CC: June 27, '92
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CITY OF PISMO BEACH, CALIFORNIA
Public Works Department
Engineering Division
Public Works Division

CITY HALL
1000 BELLO ST. • P.O. BOX 3
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M E M O R A N D U M

TO: MAYOR, CITY COUNCIL

FROM: CITY ADMINISTRATOR AND DIRECTOR OF PUBLIC WORKS

SUBJECT: TRANSMITTAL OF CITY HALL SEISMIC ANALYSIS REPORT AND SPACE NEEDS REPORT

DATE: JUNE 21, 1991

The referenced two documents are attached for Council review and our discussion at a workshop at 10:00 a.m. on Thursday, June 27 in our Council Chambers. As the Council is aware, considerable work has been done regarding the need to modernize City Hall as well as upgrade or replace it in accordance with current City ordinance regarding unreinforced masonry buildings.

The following is a brief summary of the two reports presented, as well as summary of the recommendations from the original staff status report on City Hall dated February 6, 1990 and the White Paper Report on City Hall dated May 14, 1990:

SEISMIC AND STRUCTURAL ANALYSIS

Fred Shott and his consultants have prepared the report to address not only the structural adequacy of our current facility, but also other physical problems including mechanical systems, electrical systems and asbestos material problems. In addition, a cost estimate has been presented which estimates the cost of structurally reinforcing City Hall and also expanding City Hall to meet the expected space needs of the City in the future, and finally projects a cost to demolish City Hall and replace it with a new structure.

A synopsis of the report is found on pages 4-6, and the conclusions of this report and the cost estimates are found on pages 7-8. Additionally there is a table on page nine which summarizes the options of upgrading and/or replacing the structure and the estimated cost of that work. It should be noted that these costs shown in this study reflect only construction costs, and therefore the costs would be escalated approximately 25 percent to cover costs of design, site work and various administrative costs.

The cost comparison summary does project a cost to increase the square footage of City Hall up to that needed for the existing City

retained to provide a seismic and structural analysis and a space needs consultant to further refine the needs of City Hall. The White Paper Committee further recommended that we retain the services of a professional programmer to provide a complete pre-architectural program for City Hall, an architect to provide the facility design, and a financial consultant to help with the financing program of the new City Hall.

CITY HALL/NEIGHBORHOOD ADVISORY COMMITTEE

In approximately August 1990 an advisory committee was formed made up of a Council subcommittee, City staff and members of both the Catholic church and Lucia Mar School District. The committee met in at least two settings and began discussing options ranging from placing City Hall and various community buildings in an area spread out along the east side of Bello Street from Wadsworth to Price Canyon, and additionally the concept of sharing administrative space in City Hall with the school district. A major concern at this time was lack of a space needs analysis and determination of whether existing City Hall could be retrofitted to meet the URM ordinance. An additional issue of concern was for archaeological problems that might be encountered if expansion into either areas on the hillside east of City Hall or the hillside area around the Vets Hall was pursued. Because of this concern, the school district and the City jointly funded a preliminary archaeological report. That report has recently been given to City staff, and it is attached for Council's information, dated May 24, 1991. The report found that there are probably substantial archaeological resources that may be disturbed with building on either one of the two areas.

RECOMMENDATION: City staff believes that the findings of both the Structural Analysis Report by Fred Shott and Associates and the Space Needs Assessment with cost estimates by Jay Farbestein and Associates verify the recommendation of the White Paper Report that the most cost-effective solution to our problem is to demolish and rebuild City Hall on the present or slightly expanded site. City staff agrees with those findings and recommends that City Council review the various reports at the workshop session and form a policy decision by directing staff to further explore the option of demolishing City Hall and rebuilding a new approximately 28,000 sq.ft. structure on the present or slightly expanded site. With direction from the Council, staff will return in the future with appropriate financial and professional services recommendations to continue to explore this option. City staff will also be pursuing the obtainment of a seismic upgrade grant in accordance with Proposition 122 to minimize the cost to the City.

JA/eb

PISMO BEACH, CALIFORNIA, 93449
TELEPHONE 805/773/4657

(From City Hall
Status Report -
by Staff)

February 6, 1990

The Honorable Mayor and City Council
City of Pismo Beach
Pismo Beach, CA 93449

Dear Mayor and Council:

HISTORY

Thirty-seven years ago this month, the Pismo Beach Grammar School was purchased by the City of Pismo Beach for $25,000 after the building was condemned for use as a school following the November 21, 1952, earthquake. Four years prior to the 1952 earthquake, the State Division of Architecture condemned the building. This action brought about the construction of the Judkins Elementary School which was within weeks of nearing completion at the time of the earthquake. On December 8, 1952, the 600 students returned to school in their "new, ultra modern building on the heights, just above the older school."

UNREINFORCED MASONRY BUILDING

This building has served the public for the past sixty-seven years. It has served the citizens of Pismo Beach as their City Hall since 1954. Newspaper accounts noted this location was ideally situated to serve as City Hall.

It is recognized there is sentimental feelings about this building since it has served the community for so long. Like the school district, the City Council is also faced with addressing the age of the structure, its safety and its service obsolescence.

Public buildings generally expect a life of 50 years. The building was not designed as a City Hall; but for a purchase price of $25,000 for thirty-six years of service, the Citizens got a great deal in spite of its age.

The State Legislature in 1986 passed SB 547 (Government Code Section 8875, et seq.) requiring every local jurisdiction in Seismic Zone 4 to identify and mitigate all "potentially hazardous buildings," which are defined as buildings constructed of brick or other masonry materials, and that are not reinforced. For many years, it has been recognized that a new City Hall was needed. The school district similarly recognized the need for a new building which was reflected when the action was taken to construct a newer, more modern, school prior to the 1952 earthquake.

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The Pismo Beach City Council in June 1989 directed staff through the budget to begin studies and develop plans that would lead to a new City Hall knowing that by July 1993, the City would be required to strengthen the building or demolish it. The 7.0 October 17, 1989, earthquake that rocked Northern California was felt by those in City Hall. The first thought on everyone's mind was to get out of the building.

This building is obviously ill-suited for continued service as a City Hall. Of primary concern, is the Emergency Operation Center. All of the City Emergency Communications are housed in the Police Dispatch Center. Directly below, in the basement, is the telemetry communications that control our water and sewer systems. A building failure would paralyze our Emergency Operations and place the public at substantial risk and likely take the lives of people in and around the building.

The City Council was notified on January 11, 1990, that City Hall was declared a potentially hazardous (unreinforced masonry building), high risk category, and was ordered to determine if the building met or did not meet the requirements and standards established in Chapter 15.25 of the Pismo Beach Municipal Code that was adopted as a result of State law.

One year ago, a preliminary report was requested to determine the capacity of the existing structure to resist lateral forces caused by seismic activity. After a brief field inspection and review of the available construction drawings, civil and structural engineer Fred H. Schott noted:

> "The existing structure consists of reinforced concrete footings and unreinforced brick masonry walls with wood framed floor and roof systems except in the basement area on the east wing which has a concrete slab on grade at the lower level... In general, the masonry walls are in excellent condition and are of good quality. Unfortunately, they are not reinforced. The City Hall building was designed and constructed prior to any code requirements or technical knowledge about how to construct buildings which are capable of resisting seismic forces." Mr. Schott further noted..."that a detailed structural analysis of the building would reveal some inadequacies in the roof vertical load carrying system... Unfortunately, the degree of accuracy of a rehabilitation cost estimate is inversely proportional to the amount of engineering work done. At one extreme, one could merely throw number costs at the problems... At the other extreme, one does a complete analysis and preparation of construction documents required to actually bid out the work...the engineering costs for the extremes are $1,000...to $25,000...the City will have to evaluate their future building requirements to establish

the viability of continued City use of the existing structure although it may well be determined that rehabilitation would pay for itself in terms of increasing the value of the structure for use by others."

On the first extreme, free to the City, on August 2, 1989, a letter from DECOMA Engineering, from Los Angeles, was delivered to the City suggesting that following a Saturday visual inspection of the structural integrity of the building seismic upgrading could be accomplished in such a way that would not disturb the exterior state of the building. He felt the building has extremely attractive veneer work and should be preserved for its historical value and estimated a total project cost of $259,000. He suggested his engineering fees would be $18,000.

In addition to structural issues, we must be concerned about the removal of asbestos.

