Appendix I
ARG Peer Review
I. INTRODUCTION

At the request of PBS&J, Architectural Resources Group (ARG) has prepared a historic resource evaluation of the Stanford University Medical Center Facilities Replacement and Renewal Project (SUMC Project). The following report is a peer review of the “Cultural Resources and Stanford University Medical Center Facilities Renewal and Replacement Project” report prepared by Stanford University Medical Center (SUMC) staff. The Council of the American Historical Association defines peer reviews for historical research.

Peer review means that a manuscript or research proposal will be read and evaluated by other scholars with expertise in the time period, subject matter, languages, and documents with which the author deals. As peers of the author in a specialized field, these reviewers provide analysis to the review boards of agencies on the scholarly significance of the article: Does the author display knowledge of existing work in the field? Does the research design, processes and methodologies, for example, conform with professional standards? Does the author advance an original argument and provide valid evidence to support the work? If particular areas are weak or absent in the presentation, the peer reviewers suggest revisions that will strengthen the project . . .

The project is subject to the California Environmental Quality Act (CEQA) because it is discretionary and may impact potential historic resources located within the campus boundaries. CEQA Section 21084.1 states “a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” CEQA defines substantial adverse change in the significance of a resource as the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource is materially impaired (CEQA Guidelines 15064.5). The significance of a historic resource is considered to be materially impaired when a project demolishes or materially alters in an adverse manner those characteristics that convey its historical significance and/or account for its inclusion on a historic resource list.

A “historical resource” is defined as one that is listed in, or determined eligible for listing in, the California Register of Historical Resources (California Register). Properties listed on the National Register of Historical Resources (National Register) are, by default, listed on the California Register. A resource that is officially designated or recognized as significant in a local register of historical resources

ARCHITECTURAL RESOURCES GROUP, INC
Architects, Planners & Conservators
or one that is identified as significant in a historical resources survey meeting the requirements of Public Resources Code Section 5024.1(g) is presumed to be significant under CEQA “unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant.”

The Stanford University Medical Center (SUMC) proposes demolition of the existing Main Stanford Hospital and construction of a new hospital building; renovation and expansion of Lucile Packard Children’s Hospital; reconstruction of the medical school; and expansion of medical office space associated with Stanford Hospital Center and Lucille Packard Children’s Hospital. The Medical Center Project also involves renovation of the historic Hoover Pavilion and construction of new medical office buildings and a parking structure on the site surrounding the historic building. The SUMC Project will be constructed in phases over a roughly fifteen-year period.

II. CRITERIA OF EVALUATION

National Register of Historic Places Eligibility

The National Register of Historic Places is the Nation’s master inventory of known historic resources and includes listings of buildings, structures, sites, objects and districts that possess historic, architectural, engineering, archaeological or cultural significance at the national, state or local level. Four criteria provide the basis under which a structure, site, building, district, or object can be considered significant for listing on the National Register. A potential resource needs to meet only one of the following four criteria to be deemed a significant historic resource.

(A) That are associated with events that have made a significant contribution to the broad patterns of history (such as a Civil War battlefield or a Naval Ship building Center); or

(B) That are associated with the lives of persons significant in our past (such as Thomas Jefferson’s Monticello or the Susan B. Anthony birthplace); or

(C) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (such as Frank Lloyd Wright’s Taliesin or the Midwestern Native American Indian Mounds); or,

(D) That have yielded or may be likely to yield information important in prehistory or history (such as prehistoric ruins in Arizona or the archaeological sites of the first European settlements in St. Augustine, Florida or at the Presidio of San Francisco).
Once a potential resource is determined to have met one of the four criteria, its significance should be evaluated within its historic context or historical pattern relevant to a particular geographic area. Historic contexts may be found at the local, state or national level. The geographic scale selected may relate to a pattern of historical development, a political division, or a cultural area.¹

California Register of Historical Resources

The California Register is the State's authoritative guide to significant California historical and archeological resources. The State Historical Resources Commission (SHRC) has designed this program for use by state and local agencies, private groups and citizens to identify, evaluate, register and protect California’s historic resources. The California Register program encourages public recognition and protection of resources of architectural, historical, archeological and cultural significance, identifies historic resources for state and local planning purposes, determines eligibility for state historic preservation grant funding, and affords certain protections under the California Environmental Quality Act. To be eligible for the California Register, properties must have either reached fifty years of age or sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource.

Types of resources eligible for nomination for listing in the California Register are buildings, sites, structures, objects, or historic districts. All resources listed in or formally determined eligible for the National Register are eligible for the California Register. A historical resource must be significant at the local, state, or national level under one or more of the following criteria that are defined in the California Code of Regulations Title 14, Chapter 11.5, Section 4850.

1. It is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or

2. It is associated with the lives of persons important to local, California, or national history; or

3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; or

4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

ARCHITECTURAL RESOURCES GROUP, INC

Architects, Planners & Conservators
The California Register criteria are similar to National Register criteria. All resources listed in or formally determined eligible for the National Register are eligible for the California Register.

**Local Criteria**

The Dames and Moore “Final Survey Report Palo Alto Historical Survey Update” prepared February 2001 evaluated the Hoover Pavilion and found it to be eligible for the National Register under criteria A and C. The Dames and Moore report evaluated properties constructed up to 1947, and, as result, the Medical Center was not included.

Stanford University does not have an official register of local resources. However, it is noteworthy that the Stanford Medical Center is included as “Stanford Landmarks” on the Stanford University History website.²

According to the Palo Alto Municipal Code 16.69.040 the criteria for designation to the historic inventory are:

1. The structure or site is identified with the lives of historic people or with important events in the city, state or nation.
2. The structure or site is particularly representative of an architectural style or way of life important to the city, state or nation.
3. The structure or site is an example of a type of building which was once common, but is now rare.
4. The structure or site is connected with business or use which was once common but is now rare.
5. The architect or building was important.
6. The structure or site contains elements demonstrating outstanding attention to architectural design, detail, materials or craftsmanship.

Any resource that meets the eligibility criteria under the National Register, California Register, or Palo Alto Historic Preservation standards is considered a historical resource under CEQA.

**Integrity**

In order to be eligible for the California Register, the property must retain sufficient integrity. Integrity is defined as the authenticity of a historic resource’s physical identity evidenced by the survival of
characteristics that existed during the resource’s period of significance. Historical resources eligible for listing in the California Register must meet one of the criteria of significance described above and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Historical resources that have been rehabilitated or restored may be evaluated for listing.

III. OVERVIEW AND METHODOLOGY

For this peer review, the methodology was as follows. Prior to visiting the site, ARG reviewed the historic resource evaluation, “Cultural Resources and the Stanford University Medical Center Facilities Renewal and Replacement Project” prepared by Stanford University Medical Center staff in 2007. ARG staff conducted a site visit on 9 October 2007 to view the buildings and fully understand the condition, setting, and context. An archaeological assessment was outside the scope of this peer review. The SUMC Cultural Resources report evaluated seven potential resources on the Stanford Campus: Governor’s Avenue, Hoover Pavilion, Nurse’s Cottage, 701 Welch Road, 703 Welch Road, 1101 Welch Road, and the Main Medical Center Complex.

