

CALIFORNIA STATE UNIVERSITY DOMINGUEZ HILLS

2018 Draft Master Plan



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Appendix: Technical Reports [Under a Separate Cover]

EXECUTIVE SUMMARY



Executive Summary

The purpose of the California State University, Dominguez Hills 2018 Master Plan is to support and advance the University's educational mission by providing a guide to the development of the physical campus and its facilities over the next twenty years. The Master Plan report describes in detail the vision and goals for campus development to accommodate an enrollment capacity of 20,000 full-time-equivalent students (FTES).

The 2018 Master Plan addresses the natural and built environments by identifying the requirements for maintaining and enhancing the physical aspects of the campus to meet the needs for growth and change in a rapidly evolving higher education environment. The Master Plan anticipates these changes by focusing on the facilities needed by the academic program; by campus life programs including housing, recreation, athletics and facilities maintenance; and by the requirements of campus infrastructure including roadways, parking and utilities.

The Master Plan offers guidance for future development that is intended to maintain and enrich the campus as an attractive, accessible, safe and functional environment for learning, living, recreation and culture to serve CSU Dominguez Hills students, faculty, staff and visitors as well as the surrounding region and its communities. The Master Plan report incorporates Landscape Guidelines, Sustainability Guidelines and Land Development and Architectural Design Guidelines to guide the execution of the Master Plan recommendations. Technical information concerning campus utilities and infrastructure are included in Appendices to this report and in related reports under a separate cover.



INTRODUCTION AND PURPOSE [CHAPTER 1]

California State University, Dominguez Hills comprises 344 acres within the City of Carson, California. The current full-time equivalent enrollment capacity of 20,000 FTES will remain in effect; the current enrollment, as of the 2016-2017 enrollment figures, is 13,947 enrollments, or 11,004.1 full-time-equivalent students (FTES), served by over 767 academic staff and over 285 administrative and finance staff.

Founded in 1960, the campus serves students from the local surrounding area, from counties within California and from other States and international countries. The University comprises six Colleges that offer 46 undergraduate major programs and 22 graduate major programs and has over 90,000 alumni worldwide. The University offers an NCAA Division II sports program and provides on-campus housing for 687 undergraduate students.

The 2018 Master Plan process was conducted over a 9-month period during the 2016-2017 academic year. The Master Plan team worked with the University's Master Plan Committee and campus leadership to formulate thirteen specific goals for the Master Plan. The planning process included numerous opportunities for campus and community participation, including two Campus Planning Workshops, with each Workshop consisting of

two or three separate sessions, and displaying information at the Loker Student Union to engage students in the process. These workshops were organized to both present and listen to ideas and gather feedback about preliminary planning proposals and the Draft Master Plan.

The scope of the Master Plan includes the development of new and renewed academic and administrative facilities; development of a new mixed-use University Village on 85 acres at the east of the campus; additions to the campus housing portfolio; expansion of student life and campus life facilities; functional modifications to pedestrian, bicycle and vehicle circulation systems and parking; improvements and adjustments to landscape and infrastructure systems; and aesthetic enhancements.

EXISTING CONDITIONS [CHAPTER 2]

CSU Dominguez Hills is the seventh largest CSU campus in terms of enrollment. The 346-acre campus is currently divided, with an 85-acre parcel at the west of the site the subject of a long-term lease to the StubHub Center, a facility of the Anshutz Entertainment Group. In addition, a 3.69-acre parcel is leased by the Long Beach Unified School District for the C.A.M.S. High School. The campus is surrounded by residential development to the north (across Victoria Street), west (across Avalon Boulevard) and south

(across University Avenue), and by light industrial development to the east, across Central Avenue.

The original master plan, developed in 1964 by A. Quincey Jones, anticipated 20,000 FTES, with academic and administrative facilities concentrated in the center of the site, surrounded by playfields, parking and student housing. At present, except for the existing Pueblo Dominguez student housing complex in the eastern area of the campus, significant portions of the campus at the east and at the south are underutilized and available for development. To the southwest of the site is a 3.5-acre Nature Reserve.

The Master Plan team carried out studies of the existing age, condition and life cycle of the existing campus facilities, the conclusion of which was that several existing facilities are no longer providing adequate modern spaces for the functions they were intended to serve and must be replaced. These buildings include the Small College Complex, the School of Education building, the Field House, temporaries SAC-2 and SAC-3, the EAC temporaries, and the Pueblo Dominguez 1 and 2 housing complex.

The Master Plan is also based on analyses of current vehicle circulation and parking conditions, existing public transit service, current landscape conditions, and the effect of existing and potential initiatives on long-term campus sustainability. The results from studies of the campus

infrastructure and utilities, some of which were part of the master plan process and others which were parallel investigations, were integrated with master plan proposals for campus development.

Analysis of facilities required to serve 20,000 FTES indicate that the campus needs just over 966,000 gsf of state-supported academic and administrative space, just over 260,000 gsf non-state-supported space including a Student Recreation Center, just over 1,800 student housing beds, and 6,940 parking spaces.

Analyses and observations by the Master Plan team and campus leadership suggest that new facilities be sited and arranged to increase campus visibility and identity, both from within the campus and from campus edges.

VISION, GOALS, AND PLANNING PROCESS [CHAPTER 3]

The physical campus serves the educational process. The educational experience in its fullest sense takes place not only in classrooms, but at meals, in residential areas, in the course of recreational activities, and through informal and casual encounters. The physical campus provides the setting for these experiences to be shared by students, faculty, staff and campus visitors.

Reflecting the University's 2014-2020 Strategic Plan, "Defining the Future," the

2018 Master Plan seeks to reaffirm the CSUDH mission by focusing on the campus facilities needed to increase access to educational opportunity, enhance campus support for student learning, and offer globally relevant academic programs.

The 2018 Master Plan also recognizes the dramatic changes in public funding that have occurred in recent years, and the need to grow the university's financial resources by diversifying and increasing revenue sources.

The Master Plan Vision, crafted with input from President Hagan, the Master Plan Steering Committee, campus leadership and input from campus/community planning workshops states that **CSU Dominguez Hills will be a vital physical campus that supports all the activities needed for a top-performing Model Urban University serving 20,000 full-time students** and will achieve this vision by guiding the campus to:

- **Augment Student Learning Facilities** including modern classrooms, laboratories and learning spaces;
- **Enhance Student and Campus Life**, including student residential communities, recreational facilities, arts and culture venues;
- **Support Community Connections**, including facilities to host regional and global academic, cultural, recreational and athletic programs;

• **Support a Sustainable, Diverse and Just World**, targeting a more sustainable environment, society and economy for all persons, including the ability to partner with institutions and businesses to attain financial sustainability in support of CSUDH's Academic Mission.

To enact these goals, the 2018 Master Plan was based on a conceptual framework focused on:

- Preparing for increased enrollment up to 20,000 full-time equivalent students;
- Making the best and highest use of campus land;
- Increasing campus interaction, activity and energy; and
- Reinforcing CSUDH identity and visibility within the campus and at the connectivity points with the surrounding community.

Core Campus Master Plan Program. The Master Plan Vision and Goals were translated into a program of Master Planning elements for the Core Campus including ways of using the physical campus to:

- Reinforce an integrated campus framework to support connectivity, including linking buildings, pathways and landscape;
- Improve campus entry, "front door" and face to the community;
- Replace old, inefficient and "temporary" buildings with new facilities;





- Provide more student housing to create a strong 24/7 residential community;
 - Create pedestrian connections to the University Village retail sites;
 - Improve vehicle circulation, provide sufficient parking and support campus safety;
 - Plan for sustainable development and infrastructure;
 - Plan for remodeled, expanded academic facilities, including preparation for a new Business School facility;
 - Provide for a Student Recreation Center and expansion of the Loker Student Union;
 - Provide a small “black-box” theater;
 - Plan for a potential incubator/research facility on the core campus.
- pedestrian-oriented retail, open space areas and a business park.
 - Arrange land uses to create links between the University Village area and the campus core, particularly addressing the connection between student housing and the core campus.
 - Create a strong presence along Victoria Street to maximize University Village visibility.
 - Provide for the replacement of the 649 existing student apartment beds.
 - Arrange like uses in adjacent parcels, including acknowledgment of land uses across Central Avenue.
 - Address utility infrastructure requirements.

Master Plan Themes, Principles and Objectives

University Village Master Plan Program.

As part of the 2018 Master Plan, the University undertook a series of studies to evaluate and determine the best and highest use of campus land, including about 76.5 acres of currently underutilized land on the eastern portion of the campus. The Planning Framework and Principles developed in the course of these studies were consistent with the vision, goals and planning framework for the Core Campus and articulated the following principles and purposes:

- Create a University Village environment that blends a mix of uses, including residential development,

Based on observations the planning team was able to make about the campus throughout the process, the Master Planning framework was organized to address six fundamental planning themes that, in turn, provide objectives against which to evaluate the final Master Plan: Campus Functional Organization; Open Space and Pedestrian Circulation; Building Mass and Placement; Landscape; Management of Parking and Vehicle Circulation; and the Campus and the Community.

2018 MASTER PLAN [CHAPTER 4]

The 2018 Master Plan represents an inclusive, holistic and coordinated series of proposals to guide the development of the California State University, Dominguez Hills campus over the next 15-20 years. These proposals are responses to the direction of campus leadership, including the Master Plan Steering Committee; and input during campus and community planning workshops held in the Fall of 2016 and the Spring of 2017; and is guided by the Master Plan Vision, Goals and Planning Framework.

The 2018 Master Plan addresses both the Core Campus and the new proposed University Village, and is explained and illustrated via narrative, diagrams and illustrations that represent the envisioned future physical environment of the campus. This comprehensive Plan includes the development of new land uses; new, remodeled and re-purposed facilities; revised vehicle and pedestrian access and circulation; enhanced open space and landscape; new campus and University Village housing, retail and amenities; athletic and recreation facilities; and sustainability initiatives.

The Core Campus, planned to support a campus of 20,000 FTES features:

- **twelve new academic and administrative facilities**, providing classrooms, laboratories, faculty and administrative offices, new performing arts facilities; a new incubator/

research facility; and facilities for accommodating CSUDH's new mobile Fabrication Lab vehicles;

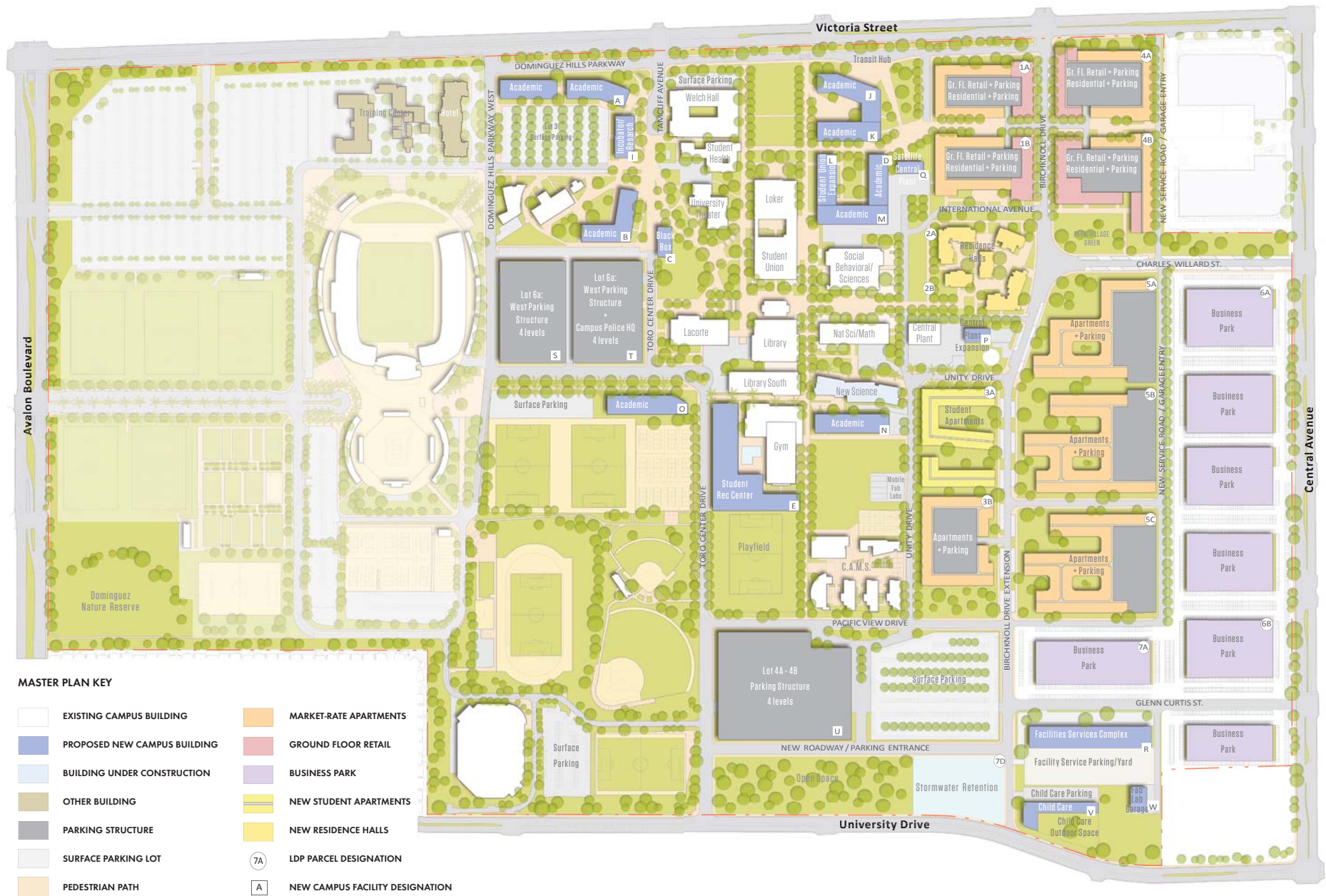
- **student support facilities**, including an expansion of the Loker Student Union, new student residence halls and a new student recreation center;
- **athletic facilities** including a remodeled gymnasium and existing and new playfields;
- **campus support facilities**, including a new, expanded Child Care Center; new Facilities Services offices and yards; and expansion of the existing Central Plant; and a satellite central plant;
- **parking facilities** to accommodate 20,000 FTES, including reconfigured surface lots and new parking structures;
- **reconfigured campus entries** at both north and south, including new campus visitor services and reconfigured vehicle access to parking facilities;
- **open space areas** for campus activities, programmed and informal gathering and recreation; and
- **existing natural reserve areas** and a new area for an urban farm project.

The University Village, occupying the easternmost 76.5 acres, is a new mixed-use development that includes:

- **new retail uses** to support both the Core Campus and the Village, including some on-street parking and parking in structures;
- **new housing** including market-rate

residential uses, housing for faculty and staff and apartment style housing for students;

- **business park development** targeted to uses compatible with and supportive of the University's educational mission;
- **open space areas** for informal activities, leisure, gathering and recreation including a new one-acre park;
- **preservation of an existing natural reserve area**; and
- **reconfigured vehicle circulation** including an extension of Birchknoll Drive and reconfigured vehicle access from Central Avenue.



LANDSCAPE MASTER PLAN [CHAPTER 5]

The Landscape Master Plan reinforces, supports and complements the Master Plan and presents ways for the campus to enhance, reconfigure and support its current abundant landscape to serve the goals and needs of the campus. The Plan includes planting and hardscape suggestions, irrigation solutions, and improvements to the campus circulation, wayfinding, and identity. The Plan seeks to improve campus sustainability in accord with the CSU 2014 Sustainability Policy through the use of climate-appropriate plant and landscape materials.

The Landscape Master Plan makes a special point to address the need for increased bio-diversity on the campus, particularly the existing, extensive, and mature Eucalyptus tree canopy which forms arguably the most recognizable campus identity feature. Because the majority of the trees were planted when the campus first opened, they are now about 50 years old, approaching their natural life-cycle limits. The Landscape Master Plan proposes a phased and gradual tree-replacement program.

The Plan also targets replacement of turf plantings in some campus areas to reduce water use while still providing a congenial outdoor environment for informal gathering and campus activities.

The Landscape Master Plan proposes a new landscape framework that makes use of plant materials from worldwide climate zones compatible with the CSUDH climate and growing conditions, and includes an extensive plant palette to guide the campus in future development of its exterior resources.

The Landscape Master Plan also illustrates a new approach to tree plantings along pedestrian pathways to increase campus connectivity and identity, and makes recommendations for treating the landscape and site furnishings in campus edge zones, courtyards, plazas and play-field areas to support and enhance use of outdoor space by campus students, faculty, staff and visitors.



SUSTAINABILITY GUIDELINES [CHAPTER 6]

The Master Plan Sustainability guidelines build on work previously achieved and programs already in place by the campus. The Guidelines set forth a series of practical ways that campus programs and physical infrastructure can continue to move the campus and all its users further toward environmental sustainability in all of its manifestations. The Sustainability Guidelines focus on campus physical facilities but also address other campus sustainability initiatives, including those related to academic programs. The Guidelines acknowledge the policies and commitments reflected in the CSU 2014 Sustainability Policy, which focuses mainly on energy and emissions, largely aligning with the State of California energy and emissions goals, and also addresses goals for water, waste, green building, and procurement.

The CSUDH Sustainability Guidelines focus on existing energy use, energy metering and energy efficiency targets for new buildings; transportation including alternatives to single-occupant vehicles and support for use of public transit; water conservation; stormwater management; and waste management. The Guidelines address the CSUDH natural environment and health and equity, including a student proposal for an urban farm project

DESIGN GUIDELINES: CORE CAMPUS [CHAPTER 7]

The campus environment is a reflection of the quality of design of its buildings, facilities and landscape. The built structures, along with the campus landscape design and natural materials, are significant factors in creating a campus environment and image that expresses and serves California State University Dominguez Hills' mission. The design of every individual campus building arises from and contributes to the overall fabric, framework and aesthetic of the campus.

The design guidelines and aesthetic principles described in Chapter 7 address the buildings and facilities of the Core Campus. The Landscape Master Plan Guidelines are included in Chapter 5, and Design Guidelines for the University Village development are incorporated as an appendix to this report. New buildings in the University Village development are expected to reflect an aesthetic appropriate for their building type (residential, retail, business park), to embody a modern aesthetic commensurate with a forward-looking new development, and to incorporate some architectural elements of form, materials, color and landscape that create a clear aesthetic connection with the core campus.

The Design Guidelines reference existing campus buildings and make recommendations about the aesthetic directions

that new buildings should follow, addressing considerations of **building orientation** and relationship to open space, the pedestrian circulation system, building entries and food service facilities; **building form** including massing, materials and color, and acknowledging a campus hierarchy of signature, foreground and background buildings; and guidelines for residential buildings and parking structures. This chapter also addresses site guidelines including site furnishings, service areas and signage.

INTRODUCTION & PURPOSE



2018 Master Plan

Chapter 1: Introduction and Purpose

California State University, Dominguez Hills is a highly diverse, metropolitan university primarily serving the South Bay area of Los Angeles County. Established in 1960, as of the 2016-2017 enrollment figures, the 346-acre campus provides the academic, student life and functional facilities for its current student population of 13,947 enrollments, or 11,004.1 full-time-equivalent students, along with over 767 faculty and over 285 staff. The current campus enrollment capacity of 20,000 full-time-equivalent students will be retained for the current Master Plan. The 2018 Master Plan is a strategy for modifying the physical campus to accommodate the growth and changes the campus is expected to experience over the next fifteen to twenty years.



1.1 CONTEXT OF THE 2018 MASTER PLAN

The most recent Master Plan was revised and approved by the CSU Board of Trustees in May 2010. Since that update, the campus has experienced modest but steady enrollment growth.

The 2018 Master Plan was initiated to respond to a series of factors that will affect the campus over the next fifteen to twenty years and beyond. These factors include both existing and future-oriented land-use elements, along with leadership decisions that have been made to enhance the capacity of the campus to serve a growing number of students and the Dominguez Hills surrounding community:

- A significant proportion of campus academic facilities have reached the end of their useful lives and need to be replaced with updated facilities to serve the needs of the University's 21st Century students, faculty, and staff.
- The campus seeks to increase its population of residential students and will need to update and increase its existing residential facilities.
- The campus has identified an opportunity to develop approximately 76.5 acres of campus land on the east side of the campus in ways that can serve the university and its students, engage the community, and produce revenues that can help the campus develop and build the new and remodeled academic facilities it will need.

ties it will need.

- The existing lease with the StubHub center which occupies 88 acres on the west side of the campus, continues beyond the 2018 Master Plan horizon.

STATE OF CALIFORNIA MASTER PLAN FOR HIGHER EDUCATION

The State of California Master Plan for Higher Education was established in 1960 to help guide the expansion of California's public higher education system. The Plan represents a pact between the government of California and its citizens to support higher education through tax dollars. The Plan sought to guarantee that all California high school graduates who qualify have access to higher education through a tripartite system:

- University of California - Open to the top 12.5% of statewide high school graduates, it is designed as the primary academic research institution in the system, covering undergraduate, graduate and professional education. It also holds exclusive jurisdiction within the public higher education system for instruction in law, medicine, dentistry, veterinary medicine.
- California State University - Open to the top 33.3% of statewide high school graduates, its main mission to provide undergraduate education and graduate education through masters' degree programs. Doctorates can only be awarded jointly with UC.
- California Community Colleges - Open

to everyone capable of benefiting from instruction, the mission of the community colleges is to provide academic and vocational instruction through the first two years of undergraduate education, and to provide remedial instruction such as language courses, workforce training, and community service courses.

As the population of California has increased exponentially over the past 45 years, the state systems have worked to keep pace by expanding existing campuses and establishing new ones. The pressure from population growth and the demands placed on higher education for a well-trained workforce, as well as the significant economic pressures on state resources over the past eight to ten years, have strained the state's educational systems, prompting all campuses to re-evaluate their resources, potentials and priorities.

Current funding arrangements for the 23 CSU campuses have changed over the past decade, and the State has shifted the responsibility for funding capital projects to the CSU and individual CSU campuses. Based on these changes, the CSUDH leadership has developed a plan for using campus land assets in ways that can provide for the needs of the campus.

HISTORY AND CURRENT STATUS OF THE UNIVERSITY

The CSU Dominguez Hills campus was founded in 1960 as South Bay State Col-

lege on land that was previously a section of Rancho San Pedro, the first private land grant in Southern California, which had been given to the Dominguez family in 1784 by King Carlos of Spain.

The College was established in response to the needs of a rising population in the South Bay area in the aftermath of World War II and the establishment of the emerging aerospace and defense industries in Southern California. Although the first classes were held in existing temporary facilities, the State of California chose the Dominguez Hills site in the new City of Carson as the permanent site of the campus as it sought to respond to the 1965 Watts Rebellion and the identified need for an institution of higher education that would address needs of the diverse, mostly minority population in nearby neighborhoods.

The modernist architect, A. Quincy Jones, created a campus physical master plan in 1964 and oversaw the design of buildings and development of the Carson campus, and the permanent campus opened in October of 1968 with the Small College Complex of

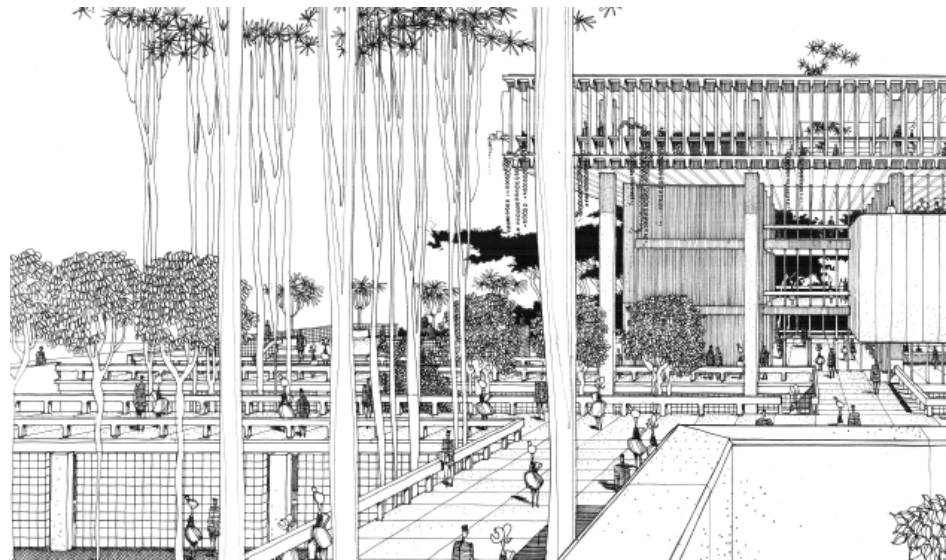


Exhibit 1-1: Image from A. Quincy Jones' 1964 Master Plan

buildings that still exist on the campus. The College met the criteria for becoming a university within the California State University system in 1977.

The University currently provides education to nearly 15,000 students enrolled in 46 undergraduate major programs and 22 graduate major programs, and has over 90,000 alumni worldwide. The University comprises six Colleges (Arts & Humanities; Business Administration & Public Policy; Education; Extended & International Education; Natural & Behavioral Sciences; and Health, Human Services & Nursing).

At present, almost 86% of the students are undergraduates and about 14% are enrolled in graduate and post-baccalaureate programs. Over 63% of undergraduates and over 74% of graduate students are female. Whereas nearly three-quarters (73%) of undergraduate students are enrolled as full-time students, nearly half (48.7%) of graduate students are part-time students. Also notable is that the average age for undergraduate students is 24.4 years, while the average age for graduate students is 34.5 years. Currently, 649 students live on campus in the Pueblo Dominguez apartment housing, original built for the 1984 Olympic games.

As of 2010, CSU Dominguez Hills was found to generate over \$335 million in economic activity annually, sustaining nearly 3,000 jobs in the South Bay region and generating more than \$20 million per

year in state tax revenue.

The University offers an NCAA Division II sports program, with four mens' sports (baseball, basketball, golf, and soccer) and 6 womens' sports (basketball, soccer, softball, track and field, and volleyball), as well as numerous intramural activity programs.

Global changes in economic and employment markets, the adoption of new technologies and pedagogies, the need for sustainable buildings and grounds, and changing demographics are all part of the context of the CSUDH 2018 Master Plan. The University has developed new curricula and programs in many fields in response to these global changes and has developed international programs to attract students from many countries to the campus.

The campus constructed a velodrome in 1984 for the Summer Olympic games, and also provided housing for the 1984 Olympic athletes. The California Academy of Mathematics and Science (CAMS) high school opened in 1990 on a small parcel of campus land leased to the Long Beach Unified School District.

The privately financed StubHub Center opened in 2003 on 88 acres of campus land via a long-term lease arrangement with StubHub Center's parent company, Anschutz Entertainment Group (AEG), providing the community with a world-class

athletics and entertainment venue for soccer, tennis, track and field, and cycle racing. The complex includes a 27,000-seat soccer stadium, a 8,000-seat tennis stadium and several outdoor fields; these facilities are sometimes used for concerts and CSUDH activities such as commencement ceremonies. Some outdoor fields are shared between the StubHub Center and CSUDH.

CSU DOMINGUEZ HILLS' STRATEGIC FRAMEWORK: MISSION, VISION AND CORE VALUES

The campus - its buildings, grounds and facilities - is a physical mechanism that allows the University to fulfill its mission and transmit its values to its students, faculty, staff and the community.

The University's Strategic Framework expresses its Mission, Vision and Core Values:

CSU DOMINGUEZ HILLS STRATEGIC FRAMEWORK

Our Mission

We provide education, scholarship and service that are, by design, accessible and transformative. We welcome students who seek academic achievement, personal fulfillment, and preparation for the work of today and tomorrow.

Our Vision

A vital educational and economic resource for South Bay, CSU Dominguez Hills will be recognized as a top-performing Comprehensive Model Urban University in America. We will be known as a campus community and gathering place where:

- Diversity in all its forms is explored, understood, and transformed into knowledge and practice that benefits the world.
- Technology is embraced and leveraged to transcend educational boundaries as we reach out to students, both local and globally.
- Sustainable environmental, social, and economic practices are a way of life.
- Students from our community who aspire to complete a college degree are provided the pathway and guidance to succeed.
- Faculty and staff across the University are engaged in serving the dynamic needs of the surrounding communities.
- Student life is meaningful and vibrant.

- Our accomplishments and those of our alumni are recognized nationally and internationally.
- Ultimately, our students graduate with an exemplary academic education, a highly respected degree, and a genuine commitment to justice and social responsibility.

Our Core Values

The following core values are fundamental to our success:

- **Accountability.** We recognize and live up to our responsibility to our students, campus resources and finances, staff, faculty alumni, supporters, and the community at large.
- **Collaboration.** All segments of the campus community work together to support our vision as well as our students' success.
- **Continuous Learning.** We strive to continually improve teaching, scholarship and service.
- **Rigorous Standards.** We identify, implement and support excellence in all our practices.
- **Proactive Partnerships.** We actively engage with our communities and its members to promote educational opportunities and excellence for our students.
- **Respect.** We celebrate and respect diversity in all forms.
- **Responsiveness.** We are here to serve the needs of students this community and society.

ENROLLMENT CAP

The University can easily adhere to the Master Plan capacity of 20,000 FTES, established at the founding of the University in 1960, for the foreseeable future.

On the basis of capacity studies conducted for both the 2018 Master Plan and the previous Master Plan, the 2018 Master Plan described in the following chapters presents the anticipated new and removed facilities, along with the pedestrian circulation, vehicle circulation, open space and Infrastructure/utilities systems appropriate to accommodate the activities of a 20,000 FTES campus over the next 15-20 years.



1.2 PURPOSE AND GOALS OF THE 2018 MASTER PLAN

The University recognizes the physical campus as a tool that can help its students attain their educational goals and contribute to their development.

The CSUDH 2018 Master Plan offers ways to implement and translate the University's vision into physical space. It is a guide for long-term land and building use and provides guidance for near-term decisions on program planning and implementation, resource allocation, priority-setting and other University administrative matters which influence the student educational experience at CSU

Dominguez Hills. These daily decisions collectively set a course for the long-term future of the University. The 2018 Master Plan will help ensure that such decisions are consistent with the University's Mission, Vision and Values.

The intent of the Master Plan is to provide the University with a road-map for the growth, renewal and change of the physical campus, with the aim of reinforcing the University's strengths, ameliorating its weaknesses and supporting the University's mandate to provide high-quality education to a large and diverse student body. It describes and illustrates ways the university campus may grow and change as the resources become available and as campus leadership identifies the need for new and renewed facilities and systems.

The 2018 Master Plan process is described in detail below, and the specific objectives of the 2018 Master Plan are articulated in Chapter 3.

The process began with a series of visioning exercises that allowed campus leadership, including the Master Plan Steering Committee, to articulate the University's current vision for its physical campus and to express the goals and objectives that would guide the Master Plan process.

The goal of the Master Plan itself is to create a framework for developing the physical campus in ways that strengthen CSUDH's ability to:

- Reinforce the University's focus on

teaching and learning by providing the appropriate instructional, research and administrative facilities that support the depth of knowledge the University is charged to instill;

- Support opportunities for interaction and collaboration among students, faculty, staff, community members and campus visitors;
- Incorporate new technologies and welcoming, socially responsible physical environments;
- Make efficient use of developable land and add additional uses to the campus to further engage the surrounding community and provide further opportunities for its students, faculty and staff;
- Create the appropriate balance between developed areas and open space;
- Continue providing suitable facilities for informal and organized recreation and intercollegiate athletics;
- Provide facilities for student and faculty/staff housing in support of the University's vision to support a 24/7 campus;
- Continue to serve as an accessible, safe and attractive campus for students, staff, faculty and the community;
- Maintain and enhance the physical appearance of the campus;
- Maintain its stewardship of campus landscape and natural resources and reinforce the University's sustainability goals;
- Adequately maintain and manage all campus facilities, systems and infrastructure;
- Continue its relationships with its neighbors to support the goals of both the University and its neighboring entities;

and

- Serve as a regional center and asset for intellectual development, cultural activity and life-long learning for the CSUDH surrounding community.

The 2018 Master Plan is a strategic approach to the development of the physical campus that provides support for both immediate and long-term decision-making by:

- Documenting and evaluating existing campus conditions;
- Assessing the implications of enrollment levels for changes to campus facilities;
- Assembling and documenting future campus needs and requirements;
- Identifying appropriate sites for development of new facilities;
- Specifying safe and functional pedestrian and vehicle circulation patterns;
- Quantifying parking requirements and identifying sites for adequate parking facilities;
- Incorporating facilities currently under development and construction into the Master Plan;
- Incorporating sustainable landscape concepts that honor and acknowledge campus natural resources and assets;
- Incorporating analyses and recommendations arising from concurrent and ongoing assessments of campus infrastructure and systems; and
- Specifying design guidelines to govern height limits, setbacks, building area, connection with campus open space, building materials for new structures, pedestrian pathways, and vehicle access roads.

1.3 PLANNING PROCESS

Under the leadership of President Hagan and the University's Master Plan Steering Committee, the Interim Vice-President for Administration and Finance and the Director of Planning, Design and Construction oversaw the planning process for the Master Plan that took place over a 10-month time period. The process involved many opportunities for collaboration among the University community and participation from the University's neighbors and local governments and agencies. The Planning Process comprised five phases:

- Phase I: Initial Development of a University Village Land Development Plan for the east side of the campus
- Phase II: Data Collection and Planning Analysis
- Phase III: Visioning
- Phase IV: Development of Master Plan Alternatives
- Phase V: Development of Draft and Final Draft Master Plan

Phases IV and V included campus outreach components which were also open to the community to ensure sufficient channels for input and review by campus and community stakeholders.

To begin the planning process, the University conducted a competitive search and contracted with a professional planning firm, AC Martin, to serve as Master Plan

architects and assist in the development of the 2018 Master Plan. The Master Plan architects were responsible for leading the planning process; working with the University to develop a communications and outreach plan; assisting the University to identify planning goals by incorporating and analyzing input from campus and community stakeholders; and illustrating and articulating Master Plan proposals. The Master Plan architects were also responsible for coordinating the efforts of a team of professional consultants, including transportation and parking engineers, civil engineers, landscape architects, and sustainability specialists.

The University's Master Plan Steering Committee was charged with identifying campus goals and planning objectives and reviewing and providing input to Master Plan alternatives and proposals.

During the Master Plan process, the Planning Team also consulted with City of Carson officials, representatives from local transit agencies, and representatives from the StubHub Center and its parent entity, AEG.

PARTICIPATION IN THE PLANNING PROCESS

The planning process was designed to encourage the participation of student, faculty, staff and community individuals and groups. Two multi-session Campus and Community Planning Workshops were held over the course of the planning

project, with sessions held during the day and the evening. Although students were specifically invited to participate in the planning process, special efforts were made to engage them. The Master Plan illustrations were presented informally at the Loker Student Union to show the Master Plan Alternatives (Phase IV, described below) and Final Draft Master Plan (Phase V), and to solicit student opinion and input.

Workshop participants, including the students at Loker Student Union, were encouraged to write their comments, questions and suggestions on post-it notes, and these were collected and transcribed and then presented to the Workshop sessions to provide additional

feedback and ensure participants that their comments and opinions were incorporated into the planning process (Exhibit 1-3).

To further facilitate broad participation, the University developed a website dedicated to the Master Plan process that was updated as the process continued so that those who were unable to attend meetings could stay informed and provide input through virtual channels. All planning materials used in the campus Community Planning Workshops were posted on the website, and the website provided a readily accessible channel for input.

The master plan as shown in this report reflects comments and ideas from workshop participants, including both students

and community members, as well as the input from the Master Plan Steering Committee and campus leadership. Comments and input from various sources often converged to address specific issues; for example, campus parking and traffic, campus vehicle entries, the need for a designated pedestrian zone between Parking Lots 3 and 6 and the main areas of the campus, the desire to retain the Sculpture Garden as an important campus gathering space, the importance of campus signage, and other master planning elements. The master plan as illustrated in this report has been designed specifically to reflect and incorporate these comments and ideas and to reinforce the master plan process as a highly interactive process.



Exhibit 1-2: Images from Master Plan 2018 Campus / Community Workshops Held Fall 2016 and Spring 2017

Parking/ Vehicle Access

- **Better pathways** in & out of parking lots and throughout campus: this will better integrate the north & south campus for pedestrians and create a safer more convenient path to parking lots.
- Concerns about the handicap bus shelter: 1) Victoria transit area 2) when it rains it becomes a river.
- Need for a **Parking Advisory team** on Steering Committee.
- Concerns about parents who drop-off at CAMS: they are coming from Victoria and driving through the campus.
- **Public transportation system** for commuters and those who house on campus (i.e. zip car, city car)
- Parking for athletics adjacent to Athletic Rec Center.
- Designated parking for police.
- **Electrical charge stations** in parking lots.
- Traffic on Tamcliff Ave: the left hand turn is extremely hazardous.
- Concerns about separating the parking to north & south side of campus causing inconvenience.
- Temporary parking at StubHub when they are not having an event? Need **better timing** for when classes get out and when StubHub has a level three event.
- Concerns about the loading/delivery dock east of LSU.
- Need for a **bike path** and **bike racks**.

Safety

- Safety for those who take **night classes**, especially women, which is about 80% of students.
- Separating parking to north & south side of campus: safety concerns for those who take night classes and have to walk far.
- More safety implemented at parking locations.
- **Operations Center** for public safety.
- Density of buildings: concerns about how one gets from one building to the other.
- Gate D is collision heavy.
- Lot 1: intersection that leads from the dorms to the campus is a major stressor.
- **Expand lighting** in all existing parking lots.

Landscape

- During rainy season the front lawn north of LSU is a swamp.
- Ecology department would like an organic garden where they can grow & sell produce.
- Meditation gardens.
- Take away eucalyptus trees and no palm trees.
- North lawn needs pathways and trees to serve as a true gathering space.
- **Creating a real Southern California landscape** with native plants and wildlife: 1) science park/art park 2) campus as a learning laboratory 3) use of native plant species (Theodore Payne Foundation) 4) small plot at east end of NSM is a monarch butterfly area now.
- Multiple ADA problem areas.
- Keep green spaces & courtyards, however, update seating

Identity

- Make sure to keep the **small campus feel** and a campus that ties into nature: this is what attracts students & alumni to our school.
- More international students.
- Everyone is seeking **diversity**: CSUDH has it, how do we leverage it?
- Loker Student Union is the **heart and soul** of the campus.
- Electronic sign on street corner is misleading and you drive right by the school.
- **Better signage** in front of campus **and wayfinding** throughout: there used to be a welcome area but not anymore.
- LeCorte is a lost potential for a campus entryway: needs a path running in front of it and a paved plaza for receptions etc.

