Alta California’s Four Fortresses

BY RICHARD S. WHITEHEAD

Spain’s plan for claiming and colonizing Upper California involved establishing a chain of missions to convert and civilize the heathen Indians under the care and guidance of Franciscan priests. The padres and their charges, in turn, were to be protected from attack by England, France and Russia as well as from other hostile Indians by four presidios, conveniently spaced to protect the missionary settlements. The dictionary translates the word “presidio” as “a garrison of soldiers, a fortress garrisoned by soldiers, a place destined for punishing criminals by hard labor, house of correction, penitentiary.” Considering that under attack, occupants of a fortress are forcibly confined within its defensive walls, the double meaning is understandable. A Spanish-speaking person, however, might have some apprehensions about working or living in a presidio. In this article we are concerned only with the four presidios that protected Spanish settlements in Alta California from their enemies.

Actually there were five California presidios. Prior to August 29, 1804, Baja and Alta California were one Spanish province under one governor, the first being Don Gaspar de Portolá who, in 1769, led the expedition to explore the California coastline and rediscover the port of Monterey.1 Portolá’s initial headquarters were at the presidio at Loreto, capital city of the Californias, located on the east coast of the peninsula about 250 miles northwest of Cape San Lucas, the southerly tip of Baja California. Existence of this presidio explains why, in 1783, Diego Gonzales, commandant at the Monterey Presidio, received a directive to order five branding irons for the horses and mules of the presidios as follows:2
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<table>
<thead>
<tr>
<th>Brand</th>
<th>Founding Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loreto</td>
<td>October 1697</td>
</tr>
<tr>
<td>San Diego</td>
<td>July 16, 1769</td>
</tr>
<tr>
<td>Monterey</td>
<td>June 3, 1770</td>
</tr>
<tr>
<td>San Francisco</td>
<td>July 28, 1776</td>
</tr>
<tr>
<td>Santa Barbara</td>
<td>April 21, 1782</td>
</tr>
</tbody>
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The A above the number is presumed to be the feminine noun ending of the word *compania*, each presidio garrison being designated Company 1 through 5, corresponding to the chronological sequence of each presidio's founding.

Reliable documentary data for the presidios is generally much scarcer than for the missions. One might conclude that this is due to the fact that the priests were well educated and erudite while the soldiers were inclined to be more common individuals lacking education and even, in many cases, illiterate. Since the military has always had a reputation for its high volume of paperwork, this conclusion is faulty, but it does appear that much of the information we need is still hidden in the archives. There seems to be more information available for an authentic reconstruction of the Santa Barbara Presidio than for any of the other presidios, perhaps because more time and effort has been put into the research by the Santa Barbara Trust for Historic Preservation, the organization that is rebuilding that presidio.

One category of data which provides some information is the early plans of the San Francisco, Monterey and Santa Barbara presidios, together with limited descriptions of the buildings. A major breakthrough in this area only occurred early in 1982. Fr. Harry Morrison, a priest at St. Joseph's Catholic Church in Pinole, situated north of Berkeley, California, is also an avid history researcher who in his spare time delves into the archives of the Bancroft Library at Berkeley. Going through the papers of Edward Vischer (1808-1878), a talented artist who painted the California missions, he discovered a set of drawings of all four
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Alta California presidios, dated 1820, Plates IV, VII, X and XI. Accompanying the plans was a request dated October 19, 1878, and signed by General Mariano G. Vallejo suggesting that the presidios were no less important than the missions, and that Vischer also paint them for posterity, using as a basis the 1820 plans.3 Knowing of the interest and activity toward reconstructing the Santa Barbara Presidio, Fr. Morrison contacted the author of this article. Since both Vischer and Vallejo died soon after, the presidios were never painted at that time.

Who made the drawings, when and why, are questions so far unanswered. Since all four are dated the same year, it would seem logical that they resulted from an order, probably by the governor, who was also military commander. In 1820 Pablo Sola was governor. In 1818 he visited all four presidios and nineteen missions and reported his observations to the viceroy of New Spain (Mexico) by letter dated April 3, 1819.4 No mention is made in this letter of plans of the presidios, but it is possible Sola ordered them drawn on this trip. It is also possible, since those sent Vischer are all on the same kind of blue-lined paper, that Vallejo had one of his staff make copies of the originals to send to Vischer, and the originals remain undiscovered to date.