In addition to reviewing findings, an important element of peer reviews is the assessment of the clarity of presentation and adequacy of the research on which the report was based. ARG found the SUMC report to be clear and well researched in general but determined that additional information was needed in several areas to better understand the significance of the Main Medical Center Complex. SUMC provided additional research material, primarily on the work of Edward Durell Stone and Thomas Church, on 22 February 2008. ARG supplemented the information on Stone and Church from our in-house library. Using San Francisco Public Library and University of California San Francisco Parnassus Library resources, ARG conducted research on the history of heart transplantation and Dr. Norman Shumway in April 2008. ARG assumed that SUMC staff viewed research materials at Stanford University libraries, and ARG did not conduct additional research at Stanford.
IV. RESOURCE DESCRIPTIONS

Governor’s Avenue

Description
Governor’s Avenue was a tree-lined drive originally planted with more than 700 Tasmanian blue gum eucalyptus trees by Governor Leland Stanford, Sr. between 1876 and 1878. The lane of trees references nineteenth century street planting approaches in that the Avenue is bordered by rows of evenly spaced trees. The two short surviving portions of Governor’s Avenue in the project area are located (1) south of Pasteur Drive, and (2) adjacent to the south side of Welch Road. Pages 8-18 of the SUMC report describe the history of Governor’s Avenue, the extant resources, and develop a context of tree-lined drives and the applicability of the California Register criteria. Historical and current photographs and maps illustrate the development of the avenue and the explanation of type.

Integrity
The various remaining segments of Governor’s Avenue have varying degrees of integrity. The SUMC evaluation notes, “The intact portions of Governor’s Avenue are a significant historic resource, potentially eligible for listing for its important [sic] to the local community as an early example of a tree-lined avenue in Palo Alto. Within the project boundary, however, most of the alignment is absent. A very short fragment remains between the sidewalk and a parking lot at the rear of the 900 Blake Wilbur Drive, and another fragment has been retained across the Pasteur Drive median, ending in a parking lot on Campus Drive West.”3 The SUMC report does not explicitly conclude whether or not the segment within the project boundaries has sufficient integrity to be eligible as contributing portion of a significant historic linear resource.

Significance
The SUMC report finds that “Governor’s Avenue appears4 to be eligible for listing on the California Register under Criterion 3 as embodying the distinctive characteristic of a 19th century tree-lined avenue.”5
SUMC Report Conclusion
The SUMC report finds that the “intact portions of Governor’s Avenue are a significant historic resource, potentially eligible for listing for its importance to the local community as an early example of a tree-lined avenue in Palo Alto.”

ARG Findings
ARG agrees that other segments of Governor’s Avenue may have historic significance; however, it is ARG’s finding that the segment within the project area (project segment) does not have sufficient integrity to be a contributing part of this resource. The SUMC report also states that “the Governor’s Avenue alignment is compromised within the project area by gaps and inconsistent treatment of replacement sections; however, improvements to reinforce the historic alignment could be made during design of new facilities.” ARG notes that an integrity analysis cannot be based on future actions.

The seven aspects of integrity used to evaluate the integrity of a cultural landscape are tailored to landscape resources (see “Guidelines for Evaluating and Documenting Rural Historic Landscapes”).

Location
Location is the place where the significant activities that shaped a property took place.

The project segment retains integrity of location.

Design
Design is the composition of natural and cultural elements comprising the form, plan, and spatial organization of a property.

The composition of the Governor’s Avenue project segment has been significantly altered. Historically, Governor’s Avenue was one of a number of farm roads that crossed the more than 6000-acre Palo Alto Stock Farm. The segment is now closely bordered by the buildings of the Stanford hospital, which is a significant change in the adjacent built environment that impacts the original design. In addition, the trees once lined a dirt road, which is now paved with asphalt and serves as a pedestrian walkway stretching between a roadway and a parking lot. Wood fencing, dating to least 1890 and visible in historic photographs, lined portions of both sides of Governor’s Avenue and was erected as an integral and functional feature of the road. This fencing is no longer extant. The rows of trees are interrupted in several locations by bisecting pathways and roadways. The project segment does not retain integrity of design.

Setting
Setting is the physical environment within and surrounding a property.
The setting of the Governor’s Avenue project segment has significantly changed. Once cutting through open farmlands, the segment is now bordered by Pasteur Drive, a two lane paved road, a parking lot, and five multi-story buildings. The project segment does not retain integrity of setting.

Materials

Within a rural property include the construction materials of buildings, outbuildings, roadways, fences, and other structures. Original plant materials may enhance integrity, but their loss does not necessarily destroy it.

A historic photograph of the Avenue included on page 11 of the SUMC report indicates that close to the Trotting Farm, the avenue consisted of a dirt road bordered by evenly spaced eucalyptus and paddocks surrounded by a wooden fence. The Governor’s Avenue project segment is currently comprised of an asphalt walking path bordered by young, evenly spaced sycamores, lawn, and buildings. All materials have changed, and the wooden fence is no longer extant. As the bulletin states, original plant materials are not necessary for intact integrity, and similar species are acceptable. However, the trees of the project segment are all young, indicating wholesale replacement. Because of the changes in trees and species, path material, nearby ground cover, and lack of fencing the project segment does not retain integrity of materials.

Workmanship

Workmanship is exhibited in the ways people have fashioned their environment for functional and decorative purposes.

Functionally, the trees shaded and ornamented a roadway. The roadbed is extant but the original function has changed. Because all materials have been changed, the workmanship is not evident. The project segment does not retain integrity of workmanship.

Feeling

Although intangible, feeling is evoked by the presence of physical characteristics that reflect the historic scene.

The current scene of the Governor’s Avenue project segment, a segment of asphalt walkway bordered by rows of trees, surrounded by lawn and medical buildings, parking lots, and roadways, is urban in character. It does not evoke the same historic feeling of a rural, long, continuous, dirt roadway bordered by rows of trees, pastureland, and paddock fences. The project segment does not retain integrity of feeling.

Association

Association is the direct link between an important event and persons that shaped it.

Because the SUMC report finds that “Governor’s Avenue appears to be eligible for listing on the California Register under Criterion 3” rather than Criterion 2, association with a significant person, this aspect does not appear to be applicable.
Overall, ARG finds that the project segment of Governor’s Avenue does not have sufficient integrity to contribute to the overall significance of the resource. Of the National Register’s seven aspects of integrity, the Governor’s Avenue project segment retains integrity of location but not of design, setting, materials, workmanship, or feeling. Association does not appear to be applicable. It is possible that historic resources that do not retain sufficient integrity for listing in the National Register may still be eligible for listing in the California Register. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register if it maintains the potential to yield significant scientific or historical information or specific data. Because the Governor’s Avenue project segment has been so extensively altered, ARG finds that it does not appear to retain sufficient integrity to yield significant historical information or specific data, and therefore does not appear to be eligible for the California Register and is not a historic resource for the purposes of CEQA. City of Palo Alto Historic Preservation staff visited the site in January 2008 and concluded that the surviving portions of Governor’s Avenue within the project area, “do not convey the historic character of a rural farm road even when certain design elements of the original Avenue have been referenced (bordering trees south of Pasteur Drive).”

**Hoover Pavilion**

*Description*

The Hoover Pavilion was constructed in 1930-1939 as the Palo Alto Hospital. The building is T-shaped in plan with a five-story central block six-story tower and four-story wings. The ziggurat form, vertical emphasis of window bays, and stylized floral and geometric terra cotta panels and fixtures represent the Art Deco movement. Pages 37-48 of the SUMC report describe the history of the Hoover Pavilion, the extant resources. This section also develops a design context and evaluates the applicability of the California Register criteria. Historical and current photographs and architectural drawings illustrate the development of the hospital building. Photographs of other Art Deco-influenced structures help illustrate the context of the Art Deco style in the Palo Alto area.

