Vision 2025

UC Santa Barbara

Physical Design Framework

July 2010

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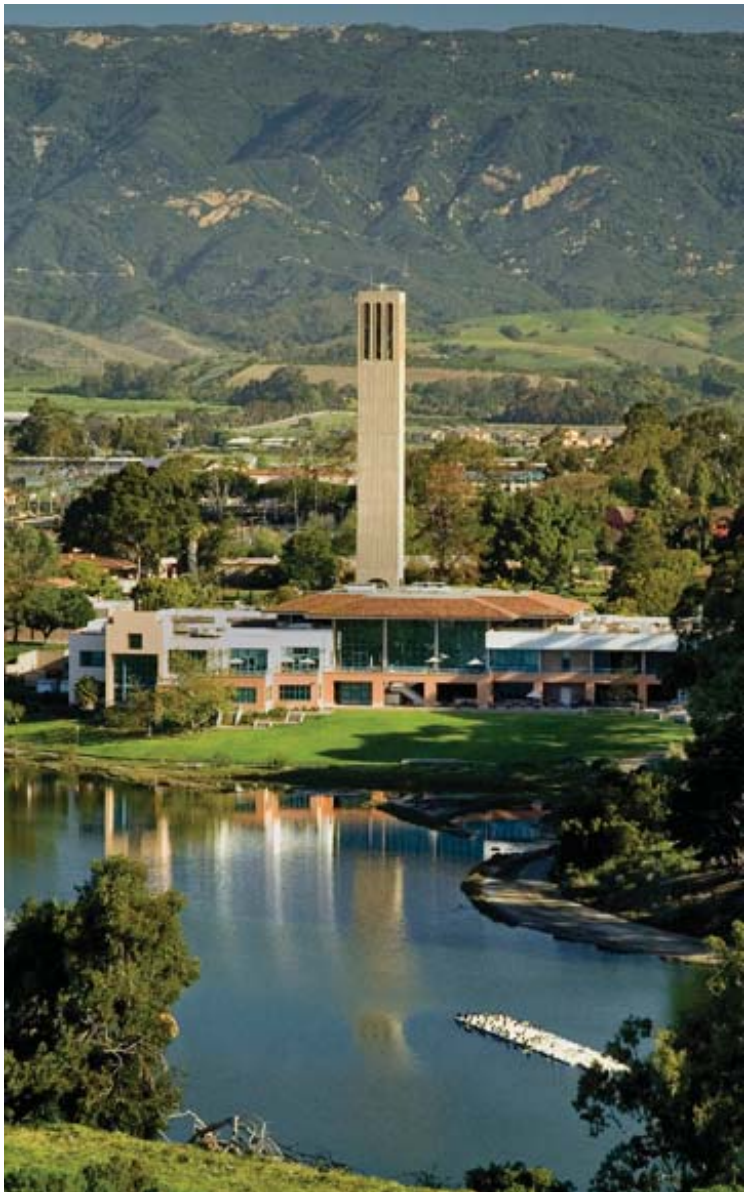


ACKNOWLEDGEMENTS

Henry T. Yang, Chancellor
Gene Lucas, Executive Vice Chancellor
Joel Michaelsen, Chair, Academic Senate

Marc Fisher
Senior Associate Vice Chancellor,
Administrative Services

Campus Planning and Design
Tye Simpson, Director
Steven Connor
Shari Hammond
Alissa Hummer
Dennis Whelan

Administrative Services
Christine Griffin
Lynn McLaughlin-Hill
Jill Richardson
Lisa Tucker

PREFACE

The UC Santa Barbara Physical Design Framework describes the approach the campus will use for the development of buildings, landscape, and infrastructure within the context of the Long-Range Development Plan (LRDP).

The Physical Design Framework describes the current state of the campus physical environment alongside the physical values, principles, and design elements that will ensure projects in the LRDP and capital program meet the design aspirations of the campus. The accompanying 10-Year Capital Financial Plan outlines both how the capital investment program would meet the campus' academic and strategic objectives and how the University intends to fund the program.

The Physical Design Framework is based on a number of other physical and planning initiatives such as the Campus Plan, Campus Housing Study, and pattern books for Ocean Road and Storke Campus Housing. The Framework builds on the strongest elements of prior plans and incorporates a renewed focus on the campus' natural setting, sustainability, and a more coherent physical plan for future development.

CONTEXT

PHYSICAL

The 1,055-acre UC Santa Barbara campus is located in southern Santa Barbara County on a coastal bluff overlooking the Pacific Ocean. To the north lies Goleta Valley and the east-west trending Santa Ynez Mountains. West of the campus are open spaces along the coast, Isla Vista, and residential subdivisions of the City of Goleta. Immediately to the north of the campus is the Goleta Slough, which, along with the Santa Barbara Municipal Airport, lies within the westerly extension of the corporate limits of the City of Santa Barbara.

The campus is located along a narrow marine terrace that extends from the south at Ventura County to the north at Point Conception. The campus sits about 35 feet above sea level and steep bluffs extend from the sandy beach to surround many portions of the campus. Two large water bodies are found on campus: the Campus Lagoon on the Main Campus and Devereux Slough on the West Campus.

The campus is surrounded by, and interspersed with, numerous open space areas including horticultural, native, naturalized landscapes, and environmentally sensitive habitat found in a range of conditions. The University is surrounded by the Pacific Ocean, lagoons, marshes, wetlands, oak woodland areas, and remnant eucalyptus windrows.

The University is made up of four principal campuses: Main, Storke, West, and North campuses. The Main Campus is the academic core of the University and developed with a range of academic, support, recreational, and housing facilities. The Main Campus includes access to sandy beaches and pedestrian paths along Lagoon Island and around the Campus Lagoon, and has an extensive bicycle and pedestrian circulation system.

UC Santa Barbara Campuses

Storke Campus is bordered by the Storke Campus Wetland area and includes Harder Stadium, athletic fields, San Clemente Student Housing, and an associated bioswale and habitat restoration area.

West Campus is mostly undeveloped and includes the Orfalea Family Children's Center, Faculty housing, horse stables and a riding ring, and the New West Campus (formerly Devereux). Coal Oil Point Reserve and West Campus Bluffs are at the southwest edge of West Campus which is primarily natural area with designated trails to the beach.

North Campus is largely undeveloped and includes two housing sites. The North Campus surrounds the Ocean Meadows Golf Course and includes the approximately 70-acre South Parcel Nature Park, which will be preserved as natural open space. Eucalyptus and Cypress trees line the western edge of North Campus, and the City of Goleta's vast open space, and the Ellwood Mesa, borders this area to the west.

PLANNING

Strategic Academic Plan for 2007-2025

The mission of the University is to demonstrate academic excellence through instruction, research, and public service. The UC Santa Barbara Strategic Academic Plan distinguishes which instruction and research programs to target for managed growth - both in student enrollment and faculty. Four interdisciplinary growth themes are identified including: environment; global international issues; digital studies; and academy and society. In addition, the academic program focuses on the increase of population diversity in California, the need for a technical and scientific workforce at the state and national levels, and the need for a strategic response to a potentially substantial turnover in faculty due to retirements.

The Academic Plan specifies that UC Santa Barbara would increase enrollment by one percent a year to the University of California's system-wide planning horizon of 2025-2026. This one percent is a reasonable proportion of the total enrollment increase that needs to be absorbed by all UC campuses. UC Santa Barbara's total student enrollment would increase from a head count of 20,000 to 25,000 by 2025. Graduate student enrollment would increase from 2,870 to 4,250, increasing the graduate proportion of total enrollment from 13 percent to 17 percent. Corresponding increases in faculty would be from 1,100 to 1,400; and staff would increase from approximately 3,600 to 5,000.

The lack of affordable housing is one of the foremost physical challenges in implementing the Strategic Academic Plan. The LRDP plans to increase the amount of on-campus affordable housing.

Long Range Development Plan

The LRDP identifies and describes physical development that will be needed to implement the Academic Plan including: land use; transportation and parking; open space and landscape; utilities; infrastructure; and compliance with the California Coastal Act. The LRDP describes the location and intensity of proposed development on campus subject to the requirements of the California Coastal Act of 1976, which regulates development within the coastal zone of California.

UC Santa Barbara's physical planning began with the first Master Plan in 1950, followed by eight other campus and master plans. Several planning principles have been retained over roughly 60 years of long-range physical planning, including: a rectilinear grid of development; residential grouping around the Lagoon; primary instruction within walking distance of the library; pedestrian malls with viewsheds of the surrounding natural features; recreation clustered around the northern portions of the campuses; a pedestrian and bike-centric interior circulation with a perimeter automotive road system; and replacement of original Marine Corps and temporary buildings with permanent facilities. The most recent LRDP presents a renewed focus on establishing a clear physical framework; urban design and sustainability; environmental and coastal resource protection; and an increased emphasis on civic and open spaces.