In addition to revealing the layout and state of the presidios after a period of some thirty to fifty years after their founding, during which earthquakes, fires and enemy attack occurred, the discovery of these drawings provided the first known plan of the San Diego Presidio. For nearly twenty years, archeologists had been probing the mounds on Presidio Hill above Old Town in San Diego and excavating the foundations of the Presidio Chapel without benefit of a plan to tell them what to look for. Comparing the 1820 plans with those of earlier dates and supplementing these data with various reports, the combined data provides us with some interesting sidelights on the history of these civil and military installations.

One must keep in mind that the presidios were not just forts, but fortified settlements, intended to house a garrison of soldiers with their families and with such amenities as were available to distant outposts during that period. Each presidio was located far enough back from the shoreline, generally 2,000 to
4,000 feet distant, that an enemy ship could not inflict much damage with cannonball ranges of that period. For protection of the harbor, each presidio had a fort, or castillo, a level esplanade of wood planking on which were emplaced several cannon behind an embankment of dirt or adobe and stone. This so-called battery was located on a hill overlooking the harbor and, in theory, prevented ships from attacking the presidio. Had a foreign power wished to invade the territory, however, they could easily have landed at a distance from the harbor and laid siege to the presidio.

All four presidios consisted of a quadrangle of buildings grouped around a parade ground and surrounded by a defense wall. In each case, the main gate faced toward the ocean and in some cases, the church was on the opposite side of the parade ground from the main gate. At San Diego, and probably in all of the initial or palisade construction, the defense wall also served as the back wall of the presidio buildings, thus saving the time and cost of building another wall. This design was also followed in the presidios, forming a cordon of earlier forts generally following the southerly boundary of the United States and protecting the northerly boundary of Mexico against the Apaches and other hostile Indians. In case of attack, the defending soldiers climbed on top of the roof of the buildings and fired over the defense wall, using it as a parapet.

The design that replaced it by the 1780s is illustrated by the Santa Barbara layout, Plate IX, in which the buildings are separate from the defense wall, providing a rear garden area for the houses and corrals for the horses. In the presidios of the Southwest where there were no corrals as part of the presidio and the horses were grazed outside the defensive wall, it was found that the fort could be immobilized when the Indians swooped down on the grazing herds, killed the handful of guards and stole the horses.

According to De Mofras, a visitor to the presidios in 1844, it was standard practice to construct a dry moat twelve feet wide and six feet deep around the outside of the defense wall. Excavated dirt formed an embankment along the outside of the ditch. Attacking Indians were first exposed to fire from the top
of the defense wall as they surmounted the embankment, then had to scale the ten-foot-high defense wall. If they were successful in climbing over the wall, they found themselves trapped in the back garden, exposed to fire from the rear windows and doors of the buildings. This design thus augmented the presidio defenses.

The earliest plan of the San Francisco Presidio (Plate I) is contained in a letter dated March 4, 1792, from Acting Commandant Hermenegildo Sal to Governor Antonio Romeu. Sal gives the dimensions of the guardroom, barracks, jail cells, dry goods and provisions warehouses, commander’s houses, church, casemate and sergeant’s house, and shows the length of the north side as 319 feet and of the west side, 330 feet. Sal describes the deteriorated state of the structures, walls out of plumb, some walls wider at the top than at the bottom, stone walls cemented with mud, roofs of grass and reed, poor adobe and a shortage of timber. The plan shows that the entire east side of the quadrangle is completely gone, leaving the troops defenseless against an attack from that direction, although another document states that there was a post fence along that side. Sal states that the buildings shown on the plan represent the third construction since the founding sixteen years before, and attributes the bad state of the buildings to lack of intelligent workmen and supervision.

Plate II is a translated copy of a plan dated June 27, 1795, and signed by Governor Borica but prepared by Sal who submitted to the governor a detailed list of materials prepared by the stonemason Manuel Ruiz with the cost estimates by Sal. Construction in accord with this plan was never accomplished, but Sal’s warnings apparently led to the assignment of Engineer Captain Alberto de Córdoba to Alta California to make recommendations for improving its defenses. Plate III is a translated copy of Córdoba’s plan for the San Francisco Presidio, but again it was not carried out, perhaps because Córdoba himself considered all the California presidios pretty much ineffective because of the fact that an enemy could land at a good many undefended points along the shoreline. He recommended instead a greatly enlarged cavalry corps with mobility to repulse an attack anywhere along the coast, supplemented by mobile batteries on
Escala que demuestra las habitaciones que tiene el Presidio de San Francisco.