CAL POLY CONNECTION

Last year, at this time, the City working with Cal Poly's School of Architecture and Environmental Design, explored several possibilities to build a City Hall downtown, primarily using City owned parking lots on Pomeroy, Dolliver and Main. Although several interesting proposals were presented by the students, initial reactions were this location was not best suited for a City Hall.

The June 1989 R/UDAT report suggested that the City develop a Civic Center master plan for the area and undertake the necessary land trades and assembly to implement such a plan. The Civic Center should be a high priority on the Council's Capital Improvement Program. The grassroots citizens R/UDAT followup committee are recommending in Report #2 that the City Hall Complex be retained at the existing Bello Street location by reconstructing the facility on land at this location owned by the City or land in the immediate vicinity yet to be acquired.

In October 1989, the City again requested informal assistance from Cal Poly's School of Architecture and Environmental Design. Professor Loh counseled that to construct a new facility at another location would require a site selection study demanding a great deal of time, expense and professional involvement to understand the physical and economic impact to the surrounding area... To construct a new facility requires a comprehensive building program which includes the project statement, spatial requirements functional relationships, budget, time and other important issues. Without a comprehensive building program, the commissioned architect will have difficulty in conceiving a design to meet the City's needs and aspirations. Professor Loh explained developing a building program is very important. The school could assist in this endeavor without any difficulty.

The City staff, working along these lines of thought, have prepared preliminary information that will be used by Professor Loh's design class this winter. The class will illustrate the programming concept in visual terms and both the positive and negative aspects of the building program. This spring, the class will take the revised information and test the program again. By this time, the design proposals produced by the class should be able to clearly identify the City's needs, aspirations, image of the facility, etc. The budget planning for the construction of the facility and the final program can then be worked out.

A neighborhood plan is needed that will respect the surrounding environment, both natural and cultural, that is accessible to the handicapped and is energy efficient. We believe the success of this community undertaking is dependent on cooperation in developing a neighborhood plan that best serves our collective and individual purposes and interests.

The public's investment in their City Hall is significant and long term. The City Hall must fulfill three distinct roles: as a Civic symbol; as a tool for modern administration; as an emergency operations center and as a focus for community activities.

Each of the City departments have addressed questions regarding the physical condition of the existing facility, site analysis of the current location, service demand, space needs, modernization and efficiency for customer service. We are concerned with the role and size of every department now, and in the future, and the department's relationships with other departments to insure the design of the building is flexible, accessible and functional in light of the community's goals and interests.

Obviously, the existing site has several constraints and will pose significant design challenges. The City Hall has coexisted in this neighborhood area for many years and is very sensitive to the need of the neighborhood. The City, in particular, has cooperated with the Saint Paul the Apostle Catholic Church, which owns the parking lot that accommodates about 54 vehicles currently used by the City. The Church in turn uses the City-owned property for parking at the Veterans Hall. Also, the Lucia Mar School District owns property bisecting the Veterans Hall and the parking lot and property directly behind City Hall. We must explore all the alternatives for maximum shared benefit as we consider a neighborhood plan.

FUNDING

Preliminary inquiries have been made to the financial market soliciting financial information that will assist the City in developing the financial alternatives to pay for the facility. We have received initial information from six financial advisors and

underwriters. Several financing options and revenue sources are available and will be thoroughly analyzed concurrent with the planning process.

The City Council has provided consistent policy guidance by being proactive and establishing goals and objectives. The September 1988 Strategic Plan examined the missions of each City department, City goals, current and obtainable resources and developed new strategies to plan for the future and effectively and efficiently meet the service needs of this diverse community. In January 1989, a Citizens Advisory Committee detailed findings pertaining to critical growth management issues and identified the need to replace City Hall. The committee report accepted by the City Council said:

> "It is evident as it relates to the structural condition of City Hall that substantial cost will be incurred if a program to retrofit City Hall is pursued in order to comply with Seismic Retrofit laws going into effect statewide in 1990. Irrespective of other issues, City Hall is the single most critical facility within the community as it relates to disaster management and other considerations that lead to the need for police and fire dispatch presently housed at the facility and all administrative services of the community. In addition to the structural condition of the buildings itself, facility and space needs are presently not being met within the existing walls. Physical expansion of the building is also necessary in order to house the on-going operations in place as well as potential additional personnel as the City continues to grow. In conclusion, the structural deficiencies of the building and lack of space tend to suggest that a study should commence for the reconstruction of City Hall at this site, or at another location. The recommended solution is to begin planning the ultimate needs of City Hall and evaluate programs to finance retrofit/reconstruction/relocation of City Hall depending on the preferred location."

In March, 1989, the City Council addressed 44 issues and developed goals, programs and priorities to provide direction. The question: should the City build a new City Hall---where, when and how much was asked. The City Council responded,

> "Yes, we should build near the present site and start putting money aside now. Yes, we should build at the present location, as soon as possible and to expand including the tennis courts and if the fire station is moved; use the land there. Start planning now. It would be hard to beat where it's at now."

In June, 1989, the City Council appropriated $50,000 to begin plans to construct a new City Hall and to address their concerns developed in their goal setting workshops and issues identified by the Citizens Committee. Also in June, the Community-based effort using R/UDAT was designed to allow local citizens greater control and involvement in decisions affecting the future development of Pismo Beach. The community based report is recommending the City Hall be retained at the existing Bello Street location by reconstructing the facility on land at this location owned by the City, or land in the immediate vicinity to be acquired.

GENERAL PLAN UPDATE

In October, 1989, the City Council directed the Planning Commission to update the General Plan and use Zucker Systems. The General Plan will include a municipal services and public facilities element which will further address the City Hall issue.

CONCLUSION

Many significant issues are being considered by the community which will continue to require direct and open communication. The City Council in October, 1989, requested this progress report. The City staff will continue to address the City Hall issue and expect to provide the next update at the end of March and will follow on with Cal Poly who will complete their project this June. This scenario will allow the City with the least expense to maximize creative alternatives to then prepare necessary documents for soliciting professional support. We hope you agree that this major undertaking has been approached with caution, forethought and intent to provide as much information early on before you make the final policy decisions that will affect this community for the next fifty plus years.

Special recognition to your management team, Sharon Jones, City Clerk; Jim Ashcraft, Public Works Director/City Engineer; Michael Swigart, Community Development Director; Margaret Vicars, Finance Director; Fire Chief Paul Henlin; Police Chief Brook McMahon; and Lieutenant Gary Holt, and Mark Hall-Patton, Director, SLO County Historical Museum, for his assistance with the History Section and special appreciation to Cal Poly Professor, Larry, Loh and the students of the School of Architecture and Environmental Design is in order for their outstanding effort to date.

Sincerely,

Richard L. Kirkwood
City Administrator

RLK:jy

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(From White Paper Report 5/14/90)

RECOMMENDATIONS

The Mayor's introductory memorandum to the City Hall Review Committee stated "the objective of your committee is to research, fact find and present an independent, unbiased report to the City Council for public comment." As the Committee became familiar with this assignment, we adopted a two-part objective for our report. First, we have sought to make an objective determination of the actual extent and type of facilities a City Hall for Pismo Beach should include. Second, we have identified what we feel is the optimum available scenario for action on a City Hall project, including site selection and development program. Given each Committee members' opportunity to form opinions on a recommended course of action, we have selected to discuss the majority and minority opinions.

MAJORITY OPINION

The majority opinion is Scenario 1B - Build a New City Hall on the Existing Location. This decision is based on the following conclusions:

1. Development of new City Hall facilities could be phased.

2. Should the existing building be replaced by an entirely new structure, demolition of the existing building would occur after some new construction is ready for occupancy.

RECOMMENDATIONS

MAJORITY OPINION (Continued):

3. Arrangements for use of the Saint Paul's church parking lot should be formalized through a) a land trade, b.) a land purchase, c) execution of a long term lease, or d) establishment of irrevocable and perpetual easements.

4. The existing tennis courts should be utilized for either building or parking area in the new City Hall project.

Although building a new City Hall ranks first, there is the opinion that a combination of remodeling and new construction has merit. The following conclusions accompany Scenario 1A.

5. Depending on the results of a seismic retrofit study of the existing building, the new facilities would be a combination of new construction and remodeling of the existing building; retaining as much of the original facade as possible.

