RESOLUTION NO. ____
RESOLUTION OF THE COUNCIL OF THE CITY OF PALO ALTO APPROVING ARCHITECTURAL REVIEW FOR THE STANFORD UNIVERSITY MEDICAL CENTER FACILITIES RENEWAL AND REPLACEMENT PROJECT (STANFORD HOSPITALS AND CLINICS, LUCILE PACKARD CHILDREN’S HOSPITAL AND STANFORD UNIVERSITY SCHOOL OF MEDICINE, APPLICANT)

The Council of the City of Palo Alto does resolve as follows:

SECTION 1. Background.

The City Council finds, determines, and declares that:

A. On August 13, 2007, Stanford Hospitals and Clinics, Lucile Packard Children’s Hospital and Stanford University School of Medicine on behalf of the Board of Trustees of the Leland Stanford Junior University, applied for a Zone Change, Comprehensive Plan Amendment, Environmental Assessment, Architectural Review, Annexation and a Development Agreement for the Stanford University Medical Center Facilities Renewal and Replacement Project, including the demolition, renovation, and replacement of on-site structures, thereby adding approximately 1.3 million square feet of net new floor area, broken down as follows:

- Demolition, renovation, and construction of SHC facilities, providing a net increase of approximately 824,000 square feet;
- Demolition, renovation, and construction of LPCH facilities, resulting in approximately 442,000 additional square feet;
- Demolition of four existing SoM buildings and construction of three replacement buildings, with no net increase in square feet;
- Demolition of shops and storage space, renovation of existing Hoover Pavillion, and net addition of approximately 46,000 square feet of new medical, office, research, clinic, and administrative facilities at the Hoover Pavilion Site for medical offices for community practitioners and SUMC-related medical offices, clinical facilities, and support uses;
- Demolition of existing parking spaces and construction of 2,985 new and replacement spaces, for a net increase of 2,053 spaces to address additional demand for the SUMC
Project, to be located in surface parking and above- and underground structures;

- Construction of a new road connecting Sand Hill Road and Welch Road, and provision of interior driveways and improved circulation connections, including the extension of Quarry Road to Roth Way, and
- Widening of Welch Road by the addition of a third lane to accommodate left turns in both directions; and related on-site and off-site improvements ("The Project").

B. The City Council has adopted Resolution No. _____ certifying an Environmental Impact Report prepared for the Project, Ordinance No. _____ adopting a new chapter in Title 18 (Zoning) for a "Hospital" zone district (HD), Resolution No. _____ amending the Comprehensive Plan to clarify language in specific Land Use policies, initiation of an annexation petition for a 0.75 acre portion of land in Santa Clara County to the City of Palo Alto, approval of a Development Agreement with Stanford University that would vest certain land use and development regulations for a 30-year period in exchange for public benefits, and acceptance of an update to the Stanford University Medical Center Area Plan.


D. The Planning and Transportation Commission held duly noticed public hearings on the Project on May 11, 2011 and recommended approval of the design of the Project based upon the findings and upon the conditions set forth below.

E. The City Council held a duly noticed public hearing on the Project on June 5, 2011 and heard and considered all public testimony, both oral and written, presented to it, together with all staff reports and the record of the proceedings before the Architectural Review Board and Planning and Transportation Commission.

SECTION 2. Design Approval. The City Council hereby approves the Stanford University medical Center Facilities Renewal and Replacement Project regarding the architecture, site planning and related site improvements, subject to the conditions set forth below, making findings as described in Exhibit A.
SECTION 3. Conditions of Approval. The City Council approves the Project subject to the conditions of approval described in Exhibit B.

INTRODUCED AND PASSED:

AYES: 

NOES: 

ABSENT: 

ABSTENTIONS: 

ATTEST: APPROVED:

City Clerk

Mayor

APPROVED AS TO FORM:

Senior Assistant City Attorney

City Manager

Director of Planning and Community Environment

PLANS AND DRAWINGS REFERENCED:

1. Development Plans prepared by the following: 
3. Lucile Packard Children’s Hospital Expansion: December 2, 2010 & March 17, 2011 
5. Hoover Site Development (Medical Office Building and Parking Structure): October 14, 2010 & April 7, 2011 
6. School of Medicine Foundations in Medicine: March 17, 2011 
7. Welch Road Surface Improvements and Durand Way: March 17, 2011 
8. SUMC Campus Design Guidelines: March 17, 2011

Exhibit A: Architectural Review Findings
Exhibit B: Conditions of Approval
(1) The design is consistent and compatible with applicable elements of the Palo Alto Comprehensive Plan in that the project is consistent with the following significant policies and programs:


(2) The design is compatible with the immediate environment of the site in that the New Stanford Hospital will continue and progress the quality of healthcare facilities on the Stanford University Medical Campus. The location of the hospital expansion will be along the Medical Center Promenade, linking it to the existing Stanford Hospital and Clinics, the Lucile Packard Children's Hospital, the Stanford School of Medicine, the Advanced Medicine Center and other SUMC buildings so that it has a close proximity for patients, visitors, staff and resources. This can only be done by relocating existing parking to the periphery of the medical campus, thereby allowing the expansion of the hospital to have a relatively seamless connection. The building design engages the exterior landscape with gardens, water features, roof gardens, and public program on the south side facing Pasteur Mall and east side facing the Medical Center Promenade. The design of the hospital has evolved in a manner that addresses the visual impacts identified in the Environmental Impact Report (EIR). Specifically, the proposed design, as part of the Tree Preservation Alternative, has resulted in a more compact building footprint and hospital tower configuration, which reduces the overall massing of the buildings. As described below, the towers have been designed with aluminum curtain walls and large windows that provide a sense of transparency and light;

(3) The design is appropriate to the function of the project in that it establishes a flexible modular framework for the rapidly evolving requirements of modern healthcare. Over the lifespan of the building and as the hospital's needs grow, this framework will be able to add future modules in a rational and consistent manner. The modular system also establishes structural and mechanical, electrical and plumbing systems that allow repurposing of spaces more easily without disruptive demolition and new construction;

(4) In areas considered by the board as having a unified design character or historical character, the design is compatible with such character by respecting the Stanford character but reinterpreting it in a modern way with new construction methods and materials. The tradition of Stanford courtyards, arcades and gardens are continued in the new design to promote a continuity of building aesthetic and quality of public space;
(5) The design promotes harmonious transitions in scale and character in areas between different designated land uses in that the massing and section of the building are meant to relate to the overall scale of adjacent buildings. The base of the building (Level 1 and 2) approximately aligns with the roofs of the surrounding buildings and uses similar solid materials and colors. The patient pavilions above (Levels 4-7) differentiate themselves by using more glass and lighter materials;

(6) The design is compatible with approved improvements both on and off the site by helping to define a clear and consistent edge to Pasteur Mall on all sides and improve the quality of space. Mirroring the School of Medicine developments on the south side of Pasteur Drive, the new hospital will help delineate Pasteur Mall as the entrance to the Medical Campus, analogous to Palm Drive for the University. A consistency in architectural language and materials is used on the School of Medicine buildings as well as the Lucile Packard Children's Hospital Expansion and new improvements to Hoover Pavilion;

(7) The planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community by having a clear and rational organization to the building that is easily understood. The main drop-off continues to use the Pasteur Drive loop as the entrance for patients and visitors and is centrally located between the new and existing hospital. Large diagnostic and treatment areas such as the Emergency Department, Imaging and Surgery are on the lower portions of the building to form a base. The Emergency Department is at street level close to Welch Road and gives clear access for emergencies, separating ambulance traffic from public traffic. Patient rooms are elevated in pavilions on upper levels for privacy, views and light around the atrium provides clear orientation. The internal circulation of the building is organized around a central courtyard that acts as the focal point and orientation device;

(8) The amount and arrangement of open space are appropriate to the design and the function of the structures in that the Level 3 roof gardens are strategically located between the diagnostics and treatment base building and patient pavilions above to provide an easily accessible respite from the clinical environment for patients, visitors and staff. Cafeteria, meditation space and other public functions are also located on this floor to take advantage of the gardens. The new garage roof serves as an extension of this elevated garden plane. The Garden of Medicinal Plants provides an outdoor area for people using the ED waiting area. The main drop-off is designed as a pedestrian friendly plaza with program and seating areas, linking the new hospital with the existing hospital centered around the Medical Center Promenade;

(9) Sufficient ancillary functions are provided to support the main functions of the project and the same are compatible with the project's design concept in that the New Hospital will have multiple points of contact with the current hospital so that many of the existing support functions will be able to support both buildings including the loading dock. The new parking garage will meet parking demand from existing Parking Structure
3 to be demolished with a building quality compatible in design and accessibility to the new hospital;

(10) **Access to the property and circulation thereon is safe and convenient for pedestrians, cyclists and vehicles** in that the main drop-off will be located in close proximity to both the new and existing hospitals for patients and visitors. Separation of ED traffic directly off of Welch Road will keep these emergency vehicles away from Pasteur Drive loop with a separate ambulance drive and ED drop-off. The New Hospital emphasizes the Promenade as a link through the entire medical campus connecting LPCH, SHC and School of Medicine buildings for pedestrian access for staff and visitors. Bike lockers are throughout the site but staff bike lockers are located on the west side of the garage for easy access from Welch Road, thereby lessening bicycle traffic in and around garage. This gives staff entrance to the hospital safely on the Garden Level;

(11) **Natural features are appropriately preserved and integrated with the project** in that the building and landscape design have progressed with the goal of preserving heritage trees on and around the site (Tree Preservation Alternative, now the Applicant’s preferred plan). Other trees occupying the site will be transplanted if possible or replaced with trees of like species. The existing Lawrence Halprin fountain will be maintained and refurbished to signify the terminus of Governor's Way;

(12) **The materials, textures, colors and details of construction and plant material are appropriate expression to the design and function and whether the same are compatible with the adjacent and neighboring structures, landscape elements and functions** in that the material and color palettes have been selected in relation to SUMC Design Guidelines and in concert with recent University projects. The diagnostic and treatment base will be rendered in solid precast to reflect the technical and controlled atmosphere of these spaces. Patient rooms will be mostly clad in aluminum curtain wall with large glass windows to provide the requisite quality of light and views. Curved glass walls will be used at Level 1 public functions to promote interest and activity along the pedestrian arcades of the building;

(13) **The landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site** in that the landscape design includes a Garden of Medicinal Plants, linking the site to its agricultural history and uses medicinal fruit baring trees such as loquat, olive and pepper to combine with existing ginko street trees on site. An orchard-like arrangement relates to the sites origin as an apricot orchard while giving an ordered, orthogonal design consistent to that of the hospital. The main drop-off plaza uses carob trees with similar medicinal properties but in a more organic pattern relating to the existing heritage oaks of the adjacent Kaplan Lawn. The line of existing Chinese Elms that run parallel to the Church Fountain are continued along the Medical Center Promenade to emphasize the continuity of the pedestrian walkway through the entire campus;
(14) Plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety which would tend to be drought-resistant and to reduce consumption of water in its installation and maintenance in that the native planting is central to the landscape design and overall sustainability goals of the project. Tree types are native to the sites historical uses. The majority of green roofs are a combination of native planting, drought-resistant ground cover and artificial turf for inaccessible areas with a limited amount of green lawn for accessible areas;

(15) The design is energy efficient and incorporates renewable energy design elements including, but not limited to:

(A) Exterior energy design elements;

- Sealed cavity curtainwall with integrated, automated blinds for acute care patient rooms with south/east/west exposure to reduce direct solar gain,
- Large roof overhangs on south/east/west facing facades for shading of large glass walls at Level 3 pavilions, and
- Use of cool air from seismic isolator crawl space to cool computer server rooms located directly above on Ground Level.

(B) Internal lighting service and climatic control systems

- Displacement ventilation in 264 acute care patient rooms and other nursing areas reduce energy consumption with low velocity air supply,
- Energy efficient lighting fixtures with occupancy and daylighting controls, and
- Partitioning of computer server rooms to isolate temperature sensitive equipment requiring air conditioning from non-temperature sensitive areas.