No. 1. Guardia de Prevención, tiene de largo 6½ varas, de ancho 4½ y 3½ de alto.
2. Cuartel: de largo 16 varas, 3½ de alto, 2 de largo y 4½ de ancho.
3. y 4. Calabosos de 2 varas de alto, 2 de largo y 1½ de ancho.
5. Almacén de ropa, 18 varas largo, 4½ alto y 6 ancho.
6. Ydem de víveres, 18 varas largo, 4½ alto y 6 ancho.
7. y 8. Casas del Comandante, 37½ varas largo, 6 de ancho y 4½ de alto.
10. Iglesia 19 varas de largo, 8 de ancho y 4½ de alto.
11. Casa mata, 4 varas en cuadro y 2½ de alto.
9. Casa del Sargento

Habitaciones de la Tropa desde a hasta k.
(ES copia sacada del original)

Above north facade — Tiene este lienzo 116 varas. Mira al Norte
Beside west facade — Tiene este lienzo 120 varas. Mira al Poniente

Translation

Scaled drawing showing the rooms of the Presidio of San Francisco.

No. 1. Guard room, being 17.2 feet long, 12.4 feet wide and 9.6 feet high.
2. Soldier’s barracks: 44 feet long, 9.6 feet high and 12.4 feet wide.
3. and 4. Jail cells 5.5 feet high, 5.5 feet long and 4.1 feet wide.
5. Clothing warehouse, 49.5 feet long, 12.4 feet high and 16.5 feet wide.
6. Provisions warehouse, same dimensions as clothing warehouse.
7. and 8. Commandant’s dwelling, 103.1 feet long, 16.5 feet wide and 12.4 feet high.
10. Church, 52.2 feet long, 22 feet wide and 12.4 feet high.
11. Casemate, 11 feet square and 6.9 feet high.
9. Sergeant’s quarters. From a to k, houses of the soldiers.

A copy taken from the original

Above north facade — This facade is 319 feet [long]. Looking to the north
Beside west facade — This facade is 330 feet [long]. Looking to the west

[72]
Plan del Presidio que se propone para alojar la Compañía de Cavalleria del Puerto de San Francisco en la nueva California.

A. Puerta Principal
B. Cuerpo de Guardia
C. Calabozo
D. dos Almacenes para Sentenos y Viveres
E. Quarta para el Hato
F. Ydem para la sal
G. Casa del Abilitado
H. Idem del Capellan
I. Oficina para utensilios de Yglesia
J. Sacristia
K. Yglesia
L. Casa del Comandante
M. Ydem para Oficiales
N. 21 casas para la Tropa
O. Cozinias y corrales de Ydem
P. Carpinteria
Q. Herreria
R. Enfermeria para Marinos
S. Callejones de los Rebellines
T. dos Rebellines
U. Casa del Sargento
X. Cozina para los Solteros
Y. Quartel
Z. dos Corrales para Cavalleria y Ganado

Monterey 27 de Junio de 1795
Diego de Borica

Translation

Plan of the Presidio that is proposed to house the Cavalry Company of the Port of San Francisco in New California.

A. Main gate
B. Guard room
C. Jail
D. Two warehouses for grains and provisions
E. Quarters for the cattle
F. The same for salt
G. House of the paymaster
H. The same for the chaplain
I. Workroom for the utensils of the church
J. Sacristy
K. Church
L. House of the commandant
M. The same for other officers
N. Twenty-one houses for the soldiers
O. Kitchens and corrals for the same
P. Carpenter's shop
Q. Blacksmith shop
R. Infirmary for seamen
S. Passageway to the bastions
T. Two bastions
U. House of the sergeant
X. Kitchens for the single soldiers
Y. Quarters for single soldiers
Z. Two corrals for horses and cattle

Monterey, June 27, 1795
Diego Borica

[74]
Plate II. The San Francisco Presidio. This plan is incorporated in a report by Heremenegildo Sal, dated Monterey, June 26, 1795, to Governor Diego de Borcia which gives construction costs of the presidio from July 26, 1776 to November 1781. Provincias Internas, 216:217 (Tomo 216, Californias). Courtesy Archivo General de la Nacion, Madrid; copy in The Bancroft Library.
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PLATE III

LEGEND

Plan que manifiesta el nuevo proyecto del Precidio de San Francisco para alojar las tropas de su Guarnición.