Long Range Development Plan

LRDP Land Use Plan

The most recent LRDP is the culmination of an extensive planning and review process attended by academic and administrative officers, faculty, staff, students, interested citizens, and representatives of local government. The LRDP was designed to dovetail with local and regional planning efforts, especially the Isla Vista Masterplan. The core strategy of the LRDP was formulated during a "visioning" process, which produced the 2003 Campus Plan and the 2005 Campus Housing Study. The Ocean Road and Storke Pattern Books were produced to retain the physical design concepts for development on these housing sites.

The LRDP is a multi-phase outline for the development of the UC Santa Barbara campus over the coming years. It does not, however, commit the University to the construction of any particular project. Competing funding priorities, project plans, and construction schedules are determined within the annual capital improvement programs of the university system as a whole and must be approved by either the Chancellor, the University of California Office of the President, The University of California Regents, or the California State Government. The plans, maps, and sketches generally illustrate one of various ways that development can support the implementation of the LRDP while retaining consistency with University policy and the California Coastal Act.

California Coastal Act

Most development at UC Santa Barbara is subject to the California Coastal Act of 1976 which requires LRDP and capital project approval by the California Coastal Commission to ensure that natural resources and public access are protected along the coast of California. The LRDP and Physical Design Framework demonstrate how compliance with the statutory polices of the California Coastal Act are to be achieved.

New development proposed on the UC Santa Barbara campus is consistent with the California Coastal Act's discouragement of sprawl and inefficient provision of urban services because the campus is well within urban limits established by the City of Goleta and the County of Santa Barbara. The California Coastal Act, LRDP, and Physical Design Framework limit development to areas that have available public services (water, wastewater treatment, and others). The campus itself is an essential public service vital to the economic health of the state and region, particularly in the areas of marine science and coast-related research. Several LRDP policies fulfill the California Coastal Act requirement to protect scenic and visual resources by establishing public spaces and view corridors.

The California Coastal Act requires existing and future development to be sited in areas that are protected from geologic hazards, floods, and fire. The LRDP and Physical Design Framework do not propose development that would be subject to hazards and geologic instability.

The California Coastal Act and LRDP protect public access to coastal resources. The LRDP and Physical Design Framework includes design principles assuring campus development does not congest coastal access ways. The Physical Design Framework also suggests designs which protect and enhance public access on University-owned beaches, open spaces, parks, and bluff tops where trails, access improvements, and public parking are proposed.

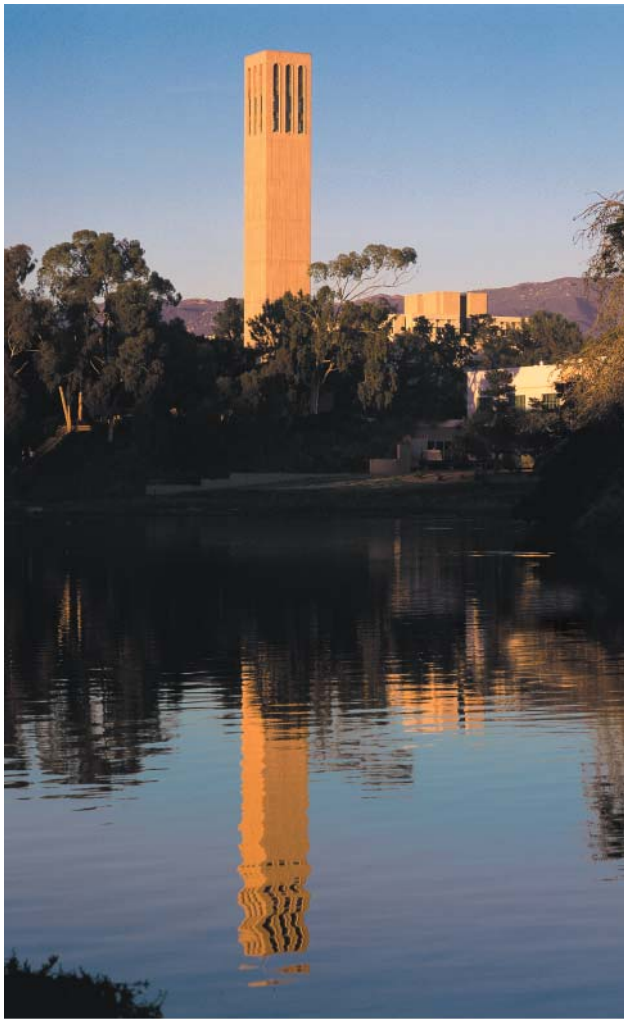
Coastal Access Points

Main Campus East Bluffs from top of stairs at coastal access point.

Although the LRDP does not propose any additional revetments or breakwaters, the California Coastal Act allows such structures only in special circumstances. Generally the California Coastal Act discourages these structures because they typically inhibit public access and disturb the natural ecology of the coast.

Most importantly, the Coastal Act requires that land resources associated with environmentally sensitive habitats and areas of special biological significance be protected. The LRDP sets aside land reserves for the purpose of protecting environmentally sensitive habitats, including Coal Oil Point and Lagoon Island and protects these areas from development. The principles and elements of Physical Design Framework are structured around recognizing the importance of environmentally sensitive and other natural areas.

Bio-Swale System at Manzanita Village



Campus Lagoon
Consistent with the Coastal Act, the campus has developed and is implementing a lagoon management plan to protect this important campus coastal resource.

Bioengineering Building Perspective

Ten-Year Capital Financial Plan

The 2009-2019 Capital Financial Plan sets priorities for the capital investments necessary to implement the Strategic Academic Plan and LRDP. The Capital Financial Plan produces a scheduled list of projects to be funded by state and/or non-state (federal, gifts, external financing) sources. The plan for the Santa Barbara campus resolves a number of issues relevant to the capital planning and review process, including: maintaining confidence and trust amongst campus constituencies (faculty, staff, students, administration); coordination with the LRDP and Physical Design Framework; assessment (definition and priority) of major capital projects; understanding funding regulations; and establishing a monitoring program to ensure that projects are completed as planned. During the capital planning process, priorities are assigned to capital renewal projects, infrastructure replacement and renewal, and the planning, development, and execution of new buildings.

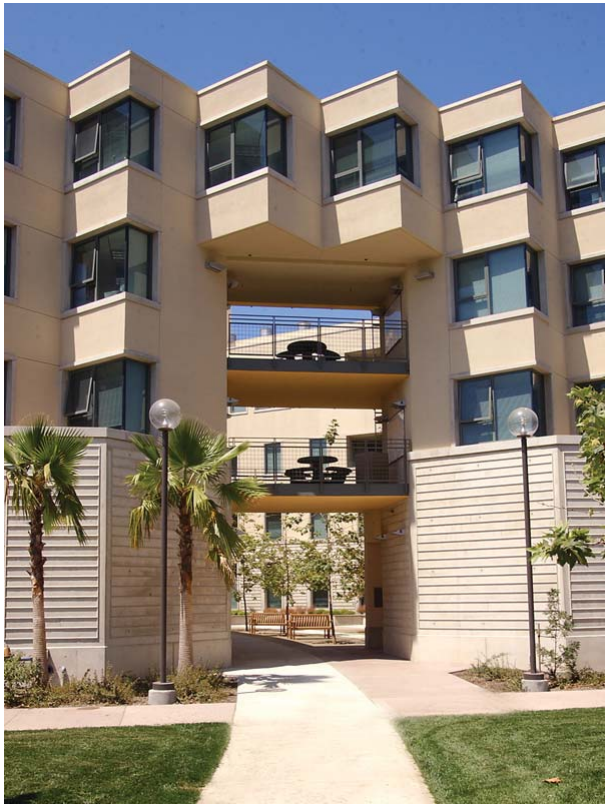
SUSTAINABILITY

UC Santa Barbara has a rich history of environmental awareness, starting with the establishment of one of the country's first undergraduate Environmental Studies Programs a year after the 1969 oil spill in the Santa Barbara Channel. In 1990, the campus was one of the first in the US to sign the Talloires Declaration, pledging to develop, create, support, and maintain sustainability on the UCSB campus. As a result, the School of Environmental Science and Management was established in 1994 to provide Master's and Ph.D. students with training in research and assessment of environmental issues and the skills to implement changes within political structures. Founded in 2008, the Institute for Energy Efficiency (IEE) was created to accelerate the develoment and commercialization of key energy-saving technologies. In 2009, the IEE received a $19 million federal stimulus grant to establish an Energy Frontier Research Center on campus that will create new technologies for energy efficiency and train a new generation of energy scientists and engineers. Sustainability permeates the academic culture of the campus.

In the late 1990s, the campus Energy Team began implementing aggressive energy efficiency measures, such as de-lamping, HVAC upgrades, lighting retrofits, metering, building commissioning, and installation of chilled water loops. As a result, UCSB reduced its per square foot electricity use by 31% over the last decade. Additionally, in 2002, Bren Hall was the first laboratory building in the US to achieve Platinum-level certification in Leadership in Energy and Environmental Design (LEED) for New Construction (NC), a rating system developed by the US Green Building Council. And in 2004, UCSB was the first UC campus to achieve a LEED for Existing Buildings (EB) Silver-level certification for Girvetz Hall. Resulting from the above accomplishments, Chancellor Henry T. Yang was the first Chancellor in the UC system to implement LEED-NC Silver minimum standard for all new construction starting in 2004, and since then, we have completed several more LEED-certified buildings. Furthermore, UCSB was one of three university campuses to participate in the US Green Building Council's pilot Portfolio Program where we committed to LEED-certify 25 additional existing buildings over the next few years.