Land Development Plan

- Concerns for mom & pop shops already existing on Victoria.
- Good idea to have **faculty live on campus**: faculty housing will help create a strong faculty presence on campus.
- Suggestion to use Arizona State University as a model for a University District.
- Will **create jobs** for students.
- Commercialized environments & internships.
- **Build data center** with analytic component for student jobs & internships.

Student Housing

- Currently, international students get 10% of student housing space.
- By having student housing, you get a **different mix of students**.
- Feeling **stuck** without amenities or services because most student's do not have a car.
- Student services should be in a central location: stop shop.
- Housing open to fraternities & sororities
- **Integrate** Faculty housing with Student housing.
- **Suite style housing**: 1) housing that is built for community living 2) integrating a learning program into housing 3) create more diversity.
- Need for more student housing: roughly **200 students on the wait list** for housing.
- Will current housing be renovated?

Athletic Facilities

- Positive response to **hybrid athletic rec center and office center**: this will certainly help with campus engagement.
- Current gym needs work but should be retained; field house should be torn down & replaced.
- Idea to have **community gym memberships** (i.e. University Village residents?)
- Certain play fields are maintained and access controlled by StubHub.
- Sharing the gym for the dance program is not adequate.
- Campus does not have a tennis program and the current weight room is too small.
- CAMS uses current gym but they don't have their own lockers.
- Most students don't know there is a pool by the gym, it is too hidden.

Food Services

- **Coffee carts/kiosks** throughout campus with seating and umbrellas.
- Food at the gateway to the campus so that it is visible and appealing.
- Access to **food 24/7**.
- Food trucks and/or more cafes throughout campus.
- **Affordable food**: 1) particularly for those in student housing 2) food revenue can generate for other functions across campus 3) some campuses subsidize food services.
- Access to a grocery store.
- Loker Student Union to include more **local businesses**.
- Students tend to eat in their cars: how can we create a place that will draw them onto campus?
- **Farmers Market** will leave when construction in the city is completed: CSUDH location does not draw enough patrons: how do we change this?

Sustainability & Utilities

- More water features.
- Can we use **recycled water** and **atmospheric contents**?
- Build a data center that can be used by other CSU campuses to maximize capacity at the outset when it is cheapest.
- Accommodate electric cars in the lots better.
- Use of **Solar Panels** around campus.

New Facilities & Programs

- Positive feedback on proposed **Performance Arts Center**: wants an amphitheater.
- Need for **academic villages** where students can study as well as gather with faculty.
- Need for a Business School.
- Classrooms currently lack **digital technology**.
- Aiming for more **active learning classrooms**.
- Faculty need quality office space.
- Positive feedback on proposed new academic building & special use facility building over sculpture garden because it creates a nice opportunity within campus confinement & you are not distracted by a parking lot.
- **Retrofit for Library North** should be in the Master Plan.
- Some want **classroom sizes** to not be too large: CSUDH promotes small classes. However, there is a need for larger classrooms to accommodate registration needs: 100-seat to 125-seat classrooms.
- **Graduate program** in Education/College of Education needs new facilities, preferably a consolidated building for undergrad & grad programs.

Exhibit 1-3: Master Plan 2018: Comments from Working Groups & Campus / Community Planning Workshops

PHASES OF THE PLANNING PROCESS

Phase I:

The 2018 Master Plan began with a 2-month intensive, in-depth analysis of the 76.5 acres on the east of the campus that University leadership had identified as a potential site for a new Land Development Project, termed the University Village. The report of this phase of the project is available under a separate cover of this report, and details the amount and type of development the University and its advisors identified as feasible and contributing to an enhanced campus experience for both the university and the surrounding communities. Real estate market analysts engaged by the University provided an understanding of the financial viability of the University Village development and made recommendations for phasing. These plans were incorporated into and integrated with planning for the Core Campus that took place during the ensuing eight-month planning process.

Phase II: Data Collection and Planning Analysis

During Phase II, the Planning team reviewed all available studies, reports, publications, data and other documents in order to comprehensively document current conditions and identify needs and requirements for future campus development. The team toured the campus and

was briefed by University staff on current campus conditions, new and anticipated development, and other factors important to the 2018 Master Plan.

Phase III: Vision and Goals for the CSU Dominguez Hills Campus

The Planning Team conducted a series of planning sessions to help the University and its constituent groups articulate the vision and goals that would guide the 2018 Master Plan and its process. The Planning Team met with the Master Plan Steering Committee twice and with five Working Groups assembled to represent the Academic, Student Life, Administrative and Campus Operations sectors of the campus. These Working Group consultative sessions ensured that the Planning Team would gain information about the needs and requirements of the University's academic, administrative, housing, student life, athletics and campus support programs and the aspirations, goals and operations of each.

The planning Vision and Goals developed during these consultation sessions were presented at the two Campus/Community Planning Workshops to create a highly transparent process and to ensure that the 2018 Master Plan would be consistent with the University's Strategic Framework, Mission, Vision and Core Values. The Master Plan Vision and Goals are described in detail in Chapter 3 of this report.

During the early phases of the project, the Planning Team met with President Hagan to ensure that his vision and strategic framework were clearly understood.

Phase IV: Master Plan Alternatives

During the fourth phase of the Master Plan process, the Planning Team developed three Master Plan Alternative Design Concepts that served as options for the final Draft Master Plan and provided the basis for discussion and debate during the Campus/Community Planning Workshops. Each option was illustrated via plan drawings of the campus and other illustrations to describe the planning intent and to show how each could fulfill the needs of the campus as it moves into the future.

Each of the Alternative Design Concepts accommodated the 20,000 FTES enrollment level that was the basis for the planning process, and each illustrated a distinct way that the facilities required to serve this enrollment level could be achieved on the campus, including the locations of buildings and open space areas, athletic fields and recreation space, student and faculty/staff housing, pedestrian and vehicle circulation, and parking facilities.

Phase V: Draft and Final Draft Master Plan

The Draft 2018 Master Plan was developed on the basis of campus and community responses to the Alternative

Master Plan Design Concepts, distilling the proposed solutions into a simple Plan. This Plan was presented at the second Campus/Community Planning Workshop to students, faculty, staff and community stakeholders, for additional comment and input, and then presented to the Master Plan Steering Committee for additional comments and guidance.

The Final Draft Master Plan described and illustrated in this report is the product of input from many sources and takes into account the University's long-range Vision as well as the priorities necessary for long-term fiscal planning and integration with the CSU System requirements.

1.4 SCOPE OF THE 2018 MASTER PLAN

The scope of the 2018 Master Plan embraces five specific areas of concern on the Core Campus: renewal of academic and administrative facilities; increasing housing for students, and providing housing opportunities for faculty and staff; expanding student life and campus life facilities; making functional modifications to the campus; and adjustments to campus infrastructure. In addition, the 2018 Master Plan addresses the development of the University Village on the east of the campus as a mixed-use development incorporating market-rate housing facilities, retail development,

parking, open space areas and business park development. The 2018 Master Plan describes the ways this development can take place to enhance the campus experience and make best and highest use of campus land.

The 2018 Master Plan describes and illustrates how the University will be able to make the following changes to the campus.

RENEWAL OF ACADEMIC AND ADMINISTRATIVE FACILITIES

- Replace academic and administrative facilities that have reached the end of their useful life.
- Renovate and remodel existing facilities to better serve academic and

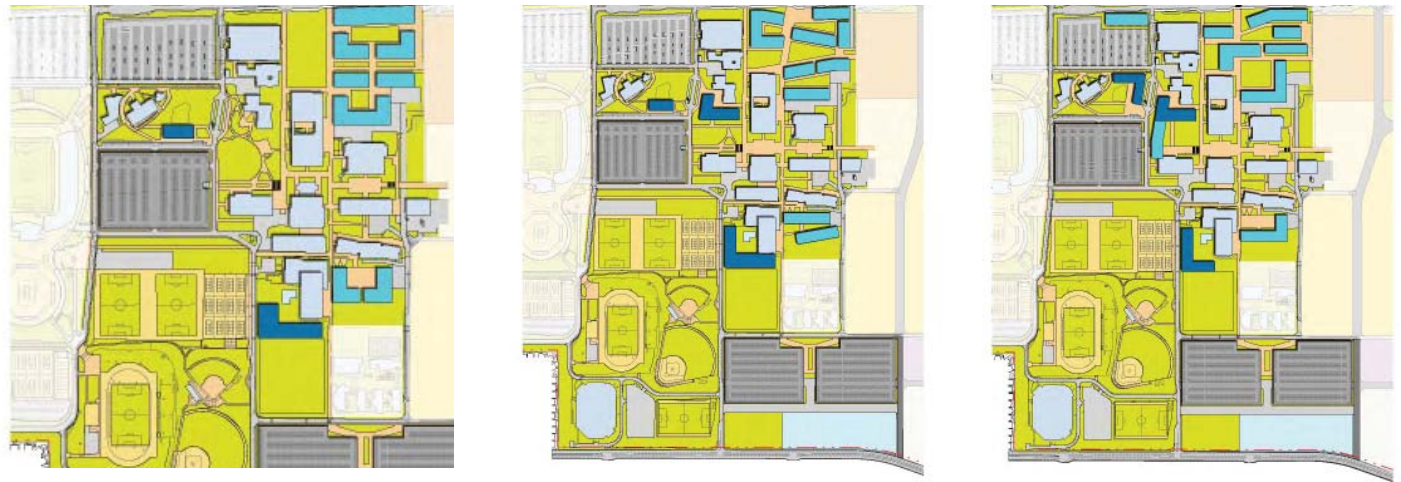


Exhibit 1-4: Master Plan Alternatives for the Core Campus during Phase IV of the 2018 Master Plan Process



Exhibit 1-5: One Master Plan Goal: Increase Campus Housing. (Pictured: CSUDH Pueblo Dominguez Student Housing)

administrative purposes.

INCREASE CAMPUS HOUSING

- Locate new student housing facilities on the Core Campus.
- Phase in the renewal of existing student housing facilities by replacing facilities that have reached the end of their useful life with new housing buildings.
- Expand residential dining facilities to accommodate an increased complement of residential students.
- Develop and phase in apartment-style housing on the University Village portion of the campus.
- Develop market-rate housing to serve both University and non-university tenants on the University Village portion of the campus, and make these housing options open to faculty, staff and graduate students.

The creation of residential facilities on both the Core Campus and the University Village will be managed through non-state-funded methods of financing and development.

EXPAND STUDENT LIFE AND CAMPUS LIFE FACILITIES

- Provide for an expansion of the Loker Student Union as the campus experiences enrollment increases.
- Develop a new Student Recreation Center to coordinate with the existing Gymnasium and other student-administered recreation facilities.
- Provide sufficient facilities for informal and intramural sports activities and recreation.

The creation of some student life facilities

will be managed through non-state-funded methods of financing and development.

FUNCTIONAL MODIFICATIONS

- Support the use of public transit by continuing to provide shuttle connections and bus stops for University and local Transit vehicles.
- Make changes to campus entries and roadways to increase campus visibility and identity, improve the flow of traffic onto and off the campus, and emphasize and support the pedestrian experience.
- Redistribute parking facilities to better accommodate incoming and outgoing traffic.
- Support and extend the existing pedestrian pathway system to support pedestrian safety and reinforce a legible and aesthetically pleasing campus.
- Extend the core campus pedestrian system to new facilities and to the University Village.
- Identify bicycle routes to the campus that coordinate with the regional bicycle plan, identify places on the campus to develop bicycle-support facilities such as parking and lockers, and identify bicycle and pedestrian zones that will help to increase safety and functionality.
- Reinforce and extend the existing signage plan to support wayfinding systems that create a more legible campus that is easier for visitors to navigate.
- Develop larger-scale campus identification signage at the Campus entries to the campus to reinforce campus identity and visibility.



Exhibit 1-6: Example of a pathway connecting the Campus Core to the new University Village

ADJUSTMENTS TO CAMPUS INFRASTRUCTURE

- Modify and augment campus utilities systems to serve the new and renewed facilities that are part of the 2018 Master Plan.
- Develop new areas of landscape and renew campus landscape zones in a sustainable manner.

AESTHETIC ENHANCEMENTS

- Develop building sites in a strategic manner to create quads, courtyards and other open spaces that encourage frequent and casual social experiences among students, faculty, staff and campus visitors.
- Reinforce the pedestrian environment of the campus, conserve campus open space and nurture natural areas.

1.5 ORGANIZATION OF THIS REPORT

Chapter 2 of this report documents the existing conditions that form the basis and context for the 2018 Master Plan. Chapter 3 describes the Planning Vision and Goals which formed the framework for the 2018 Master Plan and served as the Master Plan's targets. Chapter 4 describes and illustrates the 2018 Master Plan in detail. The Landscape Master Plan is described in detail in Chapter 5; the Sustainability Plan is described in detail in Chapter 6. Chapter 7 describes brief Design Guidelines for implementing the 2018 Master Plan proposals. Additional reports and documents relevant to the 2018 Master Plan are included in the Appendices to this report.

- Enhance the identity of the University and the campus through landscape and identification at campus entries.
- Develop landscape and pedestrian connections in newly developed areas of the campus.
- Develop landscape and pedestrian connections from the Campus Core to the University Village.
- Use Design Guidelines to guide the design and development of new facilities and integrate their form and materials with existing buildings and outdoor space to create a renewed campus aesthetic for the built environment.

EXISTING CONDITIONS



Chapter 2: Existing Conditions

California State University, Dominguez Hills, established in 1960, is the 7th largest CSU campus in terms of enrollment. The 344-acre campus, with an 88-acre parcel at the west of the site the subject of a long-term lease to the StubHub Center, a facility of the Anschutz Entertainment Group. In addition, a 3.69-acre parcel is leased by the Long Beach Unified School District for the C.A.M.S. High School.

Except for the Pueblo Dominguez student housing on the eastern side of the campus, significant portions of the campus at the east are underutilized and available for development. Southwest of the area leased to the StubHub Center is a 3.5-acre Nature Reserve, which is a part of the Core Campus.



2.1 REGIONAL AND COMMUNITY SETTING

The CSU Dominguez Hills campus is located in the City of Carson, in the County of Los Angeles (Exhibit 2-1).

Exhibit 2-2 shows an aerial photograph of the current campus, bounded on the north by Victoria Street, on the south by University Avenue, on the west by Avalon Boulevard and on the east by Central Avenue. Exhibit 2-2 also shows the area of the campus that is leased to AEG for the Stub Hub Center, its facilities, fields and parking.

CSU Dominguez Hills has a significant impact on the Los Angeles region and the State of California. Annual spending related to CSU Dominguez Hills (\$190 million) generates a total impact of \$328.4 million on the regional economy, and nearly \$335.3 million on the statewide economy. This impact sustains nearly 3,000 jobs in the region and statewide economy. Per year, the impact generates more than \$18.5 million in local and nearly \$20 million in statewide tax revenue.

More than \$1 billion of the earnings by alumni of CSU Dominguez Hills are attributable to their CSU degrees, these earnings create an additional \$1.7 billion of economic activity throughout the state.

CSU Dominguez Hills enhances the quality of life in the Los Angeles region through

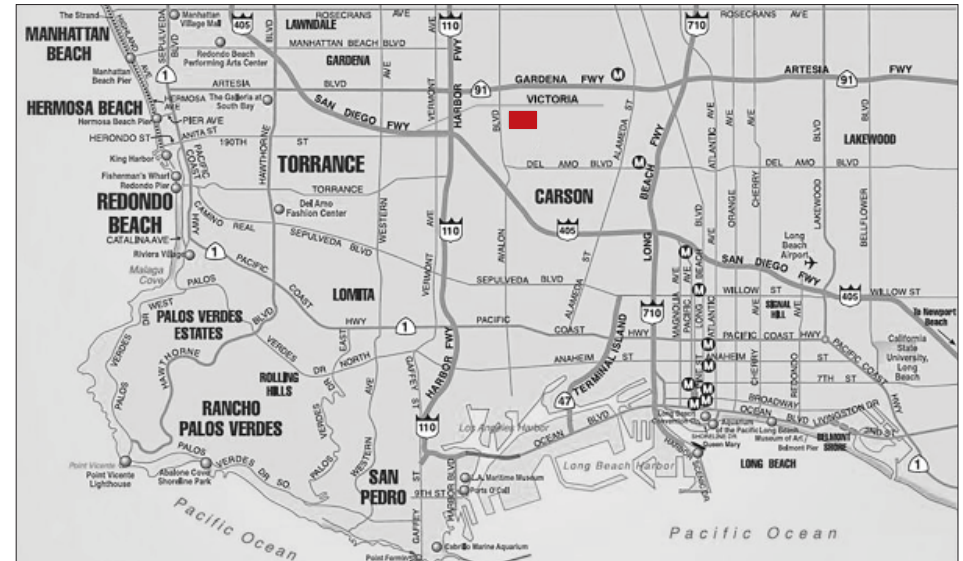


Exhibit 2-1: CSUDH Location and Regional Setting

community service, arts, culture, and sports.

CSU Dominguez Hills is a center for cultural life in the South Bay area of Los Angeles County. The Library South Wing is a state-of-the-art facility that will serve the university and community far into the 21st century. The South serves the evolving educational, research and cultural needs of both the university and the surrounding community, including a technologically advanced archival storage and research area.

CSU Dominguez Hills is home to the award-winning 485-seat University Theatre and 70-seat Edison Theater complex. The Theatre Arts Department, including

the Teatro Dominguez theatre company and the New African Grove Black Theatre Program, offers plays, readings, and other performances. Musical concerts, dance recitals, lectures, local entertainment, and cultural programs also take place on the main stage.

The Loker Student Union serves as a social and cultural center and event venue for the campus and surrounding community, providing 120,000 square feet of meeting and event space, including the 800-seat Dominguez Ballroom, conference rooms, a sports bar, and a fine dining restaurant.

The University Art Gallery is one of the major exhibition spaces of the South



Exhibit 2-2: Aerial Photograph of CSU Dominguez Hills campus, 2016



Bay area, holding five exhibitions a year. With over 2,000 square feet of exhibition space, the Gallery can accommodate large-scale paintings and sculptures by local and national artists. The gallery is also used as a forum for student art critique classes, discussions with artists, university and community guest lecture series and events.

The campus includes facilities for NCAA Division II athletic programs and is the site of the StubHub Center, which includes a 27,000-seat soccer stadium, home to Major League Soccer's Los Angeles Galaxy. StubHub Center is an official U.S. Olympic training site and multi-sports complex for world-class soccer, tennis, track and field, lacrosse, and cycling, as well as other events. CSU Dominguez Hills students gain work experience as interns at StubHub Center and student-athletes have the use of StubHub Center soccer training fields and a three-mile jogging trail with twelve fitness stations.

The California Academy of Math and Science, a high school in the Long Beach Unified School System, is located on the CSU Dominguez Hills campus; CAMS students are able to take college-level courses at CSUDH.

The student body at CSU Dominguez Hills reflects one of California's greatest strengths—its ethnic and cultural diversity. The university's student body is 28 percent African American, 42 percent



Hispanic, 18 percent White, 12 percent Asian American/Pacific Islander and 0.3 percent Native American.

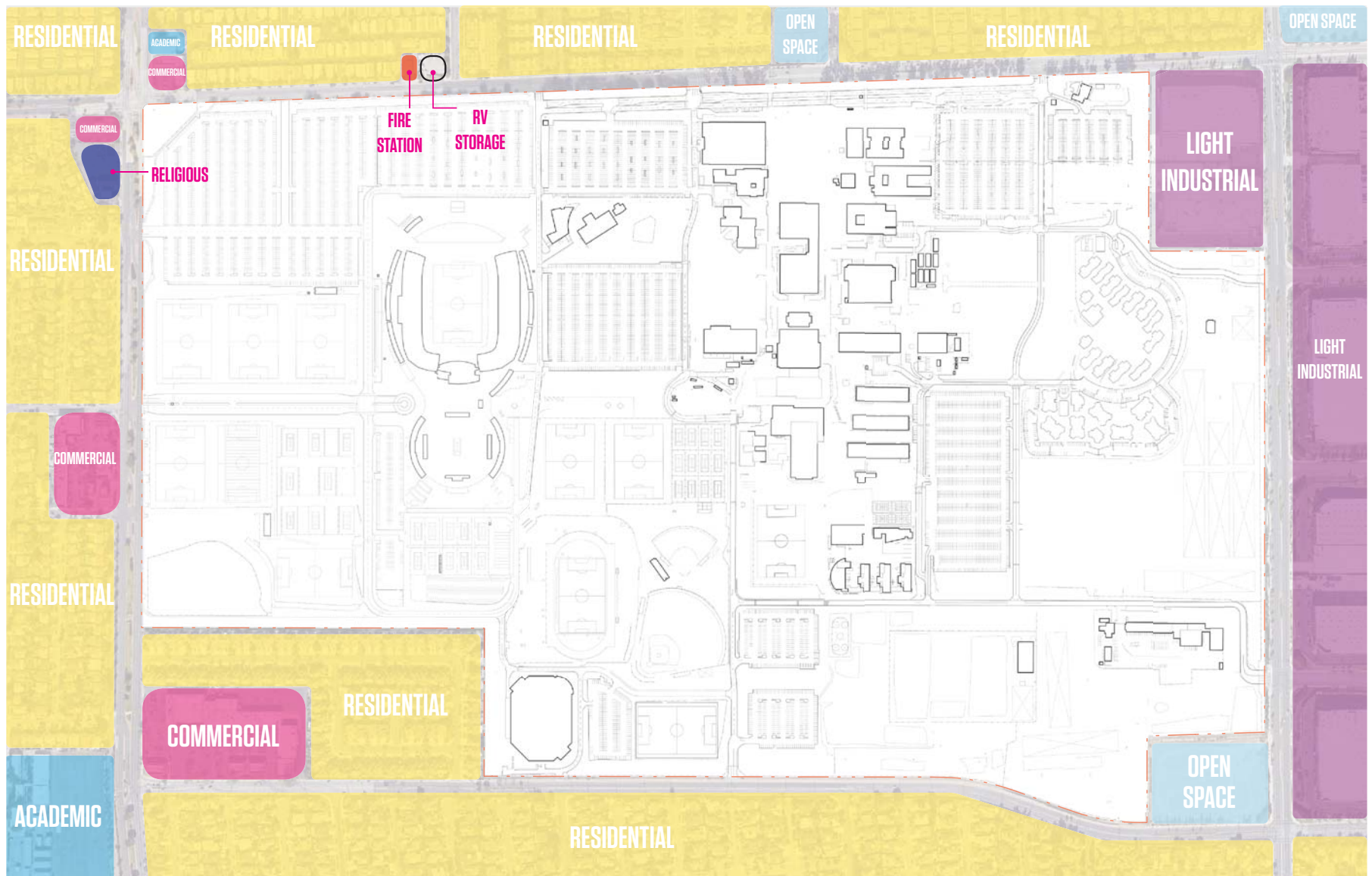


Exhibit 2-3: Surrounding Land Use Diagram

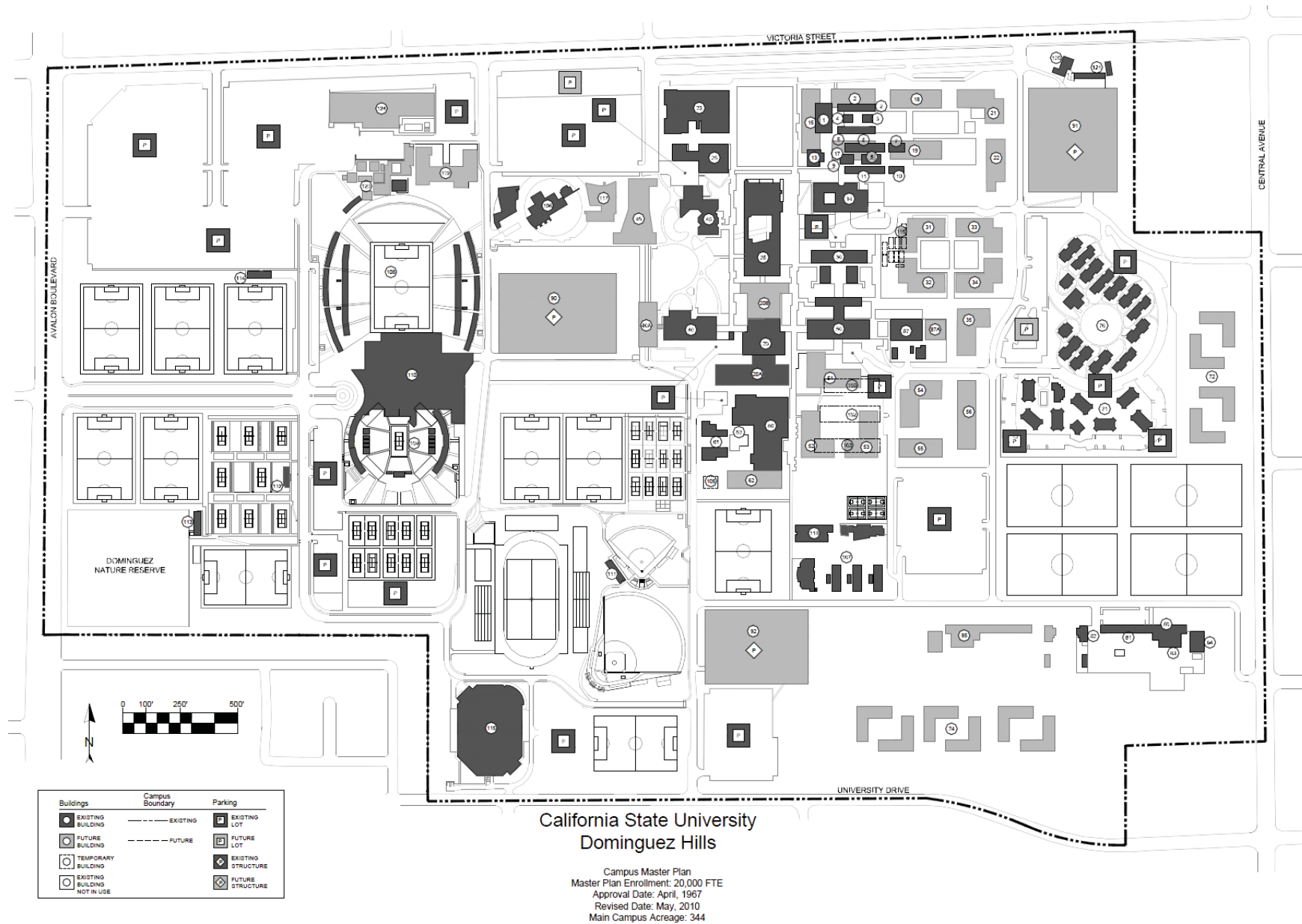


Exhibit 2-4: CSU Dominguez Hills 2010 Master Plan

2.2 EXISTING CAMPUS MASTER PLAN

The existing Campus Master Plan, approved in 2010, is recorded at the CSU Chancellor's Office as a single page document which recommends a number of new projects for an enrollment of 20,000 FTES, comprising academic, student support, housing and campus support facilities.

Anticipated new campus projects at that time included:

- 18 new academic buildings
- new performing arts facility
- new student housing at the east and at the south of the campus
- a new student recreation center
- additional Extended Education Facilities
- three new parking structures
- a Facilities Services complex
- four new playfields.

This Plan also showed anticipated development on the west of the campus in the StubHub lease area; a hotel and new training facilities.

2.3 ENROLLMENT

Since its inception, CSU Dominguez Hills has been planned to accommodate 20,000 full-time equivalent students (FTES). This target student capacity remains the primary goal of the CSUDH 2018 Master Plan.

Fall 2016 enrollment was 11,533.2 FTES. At this time, the total campus physical capacity of all its classrooms, laboratories and other instructional spaces stood at a level that would support 11,004.1 FTES.

Although this indicates a shortfall of space, consideration of other factors allow the campus to accommodate more than 11,004.1 FTES within the capacity of its current facilities. These factors include students enrolled at CSUDH but taking classes off-site through distance learning; or other factors.

As the student population increases, the campus must add additional instructional space to accommodate the increase in the number of students. Historically, the rate of enrollment growth on this campus has varied over time, in response to factors such as regional demographic participation rates, which are, in turn, based on the changes in local population characteristics; college-attendance rates within the region and the State; retention rates for CSUDH students; tuition and other costs of attending university; the participation of international students attending CSUDH; and other factors.

2.4 CAMPUS LAND USE AND FUNCTIONAL ORGANIZATION

HISTORY OF CAMPUS LAND USE

The eminent Southern California architect, A. Quincy Jones, developed the original master plan for California State University Dominguez Hills (called California State College at the time), in 1964. This Plan continues to exert a strong organizational influence upon the campus. The Plan was developed by applying a range of academic and site-related goals and principles, some of which remain important while others have been superseded by today's new goals and conditions.

Jones' early vision for the campus was largely realized as a result of a major construction effort in which nearly half of the campus buildings were developed over the short period of 1968 to 1971.

His vision encompassed all major land use

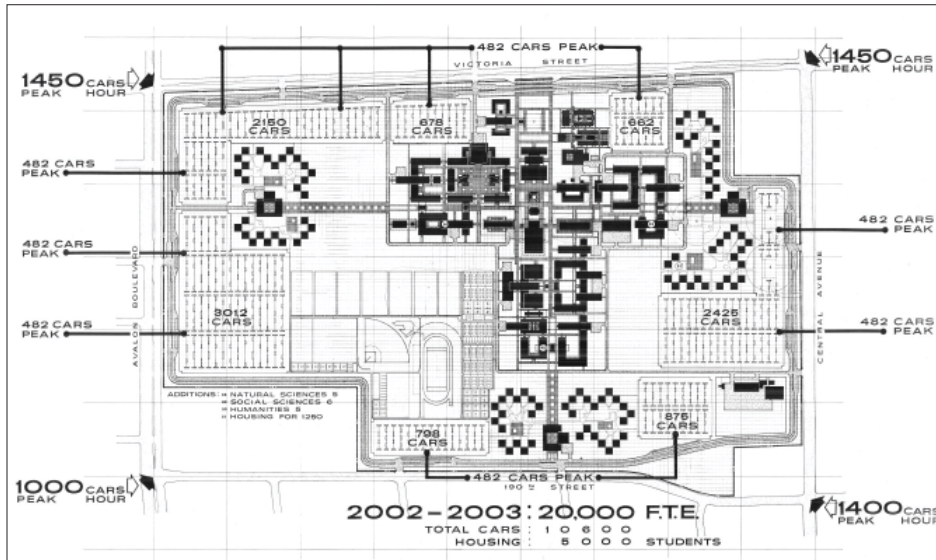


Exhibit 2-5: Original 1964 A. Quincy Jones Plan

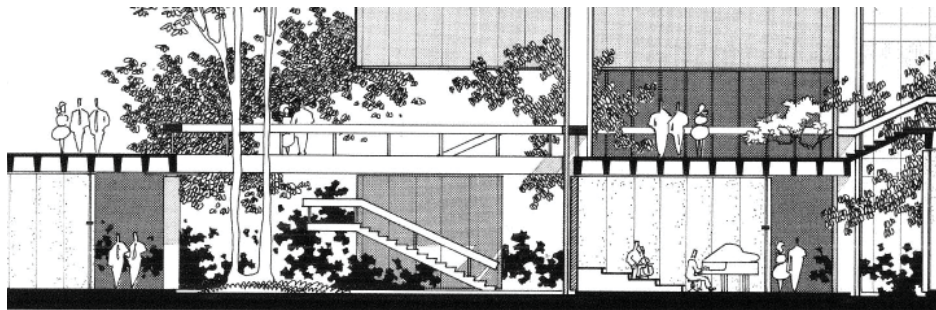


Exhibit 2-7: A. Quincy Jones 1964 Site Section showing Library Entry

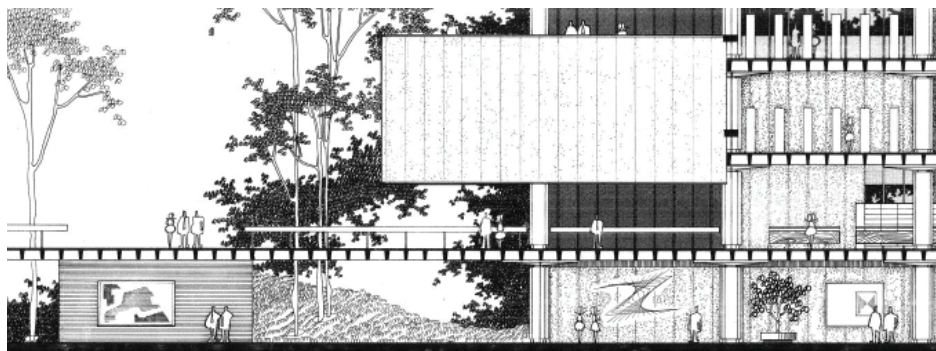


Exhibit 2-9: A. Quincy Jones 1964 Site Section showing use of Lower Level space for Exhibition

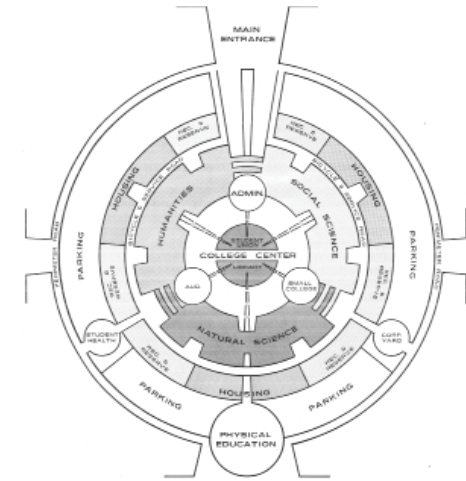


Exhibit 2-6: Original A. Quincy Jones Planning Concept



Exhibit 2-8: Original Lower Level Library Entrance

CSUDH Archives

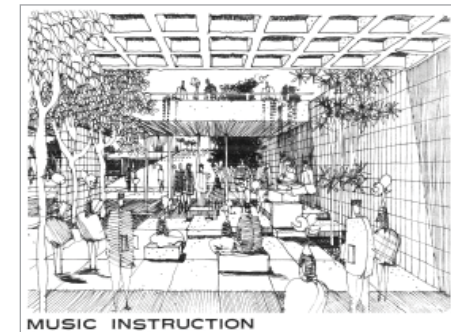


Exhibit 2-10: A. Quincy Jones 1964 Sketch of Lower Level Space

components needed for a campus capable of serving 20,000 students: academic buildings, support buildings, athletic facilities, student housing, parking, utility infrastructure and landscaping.

Exhibit 2-6 shows the approach used by Jones in organizing the campus land uses, using the entire 344-acre site. His plan created districts for academic and administrative buildings, surrounded concentrically by a 'ring' of athletic fields, open spaces and three separate housing clusters. At the outermost borders of the campus, surface parking lots were directly accessible to the main perimeter streets of Victoria Street, Central Avenue, University Drive and Avalon Boulevard.

The campus core itself was planned as an integrated combination of mainly 3-story buildings accessed by a walkway system at the second floor that met the land surface to the north and east. This unusual design was created to adjust the plan to the prevailing topography and to visually isolate the campus from the development that surrounded it at that time: fields of oil wells, scattered industrial uses and high voltage power lines.

The plan created ground-level outdoor spaces surrounded by planted earth slopes, accessed either by stairways or building elevators. These 'sunken' spaces were also visualized as a way of creating quiet academic places for study and gathering.