Explicacion
1. Puerta principal
2. Cuerpo de Guardia
3. Calaboso
4. Quarteles
5. Almacenes
6. Casas para los Sargentos
7. Casas de los Oficiales
8. Almacen de Ropas
9. Casas para los Soldados Casados
10. Casa del Capellan
11. Yglesia
12. Corrales de los casas y Quarteles
13. Ydem para Ganado y Cavallada
14. Cerca y Baluarte para la defensa del Precidio

Nota
Por ser la escala de este Plano mui reducida, no se expresan en el las puertas y ventanas de las casas.

Precidio de San Francisco 24 de Julio de 1796
Alberto de Cordova

Escala de cincuenta varas

TRANSLATION

Plan that shows the new design of the Presidio of San Francisco for housing the troops of the Garrison.

Explanation
1. Main gate
2. Guardroom
3. Jail
4. Quarters for single soldiers
5. Warehouses
6. Houses for the sergeants
7. Houses for other officials
8. Clothing Warehouse
9. Houses for Married Soldiers
10. House of the Chaplain
11. Church
12. Corrals for the houses and quarters
13. Same for cattle and horses
14. Enclosure and Bastions for the defense of the presidio

Note: Because the scale of this plan is very small, the doors and windows of the houses have not been shown.

Presidio of San Francisco July 24, 1796
Albert Cordova

Scale of 50 varas
Plate IV. An 1820 map of the San Francisco Presidio found in the Edward Vischer Papers. Reproduced by permission of The Bancroft Library.
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ships cruising along the coast. Perhaps because Córdoba's primary project while in California was to plan and found Branciforte, named after the viceroy and later to become the city of Santa Cruz, his recommendations were not acted upon.

Plate IV is the plan of the San Francisco Presidio found in the Vischer papers and dated 1820. This plan is quite similar to the 1792 plan prepared by Alférez Sal. It is also comparable to the plan for the Santa Barbara Presidio which could be considered the typical layout for all presidios after it was decided to separate the buildings from the surrounding defense wall.

Like the other three presidios, Monterey Presidio started out as a palisade structure, poles set close together in a trench and tied together with willows and reeds, called wattle construction, and the whole plastered with mud. Roofs were flat, covered with leaves and branches, grass and sod and then plastered with mud. Obviously such construction left much to be desired when winter came and the wet mud dripped down on the occupants, and adobe buildings were built as soon as the garrison could spend the time on them.

In 1967 the late Fr. Maynard Geiger, O.F.M., archivist at the Santa Barbara Mission Archive-Library, translated and edited for publication in the Southern California Quarterly an article entitled "A Description of California's Principal Presidio, Monterey, in 1773." The article contains a translation of a report written by Captain Pedro Fages, commandant of that presidio but later governor of California. Dated September 29, 1773, a little over two years after the presidio was founded, it describes the construction and design of the presidio. Details are given of the length, width and height of various buildings as well as the materials of construction and the uses of the various buildings. To illustrate the article, Fr. Maynard had historian Alan K. Brown make a drawing of the presidio utilizing measurements given in the report. In all probability, Dr. Brown was guided by a drawing of the Monterey Presidio attributed to Engineer Miguel Costansó made at Monterey prior to his departure for Mexico, July 9, 1770, never to return to California although he later wrote a report on California's defenses. Costansó's drawing, merely a proposal, is shown in Plate V and Brown's drawing is
Plan of the Royal Presidio of San Carlos of Monterey.

Interpretation

A. Present church
B. New church
C. Sacristy
D. Quarters for the Leather Jacket troops
E. Quarters for the Volunteer troops
F. Guardroom
G. Presidio warehouse
H. King’s warehouse
Y. Mission Warehouse
J. Officer’s dwelling
K. Dwelling of the reverend missionaries
L. Blacksmith shop and forge
M. Carpenter shop
N. Pack-train drivers’ dwelling
O. Surgeon’s dwelling
P. Infirmary
Q. Dwelling for visiting heathen
R. Hospital for new Christians
S. Dwelling for heathen women
T. Chicken yard
V. Pigpen
X. Common kitchen
I. Storage room for farm implements
Z. Privy
Vr. Embrasures
Location of various quarters in the Monterey Presidio: 1) central cross on pedestal; 2) church; 3) belltower; 4) missionaries' quarters, former church and sacristy; 5) porch; 6) dispensary or pharmacy—originally the first chapel; 7) Catalonian volunteers' quarters; 8) volunteers' kitchen; 9) Leatherjacket troop's kitchen; 10) quarters of the Leatherjacket soldiers; 11) government stores; 12) jail; 13) guardhouse; 14) main gate; 15) commandant's store or commissary; 16) commandant's quarters; 17) commandant's kitchen; 18) porch; 19) storehouse; 20) bin for grain; 21) postriders (mails) and smithy; 22) carpenter shop; 23) storage for muleteers' pack gear; 24) servants' quarters; 25) kitchen; 26) Indians' quarters; 27) storage for field implements; 28-31) ravelins with cannon in place.