6. If the project includes the remodeling of all or part of the existing building, the "essential services" component of Police Department facilities should be relocated outside of the existing structure early in the project.

RECOMMENDATIONS

MAJORITY OPINION (Continued):

7. It may be prudent to consider rezoning with the intent to purchase the two properties that front Bello Street between the Fire Station and the Church. The acquisition would add close to a half acre for parking or future expansion.

MINORITY OPINION

The minority opinion is Scenario Number 5 - Relocate City Hall to Price Street. This scenario has complications for the selected site depending on actual land availability and manageable costs. In balance, a Price Street location offers futuristic thinking about the business district. Increased citizen traffic could revitalize an under-utilized area that has potential.

Conclusions for this scenario are as follow:

8. Property totalling at least 1.4 acres should be acquired for the project.

9. If possible, land acquisition should be accomplished through exchanges, rather than through sale and repurchase. Condemnation probably would be required.

RECOMMENDATIONS

MINORITY OPINION (Continued):

10. Existing building on the selected Price Street site would be demolished.

11. The new City Hall could be phased construction.

12. City Hall functions would remain in the existing building until the first phase of new construction is completed and ready for occupancy.

13. The Fire Station will remain on Bello Street if the new land site is too small.

COURSE OF ACTION

Regardless of which site and development scenario is pursued, the Committee suggests establishing the following considerations when setting a course of action:

A. Any project for City Hall should maintain all City Departments in one location (Fire Station excluded).

B. Strategic and fiscal planning for a City Hall should be pursued immediately, ie. start allocating money in the General Fund.

COURSE OF ACTION (Continued)

C. Construction of a City Hall project could be phased, to reduce initial cost to the City.

D. The project size is estimated at a maximum of 28,000 square feet, to meet City needs until the year 2020.

E. The budget for the project will likely run a minimum of $3 million.

F. Further space needs analysis should seek more balance between the space requests of the Community Development Department and Police Department, and the requests for the remainder of City Departments.

G. To establish a valid square footage requirement, a space consultant might be retained.

H. If re-use of the existing building is being considered, retain a structural engineer to prepare a detailed seismic analysis of the existing building.

I. Retain a professional programmer to provide a complete pre-architectural program.

J. Decide on the actual re-use capabilities of the existing structure.

COURSE OF ACTION (Continued)

K. Retain an architect to provide facility design.

L. Retain a financial consultant to help develop a financing program.

If the selected City Hall scenario involves NEW CONSTRUCTION either ON A NEW SITE or ON THE EXISTING SITE, the following actions are recommended:

M. Enter into preliminary negotiations for a project site.

N. Enter into preliminary negotiations to ascertain the size of City property for trade or sale.

O. Retain a professional programmer to provide a complete pre-architectural program and identify required site area.

P. Finalize site acquisition and necessary rezoning.

Q. Retain an architect to provide facility design.

R. Retain a financial consultant to help develop the funding program.

In closing, we will briefly discuss how the City Hall project is to be financed. During the research portion of our project, we found support for four different funding methods:

1. A non-profit California corporation such as the existing Pismo Beach Public Facilities Corporation secured through the General Fund.

2. A Mello Roos District levied tax, and

3. A General Obligation Bond levied tax.

4. Lease back to the City of a completed building by a private developer.

Each idea has its merits. With the knowledge and direction from a financial advisor, such as one of the groups that has submitted a proposal, a funding method can be selected. Following the completion of the pre-architectural program may be the appropriate time to focus on this aspect. In the meantime, we feel that City Department Managers need to be prudent in their requests for staff and equipment. This would demonstrate to the Citizens a good faith effort by City Management to make the best use of tax dollars.

Respectfully Submitted,

CITY HALL REVIEW COMMITTEE

Tim Bittner
Bruce Fraser
Henry Myers
Nancy Stute
Kay Tavasti

A PHASE 1 ARCHAEOLOGICAL RESOURCE EVALUATION OF TWO POTENTIAL BUILDING SITES FOR THE PISMO BEACH CITY HALL CITY OF PISMO BEACH, CALIFORNIA

PREPARED FOR

City of Pismo Beach
Community Development Department
1000 Bello Street
Pismo Beach, California 93449

PREPARED BY

Larry R. Wilcoxon
Brian D. Haley

May 24, 1991

TABLE OF CONTENTS

INTRODUCTION

The following report presents the results of a program of cultural resource background research and intensive archaeological field survey of two sites for a proposed new City Hall facility in Pismo Beach, California. One site, hereafter Area 1, lies on the north corner of the intersection of Price Canyon Road and Bello Street. It is dominated by Camp Hill upon which is located a city water reservoir. The parcel comprises approximately 5.53 acres and is bordered by the athletic field of Francis Judkins Junior High School to the northeast, the Veteran's Hall to the west, and an asphalt drive to the northwest which approaches the school parking lot from Bello Street. The second site, Area 2, is a vacant rectangular parcel of 1.57 acres which lies between the current Pismo Beach City Hall parking lot on its southwestern side and Judkins School to the northeast (Figure 1).

In addition to the city water reservoir, Area 1 contains a recently built--and still unoccupied--house in the western corner on Bello Street, a pump house adjacent to the western corner of the reservoir, and several graded dirt roadways, one of which encircles the reservoir (Figure 2). A concrete lined culvert runs from the southeastern side of the reservoir berm due south down Camp Hill to the intersection of Price Canyon Road and Bello Street. The reservoir itself is a rectangular covered structure embedded in an artificial berm over 10 feet high and supporting a chain link fence. It is situated on the crown of the hill, which in turn appears to have been artificially levelled for the reservoir. Camp Hill is slightly longer in its northwest-southeast axis. The northwest and west facing slopes are especially steep. The southeastern side of the hill is moderately sloped and very rocky, containing both small bedrock exposures and coarse surface gravels with only a thin topsoil. The northeastern slope is the gentlest and shortest as the native terrain is higher on this side of the hill. Abutting the northeastern edge of Area 1 is a large pad of fill supporting the school athletic field. The broad and moderate southwestern slope faces Bello Street and the Pacific Ocean in the distance beyond. A roadcut for Price Canyon Road on the southeast edge of Area 1 is 30 feet deep and one for Bello Street is over 10 feet in depth. The Veteran's Hall and the new house are cut into the western slope of the hill.

Area 2 encompasses the remnant of a marine terrace and the hillside rising behind it to