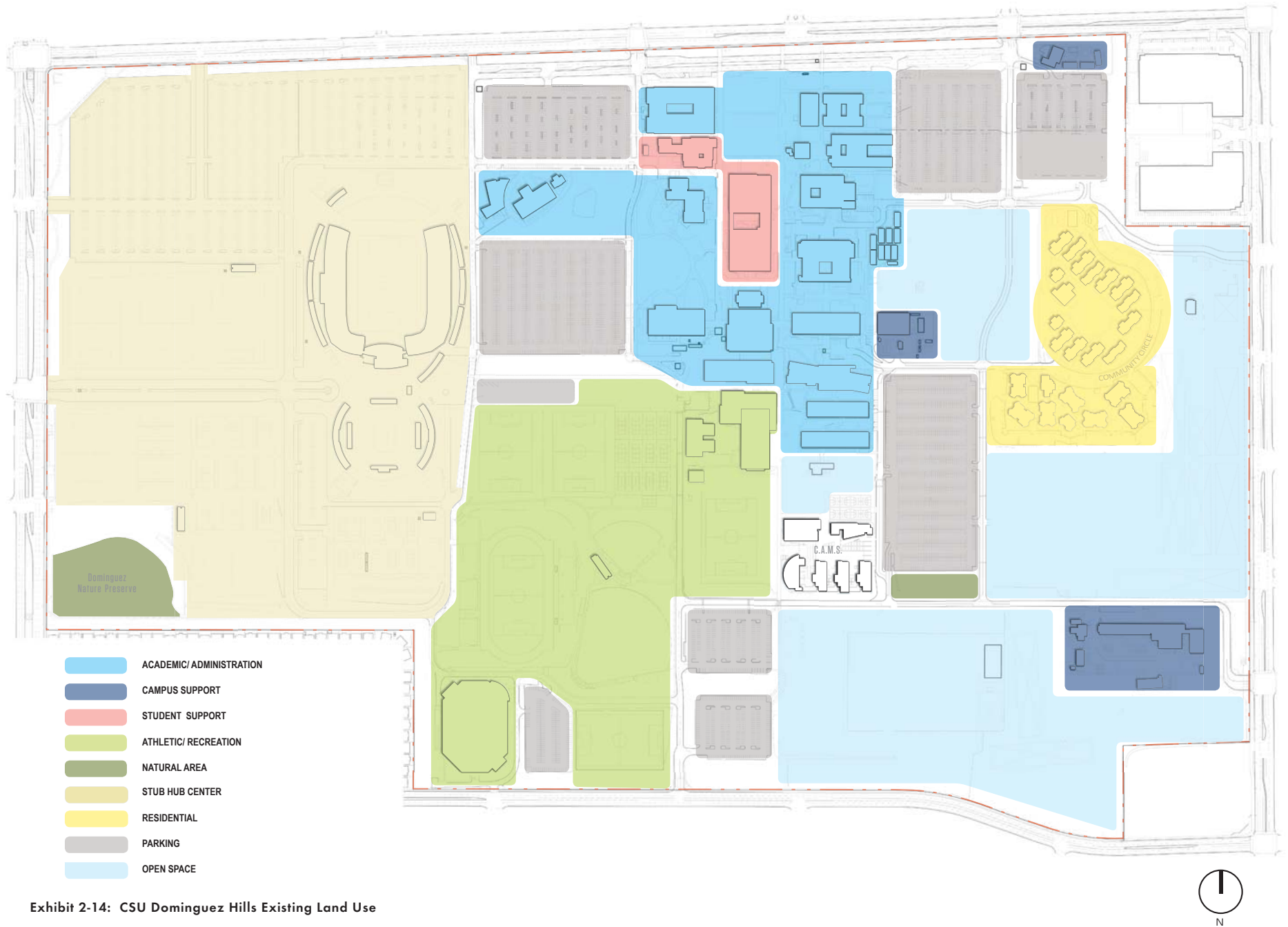
Exhibit 2-11: Small College Complex



Exhibit 2-12: Social & Behavioral Sciences



Exhibit 2-13: University Theater Entrance



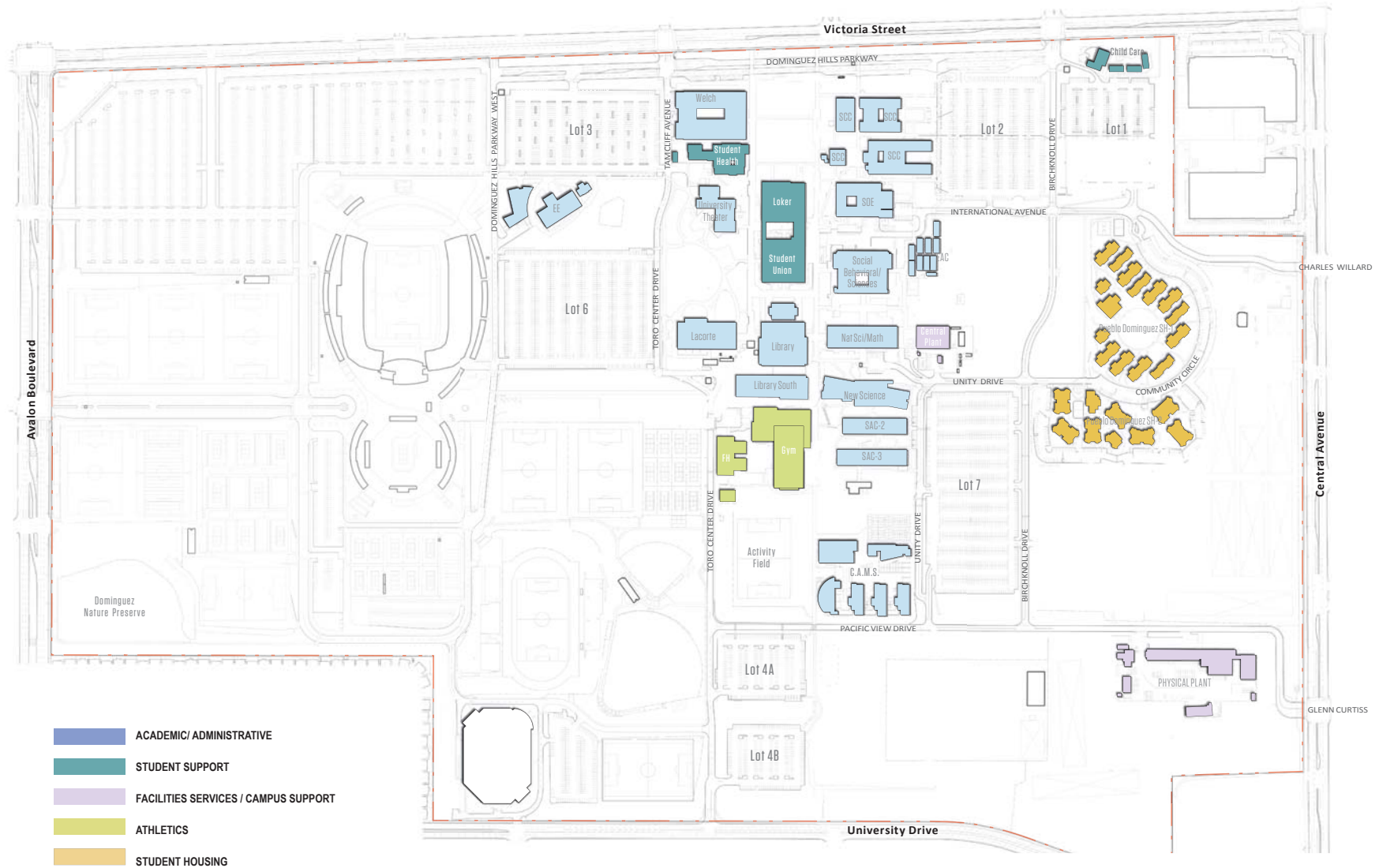


Exhibit 2-15: CSU Dominguez Hills Existing Building Uses



Exhibit 2-16: Lacorte Hall, 1977



Exhibit 2-17: James Welch Hall, 2002



Exhibit 2-18: Library South, 2009

The plan grew out of a conceptual model that created functional and academic districts within the campus. The library and student union were placed at the heart of the campus, in the center surrounded by academic precincts including humanities, social sciences and natural sciences alternating with places for administration, an auditorium and the ‘Small College’. This functional district approach is reflected in the major buildings initially constructed: the Cain Library, the Social and Behavioral Sciences Building, the Natural Sciences and Mathematics Building and the Small College group of buildings.

The Small College buildings were designed in part to provide intimate learning environments where students could receive close faculty attention and instruction. Although these facilities now suffer from deferred maintenance issues and are inefficient by today’s instructional and energy standards, the idea of providing a smaller learning-oriented environment accommodating lower student to faculty ratios continues to be acknowledged as an important feature of the campus.

The earliest buildings, those following the Small College Complex, were often built in the architectural style of the 1960’s, with heavy, unadorned concrete construction, and cast-in-place structural systems. These buildings have formed a campus style that it is no longer appropriate to emulate.

RECENT AND CURRENT DEVELOPMENT: ACADEMIC, STUDENT SUPPORT AND CAMPUS SUPPORT FACILITIES

Today, much of A. Quincy Jones’ plan remains as originally developed. However, several factors have influenced the current fit between the existing site and facilities and the campus’ need for space.



Exhibit 2-19: Existing Building Age



Exhibit 2-20: Existing Building Height



Exhibit 2-21: Existing Building Condition



Exhibit 2-22: Existing Buildings to be Removed

The campus' modest growth trajectory, currently accommodating 11,118.1 FTE students, slowed down the need for new facilities; the lease of 88 acres of the west campus to AEG for StubHub Center operations will occupy this parcel for the foreseeable future; only one of the envisioned student housing villages, Pueblo Dominguez, has been developed. As a result of these factors, the current campus core of 179.5 acres provides for a fully functional campus, utilizing just over half of the total 344-acre campus site land area.

In the 1990's and 2000's, subsequent development respected the A. Quincy Jones plan, although the facilities built during this time show a wide range of architectural styles. These include Welch Hall (2002); Loker Student Union (2009) the Library South (2009); and several temporary facilities including the South Academic Complex (SAC: 1990-1993) and the East Academic Complex (EAC: 2002).

Since the A. Quincy Jones era, campus buildings have not conformed to any particular architectural style. Most recently, the Library South Wing and the Science and Innovation building have adopted a materials palette of glass and metal panels.

Further discussion of campus architectural style and implications for future development is included in Chapter 7: Design Guidelines.

2.5 BUILDING AGE, CONDITION AND LIFE CYCLE

The existing campus facilities comprise 39 buildings ranging in age from over 50 years to more recent buildings such as the Library South, which was completed in 2009.

The Master Plan team reviewed data on the conditions of existing buildings, and surveyed building age and height; these analyses are illustrated in Exhibits 2-19 (Building Age), 2-21 (Building Condition), and 2-22 (Building Height).

This building analysis makes it clear that a number of the buildings in the campus core have reached the end of their useful life cycle due to their age and/or the condition of their structures and their internal systems. Some of these structures are single-story buildings that do not make best use of their sites on the campus. Taken together, Exhibit 2-22 shows that several campus buildings no longer provide adequate, modern spaces appropriate for the functions they were intended to serve and will need to be replaced. These buildings include the Small College Complex, the School of Education building, the Field House, temporaries SAC-2 and SAC-3, the EAC temporaries, and the Pueblo Dominguez 1 and 2 housing complex.

CAMPUS SPACE ALLOCATION						
FAC NUM SFX		FACILITY NAME	YEAR	CATEGORY CODE DESCRIPTION	GSF	ASF
001	-	SMALL COLLEGE COMPLEX	1969	Administration	8,529	6,334
002	-	SMALL COLLEGE COMPLEX	1969	Administration	5,313	4,286
003	-	SMALL COLLEGE COMPLEX	1969	Administration	1,263	1,155
004	-	SMALL COLLEGE COMPLEX	1969	Administration	1,263	1,040
005	-	SMALL COLLEGE COMPLEX	1969	Administration	5,313	4,163
006	-	SMALL COLLEGE COMPLEX	1969	Classroom - General	5,841	5,473
007	-	SMALL COLLEGE COMPLEX	1969	Classroom - General	2,145	1,954
008	-	SMALL COLLEGE COMPLEX	1969	Classroom - General	2,920	1,896
009	-	SMALL COLLEGE COMPLEX	1969	Classroom - General	1,626	1,528
010	-	SMALL COLLEGE COMPLEX	1969	Administration	2,145	1,402
011	-	SMALL COLLEGE COMPLEX	1969	Faculty Office	5,841	4,741
013	-	SMALL COLLEGE COMPLEX	1963	Administration	5,290	3,299
014	-	SCHOOL OF EDUCATION	1969	Education	27,875	18,510
020	-	LEO F. CAIN LIBRARY	1971	Library	152,006	99,259
020	A	LIBRARY SOUTH	2009	Library	139,569	98,709
023	-	JAMES WELCH HALL	2002	Multi-Use Facility	179,222	108,705
025	-	STUDENT HEALTH CENTER	1976	Health Clinic	20,046	11,793
026	-	D.P. AND K.B. LOKER STUDENT UNION	1968	Coll/Univ Union	123,033	54,850
030	-	SOCIAL & BEHAVIORAL SCIENCE	1971	Social Science	81,000	51,384
040	-	LACORTE HALL (HFA BUILDING)	1977	Humanities	70,331	43,096
045	-	UNIVERSITY THEATRE	1977	Theater Arts	25,201	18,548
050	-	NATURAL SCIENCE MUSEUM / MATH BUILDING	1974	Science	85,450	51,264
060	-	GYMNASIUM	1978	Physical Education	65,752	48,714
061	-	FIELD HOUSE	22	Physical Education	13,650	8,346
080	-	PHYSICAL PLANT	01	Administration	5,573	3,752
SUBTOTAL					1,036,197	654,201
100	-	SOUTH ACADEMIC COMPLEX	1990	Classroom - General	15,500	10,478
102	-	SOUTH ACADEMIC COMPLEX	1991	Classroom - General	15,940	11,274
103	-	SOUTH ACADEMIC COMPLEX	1993	Classroom - General	17,280	11,982
105	-	HUGHES EDUC/ATHLETIC CT	1996	Physical Education	2,760	
106	-	EXTENDED EDUCATION BUILDING	2000	Extended Education	24,584	18,657
116	-	EAST ACADEMIC COMPLEX	2002	Administration	17,760	10,644
SUBTOTAL					93,824	63,035
120	-	CHILD DEVELOPMENT CENTER	2005	Day Care Center	4,320	3,598
121	-	INFANT TODDLER CENTER	2005	Child Care Instruction	4,320	3,212
SUBTOTAL					8,640	6,810
081	-	PHYSICAL PLANT SHOPS	1969	Other		6,009
082	-	PHYSICAL PLANT VEHICLE M	1969	Corporation Yard	2,056	1,785
083	-	UNIVERSITY WAREHOUSE	1969	Other	5,602	5,387
084	-	PHYSICAL PLANT WAREHOUSE	1969	Warehouse	6,216	5,875
085	-	PHYSICAL PLANT GROUNDS	1969	Other	2,190	2,273
087	-	CENTRAL PLANT	1972	Central Plant	12,840	1,338
SUBTOTAL					28,904	22,667
TOTAL					1,167,565	746,713

Exhibit 2-23: Existing Campus Facilities and Space Allocation

CAMPUS PARKING SUPPLY	
CURRENT PARKING FACILITY	# STALLS
Parking Lot 1	536
Parking Lot 2	685
Parking Lot 3	620
Parking Lot 4a	270
Parking Lot 4b	253
Parking Lot 5a & b	337
Parking Lot 6	985
Parking Lot 7	1025
Small Lots	170
Total Parking Supply	4881

Exhibit 2-24: Campus Parking Supply

2.6 CAMPUS SPACE ALLOCATION

Exhibit 2-15 shows the current use of campus buildings; Exhibit 2-23 shows the space allocations for the University's existing facilities; these figures are derived from campus records.

In addition to these facilities, the campus includes 6 athletic and intramural playfields, and also shares 3 soccer fields, a running track and 7 surface parking lots with the StubHub Center. The University also shares the use of two play-fields with the StubHub Center.

Existing campus space was analyzed according to the December 2015 report located on the website of the Chancellor's office, titled "Space and Facilities Database Management System, Facilities Report, Campus 55—Dominguez Hills, Main Campus" (Report: FP_LST_F, 3 pages) Retrieved 01-DEC-2015 08:31:50. The total gross square feet of academic and administrative space shown in Exhibit 2-23 will form the basis for determining the University's need for additional space in the 2018 Master Plan.

2.7 VEHICLE CIRCULATION AND PARKING

CAMPUS ROADWAYS

The original A. Quincy Jones plan provided for a continuous perimeter road running parallel to the four major public roads surrounding the campus site. The existing frontage road, just south of Victoria Street between Birchknoll Drive on the east and Dominguez Hills Parkway West on the west, is the only section of Jones's plan that was implemented.

Exhibit 2-25 shows the primary campus road-map and service roads. Toro Center Drive is the major campus north-south roadway, connecting to the main campus entries at Tamcliff Avenue/Victoria Street in the north and University Drive at the south. Birchknoll Drive also enters the campus at the north, from Victoria, but extends only as far as Pacific View Drive and the indirect extension of Glenn Curtis, entering the campus from Central Avenue.

CAMPUS ENTRIES

The campus entries at Tamcliff and Victoria, at Birchknoll and at Glenn Curtis Street are signalized intersections; other entries such as the southern campus entry off University Avenue at Toro Center Drive is not signalized.

The campus entry-ways and the low-den-

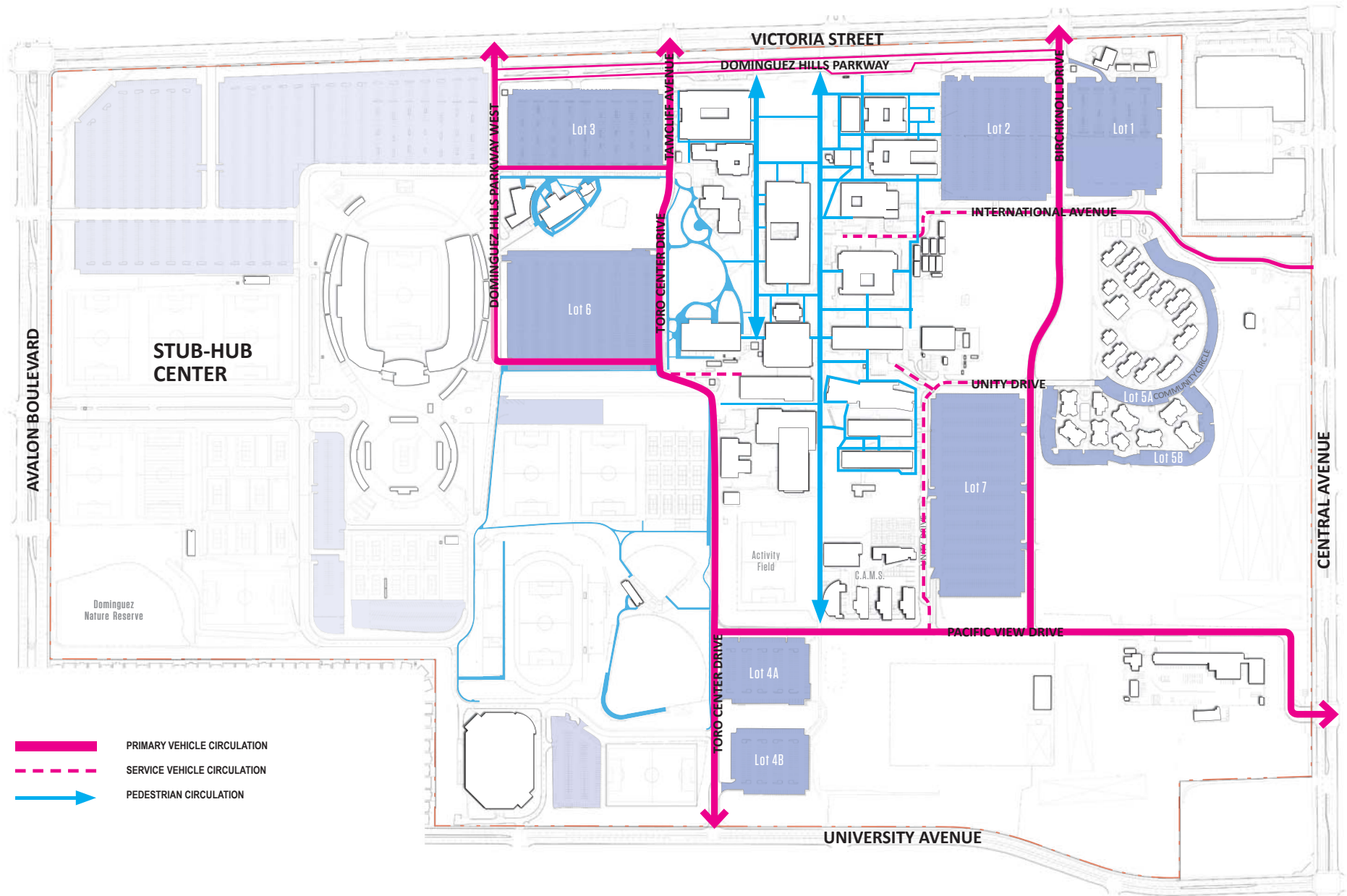


Exhibit 2-25: Existing Campus Entries, Roadways and Parking Facilities



sity development along the campus perimeters present an ambiguous face to the community. Visual analysis of the Campus entries and perimeter revealed the following points:

- Although there is a prominent CSUDH identification monument with a digital display at the corner of Victoria Street and Avalon Boulevard, the most prominent landmark encountered by those coming from the west is StubHub Center, with its stadium and surface parking lots. The visual presence of CSUDH is secondary.
- The main entry at Tamcliff, although it is signalized intersection, lacks clear signage, identification or wayfinding elements that would indicate it is a major campus entry.
- The presence of the Dominguez Hills Parkway frontage road creates confusion for those turning into the campus at the Tamcliff intersection because there is no signage, information booth or other indicator that guide visitors to choose the most appropriate roadway for entering the campus.
- The mature tress along Victoria Street obscure the existing CSUDH sign along the top of Welch Hall.
- The Birchknoll Road entry enters the campus between surface parking lots and does not present a clear sense of arrival.
- The campus entry road at Glenn Curtis Street and Central Avenue lacks appropriate signage and does not present itself as a campus entry.

PARKING FACILITIES

Since the A. Quincy Jones era, surface parking has remained at the periphery of the campus. Exhibit 2-24 shows campus parking spaces as distributed among the seven existing surface lots; these are illustrated in Exhibit 2-25. The Pueblo Dominguez housing village, comprising 649 beds, is served by its own dedicated parking (Lots 5a and 5b).

During current daily operations, Lots 4a and 4b are least likely to be filled, while Lots 1, 2, 3 & 6 are most likely to reach capacity.

The StubHub lease requires that the University supply 4,235 parking spaces that can be used by StubHub patrons attending games and events at the Center. The lease regulates when certain-size events can take place and the related number of parking spaces to be provided in order to minimize conflict with daily campus operations.

Exhibits 2-26 through 2-28 show zip-code analyses for students¹, staff and faculty who are driving to the CSUDH campus. This data is useful in determining which campus entries and which parking facilities will be in greatest demand.

¹Based on the address of record for 14,731 students, 3,820 of whom are taking online courses. These numbers are based off of the Fall 2016 enrollment levels.

TRANSIT AND ALTERNATIVE TRANSPORTATION MODES

CSUDH is served by at least six bus lines provided by LA Metro, Long Beach Transit and Torrance Transit, Exhibit 2-29. In addition, CSUDH students can access the campus via the Toro Express shuttle that connects to regional transit hubs: the Metro Harbor Gateway Transit Center (formally Artesia Transit Center) to the west; and the Metro Blue Line to the east.

Most of these lines and the Toro Express stop at a bus stop and shelter located on the Dominguez Hills Parkway frontage road just northeast of the North Lawn.

CAMPUS SERVICE ROADS AND SERVICE AREAS

Existing service roads are illustrated in Exhibit 2-30; in some cases, service vehicles use the primary campus roadways, including Tamcliff Avenue, Toro Center Drive, Dominguez Hills Parkway West, Pacific View Drive and Birchknoll Drive. A network of service roads access buildings at the first-floor level and, as at many institutions, the existing service areas are often not gracefully screened or appropriately hidden from public view.

The service road and areas serving the Loker Student Union are particularly problematic as they are currently served by semi-trucks and daytime deliveries that

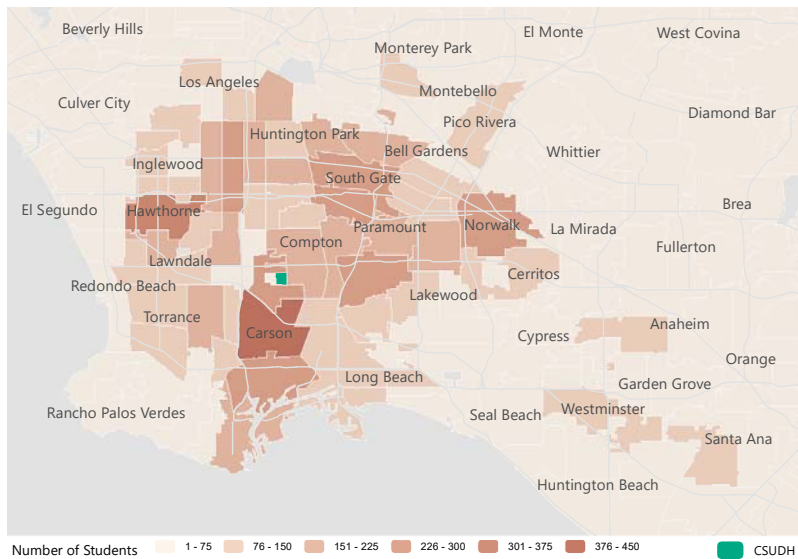


Exhibit 2-26: Zip-Code Analysis: Current CSUDH Students

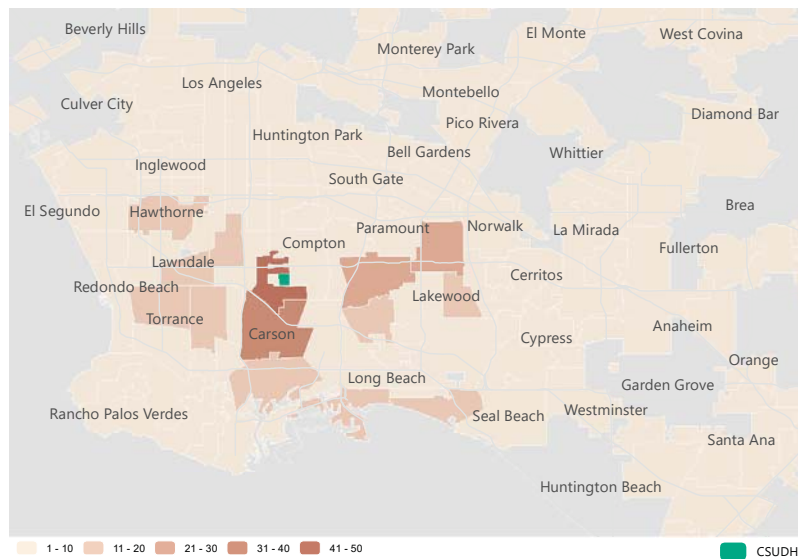


Exhibit 2-27: Zip-Code Analysis: Current CSUDH Staff

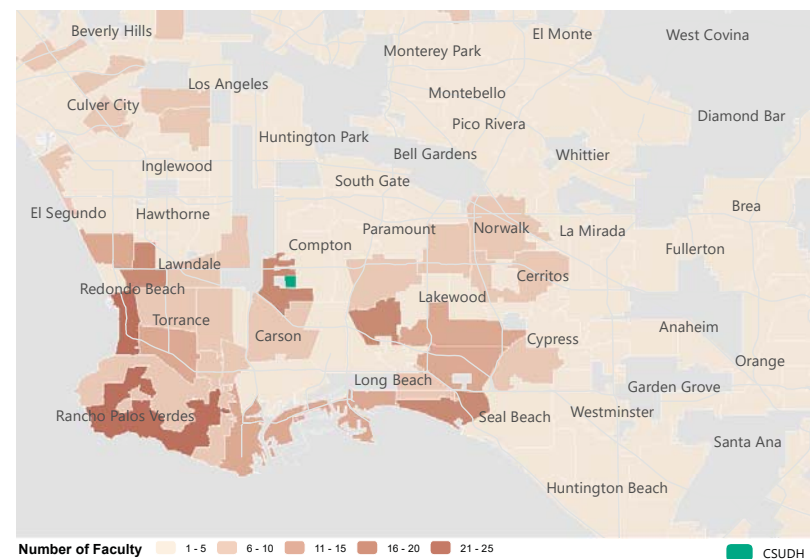


Exhibit 2-28: Zip-Code Analysis: Current CSUDH Faculty

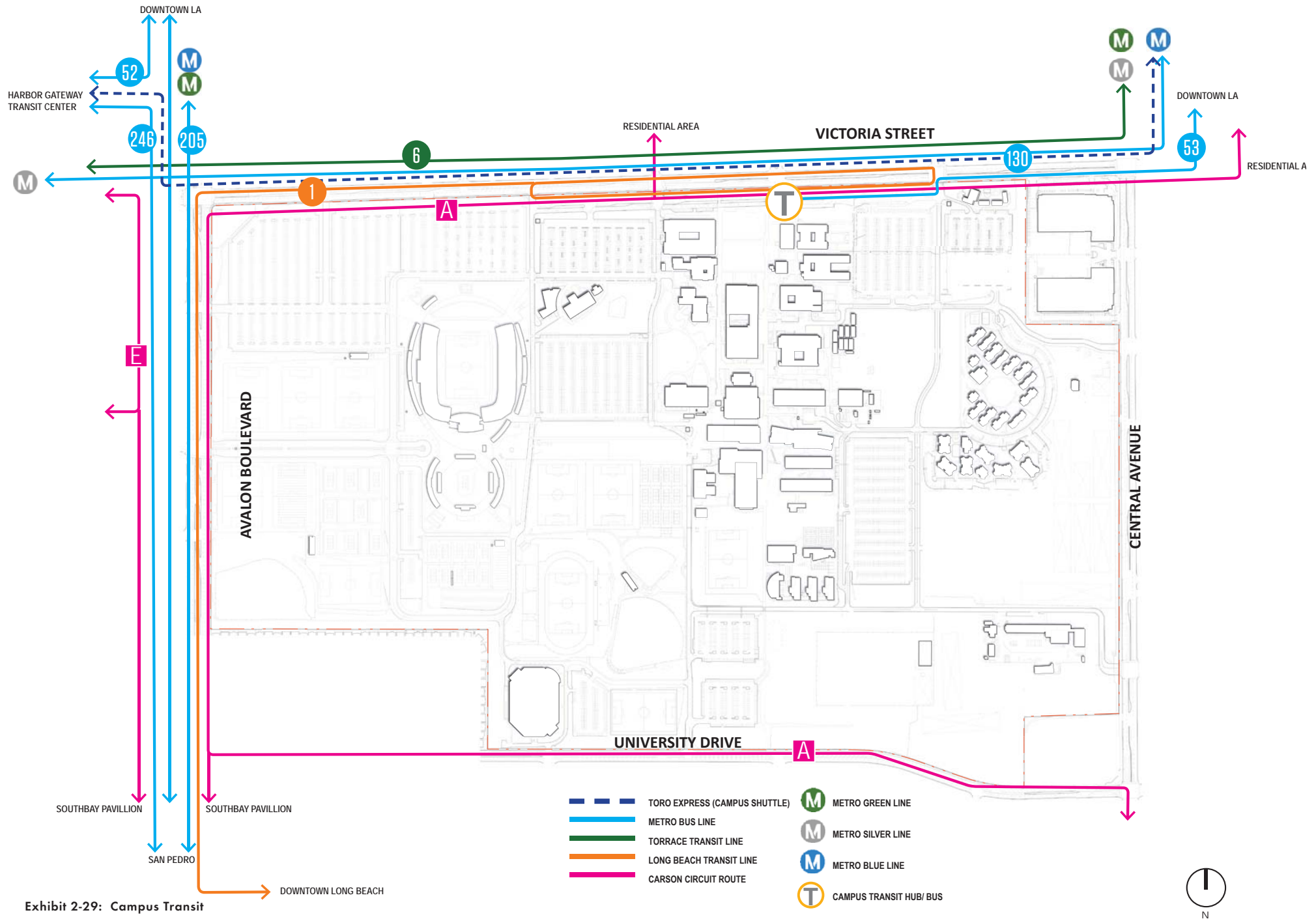


Exhibit 2-29: Campus Transit

cross pedestrian routes and are directly visible to main student gathering areas adjacent to the east side of the Loker facility. Re-envisioning this area by adding aesthetically-pleasing screening devices, restricting deliveries to before normal campus operational hours and/or limiting the size of trucks serving Loker can all help to alleviate the pedestrian conflicts and visual slight.

There are several other service roads and service areas where conflicts with pedestrians arise, including Toro Center Drive just south of the Tamcliff Avenue entry; the service road running east of the Natural Sciences, Social & Behavioral Sciences and the School of Education Buildings; and along International Drive, frequently used by student residents of the Pueblo Domingo housing village as they cross into the Campus Core.

Another feature of the original campus was an underground tunnel system built to contain major utility lines. This forward-looking system acts to protect the lines from corrosion, facilitates their access and maintenance and aids in line upgrades. The tunnel system is accessed at several places within the campus.

PEDESTRIAN CIRCULATION SYSTEM

The existing pedestrian pathway system (Exhibit 2-25) serves all areas of the campus, and has both strengths and weaknesses in terms of identity, visibility and contribution to a campus way-finding

system.

An important entry pathway links Lots 3 and 6 to the campus core through the Sculpture Garden. It is also an important route to the University Theater for visitors. Although it is landscaped and inviting, it ends at a narrow, utilitarian service stair north of Lacorte Hall. Similarly, the walkway from Lot 3 running past Welch Hall and the Student Health Center ends in a narrow, uninviting, service stair to the upper campus.

Of the main north-south pathways, the East Walkway is the most readily recognized as a major pedestrian route through the campus and is the most lively route, largely because it passes to the east of the Loker Student Union, is a main access point for the food service within the Union, and is the location for booths and activities that attract students' attention. The West Walkway is also clearly recognized as an important pedestrian route. Informal observation shows that there are certain weaknesses of the pedestrian circulation system.

- Some pathways into the campus from the west present ambiguous routes to the campus core. A primary path running between Welch Hall and the Student Health Center is narrow and ascends to the campus core via a very narrow concrete stair that looks like service stair rather than an important campus entry;
- On the upper level of the campus, the pathway between Loker Student

Union and the Cain Library are not paved or landscaped in a way that would signal a major east-west corridor;

- Pathways that start or end at service areas are ineffective and uninviting.
- There is a general lack of effective; wayfinding signs in key areas of the campus. Pathways and the pathway plans are described in Chapter 5, Landscape Plan.

The A. Quincy Jones plan also acknowledged the need to have bicycle access to the campus which was conceptually pushed to the edge of the campus core, co-located with a perimeter the service ring road. This plan was not implemented.

	FACILITIES REQUIRED FOR 20,000 FTES			
Major CSU Entitlement Categories	Existing Space, ASF ¹	Required Space, ASF ¹	Net Need, ASF ¹	Net Need, GSF ²
Lab, Faculty and Other ³	225,851	635,048	409,197	629,534
Lecture and Multimodal	61,000	121,612	60,612	93,249
Instructional Totals	286,851	756,660	469,809	722,783
General Administration	117,242	189,253	72,011	110,786
Library Totals ⁴	161,002	325,789	0	0
Media Totals	327	34,591	34,264	52,714
Plant Operation Totals ⁵	21,423	45,068	45,068	58,850
Subtotal State-Supported Space	586,845	1,351,361	621,152	939,304
Needed Space Lost to Demolition			81,649	113,969
Space Allocated to New Center for Science and Innovation (NCSI) ⁶			-52,071	-86,785
TOTAL State-Supported Space Need Estimate			650,730	966,488
Non-State Supported Space				
Student Recreation Center ⁷	54,850	180,000	125,150	192,538
Extended Education (Phase II Project) ⁸			13,900	21,385
Incubator ⁹			18,567	28,564
Child Care Center ¹⁰	5,800	11,600	11,600	17,846
TOTAL Non-State-Supported Space Need Estimate			169,217	260,333
TOTAL Needed Space Estimate¹¹			775,880	1,226,821
Student Housing	Existing Beds	Estimated Need (Beds)		Planning Estimate
Student Housing (Beds) ¹²	649	1,300 - 2,480		1,832
TOTAL Provided				
Parking	Existing	Required	Parking Range of Space	
Parking Spaces ¹³	4,847	6,876	6,940	

Exhibit 2-31: Facilities Required for

Notes:

1 Assignable Square Feet from CSU Chancellor's Office ASF/FTE Model for CSUDH set to 20,000 FTE

2 Gross Square Feet generally based on a prototypical building of 65 percent ASF to GSF efficiency

3 Includes Physical Education entitlement

4 Assumes 127,821 ASF of Library entitlement not used due to recent construction of Library Addition and other reasons; see text in chapters 2 and 4.

5 Assumes new Plant Operations Center constructed

6 From HGA Architects and Engineers. Ca. December 2016. "New Center for Science & Innovation, Section 3.0, Space Program--Existing and Proposed Department Program", page 64.

7 This space category includes student union, recreation and wellness facilities

8 Space need estimate from: CSUDH, Five-Year Capital Improvement Program 2015/16 through 2019/20. For overall campus planning purposes this facility is assumed as providing instructional space needed as part of the "State-Supported Space Need Estimate" but constructed with non-State funds.

9 For overall campus planning purposes this facility is being shown as 50% instructional space, precise location will depend on the agreements created for developing the facility.

10 Child Care Center sized to accommodate 200% of current enrollment capacity.

11 The TOTAL figure does not sum as the Extended Education and Incubator spaces are assumed to contribute to the State-Supported Instructional Spaces and are therefore included in the "Total State-Supported Space Need Estimate."

12 Need based upon campus goals in part based upon need estimates identified in: Brailsford & Dunlavey, CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS HOUSING PROGRAM AND FINANCIAL UPDATE. January 2015. See discussion below.

13 Includes general campus parking (0.35 spaces/FTES) and student residential parking (0.46 spaces/Bed) requirements. Parking ratios received from: Fehr & Peers. 2017. See Appendix B per Table of Contents.

2.8 SPACE NEEDS FOR A 20,000 FTE CAMPUS

The 2018 Master Plan will show all of the facilities needed to support a 20,000 FTES (full-time-equivalent student) campus. These facilities include both state-funded and non-state funded buildings and other development. The State of California has developed a set of space planning standards that cover most of the types of spaces needed to support a functioning California State University. These standards apply to the types of facilities that the CSU system historically constructed and maintained at state expense; specifically, classrooms, laboratories, faculty offices, administrative offices, library spaces, physical education facilities such as gymnasiums and playfields, learning media spaces, various other student learning/activity spaces and performing arts venues.

Other facilities needed to support the students and the campus are, for the most part, revenue-generating and are expected to support the repayment of bonds sold to finance their construction. These kinds of facilities include student housing, student unions, student recreation centers, student wellness centers and parking structures; these do not have official CSU standards to guide their size and development. In the case of student recreation centers, student union facilities and other student-initiated facilities, these projects can be funded and planned

only when students vote to assess themselves fees to support their development.

STATE-FUNDED FACILITIES

To plan for the full set of spaces needed for a 20,000 FTES campus, two sets of space planning standards were used:

The needed 'state-supported' spaces such as classrooms, faculty offices, student study and administrative offices were based upon the CSU standards as generated by the CSU Chancellor's Office ASF/FTE Model set to a capacity of 20,000 FTE. These are shown in Exhibit 2-31.

NON-STATE-FUNDED FACILITIES

The 'non-state-supported' spaces needed to accommodate 20,000 FTES, including those for student housing, student unions, student recreation centers and parking were based upon an integration of campus leadership assessments and various national and regional guidelines developed by professional analysts, planners and engineers. These facilities are also shown in Exhibit 2-31.

Student Housing

CSU system-wide experience as well as national research on higher education graduation rates demonstrate that, in general, students who live on campus perform better academically, adjust better socially, and achieve higher rates of graduation than students who commute

to college.

Provision of appropriate opportunities for students to live on and near campus is a very important component of the CSUDH 2018 Master Plan. The existing student housing development, Pueblo Dominguez, consists of 649 student beds located in 1/2/3-bedroom apartment style housing. These buildings were constructed originally to house visiting teams participating in the 1984 Olympic Games. This aging complex is isolated from the campus core and does not provide the type of shared common experience important to supporting the socialization and developmental needs of first and second year students.

Recognizing the need to create new and additional student housing, CSUDH retained a national consulting firm (Brailsford & Dunlavey) to analyze the market demand for student housing. Their report, submitted January, 2015, indicated a market demand for about 1,611 beds at CSUDH, suggesting a shortfall of 962 beds. This represents a ratio of .124 beds per FTES, comparable to other CSU urban campuses.

Brailsford & Dunlavey used an enrollment of 13,000 FTES as the basis for this demand analysis. An estimate of housing needs for a 20,000 FTES campus is about 2,480 beds.

There are several factors which may indicate that this figure represents a

lower end of a range of required student housing. It is well known that the Dominguez Hills has shortage of local adjacent and affordable rental housing, and so opportunities to live near campus in privately-developed apartments or other kinds of housing are limited. In addition, CSUDH has identified the international student market as an important target audience for its academic programs. International students, particularly lower division students, generally need campus-sponsored housing that provides a safe and supervised environment, linked to the core campus so students can become well-integrated into the CSUDH academic and student life culture. To the degree to which CSUDH plans to attract international students and provide them with academic support, the campus will need to have appropriate housing available.

The 2018 Master Plan for the University Village area calls for the removal of the existing Pueblo Dominguez complex of 649 beds and replacement with both student residence halls and student apartments.