In 2008, Chancellor Yang approved the Campus Sustainability Plan (CSP), a document drafted by approximately 75 "change agents" (students, staff, and faculty committed to making the UC Santa Barbara campus a more sustainable place to study and work), which contains short and long-term goals in 11 functional areas: Academics & Research; Built Environment; Communications; Energy; Food; Labs; Shops and Studios; Landscape and Biotic Environment; Procurement; Transportation; Waste; and Water. In addition, he appointed a high-level Chancellor's Sustainability Committee (CSC) to prioritize the goals laid out in the CSP and to make funding recommendations.

In order to achieve the sustainablity goals, the campus is taking aggressive measures in energy conservation retrofits of existing buildings, energy efficient new buildings, on and off-site renewable energy generation, alternative forms of transportation, stormwater management, water conservation, and behavioral change campaigns. In addition, the campus is providing on-campus housing for faculty, staff, and students as a key component of the campus sustainability effort.



Bren Hall

Donald Bren School of Environmental Science & Managmement

Sustainability efforts on the campus are evolving; therefore, the most current information on sustainability efforts, including the CSP and Climate Action Plan documents, can be found on the campus Sustainability web site:
http://sustainability.ucsb.edu.

All Universtiy and Campus sustainable practices and policies should be followed.

COMMUNITY

The UC Santa Barbara campus is adjacent to and influenced by several local jurisdictions and local conditions. The County of Santa Barbara and City of Goleta are the primary governmental agencies and work with the campus on a number of public improvement and community projects, such as road improvements and the undergrounding of utlilities.

The County also has jurisdiction over the unincorporated community of Isla Vista, which is surrounded on three sides by the campus. This half-mile square community is home to approximately 20,000 residents, about 8,500 of whom are UC Santa Barbara students. Santa Barbara City College students make up another significant portion of the population, and major issues include dense living conditions in many locations, lack of sufficient parking, lack of other infrastructure (sidewalks, etc.), and social problems, one would expect where a high concentration of young adults is found. The County created a Redevelopment Agency for Isla Vista several years ago and the Agency is making improvements to the area. The County has also drafted a Master Plan for Isla Vista that is currently waiting for California Coastal Commission approval late in 2010. The Master Plan was partially funded by UC Santa Barbara and the campus remains committed to its implementation.

The other major adjoining community is the City of Goleta. Incorporated in 2002, Goleta is located north of the campus and its population of 30,000 mirrors the daytime population of the campus. Largely suburban with three main commercial areas and many high-tech businesses, Goleta is surrounded by a variety of open spaces and shares management of one of the largest – the Ellwood Devereux Mesa – with UC Santa Barbara and the County. Goleta is the beneficiary of many spin-off businesses created by campus faculty. In addition, Goleta provides significant commercial and retail options for the campus community.

Also adjacent to the campus is the Santa Barbara Airport, a 950-acre regional facility that serves both major commercial airlines and private owners. The airport authority also oversees approximately 225 acres of adjoining commercial and industrial uses.

Finally, Goleta Beach County Park abuts the campus to the east and is the largest regional beach park in southern Santa Barbara County with over a million visitors each year.

Ocean Road Housing
At the intersection of Isla Vista and the Main Campus, a new edge is developed with housing for faculty, staff, and students.

Ocean Road Housing
View North at Ocean Road and Sabado Tarde Street

Physical Framework Main Campus

The Physical Design Framework for the UC Santa Barbara campus is based on a number of a values repeatedly expressed by the campus-community and embodied in the Campus Plan and 2010-2025 Long-Range Development Plan, as well as other planning studies. See appendices A1 - A4.

PHYSICAL VALUES

- The most highly valued asset of the campus is its magnificent natural setting, which should be the focus of campus spaces and more closely integrated into the patterns of development, open space, and circulation.
- Views of the mountains and sea should be an integral part of the design of both indoor and outdoor spaces throughout the campus.
- The many different academic disciplines and activities should be bound together into a consistent and dignified system of buildings, open spaces, and circulation.
- A clear system of pedestrian circulation should be well connected to destinations. The use of bicycles should be encouraged, and conflicts with pedestrians and cars should be reduced.

Principle 1: Orient buildings and spaces to the extraordinary natural resources around the campus. Enhance vistas and access to the natural areas from within the campus.

- Landscape design of projects should contribute to the coherence of the campus.
- Land on this campus, with its spectacular setting, should be used in an efficient manner.
- The campus should acknowledge and be well integrated with the community of Isla Vista and the surrounding residential, commercial, and natural conservation areas.

PRINCIPLES

The framework for the physical design of the campus is based on a series of principles describing how buildings and open spaces should be oriented and the way in which buildings and transportation should be arranged.

Among the most valuable assets of the UC Santa Barbara campus is its extraordinary natural setting. The physical framework for the campus begins with reinforcing the major linear open space corridors of the Main Campus and connecting these malls to the bluffs along the Pacific Ocean, the Campus Lagoon to the south, views of the Goleta Slough, and mountains to the north.

Prior campus plans emphasized the internal orientation of campus building by organizing clusters of buildings around inward facing courtyards with the campus library at the center of the campus. The Physical Design Framework emphasizes a stronger external sense of connection between the developed portions of the campus and the ocean, lagoon, slough, and mountains. The approach better relates the nascent grid of campus buildings and open spaces to the rectilinear street and lot arrangement in the adjacent community of Isla Vista.

Principle 2: Provide new, permanent space for programs currently housed in temporary and one-story structures, and use surface parking areas and underutilized building sites to create sites for new buildings and open spaces.

The development patterns on the Main Campus illustrate a limited number of large buildings surrounded by inefficient one-story buildings, trailers, and Marine Corps barracks separated by extensive paved spaces mostly devoted to circulation or surface parking lots. The framework for physical design replaces the disparate small building footprints with denser building blocks clustered together in logical groupings based on related academic programs. These “building blocks” allow for sensible increments of expansion and building additions without wholesale reconsideration of the existing arrangement of facilities and programs.

The developed character of the Main Campus is intended to depart from the suburban college character of the early campus and trend toward a design appropriate to a mature major research university. The increase in density of already developed areas allows the campus to expand primarily through redevelopment rather than geographic extent. Building heights would generally relate to the height of the surrounding buildings or range from lower stories along the edge of the campus to higher buildings at the core.

The Physical Design Framework redefines the open space network based on the major view corridors and axes that relate to the campus’ setting. This pattern results in a very clear grid within which development can take place. The grid ties together the major open spaces and malls and reinforces the developed portions of the campus with a more coherent pattern of buildings and walkways. The network defines the main public open spaces with north-south spaces that connect the Santa Ynez mountains to the water and the east-west spaces that connect the campus from Isla Vista to the ocean.

Principle 3: Create a coherent system of campus open space based on a grid of major axes and view corridors.

The north-south corridors, Tower Mall, and Library Mall connect major entries and civic spaces on campus to the system of natural conservation areas. The east-west corridors, Pardall Mall, and the Campus Green and Quad connect the Isla Vista Community to the west and to the bluffs on the east.

The open space network includes a wide variety of civic campus spaces with more intimate spaces that are a UC Santa Barbara tradition. The network organizes the campus system of pedestrian walkways and bike paths, and also links the main spaces together.