(C) Building siting and landscape elements

- Level 3 roof gardens aid in storm water management, and
- Air handler unit condensation collected and used for landscape irrigation;

(16) The design is consistent and compatible with the purpose of architectural review as set forth in Palo Alto Municipal Code, section 18.76.020(a).
Architectural Review Board
Findings for Approval
Lucile Packard Children’s Hospital

(1) *The design is consistent and compatible with applicable elements of the Palo Alto Comprehensive Plan and is consistent with the following significant policies and programs:*

L-1, L-2, L-3, L-4, L-5, L-6, L-7, L-8, L-45, L-46, L-48, L-49, L-50, L-70, L-75, L-76, L-77, L-78, T-1, T-3, T-19, T-42, T-48, N-6, N-14, N-16, N-17, N-18, N-20, N-21, N-22, N-23, N-24, N-28, N-29, N-35, N-39, N-40 and N-47, as described in Table 3.2-2 of the Draft Environmental Impact Report and reproduced for this ARB review.

(2) *The design is compatible with the immediate environment of the site* in that it maximizes the use of available outdoor space through the creation of three distinct gardens which are utilized by staff and families being served by the hospital. Parking has been placed underground to eliminate the visual impact of surface parking. Trees are used to screen the view of the hospital and to integrate the design into the landscape. Although the Lucile Packard Children’s Hospital (LPCH) Project would introduce building massing that is taller than the surrounding buildings, including the existing LPCH hospital, this building massing is primarily oriented to the Welch Road and Quarry Road corner of the site, rather than adjacent to the existing LPCH hospital. The gardens described above serve as setbacks from the existing hospital. Where the proposed building massing is closest to the existing LPCH hospital, this massing is adjacent to the existing LPCH parking structure rather than the hospital itself. This reduces the visual impact on the existing hospital.

(3) *The design is appropriate to the function of the project* in that the LPCH Project provides a state of the art tertiary care children’s hospital that meets the higher goals of sustainability with an appropriate contextual design.

(4) *In areas considered by the board as having a unified design character or historical character, the design is compatible with such character.* The visual expression of the children’s hospital is that of a building integrated with the land. The landscape berms up to modulate the scale of the building through the creation of sculpted outdoor rooms that relate to the immediate surroundings and the campus as a whole. The delicate use of materials and color palate also enhances its relationship to the character of the buildings immediately adjacent to it, such as the existing LPCH.

(5) *The design promotes harmonious transitions in scale and character in areas between different designated land uses* by using the landscape to mitigate the height of the building. The landscape rises to cover the entry lobby, and the bed pavilions emerge from this landscape feature. The Emerald Garden is both adjacent to interior lobby space and recessed from the upper most levels of the berm which are executed as a green roof. As stated above, the building massing is primarily oriented to the Welch Road and
Quarry Road corner of the site, rather than adjacent to the existing LPCH hospital. The gardens serve as setbacks from the existing hospital. Where the proposed building massing is closest to the existing LPCH hospital, this massing is adjacent to the existing LPCH parking structure rather than the hospital itself. These design features serve to promote harmonious transitions in scale.

(6) **The design is compatible with approved improvements both on and off the site as this project intimately links the design of site and structure.** As the LPCH project is an expansion to the existing hospital, the connections and transition between the expansion and existing hospital have been carefully considered to be compatible. In addition, the LPCH project has been designed to be consistent and compatible with the proposed Welch Road improvements, which include street widening, pedestrian features, and landscaping.

(7) **The planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community.** The central experience for the families being served by the hospital is a link to outdoor healing gardens. The main event garden, the Emerald Garden, is visible from the entire lobby experience. As the family leaves the lobby and moves up to the main service floor, they rise up a grand stair where they encounter the more reflective Discovery Garden. The discovery garden is a place for families to find space to contemplate their situation and to find comfort and solace in nature. Within this garden is the hospital’s chapel. At the service side of the building, the third garden, the Rainbow Garden, provides a private area for staff renewal.

(8) **The amount and arrangement of open space are appropriate to the design and the function of the structures.** Open spaces for gatherings and for visual respite are integral to the design. The three outdoor gardens serve the hospital users and provide a durable connection to nature seldom found in healthcare projects. Parking has been located underground to allow for the ample areas devoted to these spaces.

(9) **Sufficient ancillary functions are provided to support the main functions of the project and the same are compatible with the project's design concept.** Ancillary functions are all provided within the design of the project. As described above, the parking structure is entirely below grade. In addition, the loading dock is dropped a full level below grade to allow the development of the Rainbow Garden. Transformers are located at the loading dock and are not visible to the public. Cisterns for collecting water are buried beneath the landscape elements.

(10) **Access to the property and circulation thereon are safe and convenient for pedestrians, cyclists and vehicles.** The entry to the facility is clearly designated and accessible to all. A network of pedestrian/cycling paths and ample bicycle parking make the project especially attractive to those arriving by alternative means of transportation.

(11) **Natural features are appropriately preserved and integrated with the project.** Large trees are being preserved and/or relocated on the site wherever possible, including
the existing mature Coast redwood trees at the corner of Welch and Quarry Roads. Where the LPCH Project would conflict with existing trees, the project sponsor will either transplant these trees to various locations on the LPCH site or will replace trees consistent with the requirements of the proposed Hospital District.

(12) **The materials, textures, colors and details of construction and plant material are appropriate expression to the design and function and whether the same are compatible with the adjacent and neighboring structures, landscape elements and functions.** The building materials, texture, color and plant material are designed to be evocative of the immediate surrounding architectural and ecological context. GFRC planters on the exterior of the building recall the color of the dry chaparral found in our region. Drought tolerant plants within the planters provide color and a verdant liveliness to the façade. The color of the horizontal shading devices on the exterior picks up on the accent color of the adjacent existing hospital.

(13) **The landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site.** The amount, arrangement and quality of landscaped outdoor rooms as described above is extensive and uncommon in modern hospital design. This design brings sustainable health care concepts together with a design appropriate to the Northern California region and culture.

(14) **Plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety which would tend to be drought-resistant and to reduce consumption of water in its installation and maintenance.** Drought tolerant plants are fundamental to the concept of the garden design. Not only are these plants being planted in the typical locations at street level, but they continue along the perm and in the site walls up onto the green roof which is filled with drought tolerant species in intensive and extensive areas.

(15) **The design is energy efficient and incorporates renewable energy design elements including, but not limited to:**

(A) **Exterior energy design elements**

- exterior vertical and horizontal shading devices to limit direct solar gain on the interior surfaces to 5%
- use of solar thermal or solar photovoltaic systems
- site lighting will use energy efficient fixtures and provide only light levels required by the design and regulatory restrictions.

(B) **Internal lighting service and climatic control systems;**

- displacement ventilation system throughout applicable spaces reducing the typical load on mechanical systems by 30%.
- Lighting controls will be utilized to adhere to strict energy goals for the project.

(C) Building siting and landscape elements

- collection of roof rain water into cisterns
- collection of surface rain water into retention ponds that become “rain gardens” before releasing the water back to the storm system.
- extensive and intensive green roofs

(16) The design is consistent and compatible with the purpose of architectural review as set forth in Palo Alto Municipal Code, section 18.76.020(a).
(1) The design is consistent and compatible with applicable elements of the Palo Alto Comprehensive Plan in that the project is consistent with the following significant policies and programs:

L-1, L-2, L-3, L-4, L-5, L-6, L-7, L-8, L-45, L-46, L-48, L-49, L-50, L-70, L-75, L-76, L-77, L-78, T-1, T-3, T-19, T-42, T-48, N-6, N-14, N-16, N-17, N-18, N-20, N-21, N-22, N-23, N-24, N-28, N-29, N-35, N-39, N-40 and N-47; as described in Table 3.2-2 of the Draft Environmental Impact Report and reproduced for this ARB review.

(2) The design is compatible with the immediate environment of the site in that the project would retain the existing Hoover Pavilion in the existing location. The renovation of the exterior and interior of the building will not affect compatibility with the immediate environment. New or replacement exterior elements, such as mechanical units and stairways, are designed in a manner to reduce visual and historic impacts to the existing building.

(3) The design is appropriate to the function of the project in that the renovation accommodates the physical and programmatic needs and objectives of the Hoover Pavilion to be used by community practitioners and Stanford Hospital & Clinics for clinic and medical office–related uses as proposed by the Applicant;

(4) In areas considered by the board as having a unified design character or historical character, the design is compatible with such character in that the renovation project would restore and repair character defining features that have either been diminished due to previous alterations or through neglect. The improvements will allow the currently under-utilized building to be re-activated for clinic uses. The City’s historic consultant determined that the renovation project would be overall consistent with the Secretary of the Interior’s Standards for Rehabilitation of Historic Structures and that Hoover Pavilion would retain good integrity and the physical characteristics that justify it’s eligibility for inclusion in the California Register of Historic Resources;

(5) The design promotes harmonious transitions in scale and character in areas between different designated land uses in that the renovation project would not alter the scale or character of Hoover Pavilion; thereby retaining the existing scale and character of the site;

(6) The design is compatible with approved improvements both on and off the site as this project is the impetus for comprehensive improvements to the existing landscape, drainage, and site utilities;
(7) The planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community in that the proposed project uses, building types, building design, site planning and landscaping optimize shared amenities to ensure harmonious co-existence of the SUMC visitors and staff;

(8) The amount and arrangement of open space are appropriate to the design and the function of the structures in that appropriate private and public outdoor spaces are provided for the project’s uses that would serve the unique needs for all users and visitors to the site. The site planning respects the rural character of the Hoover site adjacent to the Arboretum;

(9) Sufficient ancillary functions are provided to support the main functions of the project and the same are compatible with the project’s design concept in that the parking, circulation, site features, fire access, and access to new and existing utilities are clear and considered in the site plan;

(10) Access to the property and circulation thereon is safe and convenient for pedestrians, cyclists and vehicles in that the main access points for vehicular traffic is served via a shared driveway with the adjacent surface parking site to the south and an existing driveway off a secondary road (Palo Road) to the north. The site plan provides clear separation between vehicular and pedestrian circulation to reduce the likelihood of conflict or interference. Vehicular access to and departure from the site is arranged to promote smooth traffic flow around the project site;

(11) Natural features are appropriately preserved and integrated with the project in that existing street trees and other mature trees on site are retained and existing protected trees are retained, transplanted, or replaced in kind where in conflict with new buildings. Existing landscape features around Hoover Pavilion are preserved where culturally significant;

(12) The materials, textures, colors and details of construction and plant material are appropriate expression to the design and function and whether the same are compatible with the adjacent and neighboring structures, landscape elements and functions in that a color and materials palette has been chosen with respect to the SUMC Design Guidelines, Tree and plant material selection, to add vibrancy and visual appeal, enhance the order of the site, and to assist its integration with the surrounding context;

(13) The landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site in that a variety of species types have been chosen and landscape features have been designed that will enhance the streetscape and surrounding environment in keeping with the cultural landscape assessment and the SUMC Design Guidelines;
(14) Plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety which would tend to be drought-resistant and to reduce consumption of water in its installation and maintenance in that the combination of California native plants and mature majestic trees specified have low maintenance and water use requirements;

(15) The design is energy efficient and incorporates renewable energy design elements including, but not limited to:

(A) Exterior energy design elements

The window specification and orientation of glazed areas shall minimize solar heat gain, and site lighting is specified to be high efficiency fixtures.

(B) Internal lighting service and climatic control systems;

Along with the inherent benefits of building orientation and access to daylight, the light fixtures, appliances, and HVAC systems shall be specified with high efficiency ratings exceeding Title-24 standards.