Parking

Parking is a non-state-funded program and represents a major land use for the campus. The full explanation of the parking analysis used to identify the number of parking spaces needed to accommodate future students at CSUDH at full capacity of 20,000 FTE is provided

in Chapter 4. The 2018 Master Plan also emphasizes alternative transportation approaches to help reduce travel to the campus via single-occupant vehicles. Increasing the number of students who live on campus, provision of distance education options, as well as supporting local transit solutions, can allow students to access the campus through alternative modes of travel as described in the Transportation Demand Management (TDM) sections of the Master Plan, live on or near the campus or shift part of their study to distance education that the need for parking will be reduced.

VISION, GOALS & PLANNING PROCESS



2018 Master Plan

Chapter 3: Vision, Goals and Planning Process

The physical campus serves the educational process. The educational experience in its fullest sense takes place not only in classrooms, but at meals, in residential areas, in the course of recreational activities, and through informal and casual encounters. The physical campus provides the setting for these experiences to be shared by students, faculty, staff and campus visitors, and the 2018 Master Plan serves as a road-map for the development of the physical campus to further the University's Mission and support its goals.



2018 Facilities Master Plan Vision

CSU Dominguez Hills will be a vital physical campus that supports all the activities needed for a top-performing Model Urban University serving 20,000 full-time students.

Reflecting on the University's 2014-2020 Strategic Plan, "Defining the Future," the 2018 Master Plan seeks to reaffirm the CSUDH mission by focusing on the campus facilities needed to increase access to educational opportunity, enhance campus support for student learning, and offer globally relevant academic programs.

The 2018 Master Plan also recognizes the dramatic changes in public funding that have occurred in recent years, and the need to grow the university's financial resources by diversifying and increasing revenue sources.

3.1 2018 MASTER PLAN: VISION, GOALS & PROGRAM FOR DEVELOPMENT OF THE CORE CAMPUS

The Master Plan team worked with the Master Plan Steering Committee to develop a vision that would guide the Master Plan to address these mission-critical aspects of the campus:

- **Student Learning** facilities including modern classrooms, laboratories and learning spaces;
- **Student and Campus Life**, including student residential communities, recreational facilities, arts and culture venues;
- **Community Connections**, including facilities to host regional and global academic, cultural, recreational and athletic programs; and
- **A Sustainable, Diverse and Just World.** CSUDH targets a more sustainable environment, society and economy for all persons, including the ability to partner with institutions and businesses to attain financial sustainability in support of CSUDH's Academic Mission.

Campus leadership developed goals to serve as benchmarks for the 2018 Master Plan:

- Prepare for increased enrollment up to 20,000 full-time equivalent students;
- Make best and highest use of campus land;
- Increase campus interaction, activity and

energy; and

- Reinforce CSUDH identity and visibility within the campus and at the connectivity points with the surrounding community.

The Master Plan Vision and Goals were translated into a program of planning elements to be achieved by the Master Plan, including:

- Reinforce an integrated campus framework to support connectivity, including linking buildings, pathways and landscape;
- Improve campus entry, “front door” and face to the community;
- Replace old, inefficient and “temporary” buildings with new facilities;
- Provide more student housing to create a strong 24/7 residential community;
- Create pedestrian connections to the University Village retail sites;
- Improve vehicle circulation, provide sufficient parking and support campus safety;
- Plan for sustainable development and infrastructure;
- Plan for remodeled, expanded academic facilities, including preparation for a new Business School facility;
- Provide for a Student Recreation Center and expansion of the Loker Student Union;
- Provide a small “black-box” theater;
- Plan for a potential incubator/research facility on the core campus.

3.2 GOALS & PROGRAM FOR THE UNIVERSITY VILLAGE DEVELOPMENT

As part of the 2018 Master Plan, the University undertook a series of studies to evaluate the best and highest purposes for its land holdings. “Defining Our Future,” CSUDH’s 2014-2020 Strategic Plan, noted the dramatic changes in public funding for the CSU campuses and the need to grow the University’s financial resources by diversifying and increasing revenue sources to address both programmatic and capital priority needs. To serve that aim, in 2015 President Hagan initiated a study of approximately 85 acres of the east side of the campus to help determine the potential of that land, currently under-utilized, for generating revenue for the campus via land development strategies.

The University enlisted the assistance of the Urban Land Institute of Los Angeles and the Orange County/Inland Empire District Councils to convene a Technical Assistance Panel (TAP) that would make an initial assessment of the land under consideration and suggest uses that would serve both university needs and revenue-generating purposes. (The TAP Report is available here: <https://www4.csudh.edu/Assets/CSUDH-Sites/FPCM/docs/ULI-TAP-Report-Sep-2015.pdf>)

Following up on the TAP Report recommendations, President Hagan directed a consultant team to determine a pro-

gram for the development of this site and to evaluate the feasibility of, and the potential financial return from, a range of development options. The process was guided by a team consisting of the University’s Ad Hoc Land Development Committee, appointed by President Hagan and consisting of representatives from a range of University sectors including the Academic Senate; the Interim Vice President, Administration and Finance; and the Interim Director of Planning, Design and Construction.

The Planning Framework and Principles developed in the course of these studies were consistent with the vision, goals and planning framework subsequently developed for the 2018 Master Plan. This Planning Framework articulated the following principles and purposes:

- Create a University Village environment that blends a mix of uses, including residential development, pedestrian-oriented retail, open space areas and a business park.
- Arrange land uses to create links between the University Village area and the campus core, particularly addressing the connection between student housing and the core campus.
- Create a strong presence along Victoria Street to maximize University Village visibility.
- Provide for the replacement of the 649 existing student apartment beds.
- Arrange like uses in adjacent parcels, including acknowledgment of land uses across Central Avenue.
- Address utility infrastructure requirements.

As conceived, the **University Village** is an urban design concept within the CSUDH 2018 Master Plan that integrates the academic core and the student residential community with a neighborhood of lively retail and business communities and residential apartments to create a live/work/play environment with synergistic connections to the University’s mission and purpose. **The Land Development Project (LDP)** is a privately-financed and -developed mixed-use Project on 76.5 acres within the University Village that includes high-quality rental housing for faculty, staff and community members; retail development; and business park development. The Land Development Project is conceived to generate revenue from public and private sources to realize the Master Plan objectives and to further support and benefit the CSU’s educational mission. It is anticipated that the LDP would be developed as a public-private partnership (P3) which could be constructed over a period of years. The Student Residence Halls and Student Apartments, planned to increase the number of student residents on the campus, are geographically part of the University Village, and have been placed nearest to the campus core. These developments are not currently envisioned as part of the P3 land development project, and it is expected that these student residential projects will be developed by the campus.

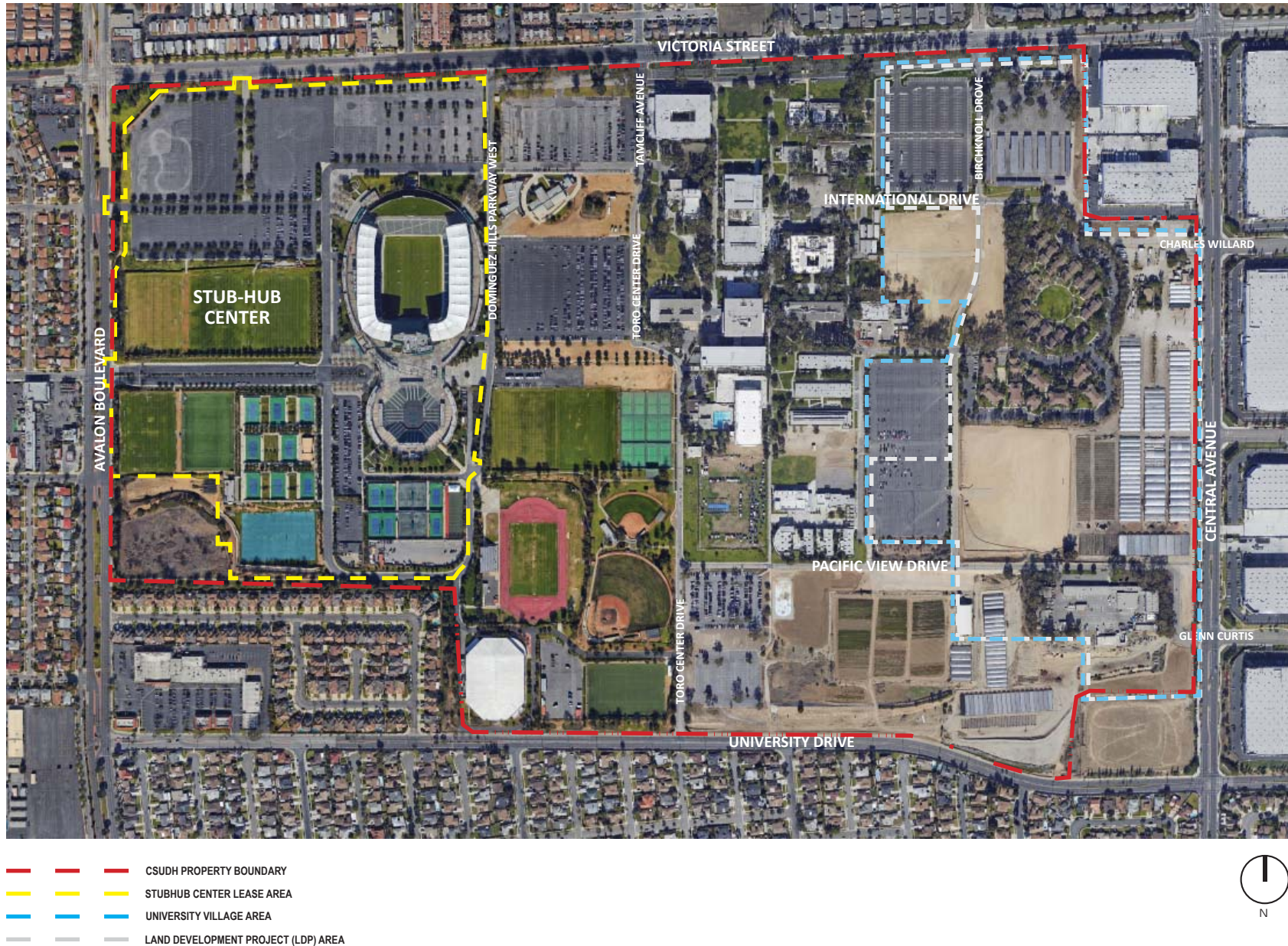


Exhibit 3-1: Aerial Photograph of CSU Dominguez Hills campus, 2016

3.3 2018 MASTER PLAN FRAMEWORK

The 2018 Master Plan Framework is a planning approach that provides direction to the Master Plan team. It consists of a series of planning-level themes, each articulated through a description of planning fundamentals, observations of the existing campus and planning objectives that provide direction for how planning elements within both the built and natural environments can be used to support the University's overall mission and make the best use of campus land, facilities and systems.

CAMPUS FUNCTIONAL ORGANIZATION

Planning Fundamentals

Functional organization is the primary driver of a campus master plan.

Observations

The existing functional organization of the campus generally serves the University's mission and purposes well. Academic/administrative, student support, athletic, and housing areas are well defined, although they are not always organized to support one another.

The older, low-rise buildings in the Academic Core are inefficient and do not provide the facilities the University needs

for cutting-edge, flexible classroom and laboratory space. Nor do they make the best use of campus land.

Planning Framework

The 2018 Master Plan will enhance and improve the functional organization of the campus through the strategic placement of buildings. New and remodeled facilities will serve to expand the University's capacity to fulfill its Mission while conserving open space and strengthening the pedestrian character of the campus.

Planning Objectives for Campus Functional Organization

Functional precincts are areas of the campus primarily occupied by specific functions. To enact this framework, the Master Plan will respond to the following Objectives:

- Functional precincts will be reinforced by new and remodeled buildings and facilities of similar function.
- New functional precincts will be created where needed to support the needs of academic, administrative, student life and campus life programs.
- Campus focal points and gathering areas, including both exterior and interior facilities of singular use and importance will reinforce functional precincts and pedestrian circulation.
- Food service facilities will be distributed throughout the campus to serve student, staff and visitor needs, to activate functional precincts and to reinforce the

pedestrian circulation system.

- Retail, recreational, convenience and other amenities will be distributed on the campus in appropriate areas to provide a vibrant and satisfying 'live-work-teach-learn-play' environment.
- Increased student residential capacity will reinforce the University's active learning programs, support a safe 24-hour environment on campus, include facilities for dining, and incorporate open space to support recreational programs.
- New residential capacity will be sited and planned to create strong residential communities for undergraduate students, provide housing opportunities for graduate students, faculty and staff, and create a strong residential presence for residents who may come from the surrounding community.
- Residential communities will be sited near to ancillary functions such as small food service or retail facilities and open space to support informal recreation.
- Campus entries will be clearly defined to reinforce campus identity and convey a sense of arrival. Campus signage will support campus identity and wayfinding.
- The 2018 Master Plan will provide appropriate development opportunities and an appropriate mix of uses.
- Generate revenue from public and private sources to realize the Master Plan objectives and to further support and benefit the CSU's educational mission.

OPEN SPACE AND PEDESTRIAN CIRCULATION



Planning Fundamentals

Open space is as integral and essential a component of the CSU Dominguez Hills campus as its buildings and facilities. The recognition and articulation of open space is an important contributor to organizing land use and creates character-defining features throughout the campus.

Open spaces, through their landscape and hardscape elements and their site furnishings, provide visual continuity and are a unifying element within the campus. Open space also serves to orient users and visitors to the campus, and, in conjunction with identification monuments and signage, provides clear entry points and gateways to the campus.

Observations

The campus has sufficient undeveloped or under-utilized land to accommodate the required new development to serve 20,000 full-time-equivalent students. In addition, the campus has available land to develop a mixed-use University Village that will support and enhance the University's mission and goals.

The available land is sufficient to incorporate new quads, courtyards and open space as essential components of development on both the core campus and within the University Village mixed-use development.

Pedestrian pathways create linkages within the campus core but the pedestrian circulation system lacks a clear

framework, and some pathways lack a visible or functional endpoint.

Within the campus core, some pedestrian pathways cross vehicle traffic, compromising pedestrian safety and hindering vehicle circulation; this observation was seen in both campus entry areas and within the campus on service roadways.

Planning Framework

Master Plan development will reinforce and extend the existing campus system of open spaces, using building placement to create a series of "outdoor rooms" joined by pedestrian pathways. These open spaces support the University's Mission by providing outdoor amenities for the academic, recreational, and social activities that serve everyday life on the campus.

The Master Plan will strengthen pedestrian linkages across the campus, particularly between student housing and the Academic Core. New areas of development within the proposed University Village in the east will be connected via pedestrian pathways to the campus core.

Planning Objectives for Open Space

To enact this framework, the Master Plan will respond to the following Objectives.

- Open spaces will provide a variety of spatial experiences by way of variations in size, programmed uses, architectural character of surrounding buildings, and

landscape.

- Open spaces will include areas of lawn, landscape and hardscape, shade, and site furnishings (seating, lighting, signage) to reinforce their programmed uses.
- Master Plan development will serve to create and define vistas and view corridors through the strategic location of buildings to frame open space and the use of landscaping.
- Safety and security will be given priority when planning all development on the campus, including pedestrian, open space, facilities and vehicle areas on the campus.
- Building entries will be located to address adjacent open spaces. Where possible, interior common spaces should be well connected to adjacent outdoor spaces to reinforce casual interaction and support the concept of active learning and collaboration in “outdoor rooms.”
- Master Plan development will provide for the support, revitalization and improvement of natural areas of the campus and reinforce the connections to these natural areas.
- Master Plan development will reinforce an integrated pedestrian circulation system to strengthen the links between campus activity hubs.
- Food service facilities will be connected to and reinforce open space and gathering areas to encourage and provide the setting for informal interaction among students, faculty, staff and visitors.

BUILDING MASS AND PLACEMENT

Planning Fundamentals

The volume of building space, along with its location, scale, and orientation, has a significant and direct impact on the qualities and characteristics of open space, pedestrian circulation, and overall campus organization and functionality. Buildings support the University’s Mission by serving as the setting for both programmed and informal activities. Buildings serve to modulate the physical environment to human scale, and make a significant contribution to the aesthetic environment of the campus.

Observations

One area of the Academic Core is populated by a series of low-rise, older buildings in generally poor condition and temporary buildings that do not serve the campus well.

Anticipated new buildings should be sited, sized, massed and oriented to maximally create a strong sense of campus identity, contribute to the campus ambiance and reinforce a safe, active campus with 24/7 components.

Planning Framework

The placement, scale and massing of buildings will reinforce campus open space and pedestrian circulation systems

and will support the University’s Mission by providing appropriate facilities for academic, social and recreational pursuits, and by creating an environment conducive to human activities.

Planning Objectives for Building Mass and Placement

To enact this framework, the Master Plan will respond to the following Objectives.

- New buildings will be placed and configured to define campus open spaces.
- The Master Plan Design Guidelines [Chapter 7] will guide the height and placement of new buildings; the height of an individual building will be appropriate to that of other structures abutting the contiguous open space.
- Buildings entries will be readily visible, placed to relate to adjacent open spaces, and configured such that activity from buildings may easily flow into nearby open spaces and pedestrian pathways.
- Future buildings will reflect efficient land use. Small single-story buildings will be avoided in favor of larger, multistory ones that respect land value, efficiency, and function.
- The mass of large campus buildings will be modulated through the use of fenestration patterns, surface materials, and segmentation within the facade and landscape.

LANDSCAPE

The Planning Fundamentals, Observations, Framework and Objectives



Exhibit 3-2: Existing Sculpture Garden

discussed below are extended and augmented by the discussion and materials in Chapter 5, Landscape Master Plan.

Planning Fundamentals

The quality of landscape and its component parts contribute significantly to the aesthetic character of the campus by reinforcing the integrative role of open space, creating connections between landscape and structures, and producing a comfortable and human-scaled setting for educational formal and informal activities.

Observations

The landscape of the CSUDH campus is marked by a tree canopy that has emphasized tall eucalyptus trees, a legacy of the original landscape designed by A. Quincy Jones. These trees have begun to reach the end of their natural life cycle, and a program of tree-replacement will need to be implemented.

Natural areas of the campus, including the Dominguez Nature Reserve and the Heritage Creek Preserve, should be supported and reinforced so that the campus can serve as a 'living laboratory' for sustainability and the biological sciences, integrating the natural environment with academic programs.

Planning Framework

The Master Plan will propose and introduce a new landscape framework and plant palette that will serve to reinforce,

extend and enhance the existing campus landscape.

The landscape plan will focus on sustainable strategies to strengthen the open space and pedestrian circulation systems, reinforce campus identity, and strengthen connections among campus areas.

Planning Objectives for the Design and Development of Landscape

To enact this framework, the Master Plan will respond to the following Objectives.

- Landscaping will be used as visual and connective elements to modulate building scale, create a continuous sequence of outdoor rooms, and provide summer shade.
- Landscaping will be used to support an aesthetically pleasing and functional pedestrian environment and be integrated through the use of plant materials and building features.
- Where appropriate, the campus will integrate landscape and campus utility systems to reinforce a sustainable open space system that incorporates storm-water management features in ways that reinforce natural beauty functionality.
- New and replacement landscaping will be based upon a new landscape master plan framework and plant palette and will be deployed, along with paving materials, light fixtures, and site furniture, to emphasize the design of open spaces and reinforce key pedestrian connections and gathering areas.
- Landscaping, along with campus identi-

fication monuments and the implementation of the campus signage system, will be used to support and reinforce an effective wayfinding system, to create welcoming and legible campus entries and to emphasize a clear pedestrian circulation system.

MANAGEMENT OF PARKING AND VEHICLE CIRCULATION

Planning Fundamentals

The appropriate management of parking facilities and vehicle circulation systems plays a fundamentally important role in the way the physical resources of the campus are used. The Master Plan will promote and mandate systems that bring vehicles onto the campus quickly and rapidly turn drivers into pedestrians.

Bicycles can be an important part of the campus circulation system and must be managed commensurate with the management of vehicle circulation.

Management of these resources should include well-planned and supportive use of public transit and other systems that can reduce the traffic coming to the campus and reduce the need for new parking facilities.

Observations

The majority of CSU Dominguez Hills students commute to the campus, along with a majority of faculty and staff. Even

with a significant increase in student residential capacity and the initiation of faculty/staff housing, commuters will remain predominant on the campus.

The University bus stop along Victoria Street serves the campus, and the University also operates a shuttle service, Toro Express. The campus cooperates with local public transit authorities to make these public transit systems compatible with campus needs. The University should consider an enhanced system of incentives for students, faculty and staff to use public transit in order to reduce the pressure on campus roadways and parking facilities.

The campus entries are not prominent, highly visible or legible. The main entry from Victoria Street is marked with signage, but multiple lanes created by the frontage road extending in both directions from the Tamcliff entry point makes this entry ambiguous and difficult for visitors new to the campus to navigate.

The south entry at Toro Center Drive off University Avenue presents an unclear face to the community, with insufficient signage and direction for visitors.

The approach to the campus from both east and west along Victoria is dominated by surface parking lots, including StubHub surface parking and entries to the west. As a result, the main campus entry presents an indistinct and confusing picture to first-time campus visitors and fails to



Exhibit 3-3: Existing Parking Lot 3

reinforce a strong CSUDH identity.

There is currently no bicycle plan for the campus, and the campus lacks bicycle support functions such as parking and storage.

Planning Framework

The design of the vehicle circulation system will focus on safety, accessibility and support of emergency vehicle, service and maintenance functions. The vehicle circulation system will reinforce campus functional organization and support the pedestrian circulation system.

Parking will be easily accessible from campus entry points without disrupting the pedestrian character of the campus core. New housing areas will continue to provide associated parking for residents.

A new bicycle plan should be integrated with the regional bike plan. More convenient bike storage facilities should be added and evenly distributed across the campus. Planning for bicycle circulation will encourage the use of bicycles to commute to the campus as part of the plan to reduce single-occupancy vehicle commuters.

Planning Objectives for the Management of Parking and Vehicle Circulation

To enact this framework, the Master Plan will respond to the following Objectives.

- Parking capacity will expand only when existing parking facilities are not suffi-

cient to serve the population of faculty, staff, students and visitors at the 20,000 FTES level.

- Campus entries will be more prominent and visually defined with signature landscape elements and signage at both north and south campus entry areas. Internal campus signage will direct drivers to parking facilities.
- Campus roadways will be restricted to reduce vehicles passing through the campus core.
- A zoned parking permit system should be implemented over time in order to more evenly distribute vehicles coming to the campus.
- Primary pedestrian pathways will be designed as necessary to accommodate service and emergency vehicles.
- Future University Village development will include parking to accommodate the needs of residents, guests and retail patrons.

THE CAMPUS AND THE COMMUNITY

Planning Fundamentals

CSU Dominguez Hills is a resource for and a partner with the surrounding city and regional communities in developing opportunities for social, educational and economic development. The Master Plan should address campus facilities and systems so that they welcome visitors, create and maintain resources, and are equipped to host academic, cultural, recreational and athletic events that appeal to the

surrounding community.

Observations

The campus has good relations with its immediate neighbors. Community members are clearly welcomed to the campus to participate in Continuing Education programs, cultural and arts programs and other events and activities.

Planning Framework

Campus planning and development initiatives will maintain and enhance the University's positive relationship with neighboring residential and support opportunities to create a mixed-use development that includes both residential and retail uses.

Planning Objectives for the Campus and Community

- Campus edges will be enhanced to make the campus more visible and identifiable to the University's neighbors and to the surrounding communities.
- The goals for campus development will acknowledge and, where appropriate, incorporate elements that attract and local residents to visit and participate in campus activities and events.

2018 MASTER PLAN



2018 Master Plan

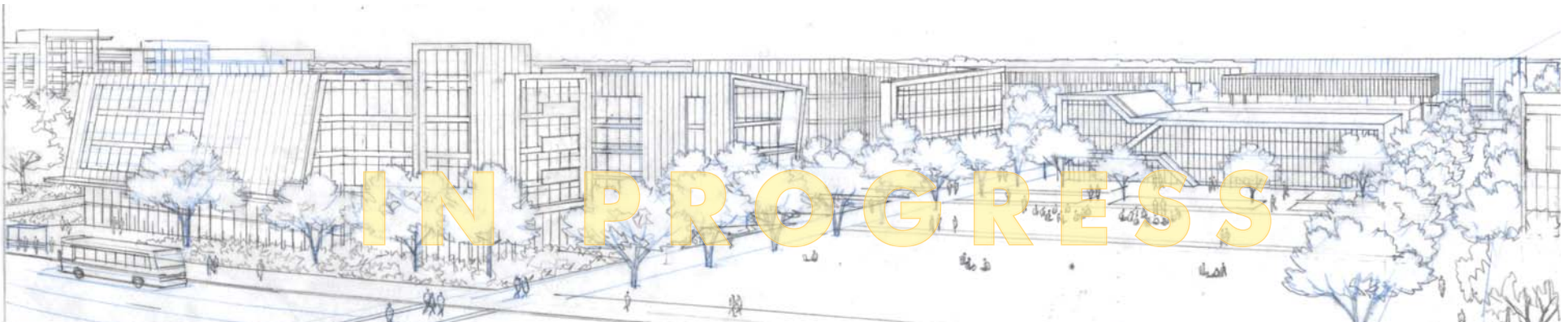
Chapter 4: 2018 Master Plan

The 2018 Master Plan represents an inclusive, holistic and coordinated series of proposals to guide the development of the California State University, Dominguez Hills campus over the next 15-20 years. These proposals are responses to the direction of campus leadership, including the Master Plan Steering Committee; and input during campus and community planning workshops held in the Fall of 2016 and the Spring of 2017; and is guided by the Vision, Goals and Planning Framework described in Chapter 3.

The Illustrative Master Plan described in this chapter is based upon a Master Plan Program developed over the course of the first two phases of the Master Plan project and addresses the Master Plan Scope described in Chapter 3. The Plan represents a comprehensive vision for campus development that addresses both the core campus and the new proposed University Village, including:

- Land uses;
- New, remodeled and re-purposed academic, administrative and student life facilities;
- Open space and landscape;
- Campus and University Village housing, retail and amenities;
- Athletic and recreation facilities; and
- Vehicle and pedestrian access and circulation.

The 2018 Master Plan illustrated in this and the following chapters is described in broad, conceptual strokes and in a series of detailed diagrams and tables. It represents a possible and appropriate way in which buildings, open spaces, pedestrian pathways, roadways, parking and other facilities can be built or modified on the CSUDH campus to fulfill the University's needs. Specific aspects of the Master Plan are further described in a Landscape Master Plan [Chapter 5], a Sustainability Plan [Chapter 6], and brief Design Guidelines [Chapter 7]. A schematic approach to the campus infrastructure needed to implement the 2018 Master Plan proposals is included in the Appendix.



Variations on this conceptual plan that respond to emerging needs and specific programs would include alternative configurations for building footprints; alternative arrangements of buildings, open space and other campus facilities; and emerging implementation and phasing scenarios. These variations are acceptable if they adhere to the Master Plan Vision, Goals and Framework [Chapter 3] and the Design Guidelines [Chapter 7] described in this report. For the remainder of this report, this illustrative plan will be referred to as the 2018 Master Plan.

4.1 2018 MASTER PLAN SUMMARY: SIGNIFICANT FEATURES

The CSUDH campus site, shown in Exhibit 4-1 as an Illustrative Plan, includes three overarching land development areas:

The Core Campus, occupying the central 179.5 acres and extending from Victoria Street to University Avenue, has been planned to make best use of existing campus facilities and to identify and illustrate the most appropriate sites for the new facilities and features needed to support a campus of 20,000 FTES. These include:

- twelve new academic and administrative facilities, providing classrooms, laboratories, faculty and administrative offices, new performing arts facilities; a new incubator/research facility; and facilities for accommodating CSUDH's mobile Fabricator Lab vehicles;
- student support facilities, including an expansion of the Loker Student Union, new student residence halls and a new student recreation center;
- athletic facilities including a remodeled Gymnasium and existing and new playfields;
- campus support facilities, including a new, expanded Child Care Center; new Facilities Services offices and yards; an expansion of the existing Central Plant; and a satellite central plant;
- parking facilities to accommodate 20,000 FTES, including reconfigured surface lots and new parking structures;
- a reconfigured north campus entry at

Tamcliff Drive and Victoria Street; a reinforced campus entry at Toro Center Drive and University Avenue; and reconfigured vehicle access to parking facilities;

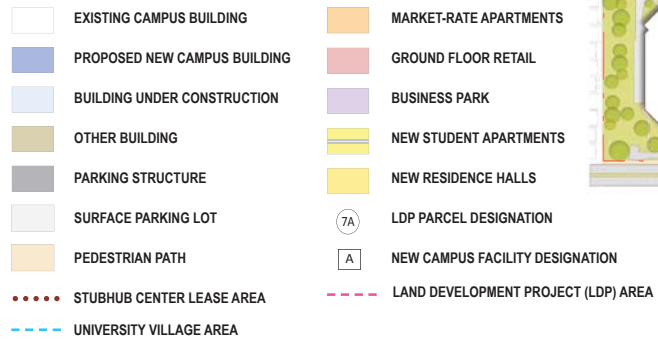
- open space areas for campus activities, programmed and informal gathering and recreation; and
- existing natural reserve areas

The University Village, is an urban design concept within the Master Plan, integrates the academic core and the student residential community with a neighborhood of lively retail and business communities and residential apartments to create a live/work/play environment with synergistic connections to the University's mission and purpose. The Land Development Project is a privately financed and developed mixed-use project on 76.5 acres that includes high quality rental housing for faculty, staff and community members; retail uses; and business park development. Student residence halls and apartments are part of the University Village, but are not currently envisioned as part of the P3 land development project.

As shown in Exhibit 4-1 and subsequent exhibits, the 2018 Master Plan describes the University Village development components occupying land at the east of the campus, extending from Victoria Street to just south of Glenn Curtis Drive. The primary vehicle access to the University Village will be the existing Birchknoll Drive, extended to University Avenue as part of the 2018 Master Plan. This mixed-use University Village development includes:

- retail uses to support the Core Campus, the Village and the neighboring community, including some on-street parking and parking in structures;
- market-rate housing and parking, including housing for faculty and staff and apartment-style housing for students;
- student residence halls, dining facility and activity spaces;
- business park development targeted to uses compatible with and supportive of the University's educational mission;
- open space areas for informal activities, leisure, gathering and recreation;
- preservation of an existing natural reserve area; and
- vehicle circulation including an extension of Birchknoll Drive from Victoria Street to University Avenue; and reconfigured vehicle access from Central Avenue via Charles Willard Drive and Glenn Curtis Drive.

The Stub Hub Center, occupying the western-most 88 acres, incorporating a new hotel and new training facilities; these new facilities were initiated by StubHub and were included and entitled for development in the previous campus master plan. The existing StubHub stadium is the home field of the LA Galaxy Major League Soccer (MLS) team. The stadium has seating for 27,000 spectators when configured for MLS games, and will have seating for 30,000 spectators when configured for NFL football games and other events.



2018 Master Plan

	FACILITIES REQUIRED FOR 20,000 FTES				2018 MASTER PLAN: FACILITIES PROVIDED		
Major CSU Entitlement Categories	Existing Space, ASF ¹	Required Space, ASF ¹	Net Need, ASF ¹	Net Need, GSF ²	Provided Space, ASF	Provided Space, GSF	Facilities
Lab, Faculty and Other ³	225,851	635,048	409,197	629,534			
Lecture and Multimodal	61,000	121,612	60,612	93,249			
Instructional Totals	286,851	756,660	469,809	722,783			
General Administration	117,242	189,253	72,011	110,786			
Library Totals ⁴	161,002	325,789	0	0			
Media Totals	327	34,591	34,264	52,714			
Plant Operation Totals ⁵	21,423	45,068	45,068	58,850			
Subtotal State-Supported Space	586,845	1,351,361	621,152	939,304			
Needed Space Lost to Demolition			81,649	113,969			
Space Allocated to New Center for Science and Innovation (NCSI) ⁶			-52,071	-86,785			
TOTAL State-Supported Space Need Estimate			650,730	966,488	649,119	988,160	Academic/Admin Buildings A (79%), B (27%), C, D, 1 (50%) J, K, M, N, O; Plant Operations Buildings P, Q, R
Non-State Supported Space							
Student Recreation Center ⁷	54,850	180,000	125,150	192,538			
Extended Education (Phase II Project) ⁸			13,900	21,385			
Incubator ⁹			18,567	28,564			
Child Care Center ¹⁰	5,800	11,600	11,600	17,846			
TOTAL Non-State-Supported Space Need Estimate			169,217	260,333	174,480	268,430	Buildings A (21%), E (73%), I, (50%) L, Child Care
TOTAL Needed Space Estimate¹¹			775,880	1,226,821	823, 599	1,256,590	
Student Housing	Existing Beds	Estimated Need (Beds)		Planning Estimate	Provided Beds		
Student Housing (Beds) ¹²	649	1,300 - 2,480		1,832	1100 Beds		Residence Halls
					244 apartments yields 488 beds		University Village Student Apartments (LDP Parcel 3A)
TOTAL Provided					1,588 - 2,067 beds		
Parking	Existing	Required Parking (Range)			7,164		Core Campus Parking Stalls
Parking Spaces ¹³	4,847	6,876 - 6,940					

Notes:

1. Assignable Square Feet from CSU Chancellor's Office ASF/FTE Model for CSUDH set to 20,000 FTE

2. Gross Square Feet generally based on a prototypical building of 65 percent ASF to GSF efficiency

3. Includes Physical Education entitlement

4. Assumes 127,821 ASF of Library entitlement not used due to recent construction of Library Addition and other reasons discussed in text.

5. Assumes new Plant Operations Center constructed

6. From HGA Architects and Engineers. Ca. December 2016. "New Center for Science & Innovation, Section 3.0, Space Program--Existing and Proposed Department Program", page 64.

7. This space category includes student union, recreation and wellness facilities

8. *Space need estimate from: CSUDH, Five-Year Capital Improvement Program 2015/16 through 2019/20. For overall campus planning purposes this facility is assumed as providing instructional space needed as part of the “State-Supported Space Need Estimate” but constructed with non-State funds.*

9. For overall campus planning purposes this facility is being shown as 50% instructional space; precise allocation will depend on the agreements created for developing the facility.

10. New Child Care Center based on enlarging existing capacity to accommodate twice the existing enrollment.

11. The TOTAL figure does not sum as the Extended Education and Incubator spaces are assumed to contribute to the State-Supported Instructional Spaces and are therefore included in the "Total State-Supported Space Need Estimate."

12. Need based upon campus goals in part based upon need estimates identified in: Brailford & Dunlavey, CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS HOUSING PROGRAM AND FINANCIAL UPDATE. January 2015. See discussion in text.

13. Includes general campus parking (0.35 spaces/FTES) and student residential parking (0.46 spaces/Bed) requirements. Parking ratios received from: Fehr & Peers. 2017 See Appendix B.

Exhibit 4-2: 2018 Master Plan: Space Required and Provided

2018 MASTER PLAN: PROPOSED FACILITIES						
BUILDING	TYPE		ASSIGNED USE	GSF/ FLOOR		TOTAL ASF @ .65 EFFICIENCY
CORE CAMPUS						
A	Academic	¹	Extended Ed Phase II / Unassigned Academic	39,643	4	158,572
B	Administrative		Administration	26,360	5	131,800
C	Black Box Theater		Arts	7,640	1	7,640
D	Academic		Unassigned	17,000	4	68,000
E	*Rec Center	²	*Recreation / Wellness / Coaching / Team	74,200	2	148,400
F, G, H	not used			-	-	-
I	Non-State		Incubator / Foundation	14,282	4	57,128
J	Academic / Administrative		Business School	27,210	5	136,050
K	Academic / Administrative		Unassigned	21,170	5	105,850
L	Student Union Expansion		LSU	17,000	5	85,000
M	Academic / Administrative		Health, Human Services / Nursing / Audiology	23,590	4	94,360
N	Academic / Administrative		College of Ed	23,250	5	116,250
O	Academic / Administrative		Kinesiology / Physical Therapy / Athletic Training	26,005	4	104,020
P	Plant Operations		Central Plant Expansion & Thermal Energy Storage	6,450	1	6,450
Q	Plant Operations		Satellite Central Plant	-	1	5,500
R	Plant Operations		Facilities Services Offices	-	1	46,900
			Facilities Services Yard	-	1	83,860
S	Parking Structure 6a		Parking	126,500	4	506,240
T	Parking Structure 6b		Parking	126,500	4	506,240
U	Parking Structure 4a/4b		Parking	239,020	5	1,195,100
V	Child Care		Child Care Center (+ 30,300 gsf exterior play space)	17,970	1	17,970
W	Fab Lab Garage		Secure Parking	TBD	1	TBD
State-Funded ACADEMIC Buildings Shown (includes 79% of Building A and 27% of Building E)						797,510
State-Funded Administrative Facilities						131,800
¹ State-Funded Plant Operations Facilities						58,850
TOTAL STATE FUNDED SPACE						988,160
TOTAL NON-STATE-FUNDED SPACE (includes 21% of Building A and 73% of Building E)						174,480

Notes:

- 21% of Building A is assigned to Extended Education Phase II development based on space need estimate from: CSUDH, Five-Year Capital Improvement Program 2015/16 through 2019/20. For overall campus planning purposes this facility may provide instructional space needed as part of the "State-Supported Space Need Estimate" shown in Exhibit 4-2 but it is assumed it will be constructed with non-State funds.
- 27% of Building E, Student Recreation Center, is assigned as instructional space, for the purposes of the Athletic Education program.
- Plant Operations facilities asf/gsf ratios depend upon specific uses.