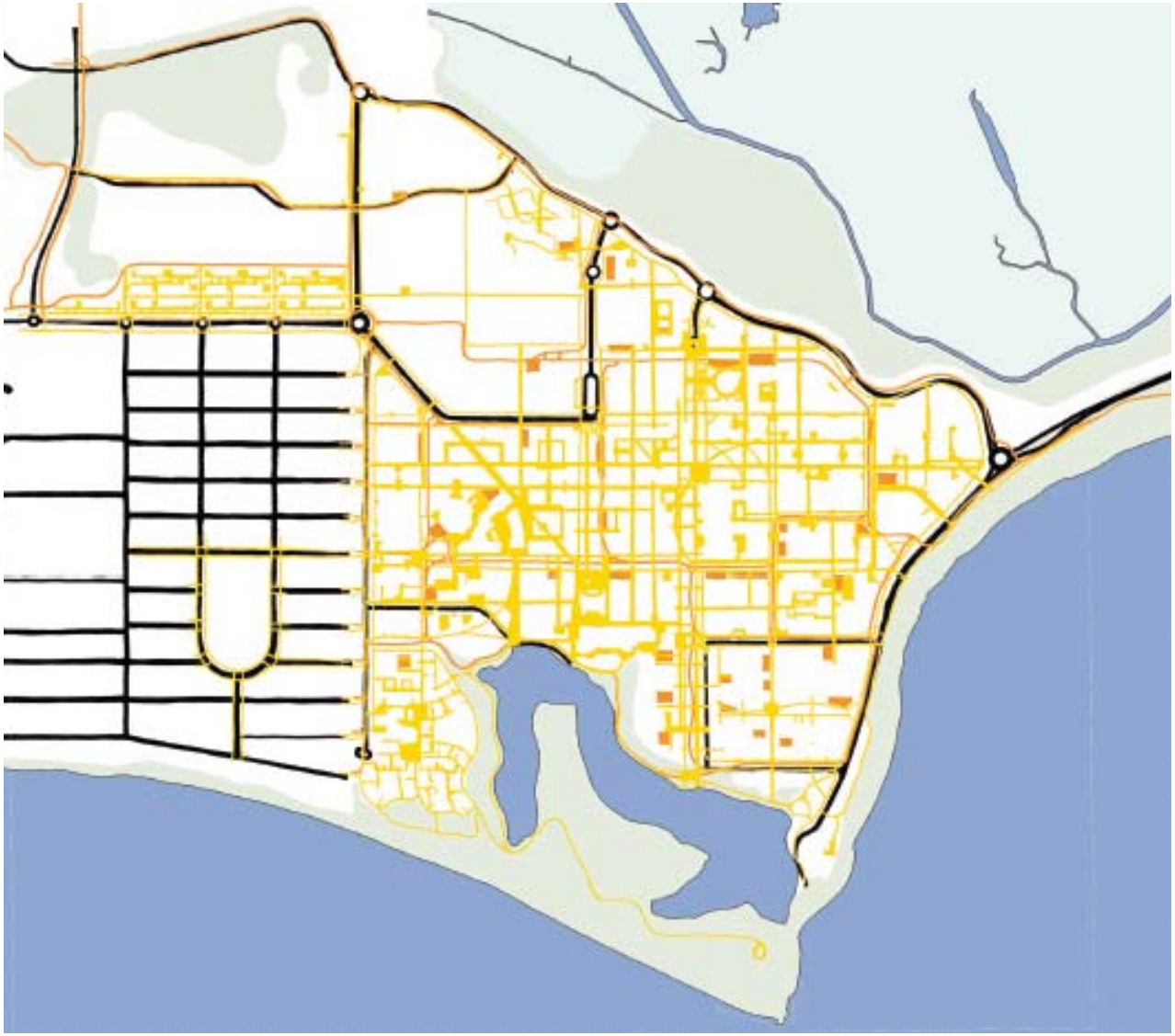
The open space network defines a set of zones or areas to be developed with campus facilities or buildings. The pattern of development in these areas is defined on the edges by open space and controlled by “build-to” alignments, volume, and massing requirements. Building footprints are to be based on using the full extent of the zone with openings to paseos, courts, entrances to plazas, and other variations to provide relief to long walls or wings. The height of buildings should be adjusted to ensure adequate sun penetration into courtyards. Taller buildings or tower elements are encouraged at key points, highly visible corners or facades, and at the ends of public spaces.

Principle 4: Use the system of open space to clearly define development zones.

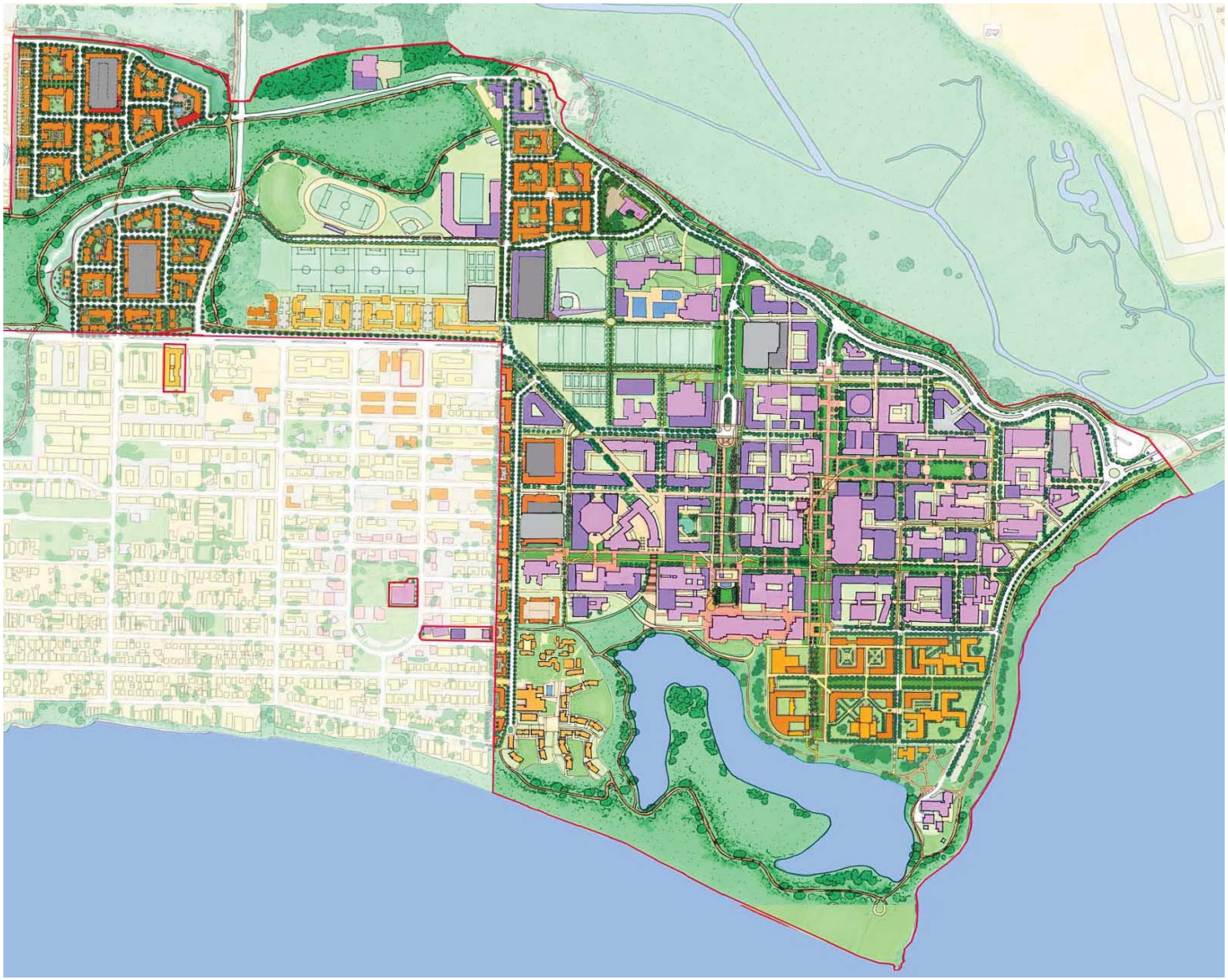
The system of open spaces organizes transportation routes, improving campus transportation by modest improvements to existing streets and intersections, by adding a few small-scale connecting roadways, and reconfiguring existing streets more appropriately to their surroundings. The changes will increase the capacity of the system sufficiently to relieve congestion by better distributing traffic over a more robust interconnected system. As the campus grows, surface parking shall be replaced with more structured parking.

The bicycle network provides an important amenity for the campus and surrounding community. The network of bike paths would be expaned and clarify the network, especially in the core of the campus, reducing peak period congestion at particular places.

The campus has an extensive pedestrian network. The emerging organization establishes an orderly, hierarchical, and well-defined system of pedestrian pathways, plazas, and courtyards. To complement this system, the design framework incorporates appropriate and consistent lighting, graphics, and site furnishings.



Principle 5: Use the system of open spaces to organize transportation routes in well-defined areas.



Principle 6: Coordinate separate development projects with the design principles established by the Campus Plan and Physical Design Framework.

The Physical Design Framework establishes a pattern of common open space that can serve as a plan within which each individual building project can be developed. The regulating lines that define the public space should be respected. The buildings to be developed should be conceived as a means of creating public spaces, as well as containers for academic and support functions. In this way, each building will be another step toward realizing a common vision.

ELEMENTS

The Framework contains five major elements. The first element relates to the campus grid which ensures that buildings and open spaces are properly arranged. The second element relates to the disposition of the civic, campus-scaled open spaces and landscape. The third element concerns campus infill, and the fourth element concerns residential neighborhoods. The fifth element regulates building design.

Grid

The campus has a rich variety of spaces and a diverse collection of buildings. These large and small spaces as well as buildings would be more logically and coherently organized within a grid that constitutes both the main campus open space framework, as well as organizing automobile, service, bus, bicycle, and pedestrian circulation into well-defined routes.

The grid and resulting development blocks provide physical order that create view corridors, framing the mountains, lagoon, ocean, and islands. These malls provide direct physical and landscape connections to the remarkable natural resources surrounding the campus.

Vision 2025 campus view looking South and West.

With the flexibility gained by eliminating temporary buildings, a coherent system of campus open spaces based on a grid of vistas and circulation routes makes the campus navigable and clearly defines development zones. The creation of a grand campus grid and the clarification of circulation patterns results in a series of development blocks created by this rectilinear overlay. Many blocks have existing buildings while others are undeveloped. The creation of a well-defined block system allows for the orderly arrangement of new buildings and additions to existing buildings without compromising the underlying order.