Plate VII. The Monterey Presidio in 1820 found in the Vischer Papers. Reproduced by permission of The Bancroft Library.
Of the thirteen houses shown on the fourth front of the quadrangle, the walls are finished — three-quarters (of a vara) thick, and three varas high without the ridge of the roofs, which are to be the same as the other (houses) for the soldiers, and also the corresponding woodwork has been put into seven of them, and the little that is lacking for the rest is being brought, and more than four thousand tiles are made for their roofs. [Note: a vara = 33 in. or 2.75 ft.]

All of the outer wall shown in this plan is ready to be built, and it will be started beginning with the month of November, at which time the quadrangle will be completed.

The front walls of the first front are standing; they are one and a half adobe (bricks) thick, mortared, because of the poor quality of the soil for adobes.

1. Main gate with an opening of 4 varas.
2. A storehouse for supplies, 20 varas in length and 5½ in width, its roof of beams, finished boards, and good quality tile.
3. Two of the same, of the same size, for provisions and other effects, the roof of beams, wattles, and tile as above.
4. Thirteen houses for families — 8 varas in length and 5 in width — the roofs of rafters, wattles, and good tile.
5. Private gate with an opening of 3 varas, roofed like the houses.
6. Church, 20 varas in length, 8 in width, and 7½ in height, lined with mortar and whitewashed — its roof of beams and finished boards and good tile, and adorned with painting.
7. Sacristy, 5 varas in length and 4 in width — its roof like the church.
8. Living-room of the second lieutenant, 8 varas in length, 5 in width — its roof of rafters, wattles, and good tile.
9. Two bedrooms for the above — 5 varas in the clear — the roof like the living-room.
10. Bedroom of the Comandante — 5 varas in the clear, its roof of beams, finished boards, and good tile.
11. House for the sentry.
12. A living-room for the Comandante, 11 varas in length and 5 in width, its roof of beams, finished boards, and good tile.
13. Entrance-hall of the above — 4 varas in the clear — 4 in height (sic) ph whitewashed on the inside
14. Office for writing, 5½ varas in length, 3½ varas in height.
15. Living-room and bedroom of the chaplain, 11 varas in length for both rooms, and 5 in width, the roofs of rafters, wattles, and good tile.
16. Five houses for families — 8 varas in length, 5 in width — their roofs like that of the chaplain.
17. Fifteen houses on the fourth front for families — 9 varas in length and 5 in width, — their roof like those before-mentioned.
18. House of the sergeant, 15 varas in length, 5½ in width — its roof as above.
20. Guard-house — 12 varas, and two small cells of 4 varas.
21. Kitchen and pantry of the second lieutenant, 6 varas in length and 4 in width, its roof as above.
22. Two yards for the second lieutenant's house — one of 14 varas and the other of 7.
23. Kitchen and pantry of the Comandante, 6 varas in length and 4 in width, roofed as above.
24. Two yards for the Comandante — one of 25 varas in length and 14 in width, and the other 14 in length and 8 in width.
25. Yard of the chaplain's house, 14 varas in length and 11 in width.
26. Bastion facing the west, of 6 varas.
27. The same, facing the east, of 6 varas.
28. Gates to two corrals for stock — 60 varas in length and 14 in width.
29. Gates or passage-ways to enter the bastions — 2½ varas in width.

Royal Presidio of Santa Barbara, September 16, 1783.

Pedro Fages

[Note: prepared by Felipe de Goycechea, but signed by Fages.]
Plate VIII. The Santa Barbara Presidio in 1788 signed by Pedro Fages, although originally drawn and signed by Felipe de Goycoecha, the second commandant. Reproduced by permission of The Bancroft Library.
Plate IX. The Santa Barbara Presidio superimposed on the present street and lot system. Drawing by Richard S. Whitehead.
Plate X. The Santa Barbara Presidio in 1820 found in the Vischer Papers. Reproduced by permission of The Bancroft Library.
Plate XI. The San Diego Presidio in 1820 found in the Vischer Papers. Reproduced by permission of The Bancroft Library.
reproduced in Plate VI which indicates that some of Costansó's features were not constructed.