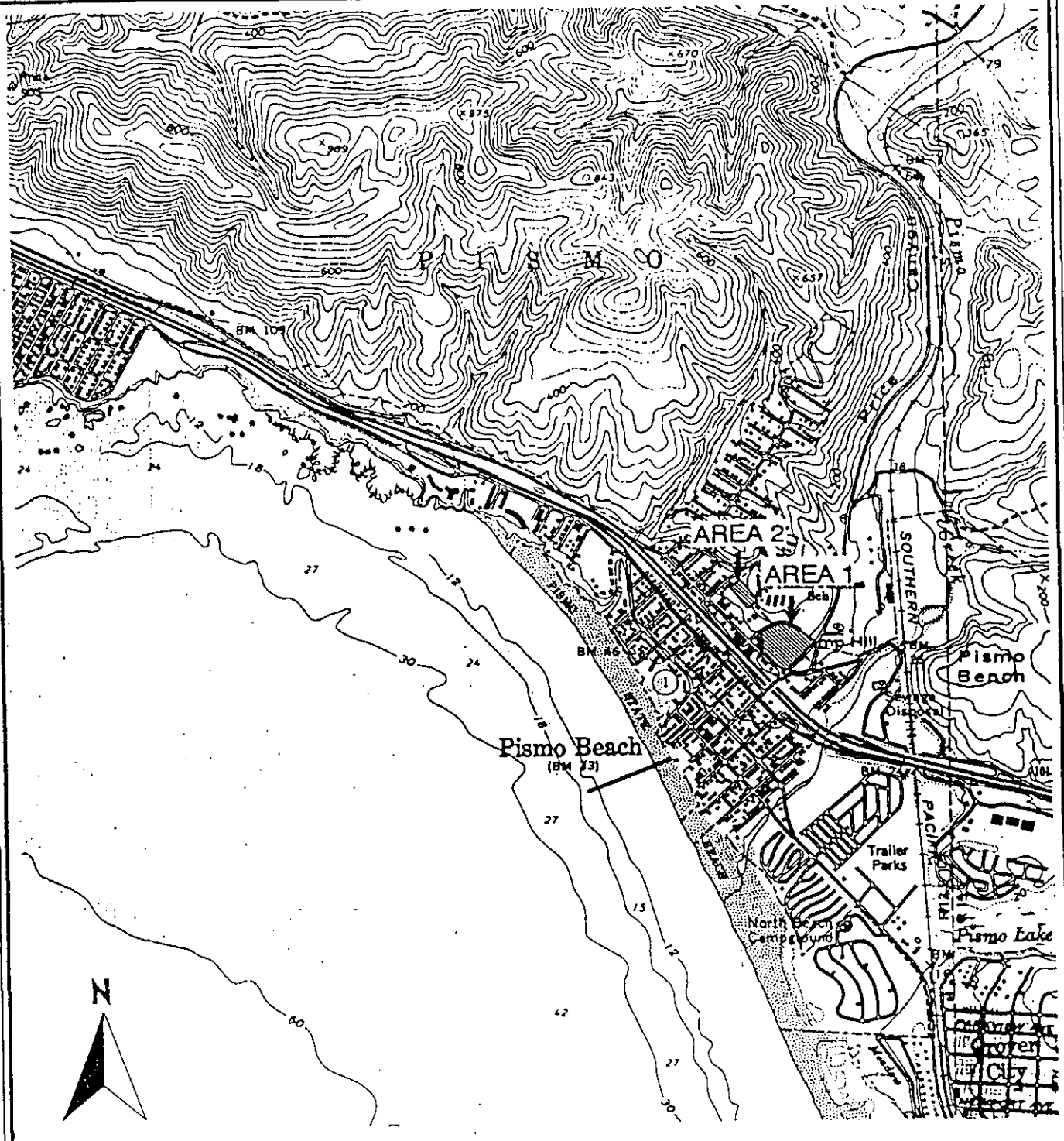

FIGURE 1: Project Location Map Pismo Beach City Hall Sites

U.S.G.S. 7.5' PISMO BEACH QUADRANGLE
SCALE 1 : 24,000

Larry R. Wilcoxon Archaeological Consultants
7671 Dartmoor Avenue
Goleta, CA 93117

Judkins School (Figure 2). The gently southwest sloping terrace occupies the northwestern two-thirds of the parcel. Area 2 contains only a sign of standing letters proclaiming "Pismo Beach" and a dirt footpath which climbs the hillside. Three houses and their fenced yards border to the northwest, while to the southeast the marine terrace narrows and disappears within the parcel, and only the empty southwest-facing hillside extends beyond. Vacant hilltop and school buildings lie to the northeast. A sloping cut eight feet in depth forms the southwestern edge of Area 2. This cut levels the parking lot on this side of the parcel. The parish house of St. Paul's Catholic Church is located just off the western corner of Area 2.

Vegetation within the project area consists mainly of grasses, mustard, thistle, and various wild flowers. In Area 1 there is also a small community of coyote brush on the rocky southeastern hillside, and a half dozen eucalyptus trees surrounded by a dense stand of poison oak on the northeastern slope.

The scope of work for the archaeological investigation included a) a cultural resource records search of archaeological and historic documents pertaining to the project area and immediate environs, b) an intensive field survey to locate, describe, and determine the spatial extent of any potentially significant cultural resources, and c) the formulation of appropriate management recommendations. No attempt was made to assess project impacts to cultural resources as no specific development plans for the property have been formulated at this time. The primary purpose of this study is to provide an inventory of cultural resources known to be present on the property so they may be properly considered as constraints in future development. The field work and background research were carried out by a team of archaeologists under the direction of Larry R. Wilcoxon between April 12, 1991 and the date of this report.

BACKGROUND RESEARCH

In order to determine the location and nature of known and previously recorded cultural resources within or near the project area, existing archival information was located and thoroughly reviewed. Archaeological site records, maps, field notes, current city, county, state, and federal cultural resource listings, and published and unpublished literature were all carefully

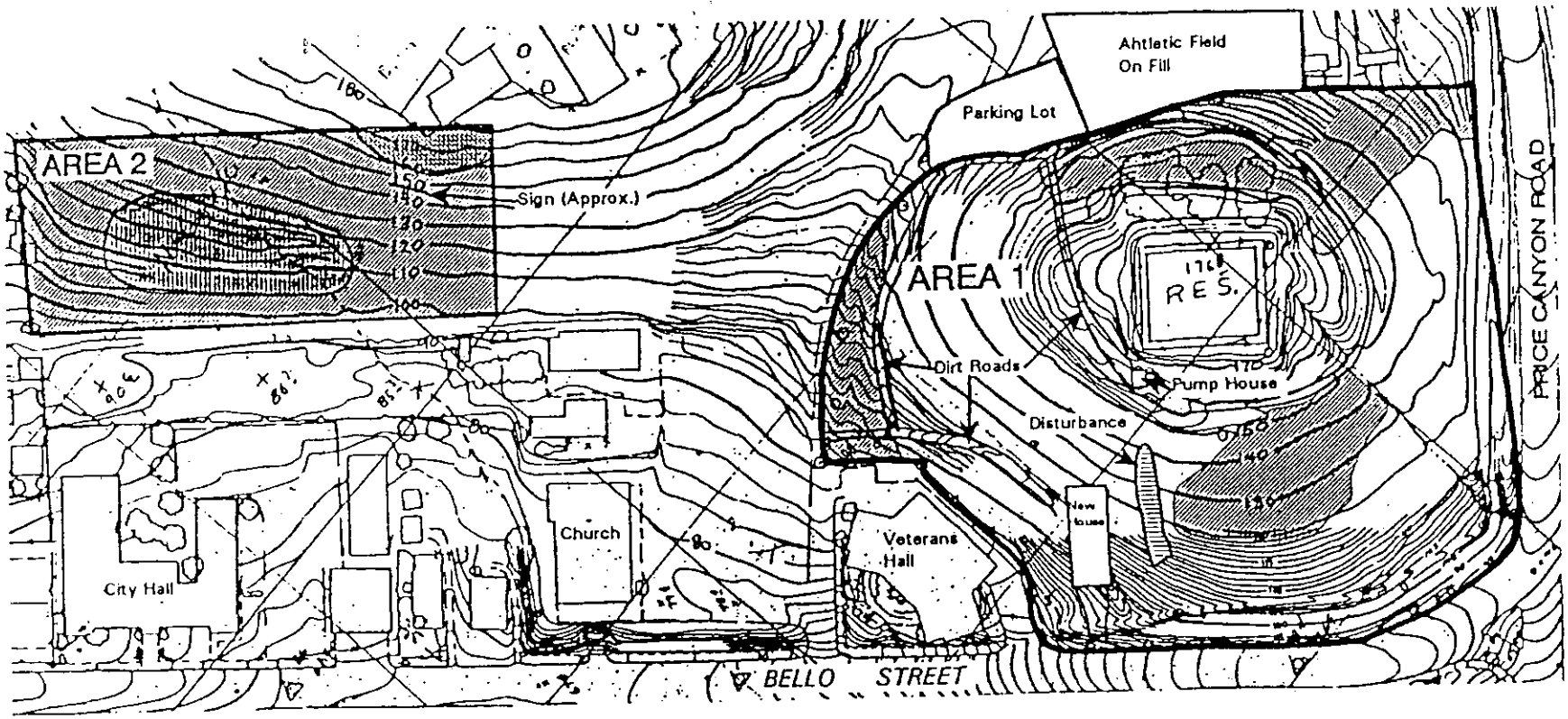

FIGURE 2: Extent of SLO-832 Cultural Deposits At Potential City Hall Building Sites

SCALE: 1" = 154'

Larry R. Wilcoxon Archaeological Consultants
7671 Dartmoor Avenue
Goleta, CA 93117

examined. During the background research phase of the investigation, the following sources were consulted for pertinent materials:

- University of California, Central Coast Information Center, California Archaeological Site Survey;
- University of California. Santa Barbara, Map and Imagery Library;
- Larry R. Wilcoxon Archaeological Consultants in-house archives.