	INDICATES NEW STATE-FUNDED FACILITY
	INDICATES NEW PARTIAL-STATE-FUNDED FACILITY
	INDICATES NEW NON-STATE-FUNDED FACILITY

Exhibit 4-3: 2018 Master Plan: Proposed Facilities

CSUDH EXISTING FACILITIES: 2018 MASTER PLAN STATUS						
FACILITY NUMBER SFX		FACILITY NAME	2018 MASTER PLAN STATUS	CATEGORY CODE DESC	GSF	ASF
001	-	SMALL COLLEGE COMPLEX 1 01	Replaced	Administration	8,529	6,334
002	-	SMALL COLLEGE COMPLEX 2 01	Replaced	Administration	5,313	4,286
003	-	SMALL COLLEGE COMPLEX 3 01	Replaced	Administration	1,263	1,155
004	-	SMALL COLLEGE COMPLEX 4 01	Replaced	Administration	1,263	1,040
005	-	SMALL COLLEGE COMPLEX 5 01	Replaced	Administration	5,313	4,163
006	-	SMALL COLLEGE COMPLEX 6 07	Replaced	Classroom - General	5,841	5,473
007	-	SMALL COLLEGE COMPLEX 7 07	Replaced	Classroom - General	2,145	1,954
008	-	SMALL COLLEGE COMPLEX 8 07	Replaced	Classroom - General	2,920	1,896
009	-	SMALL COLLEGE COMPLEX 9 07	Replaced	Classroom - General	1,626	1,528
010	-	SMALL COLLEGE COMPLEX 1 01	Replaced	Administration	2,145	1,402
011	-	SMALL COLLEGE COMPLEX 1 12	Replaced	Faculty Office	5,841	4,741
013	-	SMALL COLLEGE COMPLEX 1 01	Replaced	Administration	5,290	3,299
014	-	SCHOOL OF EDUCATION 10	Replaced	Education	27,875	18,510
020	-	LEO F. CAIN LIBRARY 18	Retained	Library	152,006	99,259
020	A	• LIBRARY SOUTH 18	Retained	Library	139,569	98,709
023	-	JAMES WELCH HALL 84	Retained	Multi-Use Facility	179,222	108,705
025	-	STUDENT HEALTH CENTER 13	Retained	Health Clinic	20,046	11,793
026	-	D.P. AND K.B. LOKER STUDENT UNION 08	Retained	Coll/Univ Union	123,033	54,850
030	-	SOCIAL & BEHAVIORAL SCIENCE 27	Retained	Social Science	81,000	51,384
040	-	LACORTE HALL (HFA BUILDING) 15	Retained	Humanities	70,331	43,096
045	-	UNIVERSITY THEATRE 28	Retained	Theater Arts	25,201	18,548
050	-	NATURAL SCIENCE MUSEUM / MATH BUILDING 26	Retained	Science	85,450	51,264
060	-	GYMNASIUM 22	Retained	Physical Education	65,752	48,714
061	-	FIELD HOUSE 22	Replaced	Physical Education	13,650	8,346
080	-	PHYSICAL PLANT 01	Replaced	Administration	5,573	3,752
100	-	SOUTH ACADEMIC COMPLEX 07	Replaced	Classroom - General	15,500	10,478
102	-	SOUTH ACADEMIC COMPLEX 07	Replaced	Classroom - General	15,940	11,274
103	-	SOUTH ACADEMIC COMPLEX 07	Replaced	Classroom - General	17,280	11,982
106	-	EXTENDED EDUCATION BUILDING 41	Retained	Extended Education	24,584	18,657
116	-	EAST ACADEMIC COMPLEX 01	Replaced	Administration	17,760	10,644
120	-	CHILD DEVELOPMENT CENTER 37	Replaced	Day Care Center	4,320	3,598
121	-	INFANT TODDLER CENTER 38	Replaced	Child Care Instruction	4,320	3,212
081	-	PHYSICAL PLANT, FACILITIES (081-085)	Replaced	Other	16,064	21,329
087	-	CENTRAL PLANT 33	Expanded	Central Plant	12,840	1,338

Exhibit 4-4: 2018 Master Plan: Status of Existing Campus Facilities

4.2 FACILITIES REQUIRED FOR 20,000 FTES

Exhibit 4-2 shows the analysis of space and facilities needed to allow the campus to support a 20,000 FTES enrollment level, based on CSU standards and policy. This exhibit includes summary information showing how these goals are reached in the 2018 Master Plan. These exhibits demonstrate that the requirements to support the 20,000 FTES enrollment level are readily accommodated within the Core Campus, allowing some campus land to be allocated for the development of the University Village.

Exhibit 4-3 is a table showing each new 2018 Master Plan Core Campus facility, its intended use and an estimate of its size (number of levels and overall gross square feet). Exhibit 4-4 shows the existing campus buildings and how they are addressed in the 2018 Master Plan. A table showing 2018 Master Plan Parking Facilities is included in Exhibit 4-26, Section 4.5 (Vehicle Circulation and Parking).



Exhibit 4-5: 2018 Master Plan: Land Use Plan

4.3 CAMPUS LAND USE

2018 MASTER PLAN APPROACH TO LAND USE

The 2018 Master Plan uses Core Campus land to develop needed facilities while preserving campus open space. The Plan uses new buildings to reinforce existing land uses and to create or reinforce open spaces of a congenial, pedestrian-oriented scale.

The 2018 Master Plan builds upon the current distribution of land uses on the CSUDH campus. Exhibit 4-5 is a conceptual proposal Land Use Plan showing campus functional precincts.

Consistent with the Master Plan Vision, Goals and Framework described in Chapter 3, the Land Use Plan shows that the proposed development sites effectively concentrate and reinforce the use of land within each functional precinct and provide expansion space for a broad range of programs. The locations of the 2018 Master Plan land use precincts are predicated on several factors including functional adjacencies to other related uses, land availability, and accessibility (pedestrian, service, and vehicle).

The development sites shown in the 2018 Master Plan have been chosen to achieve the following Master Plan goals:

- Efficiently make use of University-owned

land currently occupied by facilities that have reached the end of their useful life cycles or will do so within the Master Plan's planning horizon;

- Use existing surface parking lots as future development sites;
- Avoid using significant campus open spaces for new building sites;
- Reinforce the campus open space system by using building edges to create new open spaces, plazas and courtyards and/or to delimit the boundaries to existing open spaces; and
- Reinforce the pedestrian pathway system by siting buildings such that building entrances are oriented to campus walkways.

CORE CAMPUS: PRECINCT FUNCTIONS AND FACILITIES

The Illustrative Master Plan's building footprints and adjacencies shown in Exhibit 4-2 and the other exhibits in this and subsequent chapters provide general guidelines for the planned new facilities on campus. The exact size and arrangement of new, remodeled, and renovated facilities will be determined at the time of their development.

ACADEMIC CORE (Exhibit 4-6) Refer also to Exhibit 4-3

- Academic Building A
- Incubator/Research Building I
- Academic Building B
- New Tamcliff entry
- New Pedestrian Plaza
- New Black Box Theater (Building C)

- New Grand Stair entry to upper campus
- Parking Structure 6A (Building S)
- Parking Structure 6B (Building T)
- Academic Building N
- Academic Building O
- Student Recreation Center (Building E)
- Central Plant Expansion and Satellite Central Plant (Buildings P & Q)
- Student Resident Halls (University Village)

The Master Plan expands the Academic Core to the west, arranging twelve new academic/administrative buildings and two student support facilities to reinforce the functions and uses of the adjacent existing buildings and creating a renewed academic core that will support a vibrant campus life.

Tamcliff Entry Area

New academic buildings were sited along Victoria Street to build a strong visual identity for the CSUDH campus. A new **two-building Academic Complex** (Building A) is sited west of the Tamcliff Avenue campus entry, which is itself flanked by a proposed **new Incubator/Research facility** (Building I). It is assumed that Building I will be funded by non-State sources; depending on the arrangements made at the time of its development, this building may provide some instructional space.

By placing these two facilities on the north and east of surface parking Lot 3, the Master Plan extends the Academic Core to the west and supports the use of these facilities by individuals and groups coming

from outside the campus. These buildings also help to screen **Lot 3**, now reduced in size and providing visitor and staff parking. Parking structures in Lot 6 (Buildings S and T) increase the campus parking inventory, and will be constructed when enrollment increases dictate the need for new parking facilities (see Section 4.5 and Exhibit 4-26).

Just to the south of these new facilities is new **Academic Building B**, sited to face the campus core, with a courtyard adjacent to the existing Extended Education complex.

Pedestrian Connections Through the Sculpture Garden

The Master Plan reorganizes the relationships among buildings, open spaces, pedestrians and vehicles in the Academic Core to create a safer and more pedestrian-friendly campus entry experience and to make best use of existing open spaces and facilities to create a warm and inviting welcome to the campus.

An important new feature of the expanded Academic Core is the new **Pedestrian Plaza** that connects parking facilities in Lot 3 and the Lot 6 parking structures to the campus core. The Plaza extends from the south of the new Tamcliff gateway through the Sculpture Garden to the Grand Stair. The **Grand Stair** is a new feature that connects the lower with the upper campus. It can be used for informal gathering and can serve as

MASTER PLAN KEY

- EXISTING CAMPUS BUILDING
- PROPOSED NEW CAMPUS BUILDING
- BUILDING UNDER CONSTRUCTION
- OTHER BUILDING
- PARKING STRUCTURE
- SURFACE PARKING LOT
- PEDESTRIAN PATH
- A NEW CAMPUS FACILITY DESIGNATION

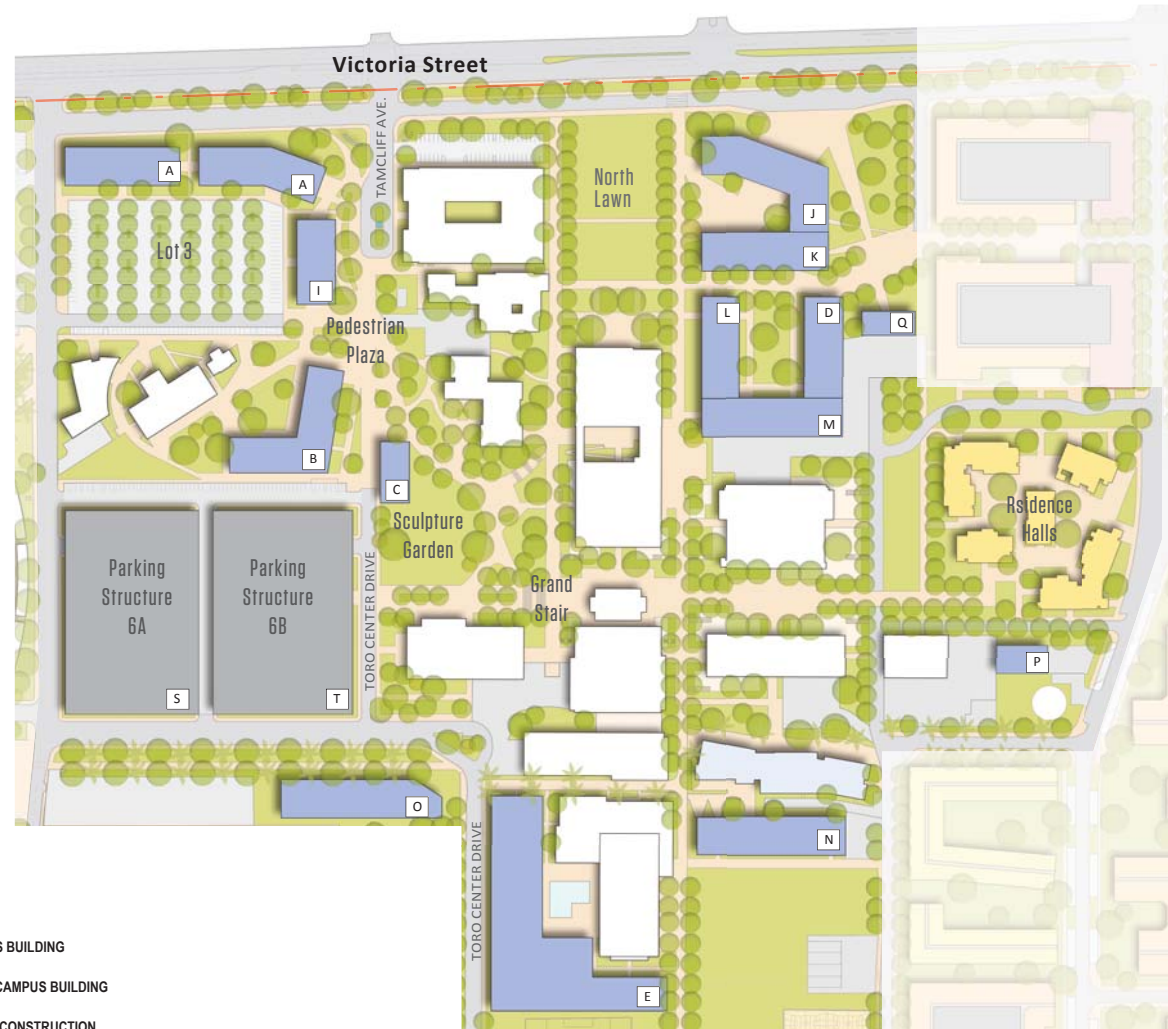


Exhibit 4-6: 2018 Master Plan: Academic Detail

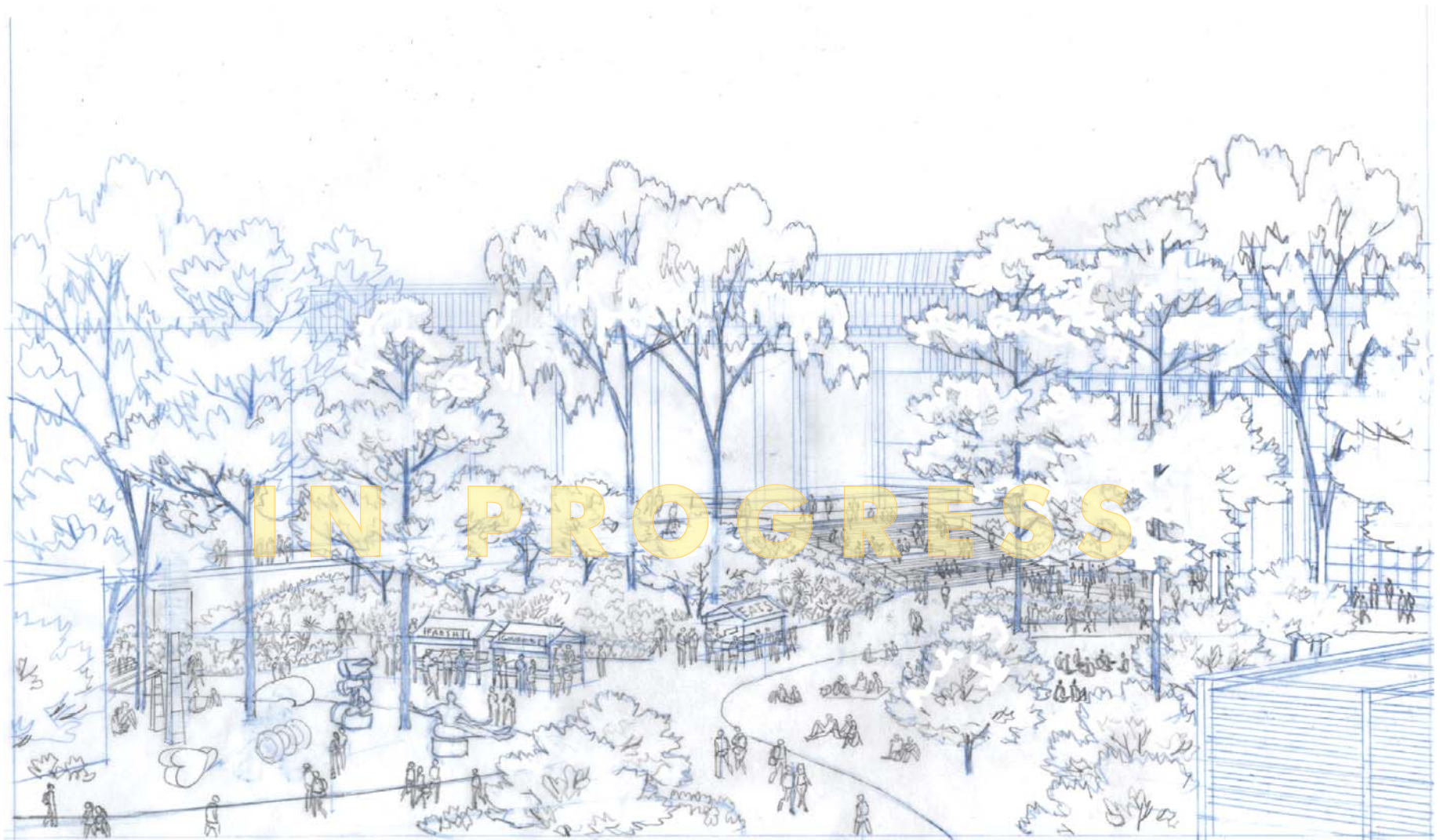


Exhibit 4-7: Artist's Rendering of New Pedestrian Plaza, Sculpture Garden and New Grand Stair to Upper Campus Level [View 3: Through Sculpture Garden]

seating for audiences during events and activities in the Sculpture Garden. A new **Black-Box Theater** (Building C) anchors the west corner of the Sculpture Garden, across from the existing University Theater. An artist's rendering of what this area of the campus may look like when it has been developed is shown in Exhibit 4-7.

New Upper Campus Academic Facilities

A series of new academic facilities have been planned for the area east and south-east of the North Lawn. These facilities are sited to support both academic and student life activity within the Academic Core, to emphasize CSUDH presence along Victoria Street, and to form an appealing and congenial pedestrian gateway from the Academic Core to the University Village development to the east. An artist's rendering of what this area of the campus may look like when it has been developed is shown in Exhibit 4-8.

Prominently sited along Victoria Street, new **Academic Building J** reinforces CSUDH's campus identity at this important 'front door.' New **Academic Building K** forms a courtyard with Building J, creating a new campus outdoor space connected to the North Lawn and providing space for events and activities of the academic programs housed in these buildings.

Two more new **Academic Buildings** just to the south of J and K (Buildings D and M)

expand the university's instructional facilities and, with the Student Union Expansion (Building L), form an intimate quad to serve the needs of these facilities, to expand the campus open space system, and to support the tradition of providing outdoor space for instruction, display, gathering and campus events.

Replacing the existing temporary buildings SAC-2 and SAC-3, new **Academic Buildings N and O** expand the Academic Core to the south.

New Student Life Facilities in the Academic Core

The 2018 Master Plan seeks to enhance students' campus experience by using new and remodeled facilities to further integrate academic life with student life. Within the academic core and southeast of the North Lawn, **Building L** provides new facilities for the **expansion of Loker Student Union**. The location of this new building reinforces the use of the East Walkway as a student activity area. The courtyard this building shares with academic buildings M and D can also be used for student activity functions.

The new **Student Recreation Center** (Building E) will be a student-funded project, and, along with a remodel of the existing Gymnasium, will include some instructional space for Athletics Education instruction.

The overall increase in on-campus resi-

dents will have an important impact on campus life. The new campus **Residence Halls** are located east of the existing Social/Behavioral Sciences building and, though geographically part of the new University Village, are well-connected to the Academic Core via Bridge Walk and other pathways and open-space areas. The Residence Hall complex will include housing for 1,100 students and a dining facility. Parking for students in Residence Halls will be in the South Surface Lot (see Section 4.5 and Exhibit 4-26).

New Campus Support Facilities

The 2018 Master Plan includes a **Central Plant Expansion (P)**, just east of the existing Central Plant, and a **Satellite Central Plant (Q)** to serve new academic facilities at the north.

SOUTH CAMPUS (Exhibit 4-9, refer also to Exhibit 4-3)

- University Avenue South Campus Entry at Toro Center Drive
- Parking Structure 4a/4b (Building U)
- South Surface Parking Lot
- Athletic fields
- Child Care Center (Building V)
- Facilities Services Complex (Building R)
- FabLab Garage (Building W)
- Stormwater Retention area

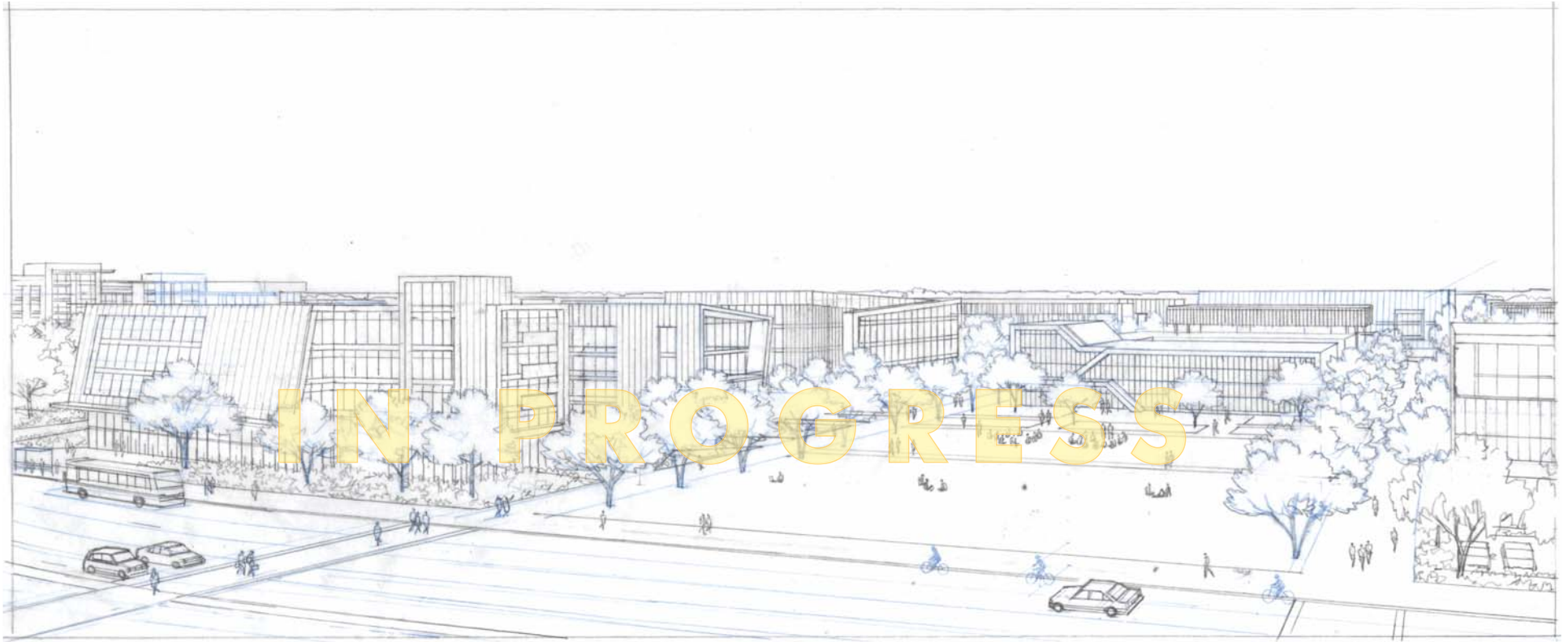


Exhibit 4-8: Artist's Rendering of CSUDH Campus, looking south from Victoria Street [View 5: FS Campus from Victoria]

Campus Entries and Parking

An **enhanced campus entry** at Toro Center Drive and University Avenue will incorporate more prominent signage to reinforce the CSUDH identity south of the campus and to create a more welcoming entry for visitors, students and staff coming from the south.

To accommodate the anticipated increase in enrollments, **additional parking facilities** are added in the southern part of the campus: the area currently occupied by surface Lots 4a and 4b will be developed with new **Parking Structure 4a/4b** (Building U), and the currently unused land to the east will be developed into the South Surface Parking Lot. These parking facilities will be developed when the campus has determined that they are needed, based on enrollment growth.

Athletic Fields

Under the 2018 Master Plan, **campus athletic fields** will not change. A small new playfield is included east of the gymnasium for informal activities.

Campus Support Facilities

The **Child Care Center** (Building V) is expanded and relocated to a site in the South Campus, readily accessed from University Avenue. The capacity of the Center is planned to accommodate twice the existing enrollment; actual enrollment increases and timing of such increases will be determined by the Center. Significant



Exhibit 4-9: 2018 Master Plan: South Campus Detail

consideration was given to input from the Child Care Center regarding the most appropriate location for a relocated Center. The site identified in the 2018 Master Plan is expected to have low levels of campus and Village activity, and will provide convenient vehicle access, dedicated parking for pick-up/drop-off, and exterior play space commensurate with increased enrollment levels.

The new **Facilities Services Complex** (Building R) includes space for offices, shops and parking/yard. This complex can be accessed from either Glenn Curtis Drive or from the Birchknoll extension at University Avenue, and has been sized to accommodate the 20,000 FTES enrollment target.

The 2018 Master Plan provides parking in two areas for the new **Fabrication Lab** teaching/maker space vans. A parking area is provided near the science buildings within the Academic Core (near to existing buildings SAC-2 and SAC-3 and adjacent to new Master Plan Building N and the Center for Science and Innovation. In addition, an enclosed **Fabrication Lab Garage** (Building W) is also placed south of the Facilities Services Complex for secure overnight parking. The south campus includes a large open space area north of University Avenue and an area set aside for stormwater management (See Appendix B).

UNIVERSITY VILLAGE/LAND DEVELOPMENT PLAN: PRECINCT FUNCTIONS AND FACILITIES (EXHIBIT 4-10)

The 2018 Master Plan for the new University Village describes a unique development planned to enhance the campus by increasing and diversifying the residential component on the campus and providing income-generating uses that will be used to support the University's development of its planned Campus Core facilities and functions.

Within the University Village area, as shown in Exhibit 4-1, is the Land Development Project, a privately-financed and -developed mixed-use Project on 76.5 acres; this is also referred to as a P3 project (public-private-partnership). Student Residence Halls and Student Apartments planned to replace the existing campus apartments are geographically within the University Village but are not currently envisioned as part of the P3 Land Development Project. In the appended technical reports, the term "Land Development Project (LDP)" refers to the entire University Village area, unless otherwise noted.

The University Village development will create an adjacent mixed-use village with amenities and retail uses to be used by the campus, the Village and surrounding neighborhood communities. The University Village development is planned

along an extended Birchknoll Drive, now conceived as continuing from Victoria Street to University Avenue. In addition, a series of Business Park components are planned; these will be accessed from Central Avenue.

The University Village development is envisioned as a public-private partnership development (known as P3). Because the precise nature of development will be determined through agreements the University establishes with one or more developers or other partners, the facilities shown in the 2018 Master Plan are conceptual in nature.

The Village development sites shown in Exhibit 4-10 is referred to with parcel numbers. The conceptual building footprints and configurations shown in the University Village area have been developed to help quantify the appropriate amount of development that each parcel could yield. Any or all buildings within a specific parcel or within the Village as a whole may take on different profiles or configurations from those shown in the illustrative Master Plan.

Facilities that could be developed within the Village include:

- Mixed Use Development including housing, retail and parking (Parcels 1A, 1B, 4A and 4B)
- Village Green park
- Market Rate Housing (Parcel 3B)
- Market-Rate Housing and parking (Parcels 5A, 5B and 5C)

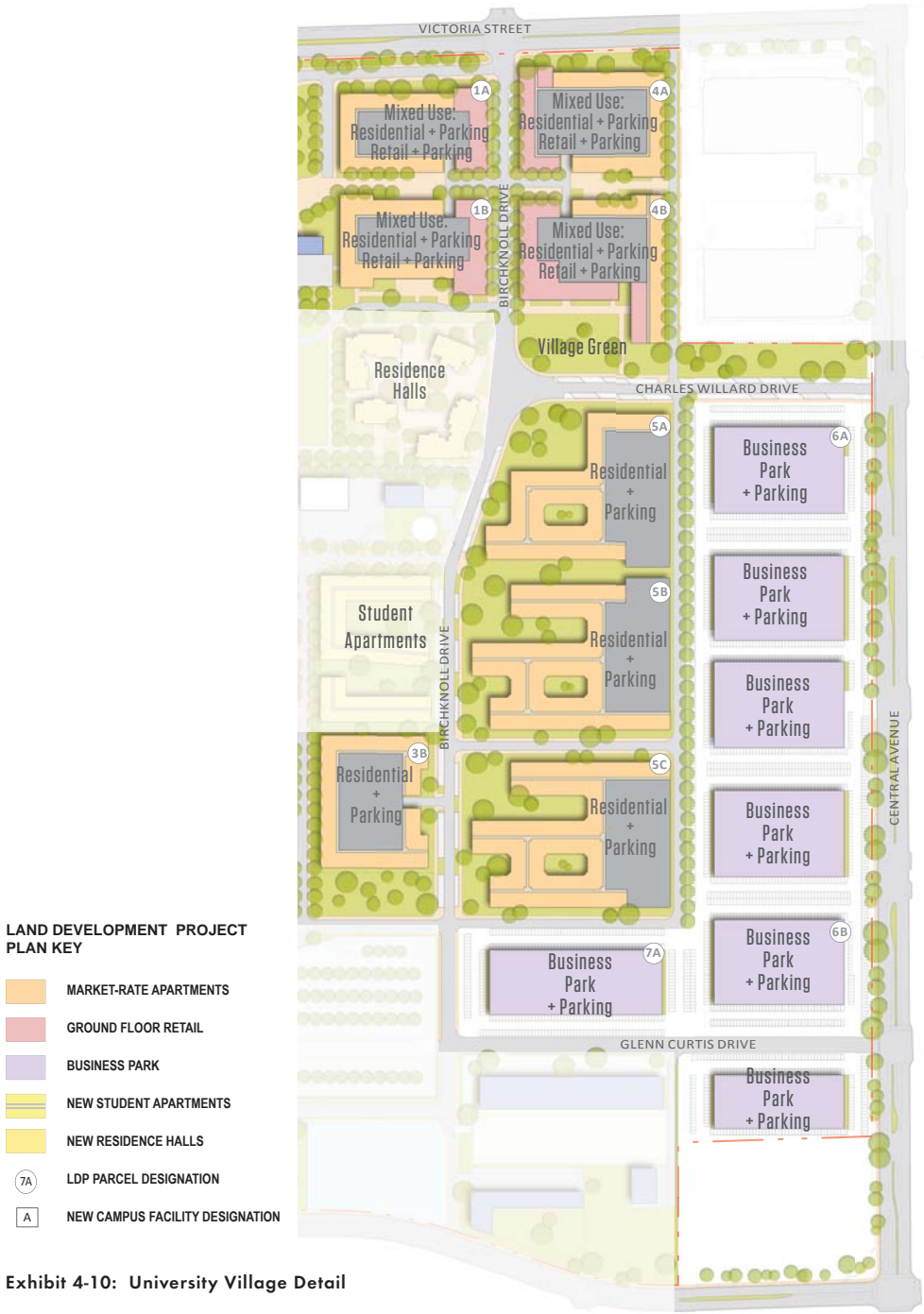


Exhibit 4-10: University Village Detail

LAND DEVELOPMENT PROJECT: PROPOSED DEVELOPMENT		
PARCEL #	DEVELOPMENT TYPE	# UNITS
1A	Mixed Use	230 apartments 16,445 gsf retail
1B	Mixed Use	249 apartments 19,235 gsf retail
3B	Residential	180 apartments
4A	Mixed Use	297 apartments 20,695 gsf retail
4B	Mixed Use	287 apartments 39,710 gsf retail
5A	Residential	236 apartments
5B	Residential	340 apartments
5C	Residential	330 apartments
6A	Business Park	345,600 gsf
6B	Business Park	140, 400 gsf
7A	Business Park	86,400 gsf
Total Apartment Units		2,149 units
Total Business Park		572,400 gsf
Total Retail		96,085 gsf

Exhibit 4-11: Land Development Project: Proposed Development



Exhibit 4-12: Artist's Rendering of University Village Development, looking from the south, with Core Campus Buildings seen at left and Business Park development at right, accessed from Central avenue

- Business Park development with surface parking (Parcels 6A, 6B, and 7A)

As noted above, the University Village also includes new Student Residence Halls and new Student Apartments (the latter shown as Parcel 3A).

Mixed Use Development at Victoria Street

The 2018 Master Plan envisions an enhanced campus entry at Birchknoll Drive and Victoria Street to serve as a gracious entry to the University Village. Flanking Birchknoll, four parcels of **Mixed-Use Development** are envisioned. Parcels 1A, 1B, 4A and 4B are envisioned to incorporate retail uses at the ground floor with studio, 1-, 2-, and 3-bedroom apartment housing above. Each development includes parking to serve both residential and retail uses. The development concept incorporates angled parking along Birchknoll Drive to create a pedestrian-oriented village atmosphere and enhance the convenience of the retail establishments (see also Section 4.5).

The **retail uses** are expected to serve the campus, the Village and surrounding neighborhood communities, and may include restaurants and other food services, a small grocery venue, and other service-oriented uses. The nature and variety of retail development will be part of the development plan(s) created by the University with one or more developers or other University partners.

Primary vehicle access to these northern-most parcels is via Birchknoll Drive or via Charles Willard Drive from Central Avenue. The Plan also includes a service road to the east of Parcels 4A and 4B, with direct access to residential parking structures. More information about Village roadways and vehicle circulation is found in Section 4.5.

South of Parcel 4B and just north of Charles Willard Drive is the **Village Green**, a 1-acre neighborhood park. Exhibit 4-13 is an artist's rendering of the Park and the surrounding mixed-use development. This open-space area is envisioned as providing informal gathering and recreation space for Village residents, visitors and campus communities. The park is large enough to accommodate moderate-size community events and gatherings. The park is envisioned to include informal seating, abundant landscape and pathways, with retail uses bordering its northern edge.

Residential Development

The **Student Apartment** complex (Parcel 3A) may comprise up to 244 2-bedroom apartments. This project may be developed directly by the University, or may be a P3 development. Parking for students living in this apartment complex is provided in the South Surface Lot, just east of Birchknoll Drive, south of Pacific View Drive, and less than a 5-minute walk away (see Exhibit 4-25).

The University Village Plan includes four parcels of **Market Rate Housing** (Parcels 3B, 5A, 5B and 5C), each incorporating studio, 1-,2- and 3-bedroom apartments, with on-site parking and surrounding open space.

Business Park Development

Business Park development parcels 6A, 6B and 7A are conceived as accommodating low-rise buildings, each with dedicated surface parking. These buildings would be accessed from Central Avenue and/or from Glenn Curtis Drive. These facilities are envisioned as accommodating business uses, and potentially research & development facilities that relate to the University's academic mission and could provide partnerships with faculty researchers and/or student employment or internship opportunities. These facilities are not expected to serve as warehouses or logistics facilities.



Exhibit 4-13: Artist's Rendering: View of Village and Village Green from Southwest, showing mixed use development along Birchknoll Drive



Exhibit 4-14: Artist's Rendering of University Village Mixed Use Development, looking south from Victoria Street, showing mixed use development along the Dominguez Hills Parkway frontage road and Birchknoll Drive.

4.4 2018 MASTER PLAN PHASING

The facilities of the 2018 Master Plan will be phased in according to the pace of campus enrollment increases and the needs of the campus as determined by campus leadership. Some of the facilities shown in the 2018 Illustrative Plan are currently in process; these include the Student Residence Halls (Parcel 3A) and early development for Building J. The development of other new academic facilities will be determined based on enrollment increases, development of new academic programs and the resources available to construct new buildings.

As new developments displace existing surface parking lots, the University will begin to plan for new parking facilities, again taking into consideration the pace of enrollment increase. It is generally expected that one or both of the parking structures in Lot 6 will be the first structures to be developed on campus, but the circumstances and conditions that obtain at the time the campus needs to increase its parking facilities will determine how these are phased.

Changes to campus roadways will take place as the development of new adjacent facilities dictate. It is expected that the updated campus entries at Tamcliff and Victoria, and at Toro Center Drive and University Drive will be given priority, in order to highlight and reinforce campus

identity. These newly updated entries will incorporate new monument signage that is integrated with the existing signage plan the campus is currently implementing as part of the previous Master Plan.

The University Village development will proceed on its own timetable, based on the arrangements and partnerships developed by the University. In order to accommodate the range of student housing needs identified in the Brailsford & Dunlavey needs assessment report, the University is expected to construct new student apartment housing before the existing Pueblo Dominguez is demolished to make way for University Village development.

The 2018 Master Plan recommends that the University implement changes in campus landscape—including plant materials, tree replacement and new hardscape and pedestrian routes--be incorporated per the Landscape Master Plan in Chapter 6 as each new project is undertaken.

4.5 TRANSPORTATION, CIRCULATION & PARKING

Preparing the campus transportation, vehicle circulation and parking systems for changes over the next fifteen to twenty years is a critical aspect of the 2018 Master Plan. This section of the Master Plan report provides guidance on the transportation facilities needed to support the increased intensity of uses associated with a future student enrollment of 20,000 FTES and the build-out of the University Village with a range of land uses. The Master Plan addresses these campus transportation facilities:

- Vehicle circulation and access
- Parking
- Transit/Commuter Hub
- Bicycle facilities
- Service and emergency vehicle access

To develop the 2018 Transportation, Circulation and Parking Plans, an extensive series of analyses was conducted including:

- Assessment of existing vehicle volumes at key intersections surrounding the campus;
- Trip generation analysis of the proposed 2018 Master Plan build-out conditions, including both the Core Campus and the University Village;
- Zip-code analysis of existing students, faculty and staff to understand the geographic distribution of campus visitors;
- Parking utilization study to understand

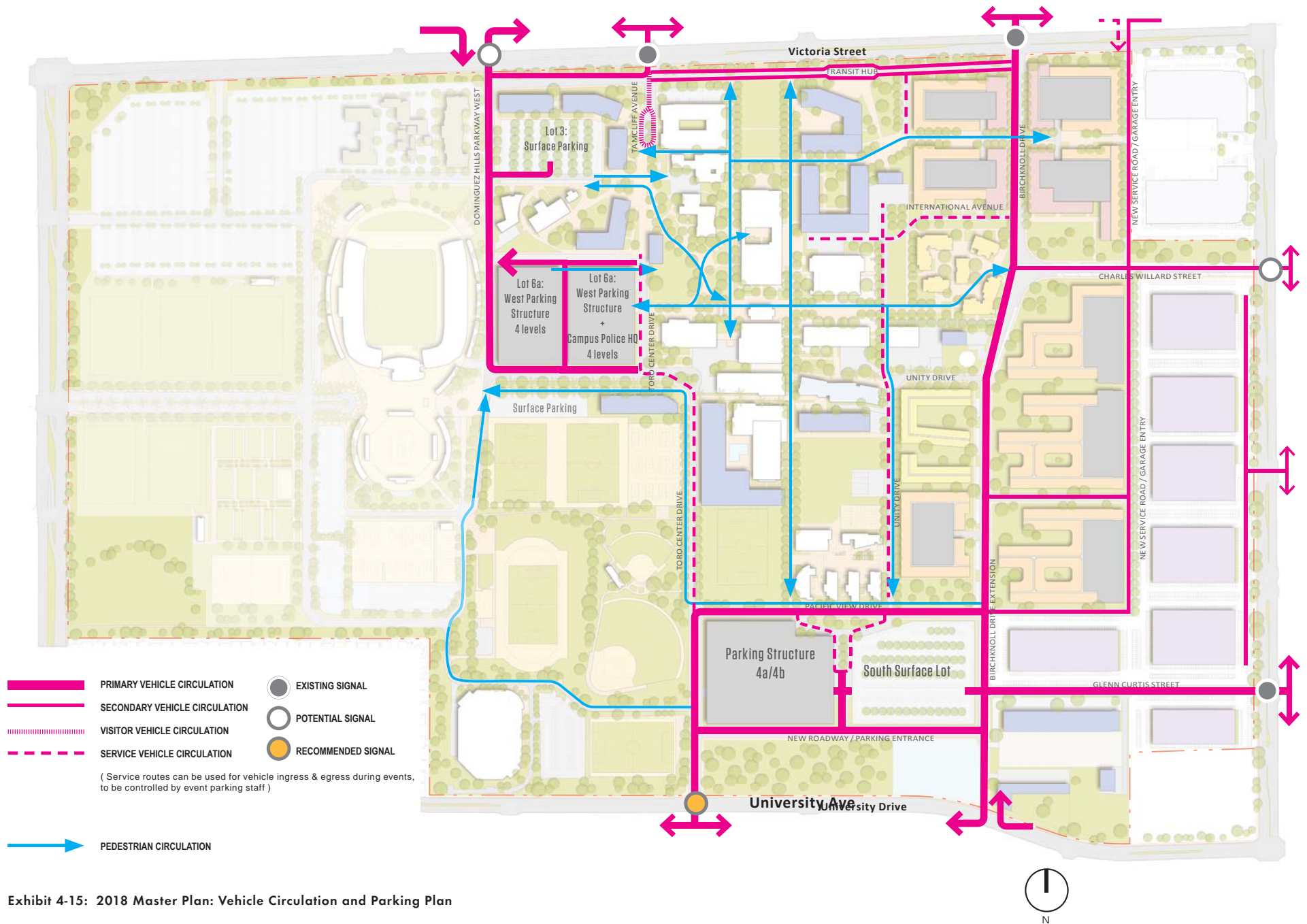


Exhibit 4-15: 2018 Master Plan: Vehicle Circulation and Parking Plan

- existing parking patterns and overall parking demand;
- AutoTURN analysis to determine required roadway widths and turning radii to support passenger vehicles, buses, and emergency vehicles including fire trucks; and
- Assessment of proposed bicycle facilities to ensure safe, comfortable access for bicyclists throughout campus.

