,015	268	1,283	prm.	1,295	230	1,525	78%	84%
229	7,000	storage	med	455	268	723	prm.	1,015	230	1,245	45%	58%
	7,000	cmrl. (bank)	great	1,085	268	1,353	prm.	1,190	230	1,420	91%	95%
230	9,900	office	great	970	379	1,349	std.	1,386	325	1,711	70%	79%
	9,900	commercial	great	1,267	379	1,646	std.	1,237	325	1,563	102%	105%
	9,900	public (P.O.)	great	1,267	379	1,646	std.	1,534	325	1,860	83%	89%
643	22,400	storage	med	1,164	857	2,022	std.	2,240	736	2,976	52%	68%
	22,400	maintenance	med	1,388	857	2,246	std.	2,240	736	2,976	62%	75%

TABLE 2 (con't.)

BUILDING TYPE	SQ. FT.	EVALUATED USE	REHABILITATION				NEW CONSTRUCTION				REHAB % NEW	
			Effort	Const.	O & M	Total	Finish	Const.	O & M	Total	Const	Total
661-	60,000	storage	little	2,400	2,298	4,698	prm.	8,700	1,974	10,674	28%	44%
668	60,000	cmnty. serv.	great	9,300	2,298	11,598	prm.	12,000	1,974	13,974	78%	83%
	60,000	maintenance	med	3,900	2,298	6,198	prm.	8,700	1,974	10,674	45%	58%
1006	13,400	office	great	1,768	513	2,282	std.	1,876	440	2,316	94%	98%
	13,400	storage	great	1,500	513	2,014	std.	1,340	440	1,780	112%	113%
1007-	25,500	office	med	1,836	976	2,812	std.	3,570	838	4,408	51%	64%
1009	25,500	storage	med	1,326	976	2,302	std.	2,550	838	3,388	52%	68%
1012-	51,200	office	little	1,894	1,960	3,855	std.	7,168	1,684	8,852	26%	44%
1014	51,200	storage	med	2,662	1,960	4,623	std.	5,120	1,684	6,804	52%	68%
	51,200	educational	med	4,198	1,960	6,159	std.	7,936	1,684	9,620	53%	64%
1016	22,000	office	little	836	842	1,678	std.	3,080	723	3,803	27%	44%
	22,000	storage	med	1,056	842	1,898	std.	2,200	723	2,923	48%	65%
	22,000	education	med	1,716	842	2,558	std.	3,410	723	4,133	50%	62%
1050-	42,200	office	med	3,038	1,616	4,654	std.	5,908	1,388	7,296	51%	64%
1051	42,200	storage	med	2,194	1,616	3,810	std.	4,220	1,388	5,608	52%	68%
1060	14,000	office	med	1,008	536	1,544	std.	1,960	460	2,420	51%	64%
	14,000	storage	med	728	536	1,264	std.	1,400	460	1,860	52%	68%
1161	-156,000	storage	med	7,488	5,974	13,462	std.	15,600	5,132	20,732	48%	65%
1188	156,000	commercial	med	12,168	5,974	18,142	std.	19,500	5,132	24,632	62%	74%
	156,000	office	great	15,288	5,974	21,262	std.	21,840	5,132	26,972	70%	79%
1398	4,100	cmnty. serv.	great	582	157	739	std.	635	134	770	92%	96%
	4,100	storage	great	541	157	698	std.	410	134	544	132%	128%
CG-2	6,700	cmnty. serv. (sub. abuse cr. or youth hostel)	little	321	256	578	std.	1,038	220	1,258	31%	46%

ADAPTIVE REUSE EVALUATIONS

SUMMARY MATRIX OF ADAPTIVE REUSE POTENTIAL

A comparative summary indicating the scores of the adaptive reuse evaluation for all the building types is shown below. This matrix displays the numerical totals for adaptive reuse potential as determined by the individual evaluation matrices for each building. Scores could range from a theoretical low of 27 to a theoretical high of 150.

HISTORIC BLDG. TYPE	EVALUATED USES							
	Office	Storage	Community Service	Educa- tion	Mixed Use	Mainten- ance	Commer- cial	Public Use
85-87	132	102		106	120			
106	120		119		123			
201-204	116	130		98	114			
218	110	128	116					
220	132	106						
222	126	114						
223-227	124	116		108	116			
228-229	110	128					106	
230	122						106	112
643		108				124		
661-668		136	117			116		
1006	100	66						
1007-1009	108	86						
1012-1014	140	96		126				
1016	138	86		116				
1050-1051	118	70						
1060	130	110						
1161-1188	88	104					102	
1398		60	103					
CG-2			144					136

EXAMPLE EVALUATION MATRIX

Below is a typical evaluation matrix [as described in Section 3, page 27-36] with columns indicating, from left-to-right: the various evaluation factors [**FACTORS**]; the value multiplier for that factor [**MULTI**] that indicates the relative value assigned to that factor, and; the columns for the evaluated uses [**USE**]. Two numbers are shown for each factor and use, first the evaluation of the building's potential [**Eval**], and next the [**Score**] of the evaluation times the multiplier for that factor.

At the bottom of the matrix the scores for each evaluated use are totalled to indicate the relative reuse adaptability of the building for each of the uses.

EXAMPLE EVALUATION MATRIX

FACTORS	MULTI	USE Office Eval/Score		USE Mixed Use Eval/Score		USE Youth Center Eval/Score	
DESIGN FACTORS							
Structural Configuration	3	5	15	5	15	5	15
Fire Rating	2	5	10	5	10	5	10
Spatial Configuration	2	5	10	5	10	5	10
Functional Requirements	3	3	9	3	9	3	9
Emergency Egress	2	3	6	3	6	3	6
Handicap Accessibility	1	3	3	3	3	3	3
Flexibility of Design	2	5	10	5	10	5	10
Restoration Potential	1	5	5	5	5	5	5
Site Considerations	2	5	10	5	10	5	10
Condition of Fabric	3	5	15	5	15	5	15
MISSION FACTORS							
Square Footage	3	1	3	2	6	2	6
Utilities	1	5	5	5	5	5	5
Location	2	5	10	5	10	3	6
COST FACTOR							
Construction and O&M	3	3	9	3	9	3	9
TOTAL			120		123		119

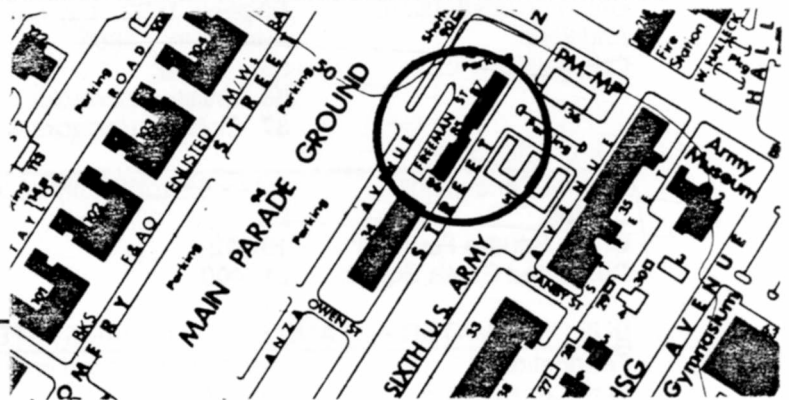
ADAPTIVE REUSE EVALUATIONS

The following pages contain the 20 building type evaluations. Building type numbers are indicated in the upper corner of each page. Each evaluation begins on the right hand page and is about six pages long.

BUILDING TYPE - 85-87

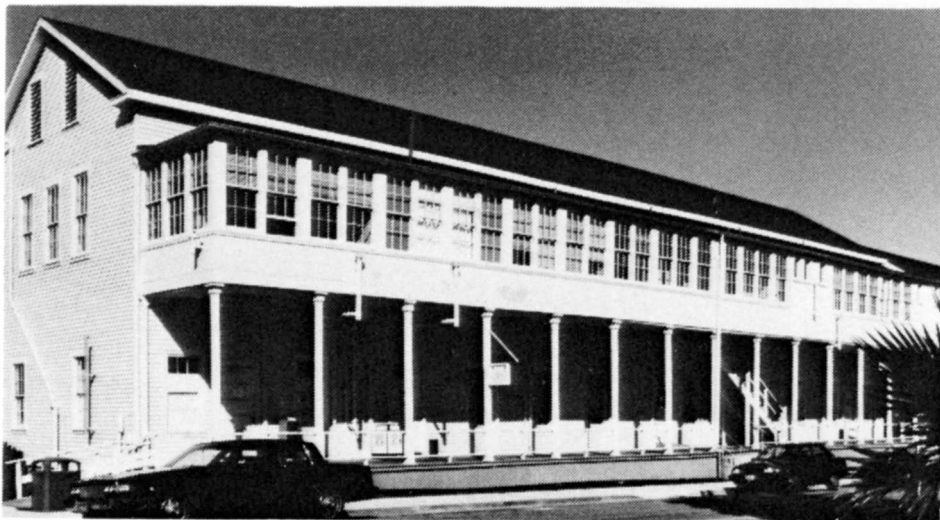
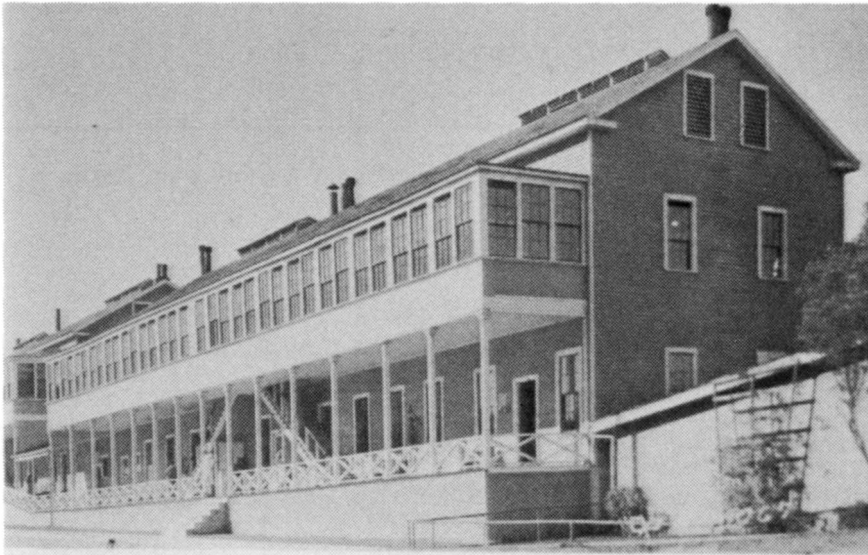
LOCATION

Master Plan Area: Main Post
Location Map:



PHOTOGRAPHS

Current and/or Historic Views:



BUILDING TYPE - 85-87**HISTORIC DATA**

Date of Construction:	Possibly 1862, may have been reconstructed in 1885.
Additions:	Added story 1885.
Original/Early Use:	85 Latrine
	86 Enlisted Barracks w/o mess
	87 Enlisted Barracks w/o mess

DIMENSIONS

Overall Dimensions:	120' x 52' (originally enclosed area 120' x 30')
Stories:	2
Gross Square Footage:	10,812
Combined Gross Sq. Ft:	21,400

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	Pier and reinforced concrete
Wall Construction:	Wood frame - 2"x 4", w/ clapboard wood siding
Floors Construction:	Wood joist - 2"x 10" 1st fl, 3"x 10" 2nd fl
Roof Construction:	Wood rafters - 2"x 6", w/ composition shingles
Fire Rating:	Combustible, no sprinklers

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	Water, sewer, electric, telephone, gas
Mechanical Systems:	Individual heating plant-gas fired

SIGNIFICANT CHARACTERISTICS**Exterior:**

- 85 and 87 Long rectangular plans joined together by 86 into continuous structure
- Gable roofs
- Long open porch on first floor
- Simple architrave moldings and fascia boards
- Windows mostly 6/6 light
- Original doors appear to be 5 panel, some with windows
- Large crawl space under most of building available for mech. systems

PRIMARY SPATIAL CHARACTERISTICS

-
- Large open plan floors w/ some individual office subdivisions, porches enclosed for office on second floor
 - Exterior stairs located along porches
 - Line of columns down center of 1st floor
-

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

-
- Long SE elevation fronts directly on Graham Street
 - Long NE elevation fronts onto Main Parade Ground
 - Substantial parking nearby
 - Public transit nearby
 - Access by steps only, no wheelchair access
-

BUILDING TYPE - 85-87**EVALUATION****Evaluated Uses:**

- office
- museum storage
- mixed use (education center and command battalion headquarters)

Summary:

These buildings appear to be most appropriate for adaptive reuse as office because that use is compatible with the existing and historic spaces in the building and does not involve functional or code requirements that would damage the historical integrity of the building. If museum storage is contemplated for this building, it should be noted that under the *Secretary's Standards*, it probably would not be possible to add a loading dock on either long elevation of the building. The greatest challenge for educational reuse would be in accommodating the spatial and functional needs as well as the code requirements for emergency egress and access for the handicapped.

DESIGN FACTORS**Structural Configuration**

The building appears not to have had significant interior bearing walls, which would make it possible to arrange new interior partitions as required for the evaluated uses. Movable, nonfixed partition systems would probably be the most appropriate. The loading capacity of the existing structure would have to be evaluated for the requirements associated with the museum storage use.

Fire Rating

The proximity of the three buildings in this type (85-86-87) to one another could require some modifications of wall construction and wall openings where they adjoin. If mixed occupancies are proposed, a one-hour-rated separation between them would have to be added.

Spatial Configuration

The existing and historical configurations could probably accommodate office and educational uses without major alterations; museum storage and band training would probably require some changes.

Functional Requirements

Band training might require acoustic properties not now found in the building. Museum storage would probably require an elevator and possibly air conditioning equipment. It would not be possible under the *Secretary's Standards* to add a loading dock. The major requirements for office and educational uses appear to be present.

Emergency Egress

The construction of the exterior porch stair may not meet code requirements. The stairs serving the second floor are not as far apart as required by code. The egress from some rooms does not meet code requirements.

Handicap Accessibility

There is no level access to the building, although this could be provided for on the first floor with a ramp. Toilet rooms on the first floor are large enough to meet code requirements. Certain uses on the second floor would require installing an elevator and new toilet rooms at that level.

BUILDING TYPE - 85-87**Flexibility of Historic Design**

Constructed as barracks, the buildings have a historic design that is basically simple in organization and could easily accommodate similar "unstructured" open-plan type office use. It would be less suited to specialized, high-activity storage, band, or educational uses that would require specialized spatial arrangements.

Restoration Potential

All the evaluated uses would allow the retention or restoration of most of the significant exterior features of the historic design.

Site Considerations

The site is close to other facilities that are important for office, storage, and mixed-use uses.

Condition of Historic Fabric

The building fabric is in generally good condition, but the building has been altered significantly in some details and has an accretion of new systems and components that have been added over the years without attention to the historic design. Being of wood construction, the exterior will require a more intense level of regular maintenance.

MISSION FACTORS**Square Footage**

This building type has a gross square footage of 21,400. The master plan allots 22,000 square feet to the Sixth Army operations center, 17,000 square feet to museum storage, 15,000 square feet to the mixed use, and 13,000 square feet to band training.

Utilities

Utilities required for evaluated uses are already provided to the building.

Location

Each of the evaluated uses is listed in the master plan for the main post.

COST FACTOR**Likely Project Costs (\$ x000)**

A "medium" level of rehab effort is anticipated. Because this is a wood frame building, new construction on this site would probably be standard finish for the Presidio.

Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
office	1,455	819	2,274	3,959	704	4,663	37%	49%
museum storage	1,027	819	1,846	2,140	704	2,844	48%	65%
mixed use	1,669	819	2,488	3,317	704	4,021	50%	62%

BUILDING TYPE - 85-87**EVALUATION MATRIX**

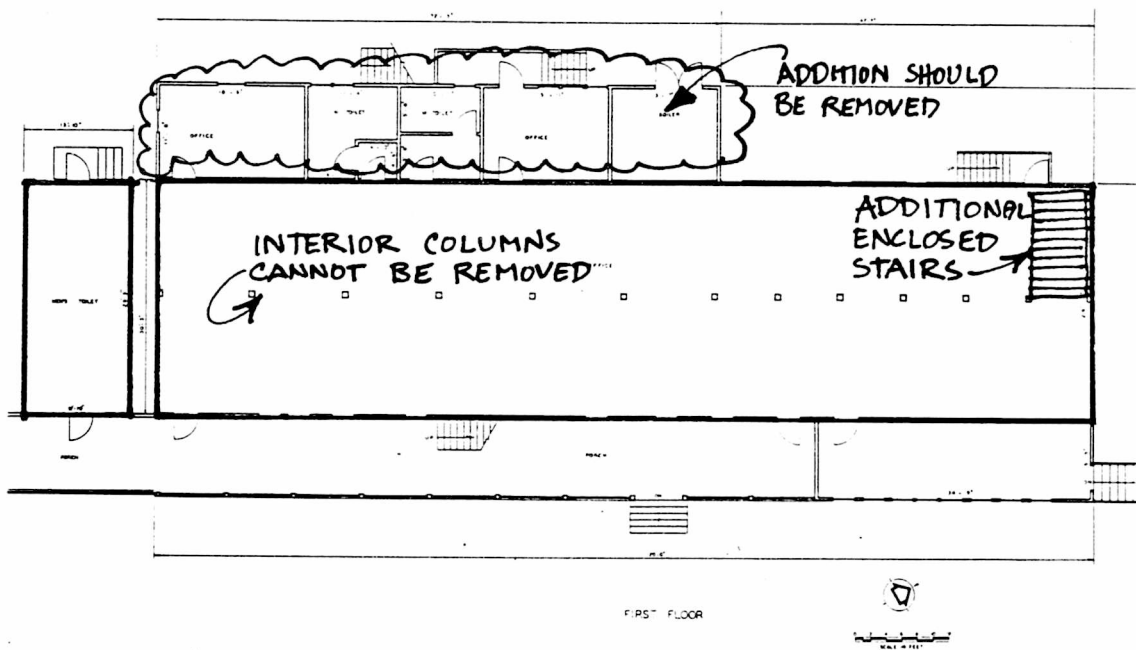
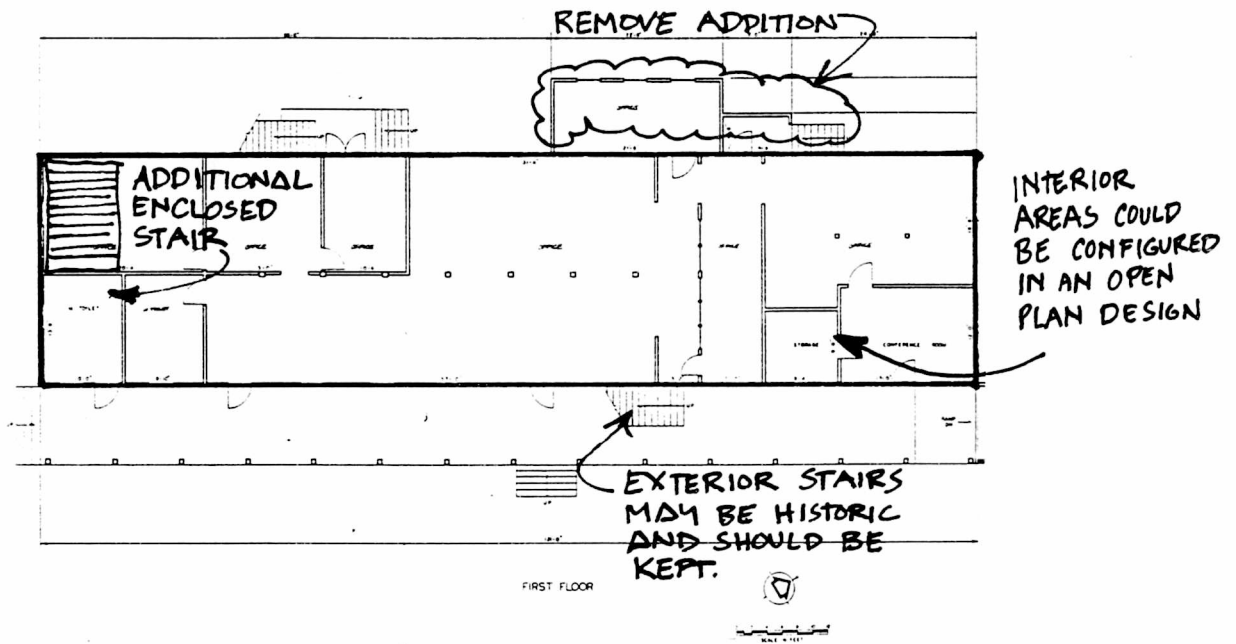
FACTORS	MULTI	USE Office Eval/Score		USE Storage Eval/Score		USE Mixed Use Eval/Score		USE Band Training Eval/Score	
DESIGN FACTORS									
Structural Configuration	3	5	15	3	9	5	15	5	15
Fire Rating	2	3	6	3	6	3	6	3	6
Spatial Configuration	2	5	10	3	6	5	10	3	6
Functional Requirements	3	5	15	1	3	5	15	3	9
Emergency Egress	2	3	6	3	6	3	6	3	6
Handicap Accessibility	1	3	3	5	5	3	3	3	3
Flexibility of Design	2	5	10	3	6	5	10	3	6
Restoration Potential	1	3	3	3	3	3	3	3	3
Site Considerations	2	5	10	5	10	5	10	5	10
Condition of Fabric	3	3	9	3	9	3	9	3	9
MISSION FACTORS									
Square Footage	3	5	15	5	15	3	9	3	9
Utilities	1	5	5	5	5	5	5	5	5
Location	2	5	10	5	10	5	10	5	10
COST FACTOR									
Construction and O&M	3	5	15	3	9	3	9	3	9
TOTAL			132		102		120		106

SKETCH KEY

Existing historic bearing wall	
Potential location of new partition	
Location of primary entrance/exit	
Potential location of new stair	
Potential location of new restroom	
Potential location of new skylight	

BUILDING TYPE - 85-87

SKETCH GRAPHICS

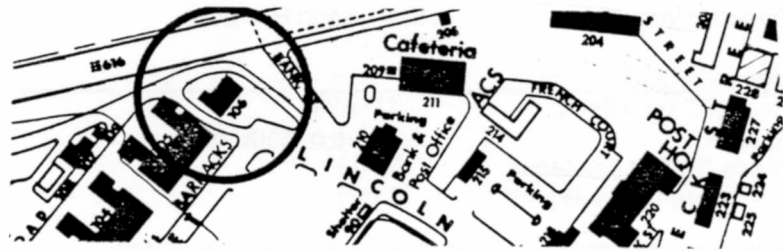


BUILDING TYPE - 106

LOCATION

Master Plan Area:
Location Map:

Main Post



PHOTOGRAPHS

Current or Historic View:



BUILDING TYPE - 106**HISTORIC DATA**

Date of Construction:	1909
Additions:	Shed-roofed, frame addition on rear, front porch enclosed.
Original/Early Use:	Military Band Barracks

DIMENSIONS

Overall Dimensions:	47' x 76'
Stories:	2 plus basement
Gross Square Footage :	8,900
Combined Gross Sq. Ft:	8,900

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	continuous concrete
Wall Construction:	brick bearing walls
Floor Construction:	basement - concrete slab, 1st - 2" x 10" joists, 2nd - 2" x 12" joists
Roof Construction:	2' x 8" wood rafters, composition shingle
Fire Rating:	sprinklered

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	Water, sewer, electricity, telephone, gas
Mechanical Systems:	gas heating plant, individual air conditioning units

SIGNIFICANT CHARACTERISTICS

Exterior:

- H-plan
- Exposed brick walls
- Arched brick openings
- Gable roofs w/ gable ends
- Brick chimney
- Classical wood details (gable ends, porch)
- Double hung 2/2 light windows
- Central entrance
- Surrounding landscaping

PRIMARY SPATIAL CHARACTERISTICS

- Two-stories w/ basement
- Some interior partition walls
- Combination individual small rooms with several medium large rooms
- Symmetrical spatial organization
- Central stair/hall

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- Parking across street
- Nearby public transit
- Site is very constricted
- No vehicular access or service
- Views of SF Bay

BUILDING TYPE - 106**EVALUATION****Evaluated Uses:**

- office
- community service-youth center
- mixed use: office & educational

Summary:

This building is relatively small and would have to be combined with other nearby structures to accommodate either of the office or mixed use functions. However, because of its human scale and prime location (with views of the bay, etc.) it would probably be most appropriate for reuse as a semi-publicly oriented use such as office or mixed use. The historic spaces in the building are of two basic sizes (evenly divided between first and second floors) which would seem suitable to these uses. In addition, functional or code requirements for these uses could be integrated into the building and would probably not damage the historical integrity of the building. The greatest challenges for educational uses would be the spatial and functional needs and the code requirements for emergency egress and access for the handicapped. Depending on the specific space plan requirements of the youth center, the building (in combination with another equally sized structure) might also be suitable for this use.

DESIGN FACTORS**Structural Configuration**

The configuration of the exterior bearing walls and historic interior partition walls would be probably appropriate for reuse in their existing locations. Some supporting columns in the basement could pose a minor problem in locating new walls.

Fire Rating

The building is sprinklered throughout.

Spatial Configuration

The building has relatively small-scaled bay spacing. Historically, floor plans have both small square rooms and large rectangular rooms. Small rooms could potentially serve as individual or double offices, larger rooms could be utilized as open-plan type offices or subdivided with freestanding or temporary partitions.

Functional Requirements

Though originally designed as barracks, the general circulation pattern, placement and size of windows and doors, and the character of interior finishes would be appropriate for all three uses. Historic interior partition walls may place some limitations on the degree of interior remodeling that could be allowed (i.e., some historic interior walls could not be removed).

Emergency Egress

Additional second floor egress would be required but this could probably be provided with fire escape structures on the exterior of the building. Additional first floor egress should be provided with additional doors at the rear of the building.

Handicap Accessibility

Large toilet room on first floor could probably be converted to be handicap accessible. No barrier-free access to the building is currently indicated, but a ramped entrance could potentially be provided at the side of the front porch. The building has no elevator, and installation would be very difficult.

BUILDING TYPE - 106**Flexibility of Historic Design**

Though the exterior walls could not be materially changed from their historic appearance the interior partition walls could be sympathetically re-arranged to create more large or small spaces as desired. New interior finishes should match historic conditions.

Restoration Potential

The building currently retains most of its historic appearance, which could be easily maintained. Removal of the enclosed second floor porch would be easily accomplished with any of the evaluated uses.

Site Considerations

The building is surrounded by landscaped lawn area with pedestrian access, parking is available nearby.

Condition of Historic Fabric

The historic fabric of the building is in generally excellent condition.

MISSION FACTORS**Square Footage**

The 8,900 sq.ft. area of this building is less than 10% of the required area (100,000 sq.ft.) at the Main Post for the office use, it would have to be combined with numerous other structures. For the evaluated mixed use and youth center, the building could only provide approximately 50% of the required space.

Utilities

Utilities required for evaluated uses are already provided to the building.

Location

The office and mixed uses are indicated in the master plan for the Main Post area, the youth center is listed in the master plan but without a specified location.

COST FACTORS**Likely Project Costs (\$ x000)**

A medium level of rehab effort is anticipated. Because of this building's prominent location on the Main Parade Ground new construction on this site would be premium finish for the Presidio.

Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
office	756	340	1,097	1,646	292	1,939	46%	57%
community service	756	340	1,097	1,780	292	2,072	43%	53%
education/office	845	340	1,186	1,780	292	2,072	48%	57%

BUILDING TYPE - 106**EVALUATION MATRIX**

FACTORS	MULTI	USE Office Eval/Score		USE Educ. / Office Eval/Score		USE Youth Center Eval/Score	
DESIGN FACTORS							
Structural Configuration	3	5	15	5	15	5	15
Fire Rating	2	5	10	5	10	5	10
Spatial Configuration	2	5	10	5	10	5	10
Functional Requirements	3	3	9	3	9	3	9
Emergency Egress	2	3	6	3	6	3	6
Handicap Accessibility	1	3	3	3	3	3	3
Flexibility of Design	2	5	10	5	10	5	10
Restoration Potential	1	5	5	5	5	5	5
Site Considerations	2	5	10	5	10	5	10
Condition of Fabric	3	5	15	5	15	5	15
MISSION FACTORS							
Square Footage	3	1	3	2	6	2	6
Utilities	1	5	5	5	5	5	5
Location	2	5	10	5	10	3	6
COST FACTOR							
Construction and O&M	3	3	9	3	9	3	9
TOTAL			120		123		119

SKETCH KEY

Existing historic bearing wall



Potential location of new partition



Location of primary entrance/exit



Potential location of new stair



Potential location of new restroom

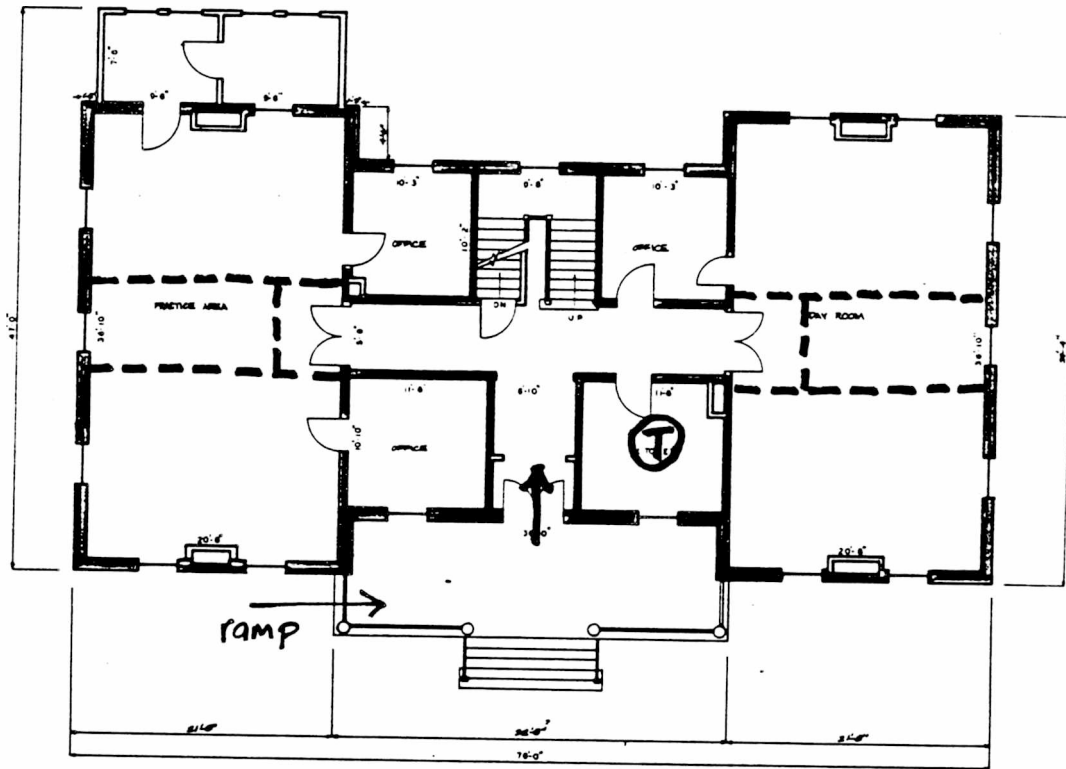


Potential location of new skylight

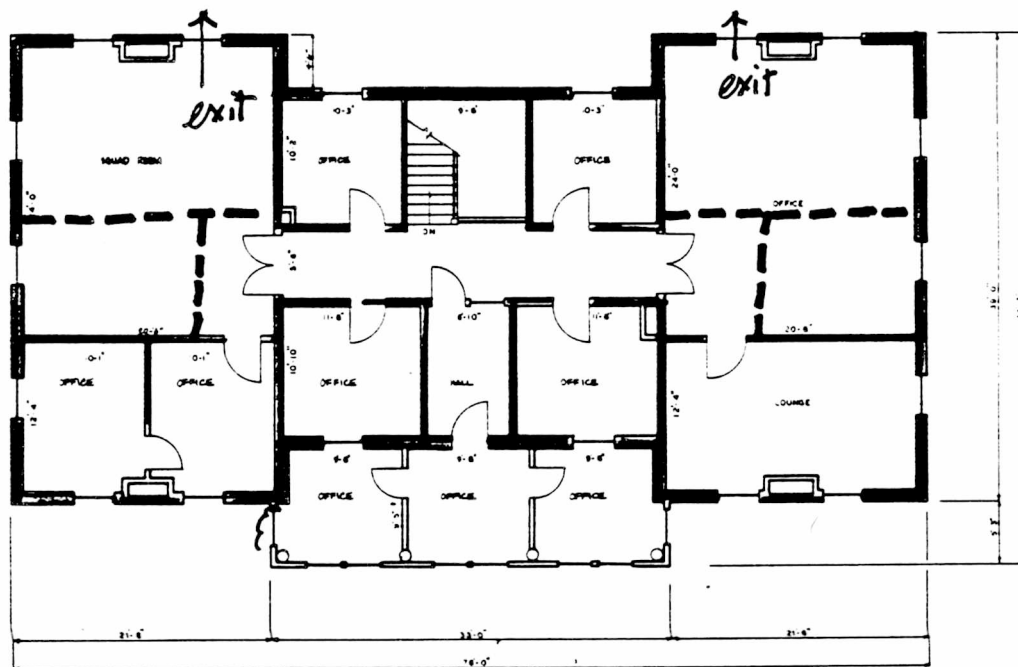


BUILDING TYPE - 106

SKETCH GRAPHICS



FIRST FLOOR



SECOND FLOOR

BUILDING TYPE - 201 - 204

LOCATION

Master Plan Area: Main Post
Location Map:



PHOTOGRAPHS

Current or Historic View:



BUILDING TYPE - 201 - 204

HISTORIC DATA

Date of Construction: 1896
 Additions: some small additions, some major building alterations
 Original/Early Use: 201 Exchange Store & Administration
 204 Exchange Store & Administration

DIMENSIONS

Overall Dimensions: 32" x 186"
 Stories: two
 Gross Sq. Ft.: 12,100±
 Combined Sq. Ft.: 24,200±

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation: combination stone and concrete pier
 Wall Construction: 2" x 4" wood frame
 Floor Construction: 1st - concrete slab, 2nd - 2" x 10" joists
 Roof Construction: 2" x 8" rafters w/ composition shingles
 Fire Rating:

UTILITIES AND MECHANICAL SYSTEMS

Utilities: water, sewer, electric, gas, telephone
 Mechanical Systems: gas space heaters

SIGNIFICANT CHARACTERISTICS

Exterior:

- long rectangular plan
- utilitarian exterior design features
- clapboard wood siding and trim
- regularly spaced double hung wood windows
- gable end roofs with overhanging eaves
- wood doors
- #204 originally had two rooftop monitor vents

PRIMARY SPATIAL CHARACTERISTICS

- large open plan floor w/ some subdivisions
- no interior bearing walls
- grid of 6" x 6" support posts (#204 - both floors, #201 - 1st fl. only)

SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- direct vehicular access on several sides
- parking directly adjacent
- building front directly onto street on one side
- 1 story grade change at # 201

BUILDING TYPE - 201 - 204

EVALUATION**Evaluated Uses:**

- office
- educational
- mixed use: community service/office
- storage (museum)

Summary:

Relatively large (total of 24,000 sq.ft.), with easily subdivided space, these two buildings have a utilitarian character (typical of "temporary" structures) that must be carefully integrated with the new functions that are now desired at the Main Post. With substantial upgrading, both buildings would make potentially suitable office, educational, or commercial structures. However, they would probably be most easily reused for a more basic type of use such as a museum storage facility.