*Integrity*

The SUMC report concludes that, “The Hoover Pavilion has a fairly high level of integrity for its exterior art deco features and original building materials. The interior floor plan is substantially similar and the
windows, stairwells and main entry have retained historic finishes. However, decades of interior remodeling have altered the interior finished to such an extent that the sense of being inside a historic hospital is compromised in many of the spaces: patient rooms have been converted to offices, and the remaining medical treatment areas are thoroughly modern in character. The high level of integrity and strong character of the exterior features including the ziggurat roof profile, ornamental concrete and tile, and largely intact windows and entry give a strong sense of historical style and period to the exterior. The integrity of the characteristic zigzag modern features of the exterior is adequate to convey the feeling of the period and its architectural interest.”

**Significance**

The SUMC report concludes that the Hoover Pavilion appears to meet the parameters of the California Register Criterion 3 as exemplifying the distinctive characteristics of pre World War II hospital, including the use of the Art Deco style and the functional design of the property.

**Conclusion**

The SUMC report concludes that the Hoover Pavilion/Palo Alto Hospital appears to be historically significant, displays substantial integrity of its defining Zigzag Moderne exterior features and appears to be eligible for listing on the California Register under Criterion 3.

**ARG Findings**

ARG concurs with the SUMC report’s conclusion that the property has integrity and appears to be historically significant for its representation of pre-World War II hospitals and Art Deco buildings in Palo Alto. In addition, the Dames and Moore “Final Survey Report Palo Alto Historical Survey Update” prepared February 2001 evaluated the Hoover Pavilion and found it to be eligible for the National Register under criteria A and C. The property appears to be eligible for the California Register under California Register Criterion 3 and is a significant historic resource for the purposes of CEQA. City of Palo Alto Historic Preservation staff visited the site and also concluded that the Hoover Pavilion appears to be a significant historic resource in relation to the California Register and National Register. Staff also identified the Art Deco fountain near the main pavilion entry as a significant related landscape feature.
Nurses’ Cottage

Description
The Nurses’ Cottage, located southwest of the Hoover Pavilion, is a multi-level building (some sections are one story and other sections are one story plus a raised basement) with an irregular footprint. The building was designed by Palo Alto architects Birge Clark and David Clark in 1941. Birge Clark and Walter Stromquist designed a 1948 addition to the building. Pages 48-53 of the SUMC report describe the history of the Nurses’ Cottage and the applicability of the California Register criteria.

Integrity
The SUMC report did not evaluate integrity of the Nurse’s Cottage, ostensibly because the report did not find the building significant under any of the four California Register criteria.

Significance/Conclusion
The SUMC report finds that the Nurse’s Cottage does not appear to be eligible for the California Register under any of the four criteria.

ARG Findings
Based on the information presented in the SUMC report, ARG concurs with the report findings that the property does not appear to be eligible for the California Register under Criteria 1, 2, or 3. Criterion 4 is typically associated with archaeological resources, which is outside ARG’s expertise or scope of work. The building therefore does not appear to be eligible for the California Register and is not a historic resource for the purposes of CEQA. ARG did not conduct an integrity analysis since this property does not appear to be significant. City of Palo Alto Historic Preservation staff visited the site and also concluded that the Nurses’ Cottage does not appear to be eligible for the California Register.

701 Welch Road, Whelan Building

Description
The buildings sit at the corner of Welch and Quarry Roads, across from the Stanford Barn. The complex at 701 Welch Road consists of five structures: four date from the 1957-61, the original development of the property (701A, 701B, 701C, 701D), and an elevator tower dates from 1998. The buildings range from one to three stories and form a “U” shape surrounding a sunken central courtyard. The building’s flat roof,
use of glass and steel, skeleton-frame construction, and lack of nonessential decoration are all typical of the International style. The original buildings were designed by architect Don Knorr. Pages 54-62 of the SUMC report describe the history of the buildings and the applicability of the California Register criteria. Current and historic photographs chronicle alterations to the building.

Integrity
The SUMC report found that due to a series of changes that disrupted the unity of Knorr’s original plan, the buildings at 701 Welch Road do not appear to retain integrity of design.

Significance/Conclusion
The SUMC report found that the buildings at 701 Welch Road do not meet any of the four California Register criteria and have lost integrity of design. As a result, they do not appear to be a significant historical resource.

ARG Findings
Based on ARG's site inspection, and background information and photographs provided in the SUMC report, ARG concurs that the property does not appear to be eligible for the California Register because it has been significantly modified and no longer retains integrity. According to the State of California Office of Historic Preservation, California Office of Historic Preservation Technical Assistance Series #6, “It is possible that historical resources may not retain sufficient integrity to meet the criteria for listing in the National Register, but they may still be eligible for listing in the California Register. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register if it maintains the potential to yield significant scientific or historical information or specific data.” In a series of alterations commencing in 1969, the curtain walls were moved outward to roof eaves, the enclosing of the porch at Building C, adding a new doorway and re-glazing with tinted glass, and the addition of an elevator tower in 2001, have significantly compromised the property. The buildings no longer retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Using the seven aspects of integrity, although the location and setting of the buildings are intact, the design, materials, workmanship, and feeling are compromised. Association does not appear to be relevant for this property. The building therefore does not appear to be eligible for the California Register and is not a historic resource for the purposes of
CEQA. City of Palo Alto Historic Preservation staff visited the site and also concluded that 701 Welch Road does not appear to be eligible for the California Register.

703 Welch Road, Welch Road Professional Center

Description
The building at 703 Welch Road sits west of 701 Welch Road. The building is a two-story structure with an “H”-shaped plan with one-story connecting elements at the north and south ends. The gaps in the “H” form a narrow inner courtyard. The building steps from one to two stories in height; the second story was a later addition. Welch Road Properties, led by developer J.P. Aced, completed the building’s first phase in 1958. The addition of the second story was completed in 1963. The architect for the 1963 addition was Bill Davies and landscape designer Doug Baylis. Pages 62-65 of the SUMC report describe the history of the buildings and the applicability of the California Register criteria.

Integrity
The SUMC report concludes that the building’s original design has been compromised since its original construction in 1958. The alterations have been as follows: the addition of the second story in 1963, redesign of the main entry in 1970, and the addition of a deck on the roof of the single story section in 1981. The fenestration and ornamentation of the exterior elevations are substantially intact, but the courtyard facades have been repeatedly altered. The report found that 703 Welch Road does not retain integrity.

Significance/Conclusion
The SUMC report found that 703 Welch Road does not meet any of the four California Register criteria and has lost integrity of design. As a result, it does not appear to be a significant historic resource.

ARG Findings
Based on a site inspection and information from the SUMC report, ARG concurs that the property does not appear to be eligible for the California Register because it does not meet any of the California Register criteria and has been significantly modified. As explained above, a historic resource that does not retain sufficient integrity to meet the criteria for listing in the National Register, but they may still be eligible for listing in the California Register. A resource that has lost its historic character or appearance may still
have sufficient integrity for the California Register if it maintains the potential to yield significant scientific or historical information or specific data.” In this case, the building has undergone numerous alterations including: the addition of a second story in 1963, alteration of the main entry in 1970, addition of the roof deck at the rear of the building in 1981, and alteration of courtyard facades. Using the seven aspects of integrity, although the location and setting of the building are intact, the design, materials, workmanship, and feeling are compromised. Association does not appear to be relevant for this property. The building therefore does not appear to be eligible for the California Register and is not a historic resource for the purposes of CEQA. City of Palo Alto Historic Preservation staff visited the site and also concluded that 703 Welch Road does not appear to be eligible for the California Register.