Details of these analyses are included in Appendix B of this report.

VEHICLE AND PEDESTRIAN CIRCULATION PLANS

Vehicle and Pedestrian circulation are inherently tied together on any campus. Exhibit 4-15 illustrates the recommended circulation patterns throughout the Core Campus, and the University Village, including primary, secondary and service vehicle routes and primary pedestrian routes.

For the most part, the 2018 Master Plan makes use of existing roadways in the core campus, and has focused changes on five important factors:

- 1) increasing the safety of the pedestrian core;
- 2) streamlining vehicle traffic into and out of the campus;
- 3) making transit use as convenient as possible;
- 4) concentrating parking at the edges of

the campus; and

5) recognizing that the campus experiences two distinct vehicle circulation/parking environments throughout the course of the year: normal campus operations during the academic year, interspersed with periodic large-scale events occurring within the University or at the Stub Hub Center which may utilize most or use all of the available campus parking.

Campus Roadways and Vehicle Circulation

The Master Plan makes specific changes to existing roadways in several locations in order to accommodate future needs as enrollment increases. To address pedestrian safety and to better distribute arriving and departing traffic, some roads currently used for primary vehicle circulation have been changed to service/emergency-vehicle use during normal campus operations with the provision that these roadways can be set up to allow primary vehicle circulation during campus or StubHub Center events and other special occasions. Barrier gates, key-card and pre-timed gate operations, along with the use of campus or StubHub parking staff, can be used to increase traffic flow during large events.

Tamcliff Avenue North Entry (Exhibit 4-17)

Tamcliff Avenue will serve as a key campus entry-point for visitors, bicyclists,

and pedestrians coming from the north and will be enhanced by new campus identification signage and landscape to emphasize this intersection as an important visitor entry.

Pedestrian access. In order to create a safer and more congenial pedestrian experience, this roadway has been changed from a through-campus roadway to a vehicle entry/drop-off and turn-around. Just to the south of the vehicle turn-around is the newly-created Pedestrian Plaza that extends into the campus and through the Sculpture Garden. This Plaza will become a primary pedestrian route from lower to upper campus, connecting with West Walkway and the rest of the campus pedestrian pathway system via the new Grand Stair.

Visitor access. For new visitors to the campus, the Tamcliff entry will include a 'visitor information point' placed in a landscaped island (an automated or human-attended booth) to allow for driver-side interaction so that visitors can get information about their campus destination and obtain a parking pass. The turn-around will allow visitors to then proceed to visitor parking in Lot 3 or parking in Lot 6, or to return to Victoria Street to access parking facilities in the south campus.

Passenger and bicycle access. The Tamcliff turnaround area is configured to allow for passenger drop-off and pick-up. The turnaround is configured to ensure that it can accommodate emergency vehicles.

Low volumes on Tamcliff Avenue will facilitate an improved environment for pedestrians and bicyclists. As shown in Exhibit 4-27, bicyclists arriving from Victoria Street will have access to Class II bike lane facilities along the Tamcliff entry, and will be required to dismount in the pedestrian-oriented core of the campus.

Service and emergency access. The roadway connection from Tamcliff to Toro Center Drive and the South campus will be maintained for emergency vehicles by having the Pedestrian Plaza built to the specifications of width and materials needed to support those vehicles. Service vehicles can use this roadway when necessary, but the new Pedestrian Plaza is intended to be primarily a vehicle-free zone.

Addressing vehicle congestion at campus entry. Converting the Tamcliff entry to a turn-around drop-off access point will help reduce vehicle congestion at this northern campus entry point. Students and staff arriving at the campus from Victoria Street can go directly to the parking facilities for which they have parking permits (Lots 3 and 6) by turning immediately onto the Dominguez Hills Parkway frontage road and Dominguez Hills Parkway West. Those arriving for destinations on the South campus, or those whose parking permits are for the surface lots or structures in the South campus will no longer drive through the campus, but will access those parking facilities via University Avenue.



Exhibit 4-16: Changes to Dominguez Hills Parkway Frontage Road: Detail

Dominguez Hills Parkway

Dominguez Hills Parkway forms a frontage road between the campus and Victoria Street at the north, and then turns south to become Dominguez Hills Parkway West, giving access to Lots 3 and 6 and, currently, the South campus. The 2018 Master Plan makes several adjustments to this roadway.

Dominguez Hills Parkway Frontage Road (Exhibit 4-16). On the frontage road portion of the roadway, the existing internal median is removed and the median between Dominguez Hills Parkway and Victoria Street is narrowed to 20' in order to move the roadway 10 feet to the north. The frontage road is also converted to one lane in each direction and the existing information booth is removed. The transit/commuter hub will continue to be on the frontage road, shifted to the east, as shown in Exhibit 4-29.

By narrowing the frontage road, the Mas-

ter Plan creates new development sites for academic buildings closer to Victoria Street, thereby increasing the visibility and immediacy of the campus from Victoria and creating a more identifiable face to the community.

Dominguez Hills Parkway West. The role of Dominguez Hills Parkway West in the campus vehicle circulation system will be more important as campus enrollment increases and the 2018 Master Plan is built out.

This roadway will now serve as a major campus vehicle entry from the north and the primary access to Lots 3 and 6, the west-campus parking facilities Dominguez Hills Parkway West will be widened to two lanes in each direction to accommodate increased traffic (Exhibit 4-21). The campus may consider the possibility of a new right-turn-in/right-turnout traffic signal where Dominguez Hills Parkway West intersects with Victoria Street, in order to more quickly bring traffic heading east on

Victoria into the campus.

When campus parking requirements increase with increased enrollment, one or more parking structures will be built on Lot 6. At that time, two access driveways will be built to provide vehicle access to the structure(s), and they will intersect with Dominguez Hills Parkway West.

Toro Center Drive

Northern Segment. In order to improve the pedestrian environment of the Core Campus, the segment of Toro Center Drive that currently connects with the Tamcliff Avenue campus entry has been changed to a service/emergency vehicle-only route, as shown in Exhibit 4-17. This allows for the new Pedestrian Plaza entry into the campus, with paving patterns and materials that allow for emergency vehicles to travel directly through the campus in a north-south direction. This treatment of the Pedestrian Plaza also allows for this route to be opened to primary vehicle traffic during large campus or StubHub center events.

Mid-campus Segment. Toro Center Drive between the new Pedestrian Plaza and the connection to the southern segment will also provide for service-vehicle access and access to the Lot 6 parking structures when they are built.

Southern Segment (Exhibit 4-18). Toro Center Drive continues to serve as the main campus entry from the south. This vehicle entry at University Avenue will be enhanced by new campus identification

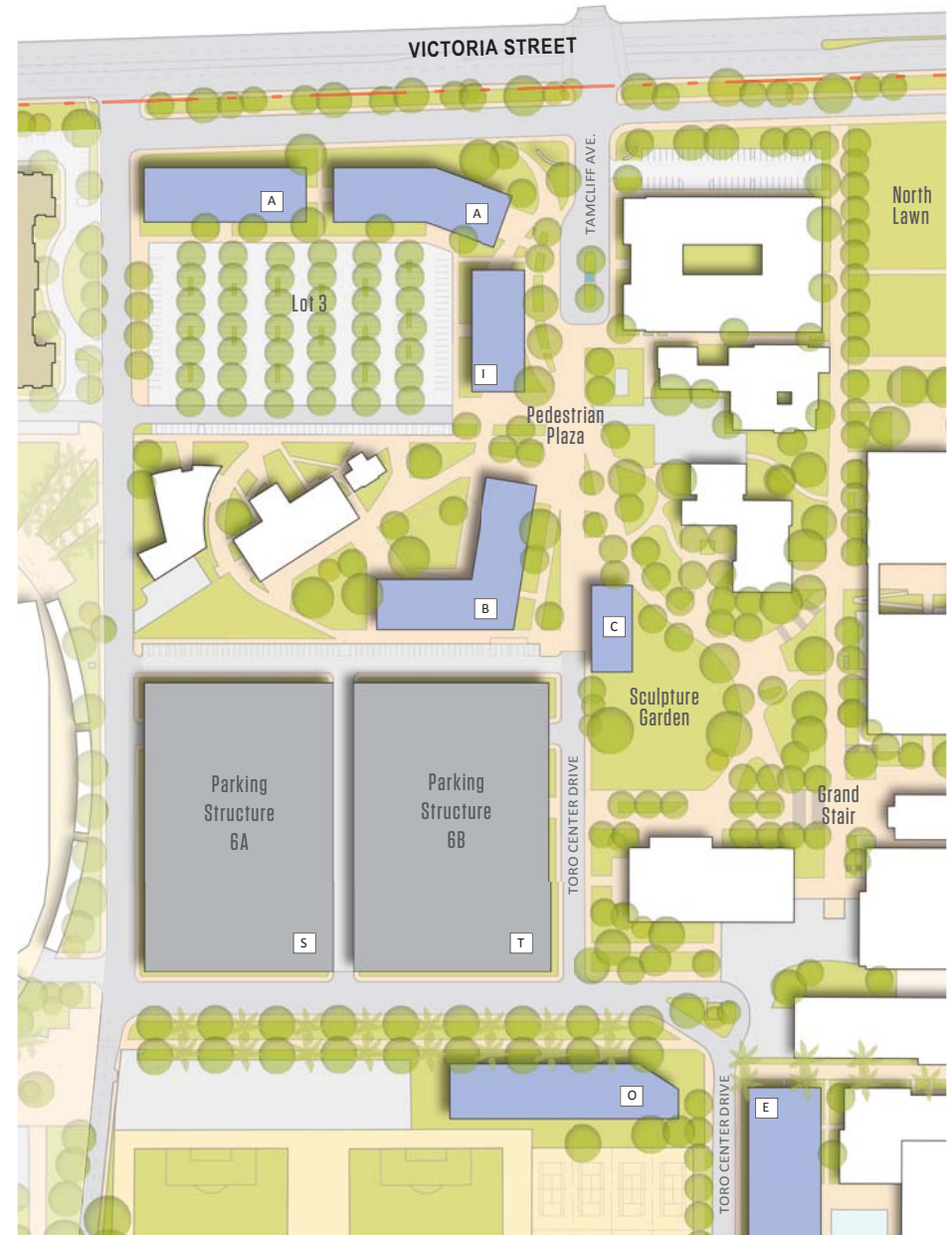


Exhibit 4-17: Tamcliff Entry and Dominguez Hills Parkway West: Detail

signage and landscape to emphasize this intersection as an important campus entry.

Toro Center Drive provides access to new parking facilities at the south (Structure 4A/4B and South Surface Lot), and continues as a primary vehicle route north to Pacific View Drive. Toro Center Drive also connects with a new east-west roadway north of University Drive, which provides additional access to these two parking facilities.

In light of the increased use of Toro Center Drive as enrollment increases, the Master Plan recommends a new traffic signal at the intersection of Toro Center Drive and University Avenue, as illustrated in Exhibit 4-15.

Birchknoll Drive

Under the 2018 Master Plan, Birchknoll Drive serves as the main vehicle entry into the University Village, and is now extended through the campus to University Avenue, with a right-turn-in/right-turn-out intersection there at University Avenue.

As shown in the street section illustrated in Exhibit 4-19, Birchknoll Drive is conceived as being one vehicle lane in each direction, with a bike lane and angled or parallel parking on either side. The northern segment of Birchknoll Drive is meant to create a congenial Village atmosphere, providing easy access to the ground-floor



Exhibit 4-18: Toro Center Drive Southern Segment: Detail

retail establishments on either side of the street.

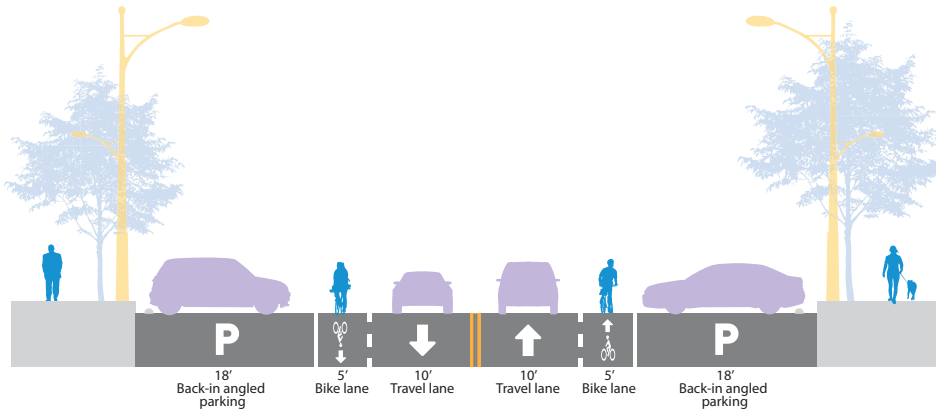
Other Vehicle Access Routes Into University Village (Exhibit 4-15)

In order to reduce traffic congestion into the University Village, the 2018 Master Plan includes several new access roadways. A service road extending from Victoria Street to Pacific View Drive provides for direct access to residential parking structures so that those living in the Village have an option for routine ingress

and egress in addition to Birchknoll Drive. This new roadway is recommended to be a right-turn-in/right-turn-out intersection at Victoria Street.

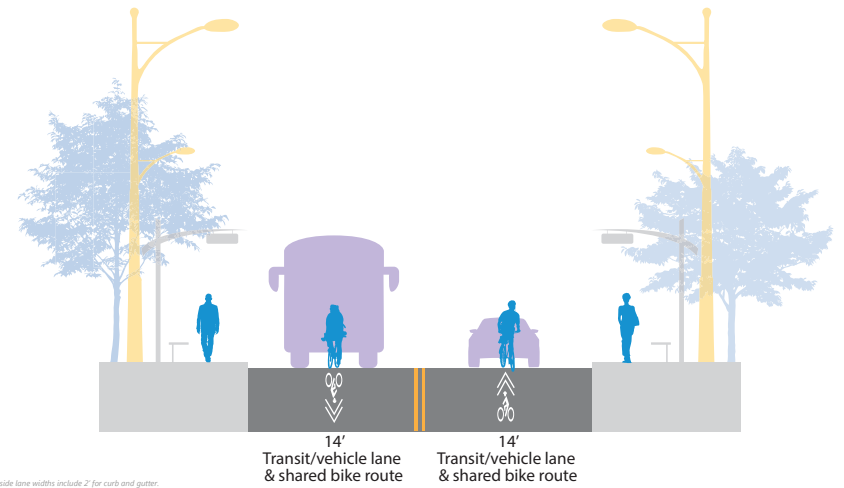
Charles Willard and Glenn Curtis Drives are extended from Central Avenue and straightened as they come into the campus. The Master Plan suggests the possibility of a new traffic signal at Charles Willard and Central (Exhibit 4-15).

Vehicle access to Business Park development on the east side of the Village is



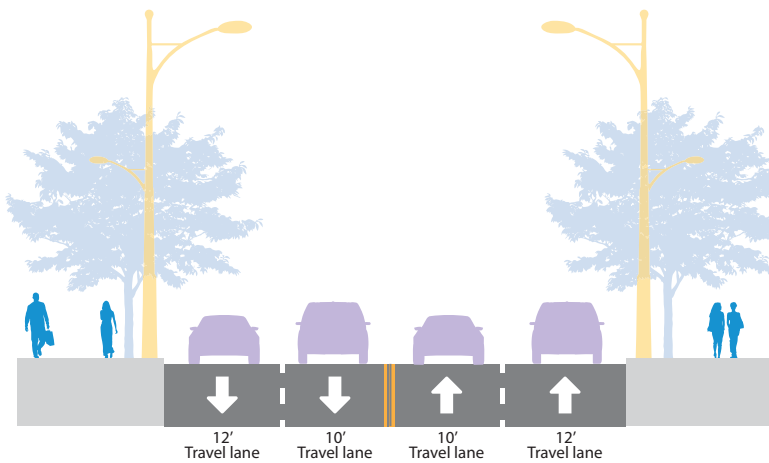
Note: Curbside lane widths include 2' for curb and gutter.

Exhibit 4-19: Street Section: University Village "Main Street" - Birchknoll
SOURCE: FEHR & PEERS



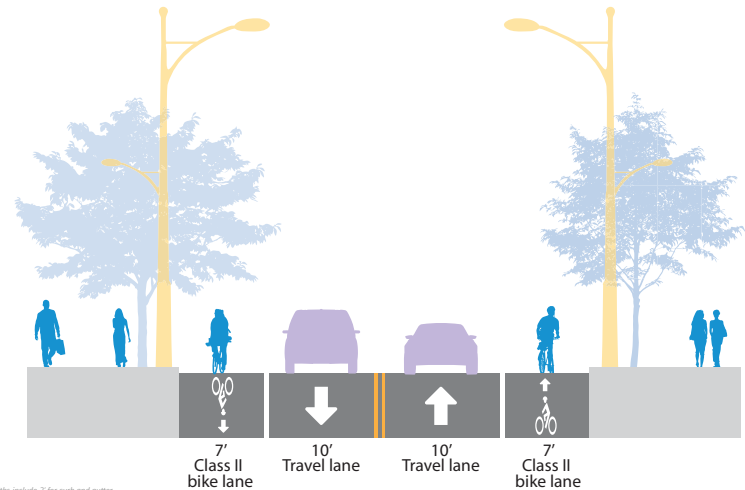
Note: Curbside lane widths include 2' for curb and gutter.

Exhibit 4-20: Street Section: Shared transit/Vehicle Lane & Bike Route - Dominguez Hills Parkway Frontage Road (parallel to Victoria Street)
SOURCE: FEHR & PEERS



Note: Curbside lane widths include 2' for curb and gutter.

Exhibit 4-21: Street Section: Four Travel Lanes - Dominguez Hills Parkway West
SOURCE: FEHR & PEERS



Note: Curbside lane widths include 2' for curb and gutter.

Exhibit 4-22: Street Section: Service Vehicle Road with Bike Lanes - Toro Center Drive
SOURCE: FEHR & PEERS

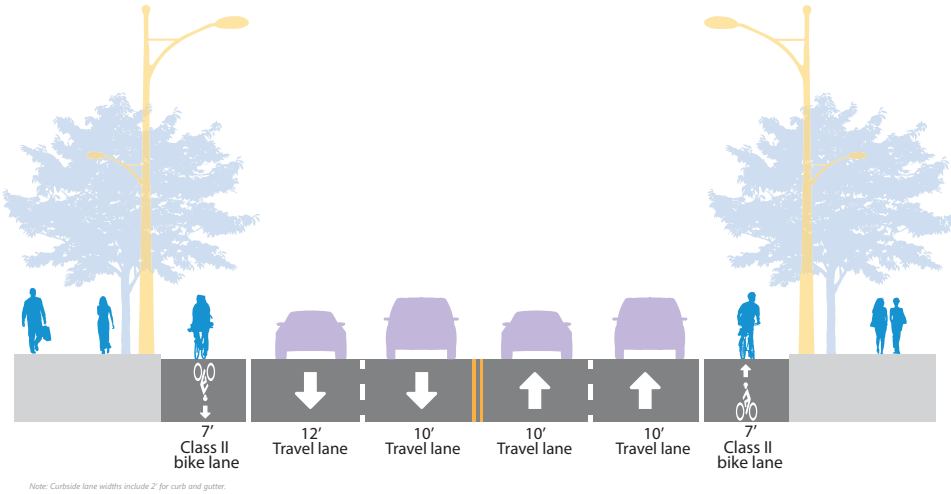


Exhibit 4-23: Street Section: Four Travel Lanes - Toro Center Drive at University Avenue
SOURCE: FEHR & PEERS

RECOMMENDED ROADWAY FACILITY WIDTHS	
FACILITY	RECOMMENDED WIDTHS
Travel lanes (includes transit lanes)	10-12 feet
Space for curb and gutter	4 feet per roadway
Class I Two-way Bike Path	12 feet
Class II Bike Lanes or Class II + Buffered Bike Lanes	5-8 feet
Class IV Protected Bike Lanes	8 feet
Sidewalk	Minimum 8 feet
Parallel Parking	8 feet
Angled Parking	16 feet
90 Degree (Perpendicular) Parking	20 feet
Curb radii	10-15 feet in most cases

Exhibit 4-24: Recommended Roadway Widths

from Central Avenue or Glenn Curtis Drive (Exhibit 4-15).

Recommended Roadway Widths

Although the 2018 Master Plan makes use of existing roadways, some will be altered, extended, narrowed or changed in use, as described in the sections above. Implementation of the 2018 Master Plan will proceed in phases, as enrollments increase, and these changes will be made gradually, over a period of years.

Exhibits 4-19 through 4-23 are roadway cross section illustrations showing selected roadway cross-section examples at several locations throughout campus. Further information is available in Appendix B.

Exhibit 4-24 shows the recommended minimum roadway widths for each road type that would be necessary to support the estimated vehicle volumes and provide bicycle access throughout the site when the campus is fully built-out for 20,000 FTES. These recommendations provide guidance in determining the needs of each roadway as they are phased in through the build-out of the Master Plan.

Primary circulation assumes two lanes in each direction and secondary vehicle circulation assumes one lane in each direction.

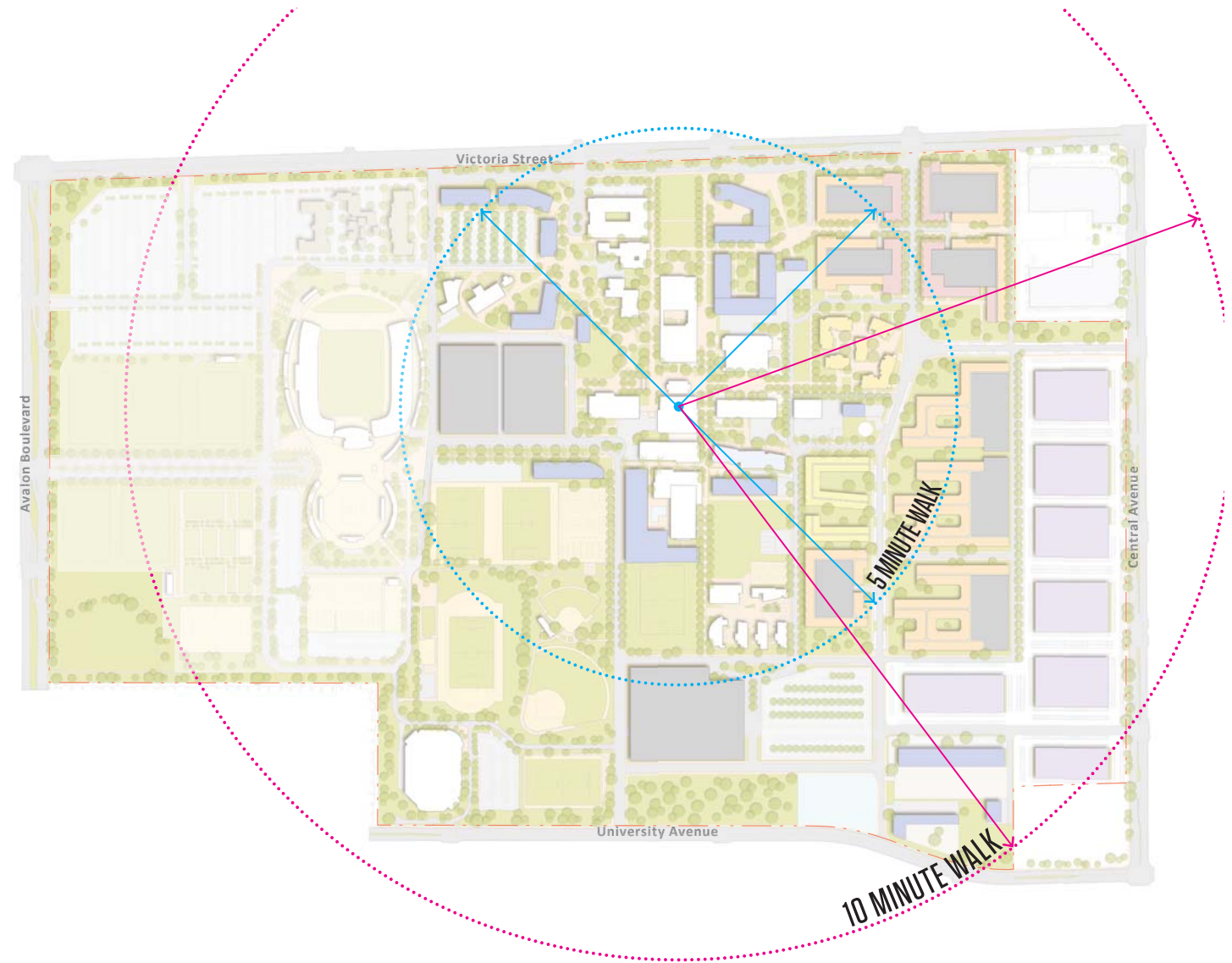


Exhibit 4-25: 2018 Master Plan: Walking Distances

Service and Emergency Vehicle Routes

Exhibit 4-30 shows a service vehicle circulation system that provides access to all campus and University Village buildings while interfering with pedestrian circulation as little as possible. In addition to existing service routes within the campus, the Master Plan shows a new service roadway from the Dominguez Hills Parkway frontage road east of Buildings J and K to serve those facilities. Further discussion of the service vehicle circulation system is included below.

Traffic Signals

New traffic signals may be considered at several locations to facilitate improved safety and operations at locations where internal campus roadways intersect with Victoria Street, Central Avenue, and University Drive. These locations are illustrated in Exhibit 4-15, and should be analyzed further under City of Carson guidelines for signal warrants as the Master Plan is implemented.

Campus Pedestrian Circulation

The nature and quality of campus pedestrian circulation has a significant effect on campus life. Although CSUDH is a large campus, Exhibit 4-25 shows that a pedestrian walking at a moderate speed can cross the core campus in less than 10 minutes, and that all locations in the campus core and the University Village are within a 10-minute walk of the center of

the campus, in this diagram represented by the Leo Cain Library.

The 2018 Master Plan is focused on creating and supporting a safe and user-friendly pedestrian pathway system to serve all campus inhabitants. Exhibit 4-15 illustrates how the 2018 Master Plan makes use of existing pedestrian pathways, extending them where appropriate to provide access to new facilities. As discussed in Chapter 5, the Landscape Master Plan proposes renaming pedestrian pathways for the dominant tree species along them to emphasize their identity and importance on the campus.

Three new aspects of the pedestrian pathway system include the new Pedestrian Plaza and pathway through the Sculpture Garden, linking parking facilities in the west to the core campus; the new Olive Walk pathway connecting academic core to the University Village retail area; and the pedestrian routes from campus parking facilities at the south to the StubHub Center, providing legible and direct routes for StubHub Center patrons during large events.

Pedestrian Access and Safety

On both primary and secondary vehicle routes, speeds through the campus are anticipated to remain slow (<20 miles per hour) to support pedestrian and bicycle safety. On both primary and secondary routes, marked crosswalks should be provided at key pedestrian junctions, includ-

ing intersections and mid-block locations that experience heavy foot traffic. All crossings should include ADA-compliant curb ramps. Pedestrian-scale wayfinding and lighting should be provided throughout the site, connecting into the campus and linking the development to nearby transit stops.

Enhanced pedestrian facilities, including wide sidewalks and street furniture, will be included as part of the University Village mixed-use district in the eastern portion of campus. Major campus pedestrian routes and their proposed character are discussed in more detail in Chapter 5, Landscape Plan.

PARKING

Parking facilities are non-State-funded resources paid for by parking fees. The 2018 Master Plan provides the parking resources needed for 20,000 FTES enrollment target. Parking facilities, both surface lots and parking structures, are illustrated in Exhibit 4-26.

Within the core campus, parking resources are located toward the edge of campus, with the primary vehicle routes supporting the heaviest volumes of vehicles to the existing and planned parking lots and structures. This maintains a strong pedestrian core to the campus, with a safer and more pleasant pedestrian access from parking lots and structures, and from the transit hub, into the central parts of campus.

PARKING FACILITIES									
FACILITY/ LOCATION	TYPE		CAMPUS SECTOR/ PARCEL USE	GSF/ LEVEL		TOTAL GSF	# SPACES/ LEVEL	TOTAL SPACES	% OF TOTAL CAMPUS PARKING
CORE CAMPUS: NON-STATE FUNDED									
Lot 3	Surface		NORTHWEST	113,140	1	113,140	323	323	4%
Lot 6a	Structure		WEST	126,120	4	506,240	390	1557	19%
Lot 6b	Structure		WEST	126,120	4	506,240	390	1557	19%
Lot 6 surface strip	Surface		WEST					55	1%
Lot 4a/4b	Structure		SOUTH	239,020	5	1,195,100	735	3,677	47%
South Surface	Surface		SOUTH	239,020	1	239,020	683	683	9%
North of Welch Hall	Surface		NORTH	15,840	1	15,840	45	45	1%
TOTAL CORE CAMPUS								7,899	100%
UNIVERSITY VILLAGE: NON-STATE FUNDED								TOTAL SPACES	
Parcel 1A	wrap-structure		mixed-use retail + residential					638	
Parcel 1B	wrap-structure		mixed-use retail + residential					638	
Parcel 2 A&B	Residence Hall Students park in South Surface Parking Lot (accounted for above)							-	
Parcel 3A	Residence Hall Students park in South Surface Parking Lot (accounted for above)							-	
Parcel 3B	wrap-structure							555	
Parcel 4A	wrap-structure		mixed-use retail + residential					975	
Parcel 4B	wrap-structure		mixed-use retail + residential					895	
Parcel 5A	wrap-structure		residential					732	
Parcel 5B	wrap-structure		residential					732	
Parcel 5C	wrap-structure		residential					704	
Parcel 6A	surface		business park @ 1 stall/500 gsf					691	
Parcel 6B	surface		business park @ 1 stall/500 gsf					281	
Parcel 7	surface		business park @ 1 stall/500 gsf					173	
TOTAL UNIVERSITY VILLAGE								6,995	

Exhibit 4-26: Master Plan Parking Facilities

Parking Required for 20,000 FTES Enrollment

Exhibit 4-26 is a table detailing the campus parking facilities proposed in the 2018 Master Plan, including the parking ratios that were used to determine the parking needs at full build-out.

The parking facilities necessary to support the land uses in the 2018 Master Plan are based on the expressed demand rate on campus found during a November 2016 parking study performed by Fehr & Peers, the transportation engineers serving as consultants to the Master Plan project. The study revealed a peak demand rate of 0.32 spaces per non-residential full-time equivalent student and a peak demand rate for on-campus residential spaces of 0.46 spaces per on-campus bed.

The proposed number of parking spaces required at full campus build-out for 20,000 FTES was developed by applying the current demand rates to the future numbers of on-campus beds and student enrollments, and adding a 10% contingency rate. The resulting proposed number of spaces is 7899 as described in Exhibit 4-26.

The proposed parking supply rates are in line with parking provision rates for students and faculty found at several other California State University campuses. For comparison, these rates are summarized and found in Appendix B.

Residential Parking

As shown in Exhibit 4-26, student residential parking for both Residence Hall and Student Apartment residents is accommodated in the South Surface parking lot. Within University Village, the majority of the development parcels incorporate the parking necessary for the intended uses, consistent with City of Carson guidelines.

Phasing of Parking Facilities

Master Plan parking facilities are expected to be implemented as the need emerges, and the parking structures shown in the Illustrative Plan will be built only when surface parking facilities are not adequate to serve the campus. With the implementation of a transportation demand management program (TDM; see below and Chapter 6 for further information) and encouragement for students, staff, faculty and visitors to use public transit, it is possible that the campus may be able to avoid building all of the parking structures shown in the 2018 Master Plan.

BICYCLE PLAN

At the time of the 2018 Master Plan, the use of bicycles to and within the CSUDH campus is at a low level, for a variety of reasons, including the predominant automobile culture of southern California. Although the City of Carson has a regional bikeway system, the surrounding streets are not necessarily bicycle-friendly. Many CSUDH students are employed outside

the campus, and they need to have a fast and efficient commute between campus, jobs and home. The University does not permit bicycles and skateboards to be used on the upper campus as a pedestrian safety measure, and there are few bicycle facilities on campus (parking, storage, lockers or showers) whose presence could help encourage bicycle use.

There are compelling reasons for the campus to now consider implementing a bicycle plan.

- The University wishes to meet its goal of reducing greenhouse gases and operating in a more environmentally-responsive manner. (See also Chapter 6.) As part of this commitment, the campus transportation demand management plan includes bicycles as an alternative form of transportation and commuting.
- With the addition of more on-campus residential students and many more residents in the University Village development, it is a propitious moment for the campus to implement a more supportive and effective bicycle plan.
- Finally, CSUDH has a world-class velodrome facility used for bike competitions and training; its presence is a support to a more extensive bicycle culture on the campus.

The 2018 Master Plan includes a Bicycle Plan tailored to this campus and its surrounding community. Exhibit 4-28 shows a proposed Bicycle Plan that includes the City of Carson Bicycle Plan, a system of surrounding existing and planned regional



Class I: Shared-Use Path
Provides a completely separated right-of-way for the exclusive use of bicyclists and pedestrians



Class I Bike Paths are constructed off-street and do not contribute to curb-to-curb widths. Rather they are often built alongside the sidewalk, or constructed as a mixed-use path that accommodates both pedestrians and bicyclists through delineation of space using paint or different surface treatments.



Class II: Bike Lane
Provides a striped lane for one-way bike travel on a roadway



Class II Bike Lanes have a recommended minimum width of 5', and contribute to the curb-to-curb width. Buffered bike lanes have a recommended minimum width of 8', with painted/stripped buffers that provide additional space between bicyclists and vehicles. In a campus context, with slow-traveling vehicles, it may not be necessary to include buffered bike lanes to provide a safe and comfortable experience for cyclists and drivers.



Class III: Bike Route
Provides for shared use with motor vehicle traffic



Class III Bike Routes are recommended only on roads with one lane in each direction, and do not add to the curb-to-curb width. These facilities are marked with "sharrow" stencils and signage, and are appropriate only on low-speed, low-volume roadways because they require cyclists and drivers to share the road.



Class IV: Cycletrack
Provides a separated right-of-way for the exclusive use of bicyclists adjacent to a roadway



Class IV Cycle Tracks are a newer addition to the toolbox of bicycle facilities. They have a recommended minimum width of 8', and include vertical separation between vehicles and bicycles. The vertical separation may be bollards, concrete curbs, or planters/landscaping. Class IV facilities are appropriate on high-volume, higher-speed roads where there may not be enough off-street space to construct a Class I Bicycle Path. Like a Class I Path, Class IV facilities may be constructed to support two-way bicycle traffic on the same facility, requiring a minimum of 15' which includes a raised buffer.

NOTE: More information about the design of bicycle facilities can be found in the NACTO Urban Bikeways Design Guide, available online at <http://nacto.org/publication/urban-bikeway-design-guide/>.

Exhibit 4-27: Bicycle Class Requirements

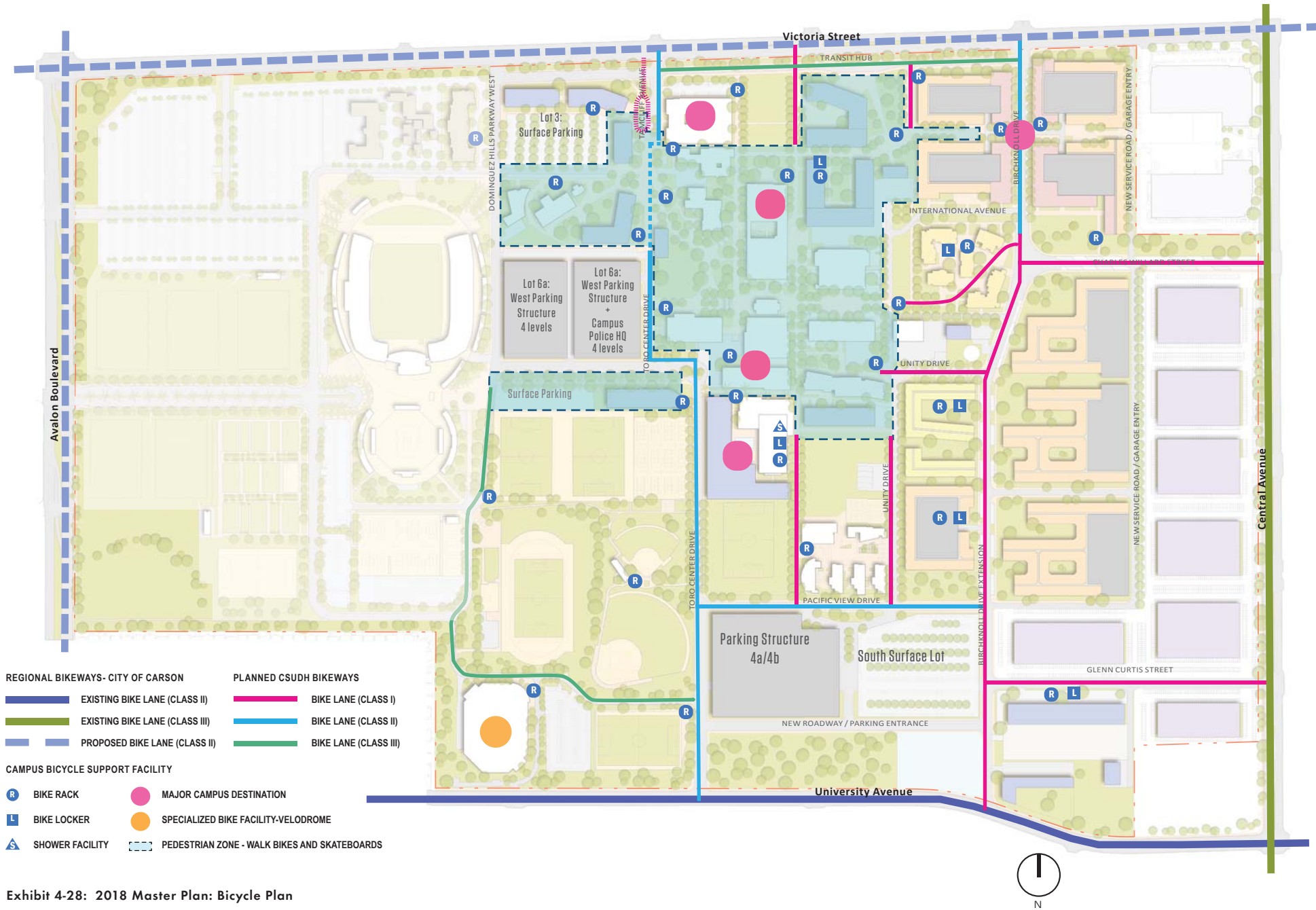


Exhibit 4-28: 2018 Master Plan: Bicycle Plan

bikeways that run along the four adjacent roadways that surround the entire campus property. (See also the more comprehensive City Bicycle Plan illustrated in Chapter 6.)