(C) Building siting and landscape elements

Low-flow irrigation combined with drought resistant plant materials;

(16) The design is consistent and compatible with the purpose of architectural review as set forth in Palo Alto Municipal Code, section 18.76.020(a).
Exhibit A: SUMC Facilities Renewal and Replacement Project Architectural Review Findings

Architectural Review Board
Findings for Approval
Hoover Pavilion Site Development

(1) **The design is consistent and compatible with applicable elements of the Palo Alto Comprehensive Plan in that the project is consistent with the following significant policies and programs:**

L-1, L-2, L-3, L-4, L-5, L-6, L-7, L-8, L-45, L-46, L-48, L-49, L-50, L-70, L-75, L-76, L-77, L-78, T-1, T-3, T-19, T-42, T-48, N-6, N-14, N-16, N-17, N-18, N-20, N-21, N-22, N-23, N-24, N-28, N-29, N-35, N-39, N-40 and N-47; as described in Table 3.2-2 of the Draft Environmental Impact Report and reproduced for this ARB review.

(2) **The design is compatible with the immediate environment of the site** in that the project converts underutilized surface parking into a multi-level parking garage and medical office building, which would be available to SUMC visitors and staff. The proposed heights of the project are compatible with adjacent existing Hoover Pavilion. The medical office building (MOB) and parking garage height would be approximately the same height as the height of the west wing of Hoover Pavilion (their stair tower and equipment screen would be taller than the west wing of Hoover Pavilion, by approximately 10-feet. Further, the project is compatible with the environment beyond the site in that it is separated from commercial uses by main arterial roads (Quarry Road and El Camino Real) on two sides and surrounded by mature majestic trees of Stanford University Arboretum and surface parking on the remaining sides;

(3) **The design is appropriate to the function of the project** in that the design accommodates the physical and programmatic needs and objectives of the parking garage and medical office building uses as proposed by the applicant;

(4) **In areas considered by the board as having a unified design character or historical character, the design is compatible with such character** in that the project utilizes similar materials, finishes, and colors – as well as building proportions and building massing -- that are respectful of the character of the existing Hoover Pavilion, without attempting to emulate or replicate the style of the older buildings. The City’s historic consultant determined that while the historic integrity of the existing Hoover Pavilion would be diminished as a result of the project, overall Hoover Pavilion would retain good integrity and the physical characteristics that justify its eligibility for inclusion in the California Register of Historic Resources;

(5) **The design promotes harmonious transitions in scale and character in areas between different designated land uses** in that the proposed buildings respond to existing buildings and features of the site. The design of the MOB is inspired by the scale, articulation, and materiality of Hoover Pavilion in order to lend human scale to the Quarry Road frontage as well as to the new central spine. For emphasis, site walls, base elements, and circulation towers of the MOB and garage are clad in terracotta.
Similar to Hoover Pavilion, the garage steps down around the main garden to provide clarity and human scale to new and existing features and transitions of the site. In addition, the placement of the MOB and garage in the proposed location, away from the Arboretum, respects the natural environment and rural character of that portion of the Hoover site;

(6) The design is compatible with approved improvements both on and off the site as this project is the impetus for comprehensive improvements to the existing landscape, drainage, and site utilities. Existing utility overhead lines would be modified and re-routed to accommodate the garage;

(7) The planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community in that the proposed project uses, building types, building design, site planning and landscaping optimize shared amenities to ensure harmonious co-existence of the SUMC visitors and staff;

(8) The amount and arrangement of open space are appropriate to the design and the function of the structures in that appropriate private and public outdoor spaces are provided for the project’s uses that would serve the unique needs for all users and visitors to the site. The site planning respects the rural character of the Hoover site adjacent to the Arboretum;

(9) Sufficient ancillary functions are provided to support the main functions of the project and the same are compatible with the project's design concept in that the parking, circulation, site features, fire access, and access to new and existing utilities are clear and considered in the site plan;

(10) Access to the property and circulation thereon is safe and convenient for pedestrians, cyclists and vehicles in that the main access points for vehicular traffic is served via a shared driveway with the adjacent surface parking site to the south and an existing driveway off a secondary road (Palo Road) to the north. The site plan provides clear separation between vehicular and pedestrian circulation to reduce the likelihood of conflict or interference. Vehicular access to and departure from the site is arranged to promote smooth traffic flow around the project site;

(11) Natural features are appropriately preserved and integrated with the project in that the existing street trees and other mature trees on site are retained and existing protected trees are retained, transplanted, or replaced in kind where in conflict with new buildings. Existing landscape features around Hoover Pavilion are preserved where culturally significant;

(12) The materials, textures, colors and details of construction and plant material are appropriate expression to the design and function and whether the same are compatible with the adjacent and neighboring structures, landscape elements and functions in that a color and materials palette has been chosen with respect to the SUMC Design Guidelines,
Tree and plant material selection, to add vibrancy and visual appeal, enhance the order of the site, and to assist its integration with the surrounding context;

(13) The landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site in that a variety of species types have been chosen and landscape features have been designed that will enhance the streetscape and surrounding environment in keeping with the cultural landscape assessment and the SUMC Design Guidelines;

(14) Plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety which would tend to be drought-resistant and to reduce consumption of water in its installation and maintenance in that the combination of California native plants and mature majestic trees specified have low maintenance and water use requirements;

(15) The design is energy efficient and incorporates renewable energy design elements including, but not limited to:

(A) Exterior energy design elements

The window specification and orientation of glazed areas shall minimize solar heat gain, and site lighting is specified to be high efficiency fixtures.

(B) Internal lighting service and climatic control systems

Along with the inherent benefits of building orientation and access to daylight, the light fixtures, appliances, and HVAC systems shall be specified with high efficiency ratings exceeding Title-24 standards.

(C) Building siting and landscape elements

Low-flow irrigation combined with drought resistant plant materials;

(16) The design is consistent and compatible with the purpose of architectural review as set forth in Palo Alto Municipal Code, section 18.76.020(a).
Architectural Review Board
Findings for Approval
Stanford University School of Medicine: Foundations in Medicine Building 1

(1) The design is consistent and compatible with applicable elements of the Palo Alto Comprehensive Plan in that the project is consistent with the following significant policies and programs:

L-1, L-2, L-3, L-5, L-6, L-7, L-8, L-45, L-49, L-50, L-70, L-74, L-75, L-77, T-1, T-3, T-19, T-23, T-48, N-17, N-18, N-20, N-21, N-22, N-23, N-24, N-25, N-29, N-30, N-39 and N-47 as described in Table 3.2-2 of the Draft Environmental Impact Report and reproduced for this ARB review.

(2) The design is compatible with the immediate environment of the site in that the proposed heights of the three foundations buildings are compatible with the adjacent Stanford School of Medicine campus. Further, the project utilizes the full buildout potential of the site through additional square footage and the creation/completion of several quads along Pasteur Drive and Cooper Lane. Governors Avenue along the East side of the site is also strengthened. A new front door for the School of Medicine along Pasteur Drive is created in relationship with the new Stanford Hospital entry and an emphasized connection between the two campuses along Medical Center Promenade.

(3) The design is appropriate to the function of the project in that it continues the physical and programmatic needs of the Stanford School of Medicine through continued development of research facilities.

(4) In areas considered by the board as having a unified design character or historical character, the design is compatible with such character in that the project continues the language established the Clark Center and continued with the Lorry I. Lokey building of limestone facades with red roof elements signifying major entries. The building proportions and massing are also consistent with existing buildings on the School of Medicine campus.

(5) The design promotes harmonious transitions in scale and character in areas between different designated land uses in that the Foundation in Medicine buildings create a northern edge for the School of Medicine Campus within a consistent architectural character and scale that has already been established. The articulation of the base with exposed structure and transparent glass create a consistent rhythm along the entirety of Cooper Lane. In addition, all glass entries are set back to create a series of “front porches” along Cooper Lane for student and staff interaction.

(6) The design is compatible with approved improvements both on and off the site in that it will follow Stanford Design guidelines and reference the architectural “Kit of Parts” established on the Stanford School of Medicine Campus. The project will also help establish connector elements and walkways between the School of Medicine and the new Stanford Hospital.
(7) The planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general communities in that the proposed buildings help establish a series of new quads along and “porches” along both Pasteur Drive and Cooper Lane. The buildings also complete a distinct and cohesive School of Medicine Campus.

(8) The amount and arrangement of open space are appropriate to the design and the function of the structures in that the proposed buildings create a series of open spaces and quads consistent with the scale and density of the School of Medicine campus.

(9) Sufficient ancillary functions are provided to support the main functions of the project and the same are compatible with the project’s design concept in that service areas, garbage, bike parking, and other support functions are all available on or adjacent to the site as part of the campus plan and architecture.

(10) Access to the property and circulation thereon is safe and convenient for pedestrians, cyclists and vehicles in that the site plan creates a clear distinction for vehicular access and departure to the site on Pasteur Drive. Numerous options exists for pedestrian access including Cooper Lane connection back to Stanford University and the Medical Center Promenade that will connect pedestrians through the School of Medicine Campus to the new Stanford Hospital north of the site.

(11) Natural features are appropriately preserved and integrated with the project in that the building footprints have been located in order to preserve as many of the existing mature trees as possible. The existing mature oak trees along Pasteur Drive are augmented with additional oak trees to create three large groves along the south side of the Drive.

(12) The materials, textures, colors and details of construction and plant material are appropriate expression to the design and function and whether the same are compatible with the adjacent and neighboring structures, landscape elements and functions in that the landscape paving and plant materials have been carefully selected to complement the existing campus palette. At the project boundaries, the design intent is to align with and, in many cases, extend the existing paving materials in order to create a seamless edge.

(13) The landscape design concept of the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site in that the landscape design incorporates a range of open space opportunities at varying scales, from a central plaza to an open green suitable for outdoor recreational activities. Bike parking is located close to the entrances of the buildings. Plant massing, form, texture, will enhance the functionality of the open spaces, as well as provide screening where necessary.
(14) Plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety which would tend to be drought-resistant and to reduce consumption of water in its installation and maintenance in that all plant material will be native or acclimated to the site’s climate zone.

(15) The design is energy efficient and incorporates renewable energy design elements in that the project will be designed in compliance with the following standards:

(A) Exterior energy design elements

The window specification and orientation of glazed areas shall minimize solar heat gain, and site lighting is specified to be high efficiency fixtures.

(B) Internal lighting service and climatic control systems

Along with the inherent benefits of building orientation and access to daylight, the light fixtures, appliances, and HVAC systems shall be specified with high efficiency ratings exceeding Title-24 standards.

(C) Building siting and landscape elements

Low-flow irrigation combined with drought resistant plant materials;

(16) The design is consistent and compatible with the purpose of architectural review as set forth in Palo Alto Municipal Code, Section 18.76.020(a).
Architectural Review Board
Findings for Approval
Welch Road Improvements

(1) The design is consistent and compatible with applicable elements of the Palo Alto Comprehensive Plan and is consistent with the following significant policies and programs:

L-1, L-2, L-3, L-4, L-5, L-6, L-7, L-8, L-45, L-46, L-48, L-49, L-50, L-70, L-75, L-76, L-77, L-78, T-1, T-3, T-19, T-42, T-48, N-6, N-14, N-16, N-17, N-18, N-20, N-21, N-22, N-23, N-24, N-28, N-29, N-35, N-39, N-40 and N-47, as described in Table 3.2-2 of the Draft Environmental Impact Report and reproduced for this ARB review.

(2) The design is compatible with the immediate environment of the site in that the improvements to the existing Welch Road and subsequent installation of Durand Way will maintain Welch Road in its current location, but would be improved to facilitate traffic movements in and out of the medical center area. The Durand Way extension would also facilitate improved traffic movements between Sand Hill Road and Welch Road. The improvements include a new streetscape landscaping plan that would be compatible with existing landscaping in the vicinity of Welch Road.

(3) The design is appropriate to the function of the project in that the street improvements would facilitate traffic movements in and out of the medical center area.

(4) In areas considered by the board as having a unified design character or historical character, the design is compatible with such character. This finding is not applicable to the Welch Road/Durand Way project.

(5) The design promotes harmonious transitions in scale and character in areas between different designated land uses. This finding is not applicable to the Welch Road/Durand Way project.

(6) The design is compatible with approved improvements both on and off the site in that the Welch Road and Durand Way projects are an important component for the overall success of the larger SUMC Project.

(7) The planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community. This finding is not applicable to the Welch Road/Durand Way project.