**1101 Welch Road, Medical Plaza**

*Description*

The Medical Plaza at 1101 Welch Road consists of three one-story buildings surrounded by parking lots, screening fences and landscaping. There is a small courtyard between two of the buildings. The buildings were designed by William Wurster, and the grounds were designed by landscape architect Lawrence Halprin. Pages 66-74 of the SUMC report describe the complex and the applicability of the California Register criteria.

*Integrity*

The SUMC report finds that overall the Medical Plaza retains integrity of materials and workmanship on the exterior but does not retain integrity of design and setting because of the loss of large trees.

*Significance/Conclusion*

The SUMC report finds the buildings at 1101 Welch Road do not meet any of the four criteria for listing on the California Register, have lost integrity of design, and do not appear to be significant historic resources.

*ARG Findings*

Based on a site inspection and information provided in the SUMC report, ARG concurs that the property does not appear to be eligible for the California Register because it does not meet any of the California Register Criteria. The buildings do not appear to be associated with significant events or persons
(California Register Criteria 1 and 2). The architect, William Wurster, was a noted architect, but the buildings at 1101 Welch Road are modest and many additional examples of his work that possess a higher significance and design aesthetic remain in the Bay Area. Similarly, the landscaping is not a well-developed representation of the designs of landscape architect Lawrence Halprin. The central courtyard exhibits modern elements such as geometric planting beds and some landscaping fronts the roadway. However, most of the site is dedicated to parking lots and the gardens are isolated. The property therefore does not appear to be eligible for the California Register and is not a historic resource for the purposes of CEQA. City of Palo Alto Historic Preservation staff visited the site and also concluded that 1101 Welch Road does not appear to be eligible for the California Register.

Main Medical Center Complex

Description

For the purposes of this report the Main Medical Center Complex refers only to the buildings designed by Edward Durell Stone constructed in 1959 and 1963, not the Stanford Hospital building to the north. The Main Medical Center Complex, a large three-story building, was roughly “I” shaped when built in 1959. Designed by architect Edward Durell Stone, the building originally housed the joint Palo Alto – Stanford Hospital and Stanford University Medical School. Landscaping was designed by Thomas Church. The western two wings projected from the main block of the building to form a forecourt with central fountain (still extant). The eastern wings were infilled in 1963 according to Stone’s designs to create a grid-like plan surrounding interior courtyards.10 Pages 74-102 of the SUMC report describe the complex and the applicability of the California Register criteria.

Integrity

The SUMC report concludes that the Main Medical Center Complex shows substantial loss of integrity of plan because of the addition of an attached building to the north, and the infill of some courtyards. The report finds that the setting has been significantly altered; Stone’s design was originally surrounded by parking lots and agricultural fields. Additionally, the report concludes that the setting has been compromised by the construction of nearby buildings and is now much more urban in character. Many interior spaces have lost integrity compromising the original interior design by Maurice Sands. With more specific emphasis on the interior, the report discusses in detail the integrity of the operating room,
the site of the first heart transplant in the United States. The report acknowledges both that the operating room has a significant association with the 1968 heart transplant event and that the room continues to serve operating procedures. However, the SUMC report concludes that the Main Medical Center Complex does not merit designation as a historic resource because the operating room itself fails to retain sufficient integrity.\(^{11}\)

**Significance/Conclusion**

The SUMC report concludes that the property does not meet any of the four California Register significance criteria.

**Criterion 1**

The report concludes that the building could be considered significant under Criterion 1 as the location of the first heart transplant in the United States in 1968, but it is not significant because the “floor, plan surface finish materials and equipment” of the operating room where the transplant occurred do not retain integrity and, therefore, the property cannot be eligible for this association.

**Criterion 2**

The report concludes that the building does not appear to be eligible under Criterion 2 because the important persons who worked there are still alive, and insufficient time has passed to gain a scholarly perspective of the important event. The identification of the building with a profession or group of distinguished citizens is not sufficient to meet this criterion.\(^{12}\)

**Criterion 3**

The report concludes that the Main Medical Center Complex was designed by a notable architect and landscape architect but that the hospital is not a significant example of their work. It also concludes that the Main Medical Center Complex, “is not a fine example of a garden hospital.” The report continues, the “Main Medical Center Complex’s dull sand colored walls and screens do not meet the test of ‘embodying’ Stone’s use of this device, or of ‘possessing high artistic values’ as required for listing on the California Register of Historic Places.” The report uses an eligibility assessment tool from *Growth, Efficiency and Modernism: GSA Buildings in the 1950s, 60s and 70s* (refer to page 26 for further explanation).
Criterion 4

The report concludes that the Main Medical Center Complex does not appear to have the potential to yield information important to the history or prehistory of the area or nation.

ARG Findings

ARG disagrees with the conclusions of the SUMC report that the Main Medical Center Complex does not retain sufficient integrity or significance to be eligible for listing under Criterion 1, 2, or 3 (Criterion 4 is primarily used for archaeological resources and is not applicable).

Criterion 1

Under Criterion 1 a resource is considered significant if it is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States. As mentioned above, the SUMC report found the Main Medical Center Complex could not be significant as the site of the first heart transplant in the United States in 1968 because the interior finishes that characterized the operating room in 1968 are no longer intact. ARG views the association with that significant event differently. The important research and experimentation necessary for the development of the heart transplant procedure would not have been limited to a single operating room. They would have occurred in offices, labs, conference rooms, etc. ARG believes that the evaluation should include the entire building, not a single room, and that the building must be evaluated as a whole. According to National Register Bulletin 15, “A property that is significant for its historic association is eligible if it retains the essential physical features that made up its character of appearance during the period of its association with the important event, historical pattern, or person(s).” Additionally, the Bulletin states that “A basic integrity test for a property associated with an important event or person is whether a historical contemporary would recognize the property as it exists today.” Although Dr. Norman Shumway, head of the transplant team, may not recognize the contemporary finishes or modern equipment found in the operating room, it is very likely he would recognize the Main Medical Center Complex.

The SUMC report indicates that the operating room where the 1968 heart transplant event took place continues to serve operating procedures. Highly technical, scientific, or medical institutions such as the
Stanford University Medical Center are continually evolving and responding to new scientific and experimental trends.\textsuperscript{13} It would be expected that the ongoing operational needs of medical institutions would preclude the retention of outmoded equipment or facilities. An integrity analysis cannot be based solely on changes that have occurred in response to technical necessities.

To be eligible for the California Register, properties must have either reached fifty years of age or sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. The first heart transplant in the United States occurred in Main Medical Center Complex in 1968. Although only forty years have passed since the first heart transplant was performed at the Main Medical Center Complex, because of its groundbreaking nature and because of its lasting and widespread influence, ARG believes that enough time has passed to gain a scholarly perspective. The heart transplant performed at the Main Medical Center Complex in 1968 is included in numerous histories of medicine, and JAMA: the Journal of the American Medical Association has included retrospective articles on this event. ARG conducted additional research on heart transplantation in order to understand the historic context of the first heart transplant in the United States. The following background information is the result of that research.

The sixth of January 1968 was a milestone day in the history of medicine; at Stanford University Medical Center Dr. Norman Shumway performed the first human heart transplant in the United States. That event marked the culmination of decades of research in organ transplantation and cardiac care.