The Plan shows a pedestrian zone where bicycles must be walked and potential new facilities for bicyclists on the CSUDH campus, including new bike lanes, bike racks, lockers, and showers. The plan is based on a standard system of bike lanes in use throughout the region, illustrated in Exhibit 4-27 by showing typical roadway cross-sections and examples for four classes of bicycle facilities.

These 2018 Master Plan bikeway facilities include two north/south routes through campus, one of which is a separated bicycle path that traverses much of the University Village area. The on-campus bicycle facilities include bicycle paths, bicycle lanes (which may be upgraded to protected or buffered bicycle lanes), and bicycle routes. These facilities will connect to external bike facilities currently planned by the City of Carson, providing safe bicycle connections to nearby residential, employment and transit destinations.

Conceptual cross-sections for three important roadway segments where planned bikeways traverse the campus are illustrated in Exhibits 4-19, 4-20, 4-22 and 4-23. These show Birchknoll Drive passing through the University Village retail area; the jointly shared service

road on Toro Center Drive between the Tamcliff entry and La Corte Hall; and the jointly used bus/service/bike Dominguez Hills Parkway frontage road along Victoria Street east of Tamcliff Avenue.

The Plan includes both long- and short-term bicycle parking facilities to be provided throughout campus. Some of these facilities, such as bicycle racks, can be implemented as free-standing campus elements. Other elements, such as shower facilities, can be incorporated into plans for new and remodeled campus buildings.

COMMUTER/TRANSIT PLAN

As a component of the Transportation Demand Management (TDM) plan, the commuter/transit hub on the Dominguez Hills Parkway frontage road along the north edge of campus will continue to support the range of public transit services serving the campus as well as the Toro Express campus shuttle.

The frontage road between Birchknoll Drive and Tamcliff Avenue remains a component of the campus vehicle circulation system but its use by automobiles and commuters will be diminished in the 2018 Master Plan.

Pavement markings and signage should be installed to communicate the preferred routes for passenger vehicles entering the campus, directing them to the Tamcliff, Dominguez Hills Parkway West and Toro

Center Drive campus entries. Birchknoll Drive, as primary access route for the University Village, should incorporate signage to inform visitors and commuters that Birchknoll does not provide direct access to the main campus or its parking facilities.

In order to accommodate transit vehicles along the Dominguez Hills Parkway frontage road, travel lanes should be 14 feet wide to accommodate transit vehicles, with wide bus pull-outs to accommodate both eastbound and westbound buses, allowing for improved direct transit connections on campus (See Exhibit 4-20 and 4-29).

Shared-lane bicycle marking or ‘sharrows’ and bicycle route signage should be installed along this segment of the Dominguez Hills Parkway frontage road to indicate that the roadway is a shared vehicle, bus and bike facility.

The commuter/transit hub/bus stop can be more than a simple sign and a bench. Given that it is located in an important site on the campus and very visible from Victoria Street, the University should consider including features and amenities to support transit use. Such amenities may include seating, trash receptacles, bathrooms, shade structures, landscaping, and transit signage (including real-time arrival information).

The specific design, sizing, and choice of amenities offered at the commuter/

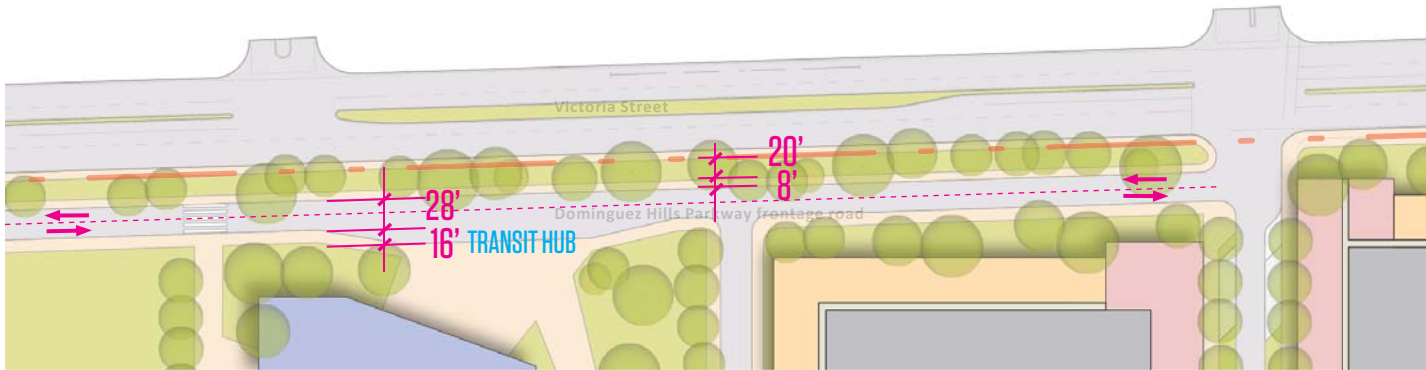


Exhibit 4-29: Dominguez Hills Parkway Frontage Road Showing Detail of Roadway Widths at Victoria Street

transit hub will be determined closer to its rebuilding and implementation, to match the specific transit services that are offered at that time, as well as the needs of transit riders and vehicle operators.

TRANSPORTATION DEMAND MANAGEMENT

As the 2018 Master Plan is implemented, a comprehensive Transportation Demand Management (TDM) plan will assist the campus in meeting state, regional and local goals to reduce the number of single-occupancy vehicle commute trips to and from campus and greenhouse gas emissions, including goals laid out in the CSU Systemwide TDM Manual (November 2012).

The CSU TDM Manual identifies TDM strategies tailored to the development environment of the CSU system's suburban campuses such as CSUDH, including

rideshare matching, parking pricing, and subsidized transit passes. These strategies will complement provisions for enhanced transit, bicycle and pedestrian facilities included in the Master Plan. An analysis of transit use at CSU campuses comparable to CSUDH shows that transit ridership levels at CSUDH are well below what could be achieved. Further information is available in Appendix B.

Recommendation

In support of the 2018 Master Plan, it is strongly recommended that CSUDH develop a comprehensive TDM plan and employ a transportation coordinator to implement the plan in order to provide a full suite of transportation options for students, staff and faculty as the campus grows.

A robust TDM plan will help to limit the number of additional parking spaces or the additional roadway capacity that will

be necessary for vehicle circulation at full build-out of the 2018 Master Plan, reducing the need for financial outlay and reducing the financial burden on students. Reduction in the need for parking can also potentially allow more space to be dedicated to academic uses and student amenities.

SERVICE AND EMERGENCY VEHICLE SYSTEM

The 2018 Master Plan includes a comprehensive plan for facility service areas and service vehicle access. The plan is shown in Exhibit 4-30. All existing and future buildings are served with a service area/loading dock and service roadways leading to them. The Emergency Vehicle System is illustrated in Exhibit 4-31.

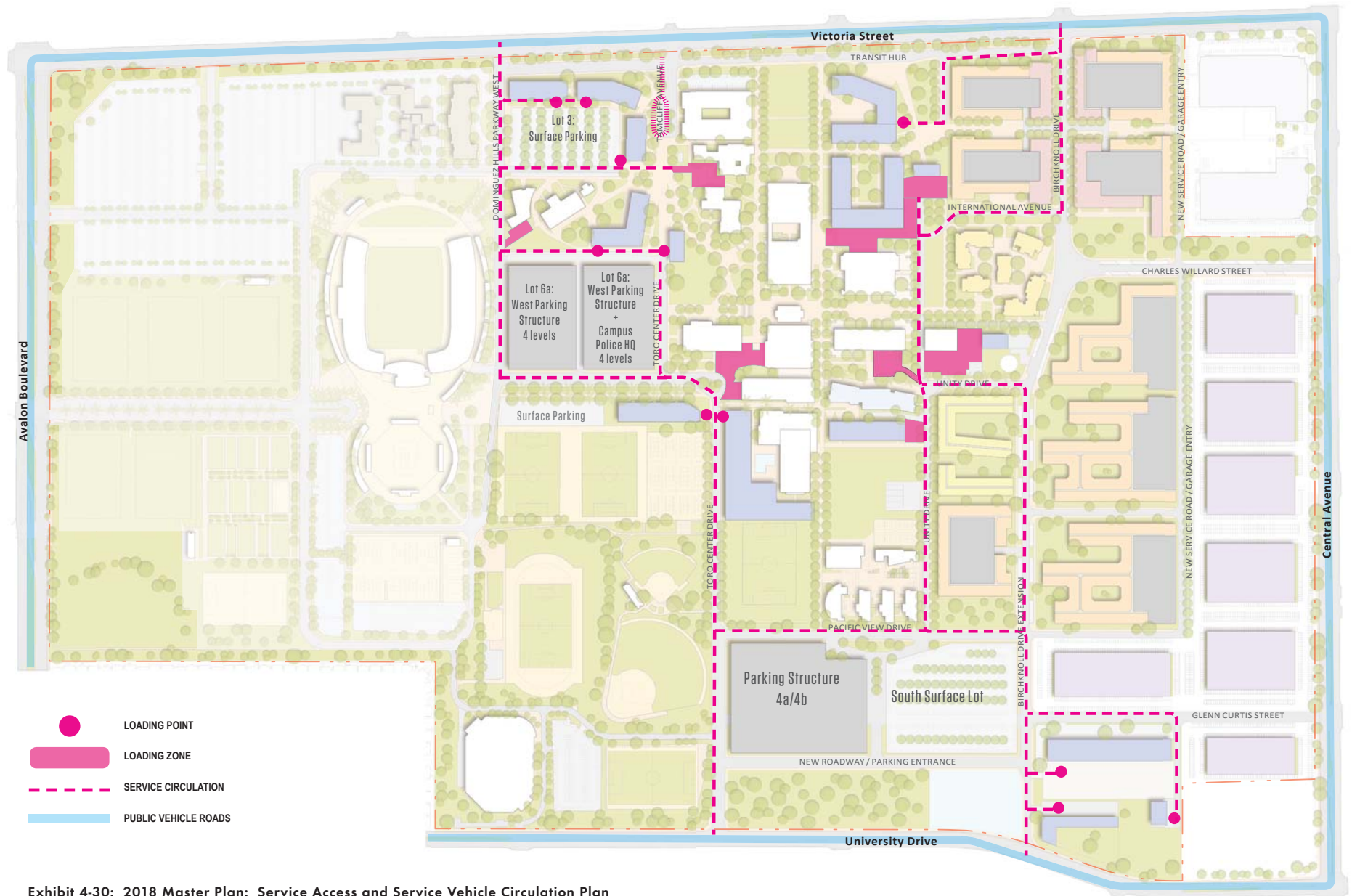


Exhibit 4-30: 2018 Master Plan: Service Access and Service Vehicle Circulation Plan



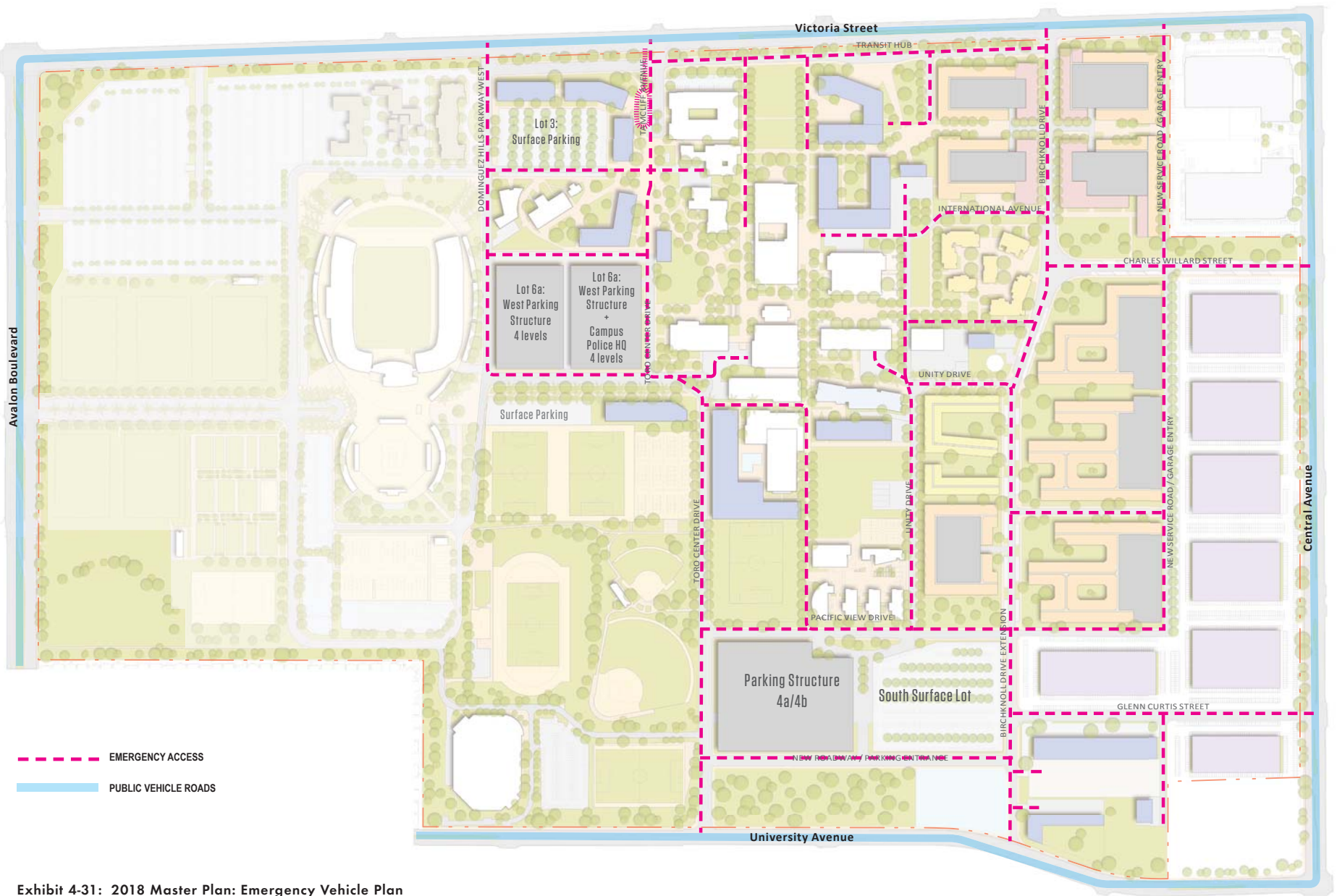


Exhibit 4-31: 2018 Master Plan: Emergency Vehicle Plan



LANDSCAPE MASTER PLAN



Chapter 5: Landscape Master Plan

The preceding project phases, including input from the Campus and Community Planning Workshops, the Master Plan Steering Committee and campus leadership, informed the generation of the Landscape Master Plan. The Plan is grounded in on-site observations, data collection, and design charrettes. The goals of the Landscape Master Plan support and complement those of the overall 2018 Master Plan. The Plan includes planting and hardscape suggestions, irrigation solutions, and improvements to the campus circulation, wayfinding, and identity. The Plan seeks to improve campus sustainability in accord with the CSU 2014 Sustainability Policy through the use of climate-appropriate plant and landscape materials.



5.1 EXISTING CONDITIONS

CAMPUS TREE CANOPY: A CHALLENGE TO BIODIVERSITY

While the existing, extensive, and mature Eucalyptus tree canopy forms arguably the most recognizable campus identity feature and provides a range of other benefits, it is also beginning to pose challenges for the campus landscape.

A majority of the campus tree canopy is comprised of *Eucalyptus Citriodora*, Lemon-Scented Eucalyptus. These trees provide a striking scene when planted en masse. They are a relatively tall tree, sometimes growing to 100 feet tall, with an open canopy and sculptural, smooth, white trunks and limbs. Large swaths of *E. Citriodora* were planted as part of the original A. Quincy Jones 1968 Master Plan to provide wind and shade relief and to give the campus a sense of visual identity -- charges which they have performed successfully for decades. The *E. Citriodora* canopy provides a significant amount of biomass, which has great environmental and ecological benefit. It sequesters large amounts of carbon from the atmosphere, and shades large areas of the ground plane and building roofs, attributes which help slow climate change and modulate the local climate. Additionally, *E. Citriodora* is well-adapted to the local climate, requiring low amounts of supplemental water through irrigation.

However, the fact that the trees are mostly

the same age (around 50 years) and species puts the canopy at a high risk for collapse. Cal Poly San Luis Obispo's Urban Forest Ecosystems Institute lists the lifespan of this species as 50-150 years, suggesting that the majority of the campus canopy is already at risk of reaching the end of its lifespan. The campus has recently experienced limited, but alarming instances of limb-fall from these trees. Furthermore, monocultures of any plant species are at an increased risk of collapse due to disease and infestation.

As illustrated in Exhibit 5-1, most of the remaining campus tree population is comprised of Coral Trees (*Erythrina species*), Paperbark Trees (*Melaleuca quinquenervia*), and Pine Trees (*Pinus species*). This is not a diverse enough selection to make the overall canopy resilient in the face of the aforementioned challenges of age and disease.

A tree replacement and resiliency strategy is outlined in this chapter.

SUSTAINABILITY / WATER USE

Much of the current campus landscape area is dominated by thirsty, high-maintenance turf grass. As illustrated in Exhibit 5-2, lawn makes up almost 60% of the total landscaped area of the campus core. Turf grass is often perceived as a signifier of a traditional college campus, and the benefits of using turf in the landscape include providing flexible outdoor space, and the cooling of surrounding air temperatures due to evapotranspiration.



Exhibit 5-1: Existing Tree Canopy

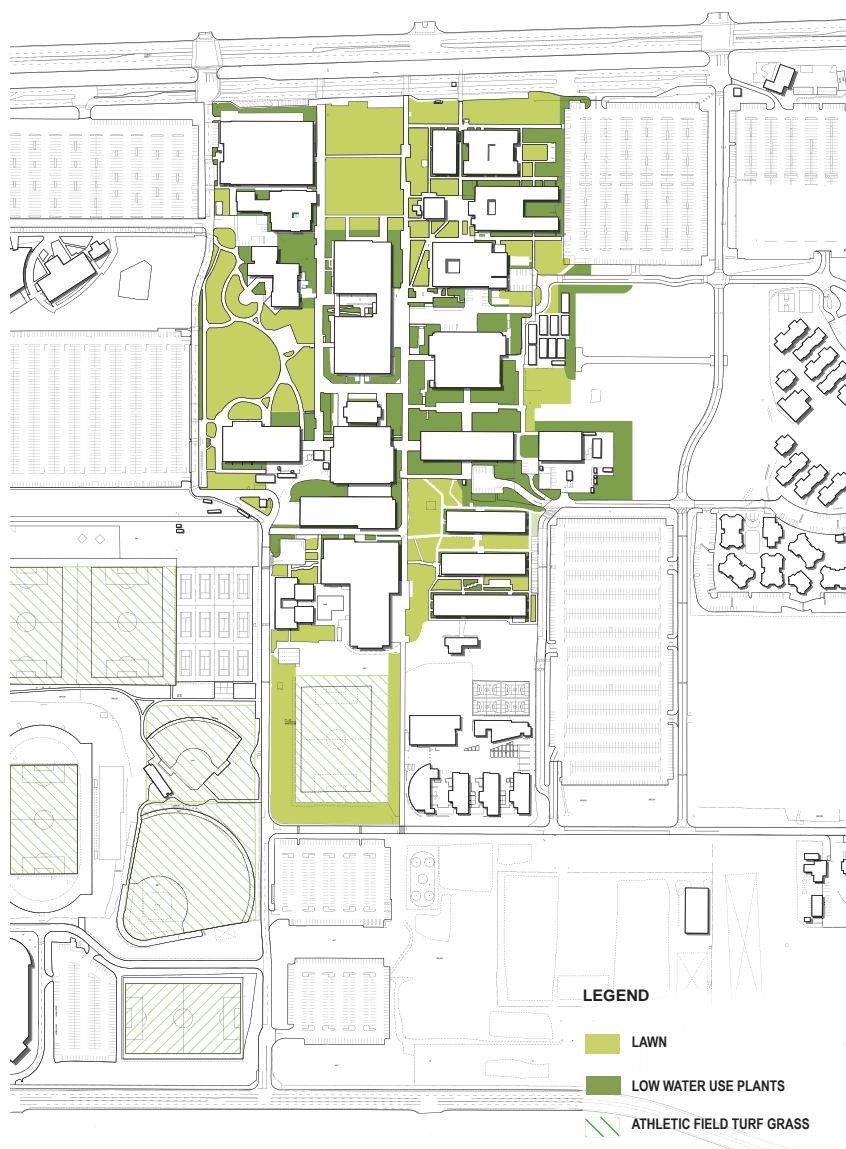


Exhibit 5-2: Existing Planted Area

However, the high percentage of turf grass goes against the CSU system's 2014 Sustainability Policy, and some of these turf areas are used relatively infrequently by the campus community. Based on local climate data, the current landscape is estimated to need 14.4 million gallons of water per year -- almost twice the amount of water that would be allowed if campus buildings and development projects were to be permitted under current regulations.

The use of reclaimed water for irrigation on campus increases the overall sustainability of the system. A significant portion of the campus landscape uses reclaimed water, and the remainder uses potable water. While using reclaimed water reduces the amount of freshwater needed, it cannot be used as "permission" for the campus to use as much water for irrigation as desired. Reclaimed water still has environmental costs due to the vast distances that water is conveyed from source to end user and the resources and energy are needed to support the reclamation and redistribution process.

Water use can be reduced both by reducing turf grass, and through updating the species planted in landscape areas to those with lower water needs. Landscape planting guidelines and supporting irrigation guidelines are included in this chapter.



Exhibit 5-3: Existing Campus Landscapes

IDENTITY AND WAYFINDING

On university campuses, it is common to use landscape materials--plants, paving and furnishings--to support visual identity and wayfinding. At the campus perimeter, the use of landscape materials can give visitors a clear sense of arrival, forming a first impression of what it means to visit, attend, and be a neighbor of the university. Within the campus, a landscape master plan should organize the use of these materials along major circulation routes and in destination areas to help provide users with visual cues to their location within campus and what it means to be there.

Existing landscape materials visible from the surrounding roads and neighborhoods consist mainly of Eucalyptus trees with an understory of turf grass, and vast open views of unshaded asphalt parking lots. The interior of campus has a similar collection of landscape materials, with little distinction between materials along major corridors, at destination areas, and elsewhere. This chapter provides guidelines for using landscape materials to enhance identity and wayfinding at the entrances to campus as well as the corridors and spaces within.

Lighting and signage are also important elements that guide wayfinding and provide a consistent identity; these planning elements constitute the next steps in implementing the 2018 Master Plan.



Exhibit 5-4: Existing Campus Landscapes

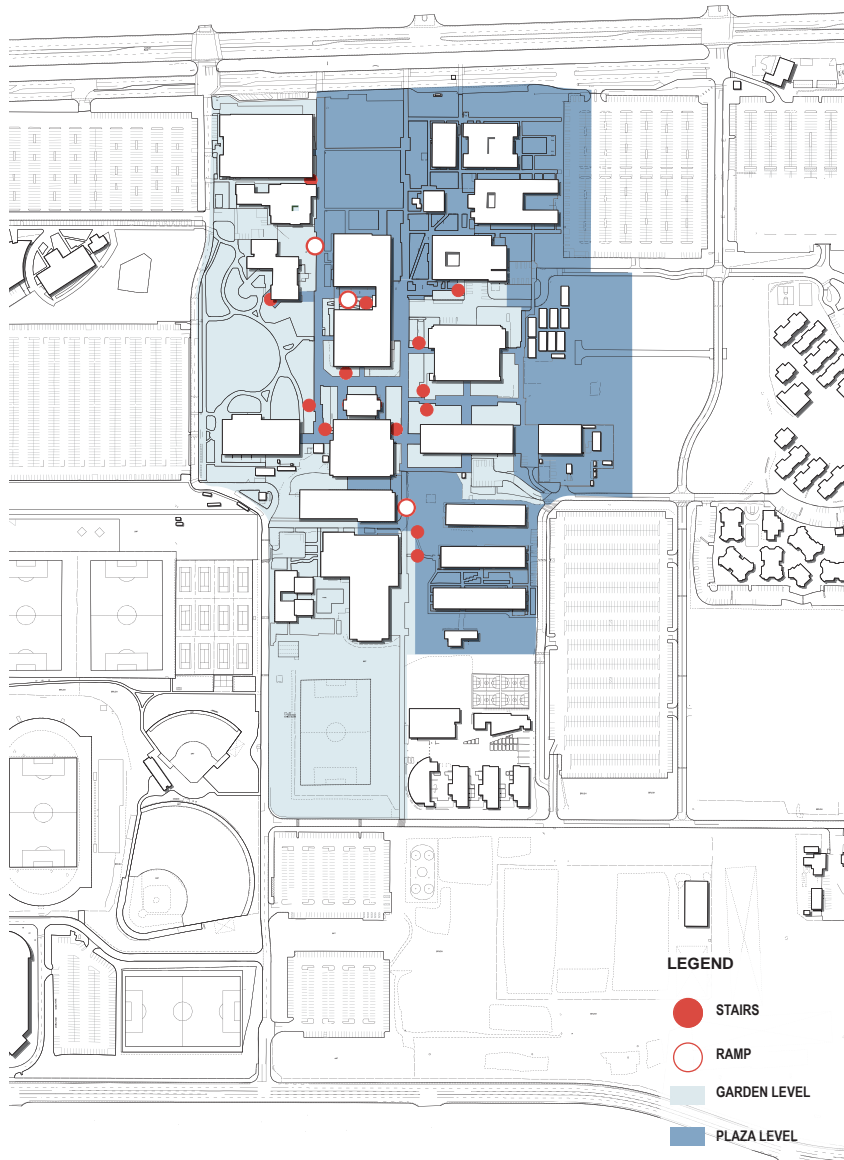


Exhibit 5-5: Existing Campus Connectivity

CONNECTIVITY

A main feature of the original A. Quincy Jones 1968 Master Plan was the use of multiple outdoor levels to define campus spaces. Today, the main elements of this strategy are evident in the central campus, as shown in Exhibit 5-5.

An important pedestrian route into the campus core is from the west, from Lots 3 and 6 and through the Sculpture Garden. The stair to the upper level is a narrow concrete stairway that is out of keeping with such an important campus gateway.

Loker Student Union Building, the Cain Library, the Social and Behavioral Sciences Building, the Natural Sciences and Math Building, and Lacorte Hall have their main entrances off the major pedestrian corridors on their upper floors, leading out to the upper campus level.

Around many of these buildings are sunken courtyards that A. Quincy Jones intended to be used for instructional and display purposes, and these are currently used as study space and direct access to lower-level classrooms. Although these lower-level courtyards are accessed in a variety of ways (exterior and interior staircases, exterior ramps, and interior elevators), it is not always readily apparent how to access the lower levels from the main, upper-level campus pathways. Exhibit 5-4 shows that most of the lower-level courtyards are not accessed directly from the main north-south pedestrian pathways, diminishing the legi-

bility of the pedestrian circulation system.

Further interrupting the visual and functional aspects of the lower-level courtyards are the metal pedestrian guardrails at the upper levels. The standard design of these guardrails includes a very thick top rail which obscures views into the courtyards (Exhibit 5-6). These visual and physical disconnects lead the lower-level courtyards to appear marginal and out-of-the-way. On-site observations and discussions with campus staff support the idea that these courtyards are underutilized. However, opportunities exist for using the courtyards as shaded and quiet outdoor spaces that could support adjacent classrooms and student groups.



Exhibit 5-6: Railings adjacent to Leo. F Cain Library, with view into lower level courtyard

5.2 LANDSCAPE MASTER PLAN

A NEW LANDSCAPE FRAMEWORK

Taking a cue from the original A. Quincy Jones Master Plan, the Landscape Master Plan also creates a holistic framework for the campus outdoor environment. It addresses the overall goals of the Master Plan while also addressing landscape-specific concerns identified during outreach, site visits, and background research. Landscape goals include:

- Increasing sustainability of the campus landscape
- Increasing plant biodiversity
- Developing a visual identity and wayfinding
- Improving connectivity of circulation modes

The 2018 Master Plan uses current CSU system and State of California sustainability requirements and goals to inform an approach to the use of plant materials that logically extends the earlier plan into the 21st Century and capitalizes on the broader and more diverse palette of plant species now available.

As shown in Exhibit 5-7, the Landscape Master Plan continues to highlight historic campus open space areas, retaining the North Lawn and the Sculpture Garden as signature campus gateways. The Plan retains the University's playfields for both intramural and intercollegiate athletics, and

adds a playfield for training and intramural sports to the east of the Gymnasium.

In keeping the previous discussion the Plan reduces the overall extent of turf grass areas campus-wide, while still providing for comfortable outdoor gathering spaces. This strategy cuts down significantly on water use in the landscape, while focusing lawn-based activities into key, high-visibility areas -- increasing sustainability and activating outdoor spaces at the same time.

A new approach to Landscape Zones is integrated with a system of Landscape Typologies and Campus Corridors so that campus edges, plazas, courtyards, quadrangles, field areas, and circulation routes are treated with consistent, climate-appropriate landscape palettes, creating greater coherence in the campus outdoor setting. These new palettes address sustainability goals by focusing on plant materials from similar climate zones worldwide; address biodiversity by providing over 250 species to work with; and address visual identity by grouping collections of species in prescribed zones. Details about the Landscape Zones, Landscape Typologies, and Campus Corridors are included below.

In order to increase resilience within the campus's well-established, but aging and somewhat homogeneous tree canopy, a strategy for increasing biodiversity is outlined. A gradual tree replacement and renewal strategy is included in this chapter.

The Plan retains a strong emphasis on

pedestrian circulation by reinforcing the existing north-south corridors and by strengthening the existing and new east-west corridors that will become more important as the University Village development progresses. Major pathways are lined with signature tree species, improving wayfinding and placemaking by lending their names to newly defined campus corridors. Also harkening back to the 1968 Master Plan, the new pedestrian circulation system includes improvements to campus connectivity by decreasing pedestrian-vehicular conflict areas; details of this plan are included in Chapter 4.

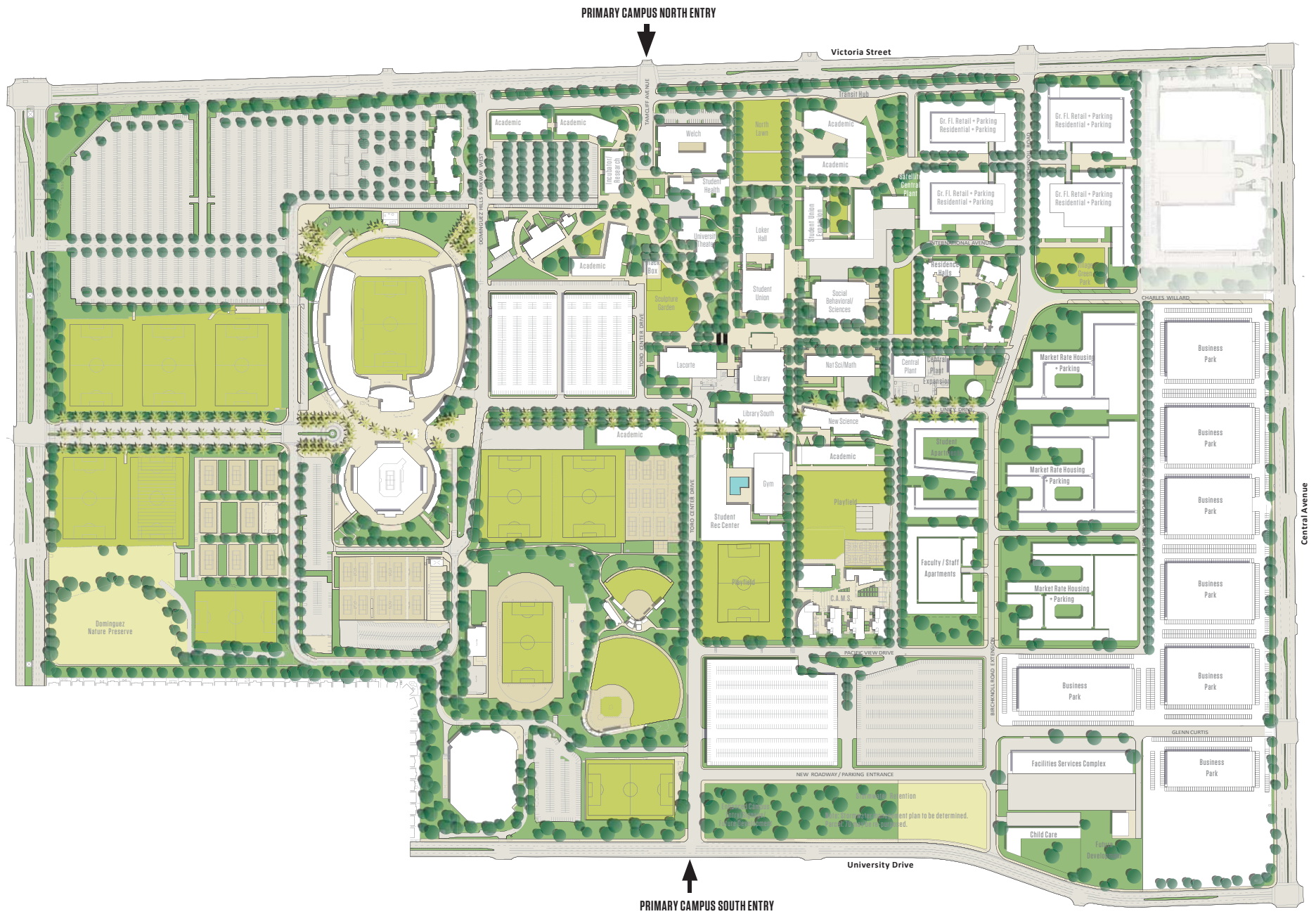


Exhibit 5-7: Illustrative Landscape Master Plan

LANDSCAPE TYPOLOGIES

In the Landscape Master Plan, campus outdoor spaces are classified within five main landscape typologies, or categories, based on their size and function: Campus Edge, Courtyards, Plazas, Quads, and Fields. A sixth typology is the pedestrian corridors, addressed later in this chapter. The typologies are illustrated in Exhibit 5-8 and described in greater detail regarding their plantings, paving and site furnishings in Exhibit 5-9 and additional text and illustrations below.

The Campus Edge typology along the perimeter streets and major vehicular gateways include the campus gateways at Tamcliff and Victoria Street, and Toro Center Drive at University Drive. Campus landscape along these major streets is also considered Campus Edge landscape.

Courtyards are relatively small spaces that are partially or fully enclosed by surrounding buildings. Existing courtyards include the areas within Loker Student Union, the space around the pool between the Gymnasium, and the new Student Rec Center, and the lower-level courtyards around existing academic buildings described above. New Courtyards are defined by new buildings.

Plazas are larger open spaces that are associated with the main entrances to buildings, and include the area west of the University Theater and spaces adjacent to some new buildings.

Quads are large, open areas are mostly

bounded by buildings, including the North Lawn and the Sculpture Garden and areas adjacent to some new buildings. Fields are large open areas used for formal and/or informal sports activities. Exhibit 5-9 provides a brief description of the proposed

character of each typology, as well as inspiration imagery. Exhibit 5-20 provides a table for selecting landscape materials for each typology.

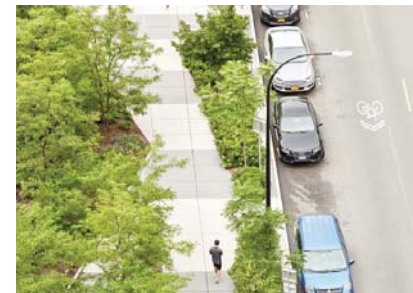


Exhibit 5-8: Proposal Landscape Typologies



[Courtyards]

- outdoor classrooms
- flexible spaces
- quiet areas
- better visual connections
- clustered seating



[Campus Edge]

- informal edges
- university colors
- species diversity
- signage for identity and wayfinding



[Plazas]

- gathering opportunities
- classroom transition areas
- campus activity opportunities



[Quads]

- shaded seating
- reduced turf
- bordered by trees
- natural oak mulch

Exhibit 5-9: Landscape Typologies: Examples and Guidelines

LANDSCAPE ZONES

The Landscape Master Plan guides future planting throughout the campus and responds to the need to increase campus biodiversity and identity by creating five Landscape Zone overlays. These zones are characterized by plant materials from Mediterranean climate zones from across the globe, including Southern California, mirroring and extending the possibilities for the CSUDH climate. Exhibit 5-10 shows how the campus is divided into seven Landscape Overlay Zones, and Exhibit 5-11 shows examples of trees, shrubs, perennials, grasses and ground covers recommended for each Zone. A full set of plant palettes showing form, characteristics, zone and culture needs are included at the end of this chapter.