(8) The amount and arrangement of open space are appropriate to the design and the function of the structures. This finding is not applicable to the Welch Road/Durand Way project.
(9) Sufficient ancillary functions are provided to support the main functions of the project and the same are compatible with the project's design concept. This finding is not applicable to the Welch Road/Durand Way project.

(10) Access to the property and circulation thereon are safe and convenient for pedestrians, cyclists and vehicles. The Welch Road and Durand Way project have been designed to accommodate all users, including automobiles, bicyclists and pedestrians in a safe and efficient manner.

(11) Natural features are appropriately preserved and integrated with the project. Although many of the existing street trees would be removed as part of the Welch Road and Durand Way projects, a new landscape plan will be implemented in a manner that would enhance the natural environment of the area.

(12) The materials, textures, colors and details of construction and plant material are appropriate expression to the design and function and whether the same are compatible with the adjacent and neighboring structures, landscape elements and functions. Drought tolerant trees and plants within the planter strips provide color and liveliness to the roadways.

(13) The landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site, in that the landscape plan provides color and visual interest to all users of Welch Road and Durand Way, while maintaining the essential function of the street to move people around the medical center campus. The concept includes a variety of groundcovers, shrubs and trees arranged in manner that promotes a visual hierarchy of plant material which is accessible for the different users of the roadways.

(14) Plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety which would tend to be drought-resistant and to reduce consumption of water in its installation and maintenance. Drought tolerant plants are fundamental to the concept of the landscape plan.

(15) The design is energy efficient and incorporates renewable energy design elements. This finding is not applicable to the Welch Road/Durand Way project.

(16) The design is consistent and compatible with the purpose of architectural review as set forth in Palo Alto Municipal Code, section 18.76.020(a).
EXHIBIT B: DRAFT CONDITIONS OF APPROVAL

A. GENERAL:

The project shall be subject to the mitigation measures as identified in the Final Environmental Impact Report’s Mitigation Monitoring Reporting Program (MMRP) adopted by the City Council. The MMRP is attached an exhibit to the CEQA resolution.

A.1 Planning Division

1. Plan Conformance. The plans submitted for permits shall be in substantial conformance with the following Architectural Review Board Drawing Submittals, except as modified to incorporate these conditions of approval:

   b. Lucile Packard Children’s Hospital Expansion: December 2, 2010 & March 17, 2011
   d. Hoover Site Development (Medical Office Building and Parking Structure): October 14, 2010 & April 7, 2011
   e. School of Medicine Foundations in Medicine: March 17, 2011
   f. Welch Road Surface Improvements and Durand Way: March 17, 2011
   g. SUMC Campus Design Guidelines: March 17, 2011

2. Review, Oversight, and Inspections. Due to the complexity and size of the Project and a phasing schedule that is anticipated to last approximately fifteen years, the City shall hire, at the expense of the applicant, an independent consulting firm or firms and/or contractors to perform activities including, but not limited to, plan review, condition compliance review, mitigation monitoring, inspections, and report preparation. Within 30-days of Project approval, the Project sponsors and the City of Palo Alto shall enter into a Memorandum of Understanding (MOU) that describes the initial deposit and subsequent payments, the types of contractors that could be retained, the scopes of work to be performed, procedures for amending the MOU, and reporting responsibilities, among other considerations. It is anticipated that consulting firms and contractors would be needed in the fields including, but not limited to, Planning, Building Review and Inspections, Public Works, Utilities, Fire, and Arborist.

3. Mitigation and Condition Monitoring. Within 30-days of Project approval, the Project sponsors shall meet with representatives from the Department of Planning and Community Environment to initiate a plan and process for mitigation and condition monitoring that is agreeable to all parties and is consistent with the provisions of the Development Agreement approved by City Council on ____. All project plan submittals shall include the following statement, printed on the introductory sheet of the plans, “These plans shall be consistent with the conditions of approval, located in the implementation document prepared for the Project.”
4. The proposed project shall comply with the requirements of *Palo Alto Green Building Ordinance No. 5107*, where applicable, prior to submittal for building permits. Projects under the jurisdiction of the Office of Statewide Health Planning and Development (OSHPD) shall be exempt from this Ordinance. Projects submitted for building review to the Palo Alto Building Department prior to adoption of Ordinance No. 5107 shall be exempt from this Ordinance.

A.2 Fire Department

1. **Perform a “Hazardous Materials Closure” with the PAFD for 701, 703, and 1101 Welch Road or facilities, areas or rooms within the project area that stored, used or handled hazardous materials.** This includes “permitted site” as well as “unpermitted sites” discovered during the project that have or had hazardous materials. For sites where a determination has been made that have or previously had hazardous materials and has not been closed with PAFD, a hazardous materials closure permit is required prior to removal of related materials and prior to demolition. Additionally, prior to removal or modification of the site an inspection by the fire dept is required unless otherwise determined.

A hazardous materials closure includes the physical facility and soil below or associated with the facility. Per project specific determination, a complete Phase II ESA and/or soil sampling may be required. The Hazardous Materials Closure Application and Guidelines can be found at [http://www.unidocs.org](http://www.unidocs.org) or is available from PAFD. Hazardous Materials closure of the facility includes removal or addressing any items or areas to the degree that maintenance of a hazardous materials permit is no longer required. Any building, room or area shall have hazardous materials or residuals removed to a level at or below state hazardous waste levels, as agreed at the project start. Clean up level within the building will determine if there is a deed restriction on the building use. At a minimum the hazardous materials closure of a facility room or area will include items listed in the Hazardous Materials Closure Guidelines and may include for example; sampling of residues on facility surfaces such as laboratory countertops, fume hoods as well as sampling of walls, equipment, sinks, sumps, floors, and drain lines. Testing for lead containing materials may be required for any facility that previously contained x-ray equipment.

When contamination of the soil suspected or determined, a Phase II ESA or soil sampling shall include sampling and analysis of soil and associated items; sinks, sumps, floors, and drain lines at a minimum. A post closure report shall be supplied to the PAFD. The PAFD and the County DEH shall be notified by the Project sponsors if contamination remains after the hazardous materials closure is completed with the Fire Department. If soil contamination is discovered, the project will be referred to the RWQCB. The RWQCB will determine appropriate action or referral to another agency for the project. The SUMC Project sponsors shall prepare a site remediation assessment that (a) specifies measures to protect workers and the public from exposure to potential site hazards and (b) certifies that the proposed remediation measures would clean up contaminants, dispose of the wastes, and protect public health in accordance with federal, State, and local requirements. Site excavation activities shall not proceed until the site remediation has been approved by the RWQCB or the designated regulatory oversite agency and implemented by the SUMC Project sponsors. Additionally, the site remediation assessment shall be subject to review and approval by the RWQCB. All appropriate agencies shall be notified. *(Note: 701 and 703 Welch Rd. are addressed separately in this report. Other known hazardous materials use storage and handling buildings, facilities, areas or rooms are not addressed separately – such as 1101 Welch Rd, multiple medical clinics / office buildings on Welch Rd, Stanford Hospital areas being remodeled or demolished, 211 Quarry Rd structures, as well as unpermitted or unknown buildings, facility areas or rooms with hazardous materials.)*
A.3 Planning Arborist

General Conditions

1. The Project shall be consistent with the Hospital District (Palo Alto Municipal Code, Section 18.XX) tree regulations including, but not limited to tree retention, relocation and removal.

2. All required Biological Resource mitigations as described in the MMRP approved by City Council shall be completed to the satisfaction of the Director of Planning and Community Environment or his/her designee.

3. The project shall comply with The Palo Alto Tree Technical Manual, Standards & Specifications (Palo Alto Municipal Code, Chapter 8.10.030)

Prior to Demolition, Building or Grading permit issuance

1. Building Permit Submittal Review. Prior to submittal for staff review, the plans submitted for State or City of Palo Alto building permit shall be reviewed by the SUMC Project Arborist to verify that all of their recommendations have been incorporated into the final plan set. The submittal set shall be accompanied by the SUMC Project Arborist’s certification letter that the plans have incorporated the following information:

   a. Final Tree Preservation Report (TPR) design changes and preservation measures as required in Mitigation Measure BR-4.1.

   b. Palo Alto Tree Technical Manual Standards, Section 2.00 and PAMC 8.10.080.

2. Site Plan Requirements. The final Plans submitted for building permit shall include the following information and notes on the relevant plan sheets:

   a. Sheet T-1 "Tree Protection-it's Part of the Plan" Applicant shall complete the following sections on Sheet T-1: Tree Disclosure Statement, Inspections, and Monthly Reporting.

   b. The Tree Preservation Report (TPR). All sheets of the TPR approved by the City shall be printed on numbered Sheet T-1 (T-2, T-3, etc) and added to the sheet index.

   c. Conditions of Approval- the final list of City Arborist Conditions of Approval shall be printed on the numbered Sheet T-1 (T-2, T-3, etc) and added to the sheet index.

   d. Protective Tree Fencing Type. Delineate on grading plans, irrigation plans, site plans and utility plans, Type II fencing around Street Trees and Type I fencing around Protected/Designated trees as a bold dashed line enclosing the Tree Protection Zone (per the approved Tree Preservation Report) per instructions on Detail #605, Sheet T-1, and the City Tree Technical Manual, Section 6.35-Site Plans. Site Plan Note- Apply to the site plan stating, "Note #1: All tree protection and inspection schedule measures, design recommendations, watering and construction scheduling shall be implemented in full by owner and contractor, as stated in the Tree Preservation Report on Sheet T-1 and the approved plans”.

3. All Other Plan Notes. All civil plans, grading plans, irrigation plans, site plans and utility plans and relevant sheets shall include the following notes applying to the trees to be protected, including neighboring trees:
a. "Note #1: Regulated Trees—before working in this area contact the SUMC Project Arborist at Tel. ___";

b. “Note #2: Soils Report and excavation instructions for basement construction within the Tree Protection Zone (TPZ) of a protected tree shall specify a vertical cut (stitch piers may be necessary) in order to avoid over-excavating into the tree root zone. Any variance from this procedure requires City Arborist approval, please call (650) 329-2441.”

c. “Note #3: Utility trenching shall not occur within the TPZ of the protected tree. Contractor shall be responsible for ensuring that no trenching occurs within the TPZ of the protected tree by contractors, City crews or final landscape workers. See sheet T-1 for instructions.”

d. Mandatory Landscape Architect (LA) Inspection Verification to the City. The LA of record shall verify the performance measurements are achieved with a separate letter of verification to City Planning staff, in addition to owner’s representative for each of the following:

   i. Percolation & drainage checks have been performed and are acceptable.

   ii. Final grading inspection of all plantable areas has been inspected for tilling depth, rubble removal, soil test amendments, are mixed and irrigation trenching will not cut through any tree roots.

   iii. Tree and Shrub Planting Specifications, including delivered stock, meets Standards in the CPA Tree Technical Manual, Section 3.30-3.50. Girdling roots and previously topped trees are subject to rejection.

4. Tree Protection Verification. Prior to demolition, grading or building permit issuance, a written verification from the contractor that the required protective fencing (at the boundary of the TPZ) is in place shall be submitted to the Building Inspections Division. The fencing shall contain required warning sign and remain in place until final inspection of the project.

During Construction

5. Excavation Restrictions Apply (TTM, Sec. 2.20 C & D). Any approved grading, digging or trenching beneath a tree canopy shall be performed using ‘air-spade’ method as a preference, with manual hand shovel as a backup. For utility trenching, including sewer line, roots exposed with diameter of 1.5 inches and greater shall remain intact and not be damaged. If directional boring method is used to tunnel beneath roots, then Table 2-1, Trenching and Tunneling Distance, shall be printed on the final plans. Plan Changes. Revisions and/or changes to plans before or during construction shall be reviewed and responded to by the SUMC Project Arborist, (name of certified arborist of record and phone #), with written letter of acceptance before submitting the revision to the OSHPD or City of Palo Alto for review.