The disorderly and cluttered form of the existing campus is transformed into an orderly sequence of grand campus spaces, enabling the addition of structures while creating a more open and spacious campus.

When individual buildings are proposed, they should be designed within this framework of open space. The LRDP and Physical Design Framework include a series of new buildings sites, areas for additions to existing buildings, and a network of circulation for all modes of travel.

Landscape and Civic Spaces

The primary features of the campus landscape are the greensward connecting the campus between the Devereux and Goleta sloughs; and the axial organization of the Main Campus and the planned campus residential neighborhoods. This landscape includes large, organic open spaces set in contrast with a clear grid for development. It preserves natural areas from disturbance while creating a variety of formal campus spaces ranging from large malls to smaller, more intimate spaces, including internal courtyards and quads.

The campus landscape is guided by principles set forth in the 1992 Campus Landscape Concept Plan by Wallace Roberts & Todd. See Appendix A.3. (The campus landscape is constantly evolving. A Landscape Subcommittee of the Campus Design Review Committee is charged with the continuing refinement of the Landscape Concept Plan.)

San Clemente Courtyard

San Clemente Courtyard

The campus landscape should provide a distinctive visual identity and unify the assembly of buildings in a common environment. The landscape reflects regional influences of both man-made gardens and the marine shelf landscape of ocean, mountains, and wetlands.

The landscape should providee a comfortable and stimulating environment for the campus population. There should be places to meet and gather, as well as quiet, small spaces for study and reflection. There are spaces for monuments, tributes, and art with displays of plant material that add color and richness.

Spatial Organization

The campus landscape should define campus districts, neighborhoods, spaces, circulation routes, and entries. The core of the campus has a highly cultivated, horticulturally rich character, transitioning to the natural areas at the perimeter. Residential neighborhoods should have distinctive landscapes specific to their location.

The landscape is an outdoor 'laboratory'. It displays a diverse collection of plant species as an educational resource for the campus and community. Collections of species native to California, Mediterranean climates, and others are developed for reference and teaching. Collections illustrate natural plant associations, regionally rare and endangered taxa, and other taxonomic relationships and themes.

The campus landscape is responsive to the regional natural landscape and conserves scarce natural resources. The natural areas, primarily on the perimeter of campus, continue to be restored, along with the preservation and enhancment of wildlife habitats. Long-term maintenance requirements, the use of water-conservation, and consideration of microhabitats should form the basis for plant selection.

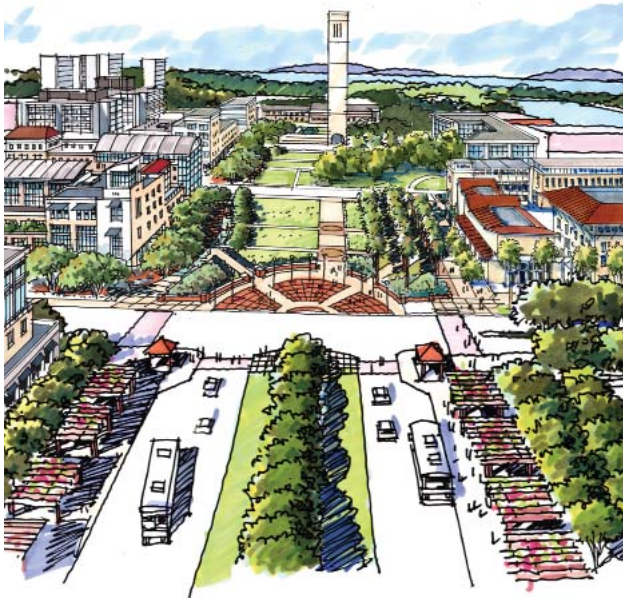
Greensward:
A system of open spaces connecting the Goleta Slough to the Devereux Slough

Greensward

The focus of Storke, North, and West Campus is the regional greensward that connects the open spaces from the Ellwood-Devereux Coast to the Goleta Slough. This greensward includes campus areas, as well as community open space in Isla Vista and the City of Goleta, as a contiguous regional amenity. The greensward should include pedestrian pathways, additional bicycle circulation, and the opportunity for passive play. In addition, there is the opportunity for additional native landscape restoration and the managmement of stormwater.

Tower Mall

Tower Mall frames a grand entrance from Mesa Road to Storke Plaza as a primary entrance to the center of the Main Campus. A pathway connects a redefined bus drop-off area to Storke Plaza. The west entrance to the Pardall Mall is framed by marker elements.



Pardall Mall

This main east-west thoroughfare across the campus contains the primary pedestrian and bicycle connections with Isla Vista. This is intended as a grand avenue from the Pacific Ocean to Isla Vista. Future buildings near the library at the crossing of the Pardall and Library Malls would be taller than buildings at the edge of the campus.

Campus Green and Campus Quad

Two well-defined spaces define the Campus Green, each with a distinct character based upon their established strengths. The Campus Green has informal plantings of large deciduous and Ficus trees with an undulating ground plane, in contrast with the typical flat lawns found throughout the campus. The Campus quad's two smaller buildings anchor each side of the quad with active uses, such as classrooms or class laboratories on the ground floor.

Library Mall

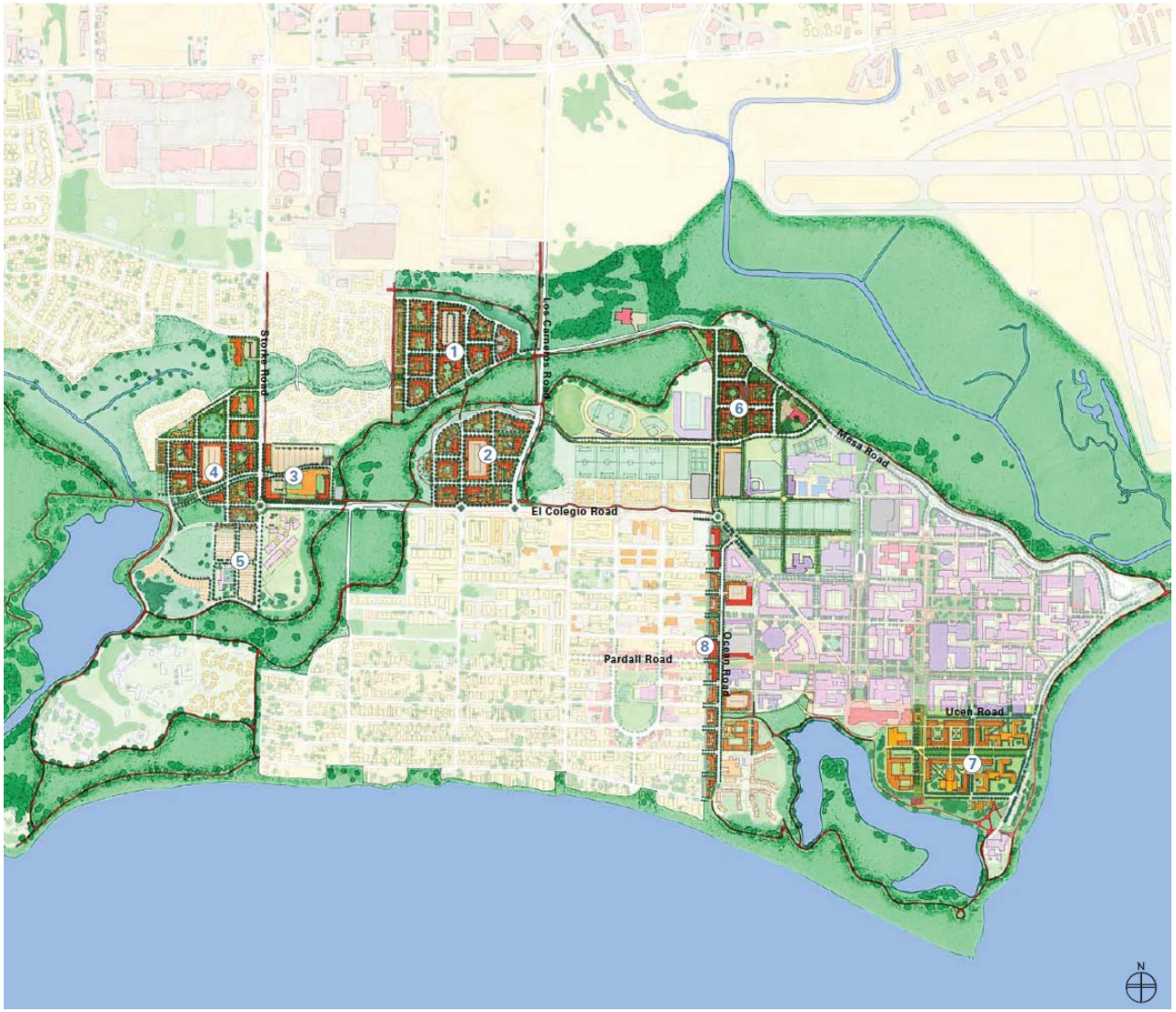
The contiguous open space that makes up the Library Mall is a collection of distinct and separate spaces. A pedestrian-only zone would become the north-south connection between the main entrance at University Plaza and the Lagoon, and also connects with the Campus Green and Pardall Mall. The Campus Lagoon terminus of the Library Mall provides a unique opportunity for a graceful transition from a formal walkway and gathering space to the more natural setting of the Lagoon. Framed views lead north to the Santa Ynez Mountains and south to the lagoon and Pacific Ocean.