A letter dated August 10, 1778, from then Governor Felipe de Neve to the commanding general at Arispe, Mexico, Teodoro de Croix, states that on July 3, 1778, the defense wall and bastions were completed, all constructed of stone. The wall was 1,476 feet in circumference (approximately 369 feet on each side), 11 feet in height and 44 inches wide. It enclosed ten adobe houses, each having a frontage of nineteen feet and a depth of twenty-two feet, and the guardroom and soldiers' quarters with a frontage of 93 feet, a depth of 16½ feet and double wall of adobe, were under construction. These were the permanent structures to replace the temporary palisade buildings described in the 1773 article. Plate VII shows the 1820 plan preserved in the Vischer papers.

The first two years of the life of the Santa Barbara Presidio were under the command of Lieutenant José Francisco Ortega who was replaced by Lieutenant Felipe Antonio de Goycochea in January 1784. Although the record indicates that Ortega sent a plan of the Santa Barbara Presidio to the governor, no plan of such an early date has so far surfaced. It might have been a plan of Ortega's palisade construction or of a proposal for permanent construction. In any event, the earliest plan, representing permanent construction, is dated September 16, 1788, and is signed by Felipe de Goycochea. An identical plan, with the same notations and date, but with a few additional measurements and signed by then Governor Pedro Fages, is reproduced in Plate VIII. Surveyed locations of buildings and structures in relation to city streets, based on archeological findings are depicted in Plate IX.

Utilizing deeds giving measurements tied to "the old church," the foundations of the presidio chapel were first uncovered in 1967. Since then, the foundations of buildings and structures in sixteen different locations in all four sides of the quadrangle have been uncovered and surveyed. One of the soldiers' family quarters in the southwest facade, now known as El Cuartel, survived the two hundred intervening years, although renovated, and another building reconstructed on the
foundations of one of the quarters for non-commissioned officers remains and is known as the Caneda Adobe. These, together with land totaling three quarters of the land within the boundaries of the original presidio are now publicly owned by the State Department of Parks and Recreation or by the city of Santa Barbara in streets and the Federal government in the Post Office property, plus land purchased by the non-profit Santa Barbara Trust for Historic Preservation. The trust is concessionaire for the State with responsibility for operating the Royal Presidio of Santa Barbara State Historic Park and reconstructing the presidio buildings. The Padre's Quarters, consisting of two rooms, plus an adjoining non-commissioned officers' quarters have been completely reconstructed on the original foundation and the presidio chapel, a structure twenty feet high to the eaves and over 100 feet long is currently (1982) under construction.

The reconstruction is as completely authentic as possible within the requirements of the City Building Code. In preparation for this reconstruction, the Trust for Historic Preservation researched and published in 1980 two reports written in the 1930s by Fred C. Hageman and Russell C. Ewing for the National Park Service, and edited by the author of this article. This book, entitled An Archeological and Restoration Study of Mission La Purísima Concepción, describes the history of that mission, its original construction as revealed by the archeological excavations of the 1930s, its reconstruction by the Civilian Conservation Corps during the Great Depression, and its present status. It is the most complete and detailed source of information available on mission-period construction. Features of the Padre's Quarters and Chapel of the Santa Barbara Presidio not readily duplicated from archeological excavations were reconstructed using the original techniques and materials of construction discovered at Purísima Mission. Adobe blocks were handmade, timbers were adzed and joined with rawhide, floor and roof tile were handmade by an Indian tribe and hardware forged by a Mexican blacksmith.

It is the intent of the Santa Barbara Trust for Historic Preservation to reconstruct the entire Santa Barbara Presidio in accord with the 1788 plan updated by changes made up to 1800 as
recorded in archival documents. This will take years of work and considerable sums of money, but when completed, it will be the only reconstructed presidio of the eighteenth century in the West, and the only representation of the civil and military government institutions of the Mission period.

The earthquake of 1812 caused a considerable amount of damage to the Santa Barbara Presidio buildings, resulting in changes in the uses of structures reflected in the plan shown in Plate X, which is the 1820 plan found in the Vischer papers. This latter plan is useful not only in showing the earthquake damage and changes resulting therefrom, but also in verifying the location and use of structures shown in the 1788 plan.