6. Tree Damage. Tree Damage, Injury Mitigation and Inspections apply to Contractor. Reporting, injury mitigation measures and arborist inspection schedule (1-5) apply pursuant to TTM, Section 2.20-2.30. Contractor shall be responsible for the repair or replacement of any publicly owned or protected trees that are damaged during the course of construction, pursuant to Title 8 of the Palo Alto Municipal Code, and city Tree Technical Manual, Section 2.25.

7. General. The following general tree preservation measures apply to all trees to be retained: No storage of material, topsoil, vehicles or equipment shall be permitted within the TPZ. The ground
under and around the TPZ shall not be altered. Trees to be retained shall be irrigated, aerated and maintained as necessary to ensure survival.

Prior to Final Inspection by City Arborist

8. **Landscape Inspection.** The SUMC Project Arborist and Landscape Architect shall perform a final inspection and prepare a final report for submittal to the City Arborist. The Planning Department shall be in receipt of written verification that the Landscape Architect has inspected all trees, shrubs, planting and irrigation and that they are installed and functioning as specified in the approved plans.

9. **Tree Inspection.** The contractor shall call for an inspection by the Project Arborist and City Arborist. A final inspection and report by the project arborist shall evaluate all trees to be retained and protected, as indicated in the approved plans, the activity, health, welfare, mitigation remedies for injury, if any, and for the long term care of the trees for the new owner. The report shall provide written verification to the Planning Department that all trees, shrubs, planting and irrigation are installed as specified in the approved plans. The final arborist report shall be provided to the Planning Department prior to written request for temporary or final occupancy. The final report may be used to navigate the security guarantee return process, when applicable.

Post Construction

10. **Maintenance.** All landscape and trees shall be maintained, watered, fertilized, and pruned according to Best Management Practices-Pruning (ANSI A300-2001 or current version). Any vegetation that dies shall be replaced or failed automatic irrigation repaired by the current property owner within 30 days of discovery.

A.4 Public Works

Prior to Submittal of Construction Permits

1. **Construction Impact Mitigation Plan.** Prior to issuance of any development permit (street work, grading, building, etc) for the SUMC project, the project sponsors shall prepare and receive approval of a Construction Impact Minimization Plan (CIMP), the minimum requirements of which are described in Mitigation Measure TR-1.8 of the Mitigation Monitoring and Reporting Plan (MMRP). Additional CIMP information not specifically described in MMRP TR-1.8 may be required. It is anticipated that a separate CIMP will be required for each of the project components. Please contact Public Works staff to initiate discussions on the development of the CIMP.

2. **The applicant is required to meet with Public Works Engineering (PWE) prior to submittal of construction permits to verify the basic design parameters affecting grading, drainage and surface water infiltration.** The applicant is required to submit a conceptual site grading and drainage plan that conveys site runoff to the nearest adequate municipal storm drainage system. In order to address potential storm water quality impacts, the plan shall identify the Best Management Practices (BMP’s) to be incorporated into the Storm Water Pollution Prevention Plan (SWPPP) that will be required for the project. The SWPPP shall include permanent BMP’s to be incorporated into the project to protect storm water quality. (Resources and handouts are available from Public Works – Engineering. Specific reference is made to Palo Alto’s companion document to “Start at the Source”, entitled
“Planning Your Land Development Project”). The elements of the PWE-approved conceptual grading and drainage plan shall be incorporated into the building permit plans.

3. **A Grading and Excavation Permit** issued by the CPA Building Inspection Division is required for the proposed project. Any grading permit issued in conjunction with a phased project implementation plan will only authorize grading and storm drain improvements. Other site utilities may be shown on the grading plan for reference only, and should be so noted. No utility infrastructure should be shown inside the building footprint. Installation of these other utilities will be approved as part of a subsequent Building Permit application.

4. **The applicant shall submit a final grading and drainage plan to Public Works Engineering.** This plan shall show spot elevations or contours of the site and demonstrate the proper conveyance of storm water to the nearest adequate municipal storm drainage system. Existing drainage patterns, including accommodation of runoff from adjacent properties, shall be maintained.

5. **The proposed development will result in a change in the impervious area of the property.** The applicant shall provide calculations showing the adjusted impervious area with the building permit application. A Storm Drainage Fee adjustment on the applicant’s monthly City utility bill will take place in the month following the final approval of the construction by the Building Inspection Division. The impervious area calculation sheets and instructions are available from Public Works Engineering.

6. **A detailed site-specific soil report** prepared by a licensed soils or geo-technical engineer must be submitted which includes information on water table and basement construction issues. This report shall identify the current groundwater level, if encountered, and by using this and other available information, as well as professional experience, the engineer shall estimate the highest projected ground-water level likely to be encountered in the future. If the proposed basement is reasonably above the projected highest water level, then the basement can be constructed in a conventional manner with a subsurface perimeter drainage system to relieve hydrostatic pressure. If not, measures must be undertaken to render the basement waterproof and able to withstand all projected hydrostatic and soil pressures. No pumping of ground water is allowed. In general, however, Public Works Engineering recommends that structures be constructed in such a way that they do not penetrate existing or projected ground water levels.

7. **Storm water discharge associated with construction activity.** This proposed development will disturb more than one acre of land. The applicant must apply for coverage under the State Water Resources Control Board’s (SWRCB) NPDES general permit for storm water discharge associated with construction activity. A Notice of Intent (NOI) must be filed for this project with the SWRCB in order to obtain coverage under the permit. The General Permit requires the applicant to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The applicant is required to submit two copies of the NOI and the draft SWPPP to the Public Works Department for review and approval prior to issuance of the building permit. The SWPPP should include both permanent, post-development project design features and temporary measures employed during construction to control storm water pollution. Specific Best Management Practices (BMP’s) which apply to the work should be incorporated into the design.

8. **The applicant is required to paint the “No Dumping/Flows to San Francisquito Creek” logo in blue color on a white background, adjacent to all storm drain inlets.** Stencils of the logo are available from the Public Works Environmental Compliance Division, which may be contacted at (650) 329-2598. A deposit may be required to secure the return of the stencil. Include the instruction to paint the logos on the construction grading and drainage plan. Include maintenance of these logos in the Hazardous Materials Management Plan, if such a plan is part of this project.
9. Dumpster/recycling area.
   a. The project includes the construction of dumpster and recycling areas as part of a food service facility. Regulations require that the dumpster/recycling area be adequately roofed or covered.
   b. The project includes the construction of dumpster and recycling areas. City guidelines recommend that this area be covered where feasible.

10. Storm runoff from loading docks. The plans include a loading dock. Storm runoff from loading docks where chemicals or hazardous materials may be handled shall not drain to a street, gutter, or storm drain. See 16.09.032(b)(4)(D). It is recommended that the loading dock(s) be covered to preclude the need for a drain.

11. Dewatering: The project excavations will require dewatering during construction. Public Works only allows groundwater drawdown well dewatering. Open pit groundwater dewatering is disallowed. Dewatering is only allowed from April through October due to inadequate capacity in our storm drain system. The geotechnical report for this site must list the highest anticipated groundwater level. We recommend a piezometer to be installed in the soil boring. The contractor must determine the depth to groundwater immediately prior to excavation by using the piezometer or by drilling an exploratory hole if the deepest excavation will be within 3 feet of the highest anticipated groundwater level. If groundwater is found within 2 feet of the deepest excavation, a drawdown well dewatering system must be used. Public Works will require the water to be tested for contaminants prior to initial discharge and at intervals during dewatering. The contractor must retain an independent testing firm to test the discharge water for the contaminants Public Works specifies and submit the results to Public Works.

12. Storm Water Pollution Prevention Measures. Per Palo Alto Municipal Code Chapter 16.11, the applicant must incorporate permanent storm water pollution prevention measures that treat storm water runoff prior to discharge. As of February 10, 2011, the prevention measures shall be reviewed by a qualified third-party reviewer who needs to certify that it complies with the Palo Alto Municipal Code requirements. This is required prior to the issuance of a building permit. The third-party reviewer shall be acquired by the applicant and needs to be on the Santa Clara Valley Urban Runoff Pollution Prevention Program’s (Program) list of qualified consultants. (http://www.scvurppp-w2k.com/consultants.htm) Any consultant or contractor hired to design/and/or construct a storm water treatment system for the project cannot certify the project as a third-party reviewer.

13. Basement Shoring: Shoring for the basement excavation, including tiebacks, must not extend onto adjacent private property or into the City right-of-way without having first obtained written permission from the private property owners and/or an encroachment permit from Public Works.

During Construction

14. The contractor must contact the CPA Public Works Inspector at (650) 496-6929 prior to any work performed in the public right-of-way.

15. No storage of construction materials is permitted in the street or on the sidewalk without prior approval of Public Works Engineering.

16. The developer shall require its contractor to incorporate best management practices (BMP’s) for stormwater pollution prevention in all construction operations, in conformance with the Storm Water...
Pollution Prevention Plan prepared for the project. It is unlawful to discharge any construction debris (soil, asphalt, sawcut slurry, paint, chemicals, etc.) or other waste materials into gutters or storm drains. (PAMC Chapter 16.09).

17. All construction within the City right-of-way, easements or other property under City jurisdiction shall conform to Standard Specifications of the Public Works and Utility Departments.

Prior to Finalization

18. All sidewalks and curb and gutters bordering the project which have been damaged during construction shall be repaired and/or removed and replaced in compliance with Public Works approved standards. Sec. 12.08.010.

19. All unused driveways shall be removed and replaced with curb and gutter. Sec. 12.08.090.

20. The Public Works Inspector shall sign off the building permit prior to the finalization of this permit. All off-site improvements shall be finished prior to this sign-off. Similarly, all as-builts, on-site grading, drainage and post-developments BMP’s shall be completed prior to sign-off. As-Built drawings shall be drawn using NAD88 coordinates and submitted in digital format (ACAD) as well as 3 mil Mylar.

A.5 Public Works – Water Quality

1. **PAMC 16.09.117(c) Discharge of Groundwater.** Prior approval shall be obtained from the city engineer or designee to discharge water pumped from construction sites to the storm drain. The city engineer or designee may require gravity settling and filtration upon a determination that either or both would improve the water quality of the discharge. Contaminated ground water or water that exceeds state or federal requirements for discharge to navigable waters may not be discharged to the storm drain. Such water may be discharged to the sewer, provided that the requirements of Section 16.09.110 are met and the approval of the superintendent is obtained prior to discharge. The City shall be compensated for any costs it incurs in authorizing such discharge, at the rate set forth in the Municipal Fee Schedule.

2. **PAMC 16.09.080 Industrial Waste Discharge Permit.** Industrial dischargers must submit an application for an industrial waste discharge permit no later than sixty days in advance of commencing discharge. (This is likely to only apply to the hospital and labs/clinics buildings)

3. **PAMC 16.09.180(b)(9) Covered Parking.** Drain plumbing for parking garage floor drains must be connected to an oil/water separator with a minimum capacity of 100 gallons, and to the sanitary sewer system.

4. **PAMC 16.09.180(b)(10) Dumpsters for New and Remodeled Facilities.** New buildings and residential developments providing centralized solid waste collection, except for single-family and duplex residences, shall provide a covered area for a dumpster. The area shall be adequately sized for all waste streams and designed with grading or a berm system to prevent water runon and runoff from the area.

5. **PAMC 16.09.180(b)(14) Architectural Copper.** On and after January 1, 2003, copper metal roofing, copper metal gutters, copper metal down spouts, and copper granule containing asphalt shingles shall
not be permitted for use on any residential, commercial or industrial building for which a building permit is required. Copper flashing for use under tiles or slates and small copper ornaments are exempt from this prohibition. Replacement roofing, gutters and downspouts on historic structures are exempt, provided that the roofing material used shall be prepatinated at the factory. For the purposes of this exemption, the definition of "historic" shall be limited to structures designated as Category 1 or Category 2 buildings in the current edition of the Palo Alto Historical and Architectural Resources Report and Inventory.