Prehistoric and Historic Overview

Knowledge of prehistory along the southern San Luis Obispo County coast is very limited despite a substantial increase in the number of cultural resource investigations over the past two decades. Archaeological studies associated with power plant construction at Diablo Canyon have resulted in the formulation of a regional cultural sequence which, with some important exceptions, generally parallels that developed for the Santa Barbara Channel coast south of Point Conception (Greenwood 1972). Analysis of well-dated artifact assemblages from six archaeological sites in the immediate vicinity of Diablo Canyon has provided relatively detailed information about changes in many artifacts classes and dates of past human occupation along this portion of the California coast. Knowledge about the sequences of house types, settlement plans, burial practices, and subsistence remains is, however, comparatively limited.

Early human habitation of the coastal region has been securely dated at 9,000 years B.P. [Before Present] (Greenwood 1972:85-88). The ancestors of these early inhabitants are believed to have had their roots in the Paleo-Indian cultural tradition of the greater North American continent. Few details of Paleo-Indian lifeways from the area are known, because few sites of this tradition have been discovered in datable contexts. Many researchers believe that sites of this time period have either been covered by deep sediments or were inundated by rising post-Pleistocene sea levels. The paucity of archaeological sites may reflect low population levels of hunter-gatherer groups occupying California at this time and/or poor preservation of organic materials needed to date site deposits adequately. From limited discoveries in eastern California near Tulare Lake and at widespread localities in the Great Plains and Southwest, we know that Paleo-Indian populations were greatly dependent on hunting large Pleistocene mammals.

Climatic warming at the end of the Pleistocene resulted in geographical displacement or extinction for most large Pleistocene mammals (Martin and Wright 1967). This factor combined with the growth of human populations caused Post-Pleistocene populations to increase their dependence on wild plant foods and small game. At this time, food-collecting populations may have moved from the interior to the coast of California where their sites are classified as the Early Milling Stone Horizon (Greenwood 1972:93; Kaldenberg 1976; Wallace 1978).

To explain the similarities shared by the lower component at SLO-2 at Diablo Canyon, the Borax Lake site, and southern California Milling Stone sites, including Topanga Canyon, Glen Annie, and the Browne site, Greenwood (1972:93) suggests that their occupants were descendants of Early Playa-Flake peoples who moved from the interior toward the coast in response to changing environmental pressures. More recent research has expanded the geographical range of Greenwood's Early Milling Stone occupation to encompass the coastal area of Vandenberg Air Force Base, where a site near Surf (SBa-931) contains lower midden deposit dating between 7,620 and 9,215 radiocarbon years (Glassow *et al.* 1981).

The earliest well-defined cultural tradition in the San Luis Obispo area is the Milling Stone Horizon. This tradition, known locally as the Oak Grove Culture (Rogers 1929), reflects a generalized hunting and gathering adaptation with a specialized emphasis on the collection and processing of wild plant seeds. The importance of plant foods in the early economy is indirectly reflected in the large number of grinding implements (manos and metates) frequently encountered in the cultural deposits and the occurrence of sites on elevated landforms near areas where plants are abundant. The rare occurrence of crude projectile points, core and flake tools used for scraping and cutting, and occasionally preserved faunal remains of medium and small-sized game, all indicate that hunting was an active pursuit but less important to the economy. The degree to which marine resources were exploited by populations of this period varied throughout the region (cf. Macko and Erlandson 1980; Wallace 1978; Glassow, Wilcoxon, and Erlandson 1988). Contemporary Milling Stone Horizon sites along the Santa Barbara Channel date from between 6000 and 2400 years B.C. [Before Christ] and are classified within the earliest two phases of the Early Period (King 1981). Greenwood's findings at Diablo Canyon

extend this date back in antiquity by approximately 1,300 years.

By 5000 years ago, hunting of land and sea mammals, fishing, and acorn gathering emerged as major subsistence activities within the area. This shift in economic focus defines Rogers' (1929) second cultural horizon: the Hunting People. Archaeological sites dating to this period contain large quantities of chipped stone artifacts and chipping waste. Frequently reported artifacts include shell, stone, and bone beads and ornaments, stemmed and side-notched projectile points, bifacially flaked knives, and plummet-shaped charmstones. The continued importance of plant foods is indicated by the appearance of globular sandstone bowls and crude pestles. Sites situated near the coast and along major perennial streams provide evidence that people were fishing with hook-and-line. Archaeological sites of this era are found in a wide variety of habitats throughout the region and include major settlements with residential features and cemeteries, minor settlements occupied intermittently and/or seasonally, resource extraction and processing camps, and rockshelters with pictographs.

At Diablo Canyon, Greenwood has identified Hunting Period components at four sites and has radiocarbon dated the occupation between 5,570 and 3,150 years B.C. Local diagnostics of this period at Diablo Canyon include nearly equal proportions of milling stones and mortars, large side-notched and stemmed projectile points and blades, flexed burials, and food remains dominated by land mammal, sea mammal, shell, and fish. Today most archaeologists consider sites of the Hunting Period to fall within the last phase of the Early Period (Ez) or Phase 1 of the Middle Period (King 1981).

Sometime between A.D. 800 and A.D. 1150, the Canaliño cultural tradition, a prehistoric predecessor of the historic Chumash Indians, first emerges among Indian populations occupying the Santa Barbara Channel and adjacent islands as they began to specialize in the exploitation of the marine environment. This development coincides with King's Late Period (King 1981). The archaeological record for this era along the Santa Barbara Channel points to high population densities, large coastal communities, and extended trade networks exhibiting links with the adjacent Channel Islands and the greater Southwest. However, these developments lagged or never took hold north of Point Conception, and these differences are the subject of intensive

research (Glassow *et al.* 1981; King 1984; Glassow and Wilcoxon 1988).

Large Late Period coastal sites containing dense shell midden deposits north of Point Conception are almost always situated in protected areas along the south or southeast-facing coasts, and many of the larger archaeological sites are located inland adjacent to major perennial streams (Glassow and Wilcoxon 1988). Furthermore, the area north of Point Conception contains a higher density of sites than recorded for the south coast, presumably reflecting less dependence on fishing: historic period populations living north of Point Conception apparently did not possess the *tomol* or plank canoe as did the inhabitants of the Santa Barbara Channel. The higher site density in the region is thought to reflect a more mobile and diffuse population with a more varied subsistence regime.

Hunting and processing technologies persisted as major elements in archaeological assemblages north of Point Conception and projectile point styles common to the Santa Barbara Channel were not adopted in San Luis Obispo County region until A.D. 1150 (Greenwood 1972:91; 1978a:552). The Late Period assemblage at Diablo Canyon is characterized by concave based triangular and small leaf-shaped projectile points, inlaid bird bone whistles, olivella disk beads, sandstone bowls and mortars with flat rims and flared walls, clam and mussel beads, and shell fishhooks.

During the historic period the project area was once part of the territory occupied by the Obispeño Chumash. The Obispeño spoke a distinct dialect of the Chumash language, one of many languages classified in the Hokan linguistic family. The entire extent of the Obispeño territory is imprecisely known, but is thought to have encompassed the coastal terraces and ranges between San Carpojo Creek/Ragged Point in the north to the Casmalia Hills region in the south. The eastern boundary is poorly defined but is generally considered to conform with the coastal mountain ranges of the Santa Lucias and the San Rafaels. The interior border between the Chumash and the Salinans is placed near Paso Robles (Gibson 1982a:77-89). In the Obispeño region, the population density has been estimated to fall between .25 and .45 persons per square kilometer (Heizer 1960). According to the research of King (1984) and Gibson (1982a), the Obispeño territory was represented by at least 42 historic rancherias or villages. At

Mission San Luis Obispo baptisms were recorded for Obispeño villages through 1806 (King 1984: Table 1).

Initial European contact with the Obispeño Chumash is recorded in 1587 when Manilla Galleon pilot Pedro de Unamuno entered *Morro* Bay and traveled a short distance inland. Eight years later, Sebastian Cermeño, also a galleon pilot, made contact and traded with a large group of Indians along the coast at San Luis Obispo Bay (Wagner 1929:161).

The first Spanish land expedition, under the direction of Gaspar de Portolá, took place nearly 200 years later in 1769. Portolá's expedition marked the beginning of a new way of life. Between 1769 and 1823, twenty-one missions were established in California, including five among the Chumash speaking peoples. Mission San Luis Obispo de Tolosa was the first mission established in Chumash territory. It was founded on September 1, 1772 in Cañada de Los Osos. Mission recruitment from Chumash villages ultimately resulted in the entire Indian population being incorporated into mission settlements and native villages being abandoned. Seasonal visits to native village sites may have occurred in the decade following village abandonment with some former village sites serving as sheep and cattle camps or fishing localities during the Mission Period (Johnson 1984:48).