DESIGN FACTORS

Structural Configuration

Exterior wood-frame bearing walls with two rows of interior support columns allows substantial flexibility in the location of walls and the size of spaces. However, interior columns probably could not be moved (or removed) and would tend to limit the amount of unobstructed space available.

Fire Rating

Buildings are currently not sprinkled. Fire walls and/or sprinklers could be installed without severely impacting the integrity of the structure.

Spatial Configuration

The historic floor plan of the buildings was utilitarian and appears to have been substantially altered by the addition and removal of walls. Existing space could probably be opened up or subdivided as required, but the 32' width of structures limits their usability. Basement level on #201 is partially open and would require enclosure to create habitable space.

Functional Requirements

Exterior window and door placement is somewhat random on both structures and could probably be modified to some degree to meet livability requirements for office and educational uses. Bldg. #201 is built into the hillside and therefore one side of the ground floor will not be able to have exterior windows. Interior column placement would prohibit uses that require large open span spaces. Present loading docks and garage areas at ground level could aid museum storage functions.

Emergency Egress

A new system of metal fire escapes has been installed at #204 which substantially increases the egress from the second floor level. Ground floor egress could be easily modified if necessary.

Handicap Accessibility

Both buildings could provide barrier free access on the first floor. Because it is built into the hillside, #201 could also potentially provide such access on the second floor level.

Flexibility of Historic Design

The simple utilitarian design of the buildings could accept a substantial amount of alteration and still maintain the character of the original building.

BUILDING TYPE - 201 - 204

Restoration Potential

The informal nature of the original exterior building design could be maintained and restored while new uses are integrated. Restoration of the buildings' character would probably permit installation of new windows and doors that are in keeping with original designs.

Site Considerations

Both buildings are almost totally surrounded by pavement, streets, or parking areas. Buildings are located near parking lots and public transit routes (Muni #29).

Condition of Historic Fabric

Buildings are only in fair condition; as light-weight, wood-frame structures, they have suffered exterior deterioration related to exposure and weathering. Wood siding has been covered with vinyl on #201.

MISSION FACTORS

Square Footage

With a combined area of about 24,000± sq.ft. (12,000± ea.) the structures could individually satisfy the space requirements for a post office (9,000) or bank (6,000) in the Main Post area. Taken together, they could provide a substantial amount of open-plan type office space (about 20% of the Main Post requirement).

Utilities

All utilities needed for the proposed uses are provided to the building.

Location

Evaluated uses coincide with uses designated for this area in the master plan.

COST FACTOR

Likely Project Costs (\$ x000)

A "medium" level of rehab effort is anticipated for museum storage; a "great" effort probably would be required to reuse the structures for office, educational, or mixed use. New construction on this site would be standard finish for the Presidio.

Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
office	1,645	926	2,572	3,388	796	4,184	49%	61%
education	3,097	926	4,024	3,751	796	4,547	83%	89%
commercial/office	3,097	926	4,024	3,388	796	4,184	91%	96%
storage	919	926	1,846	2,420	796	3,216	38%	57%

BUILDING TYPE - 201 - 204

EVALUATION MATRIX

FACTORS	MULTI	USE Office Eval/Score		USE Education Eval/Score		USE Mixed Use Eval/Score		USE Storage Eval/Score	
DESIGN FACTORS									
Structural Configuration	3	5	15	3	9	5	15	5	15
Fire Rating	2	5	10	5	10	5	10	1	2
Spatial Configuration	2	5	10	1	2	3	6	5	10
Functional Requirements	3	3	9	3	9	3	9	3	9
Emergency Egress	2	3	6	3	6	3	6	5	10
Handicap Accessibility	1	3	3	3	3	3	3	5	5
Flexibility of Design	2	5	10	3	6	3	6	5	10
Restoration Potential	1	5	5	5	5	5	5	5	5
Site Considerations	2	3	6	3	6	3	6	5	10
Condition of Fabric	3	3	9	3	9	3	9	3	9
MISSION FACTORS									
Square Footage	3	3	9	5	15	5	15	5	15
Utilities	1	5	5	5	5	5	5	5	5
Location	2	5	10	5	10	5	10	5	10
COST FACTOR									
Construction and O&M	3	3	9	1	3	3	9	5	15
TOTAL			116		98		114		130

SKETCH KEY

Existing historic bearing wall



Potential location of new partition



Location of primary entrance/exit



Potential location of new stair



Potential location of new restroom

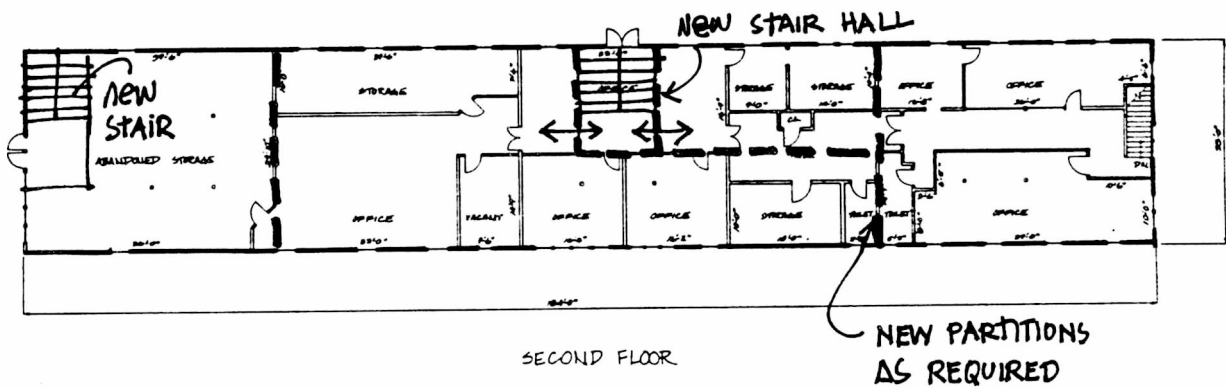
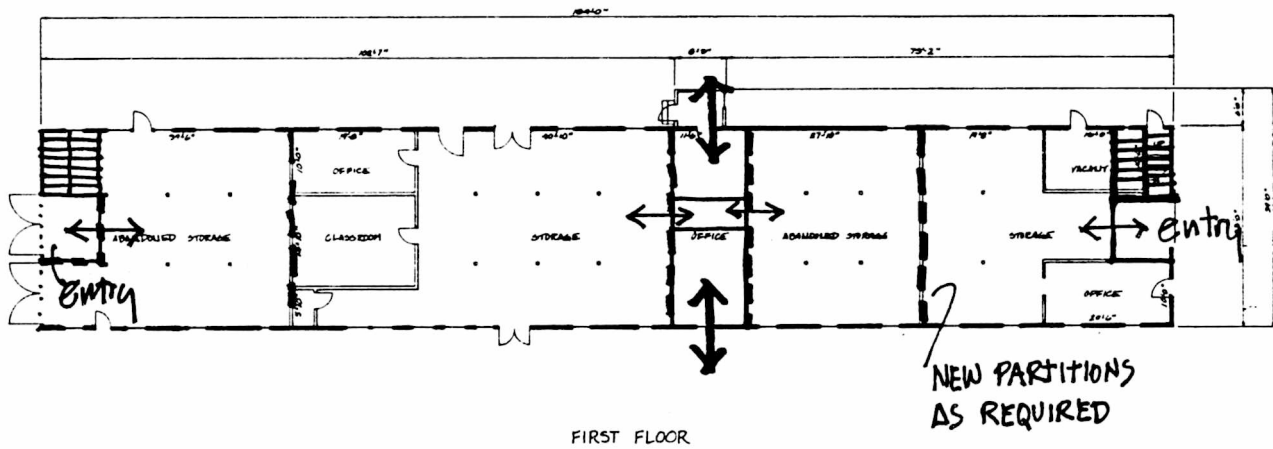


Potential location of new skylight



BUILDING TYPE - 201 - 204

SKETCH GRAPHICS



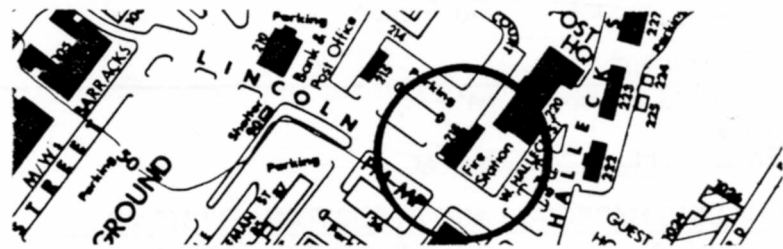
BUILDING TYPE - 218

LOCATION

Master Plan Area:

Main Post

Location Map:



PHOTOGRAPHS

Historic or Current View:



BUILDING TYPE - 218**HISTORIC DATA**

Date of Construction: 1917
 Additions: Shed-roofed additions on north and west
 Original/Early Use: Fire Station

DIMENSIONS

Overall Dimensions: 41' x 101'
 Stories: 2
 Gross Sq. Ft.: 6,000±

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation: continuous concrete footings
 Wall Construction: 2" x 6" wood studs
 Floor Construction: 1st - concrete slab on grade, 2nd - 2" x 12" joists
 Roof Construction: 2" x 6" wood rafters
 Fire Rating: Not sprinklered, combustible.

UTILITIES AND MECHANICAL SYSTEMS

Utilities: water, sewer, electricity, telephone, gas
 Mechanical Systems: gas fired heating plant

SIGNIFICANT CHARACTERISTICS

- long rectangular plan
- large hipped roof w/ dormers
- high tower shiplap siding and w/ hipped roof
- large 1st floor doors for trucks
- stucco sheathing on main bldg.

PRIMARY SPATIAL CHARACTERISTICS

- 1st fl. open plan except for several small offices and rooms
- 2nd fl. open plan dormitory with enclosed toilet room

SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- highly visible location on Lincoln Blvd.
- bldg. visible on three sides
- parking lot adjacent

BUILDING TYPE - 218

EVALUATION

Evaluated Uses:

- office
- storage (museum storage)
- community services

Summary:

As a specially designed "programmatic" type structure with a unique use, this building presents a challenge for sensitive adaptive reuse. It also occupies a highly visible location within the Presidio which could best be used for a publicly oriented type of activity. Its large, high ceilinged ground floor spaces and low second floor spaces would not lend themselves to the standardized space planning that would typically be required for office or educational uses. The large ground floor doors would be advantageous for loading of material to be stored. Its location near the Presidio Museum would also be beneficial for museum storage, but the structure lacks the required space (as identified in the master plan). As a unique type of structure at the Presidio the building would probably be best used for a function that was also unique within the Presidio, and that would fit within the 4,500 sq.ft. area of the original building.

DESIGN FACTORS

Structural Configuration

Perimeter wood-frame bearing walls on original building with a single, central row of interior columns on first floor. All interior partition walls appear to be easily movable if required.

Fire Rating

This building does not have sprinklers but its construction type would allow them to be easily installed without damage to the integrity of the building.

Spatial Configuration

Building currently has a mix of large undivided spaces with numerous small offices and store rooms. High ceilinged first floor (10') and angled ceilinged second floor (6'-2" at walls) limit flexibility for office use.

Functional Requirements

Several aspects of the design might provide the functional requirements necessary for museum storage use. These would include the large garage doors, the high ceiling, and the open plan of first floor. The stairway to the second floor is tight and would limit movement to this area. Though the building did originally have several windows, many of these have been enclosed by the new additions which make the original interior somewhat gloomy for office use, a few additional windows could potentially be added to the historic design if they were carefully located.

Emergency Egress

Ground floor egress could be easily modified as required, egress from the second floor would require additional stairs and/or exterior fire escapes.

Handicap Accessibility

Accessibility to the first floor would not present a problem, but there are no first floor toilets in the original building. The second floor is not handicap accessible.

BUILDING TYPE - 218

Flexibility of Historic Design

The exterior appearance of the structure could not be significantly altered and should have the modern additions removed if possible. The programmatic elements of the fire house design would have to remain in place, there would include the tower and the garage doors which could be sealed if desired.

Restoration Potential

Restoration for any of the uses will require removal of several exterior additions which will reduce interior space. A restored appearance would probably be easier to achieve with either the storage or community service use which would could be accommodated without much exterior alteration. Office use might require additional exterior windows.

Site Considerations

The building has a substantial amount of nearby parking and it is located on a public transit route which would be beneficial for community service or office use. There are existing driveways which would assist in delivery of storage items, but there is no loading dock.

Condition of Historic Fabric

The original portions of the building are in fair condition. Preservation of the exterior stucco and wood trim will require a more intensive type of regular maintenance and repair.

MISSION FACTORS

Square Footage

The building currently has about 6,000 sq.ft. of which it appears that about 4,500 sq.ft. are part of the original historic building. Virtually all uses identified in the master plan would require larger usable areas. The building would have to combined with other nearby structures for most uses.

Utilities

Utilities required for evaluated uses are already provided to the building.

Location

Both office and museum storage uses are required in the Main Post area. A community center use is identified for the Fort Scott area.

COST FACTOR

Likely Project Costs (\$ x000)

A "medium" level of rehab effort is anticipated for reuse as office or community service space, for storage use a "little" rehab effort is anticipated. New construction on this site would be standard finish for the Presidio.

Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
office	408	229	637	840	197	1,037	49%	61%
community service	468	229	697	930	197	1,127	50%	62%
storage	228	229	457	600	197	797	38%	57%

BUILDING TYPE - 218**EVALUATION MATRIX**

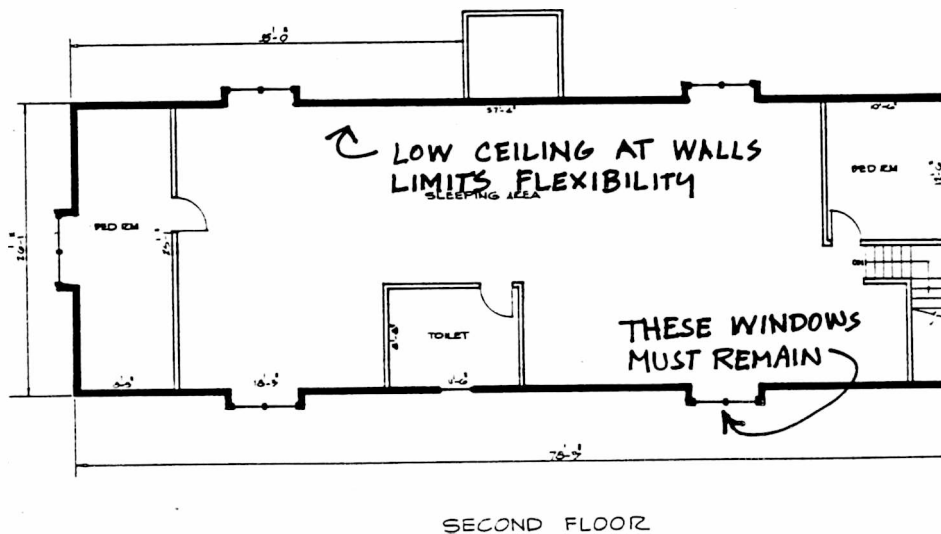
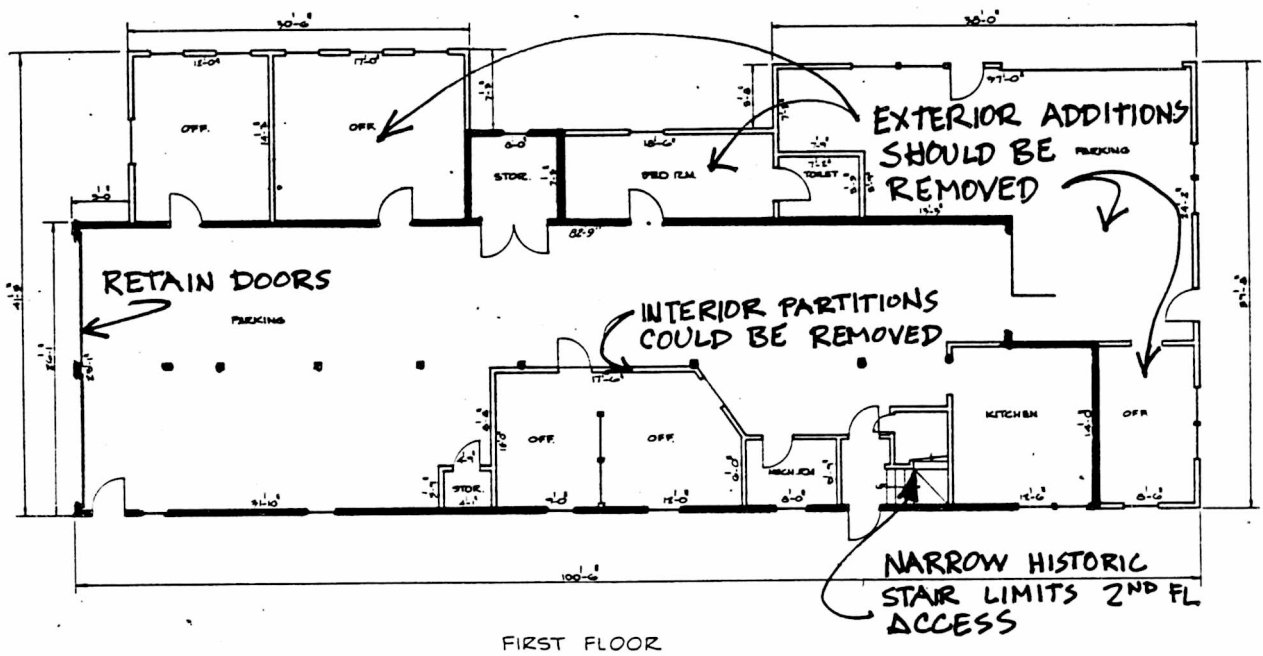
FACTORS	MULTI	USE Office Eval/Score		USE Storage Eval/Score		USE Cmnty. Cntr. Eval/Score	
DESIGN FACTORS							
Structural Configuration	3	5	15	3	9	5	15
Fire Rating	2	5	10	5	10	5	10
Spatial Configuration	2	3	6	5	10	5	10
Functional Requirements	3	3	9	5	15	5	15
Emergency Egress	2	3	6	5	10	3	6
Handicap Accessibility	1	3	3	5	5	3	3
Flexibility of Design	2	3	6	3	6	3	6
Restoration Potential	1	3	3	5	5	3	3
Site Considerations	2	5	10	5	10	5	10
Condition of Fabric	3	3	9	3	9	3	9
MISSION FACTORS							
Square Footage	3	3	9	3	9	3	9
Utilities	1	5	5	5	5	5	5
Location	2	5	10	5	10	3	6
COST FACTOR							
Construction and O&M	3	3	9	5	15	3	9
TOTAL			110		128		116

SKETCH KEY

Existing historic bearing wall	
Potential location of new partition	
Location of primary entrance/exit	
Potential location of new stair	
Potential location of new restroom	
Potential location of new skylight	

BUILDING TYPE - 218

SKETCH GRAPHICS



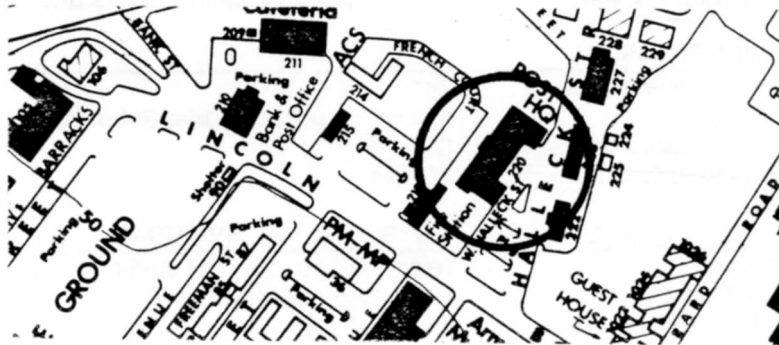
BUILDING TYPE - 220

LOCATION

Master Plan Area:

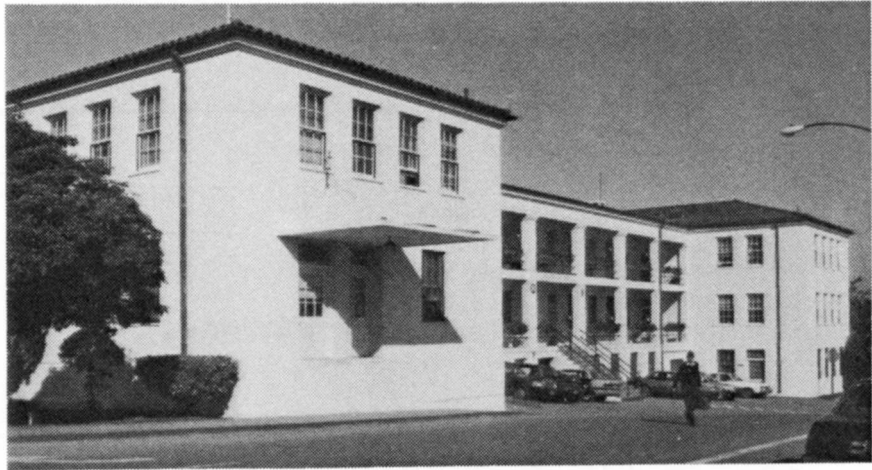
Main Post

Location Map:



PHOTOGRAPHS

Current and/or Historic Views:



BUILDING TYPE - 220**HISTORIC DATA**

Date of Construction:	1939
Additions:	no significant additions
Original/Early Use:	School and barrack for bakers and cooks

DIMENSIONS

Overall Dimensions:	74' x 178'
Stories:	two w/ basement under 3/4 of bldg.
Gross Square Footage:	30,144
Combined Gross Sq. Ft:	30,144

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	reinforced concrete w/ continuous footings
Wall Construction:	reinforced concrete
Roof Construction:	wood rafters
Fire Rating:	1 hr. - no sprinklers

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	water, sewer, electric, telephone, gas
Mechanical Systems:	self-contained gas-fired heating plant

SIGNIFICANT CHARACTERISTICS**Exterior:**

- shallow "U" plan w/ hipped tile roof
- two story, open veranda along front (east)
- 6/6 light double hung windows
- paneled doors with lights and transoms
- primary entry on back (west) elevation
- formal entry on front and back elevations
- regularly spaced fenestration all floors and elevations
-

PRIMARY SPATIAL CHARACTERISTICS

- 1st fl. - medium to small size rooms arranged along central corridor
- 2nd fl. - orig. three large rooms with several smaller rooms, area now subdivided
- central hall with stair - all levels
- interior columns on approx. 16' grid

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- fronts directly onto Halleck Street
- lawn areas to south, west and north of bldg.
- near to parking and public transit

BUILDING TYPE - 220**EVALUATION**

Evaluated uses:

- office
- storage (museum storage)

Summary:

This structure seems well suited for adaptive reuse as office space, especially open-plan type office areas that would be more workable given the building's wall-to-wall dimensions and the placement of interior columns. The many large windows would make for pleasant working environments. However, this type of occupancy will probably require new or revised interior stairs and exit ways to fully comply with code.

DESIGN FACTORS

Structural Configuration:

The building's column grid would allow potential changes in the arrangement of interior partition walls. The adequacy of the main and second floor structure would have to be analyzed for the specific loads associated with the evaluated museum storage use.

Fire Rating

The construction of the building complies with code requirements for both evaluated uses.

Spatial Configuration

The historic and existing configurations would be generally well suited to office use. Location of main interior stair and hall would have to remain in historic location. The need for large undivided floor space is not compatible with this plan.

Functional Requirements

The abandoned elevator could be returned to service, possibly for freight, if the building were adapted for museum storage. It may be possible to add a loading dock to the building along Halleck Street.

Emergency Egress

The stairways to the second floor are not separated by the distance required by code and the main stair runs unenclosed from the basement to the second floor, also a code violation.

Handicap Accessibility

The toilet rooms appear large enough to meet code requirements. A ramp would be needed to provide level access to the building. If the abandoned elevator were put back in service, all floors would be accessible.

Flexibility of Historic Design

The historic design is well suited to a mixture of open and private offices. It would not provide warehouse-like open-plan storage space.

Restoration Potential

Both evaluated uses would allow retention or restoration of significant features of the historic design.

Site Considerations

The proximity of the building to other facilities would be an advantage for either of the evaluated uses.

BUILDING TYPE - 220**Condition of Historic Fabric**

The building is in good condition. Significant features appear to be generally intact and are quality construction - tile roofs, concrete walls, solid wood windows, etc.

MISSION FACTORS**Square Footage**

The master plan calls for 22,000 sq. ft. of office space for the Sixth Army Operations center and 8,000 sq. ft. for command offices. It requires 17,000 sq. ft. for museum storage. This building provides about 30,000 gross sq. ft.

Utilities

All utilities necessary for are provided to the building.

Location

Evaluated uses coincide with uses designated for this area in the master plan.

COST FACTOR**Likely Project Costs (\$ x000)**

A "medium" level of rehab effort is anticipated for reuse as office. For reuse as storage only a "little" rehab effort would probably be required. New construction on this site would be standard finish for the Presidio.

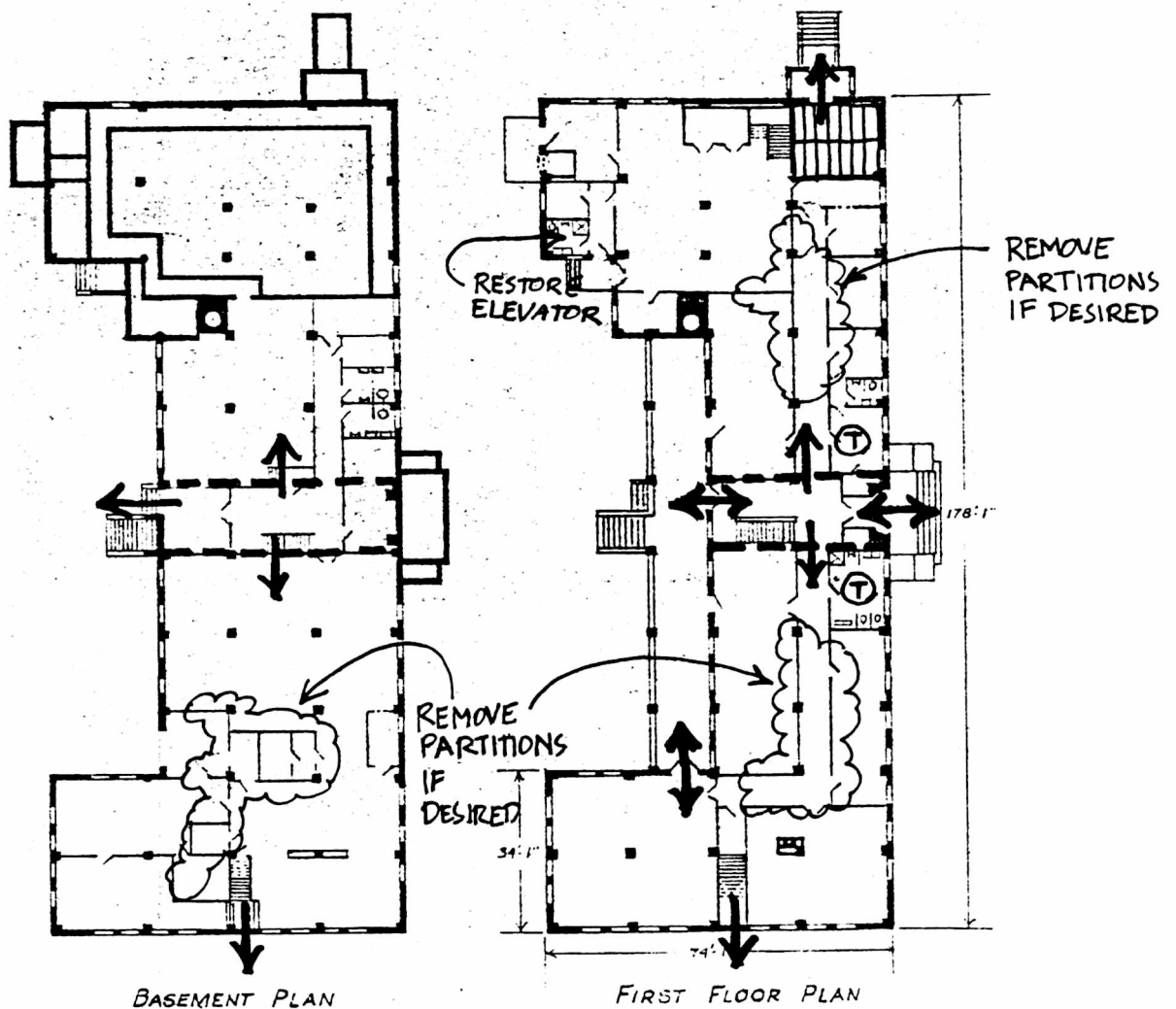
Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
office	2,174	1,156	3,331	4,228	993	5,221	51%	64%
storage	1,117	1,156	2,274	3,020	993	4,013	37%	57%

EVALUATION MATRIX

FACTORS	MULTI	USE Office Eval/Score		USE Storage Eval/Score	
DESIGN FACTORS					
Structural Configuration	3	5	15	3	9
Fire Rating	2	5	10	5	10
Spatial Configuration	2	5	10	3	6
Functional Requirements	3	5	15	1	3
Emergency Egress	2	3	6	3	6
Handicap Accessibility	1	3	3	5	5
Flexibility of Design	2	5	10	3	6
Restoration Potential	1	5	5	3	3
Site Considerations	2	5	10	5	10
Condition of Fabric	3	5	15	5	15
MISSION FACTORS					
Square Footage	3	3	9	3	9
Utilities	1	5	5	5	5
Location	2	5	10	5	10
COST FACTOR					
Construction and O&M	3	3	9	3	9
TOTAL			132		106

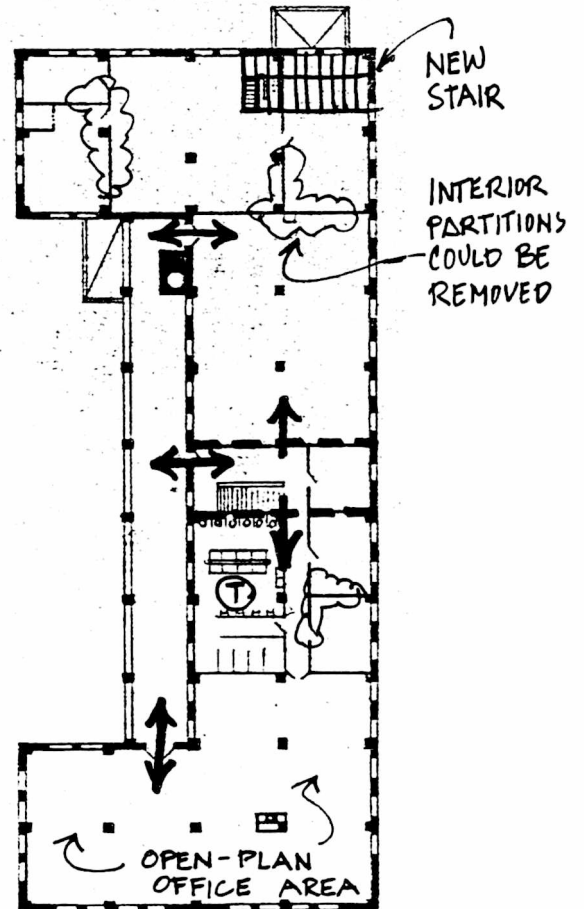
BUILDING TYPE - 220**SKETCH KEY**

Existing historic bearing wall	
Potential location of new partition	
Location of primary entrance/exit	
Potential location of new stair	
Potential location of new restroom	
Potential location of new skylight	



BUILDING TYPE - 220

SKETCH GRAPHICS

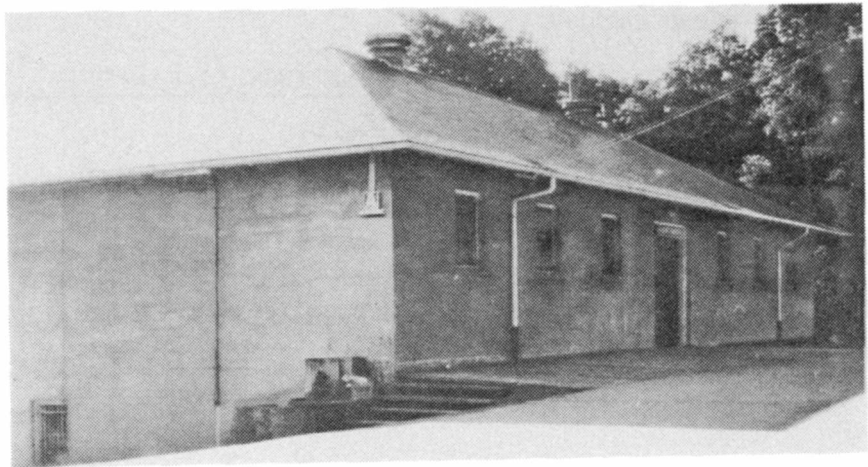


SECOND FLOOR PLAN

Main Post



Current and/or Historic Views:



BUILDING TYPE - 222**HISTORIC DATA**

Date of Construction:	1910
Additions:	shed addition, no date
Original/Early Use:	Warehouse

DIMENSIONS

Overall Dimensions:	79' x 31'
Stories:	two
Gross Square Footage:	4,800
Combined Gross Sq. Ft:	4,800

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	reinforced concrete with continuous footing
Wall Construction:	reinforced concrete
Floor Construction:	concrete - both levels
Roof Construction:	wood rafters w/ composition roofing
Fire Rating:	1 hr. construction, no sprinklers

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	water, sewer, electric, telephone, gas
Mechanical Systems:	individual gas-fired space heaters

SIGNIFICANT CHARACTERISTICS**Exterior:**

- simple rectangular plan
- hip roof w/ gravity vents at each end
- windows - double hung 3/3 light with bars @ 1st fl, simple concrete sills
- utilitarian detailing
- scrolled rafter ends
- painted concrete walls

PRIMARY SPATIAL CHARACTERISTICS

- 1st fl - originally undivided with several freestanding concrete columns to support upper floor
- 2nd fl - originally undivided except for two small rooms at one end
- no interior corridors

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- surrounded by parking on all sides
- fronts directly on Halleck Street
- first bldg. in row of small structures along Halleck
- faces Post HQ

BUILDING TYPE - 222**EVALUATION****Evaluated Uses:**

- office
- storage

Summary:

A small building with a relatively flexible and undefined floor plan, this structure could be utilized for numerous purposes. The determining factor would be the type of uses required at this location and the identification of a single use that will fit into the building's limited size. Window number and size is fairly limited in the historic design and the siting of the building (cut into the hill) limits the exterior openings on the 1st floor which would tend to limit the types of offices that would be appropriate. This bi-level nature might benefit reuse as storage because it would allow at grade loading access to both floor levels.