Since 1965, the foundations of the chapel of the San Diego Presidio have been excavated archeologically by students of San Diego State College with cooperation from the San Diego Historical Society and the city of San Diego. Although no plan of the presidio was available until discovery of the 1820 plan in the Vischer papers in February 1982, the entire foundations of the presidio’s most important building, the chapel, have been excavated along with the foundations of some adjacent structures. To what extent the 1820 plan shown in Plate XI will assist those involved in the excavation program depends on the future of the program. Because the presidio is in a city park devoted to recreational uses, the agreement by which the State College undertook its archeological program required backfilling and resodding after the excavation was completed, which has been done. It is hoped that at the very least, enough probing can be done to verify the accuracy of the 1820 plan and identify some of the mounds that outline the remains of presidio structures.

It cannot be emphasized too strongly that what remains undiscovered about the four California presidios, as well as the Loreto presidio, probably far exceeds what has already been discovered, both in documentary and archeological evidence. Virtually no work has been done to research the documents directly relating to the presidios in the Archivo General de Indias in Seville, Spain, and very little on documents in the Archivo General de la Nación in Mexico City. Work is underway on a book on the Santa Barbara Presidio using as the primary
source the California Archives at the Bancroft Library, Berkeley, California, and the archeological work at the Santa Barbara Presidio. Much of value would result from just a compilation of all the documentary information in the California Archives on the other three presidios permitting comparisons and filling in gaps in the knowledge of that period relating to the presidios. It is hoped this article will stimulate such research.
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NOTES

1 Don Gaspar de Portola was a captain of dragoons in the Spanish army who had distinguished himself in Europe before migrating to Mexico in 1767. He was born in Catalonia about 1723. Visitor General José de Galvez assigned him the job of removing the Jesuit priests from their mission to be replaced by Franciscans in 1767. From November 1767 to July 1770 he was governor of the province of Alta and Baja California. He died about 1784.

2 Nicolas Soler to Diego González, January 10, 1783. California Archives 15, Provincial State Papers, Benecia Military, Vol. V, machine page 166, Bancroft Library, University of California, Berkeley. Lt. Diego González was in command at Monterey from 1781 to 1785 and at San Francisco from 1785 to 1787. According to Bancroft's History of California (7 vols.; San Francisco, 1884-1890), III: 700, he was an incompetent officer who was dropped from the rolls in 1793. Soler was an inspector of presidio accounts.

3 Mariano G. Vallejo to Edward Vischer, October 19, 1878, Call No. 77/37 c, Bancroft Library.

4 Governor Sola to Viceroy, April 3, 1818, California Archives 25, Provincial Records Vol. IX, machine page 425. Don Pablo Vicente de Sola was a lieutenant-colonel of the provincial militia, born in Spain in 1761 and appointed governor of Alta California by the viceroy December 31, 1814. Promoted to colonel in 1793 because of his services against the pirate Bouchard, he served until November 10, 1822 as governor and died about 1826.

5 Hermenegildo Sal to Governor Antonio Romeu, March 4, 1792, California Archives, 6, Provincial State Papers Vol. XI, machine pages 233-237, and Hermenegildo Sal to Governor José Joaquín Arrillaga, December 29, 1792, Ibid., machine pages 237-242. Hermenegildo Sal came to California with the Anza expedition in 1776. He was appointed guarda-almacén, in charge of the warehouse at San Francisco from 1778 to 1782, became sergeant at Santa Barbara in May 1782, and three months later was commissioned alférez at Monterey. In 1795 he was commissioned a lieutenant. He was acting commandant at San Francisco from 1791 to 1794 and commandant at Monterey from 1785 to 1787 and 1796 to 1800.


7 Alberto de Córdoba to Governor Diego Borica, July 24, 1796 and July 30, 1796. Provincias Internas, Vol. 216, pp. 242-245, Archivo General de la Nación, Mexico City, D.F. Córdoba was a member of the Royal Corps of Engineers along with the most famous engineer, Miguel Costansó. Arriving in California late in 1795, he spent three years there working on the defenses of all four presidios.

8 Southern California Quarterly, 49 (September 1967), 327-336. The document is in Vol. XII, folios 177-183, Sección de Misiones, Archivo General de la Nación, Mexico City, D.F.

9 Pedro Fages was governor of the Californias from July 12, 1782 to April 16, 1791. Born in Catalonia, Spain, in 1734, he arrived in Mexico in 1767, was military chief of the sea branch of the Sacred Expedition to explore and settle California in 1769, and accompanied Portolá on the trips north to Monterey in 1769 and 1770. Commissioned a captain in 1771. He was commandant of the California establishments from July 9, 1770 when Portolá left, until May 25, 1774, during which time he incurred the enmity of Fr. Junípero Serra who made a successful trip to Mexico City partly to have Fages removed as commandant.