The historic Chumash village of *Pismu* is considered to be a satellite community of *Sepjato*, located at Avila, which became a more permanent settlement after 1770. *Sepjato* is the largest and best known village in the region and was associated with the Obispeño chief Buchón who was reported to have political influence for 20 leagues (52 miles) to the north and south. King (1984: Table 1) records 120 baptisms for the combined populations of *Sepjato* and *Pismu*. These conversions occurred over a thirty-four year period between 1773 and 1806. Inter-village marriage linked *Sepjato* with *Tsetacol* located at Carpojo Creek and *Sisolop* near Point Conception.

At the Spanish missions, the Chumash learned many European skills and practices, but they were also exposed to diseases from which they lacked immunity and large numbers of neophytes died. After the missions were secularized by the Mexican government in 1834, the Franciscans remained at many of the missions to serve the spiritual needs of the community.

Subsequently, many of the Chumash became associated with the growing rancho population at the various ranchos that were established throughout the region. On many of the ranchos Chumash men served as vaqueros and were involved in livestock raising and other ranching activities while Chumash women provided domestic services such as childcare, meal preparation, and general ranch chores. Many Chumash women were known to have intermarried with Spanish landholders and former Presidio soldiers.

The Chumash were not extensively studied by early ethnographers between 1850 and 1900, because early ethnography in California was focused on native societies which had not been missionized. Most aspects of pre-contact Chumash society survived only as oral tradition after the Mission Period. By 1900, only a small Chumash population near Santa Ynez and scattered individuals in San Luis Obispo, Santa Barbara, and Ventura Counties still spoke the Chumash language. Between 1910 and 1940, John P. Harrington of the Smithsonian Institution made extensive ethnographic investigations among the Chumash, but much of his work has remained unpublished.

After secularization the lands under mission control were apportioned to influential families and individuals loyal to the new Mexican Government. Soldiers were often given priority in the partitioning of land as partial compensation for previous services rendered the government. After California achieved statehood in 1850, the U.S. Government established a Land Commission to decide the validity of all claims to land under former Mexican titles (Bean 1973:156-157).

Previous Archaeological Research

A records search performed at the Central Coast Information Center of the California Archaeological Site Survey, UCSB revealed that both Areas 1 and 2 lie within a previously recorded prehistoric archaeological site, SLO-832, formerly designated SLO-767. Although its existence was known by some for many years earlier, the site was not recorded officially until 1976 when Col. W. B. Sawyer performed a surface reconnaissance on the current City Hall grounds (Sawyer 1976). Sawyer recorded a dark colored prehistoric coastal shell midden containing lithic and shell artifacts covering an enormous area, and including rock outcrops

featuring shelters, bedrock mortars, petroglyphs, and pictographs. He suggested as well that at least half of the site had already been destroyed or altered by construction. The vast site covers nearly the entire area between Wadsworth Avenue and Pismo Creek from U.S. Highway 101 northeast for 0.3 miles.

Sawyer's original estimated boundaries receive support from two surveys which encountered no archaeological materials near yet outside the boundaries: a survey of 0.23 acres northeast of Wadsworth Avenue and Schaefer Street (Macko 1979a), and of the City Maintenance Yard on Bello Street east of Pismo Creek (Sawyer 1976). Some fill, including redeposited midden, is found within the eastern boundary of the site (Macko 1979b; Breschini and Haversat 1982a) and in the central area occupied by Judkins School (Gibson 1982b; 1990).

SLO-832 has been investigated piecemeal as independent development plans for individual parcels and tracts within the site's boundaries have come forward. All surface surveys conducted within Sawyer's estimated site boundary have encountered prehistoric cultural materials (Sawyer 1976; Breschini 1979; Macko 1979b; Bente and Hilderman-Smith 1980; Dills 1980a and 1980b; Haversat and Breschini 1981; Hampson *et al.* 1982). Limited subsurface testing has been performed on portions of the site by Gibson (1980; 1982b), Zahniser (1982), and Breschini and Haversat (1982a), and salvage excavation has been conducted in the Solar Heights Tract by Zahniser and Brown (1980). Portions of the site may have been excavated by the Southwest Museum as early as the 1920s, if they correspond to an earlier designation SLO-81, but this remains unresolved (Macko 1979b).

Three radiocarbon samples obtained from auger samples in the eastern portion of the site within Price Canyon yielded dates of 6530 ± 130 years B.P. [Before Present] (UCR-1341), 8140 ± 250 B.P. (UCR-1343), and 8520 ± 140 B.P. (UCR-1342) (Gibson 1982b:13; Breschini and Haversat 1982b:11 cited in Hampson *et al.* 1982:3). *Olivella* shell beads have been observed at the site as well, and suggest a Middle Period occupation in addition to the Early Period occupation indicated by the radiocarbon dates (Gibson 1982b:13-14).

Human remains have been encountered at SLO-832. Gibson (1982b:5) reports having heard many stories that Indian interments with grave goods were unearthed during construction

of Judkins School. He also reports that:

> *Since the early 1950s, human remains have been found adjacent to Pismo Creek, along Bello Street, and at two location on the Judkins School property* (Gibson 1982b). *Human remains have been noted from two areas within 50 meters south of the proposed waterline. Between 1979 and 1982, portions of several burials were accidentally uncovered in an area of livestock sheds and were reburied in the same area south of auger 1. Also during archaeological monitoring a single burial was briefly unearthed during installation of a drainage pipe as part of the Judkins School playing field project in 1983. It is located in about the center of the oval playing field about 50 meters south of the proposed waterline* (Gibson 1990:4).

The location of the burials encountered in 1979-1983 lies a very short distance northeast of, and perhaps within, Area 1 of the current study.

SLO-832 has been the subject of controversy as development has threatened various portions of the site over the past 15 years. Issues raised by the Solar Heights Tract in 1979 on the eastern side of SLO-832 included the adequacy or inadequacy of the City's environmental reviews and archaeological mitigation measures, site preservation versus archaeological excavation, and Native American participation and monitoring (Zahniser 1979a; 1979b; 1979c; Hopa 1979). The associated controversies gave considerable impetus to the current system of archaeological review in Pismo Beach as can be seen in the conduct of subsequent archaeological inquiries at this site and others in the City.

Much of the debate surrounding SLO-832 has focused on the presence of a potential prehistoric Chumash Winter Solstice observatory on one of the rock outcrops east of Judkins School. Although the weight of professional opinions either flatly rejects the existence of such a feature on the site or finds the current evidence inconclusive (cf. Zahniser and Brown 1980; Woodward 1981), there are other archaeologists who actively support this interpretation of the rock outcrop (cf. Gibson 1982b; 1990). Archaeologists from the California Department of Parks and Recreation found the claims of ceremonial and astronomical use unconvincing and recommended against state acquisition of the property for interpretive purposes (Woodward 1981).

Several of the previous studies have included portions of Area 1. Two early surveys associated with the Solar Heights Tract investigated an easement for a water pipeline from the southwest side of the reservoir on Camp Hill eastward to Price Canyon Road and Solar Way (Breschini 1979; Macko 1979b). The easement circled the south side of the reservoir and exited Area 1 to the southeast. A ten foot wide path was graded at the time of the survey. Macko encountered a midden deposit within the easement route, and although it is not clear from his report, this may lie primarily in the adjoining property to the east and perhaps in the eastern corner of Area 1.

Gibson's testing for proposed developments at Judkins School was performed using a four inch bucket soil auger to test the depth and content of the midden (Gibson 1982b). His Auger 1 falls within Area 1, northeast of the reservoir and between it and the encircling graded road. At this location he encountered dark brown shell midden to a depth of 45 cm overlying a yellow sandstone sterile soil. The sample taken from this location yielded 249.1 grams of shell, predominantly Pismo Clam (*Tivela stultorum*), but also including California Mussel (*Mytilus* sp.), Pacific Littleneck clam (*Protothaca* sp.), cockles (*Clinocardium* sp.), Bent-nosed clam (*Macoma* sp.), Chiton (*Tonicella* sp.), and limpets. Chipped stone artifacts were not found at this location, but did occur in low densities in seven of the 13 other auger locations. In other locations the midden was found to be up to two meters thick. Gibson interprets the midden in the vicinity of Auger 1 as a relatively intact deposit.