6. **PAMC 16.09.175(k) (2) Loading Docks**
   
a. Loading dock drains to the storm drain system may be allowed if equipped with a fail-safe valve or equivalent device that is kept closed during the non-rainy season and during periods of loading dock operation.

b. Where chemicals, hazardous materials, grease, oil, or waste products are handled or used within the loading dock area, a drain to the storm drain system shall not be allowed. A drain to the sanitary sewer system may be allowed if equipped with a fail-safe valve or equivalent device that is kept closed during the non-rainy season and during periods of loading dock operation. The area in which the drain is located shall be covered or protected from rainwater run-on by berms and/or grading. Appropriate wastewater treatment approved by the Superintendent shall be provided for all rainwater contacting the loading dock site.

7. **PAMC 16.09.180(b)(5) Condensate from HVAC.** Condensate lines shall not be connected or allowed to drain to the storm drain system.

8. **16.09.215 Silver Processing.** Facilities conducting silver processing (photographic or X-ray films) shall either submit a treatment application or waste hauler certification for all spent silver bearing solutions. 650-329-2421.

9. **PAMC 16.09.205 Cooling Towers.** No person shall discharge or add to the sanitary sewer system or storm drain system, or add to a cooling system, pool, spa, fountain, boiler or heat exchanger, any substance that contains any of the following:
   
   - Copper in excess of 2.0 mg/liter;
   - Any tri-butyl tin compound in excess of 0.10 mg/liter;
   - Chromium in excess of 2.0 mg/liter.
   - Zinc in excess of 2.0 mg/liter; or
   - Molybdenum in excess of 2.0 mg/liter.

10. The above limits shall apply to any of the above-listed substances prior to dilution with the cooling system, pool, spa or fountain water.

11. A flow meter shall be installed to measure the volume of blowdown water from the new cooling tower. Cooling systems discharging greater than 2,000 gallons per day are required to meet a copper discharge limit of 0.25 milligrams per liter.

12. **PAMC 16.09.180(b)(b) Copper Piping.** Copper, copper alloys, lead and lead alloys, including brass, shall not be used in sewer lines, connectors, or seals coming in contact with sewage except for domestic waste sink traps and short lengths of associated connecting pipes where alternate materials are not practical. The plans must specify that copper piping will not be used for wastewater plumbing.
13. **PAMC 16.09.175(j) Traps Below Laboratory Sinks.** Sewer traps below laboratory sinks shall be made of glass or other approved transparent materials to allow inspection and to determine frequency of cleaning. Alternatively, a removable plug for cleaning the trap may be provided, in which case a cleaning frequency shall be established by the Superintendent. In establishing the cleaning frequency, the Superintendent shall consider the recommendations of the facility. The Superintendent will grant an exception to this requirement for areas where mercury will not be used; provided, that in the event such an exception is granted and mercury is subsequently used in the area, the sink trap shall be retrofitted to meet this requirement prior to use of the mercury.

14. **PAMC 16.09.175(a) Floor Drains.** Interior (indoor) floor drains to the sanitary sewer system may not be placed in areas where hazardous materials, hazardous wastes, industrial wastes, industrial process water, lubricating fluids, vehicle fluids or vehicle equipment cleaning wastewater are used or stored, unless secondary containment is provided for all such materials and equipment.

15. **PAMC 16.09.175(i) Laboratory Sinks.** Laboratory countertops and laboratory sinks shall be separated by a berm which prevents hazardous materials spilled on the countertop from draining to the sink.

16. **PAMC 16.09.180(b)(1) and 16.09.105 Segregated Plumbing and Sampling Locations.** The owner of every new commercial and industrial building or portion thereof shall cause the building to be constructed so that industrial waste is segregated, by means of separate plumbing, from domestic waste prior to converging with other waste streams in the sanitary sewer system. For the purposes of this section only, the term "new" shall also include change to a use that requires plumbing for industrial waste.

Establishments from which industrial wastes are discharged to the sanitary sewer system shall provide and maintain one or more sampling locations or metering devices or volume and flow measuring methodologies or other sampling and measuring points approved by the Superintendent which will allow the separate measuring and sampling of industrial and domestic wastes. Unless otherwise approved by the Superintendent, domestic and industrial waste shall be kept completely separated upstream of such sampling locations and/or measuring points. Establishments that are billed for sewer service on the basis of sewage effluent constituents shall provide a suitable means for sampling and/or measurement of flow to determine billing constituents in accordance with the utilities rules and requirements. Sampling locations shall be so located that they are safe and accessible to the Superintendent at any reasonable time during which discharge is occurring. (This is likely to only apply to the hospital and labs/clinics buildings)

17. **16.09.180(12) Mercury Switches.** Mercury switches shall not be installed in sewer or storm drain sumps.

18. **PAMC 16.09.205(a) Cooling Systems, Pools, Spas, Fountains, Boilers and Heat Exchangers.** It shall be unlawful to discharge water from cooling systems, pools, spas, fountains boilers and heat exchangers to the storm drain system.

19. **PAMC 16.09.165(h) Storm Drain Labeling.** Storm drain inlets shall be clearly marked with the words "No dumping - Flows to Bay," or equivalent.

20. **Designated Food Service Establishment (FSE) Project:**

   a. **Grease Control Device (GCD) Requirements, PAMC Section 16.09.075 & cited Bldg/Plumbing Codes**

      i. The plans shall specify the manufacturer details and installation details of all proposed GCDs. (CBC 1009.2)
ii. GCD(s) shall be sized in accordance with the 2007 California Plumbing Code.

iii. GCD(s) shall be installed with a minimum capacity of 500 gallons.

iv. GCD sizing calculations shall be included on the plans. See a sizing calculation example below.

v. The size of all GCDs installed shall be equal to or larger than what is specified on the plans.

vi. GCDs larger than 50 gallons (100 pounds) shall not be installed in food preparation and storage areas. Santa Clara County Department of Environmental Health prefers GCDs to be installed outside. GCDs shall be installed such that all access points or manholes are readily accessible for inspection, cleaning and removal of all contents. GCDs located outdoors shall be installed in such a manner so as to exclude the entrance of surface and stormwater. (CPC 1009.5)

vii. All large, in-ground interceptors shall have a minimum of three manholes to allow visibility of each inlet piping, baffle (divider) wall, baffle piping and outlet piping. The plans shall clearly indicate the number of proposed manholes on the GCD. The Environmental Compliance Division of Public Works Department may authorize variances which allow GCDs with less than three manholes due to manufacture available options or adequate visibility.

viii. Sample boxes shall be installed downstream of all GCDs.

ix. All GCDs shall be fitted with relief vent(s). (CPC 1002.2 & 1004)

x. GCD(s) installed in vehicle traffic areas shall be rated and indicated on plans.

b. Drainage Fixture Requirements, PAMC Section 16.09.075 & cited Bldg/Plumbing Codes

i. To ensure all FSE drainage fixtures are connected to the correct drain lines, each drainage fixture shall be clearly labeled on the plans. A list of all fixtures and their discharge connection, i.e. sanitary sewer or grease waste line, shall be included on the plans.

ii. A list indicating all connections to each proposed GCD shall be included on the plans. This can be incorporated into the sizing calculation.

iii. All grease generating drainage fixtures shall connect to a GCD. These include but are not limited to:

iv. Pre-rinse (scullery) sinks (direct connection)

v. Three compartment sinks (pot sinks) (direct connection)

vi. Drainage fixtures in dishwashing room except for dishwashers shall connect to a GCD (direct connection)

vii. Examples: trough drains (small drains prior to entering a dishwasher), small drains on busing counters adjacent to pre-rinse sinks or silverware soaking sinks

viii. Floor drains in dishwashing area and kitchens
ix. Prep sinks (indirect connection)

x. Mop (janitor) sinks

xi. Outside areas designated for equipment washing shall be covered and any drains contained therein shall connect to a GCD.

xii. Drains in trash/recycling enclosures

xiii. Wok stoves, rotisserie ovens/broilers or other grease generating cooking equipment with drip lines (indirect connection)

xiv. Kettles and tilt/braising pans and associated floor drains/sinks

xv. The connection of any high temperature discharge lines and non-grease generating drainage fixtures to a GCD is prohibited. The following shall not be connected to a GCD:

xvi. Dishwashers (direct connection)

xvii. Steamers (indirect connection)

xviii. Pasta cookers (indirect connection)

xix. Hot lines from buffet counters and kitchens (indirect connection)

xx. Hand sinks (direct connection)

xxi. Ice machine drip lines (indirect connection)

xxii. Soda machine drip lines (indirect connection)

xxiii. Drainage lines in bar areas (indirect connection)

xxiv. No garbage disposers (grinders) shall be installed in a FSE. (PAMC 16.09.075(d)).

xxv. Plumbing lines shall not be installed above any cooking, food preparation and storage areas.

xxvi. Each drainage fixture discharging into a GCD shall be individually trapped and vented. (CPC 1014.5)

c. Covered Dumpsters, Recycling and Tallow Bin Areas PAMC, 16.09.075(q)(2)

i. New buildings constructed to house FSEs shall include a covered area for all dumpsters, bins, carts or container used for the collection of trash, recycling, food scraps and waste cooking fats, oils and grease (FOG) or tallow.

ii. The area shall be designed and shown on plans to prevent water run-on to the area and runoff from the area.

iii. Drains that are installed within the enclosure for recycle and waste bins, dumpsters and tallow bins serving FSEs are optional. Any such drain installed shall be connected to a GCD.

iv. If tallow is to be stored outside then an adequately sized, segregated space for a tallow bin shall be included in the covered area.
d. Large Item Cleaning Sink, PAMC 16.09.075(m)(2)(B)

i. FSEs shall have a sink or other area drain which is connected to a GCD and large enough for cleaning the largest kitchen equipment such as floor mats, containers, carts, etc. Recommendation: Generally, sinks or cleaning areas larger than a typical mop/janitor sink are more useful.

e. GCD sizing criteria and an example of a GCD sizing calculation (2007 CPC)

<table>
<thead>
<tr>
<th>Sizing Criteria:</th>
<th>GCD Sizing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drain Fixtures</td>
<td>DFUs</td>
</tr>
<tr>
<td>Pre-rinse sink</td>
<td>4</td>
</tr>
<tr>
<td>3 compartment sink</td>
<td>3</td>
</tr>
<tr>
<td>2 compartment sink</td>
<td>3</td>
</tr>
<tr>
<td>Prep sink</td>
<td>3</td>
</tr>
<tr>
<td>Mop/Janitorial sink</td>
<td>3</td>
</tr>
<tr>
<td>Floor drain</td>
<td>2</td>
</tr>
<tr>
<td>Floor sink</td>
<td>2</td>
</tr>
</tbody>
</table>

Example GCD Sizing Calculation:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Drainage Fixture &amp; Item Number</th>
<th>DFUs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pre-rinse sink, Item 1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>3 compartment sink, Item 2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Prep sinks, Item 3 &amp; Floor sink, Item 4</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>1</td>
<td>Mop sink, Item 5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>Floor trough, Item 6 &amp; tilt skillet, Item 7</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>Floor trough, Item 6 &amp; steam kettle, Item 8</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>Floor sink, Item 4 &amp; wok stove, Item 9</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Floor drains</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>1,000 gallon GCD minimum sized</td>
<td></td>
<td>Total: 30</td>
</tr>
</tbody>
</table>

Note:

- All resubmitted plans to Building Department which include FSE projects shall be resubmitted to Water Quality.
- It is frequently to the FSE’s advantage to install the next size larger GCD to allow for more efficient grease discharge prevention and may allow for longer times between cleaning. There are many manufacturers of GCDs which are available in different shapes, sizes and materials (plastic, reinforced fiberglass, reinforced concrete and metal)
- The requirements will assist FSEs with FOG discharge prevention to the sanitary sewer and storm drain pollution prevention. The FSE at all times shall comply with the Sewer Use Ordinance of the Palo Alto Municipal Code. The ordinances include requirements for GCDs, GCD maintenance, drainage fixtures, record keeping and construction projects.
NOT YET FINALIZED

A.6 Transportation Division

1. Bicycle Parking Plan. Prior to the issuance of a building permit for each project component, the project sponsors shall review the bicycle parking plan and layout with the Transportation Division. Bicycle parking shall be consistent with all applicable codes.