DESIGN FACTORS**Structural Configuration:**

The building has no bearing interior partitions and can be subdivided as needed. The upper floor would have to be analyzed for the particular loads associated with the museum storage use.

Fire Rating

The construction of the building meets code requirements for both proposed uses.

Spatial Configuration

The historic space is well suited to the proposed storage use and could readily accommodate a small open-plan office grouping.

Functional Requirements

The building provides most of the requirements for office use; it lacks loading facilities and specialized air conditioning which might be required for the storage use.

Emergency Egress

Some existing rooms do not meet the requirement of direct access to a room with an exit.

Handicap Accessibility

Both floors are at grade and could readily have level access; the lower level would need an additional toilet room to meet code requirements for office use.

Flexibility of Historic Design

The historic design is very simple and could readily accommodate either proposed use.

Restoration Potential

Retention or restoration of almost all the significant features of the historic design would be possible with either of the proposed uses. Numerous alterations and small additions would have to be removed, these would not affect the utility of the building.

Site Considerations

The site is well-suited to office use. It does not offer good loading space for storage use.

BUILDING TYPE - 222**Condition of Historic Fabric**

The historic building fabric appears to be in good condition and probably would not require substantial restoration procedures.

MISSION FACTORS**Square Footage**

This building type alone does not offer the space allotted in the master plan for any of the office uses, nor is it large enough to accommodate all the required museum storage. It would have to be combined with other nearby building types to meet master plan requirements.

Utilities

All utilities needed for the proposed uses are provided to the building.

Location

Proposed uses coincide with uses designated for this area in the master plan.

COST FACTOR**Likely Project Costs (\$ x000)**

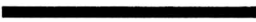
A "medium" level of rehab effort is anticipated for reuse as office space, reuse as storage would probably require only a "little" effort. New construction on this site would be standard finish for the Presidio.

Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
office	345	183	529	672	157	829	51%	64%
storage	177	183	361	480	157	637	37%	57%

BUILDING TYPE - 222**EVALUATION MATRIX**

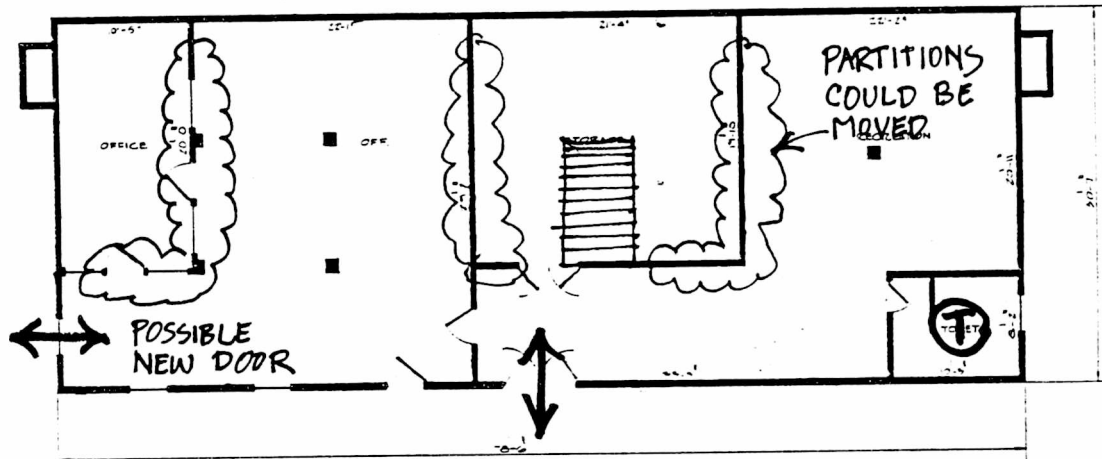
FACTORS	MULTI	USE Office Eval/Score		USE Storage Eval/Score	
DESIGN FACTORS					
Structural Configuration	3	5	15	3	9
Fire Rating	2	5	10	5	10
Spatial Configuration	2	5	10	5	10
Functional Requirements	3	5	15	3	9
Emergency Egress	2	3	6	3	6
Handicap Accessibility	1	3	3	5	5
Flexibility of Design	2	5	10	5	10
Restoration Potential	1	5	5	5	5
Site Considerations	2	5	10	1	2
Condition of Fabric	3	3	9	3	9
MISSION FACTORS					
Square Footage	3	3	9	3	9
Utilities	1	5	5	5	5
Location	2	5	10	5	10
COST FACTOR					
Construction and O&M	3	3	9	5	15
TOTAL			126		114

SKETCH KEY

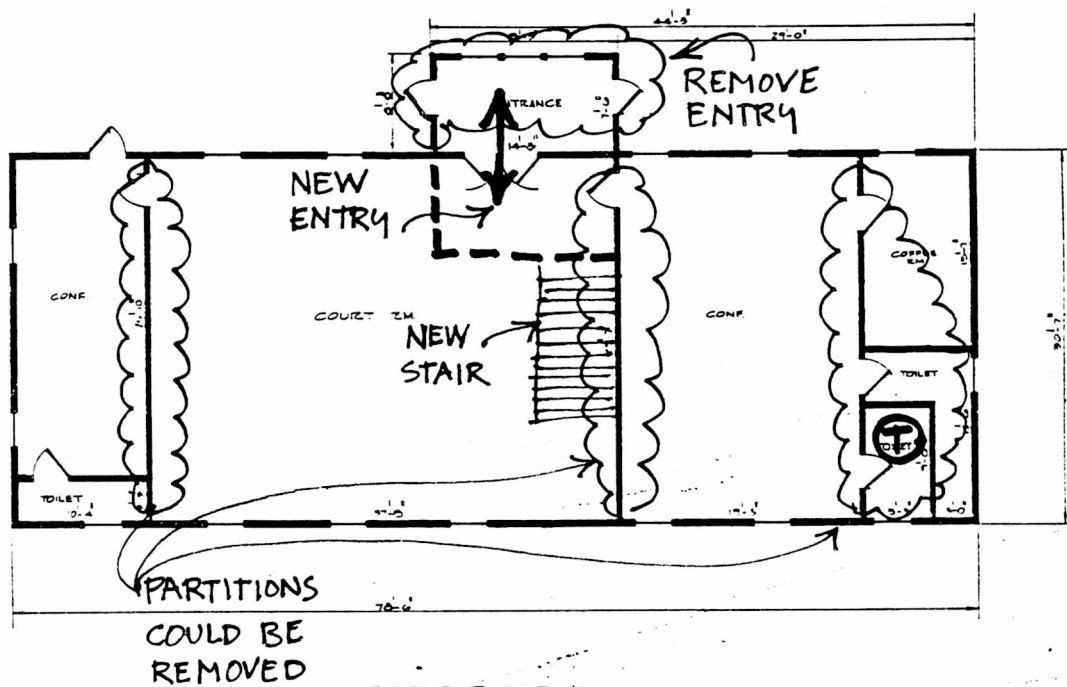
Existing historic bearing wall	
Potential location of new partition	
Location of primary entrance/exit	
Potential location of new stair	
Potential location of new restroom	
Potential location of new skylight	

BUILDING TYPE - 222

SKETCH GRAPHICS



FIRST FLOOR



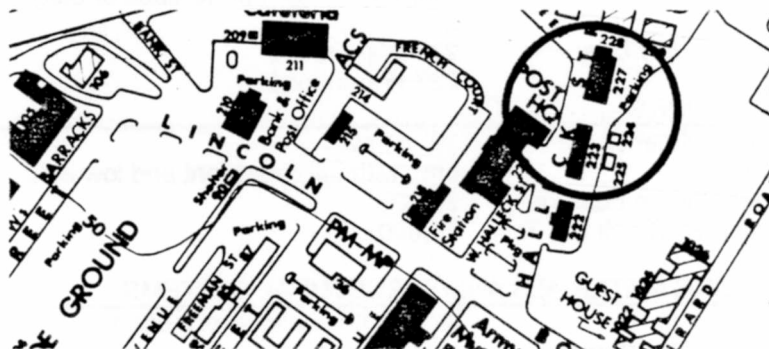
GERARD E. HARRIS...

BUILDING TYPE - 223 - 227**LOCATION**

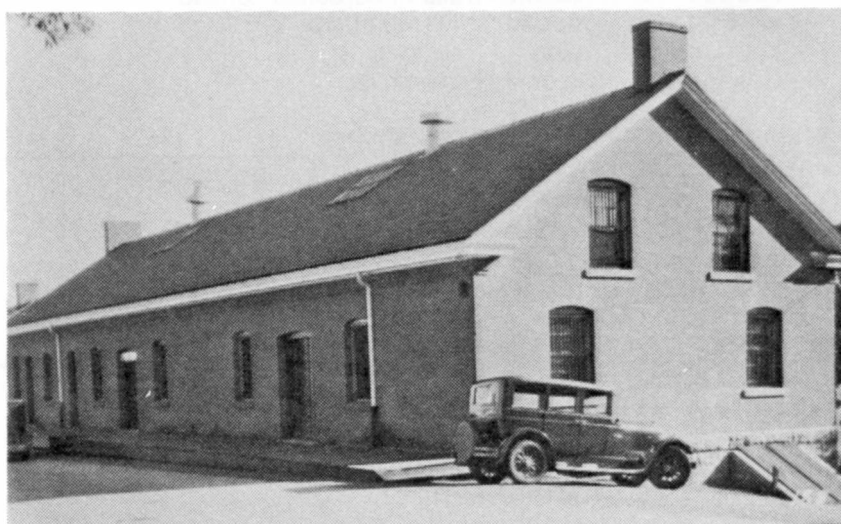
Master Plan Area:

Main Post

Location Map:

**PHOTOGRAPHS**

Current and/or Historic Views:



BUILDING TYPE - 223 - 227

HISTORIC DATA

Date of Construction:	1897
Additions:	wood shed addition to back of bldg. - no date, probably post-WW 2
Original/Early Use:	223 Warehouse 227 Warehouse

DIMENSIONS

Overall Dimensions:	32' x 114'
Stories:	one, with full basement and low attic
Gross Square Footage:	9,800±
Combined Gross Sq. Ft:	19,600±

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	stone with continuous footing
Wall Construction:	solid brick masonry
Floor Construction:	1st/attic - wood joists, 2" x 12"; basement - concrete slab
Roof Construction:	wood rafters with composition shingles (originally slate)
Fire Rating:	1 hr. - no sprinklers

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	water, sewer, electric, telephone, gas
Mechanical Systems:	gas-fired space heaters

SIGNIFICANT CHARACTERISTICS**Exterior:**

- long rectangular plan
- simple gable roof w/ returns
- segmentally arched, regularly spaced and sized window/door openings
- ornamental wood cornice
- brick chimneys
- stretcher bond, red brick walls w/ corbelled cornice
- 6/6 light wood windows, some with bars
- rusticated foundation
- exterior additions should be removed

PRIMARY SPATIAL CHARACTERISTICS

- originally undivided interior space now partially subdivided
- two rows of brick piers - basement
- two rows of wood columns - 1st fl
- low raked ceiling - attic
- attic dormers added at later date

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- fronts directly onto Halleck Street
- grade change down from front to back

BUILDING TYPE - 223 - 227**EVALUATION**

Evaluated Uses:

- office
- museum storage
- mixed use (education center / Command Battalion Headquarters)
- education (band training)

Summary:

Small buildings with relatively flexible and undefined floor plans, these structures could be used for numerous functions. Determining factors would be the type of uses required at this location and establishing a use that will fit into the buildings' limited size. Window number and size is somewhat limited in the historic design and the siting of the buildings (cut into the hill) limits the exterior openings at the basement level. Also, the 2nd floor levels have limited head clearance (the existing inappropriate dormers should be removed which would eliminate more windows at this level) though skylights could potentially be used to provide daylighting. These restrictions would limit the types of office use that would be feasible. Depending upon the specific space planning requirements, they might be rehabilitated as a band training facility.

DESIGN FACTORS

Structural Configuration:

The original rectangular plan with no interior bearing walls allows open-plan arrangement. The main and attic floors would need to be analyzed for the loads associated with the museum storage use.

Fire Rating

The construction of the building meets the code requirements for the evaluated uses.

Spatial Configuration

The historic configuration would be ideal for the evaluated storage use and nearly ideal for open-plan offices; the appropriate features of the existing configuration would be generally acceptable for the other evaluated uses.

Functional Requirements

There is no provision for the loading associated with museum storage; the acoustic requirements of a band training facility are not present; there are no windows in the basement level for office use, the buildings would probably be able meet the requirements of the other evaluated uses.

Emergency Egress

Some existing rooms do not have direct access to a room with an exit, which is required by the code, but an open-plan arrangement would possibly solve this problem. The exits from the basement are not far enough apart to meet the code requirements for any use except museum storage.

Handicap Accessibility

The building now meets the code requirements for the storage use. The toilet rooms do not meet the requirements of the code for the uses involving office space. For educational use of the attic level, wheelchair access would have to be provided. Level access would have to be provided to the main level for the other two uses.

Flexibility of Historic Design

The historic design would readily accommodate office and storage uses; it would fit the partitioning, circulation and acoustic needs of education uses to a lesser degree.

BUILDING TYPE - 223 - 227

Restoration Potential

The storage use would allow retention or restoration of almost all features of the historic design; the other evaluated uses would allow retention or restoration of most of the significant features. Exterior additions and alterations have been made which should be removed in restoration.

Site Considerations

The site does not allow easy access to the buildings for truck loading as required for the storage; it is well-suited to the site requirements of the other evaluated uses.

Condition of Historic Fabric

The historic building fabric is in good condition and would not require substantial restoration procedures.

MISSION FACTORS

Square Footage

The master plan allots 8,000 square feet for command office, 22,000 square feet for the Sixth Army Operations center and 70,000 square feet for administrative offices. It calls for 17,000 square feet of museum storage, 15,000 square feet for office/education mixed use and 13,000 square feet for band training. The 19,600 square feet (maximum) in these buildings might fit the Sixth Army offices, mixed office/education and museum storage uses evenly.

Utilities

All utilities required for the uses are provided to the buildings.

Location

Evaluated uses coincide with uses designated for this area in the master plan.

COST FACTOR

Likely Project Costs (\$ x000)

Because of the age of the structures a "medium" level of rehab effort is anticipated for all uses. Some of the neighboring historic buildings are of brick construction and therefore new construction on this site should be "premium" finish for the Presidio.

Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
office	1,666	750	2,416	3,626	644	4,270	46%	57%
storage	1,274	750	2,024	2,842	644	3,486	45%	58%
education	1,862	750	2,612	3,626	644	4,564	48%	57%
education/office	1,862	750	2,612	3,626	644	4,270	51%	61%

BUILDING TYPE - 223 - 227**EVALUATION MATRIX**

FACTORS	MULTI	USE Office Eval/Score		USE Mixed Use Eval/Score		USE Storage Eval/Score		USE Education Eval/Score	
DESIGN FACTORS									
Structural Configuration	3	5	15	5	15	3	9	5	15
Fire Rating	2	5	10	5	10	5	10	5	10
Spatial Configuration	2	5	10	3	6	5	10	3	6
Functional Requirements	3	5	15	5	15	3	9	3	9
Emergency Egress	2	3	6	3	6	3	6	3	6
Handicap Accessibility	1	3	3	3	3	5	5	1	1
Flexibility of Design	2	5	10	3	6	5	10	3	6
Restoration Potential	1	3	3	3	3	5	5	3	3
Site Considerations	2	5	10	5	10	5	10	5	10
Condition of Fabric	3	3	9	3	9	3	9	3	9
MISSION FACTORS									
Square Footage	3	3	9	3	9	3	9	3	9
Utilities	1	5	5	5	5	5	5	5	5
Location	2	5	10	5	10	5	10	5	10
COST FACTOR									
Construction and O&M	3	3	9	3	9	3	9	3	9
TOTAL		124		116		116		108	

SKETCH KEY

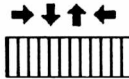
Existing historic bearing wall



Potential location of new partition



Location of primary entrance/exit



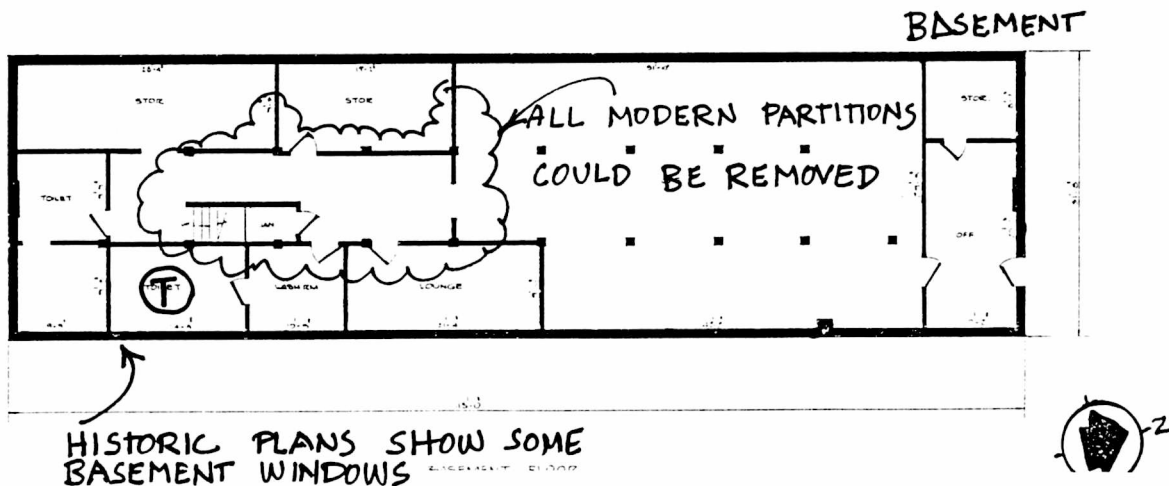
Potential location of new stair



Potential location of new restroom

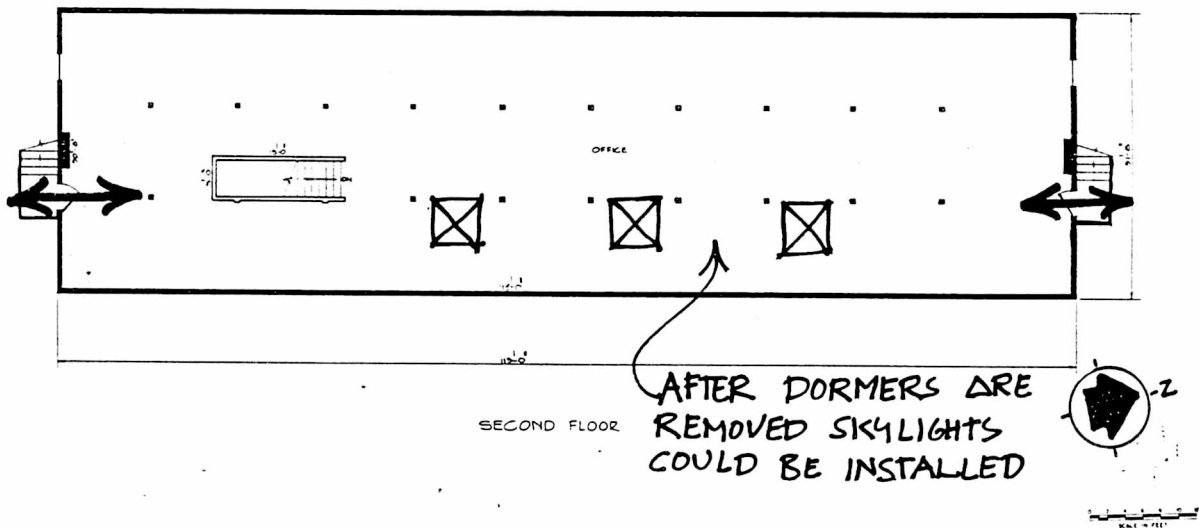
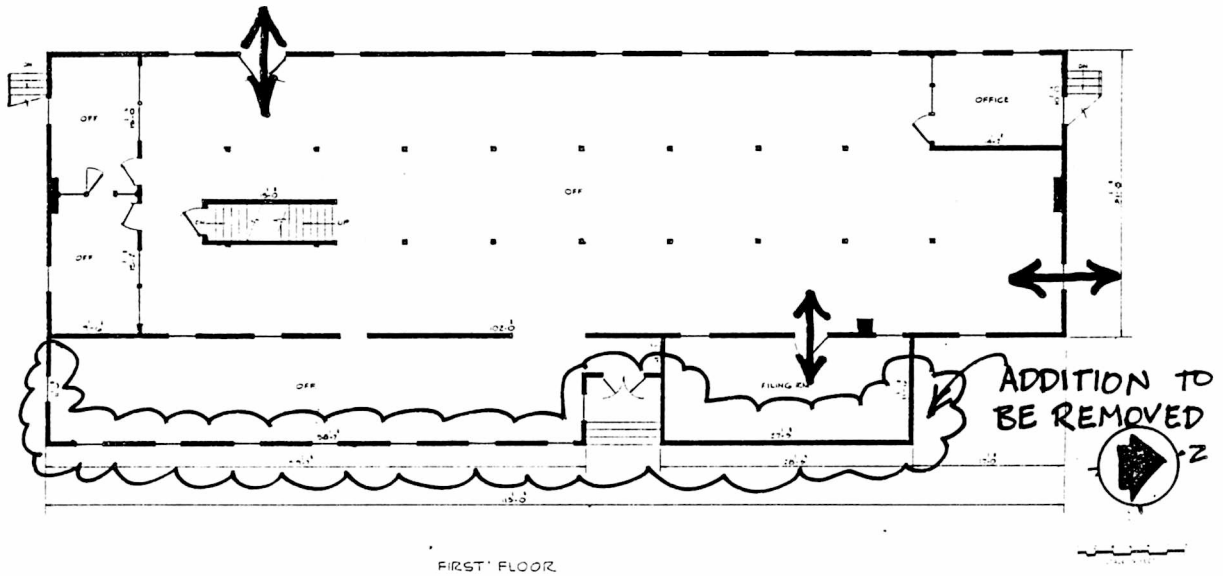


Potential location of new skylight



BUILDING TYPE - 223 - 227

SKETCH GRAPHICS



BUILDING TYPE - 228 - 229**LOCATION**

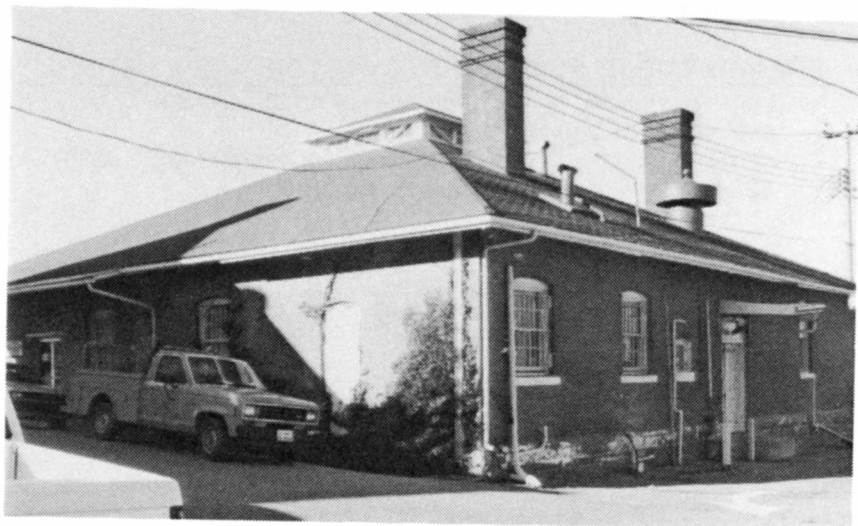
Master Plan Area:

Main Post

Location Map:

**PHOTOGRAPHS**

Current and/or Historic Views:



BUILDING TYPE - 228 - 229

HISTORIC DATA

Date of Construction:	1897 - #229 / 1909 - #228
Additions:	(wood-frame shed additions to side of #229)
Original/Early Use:	228 Bakery 229 Bakery

DIMENSIONS

Overall Dimensions:	65' x 65' - #228 / 28' x 51' - #229
Stories:	one
Gross Square Footage:	4,200 - #228 / 1,400 - #229
Combined Gross Sq. Ft:	5,600±

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	stone w/ concrete footing
Wall Construction:	solid brick
Floor Construction:	concrete slab on grade
Roof Construction:	wood truss w/ composition shingles
Fire Rating:	one-hour rated; no sprinklers

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	water, sewer, electric, telephone, gas
Mechanical Systems:	gas fired heating plant

SIGNIFICANT CHARACTERISTICS**Exterior:**

- square and rectangular plan brick structures
- hip roof with central clerestory monitor
- segmentally arched openings at windows and doors
- stone water table
- "S" curved rafter ends
- paneled wood doors

PRIMARY SPATIAL CHARACTERISTICS

- no interior bearing walls, large singular space
- exposed truss roof structure
- concrete floor

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- bldg. surrounded by parking/roadway on three sides
- asphalt extends to foundation wall
- narrow clearance between adjacent hist. bldgs. (#227, #229)
- #228 fronts directly onto Halleck Street

BUILDING TYPE - 228 - 229**EVALUATION**

Evaluated Uses:

- commercial (bank)
- office
- museum storage

Summary:

Both these small brick buildings are currently being reused, but their materials are deteriorating and will need to be stabilized and rehabilitated if their continued use is planned. The buildings are probably too small individually to easily accommodate most uses, but they could be combined with other surrounding historic buildings (which have a similar size limitation) to create a large pool of space. Both buildings have relatively unique design features (i.e., large high roofs with vent monitors) that could be used to create both interesting interior spaces and highly visible exterior elements.

DESIGN FACTORS

Structural Configuration

The structures have no interior bearing walls and could easily accommodate new interior partitions or the removal of partitions that have been added since the original construction was completed.

Fire Rating

The construction of the buildings complies with code requirements for evaluated uses.

Spatial Configuration

The open, undivided spatial configuration of the historic design could be well suited to one level of storage; it is probably somewhat less well suited to commercial and office uses.

Functional Requirements

The functional requirements for open-plan office and ordinary storage (without specialized heating and air-conditioning systems) are generally present. Special program requirements for bank use would have to be added. No facilities for loading or unloading are present.

Emergency Egress

The existing building meets code requirements for the evaluated uses.

Handicap Accessibility

The one-story configuration of the existing buildings could easily meet code requirements for the evaluated uses.

Flexibility of Historic Design

The single-story, open-plan character of the historic design could potentially accommodate the needs of the evaluated uses readily. Additional windows or doors could be added to the structures, but they would have to be carefully integrated into the brick walls. Additions to the buildings would generally not be permitted.

Restoration Potential

There have been few irreversible changes to the buildings' historic designs, but all exterior additions should be removed. The storage use would allow restoration of many of the historic features; the other uses would probably allow a slightly lesser level of restoration.

BUILDING TYPE - 228 - 229

Site Considerations

The site is very restricted for vehicular circulation and lacks truck loading room for the storage use. There is little parking available near the building.

Condition of Historic Fabric

Historic stone foundations and brick walls in both buildings are deteriorated and will require substantial restoration and stabilization effort.

MISSION FACTORS

Square Footage

With a combined area of only about 5,600 gross square feet, few of the individual functions identified in the master plan will fit into these structures. Bank use requiring 6,000 sq.ft. might be accommodated with a rehab project that sensitively connected the two structures. If combined with other nearby small buildings, they could be used for museum storage (17,000) or for the command offices (8,000 square feet).

Utilities

#228 currently has the utility service required for office and storage; #229 does not have water and sewer service.

Location

Evaluated uses coincide with uses designated for this area in the master plan.

COST FACTOR

Likely Project Costs (\$ x000)

Due to the deteriorated condition of the historic building fabric, it is anticipated that a "great" level of rehab effort will be required for any reuse function except storage, which could possibly be accommodated with only a "medium" level of effort. Because of the neighboring historic brick buildings, new construction on this site would be premium finish for the Presidio.

Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
office	1,015	268	1,283	1,295	230	1,525	78%	84%
storage	455	268	723	1,015	230	1,245	45%	58%
commercial (bank)	1,085	268	1,353	1,190	230	1,420	91%	95%

BUILDING TYPE - 228 - 229

EVALUATION MATRIX

FACTORS	MULTI	USE Commercial Eval/Score		USE Office Eval/Score		USE Museum Storage Eval/Score	
DESIGN FACTORS							
Structural Configuration	3	5	15	5	15	5	15
Fire Rating	2	5	10	5	10	5	10
Spatial Configuration	2	3	6	3	6	5	10
Functional Requirements	3	3	9	5	15	5	15
Emergency Egress	2	5	10	5	10	5	10
Handicap Accessibility	1	5	5	5	5	5	5
Flexibility of Design	2	5	10	5	10	5	10
Restoration Potential	1	3	3	3	3	5	5
Site Considerations	2	1	2	3	6	3	6
Condition of Fabric	3	1	3	1	3	1	3
MISSION FACTORS							
Square Footage	3	5	15	3	9	3	9
Utilities	1	5	5	5	5	5	5
Location	2	5	10	5	10	5	10
COST FACTOR							
Construction and O&M	3	1	3	1	3	5	15
TOTAL		106		110		128	

SKETCH KEY

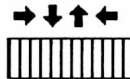
Existing historic bearing wall



Potential location of new partition



Location of primary entrance/exit



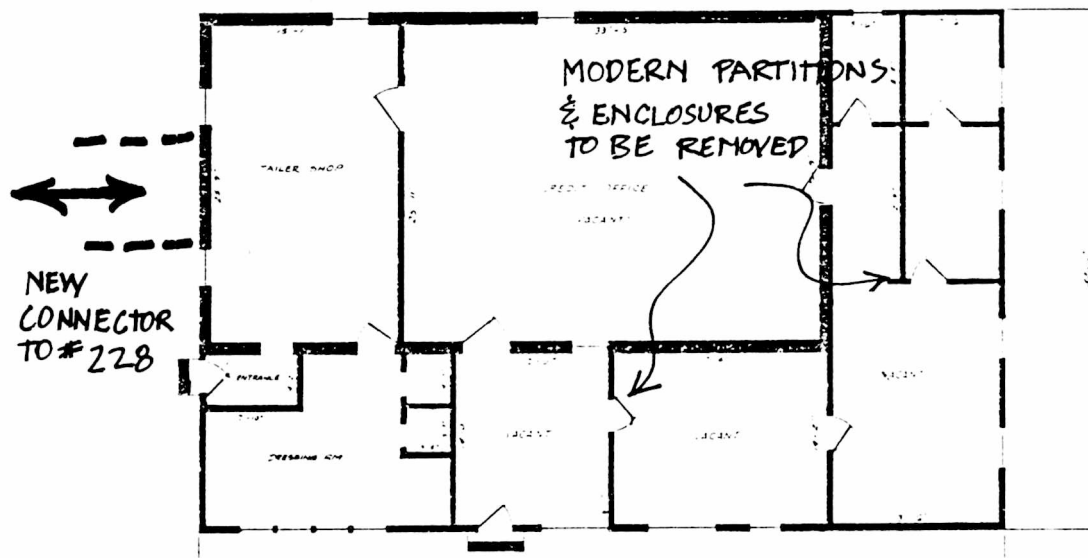
Potential location of new stair



Potential location of new restroom

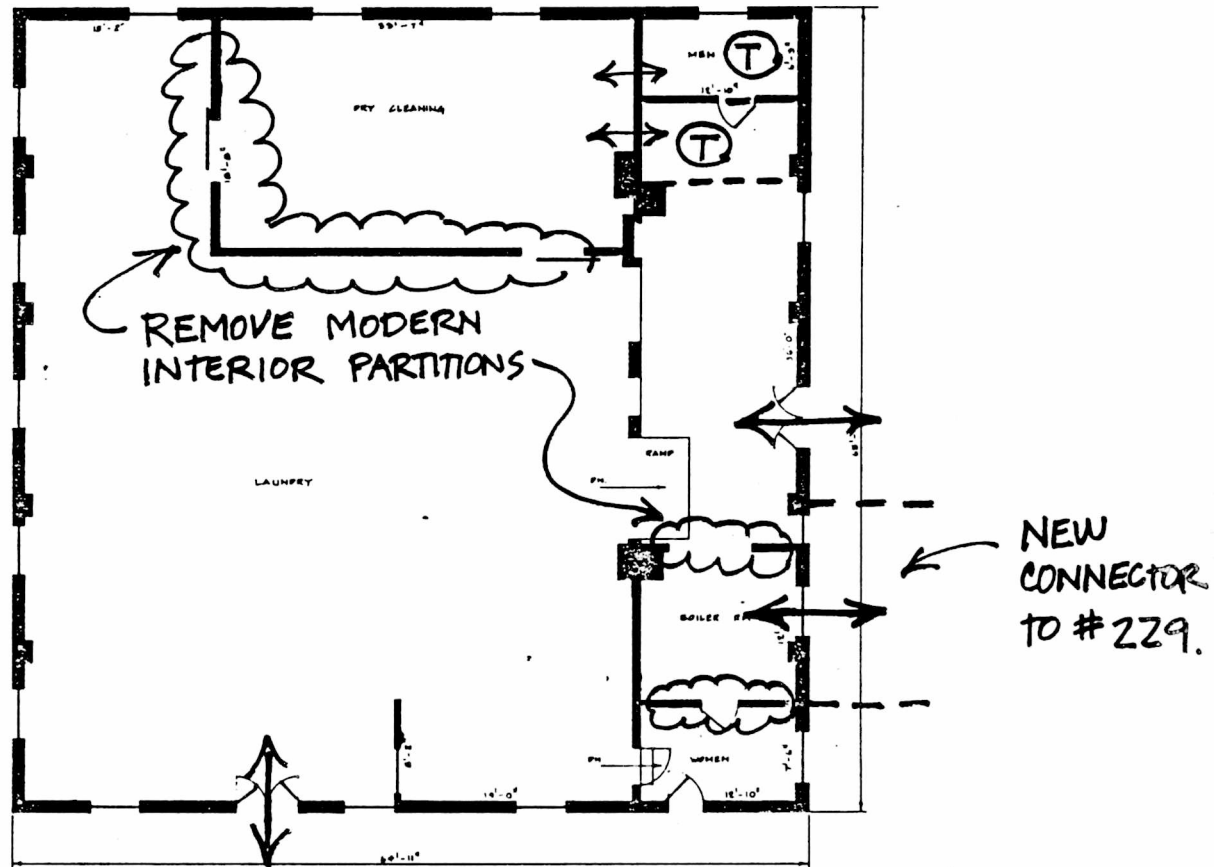


Potential location of new skylight



BUILDING TYPE - 228 - 229

SKETCH GRAPHICS

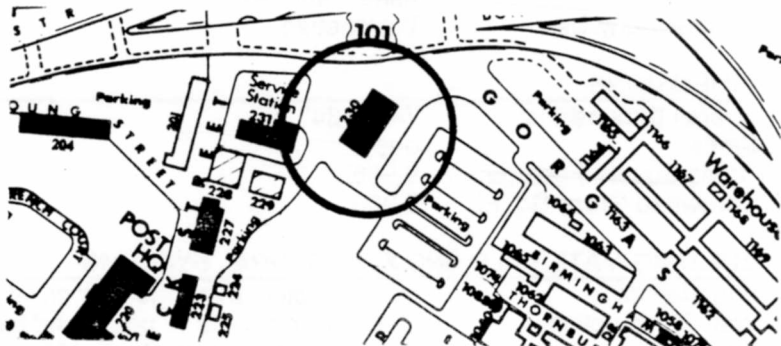


BUILDING TYPE - 230**LOCATION**

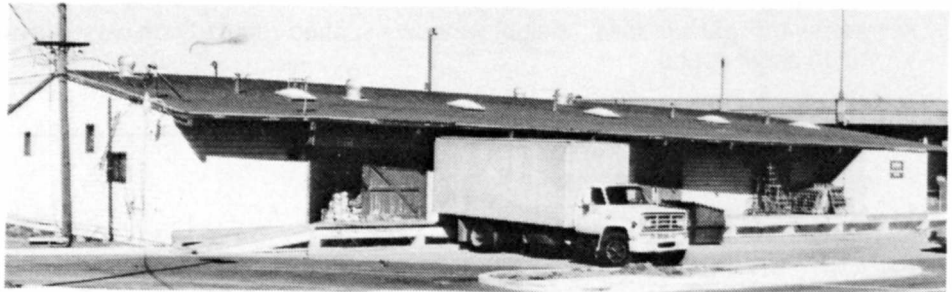
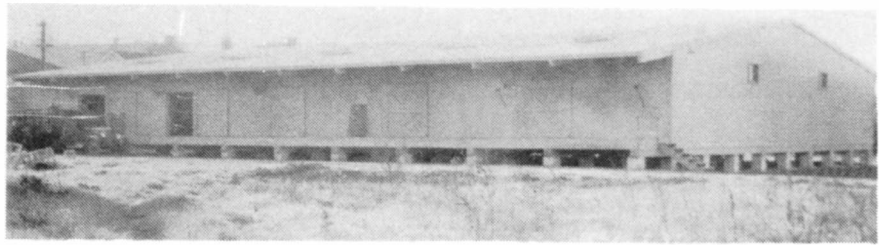
Master Plan Area:

Main Post

Location Map:

**PHOTOGRAPHS**

Current and/or Historic Views:



BUILDING TYPE - 230**HISTORIC DATA**

Date of Construction:	1917
Additions:	none identified
Original/Early Use:	Warehouse

DIMENSIONS

Overall Dimensions:	74' x 134'
Stories:	one
Gross Square Footage:	9,900
Combined Gross Sq. Ft:	9,900

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	concrete piers throughout w/ crawl space
Wall Construction:	6" x 6" wood posts w/ board and batten siding
Floor Construction:	2" flng. on 3" x 14" joists on 12" x 12" girder
Roof Construction:	2" x 6" purlins on double 2" x 12" rafters
Fire Rating:	combustible w/ wet pipe sprinkler

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	water, sewer, electric, telephone, gas
Mechanical Systems:	gas-fired heating plant

SIGNIFICANT CHARACTERISTICS**Exterior:**

- large rectangular plan
- low gable roof
- loading dock structure along one side w/ overhanging roof and sliding doors
- "utilitarian" details
- some 4/4 light windows, 6-light windows spaced regularly on west elevation
- open crawl space

PRIMARY SPATIAL CHARACTERISTICS

- no interior bearing walls
- grid of freestanding support columns
- simple wood roof structure

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- parking on three sides
- building is isolated from grouping of other historic warehouse buildings

BUILDING TYPE - 230**EVALUATION**

Evaluated Uses:

- office (command)
- public (post office)
- commercial (bank)

Summary:

This building, like other structures that were originally built as warehouses, is hampered in its reusability by its original utilitarian character and design features. Rehab of the building for use as an office would be possible, but it would require careful attention to detail so as to not obscure these characteristics. To make the building suitable for long-term use, upgrading of the overall permanence of the building would probably be required.

DESIGN FACTORS

Structural Configuration

The grid of interior columns and lack of interior bearing walls allows great flexibility in locating new interior partitions. The crawl space under the building could accommodate new mechanical and electrical systems. Original board and batten exterior walls also allow considerable flexibility in locating openings, but require interior sheathing to be made weathertight.

Fire Rating

The sprinkler system and the unencumbered site make the building appropriate under the code for the evaluated uses.

Spatial Configuration

The historic design was a large, open room with enclosed offices at one end. Open plan office or storage would be compatible with this design characteristic.

Functional Requirements

The relative lack of windows would require sensitive treatment to create attractive offices without destroying the building's historic character. A loading dock and large sliding doors, which would aid storage use, are already present.

Emergency Egress

The doors in the building would be adequate for the evaluated use. Some of the existing interior partitions may not provide the egress required by code for office use, but this could be corrected without harming the building's character.

Handicap Accessibility

An existing ramp could easily be revised to provide the required exterior access. The existing toilet rooms (as shown on the plan) are large enough to comply with requirements for handicapped access.

Flexibility of Historic Design

Open-plan type offices could be integrated into the building's historic open-plan design. Some additional interior partitioning could also be accommodated. However, the original utilitarian design characteristics would require sensitive treatment to be successfully adapted to permanent occupancy for office or public or commercial use. Storage could be easily accommodated.

BUILDING TYPE - 230

Restoration Potential

The simple character of the historic exterior design could be easily preserved and/or restored; an open-plan office use would preserve the interior configuration of the building, but the exposed walls and ceiling of the historic design probably could not be retained.

Site Considerations

The site offers adequate parking for some commercial uses.

Condition of Historic Fabric

The building has been altered for use as a store, but most of its historic fabric and features appear to be intact and in relatively good condition. However, as a wood structure, it is and will be subject to deterioration and rot.

MISSION FACTORS

Square Footage

The building has 10,500± sq.ft which individually could accommodate: 8,000 sq.ft - Command office; 9,000 sq.ft. - Bank; 6,000 sq.ft. - Post Office.

Utilities

Utilities required for the evaluated use are provided in the building.

Location

Evaluated uses coincide with uses designated for this area in the master plan.

COST FACTOR

Likely Project Costs (\$ x000)

Even though the building has been rehab a a store, the "temporary" nature of the building construction would probably require a ""medium" level of rehab effort to create a permanent use for this structure. New construction on this site would be standard finish for the Presidio.

Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
office	673	379	1,052	1,386	325	1,711	49%	61%
commercial	772	379	1,151	1,237	325	1,563	62%	74%
public (P.O.)	772	379	1,151	1,534	325	1,860	50%	62%

BUILDING TYPE - 230**EVALUATION MATRIX**

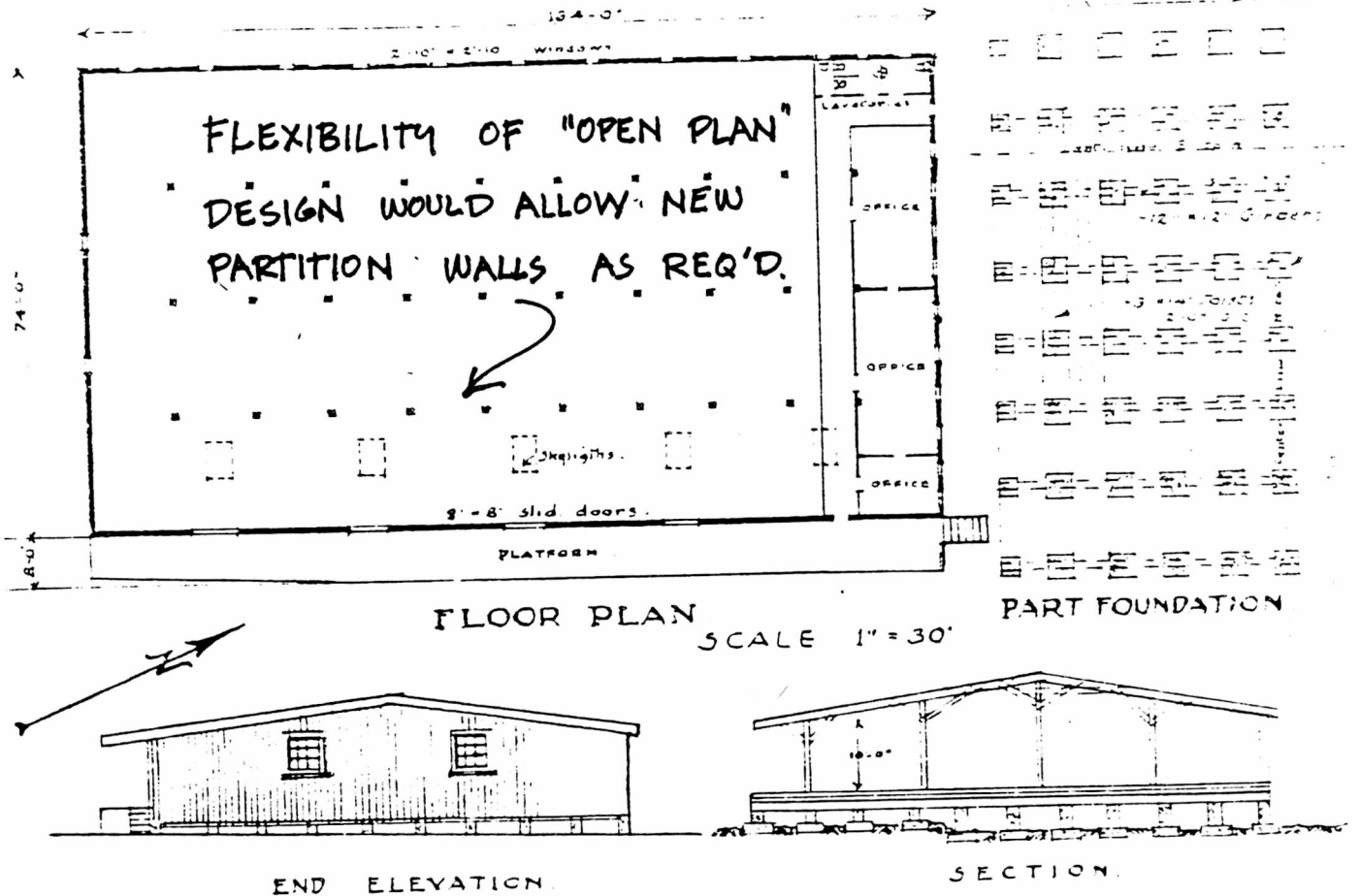
FACTORS	MULTI	USE Office Eval/Score		USE Public Eval/Score		USE Commercial Eval/Score	
DESIGN FACTORS							
Structural Configuration	3	5	15	5	15	5	15
Fire Rating	2	5	10	5	10	5	10
Spatial Configuration	2	3	6	3	6	3	6
Functional Requirements	3	3	9	1	3	1	3
Emergency Egress	2	5	10	5	10	5	10
Handicap Accessibility	1	5	5	5	5	5	5
Flexibility of Design	2	3	6	1	2	1	2
Restoration Potential	1	3	3	3	3	3	3
Site Considerations	2	5	10	5	10	5	10
Condition of Fabric	3	3	9	3	9	3	9
MISSION FACTORS							
Square Footage	3	5	15	5	15	3	9
Utilities	1	5	5	5	5	5	5
Location	2	5	10	5	10	5	10
COST FACTOR							
Construction and O&M	3	3	9	3	9	3	9
TOTAL			122		112		106

SKETCH KEY

Existing historic bearing wall	
Potential location of new partition	
Location of primary entrance/exit	
Potential location of new stair	
Potential location of new restroom	
Potential location of new skylight	

BUILDING TYPE - 230

SKETCH GRAPHICS



BUILDING TYPE - 643**LOCATION**

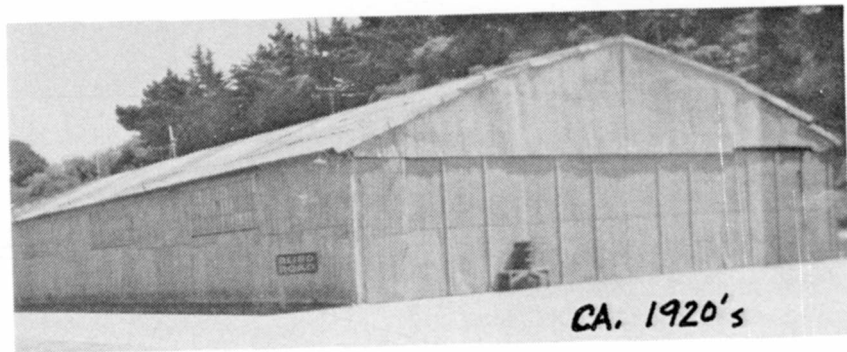
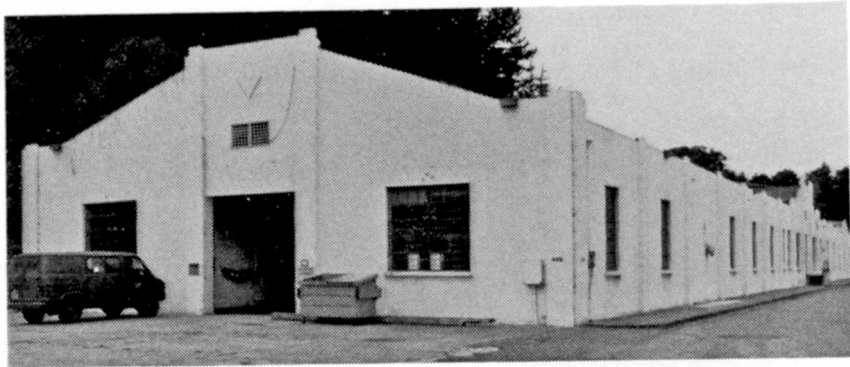
Master Plan Area:

Bayfront

Location Map:

**PHOTOGRAPHS**

Current View of Example Building:



BUILDING TYPE - 643**HISTORIC DATA**

Date of Construction: 1923 (original bldg.)
 Additions: no major additions but, substantially remodeled ca. 1930 (?)
 Original/Early Use: Aircraft Hangar

DIMENSIONS

Overall Dimensions: 68' x 332'
 Stories: 1-1/2
 Gross Sq. Ft.: 22,400±
 Combined Sq. Ft.: 22,400±

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation Construction: concrete continuous footings
 Walls Construction: concrete frame with hollow infill
 Floor Construction: concrete slab
 Roof Construction: steel truss
 Fire Rating: 1 hr, not sprinklered, protected non-combustible

UTILITIES AND MECHANICAL SYSTEMS

Utilities: Water, sewer, electricity, telephone, gas
 Mechanical Systems: gas fired heating plant

SIGNIFICANT CHARACTERISTICS

- long rectangular plan
- symmetrical elevation with central block
- regularly spaced fenestration
- smooth stucco walls
- metal sash windows
- exposed parapet
- central entrance

PRIMARY SPATIAL CHARACTERISTICS

- originally large open plan arrangement
- interior bearing walls at central office block only
- exposed steel trusses

SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- vehicular access directly to and into building
- structure directly fronts on street
- no access to back of structure

BUILDING TYPE - 643**EVALUATION****Evaluated Uses:**

- maintenance
- storage

Summary:

A large one-story building with no interior columns, this structure would potentially allow considerable flexibility for adaptive reuse. Built as an air hanger it is a unique historic structure at the Presidio and could offer space for the storage and display of historic aircraft in a historic environment if this use was desired. For reuse as either a maintenance or storage facility its concrete floor and 14' high ceiling clearance would permit numerous activities (fork lifts, lift racks, etc.) that would be restricted in other less spacious structures.

DESIGN FACTORS**Structural Configuration**

The steel truss roof resting on concrete and steel posts creates a very simple and flexible structural system which would allow two large clear-span areas over 60' x 100' in size.

Fire Rating

The building is not sprinkled but is of non-combustible construction. Sprinklers could be easily installed in the structural system.

Spatial Configuration

The historic configuration of the interior spaces were probably two large hangar rooms with a block of offices between them. The hangars were large rectangular spaces, unsubdivided with a 14' high clearance to the bottom of the trusses. Today these areas are subdivided with partition walls, but the arrangement of walls in this area could be changed as desired to meet the space requirements. The partition walls in the central office area could probably also be altered if desired.

Functional Requirements

For storage use the building floor is slab on grade which could probably support required loads; the 14' high ceiling clearance would allow use of fork lifts, etc., and the unobstructed plan would allow freedom of circulation. There is currently no loading-dock type facility at the building, this would have to be added.

Emergency Egress

Egress from this one story building could easily meet code requirements, additional exit doors could be installed along the rear facade if required.

Handicap Accessibility

The majority of the occupied spaces, including a large toilet room, are located at-grade with no barriers. The small central office area is accessible via a short interior ramp.

Flexibility of Historic Design

It is unclear if the existing exterior stucco is the "historic" appearance of the building, or whether the earlier corrugated metal appearance is the "historic" appearance of the building. Like the utilitarian warehouse buildings (#1100 series) either of these designs would present substantial flexibility for modification, but at the same time would require that changes be done in a manner that was consistent with utilitarian character of the building.

BUILDING TYPE - 643**Restoration Potential**

If the existing exterior appearance is the "historic" design, then restoration potential would be high for either of the evaluated uses.

Site Considerations

Space for a loading dock type facility is potentially available at the east end of the structure, but it would have to be constructed to the side and behind the building with trucks backing off of Mason Street.

Condition of Historic Fabric

The existing building appear to be in relatively good condition and is now built of permanent materials.

MISSION FACTORS**Square Footage**

With a maximum of 22,400 sq.ft. the building would supply about 10% of the required storage area (170,000 sq.ft.) and about 40% of the required maintenance area (Motor Pool, 53,000 sq.ft.) in the Bayfront area.

Utilities

The building is currently served by all the utilities that would probably be required.

Location

Evaluated use coincide with uses designated for this area in the master plan.

COST FACTOR**Likely Project Costs (\$ x000)**

A "medium" level of rehab effort is anticipated, new construction on this site would be standard finish for the Presidio.

Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
storage	1,164	857	2,022	2,240	736	2,976	52%	68%
maintenance	1,388	857	2,246	2,240	736	2,976	62%	75%

BUILDING TYPE - 643**EVALUATION MATRIX**

FACTORS	MULTI	USE Maintenance Eval/Score		USE Storage Eval/Score	
DESIGN FACTORS					
Structural Configuration	3	5	15	5	15
Fire Rating	2	3	6	3	6
Spatial Configuration	2	5	10	5	10
Functional Requirements	3	5	15	3	9
Emergency Egress	2	3	6	3	6
Handicap Accessibility	1	5	5	5	5
Flexibility of Design	2	5	10	5	10
Restoration Potential	1	5	5	5	5
Site Considerations	2	5	10	3	6
Condition of Fabric	3	3	9	3	9
MISSION FACTORS					
Square Footage	3	3	9	1	3
Utilities	1	5	5	5	5
Location	2	5	10	5	10
COST FACTOR					
Construction and O&M	3	3	9	3	9
TOTAL			124		108

SKETCH KEY

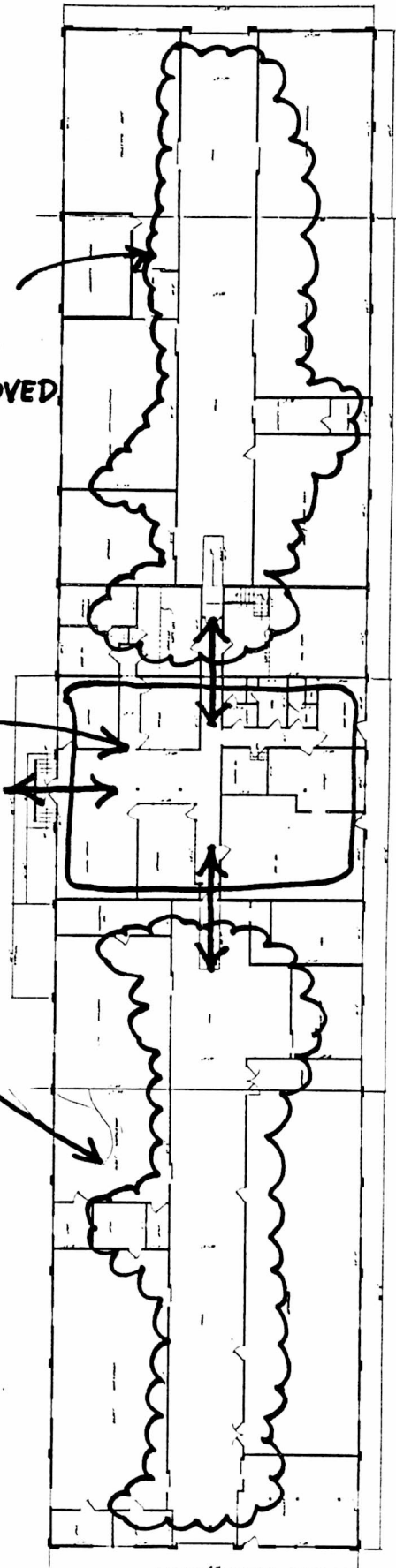
Existing historic bearing wall	
Potential location of new partition	
Location of primary entrance/exit	
Potential location of new stair	
Potential location of new restroom	
Potential location of new skylight	

BUILDING TYPE - 643

SKETCH GRAPHICS

ALL PARTITIONS
IN THESE AREAS
COULD BE REMOVED
IF DESIRED

PARTITIONS HERE
MAY BE HISTORIC

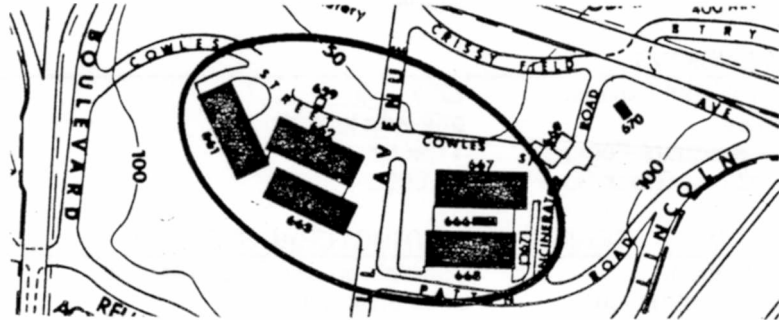


BUILDING TYPE - 661 - 668

LOCATION

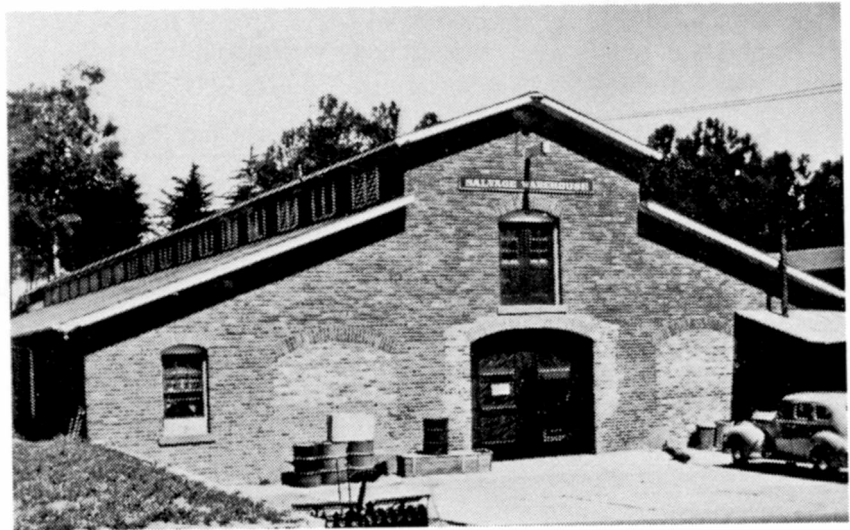
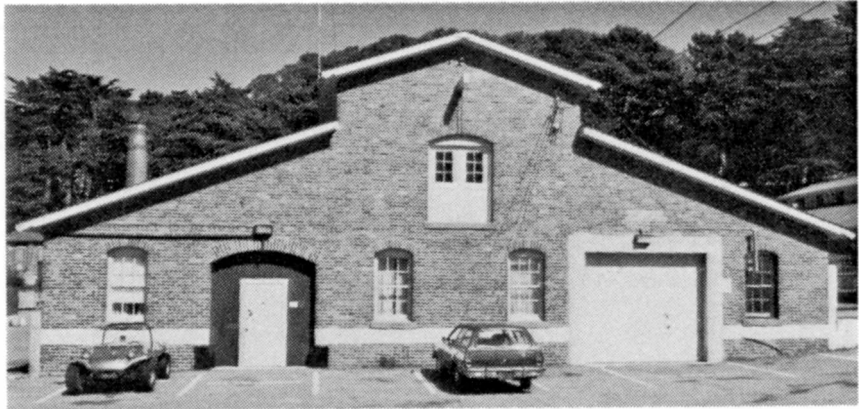
Master Plan Area: east edge of Ft. Scott

Location Map:



PHOTOGRAPHS

Current and/or Historic Views:



BUILDING TYPE - 661 - 668

HISTORIC DATA

Date of Construction:	1914
Additions:	kennels (1963) and other miscellaneous additions, date unknown
Original/Early Use:	Stable (all bldgs.)