Gibson's subsequent study for a proposed waterline from the Camp Hill reservoir across Judkins School to the north repeats the data obtained in his 1982 study (Gibson 1990). But he adds that the new parking lot and athletic fields bordering Area 2 to the north and northeast have been constructed on fill placed over intact midden deposits which extend into Area 1 where they will be adversely affected by the proposed waterline. As noted above, he also indicates that human remains found between 1979 and 1983 may have been reburied in or near Area 1.

While no previous investigations have been conducted within Area 2, two studies have been performed on neighboring properties. On the property bounding Area 2 to the southwest,

a field reconnaissance conducted for proposed remodelling of the current Pismo Beach City Hall encountered "rich coastal Indian shell midden" associated with site SLO-832 in virtually all areas not concealed by buildings or pavement; project redesign was recommended (Sawyer 1976). The neighboring property of St. Paul's Catholic Church, south of Area 2 was found to be similarly "quite rich" in shells and stone artifacts during a survey for a proposed parish house (Dills 1980b).

ARCHAEOLOGICAL FIELD SURVEY TECHNIQUE

Once the background research was completed, an intensive archaeological field survey was conducted over all exposed land surfaces within the two potential City Hall site parcels. The field survey was designed to locate surface evidence of any potentially significant archaeological resources that may be adversely impacted by future development of either parcel. All exposed ground surface within the project area was systematically surveyed by walking parallel zigzagging transects spaced at intervals of eight meters or less. In the few areas where ground surface visibility was obscured by patches of dense vegetation or ground cover, a shovel was used to scrape the ground clear and to excavate divots to expose shallow subsurface soils.

In all areas natural and artificial exposures such as erosion scars, worn paths, exposed road surfaces, rodent burrows, and the edges of cut terraces were inspected because of their exposure of soils. Criteria for determining the presence of archaeological resources on the property included one or more of the following:

For Prehistoric Sites:

- Presence of shellfish or other faunal remains;
- Presence of artifacts or cultural features;
- Presence of flaking debris from chipped stone tool manufacture;
- Soil discoloration associated with human occupation; and
- Any other unusual soil disconformities.

For Historic Sites:

- Presence of stone or adobe features associated with structural remains;

- Presence of diagnostic ceramics associated with the Spanish, Mexican, or early American Periods;
- Presence of iron or glasswares not associated with prehistoric sites; and
- Presence of faunal remains introduced by the Spanish in the historic period (cow, pig, horse, etc.).

Native American archaeological sites which were occupied during the historic period often exhibit a mixture of these characteristics.

When cultural materials were encountered during the field survey, the field archaeologist carefully inspected the landform and soils in the vicinity of the discovery in order to determine resource extent, locate temporally diagnostic artifacts, record cultural characteristics, and make a preliminary assessment of resource integrity and stratigraphic association. The location of each new discovery, whether important or not, was plotted on a project base map. Archaeological site boundaries were determined strictly on the basis of physical surface evidence.

SURVEY ACCURACY

The accuracy of any archaeological field reconnaissance rests heavily upon the relative disturbance of the area being investigated and/or the amount of material (structures, imported soils, paving, vegetation, etc.) covering the natural ground surface. The ground surface visibility in Area 1 varied from poor to good depending on the density of vegetation. In areas where the vegetation was heaviest, divots of soil were turned every ten meters to expose more soil for examination. The outer half of the graded road encircling the reservoir and the reservoir berm itself are comprised of fill and fully obscure the ground underneath which may be either the native or a graded surface. A newly constructed house on Bello Street south of the Vet's Hall also obscures some ground surface. The edges of road cuts for Price Canyon Road, Bello Street, and the graded road northeast of the reservoir provided excellent visibility of subsurface soils in this portion of the Area 1.

In Area 2 the vegetation is slightly less vigorous and surface visibility was generally good. Vegetation is quite sparse on the steeper slopes. The eastern corner of Area 2 contains the toe of a fill pad supporting the structures of Judkins School, directly above. The entire southwestern edge of Area 2 consists of a sloping cut bank which provides an excellent vertical

exposure of the native topsoil and subsoil horizons. Generally, existing clear areas, shovel divots, and other exposures of surface and subsurface soils were of sufficient density to assure accurate survey results throughout both Areas 1 and 2.

SURVEY RESULTS

The intensive cultural resource survey resulted in the location, recording, and mapping of deposits associated with prehistoric archaeological site SLO-832 within Areas 1 and 2. The precise locations of these deposits are indicated in Figure 2.

Area 1

Prehistoric cultural materials were found throughout Area 1, but in quite different densities and in association with very dissimilar soils. Three discontiguous areas contain a moderate to high density of weathered archaeological shell fragments and low densities of chipped stone artifacts in a dark gray loamy midden soil. These three areas are surrounded by large zones containing very low densities of shell fragments in a medium brown gravelly sandy loam. The southeastern slope is distinctive, because it contains small rock outcrops and a very coarse gravel mixed with a thin gray-brown topsoil with a very low density of archaeological shell. No cultural features were observed on any rock outcrops. Some of this gravel may be a by-product of the levelling of the crown of the hill for construction of the reservoir, and may cover the native ground surface in some areas. However, the roadcut facing Price Canyon Road revealed only a thin gray brown topsoil.

The largest midden area dominates the northeastern side of the hill from the base of the reservoir berm to the northeastern edge of Area 1, forming a continuous sheet of midden between the point where the graded road enters from the school parking lot to the eastern corner of Area 1. It is quite obviously contiguous with the well documented site areas to the northeast (see Gibson 1982b; 1990).

Another large irregularly shaped zone of shell midden occurs on the southwestern slope from the base of the graded road fill downhill approximately 120 feet towards Bello Street. The northwestern edge of this midden area is marked by a linear zone of mixed brown and gray

colored soils, and it is likely that a water pipeline is buried here as this is directly below the pump house and above a concrete utility box on Bello Street. The midden measures approximately 210 feet from southeast to northwest. The upper edge of this deposit appears to extend beneath the fill of the graded road encircling the reservoir, and it is likely that it extends considerably further to the north, northeast, and east. Given that the crown of Camp Hill has been levelled for the construction of the reservoir, it is conceivable, and even likely, that the midden deposits on the northeast and southwest hillsides were connected as part of a single deposit at one time. In fact, they may still be connected around the perimeter of the hilltop if there are extensive midden deposits buried beneath the fill of the graded road.

The third midden area forms a 210 by 50 foot crescent on a narrow remnant of marine terrace at the northwestern end of Area 1, between the paved roadway bordering the property and an abandoned dirt roadway on the hillside. This deposit is likely contiguous with a midden across the paved roadway which occupies the same landform. This terrace narrows behind St. Paul's parsonage, but reappears along with the cultural deposits in Area 2. Thus, the midden in the northwestern edge of Area 1 and the deposits found in Area 2 may well have originally been contiguous.

The prehistoric cultural materials are dominated by shell, and the shell types by *Tivela stultorum*. Far less common are *Protothaca* sp., *Mytilus californianus*, *Tegula* sp., *Chione* sp., and unidentified clams. The shells observed were all heavily weathered and fragmented. Shell densities were notably higher in the midden on the northeast side of the hill. A far lower density of chipped stone was observed in the three midden areas. Only chipping waste and a few flakes were observed. Most of these were Monterey chert and a local basaltic rock. Occasional modern cultural items were also observed randomly throughout Area 1, including bottle glass, pieces of metal, concrete, paper trash, and a tennis shoe. A recently used transient's campsite was found beneath several eucalyptus trees north of the reservoir, and contained a couple of cardboard boxes and a bread pan.

Area 2

Prehistoric cultural materials occur throughout Area 2 in a relatively even distribution. The eastern corner of Area 2 above the "Pismo Beach" sign contains the toe of the large fill pad for Judkins School on the hilltop above. The soil in this fill is distinctive, comprised of a tan regolith and gray loam. Some shell is intermixed, but this is obviously redeposited soil. The remainder of Area 2 contains a dark gray loam with a moderate to high density of archaeological shell with a lower density of chipped stone artifacts. An oval area covering roughly 70 by 200 feet at the back of the marine terrace which forms the lower portion of Area 2 contains the highest density of shell in a very dark gray to black sandy loam. Shell densities decline slightly toward the southeastern end of Area 2 where the marine terrace narrows and disappears. The soil color is lighter here, as well.