Infill

The central premise of the Physical Design Framework is to provide a coherent system of open space which facilitates access and communication among all parts of the campus. These open-spaces establish an ordinal grid, from which buildings are defined.

The majority of the buildings will be infill in nature. These buildings will replace temporary buildings with new, appropriately sited and designed structures. The development potential of any single building block ranges from 50-100 percent of the site, depending on whether the site is on the edge or at the center of the campus; the size of the building area, the height of surrounding buildings, and the existing buildings to remain. Within these blocks, uniform flat-topped buildings are discouraged, so that buildings can have different and more visually interesting types of roof forms and heights. On the Main Campus, where most of the academic and support functions are located, the highest buildings (around 80 feet, near Davidson Library) are generally in the center of the campus and lower buildings are toward its edges. All buildings are lower than the 170 foot Storke Tower. Heights decrease at the edges and are lowest on the Storke Campus.

Engineering II Addition: This project demonstrates a UCSB infill project.



Plan view showing the campus neighborhoods linked by natural open space.

Residential Neighborhoods

The campus has a traditional university setting not located in or adjacent to a town, but distinctly and geographically separate from the surrounding community. Thus to achieve the services and atmosphere of a college town, the campus developed distinct residential neighborhoods. These are generally compact areas that are clearly demarcated and imbued with an individual character. They are comprised of compact clusters of buildings, courts, plazas, quadrangles, and open spaces and have well-defined boundaries and entry points. Each neighborhood has an individual architectural character and unique landscape design features that are distinguished by not only dwelling units, but dining facilities, study and community spaces. The character of campus residential neighborhoods are energized with the vitality of ground level pedestrian and bicycle activity, dining and student services. The Main Campus is home to most undergraduates.

New residential neighborhoods should be planned utilizing landscaping, siting, and massing of buildings to preserve view corridors. There is a need to create a sense of community interaction with a mix of populations within each neighborhood. The Campus Housing Study, Appendix A.2.2, calls for a network of small-scale neighborhood streets that create development blocks. Each neighborhood contains a mix of different units and building types. Amenities for residents are located in each neighborhood. Depending on location, these amenities may include courtyards with play areas for small

New Campus Housing in the campus contextural style.

children, recreation areas, private gardens, communal gardens, social areas, and retail outlets. Each neighborhood has at its center a large parking structure which serves the majority of the residences and wrapped with residential units.

Workforce housing is needed for faculty and staff of all ages, positions, and incomes, and for students, especailly those with families.

Main Campus Housing

There are three primary housing areas on the campus: Ocean Road, the current Facilities Management Site, and the East Campus in-fill of existing housing. These areas are described in the Campus Housing Study for the University of California, Santa Barbara in Appendix A.2.2. The Ocean Road site is described in greater detail in the Ocean Road Pattern BooK, Appendix 2.4. Guidelines for the design of buildings in these areas should conform to the detailed guidelines presented in these documents. Two distinct styles for housing evolved in the creation of these documents. They are Spanish Revival and UCSB Contextural. The two styles should be utilized in combination to produce richness and variety.

Storke, North, and West (Devereux) Campus Housing

The housing proposed for the Storke, North, and West Campuses at UC Santa Barbara is organized as highly defined neighborhoods linked by the campus greensward. The neighborhoods are defined by a grid of small scale streets, pedestrian connections, bike paths, and transit stops. This housing, proximate to the Main Campus, supports a sustainable campus environment with a lowered dependency on the automobile.

The designs of these neighborhoods are described in the “Campus Housing Plan for the University of California Santa Barbara,” April 2009 and in the “Storke Pattern Book,” December 2006 in Appendices A.2.1 and A.2.3. Buildings in these areas should conform to the detailed guidelines presented in the Storke Pattern Book. The two distinct styles created in this document are Spanish Revival and UCSB Contextual. These two styles should be utilized in combination to create variety and richness.

The New West Campus (Devereux) will be consistent with the other housing neighborhood plans, with the inclusion of the historic Campbell Ranch has instruction and research space and two new buildings designed to be consistant with Main Campus buildings.

Building Design

The planning and design of future campus buildings is based on clear understanding of how the campus has developed over time as well as the campus' intentions about common architectural elements.

Planning and Architectural History

Campus plans for UC Santa Barbara have struggled with a new modern identity not tied to the vernacular of the region. While many campus plans have been prepared and adopted, none have been fully realized. Many architectural expressions, from the International Style, to Brutalism and Postmodernism have tried to marry their characteristic imagery within the remaining military buildings, surrounding architecture, and academic programs. The resulting variety of styles and approaches, while challenging, produces a rich built environment.

Following the US entry into the Second World War, in February 1942 the Navy selected the Santa Barbara airport for a Marine Air Station. Barracks were built southwest of the airfield on the high and dry coastal mesa, now UC Santa Barbara's Main Campus. By early 1943, with most of the original construction completed, the base became home for nearly 500 officers, 3,000 enlisted men, and 440 women Marines. In 1948, the University of California purchased the former barracks area on the coastal plateau, consisting of 408 acres and over 75 one and two-story wooden military buildings for $10. A dozen of these buildings are still in use today.

Rows of one and two-story barracks dominated the scene, with dirt paths meandering between buildings. Top soil had been removed during the War to extend the airport's runways. The remaining clay soil was heavy with salts and minerals from the years of crop irrigation. The only relief was the windrows of Eucalyptus and Cypress trees planted as farming windbreaks against the strong westerly winds.

The former Marine Air Station was functionally well suited to the University's program. Barracks became dormitories, mess halls were dining commons, and the dispensary became the student health center. The Officers Club became the Faculty Club, auditoriums changed to lecture halls, and the marine training pool and parade grounds supported athletic programs.

A physical campus plan for a college was prepared for the site by local architects, planners, and landscape architects: Windsor Soule, John Murphy, Chester Carjola and Ralph Stevens in 1951. The plan reflected both the ideals of the classic "American campus" as an academic quadrangle open to the landscape. Interestingly, it melded a Beaux-Art plan for the academic buildings with a modern free-form arc of residence halls concentrically centered on the Campus Lagoon. In August 1952, contracts were issued for the first two permanent buildings: the first phase of the Library and a Physical Sciences building (now Webb Hall) defined a central quad.

Marine Air Corps Station at Goleta Point, circa 1942

Campus Plan, 1951

Only a few years later, the Los Angeles firm of Pereira & Luckman became the UC Regents consulting architects, and prepared a contemporary plan for Santa Barbara that bore little, if any, resemblance to the original plan. It established a modernist architectural vocabulary of square rose tinted patterned concrete blocks, hipped flat-tile roofs, and buildings grouped around a non-hierarchical landscape of linked courtyards. There were no fewer than seven subsequent campus plans, each bearing little from the previous one, seeking to chart a different approach to the design of the campus and thus gradually losing a cohesive structure of open spaces. The result is a collection of spaces that can be difficult to understand or navigate and mostly indifferent to the natural landscape setting.

The most recent set of campus plans and the Physical Design Framework have established a series of unifying principles and clear campus form that seek to synthesize a gridded framework of view corridors featuring the ocean and mountains and weaving a new residential edge between the campus and Isla Vista.

The current buildings on campus reflect diverse architectural styles from the last half century. The spaces between the buildings and landscape patterns are the dominant feature of the campus rather than strong stylistic expressions in the buildings.

Second Campus Plan, 1954

Design Guidelines

New buildings and additions to the built environment should reflect the purpose of the program and academic discipline while reinforcing the campus organization of spaces. Each building needs to adapt to the specific site and have state-of-the-art efficient systems that employ smart design with lasting lifecycle quality.

Many building sites and large public spaces have potential views of the ocean, islands, and mountains. Building designs should take advantage of these views while respecting the magnificent campus setting.

Site plans should add definition and reinforce the open area framework. Avoid long flat unbroken walls at the pedestrian level.

Buildings should be oriented to the major East-West axis to take full advantage of sunlight, as possible. Exterior spaces such as plazas, balconies, and alcoves should be located on the south facing portions of buildings to manage sunlight and shade patterns to their best advantage. Northern facing elevations do not host these activities well, as they are in shade and too cold. Site planning should take advantage of natural ventilation by orienting spaces to the prevailing south-westerly wind patterns from the Santa Barbara Channel.

Building mass should create courtyards in mid-block sites. These quads should be memorable spaces with distinctive character such as Cheadle Hall and the Music Building. These courtyards should incorporate features such as water, seating, artwork, and distinctive plantings.

Davidson Library Addition and Renewal

Building heights should be consistent with the heights set in the LRDP with shorter buildings near the campus edges and taller buildings near the campus center.

Buildings should meet the sky and touch the ground in interesting, clearly expressed ways. Structures should have a clear point of entry from the exterior and have an easily navigated circulation system through the interior.