2. Bicycle Parking During Construction. As part of the Construction Impact Minimization Plan (CIMP), the project sponsors shall include the installation of temporary bicycle parking facilities if existing facilities would be affected by construction work including bike racks, bike lockers, and covered bike racks. Prior to the submittal of the draft CIMP, please contact Transportation staff to discuss the layout, type, duration and number of spaces to be provided.

3. Transit Facilities During Construction. As part of the CIMP, the project sponsors shall include the installation of temporary transit facilities if existing facilities would be affected by construction work. Prior to the submittal of the draft CIMP, please contact Transportation Division staff to discuss the transit stops that would be affected and the design of temporary facilities, which may include the placement of temporary shelters, furniture, informational signage, etc.

4. Wayfinding Signage Plan

   a. During Construction. As part of the CIMP, the project sponsors shall include the installation of temporary pedestrian wayfinding/directional signage to improve the flow and circulation of pedestrian and bicyclists around construction areas. Prior to the submittal of the draft CIMP, please contact Transportation staff to discuss the design and placement and duration of the temporary signage.

   b. Permanent Signs. Prior to issuance of construction permits, the project sponsors shall submit plans for installation of permanent pedestrian wayfinding/directional signage to improve the flow and circulation of pedestrian and bicyclists around the medical center complex and at Hoover Pavilion. Please contact Transportation staff to discuss the design and placement and duration of the temporary signage.

5. Onsite Improvement Plans. Prior to the submittal of building permit plans, the project sponsors shall review with Transportation Division staff the automobile and pedestrian circulations plans for each of the project components, including the interface between the driveways, walkways, parking garages, private streets and the public right-of-way.
A.7 Utilities

A.7.1 Utilities Electric

1. Applicant shall adhere to the requirements listed in City of Palo Alto’s Electric Service Requirements and the City of Palo Alto’s Electric Rules and Regulations.

2. Where CPAU primary electrical facilities enter private property, the applicant/developer/owner shall supply a Public Utility Easement which shall be approved by the Electric Utilities Department.

3. Only one electric service lateral is permitted per parcel.

4. The applicant/developer/owner shall provide space for installing padmount equipment (i.e. transformers, switches, and interrupters) and associated substructure as required by the City.

5. The customer shall install all electrical substructures (conduits, boxes and pads) required from the service point to the customer’s switchgear. The design and installation shall be according to the City standards and shown on plans.

6. The applicant shall be responsible to relocate and/or upgrade all CPAU electric facilities which are impacted by the projects listed under review.

7. Location of the electric panel/switchboard shall be shown on the site plan and approved by the Architectural Review Board and Utilities Department.

8. All utility meters, lines, transformers, backflow preventers, and any other required equipment shall be shown on the landscape and irrigation plans and shall show that no conflict will occur between the utilities and landscape materials. In addition, all aboveground equipment shall be screened in a manner that is consistent with the building design and setback requirements.

9. For services larger than 1600 amps, the customer will be required to provide a transition cabinet as the interconnection point between the utility’s padmount transformer and the customer’s main switchgear. The cabinet design drawings must be submitted to the Electric Utility Engineering Department for review and approval. See Drawing SR-XF-E-1020.

10. For underground services, no more than four (4) 750 MCM conductors per phase can be connected to the transformer secondary terminals; otherwise, bus duct must be used for connections to padmount transformers. If customer installs a bus duct directly between the transformer secondary terminals and the main switchgear, the installation of a transition cabinet will not be required. See Drawings SR-XF-E-1020 and DT-SE-U-1032.

11. The customer is responsible for sizing the service conductors and other required equipment according to the National Electric Code requirements and the City standards. See Drawing DT-SE-U-1032.

12. Any additional facilities and services requested by the Applicant that are beyond what the utility deems standard facilities will be subject to Special Facilities charges. The Special Facilities charges include the cost of installing the additional facilities as well as the cost of ownership.

13. The customer is responsible for installing all on-site substructures (conduits, boxes and pads) required for the electric service. No more than 270 degrees of bends are allowed in a secondary conduit run. All conduits must be sized according to National Electric Code requirements and no 1/2 – inch size conduits are permitted. All off-site substructure work will be constructed by the City at the customer’s expense. Where mutually agreed upon by the City and the Applicant, all or part of the off-site substructure work may be constructed by the Applicant.
14. All primary electric conduits shall be concrete encased with the top of the encasement at the depth of 30 inches. No more than 180 degrees of bends are allowed in a primary conduit run. Conduit runs over 500 feet in length require additional pull boxes.

15. All new underground conduits and substructures shall be installed per City standards and shall be inspected by the Electrical Underground Inspector before backfilling.

16. The customer is responsible for installing all underground electric service conductors, bus duct, transition cabinets, and other required equipment. The installation shall meet the National Electric Code and the City Standards.

17. Meter and switchboard requirements shall be in accordance with Electric Utility Service Equipment Requirements Committee (EUSERC) drawings accepted by Utility and CPA standards for meter installations.

18. Shop/factory drawings for switchboards (400A and greater) and associated hardware must be submitted for review and approval prior to installing the switchgear.

19. All new underground electric services shall be inspected and approved by both the Building Inspection Division and the Electrical Underground Inspector before energizing.

20. The Applicant shall be responsible for identification and location of all utilities, both public and private, within the work area. Prior to any excavation work at the site, the Applicant shall contact Underground Service Alert (USA) at 1-800-227-2600, at least 48 hours prior to beginning work.

21. All electrical utility installations shall meet the specifications listed in the City of Palo Alto’s Electric Service Requirement Manual.

22. Applicant shall maintain required spacing between electric facilities and all other utilities. See CPAU engineering drawing DT-SS-U-1003 for spacing requirements.

23. All conduit installation shall be in accordance with CPAU engineering drawing DT-SS-U-1003.

24. All vault and box installations shall be in accordance with CPAU engineering drawing DT-SS-U-1002.

25. Projects that require the extension of high voltage primary distribution lines or reinforcement of offsite electric facilities will be at the customer’s expense and must be coordinated with the Electric Utility.

A.7.2 Utilities Marketing

1. Outdoor Water Efficiency and Conservation Requirements. Please be advised that as of January 1, 2011, the City of Palo Alto is enforcing the new State Green Building Code (CALGreen) with local amendments for Palo Alto. Compliance with the tier 2 requirements for outdoor water efficiency is required for landscapes of any size when the project is a new construction, rebuild, or addition with greater than 1,000 square feet of building area. All other projects need to meet the tier 1 requirements if a landscape area included in the scope of the project is greater than 1,000 square feet. Prior to issuance of either a Building Permit or Grading Permit, the applicant will need to demonstrate compliance by providing the following documentation when applying for a Building and/or Grading Permit:
• Landscape Water Use Statement
• Water Use Calculations
• Irrigation Plan
• Grading Plan
• Landscape Design and Planting Plan

Applicants will need to provide this documentation to the City at the Building Permit Review stage. All landscape worksheets and Green Building Permit Applications can be found on the City’s website at www.cityofpaloalto.org/greenbuilding. Please contact Catherine Elvert in Utilities Marketing Services at (650) 329-2417 catherine.elvert@cityofpaloalto.org or Kristin Parineh in Planning and Community Environment at (650) 329-2189 or kristin.parineh@cityofpaloalto.org for more information.

2. Recycled Water. The City of Palo Alto’s Recycled Water Ordinance (Ordinance No. 5002) became effective on June 12, 2008. This ordinance has requirements for irrigation and dual plumbing that are effective immediately for certain types of projects in Palo Alto. For most projects, this requires a separate irrigation system utilizing purple irrigation pipe, appropriate fittings and the installation of an approved backflow prevention device. Please see Palo Alto Municipal Code 16.12 for more information on the recycled water ordinance.

A.8 Water, Gas and Wastewater Utilities Department

No General Conditions of Approval at this time. Please see project specific conditions.

A.9 Building Department

Pending receipt of Draft Conditions of Approval.
B. CONDITIONS OF APPROVAL AS PER PROJECTS

For the SUMC Projects, these conditions of approval are intended to be followed in addition to Section A. General Conditions of Approval.

B.1. New Stanford Hospital

B.1.1. Architectural Review Board

1. The following item shall be reviewed as part of the Architectural Review Board Consent Calendar:
   a. The design, construction and materials plans for kiosk at the main entry shall be further developed.

B.1.2. Planning Arborist

1. Kaplan Lawn Area. Prior to the submittal of Stanford Medical Center, Main Hospital building permit plans for State or City of Palo Alto review, the Project Sponsors shall provide a construction plan for the road design through the Kaplan Lawn Area. The plans shall employ a “no-cut” road design, limited to a cut no more than 4-inches from grade as feasible. This plan shall be prepared in consultation with the Project and City Arborist to preserve the root area of trees 33, 34, 35, 36, 37, 38, 39, 40, and 41.

B.1.3. Water, Gas & Wastewater Utilities Department

Prior to Issuance of Demolition Permit

1. Prior to demolition, the applicant shall submit the existing water/wastewater fixture unit loads (and building as-built plans to verify the existing loads) to determine the capacity fee credit for the existing load (for all buildings to be demolished). If the applicant does not submit loads and plans they may not receive credit for the existing water/wastewater fixtures.

2. The applicant shall submit a request to disconnect all utility services and/or meters including a signed affidavit of vacancy. Utilities will be disconnected or removed within 10 working days after receipt of request. The demolition permit will be issued by the building inspection division after all utility services and/or meters have been disconnected and removed.

Prior to Submittal For Building Permit

3. The applicant shall submit a completed water-gas-wastewater service connection application - load sheet for each set of meters (the load and location for each water and gas meter shall be separately detailed on one or more utility applications) to City of Palo Alto Utilities. The applicant must provide all the information requested for utility service demands (water in fixture units/g.p.m., gas in b.t.u.p.h, and sewer in fixture units/g.p.d.).
4. The applicant shall submit improvement plans for utility construction. The plans must show the size and location of all underground utilities within the development and the public right of way including meters, backflow preventers, fire service requirements, sewer mains, sewer cleanouts, sewer lift stations and any other required utilities.

5. Utility vaults, transformers, utility cabinets, concrete bases, or other structures can not be placed over existing water, gas or wastewater mains/services. Maintain 1’ horizontal clear separation from the vault/cabinet/concrete base to existing utilities as found in the field. If there is a conflict with existing utilities, cabinets/vaults/bases shall be relocated from the plan location as needed to meet field conditions.

6. The applicant must show on the site plan the existence of any auxiliary water supply, (i.e. water well, gray water, recycled water, rain catchment, water storage tank, etc).

7. The applicant shall be responsible for installing and upgrading the existing utility mains and/or services as necessary to handle anticipated peak loads. This responsibility includes all costs associated with the design and construction for the installation/upgrade of the utility mains and/or services.

8. Sewer drainage piping serving fixtures located less than one foot above the next upstream sewer main manhole cover shall be protected by an approved backwater valve per California Plumbing Code 710.0. The upstream sewer main manhole rim elevation shall be shown on the plans.

9. Flushing of the fire system to sanitary sewer shall not exceed 30 GPM. Higher flushing rates shall be diverted to a detention tank to achieve the 30 GPM flow to sewer.

10. Sewage ejector pumps shall meet the following conditions:
    a. The pump(s) be limited to a total 100 GPM capacity or less.
    b. The sewage line changes to a 4” gravity flow line at least 20’ from the City clean out.
    c. The tank and float is set up such that the pump run time not exceed 20 seconds each cycle.