The back of the marine terrace meets the base of the hillside roughly at the 120 foot contour line. The hillside itself is quite steep and features a line of exposed bedrock just slightly below its crest. A dark gray midden soil and prehistoric cultural materials are also abundant on this steep slope especially above the rock outcrop. This is somewhat unusual, but easily explained by the presence of a well-developed midden on the crest of the hill. Presumably most, if not all, of the material on the face of this slope is slopewash from the edge above, but some may also be derived from grading of the hilltop in which case it was mechanically pushed off the edge. Given that movement of cultural materials downslope from above is occurring by one means or another, it is reasonable to suspect that the midden found on the terrace below is redeposited from erosion above. No doubt some of the terrace midden deposit does originate in this manner. However, the lengthy cut on the southwestern edge of Area 2 provides a vertical exposure which indicates that the native topsoil of the terrace is a thick dark gray loam containing cultural materials.

The shell types found in Area 2 are the same as those in Area 1, again with *Tivela stultorum* predominant. A neatly unifacially flaked convex scraper made on a *Tivela stultorum* shell was found near the base of the hillside at the back of the high density zone. Chipping detritus, flakes, and a few cores of Monterey chert, Franciscan chert, and unidentified chert, and local basaltic rock were observed. A few modern shells of *Tivela stultorum* and several

large articulated crab carapices were noted in the northwestern end of Area 2 near the private homes. A scatter of modern debris was also observed, including paper, glass, plastic, and a segment of a wooden deck. What look like several small, filled pits near the base of the hillside may be collapsed rodent burrows which are numerous in the high density zone.

CULTURAL RESOURCE SIGNIFICANCE

At the present stage of investigation, the archaeological site deposits recorded in the two City Hall site areas are considered to be potentially significant in that they may represent important sources of information about prehistoric Native American developments in the Pismo Beach area. The distributions of stone artifacts, cultural features, and faunal remains associated with each potential building site represent unique and non-renewable resources which may have the potential to provide detailed information about the past record of human adaptation to this region of California.

An overriding consideration of the significance of these archaeological deposits in the realms of scientific research and public importance is site integrity. Integrity is manifest in the relative disturbance a resource has undergone and the degree of preservation of each class of cultural material contained in a site. As indicated, cultural deposits in Area 1 have undergone historic impacts from grading and construction activities associated with the reservoir, related pipelines, and roadways. Those in Area 2 may have undergone historic impacts from cultivation and erosion. The effects of these impacts cannot be precisely determined from surface observations made during a field survey. Archaeological middens in both areas may contain or consist entirely of redeposited materials. Such determinations can be made only after a subsurface testing program is employed. Sites lacking integrity are usually considered to be of minimal scientific or public value, but are still considered significant by some Native Americans. The latter type of significance is particularly enhanced, if the cultural deposits in question potentially contain human remains or are believed to have been associated with important aspects of traditional religion. Both of these caveats would appear to apply at SLO-832, given the history of archaeology and activism here.

CULTURAL RESOURCE IMPACTS

The prehistoric archaeological deposits associated with site SLO-832 identified in this document potentially could be subject to a variety of, as yet, unspecified direct and indirect impacts should the contemplated future City Hall development occur. Direct impacts are those which negatively affect the spatial integrity of a resource as a direct and immediate result of construction or development. Such impacts include disturbance to the ground surface, installation of subsurface utilities, landscaping, illicit artifact collection during construction, etc. Indirect impacts are those which occur as a consequence of a specific development, but not as an immediate or direct result of earth-moving. Examples of indirect adverse impacts can involve spatial displacement of resources (i.e. due to increased erosion caused by development), intensification of unauthorized artifact collection (e.g. due to increases in human traffic in a project area), etc. Additional indirect impacts can negatively effect cultural resources without causing spatial displacement (i.e. changes in chemical composition of a deposit due to mixing with fill or other substances; changes in the constituent composition of a deposit because of compaction or other factors, etc.).

One of the major limitations in evaluating the potential impacts of the present project is the lack of specific grading, landscaping, and construction information. Nothing beyond the alternative building envelopes has been provided for review. Any discussion of the nature and level of future improvements within Area 1 and their impacts to the cultural resources in question is at best speculative and must await the preparation of formal development plans which include comprehensive specifications for all earth-moving activities and a careful review by a professional archaeologist. However, in Area 2 it is inconceivable that any specific building plan could avoid impacts to the potentially significant cultural resource found there in the course of this study.

MANAGEMENT RECOMMENDATIONS

The program of background research and intensive field survey identified potentially significant prehistoric archaeological deposits within the project area. Section 21083.2 of the Public Resource Code requires a lead agency to a make a determination of 1) whether a project

will have a significant effect on archaeological resources and 2) whether such resources are "unique." Impacts to resources that are not unique do not require mitigation measures. In order to be judged unique or significant, an archaeological artifact, object, or site must meet at least one of the following criteria:

1) contain information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;

2) has a special and particular quality such as oldest of its type or best available example or its type; and/or

3) is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC 21083.2(g)).

The process of evaluating uniqueness most frequently involves a subsurface testing program in which a controlled representative sample of the cultural deposit is excavated, processed, and analyzed in order to determine a resource's a) cultural affiliation, b) vertical and horizontal parameters, c) degree of integrity, and d) quantity and quality of preserved artifacts and ecofacts. The available information from our surface reconnaissance of Areas 1 and 2 is insufficient for adequately assessing site integrity or the full range of constituent classes represented within each archaeological deposit. To obtain data adequate for a more complete discussion of significance, more intensive level investigations of both surface and subsurface components at each site would have to be undertaken. These investigations are often quite costly and are usually conducted only if impacts to the archaeological deposits cannot be avoided by project design. In order to minimize potential adverse impacts to the archaeological sites identified, the following recommendations are provided:

1) At this stage of investigation, archaeological site SLO-832 is considered to be a potentially significant cultural resource which should be avoided as a location for future City Hall development. Avoidance by project design is the archaeologically preferred alternative.

2) At this time, the boundaries of potentially significant moderate to high density midden deposits in Area 1 are tentative. This reflects the possibility and likelihood that buried deposits exist under historic fill which would potentially greatly enlarge these midden zones. If

construction anywhere within Area 1 is pursued, a subsurface boundary delimitation program should be implemented by a qualified professional archaeologist to precisely define the boundaries of potentially significant deposits so that a strategy of avoidance can be pursued. This boundary testing program should be implemented prior to the drafting of a final development plan so that project planners can be informed by the results of such a study. A boundary delimitation program of this kind can be undertaken quickly and at relatively little cost by using a backhoe equipped with a two foot wide bucket.

3) If the archaeological deposits in either Area 1 or 2 cannot be avoided, impacts may be reduced by filling on top of the site rather than cutting into identified cultural deposits. A fill program should be designed so that there is no intrusion or recompaction into archaeological deposits. Because site deposits on which fill will be placed will no longer be accessible for research, a data collection program should be conducted. The program should involve: a) mapping the location of artifacts and faunal remains on the surface of the site within the proposed areas of fill, b) surface collection of artifacts, and c) the excavation of a small sample of cultural deposit to characterize the nature of the buried portions of the site. All material used as fill deposit should be culturally sterile and chemically neutral. In Area 1 this option should not be exercised without first conducting a boundary delimitation program.

3) If avoiding or filling over the archaeological deposits is not possible, a Phase 2 subsurface testing program to evaluate the nature, extent, and significance of cultural deposits within the area of concern should be implemented. This evaluation program should be designed to assess the archaeological deposits in light of recent legislation pertaining to uniqueness and should involve the controlled hand excavation and surface collection of a representative sample of the site deposits, a detailed analysis of the material recovered, an assessment of cultural resource integrity, and the preparation of a final report with recommendations for impact mitigation if necessary. Should this program determine that the archaeological deposits are significant, a

Phase 3 mitigation program involving salvage excavations may be required.

4) All construction-related earth disturbing activities occurring within 200' of the identified archaeological site boundaries should be monitored by a qualified, professional archaeologist. All project construction personnel should also be alerted to the possibility of encountering buried cultural deposits within this area. If cultural resources are exposed or suspected, work shall be promptly halted and the professional archaeologist consulted. The latter should be employed to assess the nature of any discoveries and develop appropriate management recommendations for archaeological resource treatment.

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