DIMENSIONS

Overall Dimensions:	67' x 185'
Stories:	one with loft/attic
Gross Square Footage:	11,900±
Combined Gross Sq. Ft:	60,000±

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	concrete w/ continuous footing
Wall Construction:	solid brick masonry
Floor Construction:	1st - concrete slab, attic - 2" x 10" joists
Roof Construction:	2' x 6" rafters w/ composition roofing over slate
Fire Rating:	1-hour, no sprinklers, combustible

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	water, sewer, electric, telephone, gas
Mechanical Systems:	gas-fired heat plant,

SIGNIFICANT CHARACTERISTICS**Exterior:**

- rectangular plan
- red brick walls w/ segmental arched door and window openings
- large gable roof with monitor vent
- 6/6 light windows
- sliding wood "barn" doors
- regularly spaced window openings, most w/ high sills
- stone sills

PRIMARY SPATIAL CHARACTERISTICS

-
- large singular space
 - no interior bearing walls
 - grid of 6" and 8" wood support posts throughout
 - exposed interior structure

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

-
- "rustic" site with informal building arrangement
 - buildings in this type isolated from other structures in Presidio
 - large parking areas available
 - no nearby public transit
 - views of Golden Gate, elevated portion of Doyle Drive, and SF Bay

BUILDING TYPE - 661 - 668**EVALUATION****Evaluated Uses:**

- community (youth center)
- storage
- maintenance

Summary:

These large handsome buildings have a relatively flexible historic interior design and are built of permanent, sturdy materials which makes their reuse generally attractive for a number of functions. As a group, they are somewhat limited by their isolation from other areas of the Presidio and their combined great size (60,000± sq.ft), which makes reuse as a unit problematical and potentially expensive. Their interesting design would be best used for some type of public-access function, which would allow a greater number of people to experience the structures, even if it means that only one or two of the five structures could be used. The remaining buildings could be reused for a less intensive type of use such as storage or maintenance.

DESIGN FACTORS**Structural Configuration**

The original interior arrangement was generally open with no interior bearing walls but a regular grid of wood columns that are partially bearing. This design presents substantial flexibility but also has limitations due to the grid of columns.

Fire Rating

The construction complies with code requirements for storage. The buildings exceed the size limit for this type of construction for assembly (community center) and hazardous activities (vehicle maintenance facility), but the limit may be increased if each building is far enough from its neighbors. Some openings in exterior walls may have to be protected, depending on the distance between buildings.

Spatial Configuration

The historic open-plan spatial configuration could serve well all evaluated uses. The community center and vehicle maintenance would probably require partition walls to define certain programmatic areas.

Functional Requirements

Some requirements for vehicle maintenance (i.e., floor lifts, lube pits and paint booths) would have to be added. Regularly spaced window openings, though small, do allow daylight into the buildings. Large "barn doors" from original design could probably be sensitively modified to accommodate new pedestrian or vehicular type doors.

Emergency Egress

The existing doors would have to be changed to comply with code requirements for a community center use and a second stair would have to be added to the lofts if they were used for any purpose but storage. Small operable panels could be added to the large sliding doors.

Handicap Accessibility

All buildings have access at grade; toilet rooms accessible to the handicapped would need to be provided.

BUILDING TYPE - 661 - 668

Flexibility of Historic Design

The open-plan type of historic design could accommodate substantial changes without serious damage to its character. However the simple utilitarian character of the original interior partitions (e.g., horse stalls) and exposed roof framing might be difficult to preserve for a community center. Exterior walls and roof design could not be substantially changed.

Restoration Potential

Numerous changes over the years have damaged historic features or in some cases changed the character of the interior spaces. Most exterior portions of the buildings could be easily preserved/restored. Use as storage would allow preservation/restoration of many historic features and characteristics. Although other uses would require more changes in the buildings than storage, they would also allow a greater number people to use and experience the buildings. The community center might make desirable the restoration of some features for aesthetic reasons that would otherwise not be restored.

Site Considerations

The site offers desirable features for all uses; for use as a community center its cohesiveness and attractiveness offset the disadvantage of being isolated from the rest of the post and the lack of parking area.

Condition of Historic Fabric

The buildings are in relatively good condition with generally sound masonry and wood.

MISSION FACTORS

Square Footage

The master plan identifies several uses for maintenance or storage, including a 10,000 sq.ft. vehicle shop (Ft. Scott), a 43,000 sq.ft. medical warehouse (Bayfront), a 34,000 square foot maintenance facility for the Golden Gate National Recreation Area (Bayfront), a 53,000 sq.ft. motor pool (Bayfront), and 349,000 sq.ft. of maintenance and storage uses in the Tabulation of Existing and Required Facilities, which were not scheduled for accommodation in the near future. This last list also included a 13,000 sq.ft. recreation center, an 11,000 sq.ft. recreation vehicle check-out facility and a group of "public" uses (such as chapel, guest house and youth center) totaling 175,000 sq.ft..

Utilities

Utilities required for the evaluated uses are provided to the buildings.

Location

These building are isolated from the adjacent master planning areas of the Main Post and Fort Scott. No specific master plan recommendations are identified for this area.

COST FACTOR

Likely Project Costs (\$ x000)

A medium level of rehab effort is anticipated. Because this group of structures stands alone and creates its own distinctive "historic" setting it is anticipated that new construction on this site would be premium finish for the Presidio.

BUILDING TYPE - 661 - 668

Evaluated Use	Rehabilitation			New Construction			Rehab %New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
storage	2,400	2,298	4,698	8,700	1,974	10,674	28%	44%
community service	9,300	2,298	11,598	12,000	1,974	13,974	78%	83%
maintenance	3,900	2,298	6,198	8,700	1,974	10,674	45%	58%

EVALUATION MATRIX

FACTORS	MULTI	USE Community Eval/Score		USE Storage Eval/Score		USE Maintenance Eval/Score	
DESIGN FACTORS							
Structural Configuration	3	5	15	5	15	5	15
Fire Rating	2	3	6	5	10	3	6
Spatial Configuration	2	5	10	5	10	5	10
Functional Requirements	3	5	15	5	15	3	9
Emergency Egress	2	3	6	5	10	5	10
Handicap Accessibility	1	5	5	5	5	3	3
Flexibility of Design	2	5	10	3	6	5	10
Restoration Potential	1	5	5	5	5	3	3
Site Considerations	2	5	10	5	10	3	6
Condition of Fabric	3	5	15	5	15	5	15
MISSION FACTORS							
Square Footage	3	3	9	3	9	3	9
Utilities	1	5	5	5	5	5	5
Location	2	3	6	3	6	3	6
COST FACTOR							
Construction and O&M	3	0	0	5	15	3	9
TOTAL			117		136		116

SKETCH KEY

Existing historic bearing wall



Potential location of new partition



Location of primary entrance/exit



Potential location of new stair



Potential location of new restroom

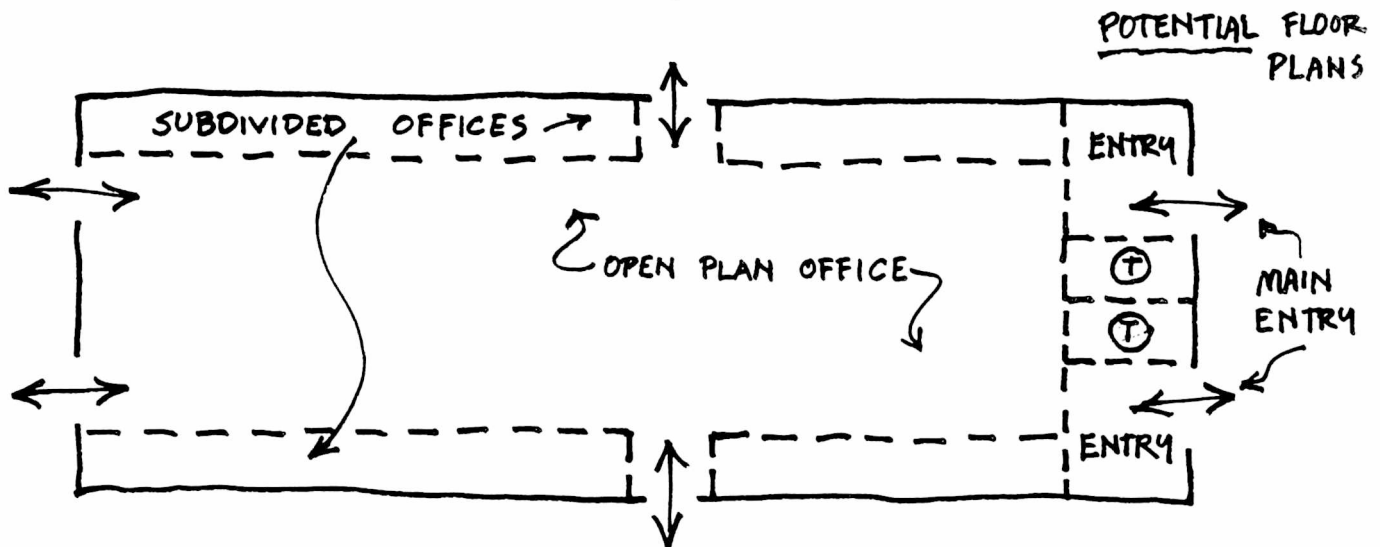
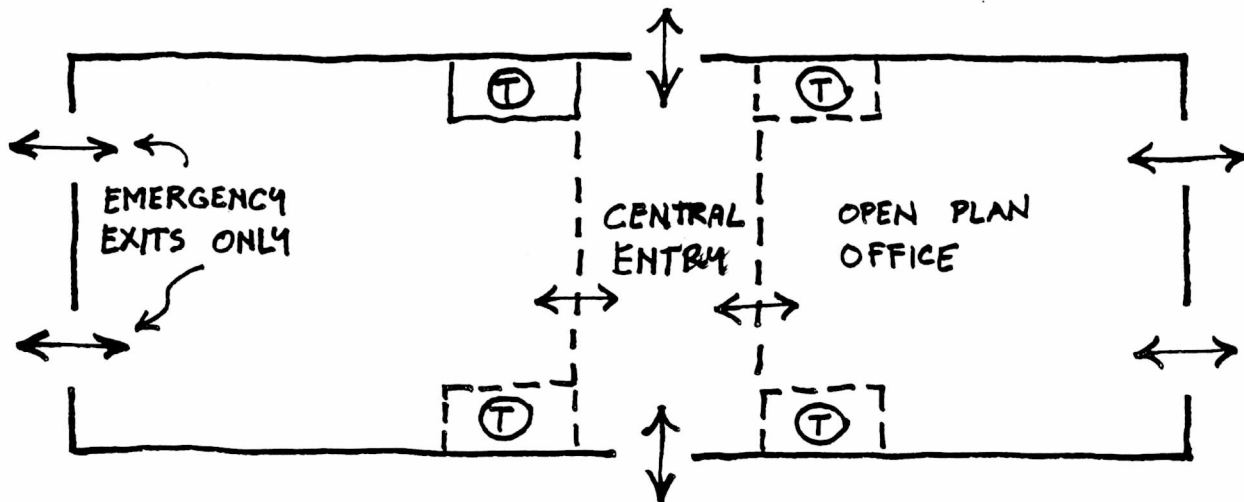
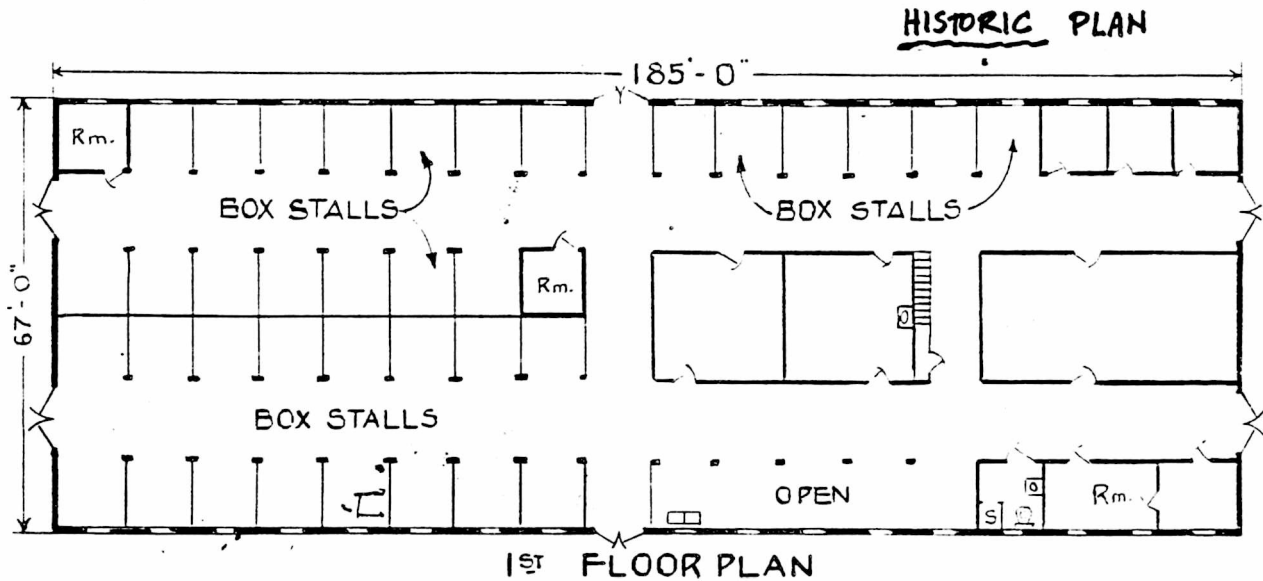


Potential location of new skylight



BUILDING TYPE - 661 - 668

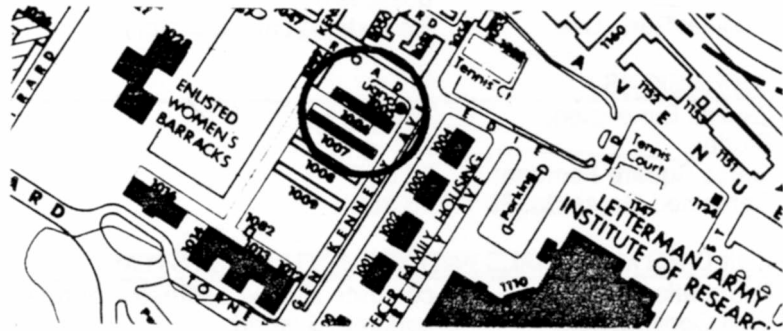
SKETCH GRAPHICS



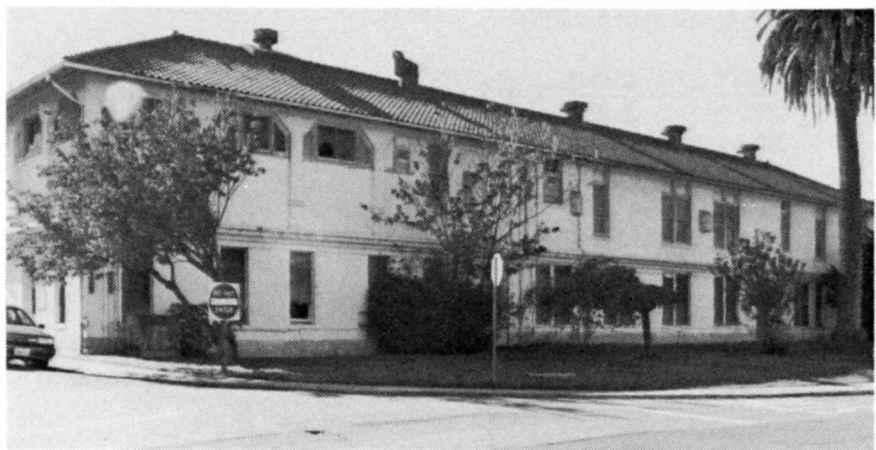
BUILDING TYPE - 1006**LOCATION**

Master Plan Area:
Location Map:

Letterman

**PHOTOGRAPHS**

Current and/or Historic Views:



BUILDING TYPE - 1006

HISTORIC DATA

Date of Construction:	1915
Additions:	South side, at first floor continuing line of original gallery - date unknown
Original/Early Use:	Bacteriological Laboratory

DIMENSIONS

Overall Dimensions:	155' x 44'
Stories:	two
Gross Square Footage:	13,352
Combined Gross Sq. Ft:	13,352

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	concrete slab w/ perimeter foundation
Wall Construction:	concrete & wood
Roof Construction:	wood truss with tile roofing
Fire Rating:	one hour - no sprinklers

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	water, sewer, electricity, telephone, gas
Mechanical Systems:	gas-fired space heaters

SIGNIFICANT CHARACTERISTICS**Exterior:**

- Mediterranean and Spanish colonial revival style
- tiled hip roof
- second floor walls articulated as angled arches
- paired wood panel doors
- windows 1/1 light
- windows at east end of second floor occupy top of articulated arches
- projecting molding separates first and second floors

PRIMARY SPATIAL CHARACTERISTICS

- basically rectangular plan
- doubled-loaded corridor on each floor
- many rooms on each floor - typically 150-200 sq. ft. each
- two stairways, no lobby

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- connects to other buildings at Letterman via glazed wood gallery
- lawn on north side, road on east, courtyard on south, gallery on west
- near parking, public transportation

BUILDING TYPE - 1006**EVALUATION****Evaluated Uses:**

- office
- storage

Summary:

A potentially attractive building that fits in well with the surrounding historic Letterman buildings, the deteriorated condition of this structure will make any type of reuse expensive. Its long narrow shape would seem to be well suited for several types of office use, but the master plan does not identify office use as a major requirement in this location.

DESIGN FACTORS**Structural Configuration**

Most interior partitions are nonstructural and could probably be removed as necessary to create office space; the first floor has a double row of support columns down the central axis, which could not be removed. The capacity of the second floor to support storage loads would have to be evaluated.

Fire Rating

The rating of the existing south and west walls and openings may not meet the requirements of the code.

Spatial Configuration

The existing interior spaces are probably too small and irregular for effective office space planning, but they could be simplified and made efficient by the removal of selected walls. The spatial character of the interior would have to be substantially modified to create usable warehouse space.

Functional Requirements

For storage use, the building should have a loading dock and an elevator, both of which are lacking. Some additional windows might be required for office use, but these could be accommodated into the historic building design.

Emergency Egress

Although there are enough exits to meet code requirements, the construction of the gallery may not meet the code requirements, making the exit from the second floor inadequate.

Handicap Accessibility

The building has adequate level access and size of toilet rooms required by code.

Flexibility of Historic Design

The office use could easily be accommodated within the historic design, while the historic interior would not accept an open-plan type storage use.

Restoration Potential

Both office and storage uses would allow retention or restoration of most of the significant exterior features, but the storage use would probably require major changes to many of the interior features.

BUILDING TYPE - 1006**Site Considerations**

The storage use would require a loading dock and truck maneuvering area, which could not be accommodated on the site without severe impact on the surrounding historic landscape features.

Condition of Historic Fabric

The existing building appears to be in fair to poor condition.

MISSION FACTORS**Square Footage**

The building can provide less than 10% of the required space (119,000) for the medical logistics warehouse in the master plan. It would have to combined with many of the surrounding structures to satisfy this space requirement. 4,000 sq.ft. of office space is specifically identified for this location.

Utilities

All utilities required for both evaluated uses are already provided to the building.

Location

Both evaluated uses coincide with uses designated for this area in the master plan.

COST FACTOR**Likely Project Costs (\$ x000)**

Because of the deteriorated condition of the building a "great" level of rehab effort is anticipated. New construction on this site would be standard finish for the Presidio.

Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
office	1,768	513	2,282	1,876	440	2,316	94%	98%
storage	1,500	513	2,014	1,340	440	1,780	112%	113%

BUILDING TYPE - 1006**EVALUATION MATRIX**

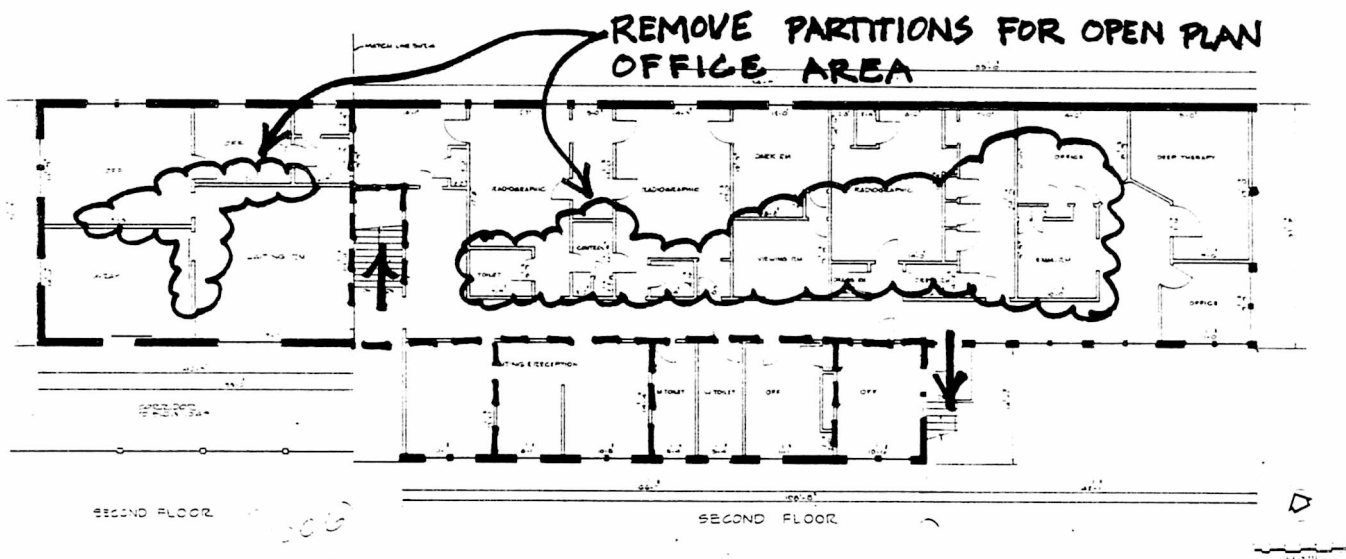
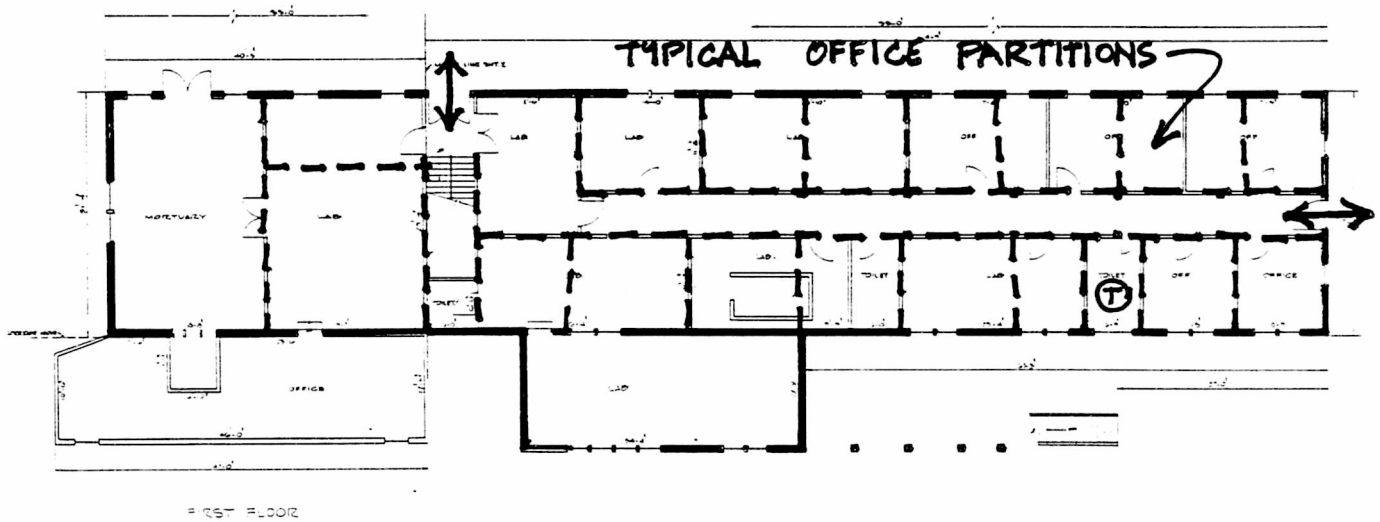
FACTORS	MULTI	USE Office Eval/Score		USE Storage Eval/Score	
DESIGN FACTORS					
Structural Configuration	3	5	15	1	3
Fire Rating	2	3	6	3	6
Spatial Configuration	2	3	6	1	2
Functional Requirements	3	5	15	1	3
Emergency Egress	2	3	6	3	6
Handicap Accessibility	1	5	5	5	5
Flexibility of Design	2	5	10	1	2
Restoration Potential	1	5	5	1	1
Site Considerations	2	5	10	1	2
Condition of Fabric	3	1	3	1	3
MISSION FACTORS					
Square Footage	3	3	9	5	15
Utilities	1	5	5	5	5
Location	2	1	2	5	10
COST FACTOR					
Construction and O&M	3	1	3	1	3
TOTAL			100		66

SKETCH KEY

Existing historic bearing wall	
Potential location of new partition	
Location of primary entrance/exit	
Potential location of new stair	
Potential location of new restroom	
Potential location of new skylight	

BUILDING TYPE - 1006

SKETCH GRAPHICS

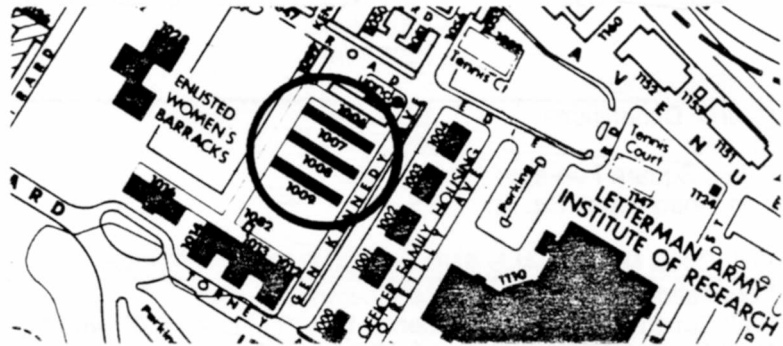


BUILDING TYPE - 1007 - 1009

LOCATION

Master Plan Area:
Location Map:

Letterman



PHOTOGRAPHS

Current and/or Historic Views:



BUILDING TYPE - 1007 - 1009

HISTORIC DATA

Date of Construction:	1901
Additions:	No significant additions
Original/Early Use:	1007 Administration, Enlisted Women w/o mess 1008 Ward 1009 Ward

DIMENSIONS

Overall Dimensions:	35' X 181'
Stories:	two
Gross Square Footage:	12,100±
Combined Gross Sq. Ft:	25,400±

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	continuous concrete
Wall Construction:	concrete with stucco (1007 wood frame)
Roof Construction:	wood joists with tile
Fire Rating:	one hour, no sprinklers

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	water, sewer, electricity, telephone, gas
Mechanical Systems:	heated by Letterman steam plant

SIGNIFICANT CHARACTERISTICS**Exterior:**

- shallow, asymmetrical I-shaped plan
- hip roofs with decoratively-sawn exposed rafter ends
- simplified version of Mediterranean phase of Spanish colonial revival style
- first floor partly below grade
- windows 1/1 light
- exit on west end of first floor located under gallery

PRIMARY SPATIAL CHARACTERISTICS

- three zones on each floor: offices on double-loaded corridor (west), open-plan ward (center), waiting room + bath suite (east)
- no interior stairs
- access at each end of building

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- glazed wood gallery connects with other buildings at Letterman quadrangle
- courtyards on north and south, road on east
- near parking and public transportation

BUILDING TYPE - 1007 - 1009**EVALUATION****Evaluated uses:**

- office (medical administration, preventive medicine)
- storage (medical warehouse)

Summary:

Potentially attractive buildings that fit in well with the surrounding historic Letterman buildings. The long narrow shapes with lots of window openings and connecting gallery would indicate that they could best be reused as office space. However, the master plan does not identify office use as a major requirement in this location. Though storage is required in this area, the buildings are not well suited to this use. #1008 and 1009 are concrete structures while #1007 is wood frame.

DESIGN FACTORS**Structural Configuration:**

Typically the central and eastern parts of the buildings appear to have no interior bearing walls, and the western portions are divided into spaces that would serve well as offices. The layout of bearing walls in the western portion would probably not be suited to warehouse use, and the load capacity of the second floor would have to be investigated.

Fire Rating

The western wall of the building where it meets the pedestrian gallery, and the openings in that wall, may not meet code requirements. The north and south walls may in some cases need changes to comply with requirements for fire rating and protection of openings.

Spatial Configuration

The existing spaces would accommodate a mix of both private and open-plan type offices; the lack of an interior stairway could make the building impractical for use as a single office space. The western (subdivided) portion of the building would be ill-suited to storage use.

Functional Requirements

The building lacks a loading dock and an elevator to facilitate storage use. Some additional windows may be desirable for office use, these probably could be integrated into the historic design.

Emergency Egress

The west exit at the ground floor (under the corridor) does not meet code requirements and the arrangement of the interior corridor that opens into the ward room does not provide the exit required by code.

Handicap Accessibility

Level access is available at both floors; toilet rooms are large enough to meet code requirements.

Flexibility of Historic Design

Office use could easily be accommodated within the historic design, while the historic interior would not easily accept an open-plan type warehouse use.

BUILDING TYPE - 1007 - 1009

Restoration Potential

Many of the significant features of the buildings are existing, these features could be easily retained or restored with office use; storage use would probably require the removal of most interior partitions but would not have a major impact on the exterior appearance of the buildings.

Site Considerations

The sites are potentially well suited for offices with landscaping; they lack truck loading and maneuvering room needed for storage use.

Condition of Historic Fabric

The buildings are in generally good condition, although historic features have been removed or altered and other features have been added without coordination with the historic design.

MISSION FACTORS

Square Footage

The buildings could provide about 20% of the required space (119,000) for the medical logistics warehouse in the master plan. They would have to combined with many of the surrounding structures to satisfy this space requirement. The structures have more than 600% of the 4,000 sq.ft. of office space specifically identified for this location.

Utilities

All the utilities required for the evaluated uses are provided to the buildings.

Location

Evaluated uses coincide with uses designated for this area in the master plan.

COST FACTOR

Likely Project Costs (\$ x000)

A medium level of rehab effort is anticipated, new construction on this site would be standard finish for the Presidio.