The heart was not the first organ to be transplanted. Over a decade before, on 23 December 1954, Joseph Murray and J. Hartwell Harrison performed the first successful kidney transplant.\textsuperscript{14} Transplantation of the kidney was achieved sooner for several reasons; it was easily tissue-typed; donors could survive with a single kidney; and dialysis offered a back up should the procedure fail.\textsuperscript{15} However, the heart, because of its cultural and emotional associations and indispensible nature was seen by surgeons as the most prestigious and significant organ to transplant.\textsuperscript{16} In addition to rejection, which was a threat to all organ transplants, heart transplantation was blocked by several significant hurdles. The heart deteriorates quickly, within minutes of death, and had to be transplanted speedily necessitating both donor and recipient be at the same hospital. In addition, suspending the heart’s activity for the length of time needed for an operation was not possible at the time. In 1953 a heart-lung machine was first used successfully, allowing the machine to take over heart functions and providing sufficient time for
operations. In June 1963 the first human lung was transplanted. Then in 1960 the first effective immuno-suppressant drugs were introduced.

With several hurdles for cardiac transplantation surmounted, the race for the first human heart transplant was underway. Dr. Norman Shumway announced his intentions to operate in October 1967, but the combination of good recipient and donor candidates was illusive. On 3 December 1967 at the Groote Schuur Hospital in Cape Town Dr. Christiaan Barnard performed the first human-to-human heart transplant in the world. Finally, finding the right combination of recipient and donor, on 6 January 1968 at Stanford’s Main Medical Center Complex, Dr. Norman Shumway performed the first successful heart transplant in the United States.

With the precedence set and the technique proven, in the year that followed Shumway’s groundbreaking surgery, more than one hundred transplants were performed around the world, in eighteen different countries. Although the operations were successful, long-term usefulness was questioned because many patients died within three months frequently due to organ rejection. Questions were raised about the efficacy of the procedure, and the number of transplants greatly diminished in the early 1970s. However, with improved immunosuppressant drugs such as cyclosporine in 1970s, heart transplantation was more viable.

The legacy of these early transplants, such as Shumway’s, is dramatic; by the mid 1980s in the U.S. alone, there were twenty-nine cardiac transplantation centers. By the 1980s, 2,000 heart transplants were conducted each year in the U.S. Several decades later, in 2006, in the U.S. alone 160 hospitals had cardiac transplant units. By this time ninety percent of heart transplant recipients survived more than one year, and seventy-five percent lived for more than five years. Worldwide between 1982 and 2006, 75,000 human heart transplants were performed at more than 250 transplant units.

Based on the information presented in the SUMC report as well as additional research conducted by ARG staff for this report, ARG concludes that the Main Medical Center Complex appears to be eligible for the California Register under Criterion 1 as the location where a groundbreaking event, the first heart transplant in the United States, was performed. City of Palo Alto Historic Preservation staff visited the site and also concluded that the Main Medical Center Complex appears to be eligible to the California Register under Criterion 1.
Criterion 2

Under Criterion 2 a resource is considered significant if it is associated with the lives of persons important to local, California, or national history. The SUMC report specifically names Dr. Norman Shumway, the Head of the Department of Cardiothoracic Surgery, who conducted pioneering work in the development of organ transplantation in the late 1950s, 1960s, and 70s. Although Dr. Shumway is deceased, the SUMC report concludes that the building is not potentially eligible under Criterion 2 because the important persons who worked there are still alive, insufficient time has passed to gain a scholarly perspective, and the identification of the building with a profession or group of distinguished citizens is not sufficient to meet this criterion. However, ARG finds that sufficient time has elapsed to gain a scholarly perspective on the work of Dr. Norman Shumway for several reasons. First, Shumway died in 2006, and his contributions to the field of medicine are complete. Second, Shumway’s work up to and including the first heart transplant in the United States occurred forty years ago or more, providing some time to gain a scholarly perspective. Third, Shumway’s contributions are already documented and evaluated in numerous histories of medicine, and in several articles in JAMA: the Journal of the American Medical Association.

In order to understand Dr. Shumway’s contributions to the field of medicine and to assess the potential eligibility of the Main Medical Center Complex for its association with Shumway, ARG conducted additional research on Shumway in order to understand the historic context of his contributions to medicine. The following background information is the result of that research.

Shumway’s association with Stanford University began early in his career. In 1957 he was hired by Stanford to operate the kidney machine at the Stanford-Lane Hospital in San Francisco. In 1958 he was tasked with establishing a program for cardiovascular research. While at the Stanford-Lane Hospital, Shumway began collaborating with Dr. Richard Lower on canine heart transplantation.

In 1959 Stanford opened its new hospital on the University’s campus in Palo Alto. Shumway and Lower moved their labs to the new facility. Building on their past experimentation in San Francisco, Lower and Shumway worked on further developing heart transplantation techniques. In December 1959 the pair undertook a dog-to-dog heart transplant. The animal lived more than a week, making it the first successful heart transplant in the world.
For eight more years Shumway continued researching transplantation in dogs. His knowledge from these years combined with the introduction of the first immunosuppressive drugs around 1960, made Shumway confident the time was right for the first human-to-human transplant. In October 1967 Dr. Norman Shumway announced his intentions to apply his procedure to humans. The combination of good recipient and donor candidates was illusive until 6 January 1968 when Shumway performed the first successful heart transplant in the United States. The delay had cost Shumway the distinction of becoming the first in the world; on 3 December 1967 at the Groote Schuur Hospital in Cape Town Dr. Christiaan Barnard had performed the first human-to-human heart transplant.

Many had expected Shumway to be first to conduct the procedure, “My disappointment is enormous, though not so much for myself personally.” Stated James Hardy, a fellow transplant surgeon. “I know that Norman Shumway’s group at Stanford have done the most extensive and the best work in this field.” In fact, Barnard had learned Lower and Shumway’s technique while spending several months in Lower’s lab in Richmond, Virginia.

In the following year more than one hundred transplants were performed around the world in eighteen countries. Long-term efficacy was questioned because of the poor long-term survival rate of patients. Worldwide there were calls to ban the procedure, and cardiac transplant units worldwide closed. In 1971 only nine heart transplants were performed in the world. Shumway was one of very few who continued to champion cardiac transplantation due to what he termed his “radical perseverance.” Shumway directed his efforts to understanding the cause and effect of rejection. As a measure of his dedication and the institutions commitment, SUMC was one of the only centers performing the procedure for nearly a decade. His continued research on techniques, combined with the improved immunosuppressive drug cyclosporine in the 1970s increased patient longevity significantly and made organ replacement a standard procedure.

Shumway continued to be at the forefront of transplantation surgery. In 1981 Shumway and Dr. Bruce Reitz performed the first combined heart-lung transplant in the world. Before he retired from surgery in 1993, Shumway oversaw over 800 heart transplants. In addition, his research into the procedure heavily influenced how the procedure was practiced by other doctors. According to Donald McRae, author of *Every Second Counts: the Race to Transplant the First Human Heart*,

Architectural Resources Group, Inc
Architects, Planners & Conservators
Norman Shumway’s reputation in medicine, as the ‘father of cardiac transplantation,’ was unsurpassed. Shumway and his Stanford team had proven that immunology and physiology were the cornerstones on which a successful heart transplant needed to be built. In his quest for scientific knowledge to underpin his clinical ventures, Shumway had transformed cardiac surgery.41

As a result of his perseverance, more than 4000 successful heart transplants were performed around the world in 2006.42 Shumway died at the age of 83 in 2006. Philip Pizzo, MD, dean of the Stanford School of Medicine, eulogized Shumway as “one of the 20th century’s true pioneers in cardiac surgery.”43

Shumway’s association with the Main Medical Center Complex is very strong. Most of his professional life has been centered at the hospital where he worked from its opening in 1959 to his retirement from surgery in 1993. It was there that he performed the first successful heart transplant, using dogs; conducted the first human heart transplant in the United States; and continued to further develop and champion the procedure during the early 1970s when many cardiac transplant units closed. Heart transplantation is now a successful medical procedure considered a valid and accepted form of advanced treatment for end-stage heart disease.