10 Miguel Costansó was the most famous and competent engineer of the mission period. He was born in 1741 in Barcelona, Spain, and was accepted into the Corps of Engineers in 1762. He was assigned to the command of José de Gálvez in 1768 and accompanied Portolá on the expedition to rediscover Monterey in 1769 and was with the party that discovered San Francisco Bay. Most of his service was in Mexico, and he died in Mexico City in 1814.
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Governor Felipe de Neve to Commanding General Teodoro de Croix, August 10, 1778. California Archives 22, Provincial Records Vol. I, machine page 90. Born in 1727 in Bailén, Spain, de Neve was commissioned a lieutenant in the army in 1749. Arriving in Mexico in 1765, he also was involved in the arrest and expulsion of the Jesuits in 1767. In 1775 he was appointed governor of the Californias with headquarters at the presidio at Loreto, Baja California, and in February 1777, he took up residence in Monterey when it was designated to replace Loreto as capital of the Californias. He was promoted to full colonel in 1778, wrote the Reglamento of 1781 and served as governor until July 1782, participating in the founding of the Santa Barbara Presidio just before his term ended. In 1783 he succeeded Teodoro de Croix as commanding general of the Frontier Provinces and died in November 1784.

José Francisco de Ortega was born in 1734 in Zelaya, Guanajuato, Mexico. At the age of twenty-one, he enlisted in the army and rose to sergeant when he joined the Portolá expedition to Alta California in 1769, distinguishing himself as the point man of the cavalcade, traveling ahead of the main body to scout the best route for the next day's journey. He was with the party that discovered San Francisco Bay. In 1773 he was promoted to lieutenant. He was a favorite of Junípero Serra who unsuccessfully recommended him to succeed Fages as governor of the Californias. After eight years as commandant at the San Diego Presidio, he was appointed the first commandant of the presidio of Santa Barbara and built its palisade structures, but being a poor manager of financial affairs, he earned the displeasure of a critical inspector, Nicolas Soler, and was replaced in 1784 by Felipe de Goycoechea. He was nevertheless commandant at Monterey from 1787 to 1791 and at Loreto until 1795. He died in 1798 after having been granted the Rancho Nuestra Señora del Refugio up the coast from Santa Barbara.

Felipe de Goycoechea was born in 1747, probably at Alamos, Sonora, according to Bancroft's History of California, but his service record states that his país (country) was Real de Cozolá, a town about fifty miles southeast of Culiacan in Sinaloa, Mexico. He was thirty-five when he became a cadet in June 1782, two months after the Santa Barbara Presidio was founded. Fifteen days later he was appointed an alférez and less than seven months later he was promoted to lieutenant. After a year and a half service in northern Mexico and Baja California, he was given command of the Santa Barbara Presidio, a heavy responsibility for a man with so little military experience, unless he had gained some prior to his appointment as a cadet about which information is lacking. His performance must have been adequate, since he was promoted to captain in June 1797. All of the permanent construction at the Santa Barbara presidio was done under the supervision of Goycoechea. He was a bachelor who, however, had descendants. His tenure as commandant at Santa Barbara was without any particular distinction, except that when George Vancouver, the English sea captain, visited Santa Barbara in November 1793, he was well-received by Goycoechea and greatly impressed by the presidio, stating that it excelled all others in neatness, cleanliness and other smaller, though essential comforts. He described the settlement, which consisted primarily of the presidio and mission, as bearing the appearance of a far more civilized place than any other of the Spanish settlements, the buildings appearing to be regular and well constructed, the walls clean and white, and the roofs of the houses covered with a bright red tile. In August 1793, Governor Arrillaga reported to the viceroy that the presidio at Santa Barbara, although begun last, was the most complete of all owing to the activity of the commandant. Goycoechea remained in command until August 1802 when he was made Habilitado General in Mexico City. In 1805 he was appointed governor of Baja California, a position he held until his death in September 1814 at Loreto.

Felipe de Goycoechea, September 16, 1788. California Archives 7, Provincial State papers Vol. XII, machine page 61. Since the plan signed by Fages, Plate VIII is almost identical and much clearer, the plan signed by Goycoechea is not reproduced herein.

Plan del Real Presidio del Canal de Santa Barbara signed by Pedro Fages, September 16, 1788. Papers of Irving Berdine Richman, Ayer Collection, Newberry Library, Chicago, Illinois. (Copy of original on linen.)