Evaluated Use	Rehabilitation			New Construction			Rehab %New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
office	1,836	976	2,812	3,570	838	4,408	51%	64%
storage	1,326	976	2,302	2,550	838	3,388	52%	68%

BUILDING TYPE - 1007 - 1009**EVALUATION MATRIX**

FACTORS	MULTI	USE Office Eval/Score		USE Storage Eval/Score	
DESIGN FACTORS					
Structural Configuration	3	5	15	1	3
Fire Rating	2	3	6	3	6
Spatial Configuration	2	5	10	1	2
Functional Requirements	3	5	15	1	3
Emergency Egress	2	3	6	5	10
Handicap Accessibility	1	5	5	5	5
Flexibility of Design	2	5	10	1	2
Restoration Potential	1	3	3	1	1
Site Considerations	2	5	10	3	6
Condition of Fabric	3	3	9	3	9
MISSION FACTORS					
Square Footage	3	1	3	5	15
Utilities	1	5	5	5	5
Location	2	1	2	5	10
COST FACTOR					
Construction and O&M	3	3	9	3	9
TOTAL			108		86

SKETCH KEY

Existing historic bearing wall



Potential location of new partition



Location of primary entrance/exit



Potential location of new stair



Potential location of new restroom

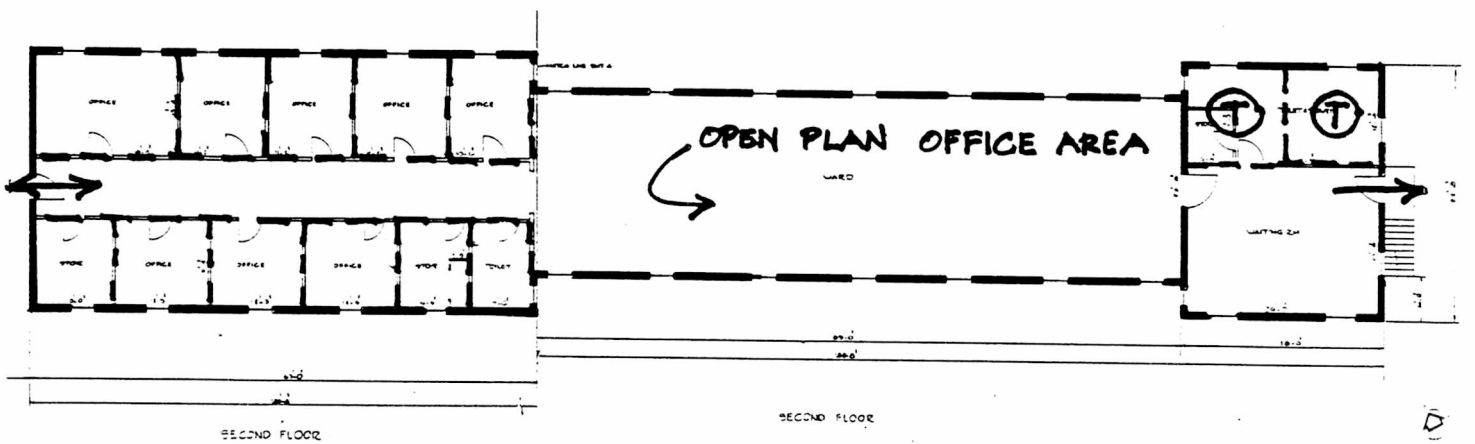
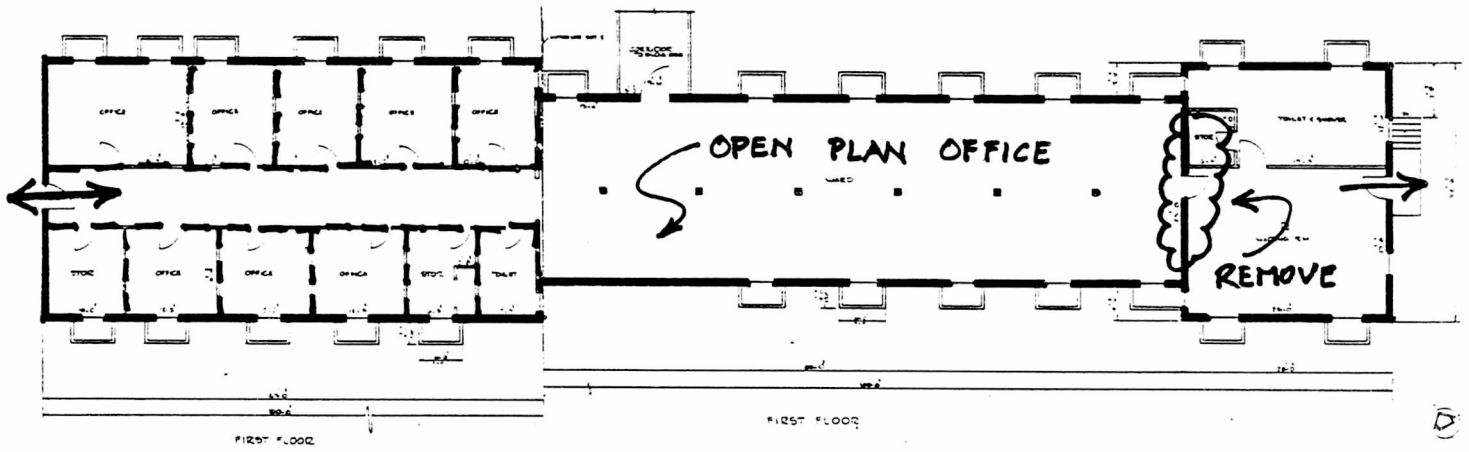


Potential location of new skylight

**SKETCH GRAPHICS**

BUILDING TYPE - 1007 - 1009

SKETCH GRAPHICS



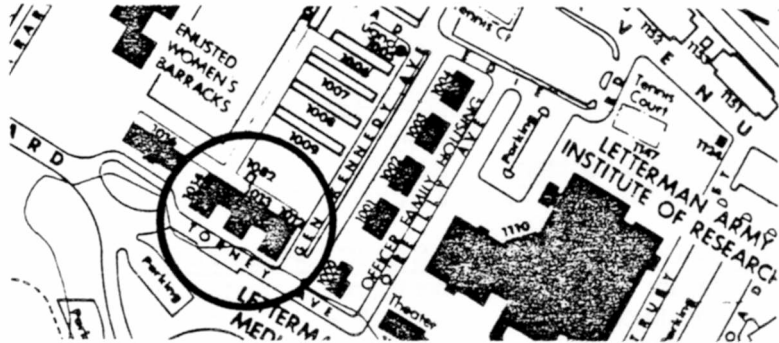
BUILDING TYPE - 1012 - 1014

LOCATION

Master Plan Area:

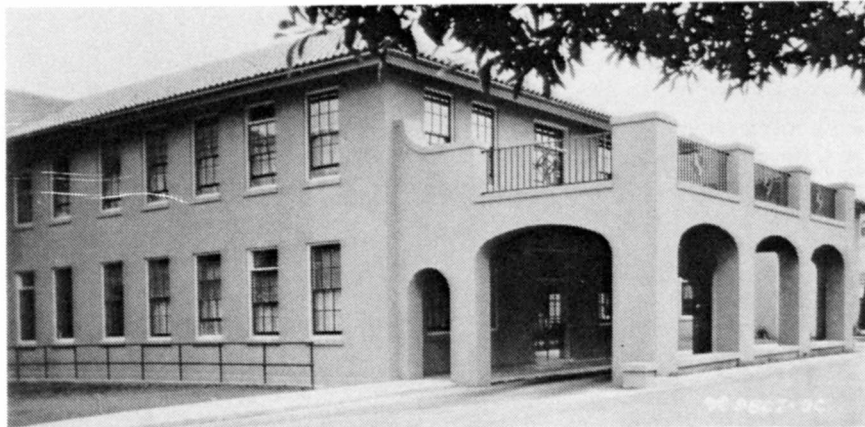
Letterman

Location Map:



PHOTOGRAPHS

Current and/or Historic Views:



BUILDING TYPE - 1012 - 1014

HISTORIC DATA

Date of Construction:	1924/1933
Additions:	none
Original/Early Use:	1012 Ward 1013 Ward and Receiving Office 1014 Outpatient Clinic

DIMENSIONS

Overall Dimensions:	202' X 106'
Stories:	three
Gross Square Footage:	22,300±
Combined Gross Sq. Ft:	51,100±

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	continuous concrete perimeter
Wall Construction:	concrete and stucco
Roof Construction:	wood joists and tile roof
Fire Rating:	one-hour, no sprinklers

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	water, sewer, electricity, telephone, gas
Mechanical Systems:	heated by Letterman steam plant

SIGNIFICANT CHARACTERISTICS**Exterior:**

- Large E-shaped plan ensemble
- Arched porte-cocheres on front with second floor decks
- Hip roof with large eave overhang, decorative rafter ends
- 6/6 light windows
- Paired doors with glazed transoms

PRIMARY SPATIAL CHARACTERISTICS

- Mix of smaller rooms along double-loaded corridors with larger undivided office or ward rooms
- long circulation corridor at rear of building
- two rows of columns in each wing
- several internal stairways

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- connection to other buildings in Letterman quadrangle via glazed wood gallery at rear
- near parking and public transportation
- landscaped lawns, roads and parking lots on all sides of building

BUILDING TYPE - 1012 - 1014**EVALUATION**

Evaluated Uses:

- office
- storage (Medical Logistics Warehouse)
- educational (Army Continuing Education System Facility)

Summary:

A very attractive multi-building structure, built of durable materials, and sited in a prominent location, this structure is a prime candidate for reuse as offices. Unfortunately the master plan does not identify this or any other logical use for the Letterman area that would be suitable for this structure. The plan and character of the building would be best suited to use as an office or other type of regularly occupied space, or for public usage such as a Continuing Education Facility.

DESIGN FACTORS

Structural Configuration:

The buildings have few interior bearing walls, which would potentially allow the changes needed to produce very usable office space. Interior support columns would restrict the total flexibility of the space. All floors would have to be evaluated to determine whether they have the load capacity required for storage use.

Fire Rating

The wall and openings adjoining the gallery/corridor may not meet code requirements.

Spatial Configuration

The existing spaces are generally appropriate for office use; many spaces would not be easily adaptable to open-plan warehouse use.

Functional Requirements

The E-plan design with a great number of exterior windows allows the subdivision of the interior space for offices that would be light and airy. Although the building currently has a ramp to the basement, sufficient room to build loading docks, and a good-sized elevator, its interior would probably not be suitable for warehouse usage.

Emergency Egress

The present arrangement of rooms, corridors and exits do not meet several code requirements for office use; some of the stairway may have to be enclosed.

Handicap Accessibility

The building meets level access and toilet room size requirements on all floors.

Flexibility of Historic Design

The historic design would promote adaptation for either open-plan or subdivided office use; it would not easily accommodate warehouse use. The exterior could not be substantially altered.

Restoration Potential

For office use most of the exterior features of the historic design could be preserved or restored; interior modifications would be required, but these would have less impact on the significant features. Storage use could also retain much of the historic exterior appearance but would have a major impact on interior features.

BUILDING TYPE - 1012 - 1014

Site Considerations

The site appears well suited to office use. The highly visible location with landscaped lawns would provide a very attractive office environment. Locating a warehouse close to the center of the Letterman area and the Main Post is probably not desirable.

Condition of Historic Fabric

The building fabric is in generally good condition and of durable character. Some historic features have been lost, and alterations not sympathetic to the historic design have been undertaken; these would be easily correctable

MISSION FACTORS

Square Footage

The master plan calls for only a small amount of office use in this area; these buildings are more than 10 times the size required. The Plan identifies 119,000 sq.ft of medical logistics warehouse for this area.

Utilities

All utilities needed for both evaluated uses are provided to the building.

Location

Evaluated uses coincide with uses designated for this area in the master plan.

COST FACTOR

Likely Project Costs (\$ x000)

A "little" rehab effort would probably be required for reuse as office, a "medium" level of rehab effort is anticipated for storage use. New construction on this site would be standard finish for the Presidio.

Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
office	1,894	1,960	3,855	7,168	1,684	8,852	26%	44%
storage	2,662	1,960	4,623	5,120	1,684	6,804	52%	68%
educational	4,198	1,960	6,159	7,936	1,684	9,620	53%	64%

BUILDING TYPE - 1012 - 1014

EVALUATION MATRIX

FACTORS	MULTI	USE Office Eval/Score		USE Storage Eval/Score		USE Education Eval/Score	
DESIGN FACTORS							
Structural Configuration	3	5	15	1	3	5	15
Fire Rating	2	3	6	3	6	3	6
Spatial Configuration	2	5	10	1	2	5	10
Functional Requirements	3	5	15	3	9	5	15
Emergency Egress	2	3	6	5	10	3	6
Handicap Accessibility	1	5	5	5	5	3	3
Flexibility of Design	2	5	10	1	2	5	10
Restoration Potential	1	3	3	1	1	5	5
Site Considerations	2	5	10	5	10	5	10
Condition of Fabric	3	5	15	5	15	5	15
MISSION FACTORS							
Square Footage	3	5	15	3	9	5	15
Utilities	1	5	5	5	5	5	5
Location	2	5	10	5	10	1	2
COST FACTOR							
Construction and O&M	3	5	15	3	9	3	9
TOTAL			140		96		126

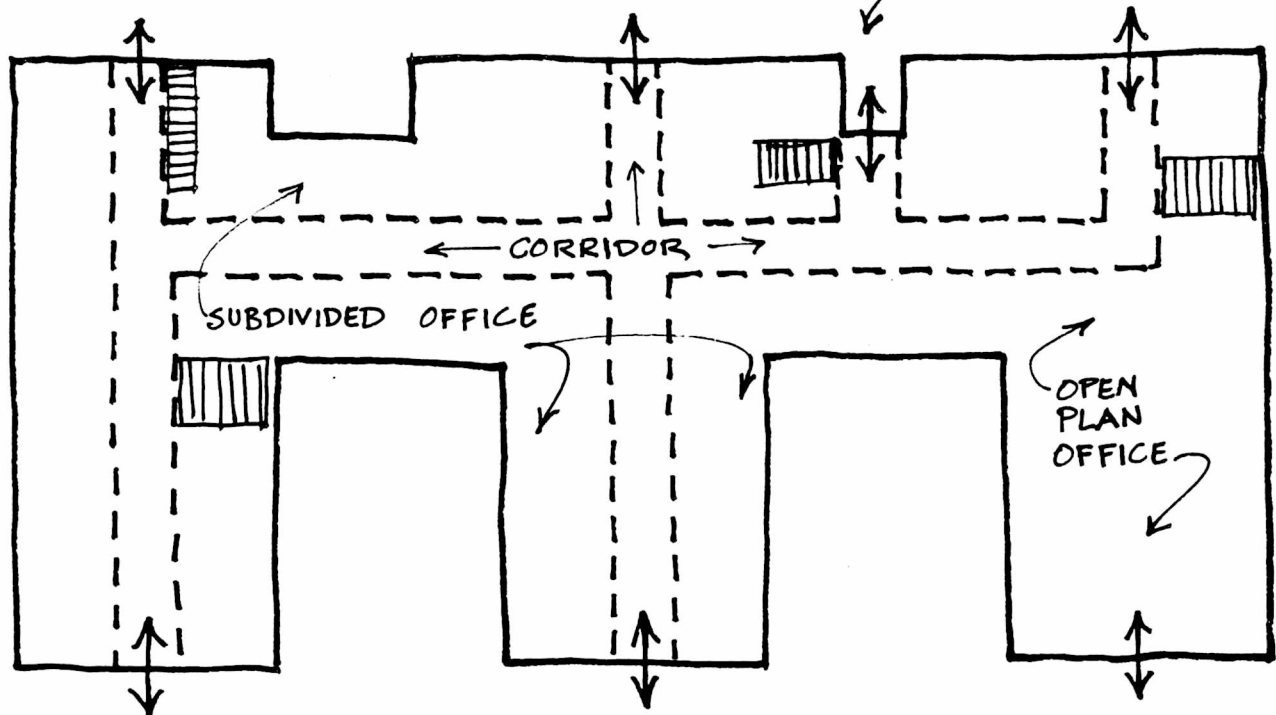
SKETCH KEY

Existing historic bearing wall	
Potential location of new partition	
Location of primary entrance/exit	
Potential location of new stair	
Potential location of new restroom	
Potential location of new skylight	

SKETCH GRAPHICS

[illegible]

POTENTIAL OFFICE PLAN

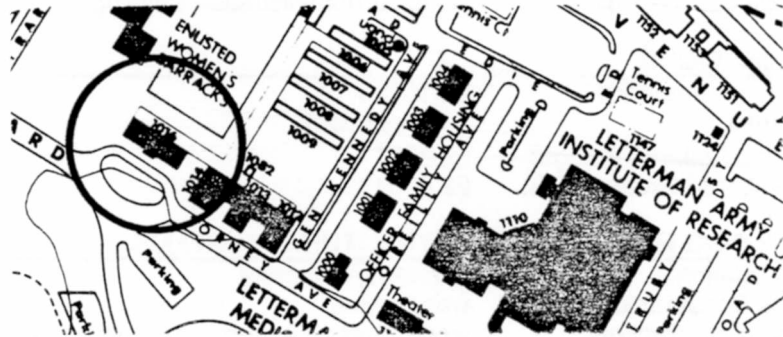


BUILDING TYPE - 1016**LOCATION**

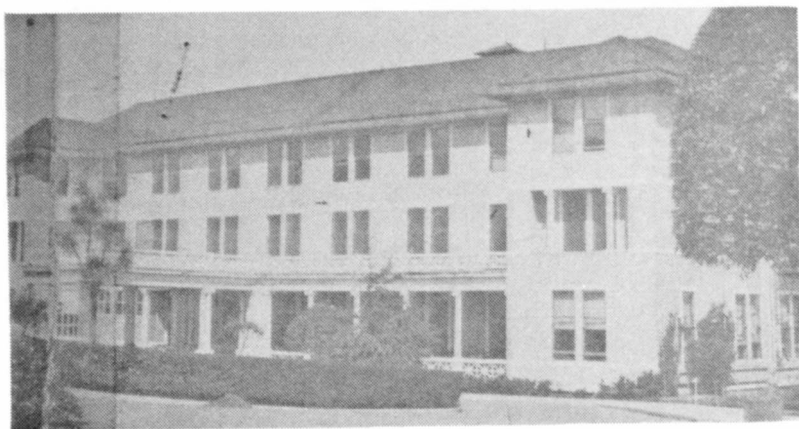
Master Plan Area:

Letterman

Location Map:

**PHOTOGRAPHS**

Current and/or Historic Views:



BUILDING TYPE - 1016**HISTORIC DATA**

Date of Construction:	1899
Additions:	Entry at south side, date unknown
Original/Early Use:	Hospital Administration Building

DIMENSIONS

Overall Dimensions:	58' X 133'
Stories:	3 + basement
Gross Square Footage:	22,000 $\pm$
Combined Gross Sq. Ft:	22,000 $\pm$

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	reinforced concrete
Wall Construction:	wood frame
Roof Construction:	wood truss with composition shingles
Fire Rating:	combustible construction with wet-pipe sprinkler system

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	water, sewer, electricity, gas
Mechanical Systems:	heat from Letterman steam plant

SIGNIFICANT CHARACTERISTICS**Exterior:**

- shallow U-shaped plan with primary elevation on south side
- hip roof with prominent vent on north side
- clapboard siding with wide trim band at window sills, heads, and cornice line
- "Renaissance" design features (Ionic columns at windows on second floor wings)
- 1/1 light windows
- fire escapes at east and west ends of building

Interior:

- pressed metal ceilings throughout

PRIMARY SPATIAL CHARACTERISTICS

- central main stair hall
- double-loaded corridor on each floor

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- connection to other buildings in Letterman quadrangle by glazed wood frame gallery
- lawns on all sides of building; roads and parking lots on two sides
- near parking and public transportation

BUILDING TYPE - 1016**EVALUATION****Evaluated Uses:**

- office
- storage
- educational (Army Continuing Education System Facility)

Summary:

An attractive historic structure that is sited in a prominent location, this structure is a prime candidate for reuse. Unfortunately the master plan does not identify any additional uses for the Letterman area that would be appear to be necessarily suitable for this structure. The plan and character of the building would be best suited to use as office or other type of regularly occupied public usage such as a continuing education facility.

DESIGN FACTORS**Structural Configuration:**

The frame structure is most appropriate for individual offices now found in the building. Removal of all interior partitions is probably not feasible or desirable, but selective removal could be possible. Typical floor loads with storage use would probably be greater than the structures capability.

Fire Rating

The sprinkler system helps the building meet most code requirements. The wall and openings adjoining the corridor may not have the fire rating required.

Spatial Configuration

The historic configuration is well suited to continued use as individual offices; some larger open-plan type offices or classrooms could also be integrated into the building. Depending on the desired room size, use as an educational facility might require enlargement of office rooms by removal of "every other" partition wall. The existing spatial configuration would not appear to be appropriate for most storage use.

Functional Requirements

Most basic functional requirements for office and class room type space appear to be met, the large number of exterior windows would permit most areas to have a several windows. The building lacks the loading facilities and elevator needed for storage use.

Emergency Egress

The existing corridors with exterior fire escapes appear to meet code requirements for office use.

Handicap Accessibility

The building meets code requirements for grade level access and toilet room size on the first floor. An elevator would be required for access to all interior levels.

Flexibility of Historic Design

The exterior historic design is relatively inflexible. The windows could not be easily closed-up or otherwise modified without significantly altering the character of the building. Some interior partitions could probably be relocated. The historic central stairway would have to remain, but additional interior stairways could be installed at either end of the building if desired.

BUILDING TYPE - 1016**Restoration Potential**

Most or all features of the historic design could be preserved/ restored with the office or educational use. The enclosed front gallery should be removed and the original open porch with decorative wood trim reconstructed. Restoration would be difficult to achieve with a storage type use.

Site Considerations

The site seems to have most of the features required for all uses. It is near parking and public transit which would be beneficial for office and educational use. Loading and maneuvering areas necessary for storage would have to be provided on the rear elevation of the structure.

Condition of Historic Fabric

The historic fabric is in generally good condition. The clapboard siding and exterior wood trim would typically require more intensive type of maintenance for long-term preservation than more permanent materials like brick or concrete.

MISSION FACTORS**Square Footage**

The master plan calls for only a small amount of additional office use in this area; this building would provide more than five times the space required. The plan identifies 119,000 sq.ft of medical logistics warehouse for this area. No specific location is identified for the 25,000 sq.ft. continuing education facility which is not scheduled for accommodation in the near future.

Utilities

All utilities necessary for proposed uses are provided to the building.

Location

Evaluated uses coincide with uses designated for this area in the master plan.

COST FACTOR**Likely Project Costs (\$ x000)**

"Little" rehab effort would be required for reuse as offices; "medium" rehab effort is anticipated for reuse as storage or educational facility. New construction on this site would be standard finish for the Presidio.

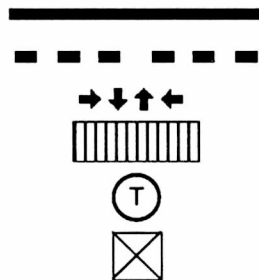
Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
office	836	842	1,678	3,080	723	3,803	27%	44%
storage	1,056	842	1,898	2,200	723	2,923	48%	65%
education	1,716	842	2,558	3,410	723	4,133	50%	62%

BUILDING TYPE - 1016**EVALUATION MATRIX**

FACTORS	MULTI	USE Office Eval/Score		USE Storage Eval/Score		USE Educational Eval/Score	
DESIGN FACTORS							
Structural Configuration	3	5	15	1	3	5	15
Fire Rating	2	3	6	3	6	3	6
Spatial Configuration	2	5	10	1	2	5	10
Functional Requirements	3	5	15	1	3	3	9
Emergency Egress	2	5	10	5	10	3	6
Handicap Accessibility	1	3	3	5	5	3	3
Flexibility of Design	2	5	10	1	2	5	10
Restoration Potential	1	5	5	1	1	5	5
Site Considerations	2	5	10	3	6	5	10
Condition of Fabric	3	3	9	3	9	3	9
MISSION FACTORS							
Square Footage	3	5	15	3	9	3	9
Utilities	1	5	5	5	5	5	5
Location	2	5	10	5	10	5	10
COST FACTOR							
Construction and O&M	3	5	15	5	15	3	9
TOTAL			138		86		116

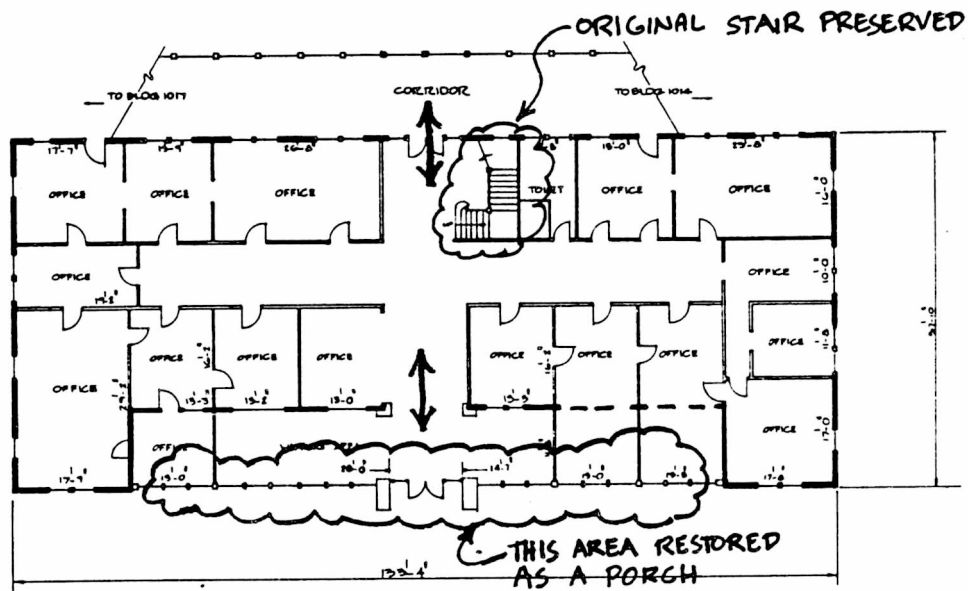
SKETCH KEY

Existing historic bearing wall
 Potential location of new partition
 Location of primary entrance/exit
 Potential location of new stair
 Potential location of new restroom
 Potential location of new skylight

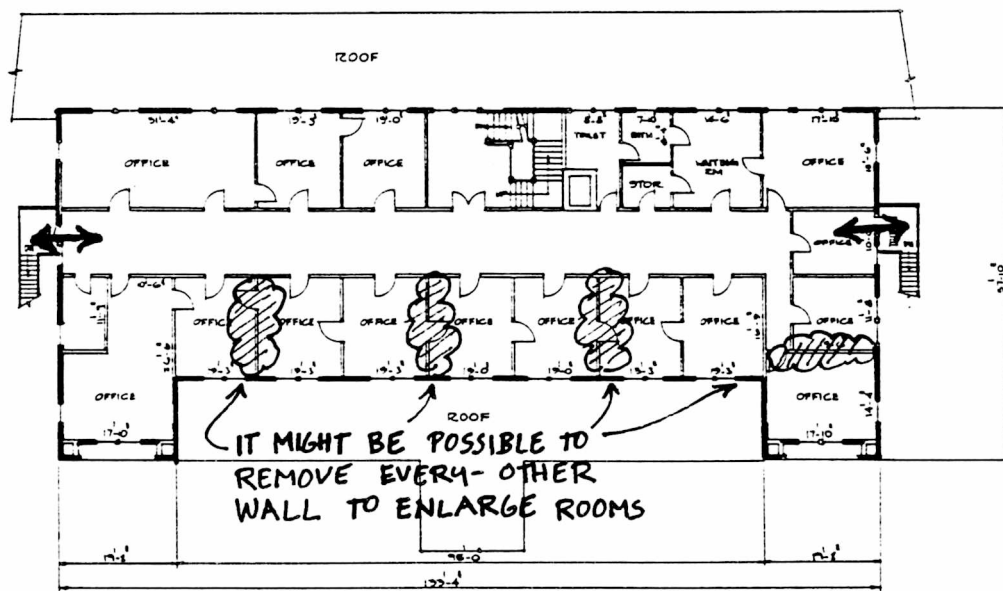
**SKETCH GRAPHICS**

BUILDING TYPE - 1016

SKETCH GRAPHICS



FIRST FLOOR



SECOND FLOOR

BUILDING TYPE - 1050 - 1051

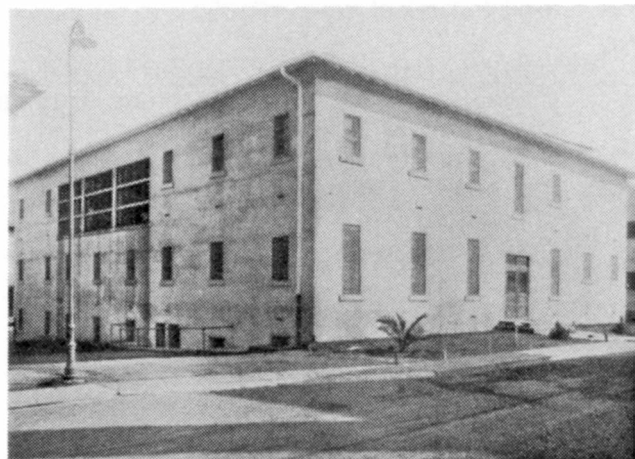
LOCATION

Master Plan Area: Letterman
Location Map:



PHOTOGRAPHS

Current and/or Historic Views:



BUILDING TYPE - 1050 - 1051

HISTORIC DATA

Date of Construction:	1909
Additions:	joined by hyphen to bldg.#1050
Original/Early Use:	1050 Psychiatric Ward 1051 Detention Ward

DIMENSIONS

Overall Dimensions:	145' X 96'
Stories:	two plus partial basement
Gross Square Footage:	20,500±
Combined Gross Sq. Ft:	42,200±

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	reinforced concrete with continuous footing
Wall Construction:	reinforced concrete
Roof Construction:	wood trusses with composition shingles
Fire Rating:	one-hour rating; no sprinklers

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	water, sewer, electricity, telephone
Mechanical Systems:	heated by Letterman steam plant

SIGNIFICANT CHARACTERISTICS**Exterior:**

- high hipped roof with exposed rafter ends
- smooth stucco/concrete walls
- regularly spaced window openings
- E-plan w/ two courtyards
- simple detailing with some recessed wall panels

PRIMARY SPATIAL CHARACTERISTICS

- two large bldgs. with a short connector
- mixture of large open-plan spaces and small individual offices
- mixture of double loaded corridors and open-plan type space
- two interior light wells in #1050

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- small yard area with trees and shrubs along south elevation
- roads surround all sides of building
- very constricted site
- near parking and public transportation

BUILDING TYPE - 1050 - 1051**EVALUATION**

Evaluated Uses:

- office
- storage

Summary:

Two potentially attractive buildings that fit in well with the surrounding historic Letterman buildings, the unusual plan design of these structures will require additional design effort to accommodate a new use. The two buildings would probably be best utilized if they were separated by removing the small connector between them. The basic configuration of the buildings would seem to be potentially well suited for several types of office use, but the master plan does not identify office use as a major requirement in this location.

DESIGN FACTORS

Structural Configuration

Building #1051 has reinforced concrete exterior bearing walls with interior columns and only a few interior bearing walls; #1050 has reinforced concrete exterior bearing walls and two interior light-wells also with concrete bearing walls. It appears that this configuration would allow substantial flexibility to move or remove interior partition walls as needed, but alteration of the interior bearing walls might be difficult. The load-bearing capacity of the floors above grade would have to be analyzed for the loads of the proposed storage use.

Fire Rating

The area of the building appears to be larger than that allowed by the code for the construction of the building. It may be necessary to provide a two-hour-rated separation in the building or to install sprinklers. The two structures could be permanently divided by removing the small connector between them.

Spatial Configuration

The historic design appears to have included a wide variety of spatial types and sizes. However, it would appear that most of the interior areas could be adapted into a system of regularly sized offices along double-loaded corridors. The interior areas would probably be difficult to organize into efficient storage use.

Functional Requirements

The building has two floors of rooms with exterior windows suitable for office use as well as some "interior" rooms that could be used for toilet rooms or other utility areas. An elevator and loading dock area would be required for efficient storage use. Basement and attic areas could be utilized for distribution of new mechanical systems.

Emergency Egress

The building has both dead-end corridors and, exits at the basement level that are not separated far enough in plan. Additional stairways and exits could probably be integrated into the building without destroying the historic design. Storage use would not pose any additional requirements on the building's egress.

Handicap Accessibility

Level access could easily be provided at the first floor. Adequate toilet rooms could also be provided at this level to satisfy code requirements.

BUILDING TYPE - 1050 - 1051

Flexibility of Historic Design

The design has a considerable amount of flexibility for changes in the interior space plan, but the location and size exterior windows could not be radically changed. Prominent interior stair halls should remain in place, but smaller additional stairways could be added. New exterior entrances could probably be added if desired.

Restoration Potential

Most of the significant features of the historic design could be retained or restored with either office or storage use. However, storage use would probably give the structure a "closed-up" exterior appearance.

Site Considerations

The site is very constricted but does have small landscaped lawn areas that make it attractive for office use. Storage use would be very difficult because the building cannot accommodate large truck traffic and the loading dock associated with it.

Condition of Historic Fabric

The historic fabric of the building is in generally good condition though there is some cracking and exposed rebar in the concrete walls. The porch areas of both buildings are in relatively worse condition than other portions of the structures.

MISSION FACTORS

Square Footage

The master plan calls for only a small amount of office use in this area; these buildings are more than ten times the size required for this use. The plan identifies 119,000 sq.ft of medical logistics warehouse for this area; these buildings could potentially supply about 25% of this requirement.

Utilities

All utilities required by both evaluated uses are provided to the building.

Location

Evaluated uses coincide with uses designated for this area in the master plan.

COST FACTOR

Likely Project Costs (\$ x000)

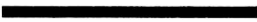
A "medium" level of rehab effort is anticipated, new construction on this site would be standard finish for the Presidio.

Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
office	3,030	1,616	4,654	5,908	1,388	7,296	51%	64%
storage	2,194	1,616	3,810	4,220	1,388	5,608	52%	68%

BUILDING TYPE - 1050 - 1051**EVALUATION MATRIX**

FACTORS	MULTI	USE Office Eval/Score		USE Storage Eval/Score	
DESIGN FACTOR					
Structural Configuration	3	5	15	1	3
Fire Rating	2	3	6	3	6
Spatial Configuration	2	5	10	1	2
Functional Requirements	3	5	15	1	3
Emergency Egress	2	3	6	5	10
Handicap Accessibility	1	5	5	5	5
Flexibility of Design	2	3	6	1	2
Restoration Potential	1	3	3	1	1
Site Considerations	2	5	10	1	2
Condition of Fabric	3	1	3	1	3
MISSION FACTORS					
Square Footage	3	5	15	3	9
Utilities	1	5	5	5	5
Location	2	5	10	5	10
COST FACTOR					
Construction and O&M	3	3	9	3	9
TOTAL			118		70

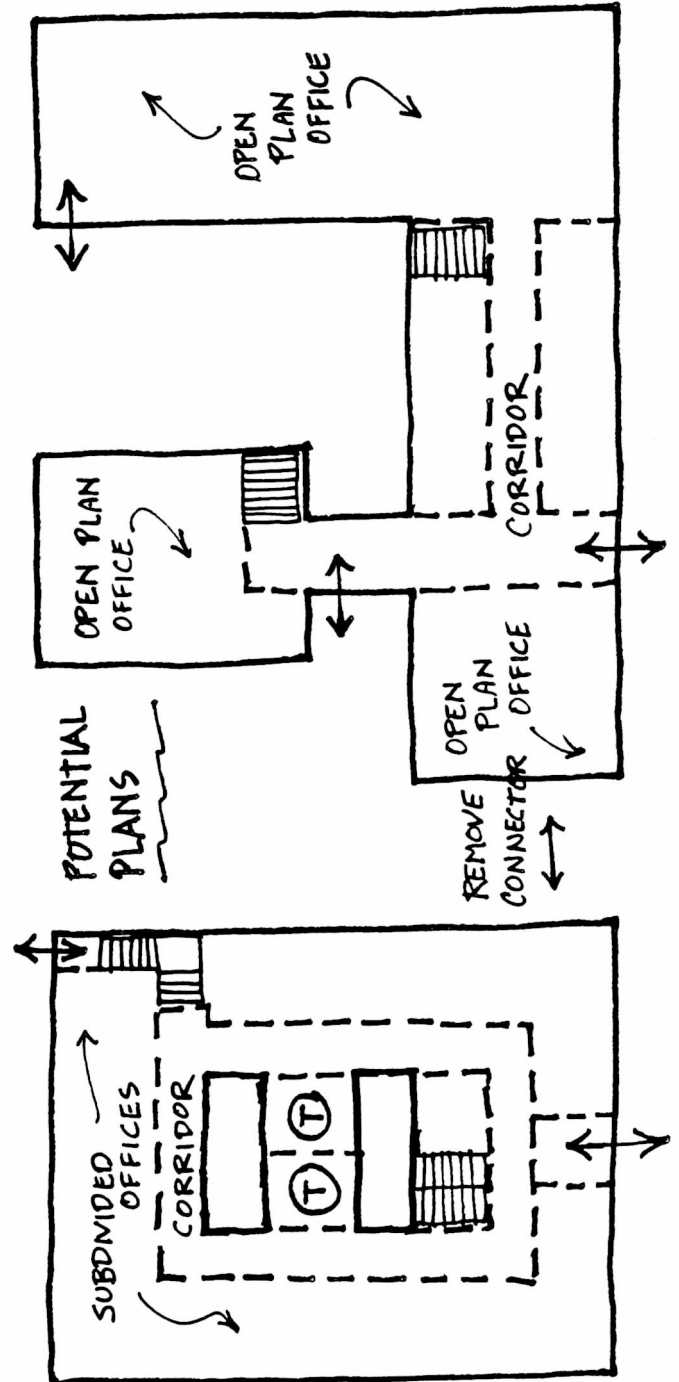
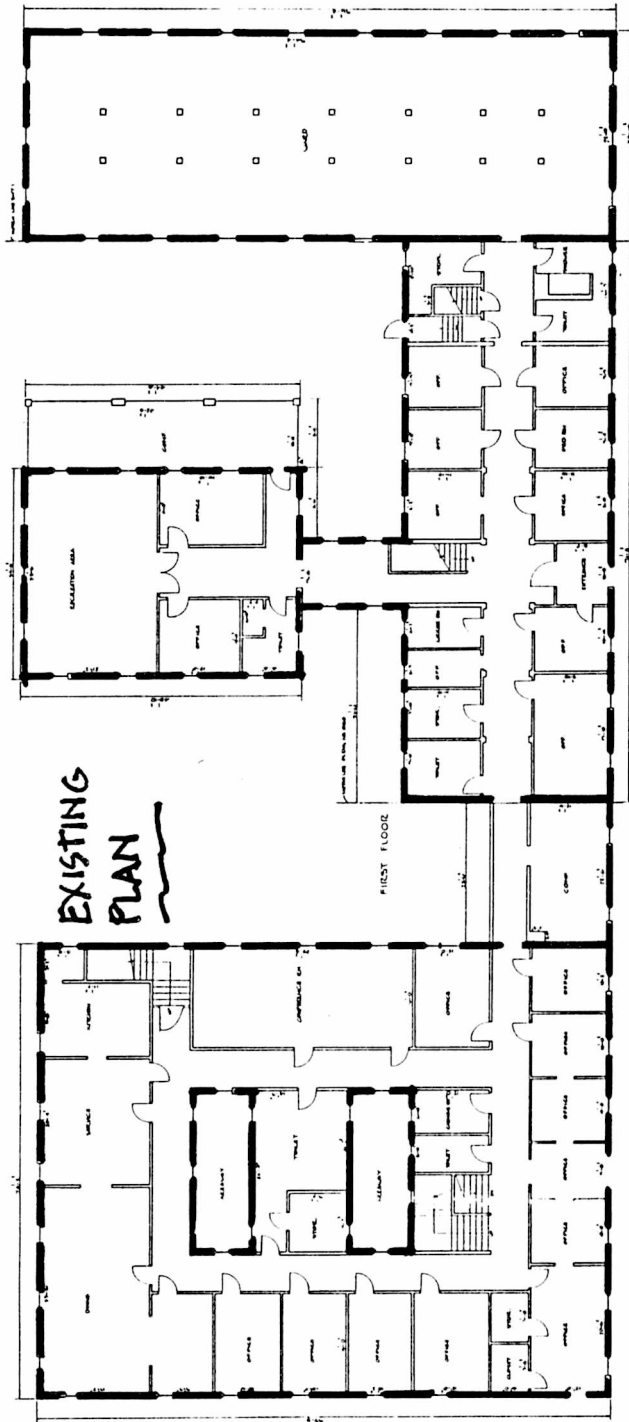
SKETCH KEY

Existing historic bearing wall	
Potential location of new partition	
Location of primary entrance/exit	
Potential location of new stair	
Potential location of new restroom	
Potential location of new skylight	

SKETCH GRAPHICS

BUILDING TYPE - 1050 - 1051

SKETCH GRAPHICS



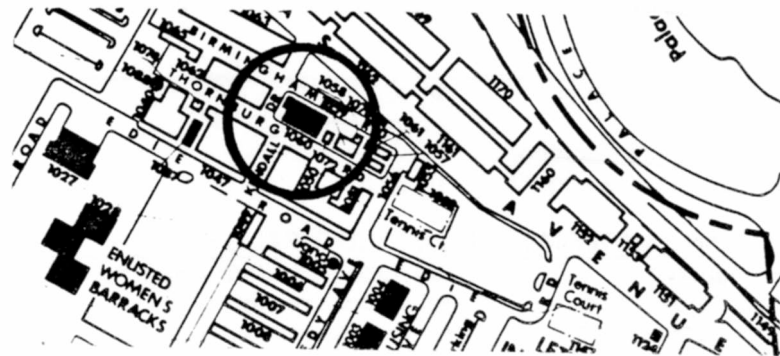
BUILDING TYPE - 1060

LOCATION

Master Plan Area:

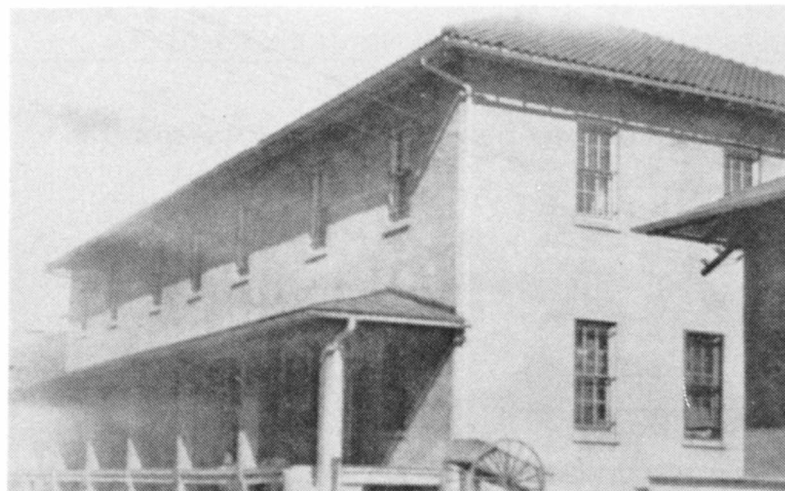
Letterman

Location Map:



PHOTOGRAPHS

Current and/or Historic Views:



BUILDING TYPE - 1060

HISTORIC DATA

Date of Construction:	1916
Additions:	small 1 story shed at west end of bldg.
Original/Early Use:	Medical and Surgical Warehouse

DIMENSIONS

Overall Dimensions:	46' X 99'
Stories:	2 + basement
Gross Square Footage:	14,000±
Combined Gross Sq. Ft:	14,000±

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	reinforced concrete with continuous footings
Wall Construction:	reinforced concrete
Roof Construction:	wood truss with tile roof
Fire Rating:	one-hour, no sprinklers

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	water, sewer, electricity, telephone
Mechanical Systems:	heated by Letterman central steam plant

SIGNIFICANT CHARACTERISTICS**Exterior:**

- simple rectangular shape
- hip tile roof with exposed rafter ends
- veranda on first floor on south and west sides
- regularly spaced 6/6 light windows
- simple Mediterranean and Spanish colonial style detailing

PRIMARY SPATIAL CHARACTERISTICS

- simple rectangular plan w/ irregularly located interior partition walls
- double row of interior bearing columns
- no interior bearing walls
- no defined entry space

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- roadway along south and west elevations
- parking lot along north elevation;
- near parking areas , moderate distance to public transportation

BUILDING TYPE - 1060**EVALUATION****Evaluated Uses:**

- office
- storage

Summary:

A potentially attractive building, built of durable materials, that fits in well with the surrounding historic Letterman buildings; the plan of this structure allows substantial freedom in the arrangement of interior spaces. The basic configuration of the building would seem to be potentially well suited for several types of office use, but the master plan does not identify additional office use as a major requirement in this location.

DESIGN FACTORS**Structural Configuration**

The lack of interior bearing walls would allow partitions to be located as required though the grid of 1st floor columns would have to be accommodated. The capacity of the floors should be evaluated for the loads associated with the storage use.

Fire Rating

The building construction is acceptable under the code for the evaluated uses and square footages.

Spatial Configuration

The historic spatial configuration appears to be fairly irregular and undefined and could probably be modified to either an open-plan or a subdivided type of space. Interior columns could probably not be modified and would have to be accommodated.

Functional Requirements

Exterior windows may be spaced too far apart to allow the efficient subdivision of interior spaces into individual offices. A loading dock could potentially be installed on the rear elevation for the storage use, but the building lacks an elevator.

Emergency Egress

The existing emergency exits on the second floor and basement levels are not far enough apart to meet code requirements. The building does not meet code requirements for enclosure of the stair and exit corridor. Both of these issues could be addressed with the reconfiguration of the interior space plan.

Handicap Accessibility

For office use, a ramp would have to be installed providing level access to the first floor. This could be accomplished on the front elevation. Handicap access could also be provided to the basement with a ramp at the rear of the building.

Flexibility of Historic Design

The informal and simple floor plan of the historic building could accommodate many changes that would be required for both uses. The exterior design of regularly spaced window openings would not allow much alteration.

Restoration Potential

The original design appears to have been relatively simple and is generally intact, which would make restoration fairly easy for either of the uses evaluated.

BUILDING TYPE - 1060

Site Considerations

The large parking lot at the rear of the building could be modified to contain a loading dock if desired. The site is constricted and has no pedestrian amenities for office use.

Condition of Historic Fabric

The building is constructed of permanent, sturdy materials that are in generally good condition and would be relatively easy to maintain.

MISSION FACTORS

Square Footage

The master plan calls for only a small amount of additional office use in this area; this building is more than three times the size required for this use. The Plan identifies 119,000 sq.ft of medical logistics warehouse for this area; this building could potentially supply about 10% of this requirement.

Utilities

All utilities required for both evaluated uses are provided to the building.

Location

Evaluated uses coincide with uses designated for this area in the master plan.

COST FACTOR

Likely Project Costs (\$ x000)

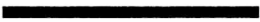
A "medium" level of rehab effort is anticipated, new construction on this site would be standard finish for the Presidio.

Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
office	1,008	536	1,544	1,960	460	2,420	51%	64%
storage	728	536	1,264	1,400	460	1,860	52%	68%

BUILDING TYPE - 1060**EVALUATION MATRIX**

FACTORS	MULTI	USE Office Eval/Score		USE Storage Eval/Score	
DESIGN FACTORS					
Structural Configuration	3	5	15	3	9
Fire Rating	2	5	10	5	10
Spatial Configuration	2	5	10	5	10
Functional Requirements	3	5	15	3	9
Emergency Egress	2	3	6	3	6
Handicap Accessibility	1	3	3	5	5
Flexibility of Design	2	5	10	5	10
Restoration Potential	1	3	3	3	3
Site Considerations	2	5	10	3	6
Condition of Fabric	3	3	9	3	9
MISSION FACTORS					
Square Footage	3	5	15	3	9
Utilities	1	5	5	5	5
Location	2	5	10	5	10
COST FACTOR					
Construction and O&M	3	3	9	3	9
TOTAL			130		110

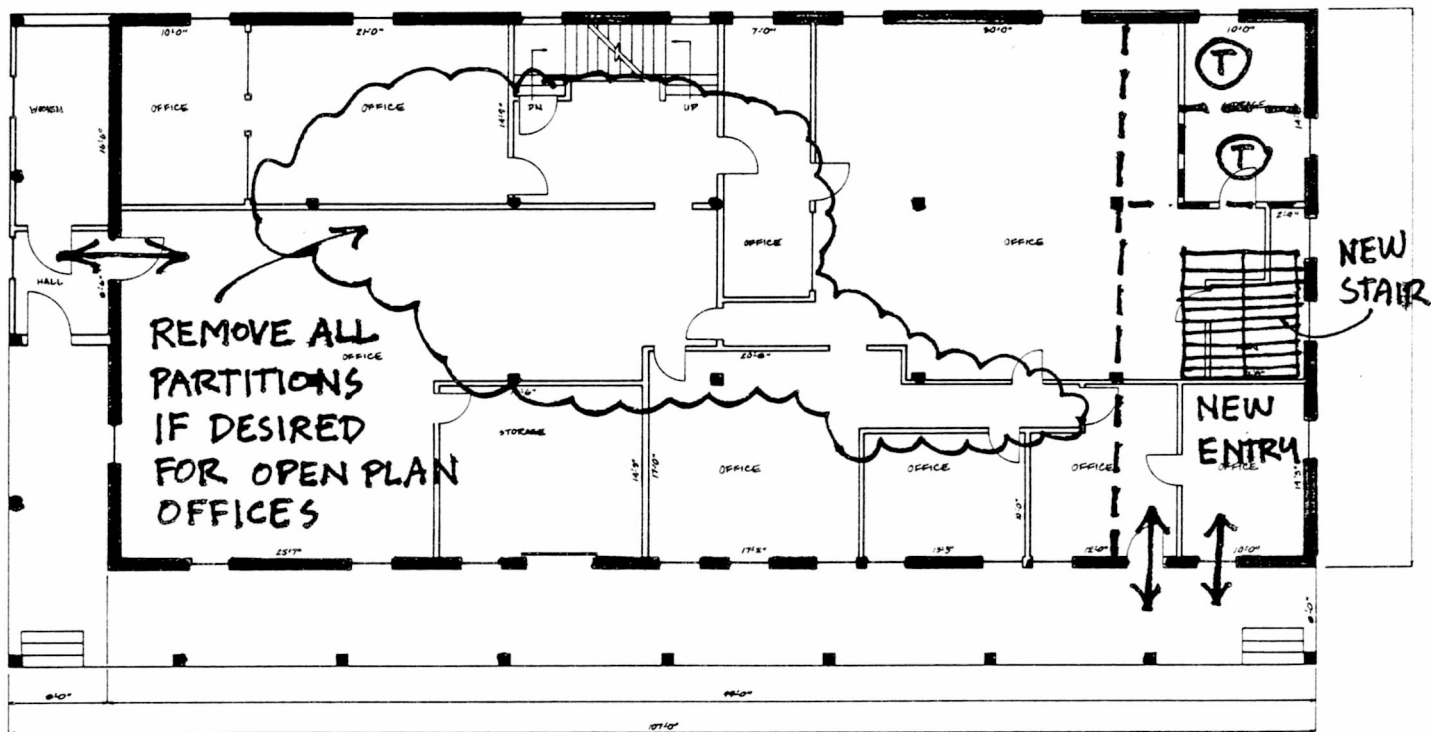
SKETCH KEY

Existing historic bearing wall	
Potential location of new partition	
Location of primary entrance/exit	
Potential location of new stair	
Potential location of new restroom	
Potential location of new skylight	

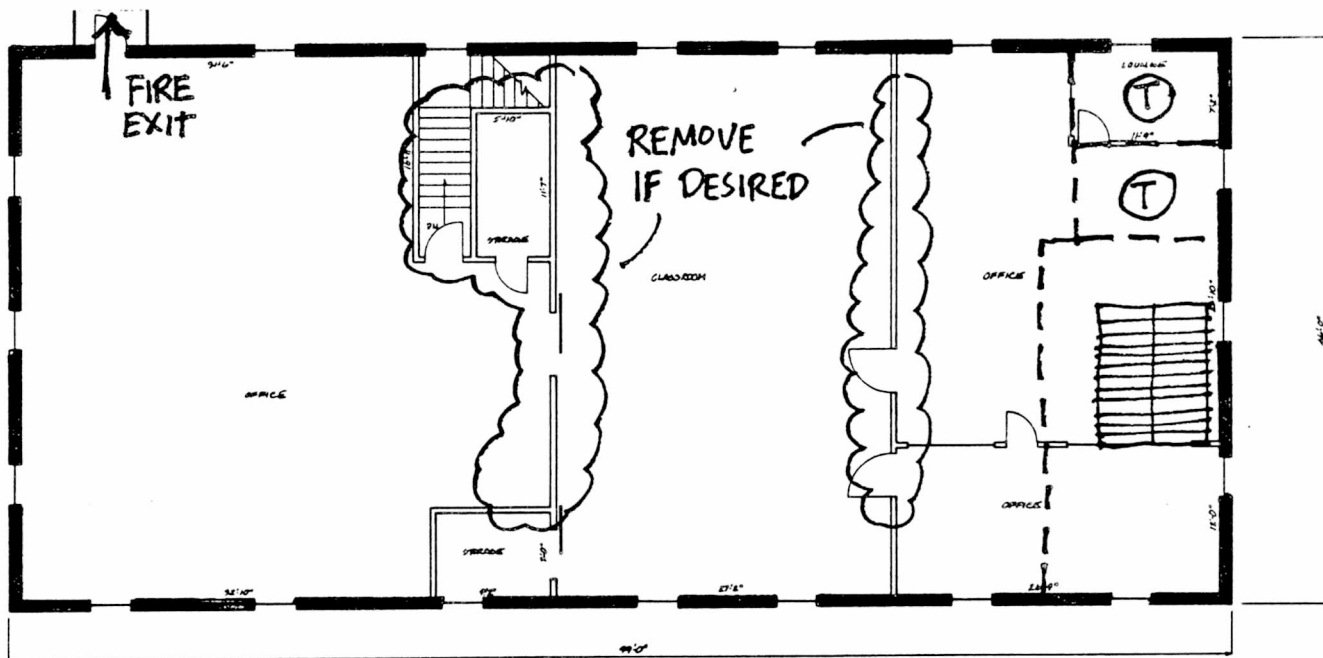
SKETCH GRAPHICS

BUILDING TYPE - 1060

SKETCH GRAPHICS



FIRST FLOOR



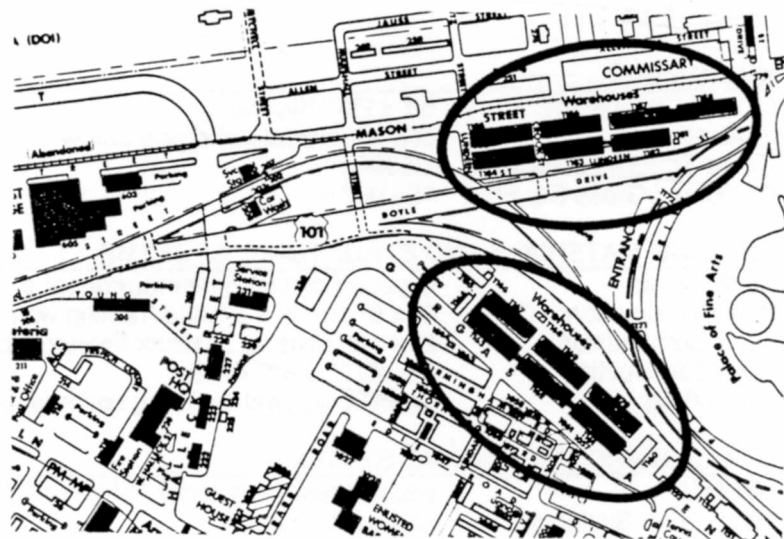
SECOND FLOOR

BUILDING TYPE - 1161 - 1188**LOCATION**

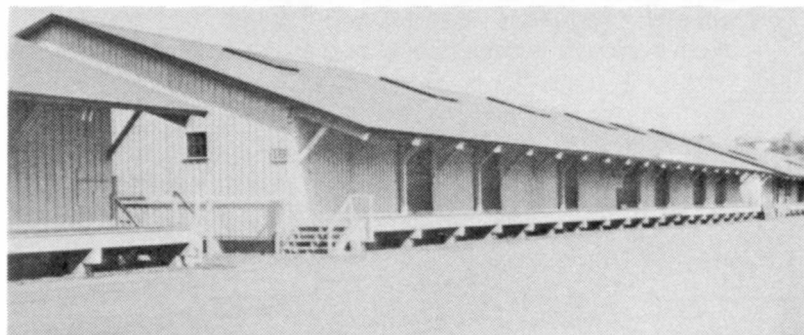
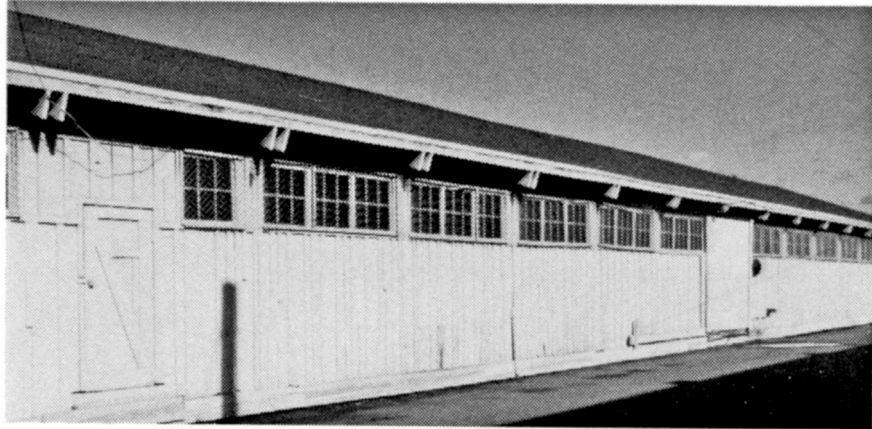
Master Plan Area(s):

Letterman Army Medical Center/Bayfront

Location Map:

**PHOTOGRAPHS**

Current and/or Historic Views:



BUILDING TYPE - 1161 - 1188

HISTORIC DATA

Date of Construction:	1917 - 1919
Additions:	numerous small additions
Original/Early Use:	# 1161, 1169, 1170, 1184, 1185, 1186, 1187, 1188 - storage # 1162, 1163, 1167, 1182, 1183 - warehouse

DIMENSIONS

Overall Dimensions:	60' x 200' (typically)
Stories:	one w/ open crawl space below
Gross Square Footage:	12,000±
Combined Gross Sq. Ft:	156,000±

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	exposed concrete pier foundations
Wall Construction:	2" x 6" and 6" x 6" stud framing w/ 1" x 10" board sheathing
Floor Construction:	2" x 12" joists w/ 2" plank flooring typical
Roof Construction:	double 2" x 12" rafters
Fire Rating:	Sprinklered (wet system); combustible

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	water, sewer, electricity, telephone, gas
Mechanical Systems:	gas space heaters

SIGNIFICANT CHARACTERISTICS

- long rectangular plan
- low gable roofs
- vertical board and batten siding
- loading dock w/ overhanging roof and large rolling doors along one side
- exposed rafter ends
- utilitarian appearance
- open crawl space visible at perimeter of bldg.
- typically used small 9 light windows

PRIMARY SPATIAL CHARACTERISTICS

- open plan arrangement
- no interior bearing walls
- some new partition walls used where required
- exposed wood plank floors
- exposed rafters and roof structure
- grid of 6" x 6" support posts

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- buildings are very closely spaced together
- two major groupings - 6 bldgs. and 7 bldgs.
- direct vehicular access to one long elevation of each bldg. typical

BUILDING TYPE - 1161 - 1188

EVALUATION**Evaluated Uses:**

- storage
- commercial
- office

Summary:

With about 156,000 sq.ft. of floor space divided among 13 structures (arranged in two groups), these wood warehouses create a very large collection of historic buildings. Only a few of the specific uses identified for either the Letterman or Bayfront areas, or the Presidio at large, could fill all the available space within these structures. In addition to their great amount of square footage, these buildings also have very utilitarian design characteristics which tends to limit their reusability for new functions and creates a challenging adaptive reuse problem.

The upgrading of this type of "temporary" historic structure, that was originally intended for a low-intensity use (i.e., warehousing), to a "permanent" high intensity use (i.e., office or commercial use), will require a substantial rehabilitation effort. This is required because the utilitarian characteristics of the warehouses must be sympathetically and straightforwardly altered to create adequately functional space for the new uses while preserving their historic warehouse appearance.

The most logical reuse of both building groups would be to upgrade them, as required, for continued use as storage facilities. Even this upgrading would probably require a substantial amount of basic improvements including; new more serviceable loading facilities, new flooring, rehabilitated exterior sheathing, and possibly structural improvements to increase loading capacity.

At least a similar level of improvements would be required for virtually all the other reuse possibilities, if the buildings were to be reused for a more intensive type of activity, such as commercial or office use, a more intensive rehabilitation effort would also be expected.

DESIGN FACTORS

Structural Configuration

Typically the buildings have a basic wood-frame structural system supporting the roof and exterior wall sheathing on a 10' x 20' grid of wood posts. There are no bearing walls. This system would potentially allow great flexibility in the arrangement of interior partition walls. However, it also substantially limits the ability to create large unobstructed areas typical of modern warehouses.

The ability of the structure to support new interior walls and finishes is uncertain. New interior walls would probably have to follow the established column grid lines.

Fire Rating

The buildings are Type V, Combustible, and are sprinklered.

Spatial Configuration

Typically the buildings have a 60' x 200' plan with a 10' x 20' grid of support posts that divides them longitudinally into three bays. There does not appear to be a typical historic space plan for the warehouses, designs for each building differed slightly. Most are open plan with one or two small (20' x 20'[±]), framed-in offices, others have been subdivided with longer, continuous partition walls that extending across the entire building. Spatially this design would allow substantial flexibility in the arrangement of interior partitions. However, the buildings are limited in the amount of clear, unobstructed area available by their basic structural system which cannot be

substantially altered. Typical ceiling heights have a minimum of 10' at the eave and are much higher in the middle of the building, but the angled roof braces project into the space and limit vertical clearances along the building's short dimension.

Functional Requirements

Though built as warehouses, with long loading docks and large sliding doors, the buildings were originally served by rail car and, consequentially, the loading docks are arranged so that use by articulated trucks is difficult and requires a 90° movement of goods. In addition, because of the diagonal roof braces, the buildings fall short of the desired maximum vertical clearance for warehouses.

For use as office the buildings have a relatively small amount of exterior window area, and the windows that they do have are in many cases too high to comfortably see out. The use of skylights for additional interior day-lighting is common.

Emergency Egress

The buildings are all one-story structures and could be easily modified to meet egress standards. The very large floor area of the buildings and the close spacing between some of the structures would require carefully analysis to achieve proper exiting.

Handicap Accessibility

Because the structures are typically only one level, and have long facades, it would be straightforward to provide barrier-free access. In addition, if several structures were interconnected (as they are now) one access point might potentially serve more than one structure. Existing toilet rooms vary substantially from building to building.

Flexibility of Historic Design

The utilitarian character and design of the structures allows considerable flexibility in some areas of design while at the same time creating substantial limitations in other areas. The undefined, open-plan type of interior space allows great freedom in the arrangement of walls and spaces. However, the grid of interior posts and the exposed framing of the structures limits the type and design character of the interior spaces.

Though the exact placement and arrangement of the exterior fenestration is not critical, the basic exterior design motif could not be substantially altered if the overall warehouse character is to be maintained. This would limit the amount of new window and door openings that could be cut into the building walls as well as the type and design of the fenestration and sheathing.

Another important aspect of the buildings' historic design flexibility is the grouping of the structures together (see Site Considerations, below).

Restoration Potential

The overall simple exterior design of the buildings would potentially be very easy to restore and/or preserve. However, certain specific details of the original design would require specialized design solutions. These would include: maintaining the appearance of the crawl space under the buildings; restoration of the board & batten siding; reuse of the large sliding doors along the loading docks, and maintaining the appearance of historically separate structures if multiple structures were to be joined together.

Site Considerations

An important aspect of the historic design of these buildings is the arrangement of the structures in groups. This grouping plays an important character defining role and the removal or replacement of one or more structures in the group would have a negative impact upon the overall historic appearance of the warehouse groupings. Therefore each group would need to be treated as a collective.

BUILDING TYPE - 1161 - 1188

Condition of Historic Fabric

Considering their 70 year age and lightweight materials of construction, the buildings are in generally good condition. However, the "temporary" wood-frame materials are subject to a more rapid deterioration than typical masonry or "permanent" type construction. If long-term reuse of the buildings was projected, a thorough rehabilitation of flooring, exterior sheathing and roofing would probably be required.

MISSION FACTORS

Square Footage

The six LAMC area warehouse have a total of $\pm 72,000$ sq.ft. which would accommodate about 60% of the 119,000 sq.ft storage requirement (Medical Logistic Warehouse) for this area in the master plan.

The seven Bayfront area warehouse have $\pm 84,000$ sq.ft. This would accommodate about 50% of the storage space requirement (170,000 sq.ft.) or 100% of the Commercial space requirement (82,000 sq.ft.), for the Bayfront area.

Neither of these two planning areas has a current requirement for a substantial amount of office square footage. However, 377,000 sq.ft. of required office area (divided among 9 specific categories) is indicated in the Tabulation of Existing and Required Facilities, but it is not scheduled for accommodation in the near future.

Utilities

The buildings are served by all required utilities, but distribution within the structures is very limited.

Location

The storage and Commercial uses are indicated in the master plan for the area in which the building groups are located. office use is indicated for the Presidio but is not scheduled for accommodation in the near future.

COST FACTOR

Likely Project Costs (\$ x000)

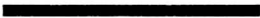
A "medium" level of rehab effort is anticipated for reuse as storage facilities or Commercial use, for reuse as office facilities these structures would require a "great" level of rehab effort. New construction at these sites would be standard finish for the Presidio.