Based on the information presented in the SUMC report as well as additional research conducted by ARG staff for this evaluation, ARG concludes that the Main Medical Center Complex appears to be eligible for the California Register under Criterion 2 for its association with pioneering cardiac surgeon Dr. Norman Shumway. City of Palo Alto Historic Preservation staff visited the site and also concluded that the Main Medical Center Complex appears to be eligible to the California Register under Criterion 2.

Criterion 3
Under Criterion 3 a resource is considered significant if it embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values. The SUMC report states that the Main Medical Center Complex “is a lesser work in the long and impressive careers of Stone and Church.” The SUMC report concludes that Edward Durell Stone and Thomas Dolliver Church are accepted as masters in their respective fields, architecture and landscape architecture, and ARG concurs. Edward Durell Stone and Thomas Church were internationally renowned during their careers and continue to be so today. A recent perspective on Stone's standing as an architect was provided by the respected organization Documentation and Conservation of the Modern Movement, Northern California Chapter (DOCOMOMO NOCA) which
stated, “Although many might argue that the beauty and quality of his individual buildings were surpassed by some of his contemporaries, it would be difficult to deny the overall significance of Stone’s work and his role as one of the most influential American architects of the twentieth century.”

In evaluating eligibility, the SUMC report also concludes that the complex is not a good example of a garden hospital. This would be important if the property was significant as a property type. For the work of a master, the position of the property with the context of the architect’s work is more relevant.

The SUMC report specifically argues that the concrete screens do not embody Stone’s use of that design element primarily because of the condition of the stucco latex paint and the compromised design intent regarding its coating. ARG disagrees and finds the grills highly representative of Stone’s work. By nature, exterior coatings need to be reapplied routinely; the need for reapplication does not affect the overall design or integrity. Aside from needing recoating in some areas, the screens are in good condition. Although Stone originally had grander plans for the grill coating, design modifications due to budget constraints are a part of most architectural projects, and the resulting changes are a significant part of the design process. Although not his original conception, Stone state that he found the stucco latex paint “wonderful.”

Finally, the SUMC report uses an eligibility assessment tool from Growth, Efficiency and Modernism: GSA Buildings in the 1950s, 60s and 70s. While this book asks interesting questions about midcentury properties, it is not associated with the California Register and should not be the final test for determining a property’s eligibility for the register. The book is geared toward federally owned properties, not private institutions like SUMC. The California Office of Historic Preservation, the agency that administers the National Register within California and the California Register, has its own Modern and Cultural Resources Committee. The Office of Historic Preservation (OHP) website on the committee’s findings directs viewers to various documents and articles useful for understanding and evaluating mid-century properties. Growth, Efficiency and Modernism: GSA Buildings in the 1950s, 60s and 70s is not included. The National Register, the basis of the California Register, provides guidance for assessing the significance of a Work of a Master and is the appropriate tool for assessment:

A master is a figure of generally recognized greatness in a field, a known craftsman of consummate skill, or an anonymous craftsman whose work is distinguished from others by its characteristic style and quality. The property must express a particular phase in
the development of the master’s career, an aspect of his or her work, or a particular idea or theme in his or her craft.

A property is not eligible as the work of a master, however, simply because it was designed by a prominent architect. For example, not every building designed by Frank Lloyd Wright is eligible under this portion of Criterion C, although it might meet other portions of the Criterion, for instance as a representative of the Prairie style.47

The SUMC report states, “A careful review of the criteria, particularly the admonition to reserve listing of recent properties to those of ‘exceptional’ merit suggests that the Main Medical Center Complex is not eligible for listing on the California Register of Historic Places.”48 It is ARG’s experience that researching and understanding Midcentury Modern resources is increasingly encouraged by register administrators and the field of architectural history. In fact, the OHP’s Modern Resources Committee website acknowledges the importance of understanding Modern resources, particularly the work of Stone: “The demolition in recent years of buildings by master architects Edward Durell Stone, Richard Neutra, and Rudolf Schindler, to name a few, has heightened the sense of urgency for the need to study and better understand the cultural resources of the Modern Age.”49

To be eligible for the California Register, properties must have either reached fifty years of age or sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. The Main Medical Center Complex is forty-nine years of age and will likely reach fifty years of the age during the course of the proposed project and may reach it during the environmental review process. Since the SUMC report was issued, SUMC staffs have provided ARG additional research material on Edward Durell Stone’s body of work and his collaboration with Thomas Church. ARG supplemented these documents with information from our in-house library. This research informed the following summary and analysis of Stone’s work and an evaluation of the eligibility of the Main Medical Center Complex under Criterion 3.

The work of architect Edward Durell Stone can be divided into three main phases. The first began in the 1930s and was characterized by Stone’s use of International style principles and materials. Although trained at Harvard and the Massachusetts Institute of Technology in the Beaux-Arts tradition, Stone’s work in the 1930s employed modernist theories. Stone was not alone in his adoption of the International style. A groundbreaking exhibition on the International style at the Museum of Modern Art exhibit in New York City in 1932 was a strong influence on architecture in the United States. Five years after the
exhibit in 1937, Stone teamed with architect Philip S. Goodwin, to design the Museum of Modern Art in New York. The building featured concrete with steel frame, curtain-wall construction, clean lines, and ribbon windows. Other Stone projects from this first phase include the Hospital in Lima, Peru (1950), and the Fine Arts Center for the University of Arkansas (1951).

Stone’s status as an American Modernist architect was only matched by Philip Johnson, making Stone’s rather abrupt switch to Formalism in the 1950s particularly significant. In contrast to the universal spaces of the International style, Stone wanted to create a new architecture of “richness,” “warmth,” and “delicacy.” In order to achieve this, he returned to the classic principals of his Beaux-Arts training and use of ornamentation.

Stone’s work from this second phase has been called both Formalism and New Romanticism. One of his first works to achieve acclaim in his new idiom was the American Embassy in New Delhi, India (1954). The central concept was a garden surrounded by offices. It featured grillework across the façade, overhanging roofs, colonnades, and a reflecting pool. The Embassy’s design was recognized ‘a modern classic’ and received the AIA’s highest honor. After its use on the embassy chancery, grillework quickly became Stone’s trademark. Stone would become the architect most responsible for popularizing concrete grillework, or screen block, throughout the United States.