Prior to Issuance of Building Permit

11. The applicant's engineer shall submit flow calculations and system capacity study showing that the on-site and off-site water and sanitary sewer mains and services will provide the domestic, irrigation, fire flows, and wastewater capacity needed to service the development and adjacent properties during anticipated peak flow demands. Field testing may be required to determined current flows and water pressures on existing water main. Calculations must be signed and stamped by a registered civil engineer. The applicant is required to perform, at his/her expense, a flow monitoring study of the existing sewer main to determine the remaining capacity. The report must include existing peak flows or depth of flow based on a minimum monitoring period of seven continuous days or as determined by the senior wastewater engineer. The study shall meet the requirements and the approval of the WGW engineering section. No downstream overloading of existing sewer main will be permitted.
12. For contractor installed water and wastewater mains or services, the applicant shall submit to the WGW engineering section of the Utilities Department four copies of the installation of water and wastewater utilities off-site improvement plans in accordance with the utilities department design criteria. All utility work within the public right-of-way shall be clearly shown on the plans that are prepared, signed and stamped by a registered civil engineer. The contractor shall also submit a complete schedule of work, method of construction and the manufacture's literature on the materials to be used for approval by the utilities engineering section. The applicant's contractor will not be allowed to begin work until the improvement plan and other submittals have been approved by the water, gas and wastewater engineering section. After the work is complete but prior to sign off, the applicant shall provide record drawings (as-builts) of the contractor installed water and wastewater mains and services per City of Palo Alto Utilities record drawing procedures.

13. Existing wastewater laterals to new or remodeled buildings that are not plastic (ABS, PVC, or PE) shall be replaced at the applicant’s expense.

14. The applicant shall pay the capacity fees, connection and inspection fees associated with the installation of the new water, gas or wastewater utility services, or additional load to existing services. The approved relocation of services, meters, hydrants, or other facilities will be performed at the cost of the person/entity requesting the relocation. Each unit or place of business shall have its own water and gas meter shown on the plans. An approved reduce pressure principle assembly (RPPA backflow preventer device) is required for all existing and new water connections from Palo Alto Utilities to comply with requirements of California administrative code, title 17, sections 7583 through 7605 inclusive. The RPPA shall be installed on the owner's property and directly behind the water meter, within 5’ of the property line. Show the location of the RPPA on the plans. Inspection by the utilities cross connection inspector is required for the supply pipe between the meter and the assembly. The applicant shall provide the City with current test certificates for all backflows.

15. An approved reduced pressure detector assembly is required for the existing or new water connection for the fire system to comply with requirements of California administrative code, title 17, sections 7583 through 7605 inclusive. Reduced pressure detector assemblies shall be installed on the owner's property adjacent to the property line, within 5’ of the property line. Show the location of the reduced pressure detector assembly on the plans. Inspection by the utilities cross connection inspector is required for the supply pipe between the City connection and the assembly.

16. The applicant shall secure a public utilities easement for City of Palo Alto Utilities facilities installed in private property. The applicant's engineer shall obtain, prepare, record with the county of Santa Clara, and provide the utilities engineering section with copies of the public utilities easement across the adjacent parcels as is necessary to serve the development. Where public mains are in private streets/PUEs the service agreement shall include the statement: “Public Utility Easements: If the City’s reasonable use of the Public Utility Easements, which are shown as P.U.E on the Map, results in any damage to the Common Area, then it shall be the responsibility of the Association, and not of the City, to Restore the affected portion(s) of the Common Area. This Section may not be amended without the prior written consent of the City”.

17. All existing water and wastewater services that will not be reused shall be abandoned at the main per WGW Utilities procedures before any new utility services are installed. All utility installations shall be in accordance with the City of Palo Alto utility standards for water, gas & wastewater.
During Construction

18. For contractor installed water and wastewater mains or services, the applicant shall prepare and submit to the WGW engineering section of the Utilities Department as-built drawings of the installation of water and wastewater utilities to be owned and maintained by the City in accordance with:

a. Two sets of as-built drawings (hard copies).

b. As-built drawings in 2008 or 2010 AutoCAD format.

c. As-built drawings in .tiff format.

d. Survey points in .csv format for all new utility features.

Note: All survey data shall be collected by a California Licensed Land Surveyor. The surveyor is responsible to setup all control points needed to perform the survey work. The accuracy for all survey data shall be +/- 1cm.

Survey data to be collected (what's applicable):

I. Collect horizontal and vertical data for:

1. Sanitary sewer manholes (rim and invert elevations and depth)

2. Storm drain manholes and catch basins (rim and invert elevations and depth)

3. Water valves (cover and stem elevations)

II. Collect horizontal data only for:

1. Service or lateral connection points at the main

2. Fire hydrants

3. Water meters

4. Sanitary sewer cleanout boxes

Use CPAU WGW Engineering’s "feature codes" for naming convention available from CPAU WGW Engineering 1007 Elwell Ct, Palo Alto, CA 94303 (650) 566-4501. All drawings and survey data shall be on the California State Plane Coordinate System - Zone 3 in units of feet. The horizontal datum shall be the North American Datum of 1983 (NAD83) and the vertical datum shall be based on Bestor 93.
B.2. Hoover Pavilion Site

B.2.1. Architectural Review Board

For Hoover Medical Office Building

1. The following items shall be reviewed by Planning Division Staff:
   a. Trash enclosure details
   b. Final hardscape plan (center spine paving)
   c. Bruce Fukuji’s recommendations regarding open space and parking reserve be considered.

For Renovation of the existing Hoover Pavilion

1. The applicant shall reconstruct and install the finial at the top of the Hoover Pavilion corner tower.

B.2.2. Water, Gas & Wastewater Utilities Department

For Building Permit

1. The applicant shall submit a completed water-gas-wastewater service connection application - load sheet for City of Palo Alto Utilities. The applicant must provide all the information requested for utility service demands (water in fixture units/g.p.m., gas in b.t.u.p.h, and sewer in fixture units/g.p.d.).

2. The applicant shall submit improvement plans for utility construction. The plans must show the size and location of all underground utilities within the development and the public right of way including meters, backflow preventers, fire service requirements, sewer mains, sewer cleanouts, sewer lift stations and any other required utilities.

3. Utility vaults, transformers, utility cabinets, concrete bases, or other structures cannot be placed over existing water, gas or wastewater mains/services. Maintain 1’ horizontal clear separation from the vault/cabinet/concrete base to existing utilities as found in the field. If there is a conflict with existing utilities, cabinets/vaults/bases shall be relocated from the plan location as needed to meet field conditions.

4. The applicant must show on the site plan the existence of any auxiliary water supply, (i.e. water well, gray water, recycled water, rain catchment, water storage tank, etc).

5. The applicant shall be responsible for installing and upgrading the existing utility mains and/or services as necessary to handle anticipated peak loads. This responsibility includes all costs associated with the design and construction for the installation/upgrade of the utility mains and/or services.

6. Sewer drainage piping serving fixtures located less than one foot above the next upstream sewer main manhole cover shall be protected by an approved backwater valve per California
Plumbing Code 710.0. The upstream sewer main manhole rim elevation shall be shown on the plans.

7. Flushing of the fire system to sanitary sewer shall not exceed 30 GPM. Higher flushing rates shall be diverted to a detention tank to achieve the 30 GPM flow to sewer.

8. Sewage ejector pumps shall meet the following conditions:
   a. The pump(s) be limited to a total 100 GPM capacity or less.
   b. The sewage line changes to a 4” gravity flow line at least 20’ from the City clean out.
   c. The tank and float is set up such that the pump run time not exceed 20 seconds each cycle. The applicant's engineer may be required to submit flow calculations and system capacity study showing that the on-site and off-site water and sanitary sewer mains and services will provide the domestic, irrigation, fire flows, and wastewater capacity needed to service the development and adjacent properties during anticipated peak flow demands. Field testing may be required to determined current water and wastewater flows and water pressures on existing water and wastewater mains. Calculations must be signed and stamped by a registered civil engineer.

9. Existing wastewater laterals that are not plastic (ABS, PVC, or PE) shall be replaced at the applicant’s expense.

10. The applicant shall pay the capacity fees and connection fees associated with the installation of the new utility service/s to be installed by the City of Palo Alto Utilities or increased demand on existing water or wastewater services. The approved relocation of services, meters, hydrants, or other facilities will be performed at the cost of the person/entity requesting the relocation.

11. A separate water meter and backflow preventer is required to irrigate the approved landscape plan. Show the location of the irrigation meter on the plans. This meter shall be designated as an irrigation account an no other water service will be billed on the account. The irrigation and landscape plans submitted with the application for a grading or building permit shall conform to the City of Palo Alto water efficiency standards. An approved reduce pressure principle assembly (RPPA backflow preventor device) is required for all existing and new water connections from Palo Alto Utilities to comply with requirements of California administrative code, title 17, sections 7583 through 7605 inclusive. The RPPA shall be installed on the owner's property and directly behind the water meter, within 5’ of the property line. **Show the location of the RPPA on the plans.** Inspection by the utilities cross connection inspector is required for the supply pipe between the meter and the assembly. The applicant shall provide the City with current test certificates for all backflows.

12. An approved reduced pressure detector assembly is required for the existing or new water connection for the fire system to comply with requirements of California administrative code, title 17, sections 7583 through 7605 inclusive. Reduced pressure detector assemblies shall be installed on the owner's property adjacent to the property line, within 5’ of the property line. **Show the location of the reduced pressure detector assembly on the plans.** Inspection by the utilities cross connection inspector is required for the supply pipe between the City connection and the assembly.

13. As part of this project the applicant is required to relocate the gas meter out of the breezeway to the front of the building. Show the new gas meter location on the plans. The gas meter
14. The applicant shall secure a public utilities easement for facilities installed in private property (including the existing water meters). The applicant's engineer shall obtain, prepare, record with the county of Santa Clara, and provide the utilities engineering section with copies of the public utilities easement across the adjacent parcels as is necessary to serve the development.

15. All existing water and wastewater services that will not be reused shall be abandoned at the main per WGW utilities procedures before any new utility services are installed.

16. All utility installations shall be in accordance with the City of Palo Alto utility standards for water, gas & wastewater.

B.3. Lucile Packard Children’s Hospital

B.3.1. Architectural Review Board

2. The following items shall be reviewed by the Architectural review Board Subcommittee:
   a. Exterior signage;
   b. Material sample for the exterior site wall adjacent to Quarry Road and Welch Road;

3. The following items shall be reviewed by Planning Division Staff:
   a. Final photometric plan, and
   b. Final light fixture plan

B.4. Welch Road / Durand Way

B.4.1. Architectural Review Board

1. The following items shall be reviewed by the Planning Division Staff:
   a. Study alternate locations for Marguerite Shuttle Stop along Quarry Road; and
   b. Study the intersection of Quarry Road and proposed LPCH loading dock to insure safe bike, pedestrian and traffic movements.

B.4.2. Transportation Division

1. Durand Way. Durand Way shall be constructed at the earliest opportunity to improve automobile circulation from the medical center complex in the vicinity of Welch Road and Sand Hill Road. At a minimum, to the extent feasible, the Durand Way intersection apron shall be constructed with the Welch Road improvements.

2. Welch Road. Welch Road shall be constructed per improvements plans approved by the City and shall include, but not be limited to: new median islands that extend from key intersections to channelize left turn vehicles and restrict driveway movements near
intersections; installation of pedestrian-activated flashing beacon systems with enhanced roadway markings & signage; installation of new retro-reflective signage throughout the project corridor; traffic signal improvements including intersection safety lighting enhancements; and miscellaneous roadway improvements.

3. **Quarry Road.** Improvements to the Quarry Road public street shall be reviewed by Transportation Division staff prior to the submittal for permits.

**B.5. School of Medicine, Foundations in Medicine 1 (FIM1)**

**B.5.1. Architectural Review Board**

1. The following items shall be reviewed by the Architectural review Board Subcommittee:
   a. Final landscape plan;
   b. Proposal for a School of Medicine gateway entry feature from Pasteur Drive area;
   c. Final photometric plan; and
   d. Revisions to both FIM1 building entries to be more visible and prominent to pedestrians.

**B.6. Design Guidelines Document**

**B.6.1. Architectural Review Board**

1. The following items shall be added by the Applicant and reviewed by Planning Division staff:
   a. Add language to SHC Clinics section that describes importance of the building as terminus to Pasteur Mall and the need for a strong axial relationship of between the building massing and Pasteur Mall;
   b. Include language in the Executive Summary that would allow minor adjustments to the Design Guidelines for items such as light fixtures, pedestrian furniture, etc; and
   c. Include language to the Executive Summary that would describe the process, procedure, and review responsibilities for any future amendments to the Design Guidelines.