Roof systems should reflect sustainable design elements in some way. Green-roofs or vegetated roof covers with growing media and plants are an alternative to standard roofing. A photovoltaic array of interconnected solar cells that can produce electricity for either on-grid or off-grid applications are viable inclusions to be considered on roof systems.

Buildings should use regional materials such as plaster, stone and wood with colors drawn from the Mediterranean palette of white walls or earth tone walls with strong color accents of paint or tile.

Regional Context

The distinctive character of the regional architectural heritage draws from Hispanic traditions of the Mediterranean and is delineated by the use of simple building materials of stone, plaster, and terra cotta. These are uncomplicated forms, articulated by an orientation to strong sunlight featuring shade devices such as deep reveals, porches, arcades, paseos, and colonnades. Without emulating the architecture, campus buildings should relect in these regional traditions.

Santa Barbara County Courthouse

Orientation

The orientation of a building to this particular latitude and climate with specific attention to the site and circumstance of the building, the prevailing climate conditions, elements of building design and construction, solar orientation; and the placement of glazing and shading elements all contribute to reducing mechanical means of environmental controls and energy.

Each building elevation should take its design from its particular solar orientation. North facing walls have large glazed areas that feature natural daylight, but do not have balconies, as they are too cold for use. East and West elevations have screens or bris-soliel. South elevations use shaded arcades, horizontal shade structures, and deep set windows to control heat gain and take advantage of outdoor spaces with views and sun.

Student Resource Building South elevation with sun shades.

Engineering Science
North and West Elevations demonstrating a response to orientation.

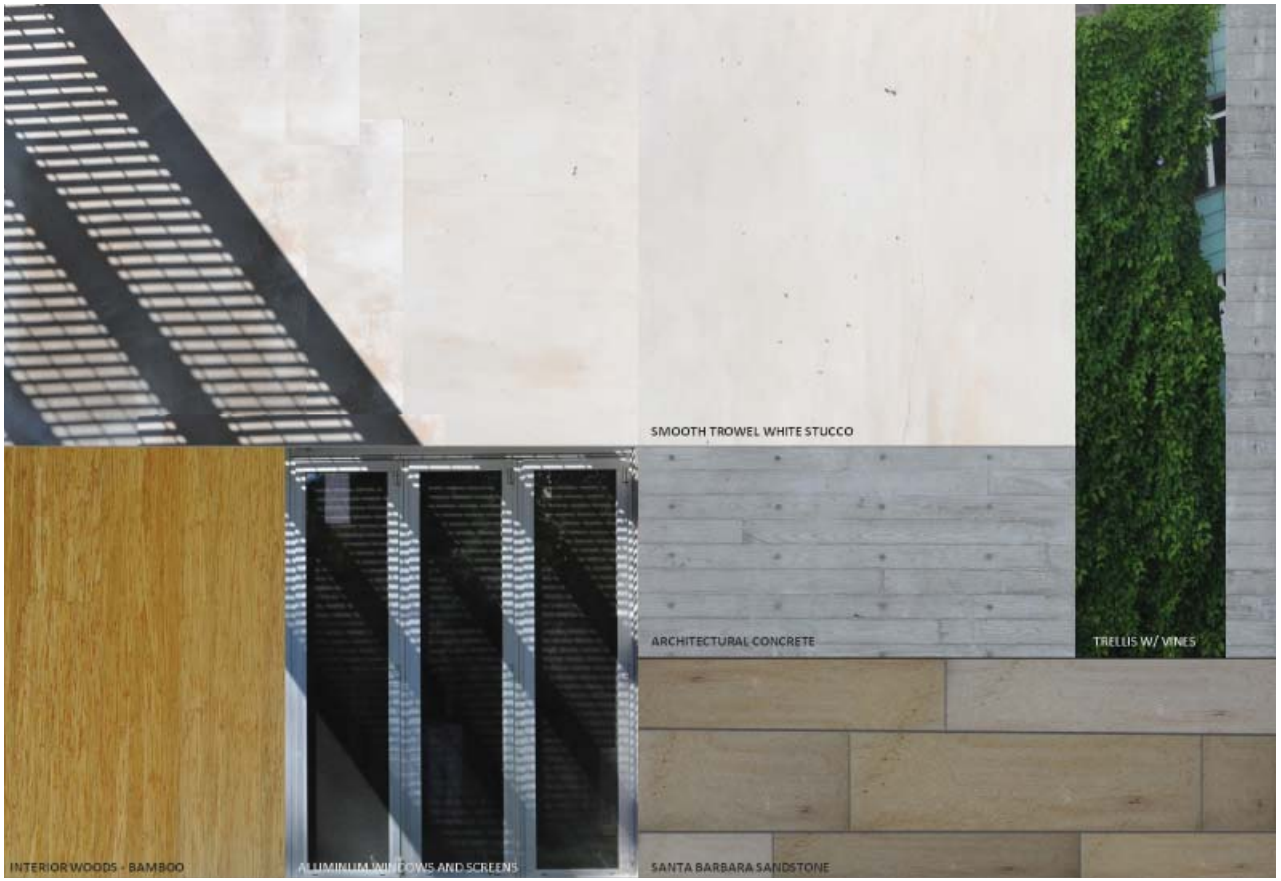
Facade/Fenestration

The term, literally meaning “frontage” or “face” is generally one side of the building exterior, especially the front, but, also, sometimes the sides and rear. Facades set the tone for the rest of the building and can become external works of art or functional expressionism. Facades should be carefully designed to contribute to the overall richness and texture of the campus.

Fenestration should be responsive to orientation and can include punched openings to window wall designs.

Phelps Hall

Recreation Center



Bioengineering Surface Materials Board

Surface

Materials, finishes, and colors, are considered for their appearance under different lighting conditions, including time of day, amount of cloud/fog cover, and both natural and artificial lighting.

Materials should reflect their natural characteristics rather than imitate something they are not. Avoid painting materials to hide their true nature. Buildings should be finished in plaster, stone, terra cotta, cast stone, concrete, wood, metal, or concrete masonry units.

Base

The base portion of the buildings' first floor, where it meets the ground, should appear as an extension of the foundation clearly expressed and featured in a building design. The base can be of stone, cast stone, concrete, or concrete masonry units.

Humanities and Social Sciences Building

Kohn Hall

Eave

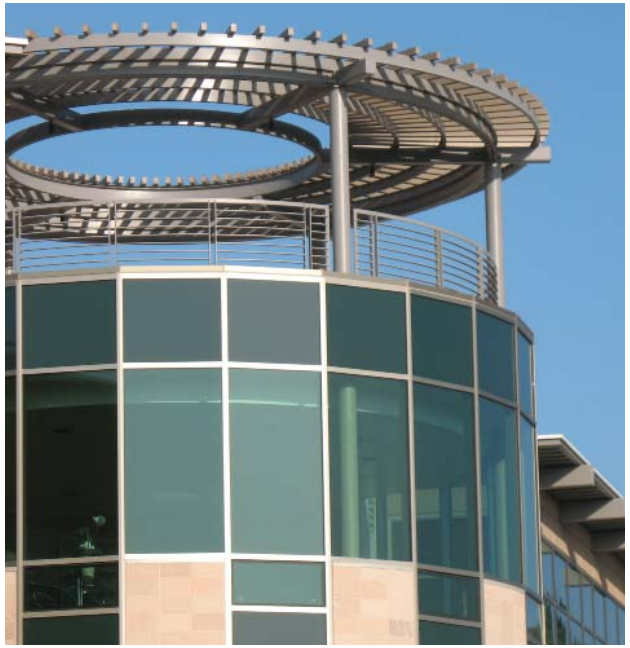
The eave is that portion of a roof which projects beyond the vertical wall of the building to protect against the rain, heat, sunlight, cold, and wind.

From the ground, the underside eave, or the soffit, is that visible portion of the construction edge seen against the sky. Combined with the fascia, the vertical surface which caps the end of the pitch and soffit is also a prominent element.

The top edge of the building should meet the sky with a clearly articulated edge in a purposeful manner; a generous eave, overhang, trellis, or sun control/shadow device.

Marine Science Institute

Materials Research Laboratory Addition



Mosher Alumni House

Roof

Roof materials should range from flat clay tiles, barrel tiles, S-tiles, or standing seam metal for hip and gable roofs (with a fairly gentle low angle pitch) to green planted roofs, roofs designed to accept solar arrays, or light colored flat roofs. Tiles tend to be brown or orange traditional, but can be shades of green. Special attention should be paid to roofs viewed from taller surrounding buildings as possible.

North Hall

Performing Arts Building

Color

Colors should draw from the Mediterranean and California pallette including cool white walls and, warm red tiles with strong blue accents borrowing from the surrounding sea and sky. There can be an abundance of deep blues, teals, and warm tans, but lavenders and green can make their presence.

Buildings may contrast or blend with greens and annual grays of the surrounding grasslands, scrublands, and natural areas. Light colored stone and pure white walls can be accented by yellowed buff colored stucco finish. Painted metals and wrought iron accessories along with wood doors and beams are possible accents. Mosaic tile designs and wood can be used for covered areas.