The Embassy project was followed by the conversion of Stone’s own house in New York City in 1956. The design also featured his signature grillework covering the entire façade of the former brownstone. Stone’s American Pavilion at the Exposition Universelle et Internationale Bruxelles in 1958 was another high profile project Stone completed in a Formalist vocabulary. That same year Stone began work on the Huntington Hartford Gallery of Modern Art, Columbus Circle, New York City, a building which received both acclaim and criticism from contemporaries. This building would later become the subject of a national preservation battle in the 2004. Also completed in 1958, the Stuart Pharmaceutical Company in Pasadena was later listed on the National Register as,

an example of the New Formalist style, which is distinguished by simplified historical forms reinterpreted in modern materials and shapes, an decorated with applied ornament. It openly disputed the tenets of the International Style that rejected applied ornament and historic forms, but was differentiated from the distinctive motifs of the Late Modern styles. Stone was the premier New Formalist architect, and the Stuart building was his first use of the style in California.”
A master of publicity, Stone appeared on the cover of *Time* magazine, on television shows and numerous magazine articles promoting his work. This publicity popularized his designs with the general public at an unprecedented level. “His eminently likeable architecture (feature in *Life*, *Horizon*, and other such magazines) quickly became part and parcel of American popular culture in the same way that the contemporary architecture of Skidmore, Owings and Merrill and Emery Roth and Sons became part and parcel of American corporate culture.”58 Stone reached the apex of his career and in the late 1950s and early 1960s.59

In addition to popular acclaim, Stone received professional awards during this period. In 1958 Stone was elected to the National Institute of Arts and Letters, the highest ranking honor society of the arts in the United States. Membership to this exclusive organization was limited to 250 native or naturalized citizens. In March of that year he was named fellow of the AIA for “his achievement in design.” In May he received one of five AIA Honor Awards out of four hundred entries for his Stuart Pharmaceutical Company building. Stone also received an Award of Merit for the United States Pavilion at the Brussels Exposition.60 Building on his success, Stone operated at a national scale with offices in New York, Palo Alto, Los Angeles, and Chicago.61

Stone designed Stanford University Medical Center/Palo Alto Hospital during this pivotal and innovative phase of his career. The center was completed in 1959, designed after the Embassy and, concurrently, or close to the time he designed the United States Pavilion at the Brussels Exposition and the Stuart Pharmaceutical Company building. Like his other work during this period, it marks his departure from the International style for a Formalistic approach. The design for the hospital shared many of the character-defining features Stone used on buildings from this period including: concrete grillwork, (roughly) symmetrical façade, massive overhanging eaves, loggias with tall slender columns, reflecting pools, and incorporated landscape elements such as gardens and courtyards. Stanford University Medical Center, along with the Palo Alto Libraries, were his first projects out of his Northern California office in Palo Alto and exemplified this phase of his design philosophy.

In the third and final phase of Stone's career, from the mid 1960s to his death in 1978, Stone built on his past success and continued to use romantic ornamentation such as grillwork and planters. However, these designs were often seen as uninventive repetitions of his former work commercialized for big business.62 This last phase of his career was increasingly criticized.
Edward Durell Stone is considered by some to be one of the most outstanding midcentury architects, and is disparaged by others for his abandonment of modernist principles for a more romantic, formal, and popular architecture. For better or for worse, Stone influence on architects is inestimable. He influenced numerous architects, and grillework became popular nationwide principally because of his work. In addition, Stone’s work addressed two of the central issues facing post-war architecture, the representation of human scale in large buildings and the role of ornament formerly cast aside by modernists.

The Main Medical Center Complex appears to be eligible for the California Register, as an example of pivotal work of Edward Durell Stone in Northern California, the location of one of his satellite offices. The hospital, and other buildings from this period, such as the much-acclaimed American Embassy in New Delhi, United States Pavilion at the Brussels Exposition, and the Stuart Pharmaceutical Company in Pasadena mark Stone’s transition from the International style to a Formalist approach that eschewed the tenets of Modernism for Beaux Arts principles with romantic ornamentation. The hospital exemplifies his work and features architectural elements characteristic of Stone’s Formalist designs from this period including, grillwork, attenuated columns, large circular planters, massive overhanging eaves, symmetrical façade, and integrated forecourt and interior courtyards. City of Palo Alto Historic Preservation staff visited the site and also concluded that the Main Medical Center Complex appears to be eligible to the California Register under Criterion 3.

Landscape architect Thomas Church collaborated with Stone on a number of projects: Panama Hotel in Panama City (1946); Stuart Pharmaceutical Company, Pasadena CA (1958), Stanford Medical Center, Palo Alto, CA (1959), and Harvey Mudd College, Claremont, CA (1960-1964). Because more intact examples of Thomas Church’s work at Stanford remain, and because the collaboration between the two did not appear to be particularly acclaimed or influential, ARG finds that the property is not significant as an example of the work of Thomas Church.

Local Criteria
The SUMC report did not evaluate the Main Medical Center Complex under Palo Alto criteria. ARG finds that the building appears to be eligible for the Palo Alto historic inventory as a Category 2 building, a “major building” of “major regional importance, meritorious works of the best architects.” A major building may have some exterior modifications, but the original character is retained. The building
appears to qualify under Criterion 1 as a structure identified with an important national event, the site of the first heart transplantation in the United States and Criterion 2 because it is the work of an important architect, Edward Durell Stone.

ARG Integrity Analysis

Based on a site inspection and information provided in the SUMC report, ARG does not concur with the SUMC report's conclusions that the Stanford Medical Center is not eligible for the California Register of Historical Resources. Focusing on interior features and setting, the SUMC report concludes there was a substantial loss of integrity. “At a superficial level, the property exhibits motifs common to both firms: Stone’s screen wall and soaring columns, Church’s geometric landscape forms. At the more basic level of function, however the design failed to satisfy clients, fell short of its inspiring vision of a palatial garden for healing, and has not retained the grandeur of its setting.”68 The document delineates the building’s design flaws and chronicles complaints about the building, but how the building functioned originally is not considered as part of a formal analysis of integrity because it does not contribute to an understanding of the degree to which historic building fabric and character-defining features have been retained.

In order to evaluate integrity, ARG examined the Stanford Medical Center Complex using the seven aspects of integrity defined in National Register Bulletin 15. The California Register is based on the National Register, and this bulletin is the industry standard for evaluating integrity. It should be noted that the California Register has lower threshold for integrity than the National Register: “A historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but they may still be eligible for listing in the California Register.”69

Location

Location is the place where the historic property was constructed or the place where the historic event occurred.

The Stanford Medical Center Complex remains in its 1959/1963 footprint. It has not been moved from its original location. This aspect of integrity has been retained.

Design

Design is the combination of elements that create the form, plan, space, structure, and style of a property.
The form of the Stanford Medical Center Complex is largely intact. It remains a three-story building with flat roof and blocky massing. In plan, the building’s original design is clear. It is based on a grid with projecting front wings. Although there is an addition at the north elevation, the connection is narrower than the Medical Center Complex and is well setback from the front elevation of the north wing and the east elevation. The addition to the north is materially differentiated from the historic resource and is compatible in materials and details. The buildings clearly read as two structures.

Changes to the interior courtyards were one reason the SUMC report determined the complex does not have integrity. Based on site visit and comparison of aerials with the original plan, ARG concludes that of the ten courtyards original to the 1959, 1963 building, nine continue to function as courtyards. Only one has been completely infilled by a building addition. Another is partially infilled. In one courtyard a fence has been inserted, and in others plantings have been changed from the grasses and other non-blooming plants favored by Thomas Church to flowering plants and bushes. Despite the loss of plantings, in most cases, Church’s hardscaping—geometric paving, geometric planting beds, and circular water features—are intact. The most important landscaping feature, the forecourt in front of the building, has a high degree of integrity. Although the courtyards may no longer be the most intact examples of Thomas Church’s work, the majority continue to function as garden spaces set within the building and do not compromise an understanding of Stone’s design.

In 1996, in order to meet American with Disabilities Act (ADA) requirements, a new lobby with canopy was built at the center of the front façade. The addition was a two-story, glazed, curtain-wall structure with cantilevered canopy inserted. Because of the transparent nature of the glazing, and because the addition respects the pattern of bays and its glazed walls sit behind the colonnade, the addition did not significantly compromise the building’s integrity design.

The interior of the building is the most compromised element. The lobby has been infilled, and the historic form is no longer evident. ARG concurs with the SUMC report that the interior designed by Maurice Sands have been compromised.