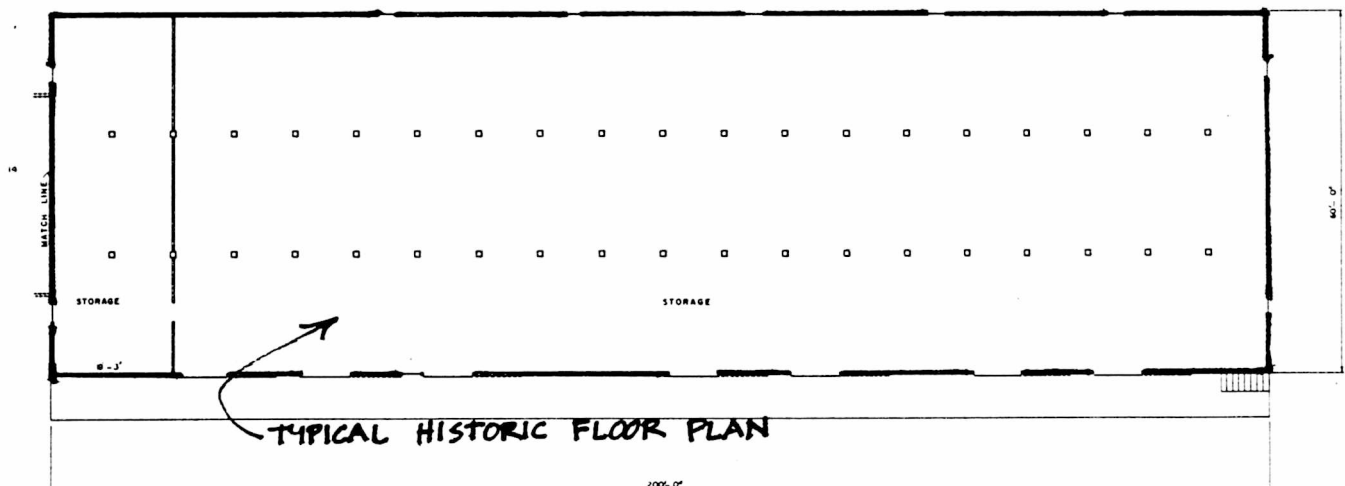
Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
storage	7,488	5,974	13,462	15,600	5,132	20,732	48%	65%
commercial	12,168	5,974	18,142	19,500	5,132	24,632	62%	74%
office	15,288	5,974	21,262	21,840	5,132	26,972	70%	79%

BUILDING TYPE - 1161 - 1188**EVALUATION MATRIX**

FACTORS	MULTI	USE Commercial Eval/Score		USE Storage Eval/Score		USE Office Eval/Score	
DESIGN FACTORS							
Structural Configuration	3	3	9	3	9	3	9
Fire Rating	2	5	10	5	10	5	10
Spatial Configuration	2	3	6	3	6	3	6
Functional Requirements	3	3	9	3	9	3	9
Emergency Egress	2	3	6	3	6	3	6
Handicap Accessibility	1	5	5	5	5	5	5
Flexibility of Design	2	3	6	5	10	3	6
Restoration Potential	1	3	3	5	5	3	3
Site Considerations	2	3	6	1	2	3	6
Condition of Fabric	3	3	9	3	9	3	9
MISSION FACTORS							
Square Footage	3	3	9	3	9	3	9
Utilities	1	5	5	5	5	5	5
Location	2	5	10	5	10	1	2
COST FACTOR							
Construction and O&M	3	3	9	3	9	1	3
TOTAL			102		104		88

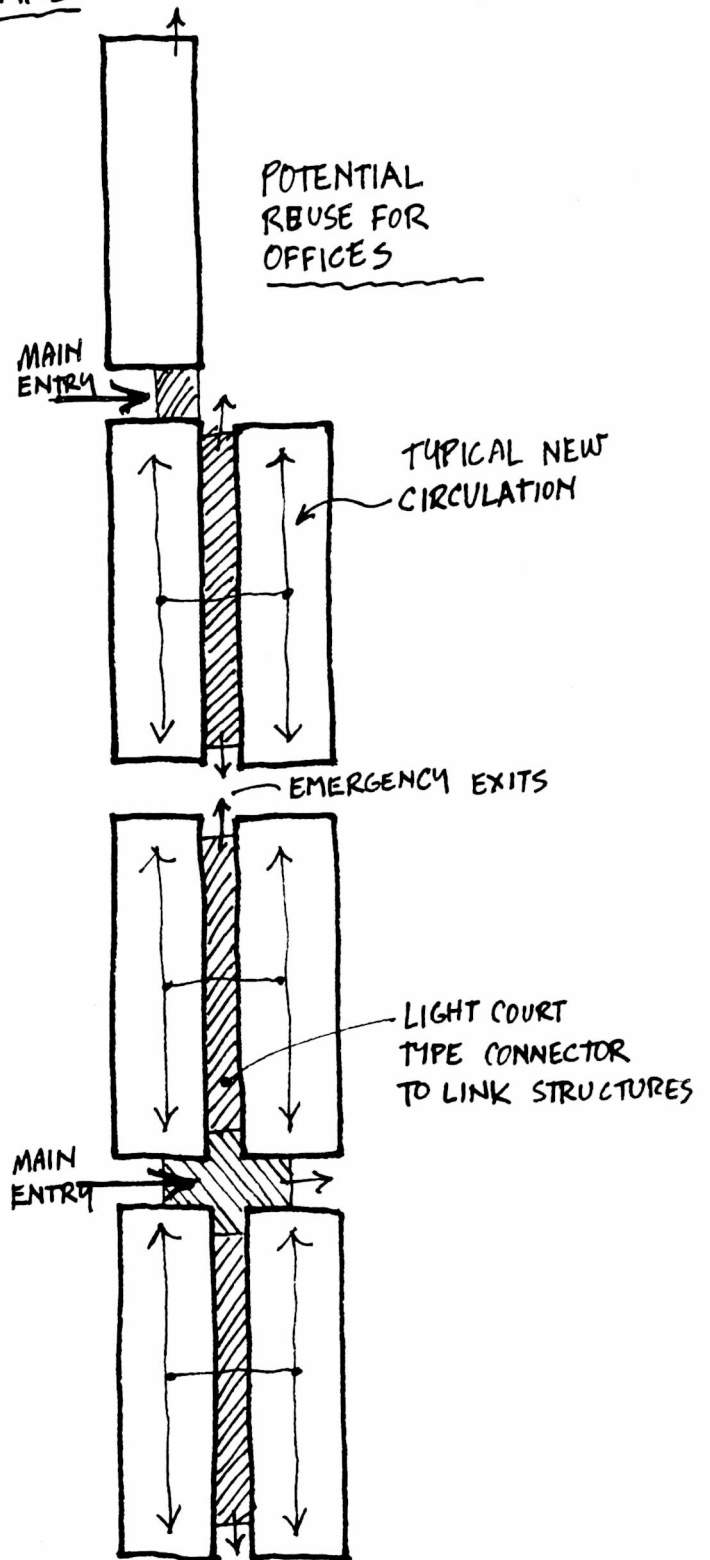
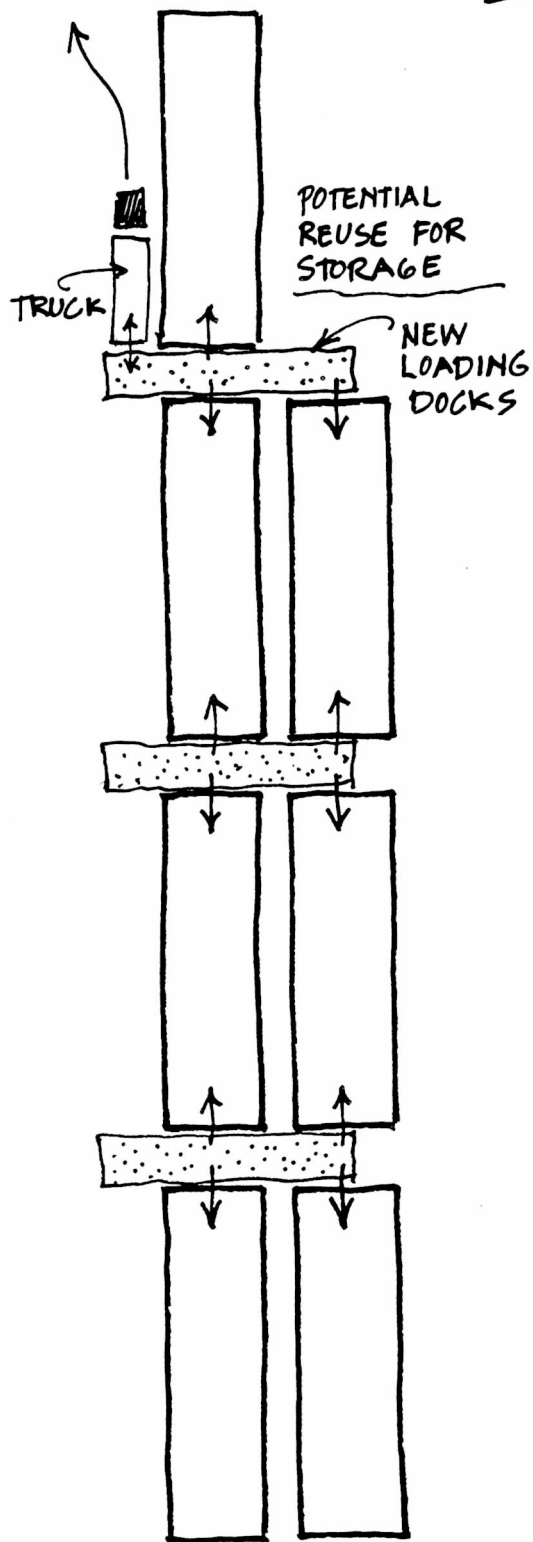
SKETCH KEY

Existing historic bearing wall	
Potential location of new partition	
Location of primary entrance/exit	
Potential location of new stair	
Potential location of new restroom	
Potential location of new skylight	

SKETCH GRAPHICS

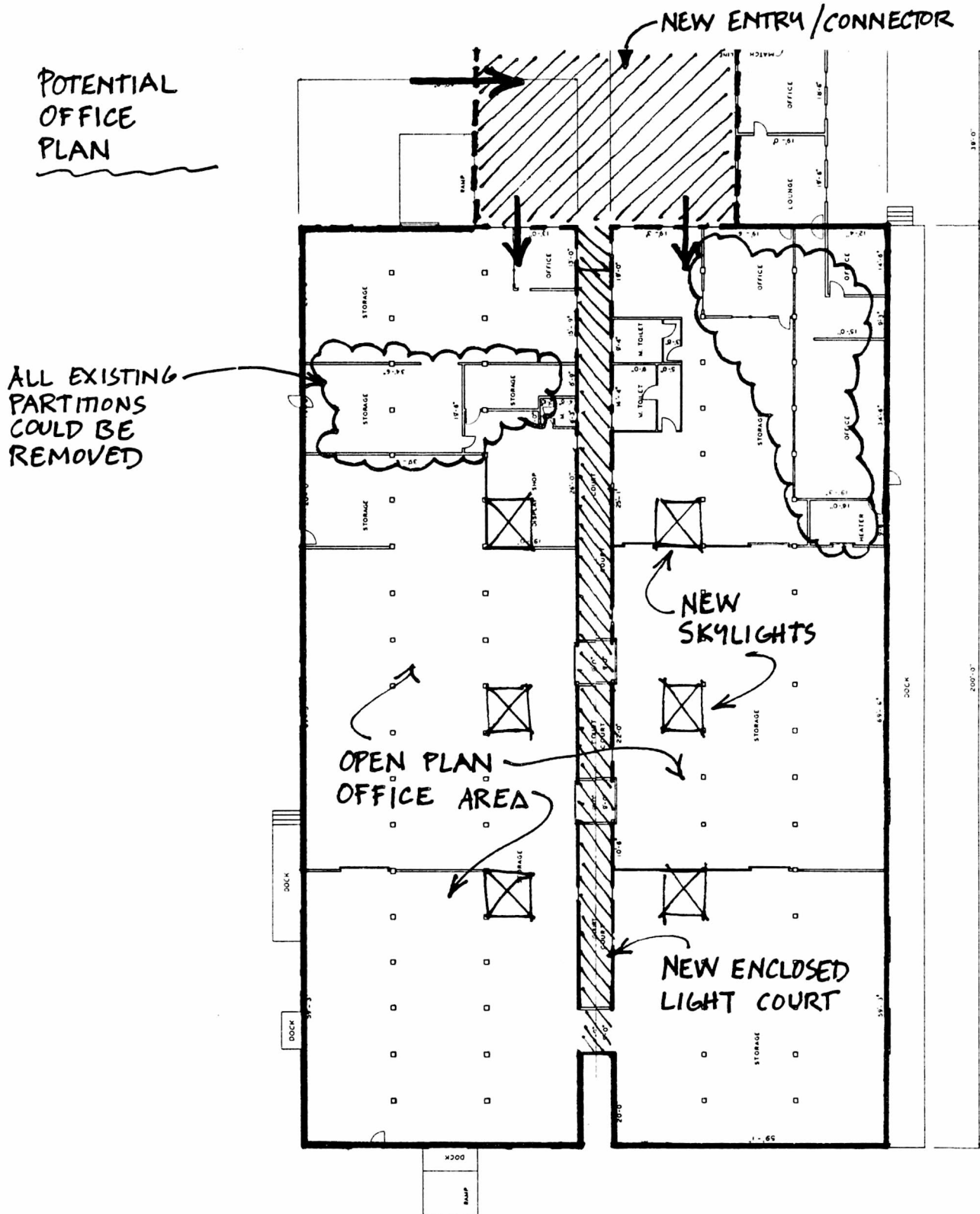
BUILDING TYPE - 1161 - 1188

SKETCH GRAPHICS

SITE PLANS

BUILDING TYPE - 1161 - 1188

SKETCH GRAPHICS

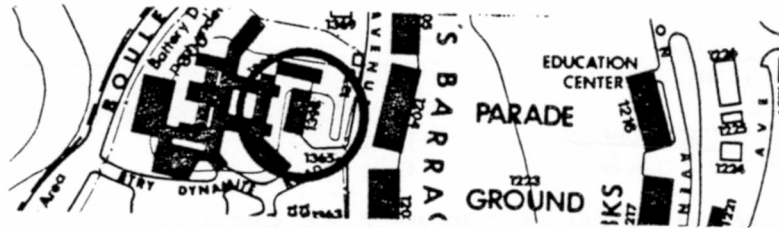


BUILDING TYPE - 1398

LOCATION

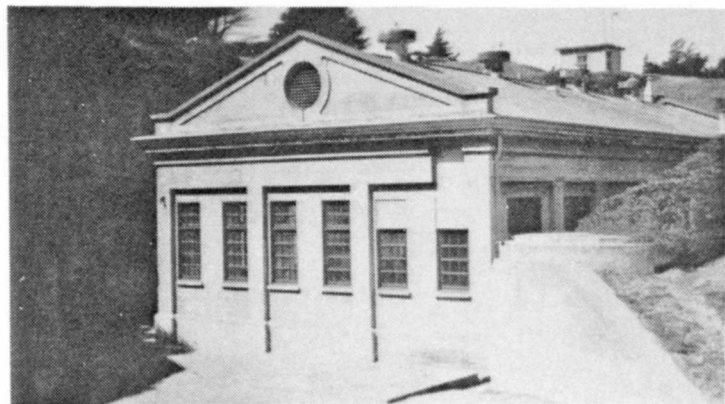
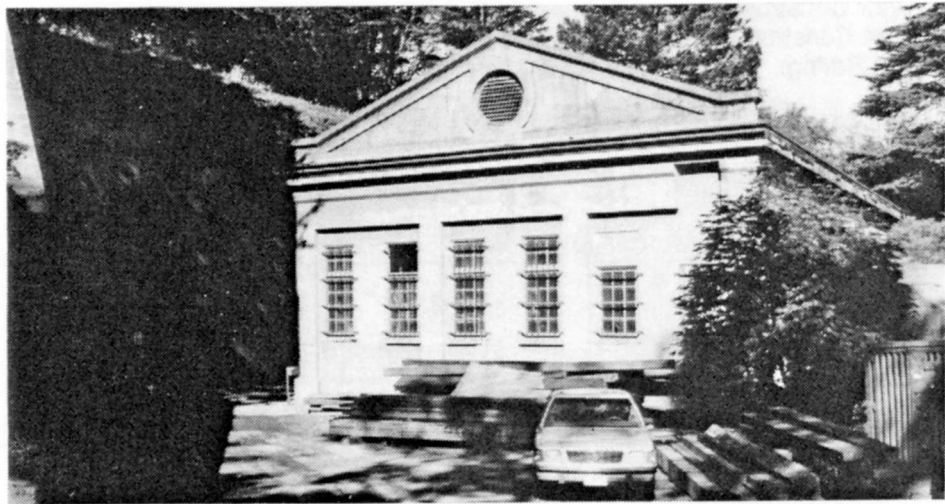
Master Plan Area: Ft. Scott

Location Map:



PHOTOGRAPHS

Current or Historic View:



BUILDING TYPE - 1398**HISTORIC DATA**

Date of Construction:	1906
Additions:	no major additions
Original/Early Use:	Battery Dynamite Powerhouse

DIMENSIONS

Overall Dimensions:	41' x 99'
Stories:	1 (on two levels) + mezzanine
Gross Square Footage :	4,100±
Combined Gross Sq. Ft:	4,100±

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	continuous concrete
Wall Construction:	reinforced concrete
Floor Construction:	concrete slab
Roof Construction:	concrete with corrugated steel
Fire Rating:	combustible, no sprinklers

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	Water, sewer, electricity, telephone
Mechanical Systems:	none

SIGNIFICANT CHARACTERISTICS

- rectangular plan w/ large stair
- gable roof w/ pedimented gable ends
- exposed concrete walls
- large multi-light windows

PRIMARY SPATIAL CHARACTERISTICS

- main floor divided approx. 50-50 into two levels w/ 4' differential
- several small rooms on high level
- small mezzanine above small rooms

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- building surrounded by battery dynamite (#1399) on 2 sides, earth mound on third side
- only one end of building is easily visible

BUILDING TYPE - 1398**EVALUATION****Evaluated Uses:**

- community center/visitors center
- storage

Summary:

A unique and very attractive structure that is in very poor condition physically, this building presents substantial obstacles and opportunities for reuse. The most pressing obstacle is the deteriorated condition of the building fabric, which will require a great amount of effort if any type of long-term reuse is contemplated. This single issue is so overwhelming it should be addressed directly before any future reuse is anticipated. Problems of site and design will also have to be overcome in the adaptive reuse of this structure, but they could be creatively solved with adequate effort.

The unique historical importance of this building through its associations with Battery Dynamite, the other batteries at Fort Winfield Scott, and its use during WW II as command post for harbor defenses, lend it special public interest. Its location creates an opportunity to provide a public display of the significant contributions the Army and the Presidio have made to the defense of the west coast and the SF Bay Area in particular. Because of this historic opportunity, and the great cost of stabilization, the building might be "permitted" to the GGNRA, isolated and mothballed for potential future use.

DESIGN FACTORS**Structural Configuration**

The structure relies on concrete exterior walls and appears to have no interior bearing walls or columns, plus it has an unusually high floor-to-ceiling height. These factors would potentially allow considerable leeway in adapting the interior space to unique activities with unusual space requirements such as movie presentations, dramatic productions, exhibits, exercise classes, lectures, etc.

Fire Rating

The construction does not meet code requirements for this square footage with the proposed use. It would meet code requirements if an automatic fire sprinkler system were installed.

Spatial Configuration

The large open interior with a two-level floor could potentially be adapted into a sloped-floor space. The small rooms could be used as offices and service spaces.

Functional Requirements

The building's large interior volume and expanse of windows would lend itself to some types of public oriented use. However, the extensive window area would make control of daylighting difficult. The building would require all new mechanical systems for any type of use.

Emergency Egress

Changes would have to be made to provide direct access to adequately spaced exits on the exterior of the building. Additional exits could probably be sensitively integrated into the exterior of the structure.

BUILDING TYPE - 1398

Handicap Accessibility

At grade access is available to one-half of the existing building, interior modifications (e.g., small lift) would be required to make the upper level of the ground floor accessible.

Flexibility of Historic Design

The exterior of the building is very formal but simple and could accept some minor alterations as long as the motif of the building was maintained. The interior could accept more major types of alterations that maintained the open nature of the space. The large window openings could probably not be closed up or otherwise substantially altered.

Restoration Potential

Restoration as a powerhouse is impractical, but the evaluated use could retain or restore many of the significant features of the historic design. Some parts or aspects of the historic generating machinery (if available) might be included in an adaptive reuse design.

Site Considerations

The site is very constricted and is fenced in and surrounded on three sides by high retaining walls. Access to the site for automobiles would be difficult. In addition, the surrounding battery blocks the view of the building making visual identification and location difficult. However, the unique characteristics of the site might be used to advantage. The isolated and enclosed nature of the site could potentially be used for outdoor events. There is on-street parking available near the site.

Condition of Historic Fabric

The reinforced concrete walls of the building appear to be in extremely poor condition. The actual feasibility of restoration and/or stabilization of the structure should be determined through a careful material and structural analysis of the building.

MISSION FACTORS

Square Footage

The master plan calls for a 7,000 sq.ft. community center; this structure could supply at most about 50% of the required space.

Utilities

There appears to be no gas service to the building. Heating would have to be electric unless this condition were altered.

Location

Evaluated use coincides with uses designated for this area in the master plan.

COST FACTOR

Likely Project Costs (\$ x000)

Because of the very deteriorated condition of the building fabric a "great" level of rehab effort is anticipated (irrespective of the use). New construction on this site would be standard finish for the Presidio.

BUILDING TYPE - 1398

Evaluated Use	Rehabilitation			New Construction			Rehab % New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
community service	582	157	739	635	134	770	92%	96%
storage	541	157	698	410	134	544	132%	128%

EVALUATION MATRIX

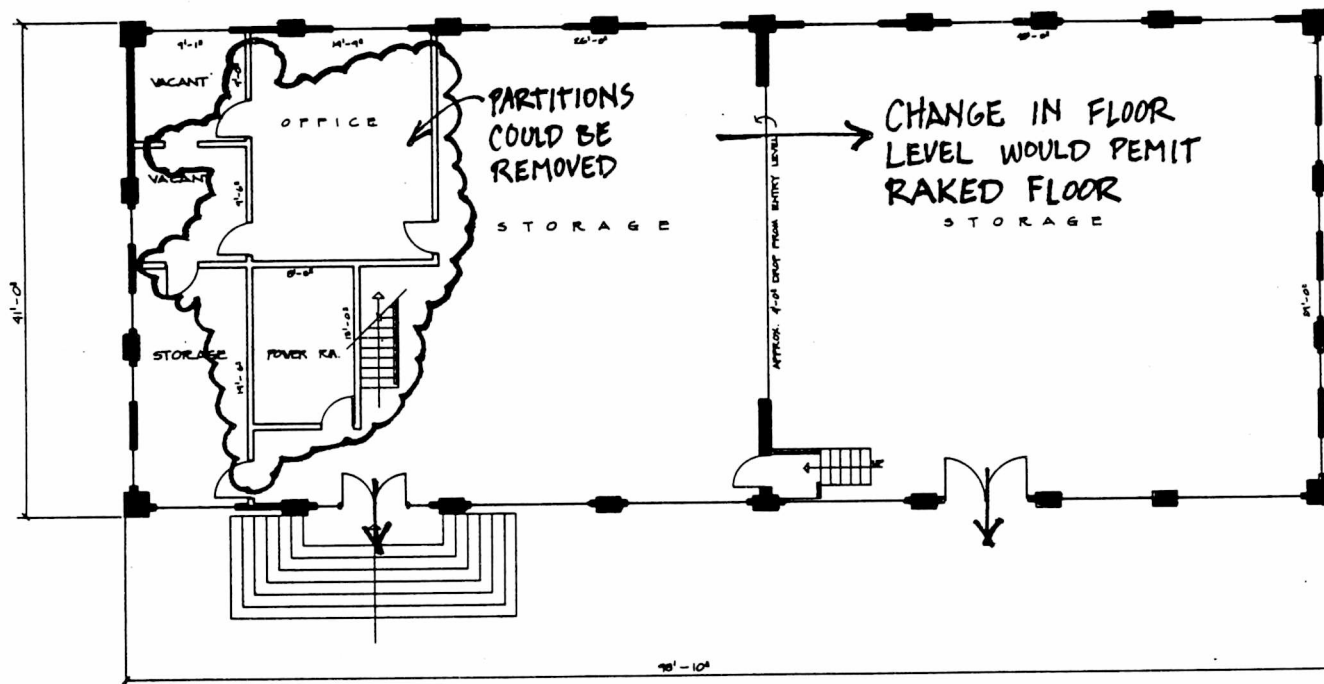
FACTORS	MULTI	USE Cmnty. Center Eval/Score		USE Storage Eval/Score	
DESIGN FACTORS					
Structural Configuration	3	5	15	3	9
Fire Rating	2	3	6	3	6
Spatial Configuration	2	5	10	5	10
Functional Requirements	3	5	15	1	3
Emergency Egress	2	3	6	5	10
Handicap Accessibility	1	5	5	5	5
Flexibility of Design	2	5	10	1	2
Restoration Potential	1	3	3	1	1
Site Considerations	2	5	10	1	2
Condition of Fabric	3	1	3	1	3
MISSION FACTORS					
Square Footage	3	3	9	1	3
Utilities	1	1	1	1	1
Location	2	5	10	1	2
COST FACTOR					
Construction and O&M	3	0	0	1	3
TOTAL			103		60

SKETCH KEY

Existing historic bearing wall	
Potential location of new partition	
Location of primary entrance/exit	
Potential location of new stair	
Potential location of new restroom	
Potential location of new skylight	

BUILDING TYPE - 1398

SKETCH GRAPHICS



FIRST FLOOR

BUILDING TYPE - CG-2

LOCATION

Master Plan Area: Bayfront

Location Map:



PHOTOGRAPHS

Current and/or Historic Views:



BUILDING TYPE - CG-2**HISTORIC DATA**

Date of Construction:	1914
Additions:	east and south porches enclosed, date unknown
Original/Early Use:	United State Coast Guard Station House

DIMENSIONS

Overall Dimensions:	56' X 56'
Stories:	2 + attic + observation cupola
Gross Square Footage:	6,700±
Combined Gross Sq. Ft:	6,700±

BUILDING MATERIALS AND STRUCTURAL SYSTEMS

Foundation:	unknown (possibly concrete pile)
Wall Construction:	wood frame
Roof Construction:	wood rafters with wood shingles
Fire Rating:	combustible, no sprinklers

UTILITIES AND MECHANICAL SYSTEMS

Utilities:	water, sewer, electricity, telephone, gas
Mechanical Systems:	gas-fired heating plant

SIGNIFICANT CHARACTERISTICS**Exterior:**

- hip roof with cupola, shed-roof dormers
- large roof overhang
- exposed rafter ends at dormers
- flared walls at each floor level, base molding at second floor
- porches at first floor on south and east sides
- open boat room with marine railway to bay on north side - room now enclosed, railway removed
- 1/1 light wood sash and frames

PRIMARY SPATIAL CHARACTERISTICS

- large boat room on first floor (now subdivided)
- dormitory sleeping rooms on second floor
- open office on third floor
- observation post in cupola

PRIMARY SITE CONSIDERATIONS (HISTORIC OR EXISTING)

- lawns and gardens on east, south and west sides
- faces Golden Gate/San Francisco Bay
- paved area, beach and dock on north side
- near parking lot
- Golden Gate National Recreation Area immediately adjoins site

BUILDING TYPE - CG-2**EVALUATION****Evaluated Uses:**

- substance abuse center
- youth hostel

Summary:

A very attractive, residentially scaled building, this structure is isolated from much of the Presidio yet has a potentially highly visible and dramatic site. It (along with the neighboring structures) is also closely related to the GGNRA property that is on either side of it. As this building is actually part of a cohesive complex that includes the residence, garage and other Coast Guard structures, its re-use should be considered as part of the group and not as an isolated facility. The unique waterfront site and grouping of historic buildings would clearly indicate that a publicly oriented use be considered a priority.

DESIGN FACTORS**Structural Configuration**

Residential-type wood framing that could potentially allow removal of some interior walls or cutting of new door openings where required.

Fire Rating

For the code occupancy classification under which the youth hostel would fall, one-hour -rated construction would be required. If this is not present, alterations would be required to provide it.

Spatial Configuration

Both evaluated uses could potentially be very compatible with the existing historic spatial configuration. Some interior alterations could be made if necessary.

Functional Requirements

Specialized medical services or other programmatic needs of a substance abuse center would have to be evaluated independently. Additional bath and toilet rooms might be required for youth hostel use.

Emergency Egress

Code requirements for both evaluated uses are already met.

Handicap Accessibility

The building appears to satisfy the requirements for the two evaluated uses.

Flexibility of Historic Design

The historic exterior design is relatively inflexible and could not accept substantial alterations such as new windows, doors, etc. However, no major exterior alterations would probably be required for either of the evaluated uses. The interior design is somewhat more flexible and could be altered with new walls or openings that were in character with the building. Both evaluated uses would probably not require changes that were out of character with the building.

Restoration Potential

Some historic features have been removed from the building or altered. Both uses would allow retention of the significant features of the original interior and exterior design. Adaptive reuse for both uses might promote returning the boat room to a single large space somewhat closer to the historic design than the smaller rooms in the existing building.

BUILDING TYPE - CG-2

Site Considerations

This site would be particularly attractive for a youth hostel because of its dramatic location in the GGNRA, nearby parking areas would be advantageous to both uses. Public transit services is available relatively nearby (MUNI #29).

Condition of Historic Fabric

The building is in excellent condition, but the exposed location near the water and the wood frame sheathing might require a higher level of regular maintenance than typical masonry buildings.

MISSION FACTORS

Square Footage

The master plan calls for a 7,000 sq.ft. substance abuse center, with 6,700 sq.ft. available, this building could potentially accommodate this use.

Utilities

All utilities required for both evaluated uses are provided to the building.

Location

The substance abuse center coincides with uses designated for this area, the master plan does not propose a youth Hostel.

COST FACTOR

Likely Project Costs (\$ x000)

Due to the existing configuration of the structure, it is anticipated that only a "little" level of rehab effort would be required for either use. New construction on this site would be standard finish for the Presidio.

Evaluated Use	Rehabilitation			New Construction			Rehab% New	
	Const.	O/M	Total	Const.	O/M	Total	Const.	Total
community service (sub. abuse ctr. or youth hostel)	321	256	578	1,038	220	1,258	31%	46%

BUILDING TYPE - CG-2**EVALUATION MATRIX**

FACTORS	MULTI	USE Sub. Abuse Cntr. Eval/Score		USE Youth Hostel Eval/Score	
DESIGN FACTORS					
Structural Configuration	3	5	15	5	15
Fire Rating	2	5	10	3	6
Spatial Configuration	2	5	10	5	10
Functional Requirements	3	5	15	5	15
Emergency Egress	2	5	10	5	10
Handicap Accessibility	1	5	5	5	5
Flexibility of Design	2	5	10	5	10
Restoration Potential	1	5	5	5	5
Site Considerations	2	5	10	5	10
Condition of Fabric	3	3	9	3	9
MISSION FACTORS					
Square Footage	3	5	15	5	15
Utilities	1	5	5	5	5
Location	2	5	10	3	6
COST FACTOR					
Construction and O&M	3	5	15	5	15
TOTAL			144		136

SKETCH KEY

Existing historic bearing wall



Potential location of new partition



Location of primary entrance/exit



Potential location of new stair



Potential location of new restroom

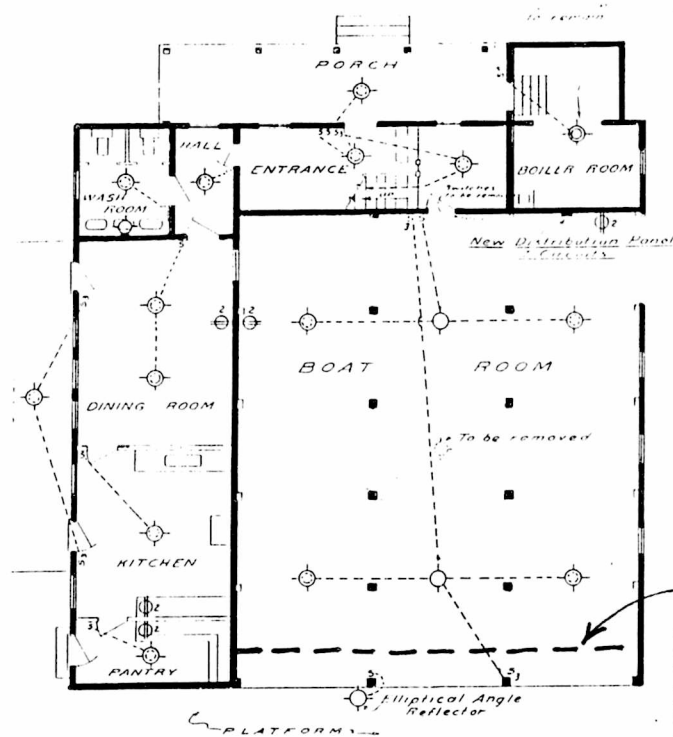


Potential location of new skylight



BUILDING TYPE - CG-2

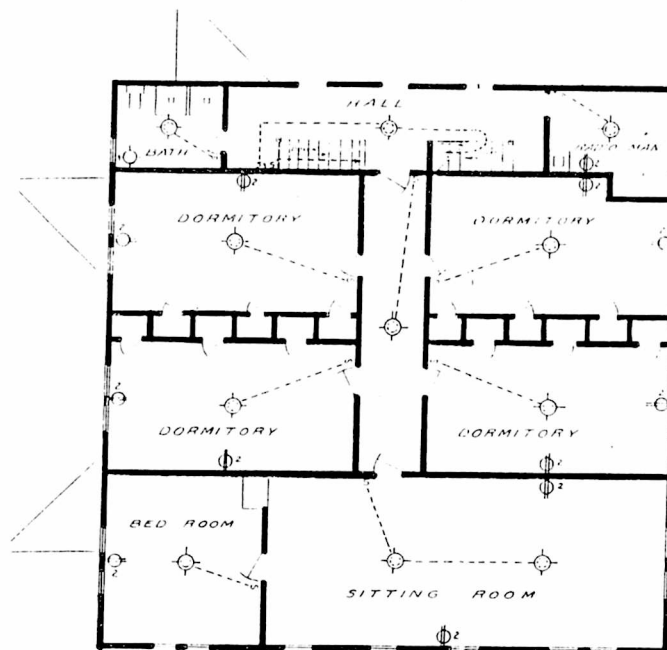
SKETCH GRAPHICS



FIRST FLOOR PLAN

THESE HISTORIC
FLOOR PLANS
COULD BE
RESTORED
FOR USE AS
A HOSTEL

NEW
RECESSED
WALL TO
ENCLOSE
BOAT ROOM



SECOND FLOOR PLAN