University Center
Storke Tower

Tower/Architectural Element

Towers, or special architectural elements, serve for their presence in the landscape, aiding way-finding and establishing neighborhood identity. They can be functional elements for circulation or communication. Buildings at key interseciton points in the campus should mark the location with a tower or other prominent architectural feature.

Givertz Graduate School of Education

Kohn Hall

Entry

Buildings should have a clearly defined portal or major building entry. The ceremonial entrance can be decorated or expanded to emphasize its function or importance. The entrance should convey its presence and be easily read from major pedestrian routes and campus open spaces.

Ssecondary entrances should contribute to clear building organization. Tertiary building entries should be provided for ground floor classrooms or other similar functions.

Webb Hall

De La Guerra Dining Commons

Arcades

The creation of covered walkways, with either arched or flat lintel porticos for shade and protection from inclement weather and strong sun, is an element of campus design and is encouraged.

Humanities and Social Sciences Building

Courtyards

Courtyards are important regional design elements, open to the sky and defined by walls or buildings. They offer light, air, privacy, security, and tranquility increasing a sense of neighborhood, community, and scale. They also serve as secondary meeting places for outdoor classrooms or staging areas for lecture halls. They are linked to the pedestrian system of walkways and paseos and populated with seating, water, and plantings. Buildings should contribute to the creation of courtyards where appropriate.

Cheadle Hall and Student Affairs Administrative Services Courtyard

CNSI/Elings Hall Courtyard

Intercollegiate Athletics Courtyard

Paseos

Paseos, or pedestrian walkways, are a series of connecting private and public walkways joined to streets, open plazas, courtyards, classrooms, lecture halls, and major building entries throughout the campus. They also serve as connections between parking facilities, Isla Vista, and surrounding open spaces.

Paseos are an important means of pedestrian circulation throughout UCSB. Because of this, the paseos reinforce a human scale, provide a pleasant experience for the user, and reveal a number of building facades and open spaces. Where possible, buildings should contribute to the network of paseos.

Music Building Paseo

Banners

ADA path of travel way finding signs

Marine Science Viewed from Bren Hall Paseo

Graphics

Elements of exterior graphic signage, such as vehicular and pedestrian directional and maps, building name and identification, donor spaces and elements, are limited to specific fonts, sizes, colors, and installation methods and should match campus standards.

Banners and special events signage along with interpretive signage have a larger degree of flexibility in their design.

Site Plantings

Planting areas in 'front yards' of buildings and their courtyards should provide a variety of interest and diversity tailored to that individual building or groups of associated buildings. While contributing to the overall cohesion of the campus.

Trees

Major corridor 'skyline' trees should visually and spatially define circulation routes and give each major corridor a distinct identity. Trees planted in north-south corridors should be in regulated rows of a single species, or two species, of a similar appearance, always framing the views to the larger landscape. The east-west corridors are wide and should feature a central planting area with large specimen trees in an informal pattern, selected and pruned to maintain views, the length of the open spaces. Feature landmark trees should frame, or terminate, views and axes to improve orientation and sense of place and provide shade canopy. See Campus Landscape Concept Plan Appendix A.3.

Pedestrian System

Pedestrian walkways should be smooth surfaces with minimum joint gap widths. Major routes should avoid curbs and steps with the use of gentle ramps or rolled curbs. Special plazas or entries should feature specific defined materials such as brick or stone. Permeable paving should be incorporated as feasible.

Bike Circle

Bike Paths

Campus bike paths should be adequate in dimension. Major intersections should have bike traffic circles. Bike parking lots should be located immediately adjacent and connected to bike paths with a clear, well lit path of travel from bike parking to main entry destination. Bike parking lots should be screened with a hedge, paved with a permeable surface, and provide a high density rack system.

Site Furnishings

Campus open spaces should include simple, substantial exterior furnishings of dark anodized metal, wood, or concrete. Furnishings should include benches, tables and chairs, kiosks, newspaper vending boxes, trash and recycling containers.

Valve boxes, generators, switch boxes and other exterior appurtenances that become elements of the exterior landscape should be discreetly woven into landscape designs.

Lighting

Pedestrian lighting should match the campus standard. Exceptions include special courtyard or entrance plaza lighting. Bollard lighting should be used in a limited fashion. Uplighting of buildings or vegetation should be limited to key entry locations to reduce light pollution. As practical, emerging lighting technology should be incorporated to reduce energy consumption.

Planning and Design Process

The physical planning and design process at UC Santa Barbara is based on an intensive process of consultation and review by faculty, staff, and students as projects are processed through a series of committees and administrative offices.

CAMPUS PLANNING & REVIEW

The Office of Budget and Planning, reporting to the Chancellor and Executive Vice Chancellor (EVC), brings forward major capital projects. The process involves the participation of faculty, staff, students, and administration to implement the academic and physical planning objectives of the LRDP, Physical Design Framework, and other plans.

To achieve an effective capital planning process the Chancellor appointed the Campus Planning Committee composed of the Senior Officers of the campus (Executive Vice Chancellor and all Vice Chancellors), two academic administrators, the Chair of the Academic Senate, three Senate Committee chairs, co-chairs of the Design Review Committee, student, and staff representatives. The Assistant Chancellor for Budget and Planning chairs the Campus Planning Committee, which meets monthly. The Committee's objectives are to ensure that the campus:

- Designs and implements Major Capital Projects (State and non-State) that are consistent with the UCSB Strategic Academic Plan, the UCSB 2010 LRDP, Physical and Sustainability Plans, in a timely, efficient and cost effective manner;

Campus Planning Process

- Maximizes and optimizes the capital dollars available to UCSB from all sources.

- Establishes a clear understanding of the academic, budgetary, land use, environmental, and aesthetic impacts for each major capital project.

The Committee achieves its objective through a three tier review process of all major capital projects. A project must be supported by a member of the Committee or the Chancellor to be presented to the Committee for review. The first review is to determine whether the proposed project is most effectively addressing the identified capital need and has sufficient benefit to the campus to merit expenditure of funds for pre-design studies. The second review occurs after pre-design studies are completed and the project is ready to proceed for campus and/or President or Regents approval. This stage of the review is focused on ensuring the proposed capital project is meeting identified program objectives, has addressed all site related issues, is meeting campus green building objectives, is maximizing available funding, and benefits the overall campus. The last review takes place at the completion of schematic design. This review is primarily focused on ensuring that all program objectives have been achieved, the funding plan is financially feasible and the design and siting is consistent with the LRDP and Physical Design Framework.

The Chancellor, along with the Academic Senate, appoints the Design Review Committee, which is co-chaired by the Senior Associate Vice Chancellor (SAVC) for Administrative Services and a member of the Academic Senate to ensure that each project is consistent with the Physical Design Framework.

Following campus approvals, the SAVC is responsible for the development of projects' preliminary plans including schematic design and design development drawings, and contract documents necessary for estimating, bidding, and construction of the project.

DESIGN REVIEW COMMITTEE

The Design Review Committee (DRC) consists of 14 members headed by co-chairs; and the SAVC, the other a member of the Academic Senate. There are three consulting architects (one a landscape architect), four faculty, two student representatives (one undergraduate, one graduate), two staff representatives, and the director of the University Art Museum. The DRC operates jointly under the aegis of the Administration and the Academic Senate and reports directly to the Chancellor making recommendations to the CPC on issues of architectural and landscape design.

The DRC considers campus physical planning, the design of buildings, their siting and other features, circulation, landscape, the integration of art into the campus landscape and environmental issues. A subcommittee on Campus Landscape is co-chaired by members of the DRC.

The Office of Campus Planning and Design is responsible for the preparation of physical planning documents, including environmental impact reports, long range development plans, area plans, transportation plans, design guidelines, landscape plans, and other campus plans, and consults with the DRC on campus design matters and provides support for the committee.

SMALL PROJECT REVIEW PROCESS

Minor Capital Improvement projects and smaller projects are dealt with by the staff of Campus Planning and Design and Design and Construction Services. With the co-chairs of the DRC, a Small Projects Committee meets monthly to review these types of projects for their effect on campus planning and design. The committee is staffed by Campus Planning & Design, and consists of eight staff design professionals with training in design, architecture, landscape, and public safety.

Aquatics Complex aerial perspective viewed from South East.

CALIFORNIA COASTAL COMMISSION

Because the campus is largely located within the state coastal zone, development on the UC Santa Barbara Campus is regulated by the California Coastal Commission. Campus development activities such as construction of buildings and activities that change the intensity of use or effect public access to coastal waters generally require notices, permits, and plan approvals from the Coastal Commission.

Implementations of specific statutory policies to protect coastal resources are accomplished primarily through the approval the campus' Long-Range Development Plan and individual project approvals. Projects may not commence until a coastal development approval has been issued. Monthly public meetings provide an opportunity for the Coastal Commission to hear public testimony and to make permit, planning, and other policy decisions relating to development in the coastal areas of California.

Exiting UC Santa Barbara through the Henley Gate.

In keeping with UCSB's sustainability goals this document was printed on Sustainable Forestry Initiative (SFI) certified paper.