Despite the changes to the interior and the partial or complete infill of two courtyards, the overall design intent of the building is very clear. For buildings significant under Criterion C, the National Register Bulletin 15 states, “A property that has lost some historic materials or details can be eligible if it retains the majority of the features that illustrate its style in terms of the massing, spatial relationship, proportion, pattern of windows and doors, texture of materials and ornamentation.” ARG concludes that these essential physical features are intact. The New Formalist style of the building is clearly communicated—the massing, proportion, fenestration pattern, overhangs, colossal posts, formal court, geometric courtyards, columnar supports, exterior materials, and iconic concrete screens are all intact. This aspect of integrity has been retained.

Setting

Setting is the physical environment of a historic property.

When first built, the Stanford Medical Center was surrounded by surface parking and agricultural fields with oak and eucalyptus trees. The hospital has developed considerably, and now has a campus-like feel. While the setting has changed, the surrounding buildings are of similar height and scale, and do not overwhelm the large, formal Stanford Medical Center Complex. In addition, figure 10-73 of the SUMC shows an early project rendering by Stone for the master plan. Additional building fabric (compatible in style and massing) surrounds the central court...
indicating that Stone anticipated the construction of other structures in the immediate area. This aspect of integrity has been altered but not significantly diminished.

**Materials**

Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.

The character-defining materials, features and finishes of the exterior of the Stanford Medical Center building are largely intact. The perforated concrete block, stamped concrete panels, colossal posts, concrete overhangs, fenestration patterns, and massive concrete planters are all intact. The interior finishes of the main public areas, such as the lobby, have been lost. Although several of the Thomas Church-designed courtyards have been at least partially infilled, most hardscaping appears to be intact. As expected, some plant replacement has occurred; many original trees of the Church planting plan remain, though obscured by newer ornamental plantings. The formal forecourt with fountain and plantings is intact. This aspect of integrity has been retained.

**Workmanship**

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.

The workmanship and modern construction methods of the period of construction are intact at the exterior of the building, and the workmanship is clearly communicated. Courtyard plantings have been altered but the workmanship of the courtyards is evident in the hardscape elements, which continue to convey the basic forzm of Church’s design.

**Feeling**

Feeling is a property’s expression of the aesthetic or historic sense of a particular period of time.

Although the setting of the Stanford Medical Center has changed, overall, the building conveys the feeling of the original hospital building, a 1959-1963 New Formalist-style hospital.

**Association**

Association is the direct link between an important historic event or person and a historic property. According to the National Register guidelines, a property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer.

The Main Medical Center remains strongly associated with the ground-breaking medical advances that occurred in this building. Staff from the 1960s would very likely recognize the building. The alterations do not obscure the property’s many character-defining features as set forth in the Integrity of Design section above: The structure of the building is intact. The Formalist Modern style of the building is clearly communicated—the overhangs, colossal posts, concrete screens, formal court, geometric courtyards, columnar supports, and iconic concrete screens are all intact. The additions are materially differentiated from the historic resource and are compatible in materials and details. This aspect of integrity has been retained.
ARG’s concludes that the Main Medical Center Complex retains sufficient integrity of location, design, setting, materials, workmanship, feeling, and association to be eligible for the California Register.

V. REPORT CONCLUSION

ARG conducted a peer review of the “Cultural Resources and the Stanford University Medical Center Facilities Renewal and Replacement Project” prepared by Stanford University Medical Center staff in 2007. ARG concurs with the SUMC conclusion that the Hoover Pavilion/Palo Alto Hospital appears to be eligible for the California Register. ARG also concurs with the SUMC conclusion that the Nurse’s Cottage, 701 Welch Road (Whelan Building), 703 Welch Road (Welch Road Professional Center), and 1101 Welch Road (Medical Plaza) do not appear to be eligible for the California Register. Because of insufficient integrity, ARG disagrees with SUMC’s conclusion that Governor’s Avenue (within the project area) appears to be eligible for the California Register. City of Palo Alto Historic Preservation staff visited the site in January 2008 and concurred with ARG’s evaluation. Finally, ARG disagrees with the SUMC report’s conclusion that Stanford’s Main Medical Center Complex does not appear to have sufficient significance or retain sufficient integrity to be eligible for the California Register. ARG concludes that Stanford’s Main Medical Center Complex appears to be eligible for the California Register under Criterion 1, 2, and 3.
VI. BIBLIOGRAPHY


(Provided by Stanford University).


#6.” Sacramento, CA, 14 March 2006.


Palo Alto Planning Department, Building Division, Building Plan Microfiche Files, CA. 1950-present.


Raithel KS. "20 Years After First Human Heart Transplant, 1987 May See 4000 Procedures Performed

3-89 to 3-99.

Schroeder, John Speer, MD and Sharon Hunt. “Cardiac Transplantation: Update 1987.” JAMA : the

Silbergleit, A. "Norman E. Shumway and the Early Heart Transplants". Texas Heart Institute Journal. 33,

Stanford School of Medicine. “Norman Shumway, Heart Transplantation Pioneer, Dies at 83.” Available

Stanford University Medical Center. Cultural Resources and the Stanford University Medical Center
Facilities Renewal and Replacement Project. Manuscript, undated.

Stanford University. “Stanford University History: Stanford Landmarks.” Available from


VII. ENDNOTES


3 Stanford University Medical Center, Cultural Resources and the Stanford University Medical Center Facilities Renewal and Replacement Project, manuscript, undated, 18.

4 The property appears to be eligible for the California Register to ARG. The Office of Historic Preservation is the only agency that can make the determination that a property is eligible.

5 Stanford University Medical Center, 12.

6 Ibid., 18.

7 Ibid., 103.

8 Ibid., 45.


10 Palo Alto Planning Department, Building Division, Building Plan Microfiche Files, CA. 1950-present.

11 Stanford University Medical Center, 75-76.

12 Ibid., 76.


17 Adler, 160.


24 Ibid.

25 McRae, 297.


27 Stanford University Medical Center. *Cultural Resources and the Stanford University Medical Center Facilities Renewal and Replacement Project*, 76.

28 McRae, 35.

29 Altman, “Norman Shumway, 83, Who Made the Heart Transplant a Standard Operation, Dies.”

30 McRae, 78.

31 Ibid., 81.


33 McRae, 208.

34 Adler, 161.

35 McRae, 276.

36 Adler, 164.


38 Stanford School of Medicine. “Norman Shumway, Heart Transplantation Pioneer, Dies at 83.”

39 Adler, 164.

40 Altman, “Norman Shumway, 83, Who Made the Heart Transplant a Standard Operation, Dies.”

41 Ibid., 276.
42 Ibid., 297.

43 Stanford School of Medicine. “Norman Shumway, Heart Transplantation Pioneer, Dies at 83.”


45 Stanford University Medical Center. *Cultural Resources and the Stanford University Medical Center Facilities Renewal and Replacement Project*, 92.


48 Stanford University Medical Center. *Cultural Resources and the Stanford University Medical Center Facilities Renewal and Replacement Project*, 103.

49 Office of Historic Preservation, “Modern and Cultural Resources Committee.”


51 Mary Anne Hunting, “Edward Durell Stone: Perception and Criticism.” (Ph.D. dis., The City University of New York, 2007), 133.


58 Mary Anne Hunting, “Edward Durell Stone: Perception and Criticism.” (Ph.D. dis., The City University of New York, 2007), 139.


62 “Biography Resource Center.”

63 Rubano, 3-90.


65 Research Information provided by Stanford University Medical Center, 19.

66 Stanford University Medical Center, 102.


68 City of Palo Alto. Building permit records for 300 Pasteur Drive, Stanford, 1996.