The campus is divided into four zones that are ‘assigned’ to the southwest, southeast, northeast, and northwest campus areas. The plant choices illustrated in Exhibit 5-11 and in the plant palettes provide a very diverse plant palette for campus and subtly suggest connections between the CSUDH campus and its sister regions worldwide. Each zone is named for a specific global region where the climate is similar to that of Southern California, and the species in the corresponding palette come from that region.

The northwest zone is overlaid as the **Australia Zone**, playing off of the existing Eucalyptus trees in that area. The northeast portion of campus becomes the **Mediterra-**

nean Basin Zone. This designation was chosen to allow the use of olives throughout the new mixed use development increasing visual and bio-diversity using an appealing climate-appropriate tree species. The southeast and largest zone is named as the **California Zone**, but the species listed are more specific to Southern California. The presence of science classrooms in this zone, as well as existing native planting projects, lends this zone to native plant materials and the learning opportunities that go along with them. The southwest area, dominated by sports fields, is represented by the **South Africa/Chile Zone**. This palette allows for Chilean palms along the pedestrian corridor that connects to the StubHub Center and its palm-heavy planting scheme. These two climate-appropriate regions have comparatively few tree species, so the sports complex area with its large open fields is a good fit.

As the University Village Plan is realized, the two eastern Landscape Zones can be expanded as shown in Exhibit 5-10.

As can be seen by comparing Exhibits 5-8 and 5-10, the Landscape Zones and Typologies are integrated at the **Campus Edge Zone**, which includes the landscape areas directly off of Victoria Avenue and Avalon Boulevard, as well as a portion of the campus’s frontage on East University Drive. As shown in Exhibit 5-11, the plant materials suggested for the Campus Edge Zone draw from the University’s colors, burgundy and gold, creating a welcoming color palette that signifies one’s arrival at CSU Dominguez

Hills.

Guidelines for selecting which plants to specify in each zone are included in extensive tables included at the end of this chapter.

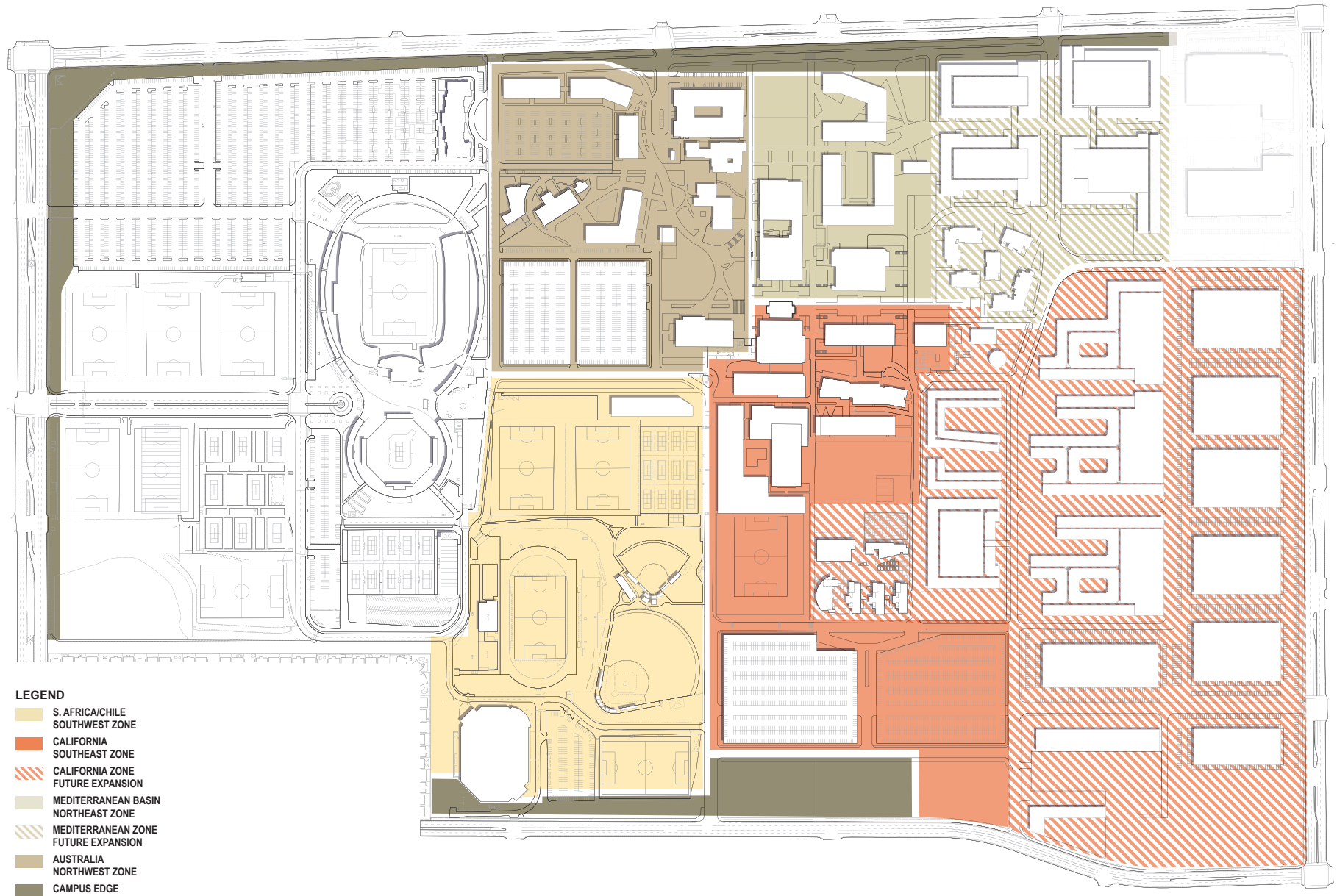


Exhibit 5-10: Landscape Overlay Zones

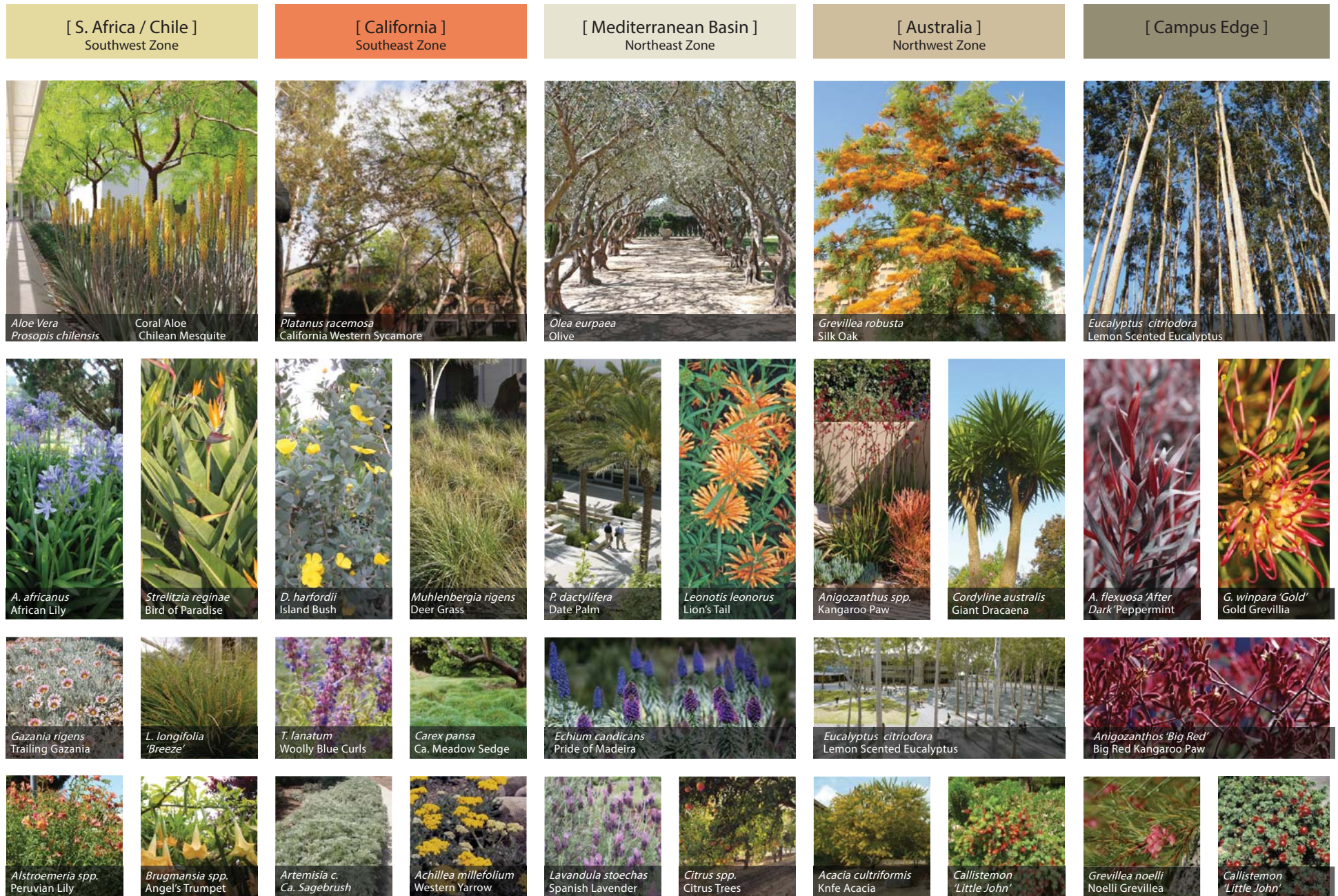


Exhibit 5-11: Landscape Zones Guidelines: Plant Palette

PEDESTRIAN CIRCULATION

The Landscape Master Plan supports the increased vehicle and pedestrian circulation loads that will be necessary to support the planned campus enrollment increase and the new University Village development.

Over time, many more people will park near the west and south entrances to campus, as new parking structures replace surface Lots 6 and 4a/4b and a new surface lot is built east of Structure 4a/4b. As shown in Exhibit 5-12, the improved pedestrian circulation system connects these expanded parking facilities directly to pedestrian pathways, quickly converting drivers into pedestrians and shortening the perceived distances to the campus core by adding interest through landscaped walkways and planting areas.

Also in support of pedestrian safety, a new Pedestrian Plaza south of the reconfigured Tamcliff entry and drop-off expands and connects the Sculpture Garden with the Grand Stair access to the upper campus. Removing automobile traffic from this area allows the green space of the Sculpture Garden to expand into the spaces around proposed new buildings to the west of the current Tamcliff Avenue alignment, directly linking the new campus expansion into the current campus core.

This new Pedestrian Plaza, although dedicated to Pedestrian use, will be sized and paved with materials that can support emergency vehicles. Proposed Grand

Stair to the northeast of Lacorte Hall can be accessed on foot from the proposed western expansions without ever crossing a street. As part of the Campus Corridors guidelines (see below), the new Pedestrian

Plaza reinforces campus identity by using plant materials with CSUDH's school colors: gold and burgundy.



Exhibit 5-12: Proposed Vehicle and Pedestrian Circulation Diagram

CAMPUS CONNECTIVITY

The Landscape Master Plan proposes a reorganization of stairs and ramps that connect the upper and lower outdoor levels of campus. Because the existing outdoor connections between levels are often hard to find and inconsistently located, this Plan proposes that future construction projects around the garden-level courtyards in the campus core relocate stairs so that they are prominently visible and easily accessed from a major north-south corridor. Exhibit 5-13 illustrates these proposed changes.

All outdoor access points would be located along Eucalyptus Lane, the Campus Mall, and Sycamore Lane. Refer to Exhibit 5-14 or a map of Campus Corridors.

An important access point between upper and lower campus levels is the Grand Stair, located at the Southeast corner of the Sculpture Garden. This is intended to replace the existing service stair in this location.

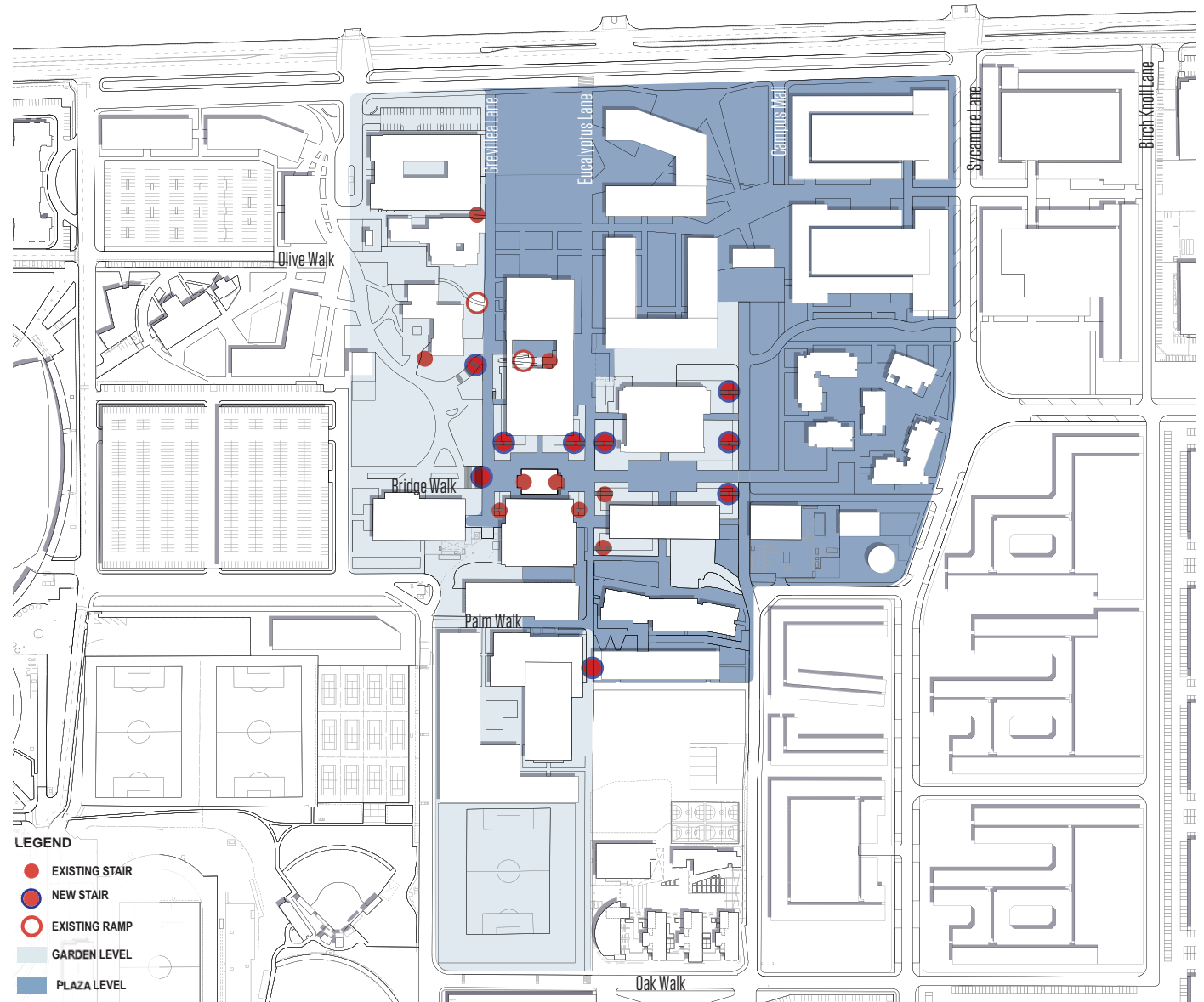


Exhibit 5-13: Proposed Campus Connectivity

CAMPUS CORRIDORS

In addition to the new Landscape Zones, the Landscape Master Plan identifies eight important campus corridors and assigns names to each, based, for the most part, on the tree species recommended to border each walkway. This aspect of the Landscape Master Plan both enhances campus aesthetics and helps with wayfinding by giving each corridor a visual identity. Exhibit 5-14 illustrates this new system of named corridors; the recommended tree species are illustrated in Exhibit 5-15 and 5-15a. The paving materials shown in the Campus Corridors Guidelines (Exhibit 5-15) were selected to extend existing paving materials, suggest new materials to further enhance tree selection for the new corridors and reinforce the visual identity of each.

The existing East Walk is renamed **Campus Mall** to reflect its importance as the main north-south pathway through the campus. The other north-south corridors are named as “Lanes,” while the east-west corridors are named as “Walks.” The campus’s signage plan should incorporate and emphasize the naming of these corridors.

Campus Corridors are integrated with the Landscape Zones described in the previous section. When there is an overlap of guidelines, tree species from the corridor guidelines should be used.

The **North Lawn** forms the most visual campus identity moment as a view corridor from Victoria Street into the Campus Core,

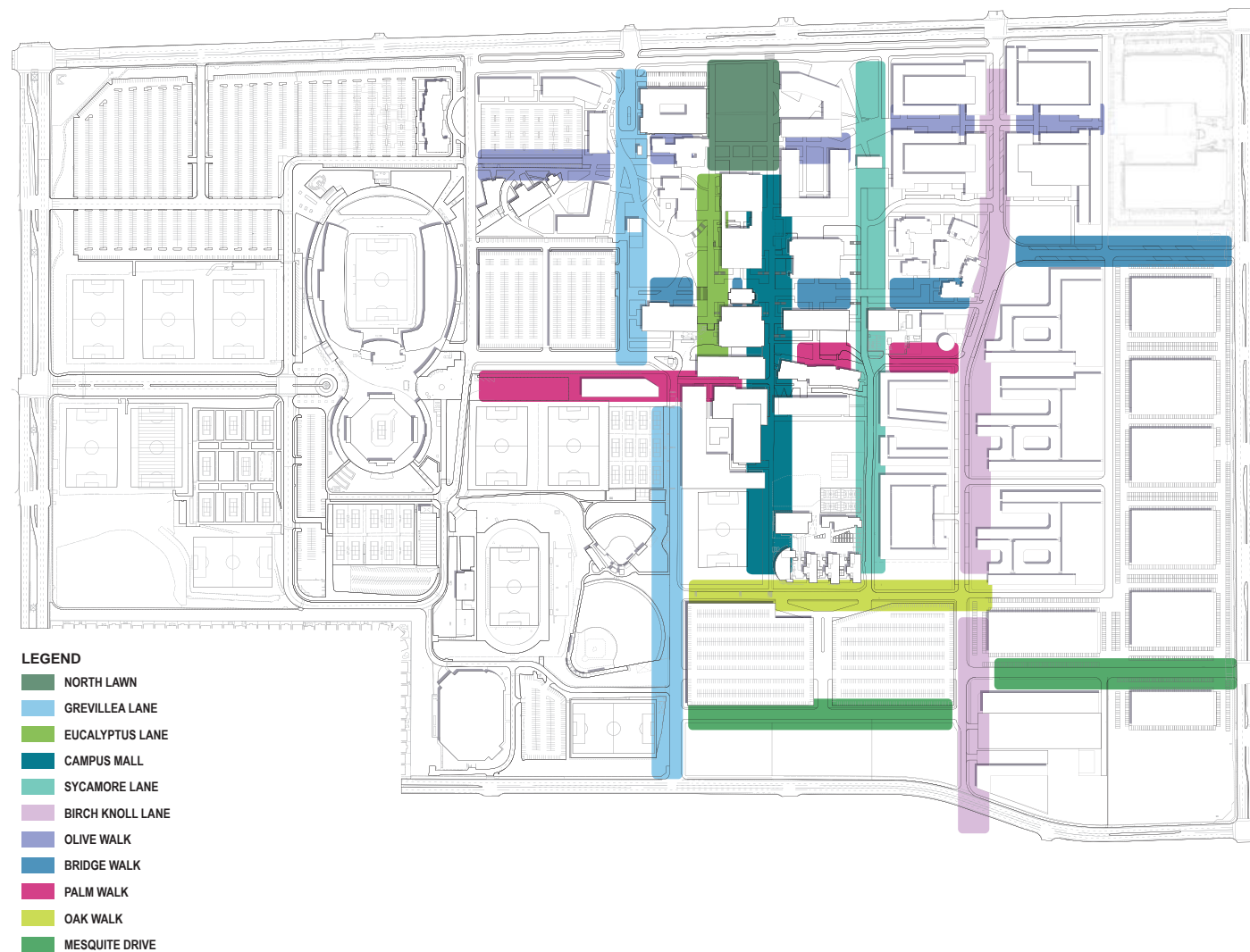


Exhibit 5-14: Proposed Campus Corridors Overlay

with the Loker Student Union building as the terminus. Through the addition of formal *Jacaranda mimosifolia* tree plantings, the North Lawn will become a signature photo opportunity for visitors and students. The Jacaranda's colorful early summer bloom perfectly coincides with graduation ceremonies.

Grevillea Lane, running north-south, connects the Tamcliff campus entry with the new Pedestrian Plaza entering the campus from Lots 3 and 6 crossing Olive Walk and Palm Walk. Grevillea Lane overlaps with the Campus Edge and Australian Landscape Zones. The recommended tree species, *Grevillea robusta* (Silk Oak), is an Australian species with golden/orange flowers, and thus fits both these zones due to its origin and color.

Eucalyptus Lane (formerly West Walkway) is named for the existing grove of Eucalyptus in the adjacent Sculpture Garden; and skirts the Sculpture Garden to its east, on the upper level of the campus. The recommended Eucalyptus species is known as Lemon-Scented Gum.

The **Campus Mall** (formerly East Walkway) already functions as the main axis of student activity between classes, and is commemorated as such through its naming convention. The existing use of Coral Trees (*Erythrina*) along this corridor is continued.

Sycamore Lane runs north-south and defines the adjacency between the core campus and University Village, extending

from the campus 'front door' on Victoria Street, past the new Residence Halls, continuing south to Unity Drive. Sycamore Lane traverses the Southern California Landscape Zone, a region where Western Sycamore naturally grows in the wild.

Birchknoll Lane is named for the existing north-south roadway that runs through University Village; the European White Birch Cultivar has been assigned as the street tree species for this roadway, which is flanked by sidewalks and bicycle routes.

Olive Walk runs east-west and connects the new mixed-use portion of the University Village with the North Lawn quad and Lot 3. Olive Walk overlaps with the Mediterranean Basin Landscape Zone from which *Olea Europea* originates.

Bridge Walk is named for the existing architecture of the corridor. It spans the historic center of campus at an upper level, looking down into the adjacent sunken courtyards, giving the feeling of walking on a bridge. It provides a metaphorical bridge between new student housing and the historic core. Bridge Walk navigates through a largely architectural portion of campus, with little adjacent landscape area, nor room for attaching a new tree species identity to the naming convention. Through the center of the route, existing adjacent trees have their base at the level of the sunken courtyards below the walk, allowing one to walk through the canopy or understory, as if on a bridge through the forest. Guidelines for tree species and landscape materials

assigned to each corridor can be found in the plant species tables at the end of this chapter.

The trees planted along **Palm Walk** are intended to create a defined pedestrian corridor between the east and west sides of the campus and connect the campus core to the StubHub Center. The use of Chilean Palms in this corridor reflects the Chilean/South African Landscape Zone, and takes cues from the existing planting at the StubHub Center. Between the Educational Resource Center and the StubHub Center, Palms can be interspersed with the existing allée of Ficus trees to preserve their existing canopy and its associated benefits.

Oak Walk, running east-west along the north edge of the new 4a/4b Parking Structure and surface parking lot on Pacific View Drive, doubles as a major pedestrian collector as commuter students transition from vehicle to foot. This corridor falls entirely with the Southern California zone, and is characterized by one of the signature native oak species.

Mesquite Drive is a primarily vehicular route connecting the new southern parking complex to Central Avenue, and the Facilities Services Complex. The western end of the corridor connects to the South Africa/Chile zone, influencing the selection of Chilean Mesquite as the signature tree.

North Lawn

Trees:
Jacaranda

Paving:
Seeded Aggregate Concrete
Natural Color
Sawcut Joints

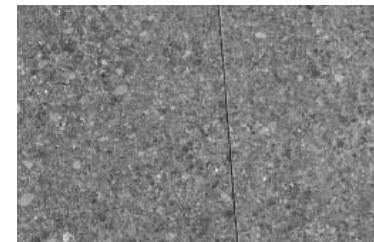


Exhibit 5-15: Campus Corridors Guidelines
(Refer also to Exhibit 5-14)

Grevillea Lane

Trees:
Silk Oak

Paving:
Natural Concrete with Topcast Finish



Eucalyptus Lane

Trees:
Lemon-Scented Gum

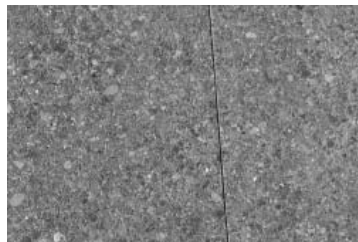
Paving:
Natural Concrete with Topcast Finish



Campus Mall

Trees:
Coral Trees

Paving:
Seeded Aggregate Concrete
Natural Color
Sawcut Joints



Sycamore Lane

Trees:
Western Sycamore

Paving:
Natural Concrete with Sandblasted
Leaf Pattern and Decomposed
Granite



Birch Knoll Lane

Planting:
European White Birch
Ornamental Grasses

Paving:
Natural Concrete with Topcast Finish



Exhibit 5-15 (Continued): Campus Corridors Guidelines
(Refer also to Exhibit 5-14)



Olive Walk

Trees:
Olive Trees

Paving:
Natural Concrete with Topcast Finish
Tight Score Pattern Decomposed
Granite



Palm Walk

Trees:
Chilean Palm Trees
Existing Ficus Trees

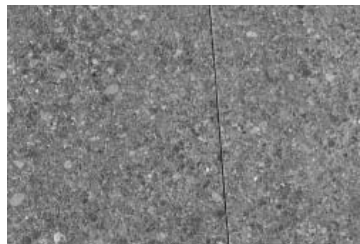
Paving:
Natural Concrete with Topcast Finish



Bridge Walk

Trees:
Lemon Scented Gum Existing Trees

Paving:
Integral Color Concrete - Dark Gray
Topcast Finish



Oak Walk

Trees:
Quercus engelmannii

Paving:
Natural Concrete with Topcast Finish



Mesquite Drive

Planting:
Chilean Mesquite

Paving:
Natural Concrete with Topcast Finish

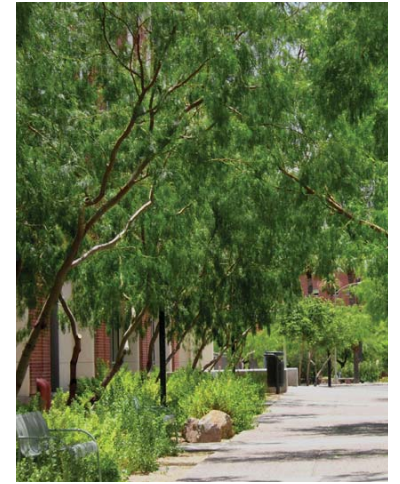


Exhibit 5-15a: Campus Corridors Guidelines Continued

ECOLOGICAL RESOURCES

The faculty and student body of CSU Dominguez Hills have a history of engaging with their local landscapes. Since its founding, the developed footprint of the University has taken up a relatively small percentage of the campus, leaving large swaths of open space. The one-acre Heritage Creek Preserve at the southern end of Parking Lot 7 is the remnant portion of an old nature preserve that previously served biology and ecology students, although it has now been graded and replanted. The Dominguez Nature Reserve was established in the southwest corner of campus around 1974. The Earth Science Club established the small Native Plant Demonstration Garden just east of the Natural Sciences and Mathematics Building, with the intent of providing habitat for migrating monarch butterflies. A proposed student community garden could be incorporated on campus with further discussion and planning. More discussion on this concept is included in Chapter 6.

This Landscape Master Plan proposes a system of Pollinator Pathways (Exhibit 5-16) to connect these patches of habitat, garden or farm with contiguous landscape areas that would include a high density of species that support butterflies, bees and other pollinators. This Pathway network would benefit the individual ecological resource areas and the overall ecological health of campus. Species listed in the “Pollinator” column in

the Landscape Zone Guidelines at the end of the chapter show how the Pollinator landscape can be implemented.

A proposed student community garden could be incorporated on campus with further discussion and planning.

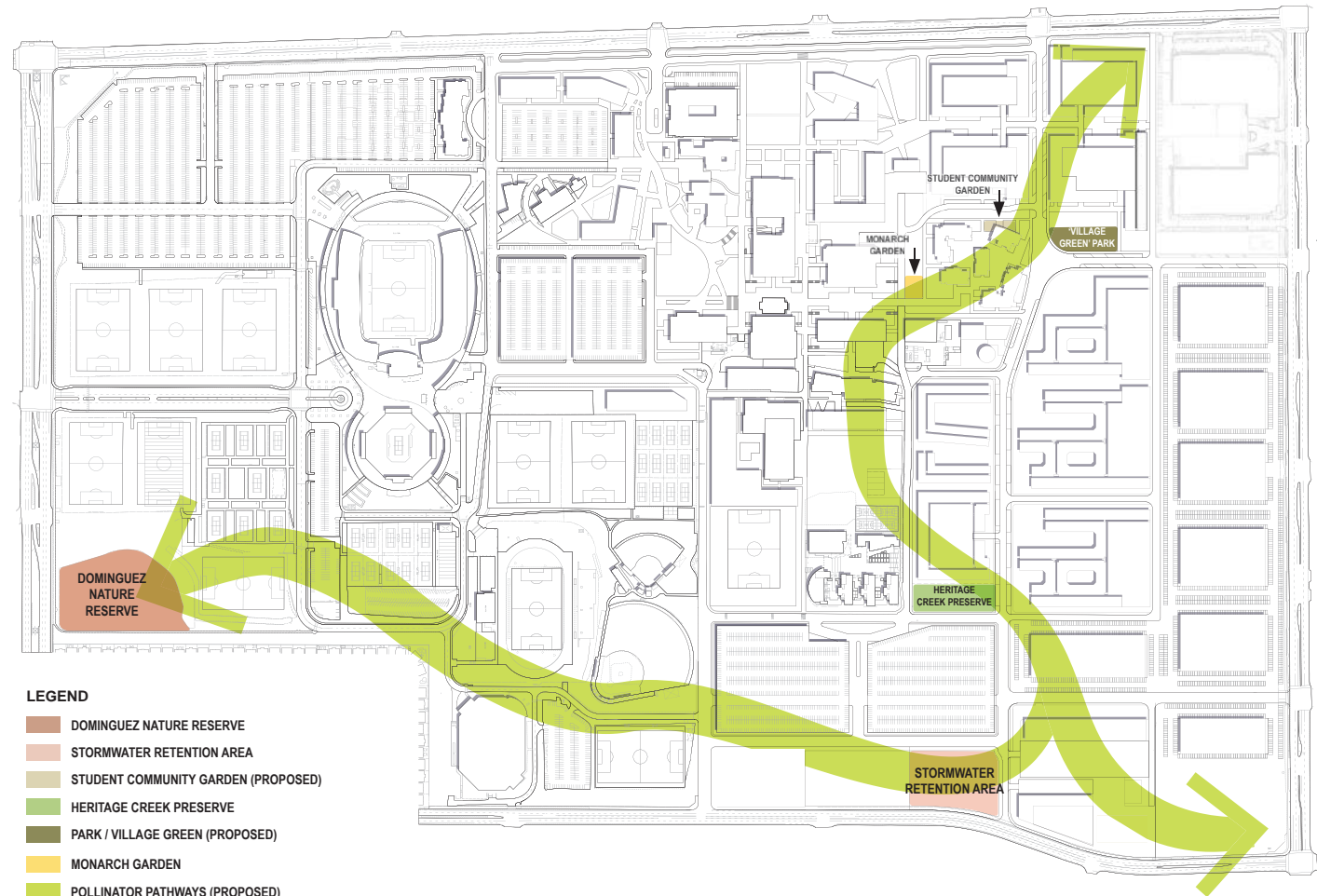


Exhibit 5-16: Pollinator Pathways

TREE SPECIES REPLACEMENT & RENEWAL

As previously discussed, there are problems posed by the predominant campus tree canopy, largely made up of *Eucalyptus citriodora*. The Landscape Master Plan recommends the gradual proactive replacement of these species within the campus core. This replacement and renewal strategy increases biodiversity of the campus tree canopy, thus increasing its overall resilience in the face of disease, infestation, pollution, and climate change.

The Landscape Master Plan recommends that 5% of *E. Citriodora* within the campus core be removed and replaced each year. However a campus-wide tree survey should be conducted by a certified arborist to evaluate all trees for health and structure and make recommendations for their disposition. The arborist report should be used as a reference for selecting which trees to prioritize for removal beginning with those having the lowest health rating. Replacement species should be chosen from the applicable Campus Corridor guidelines (Exhibit 5-15 and Exhibit 5-15a) the Landscape Zones Guidelines: Plant Palette (Exhibit 5-11) and the Pollinator Pathways overlay. A full list of recommended tree, shrub and ground cover species is included at the end of this chapter.



LEGEND

- CORAL TREES
- EUCALYPTUS TREES
- OTHER TREES

Exhibit 5-17: Existing Tree Canopy



LEGEND

THE ENDURING GOAL OF THE REPLACEMENT AND RENEWAL STRATEGY IS BIODIVERSITY. NEW SPECIES INCLUDE: OAKS, GREVILLEAS, ACACIAS, WINE PALMS, SYCAMORES, OLIVES, AND MANY MORE. PLANT PALETTE CHARTS (SECTION 5.3) AND LANDSCAPE FRAMEWORK ZONE (SECTION 5.2) SHOULD BE CONSULTED FOR GUIDANCE WHEN REPLACING TREES OR PLANTING NEW TREES.

Exhibit 5-18: Proposed Tree Canopy Biodiversity Strategy

LANDSCAPE IRRIGATION SYSTEMS

The campus currently uses reclaimed water (delivered from the nearby Joint Water Pollution Control Plant) to irrigate a significant portion of campus landscape areas. This system was last upgraded in 2005. A new meter and mainline should be installed along Birchknoll Drive to expand the campus's capability to distribute reclaimed water to new developments in both the core campus and the University Village area, and to monitor its use.

Reclaimed water can have a range of characteristics depending on the source, and these characteristics can have varied adverse effects on plant material. High salinity is a common characteristic of reclaimed water in Southern California. The campus is aware of the properties of its reclaimed water supply and plant species should be chosen accordingly.

New landscape areas and upgrades to existing irrigation systems should use drip irrigation, except in sports fields and turf grass areas (existing and new quads, and the Sculpture Garden), where overhead sprays are recommended. The current campus irrigation equipment standards should be evaluated for possible upgrade to the most efficient and sustainable products now available. New irrigation installations should follow the latest campus standards. New landscape areas and upgrades to existing irrigation systems should use drip irrigation for distribution, except in sports fields and turf grass areas (existing and new quads,

and the Sculpture Garden), where overhead rotary sprays are recommended in tight corners or narrow strips of turf, and rotors are recommended for large unobstructed swathes.

The campus currently uses CalSense as its

central irrigation control system, which maximizes irrigation efficiency.

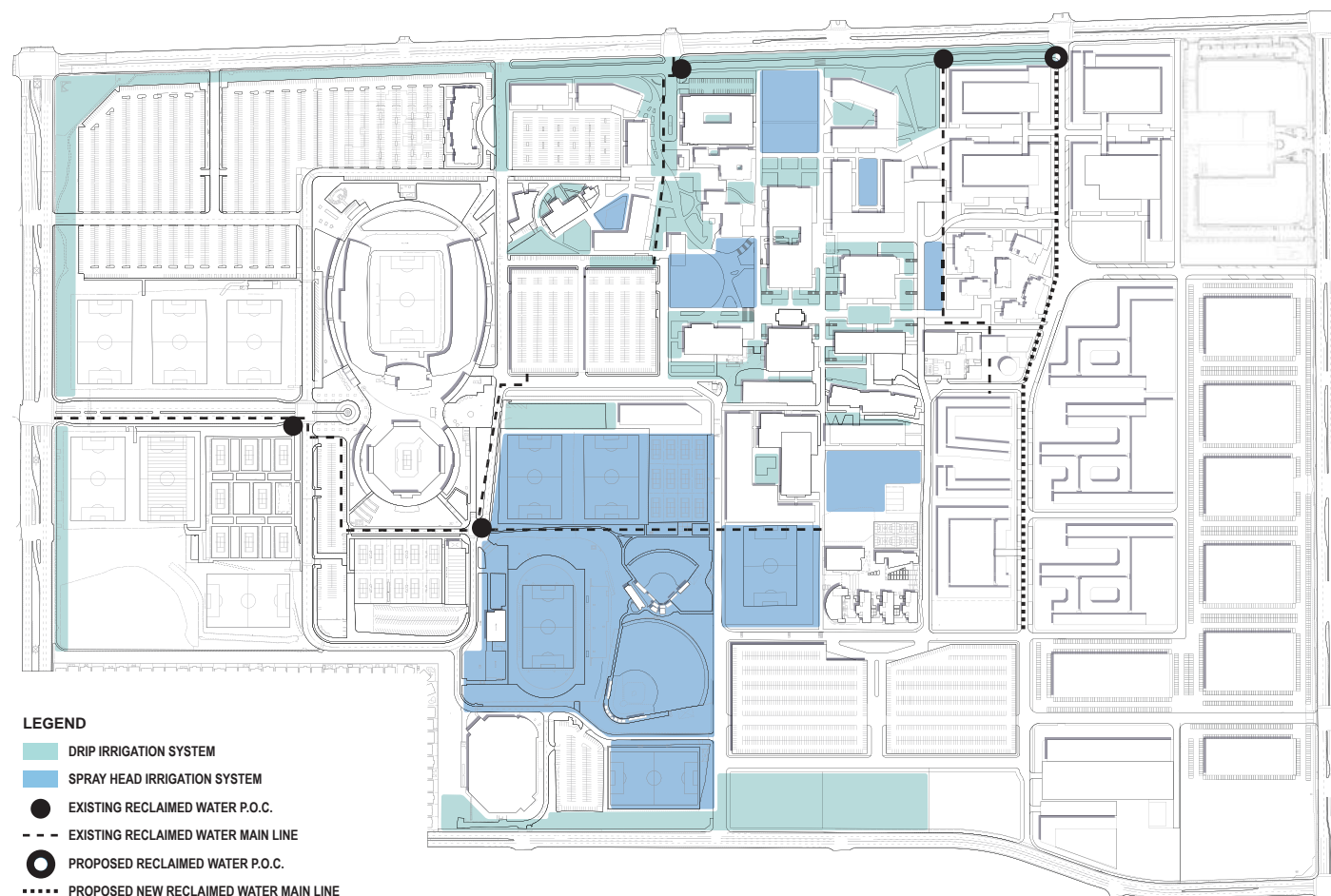


Exhibit 5-19: Irrigation Diagram - Existing and Proposed

5.3 LANDSCAPE MASTER PLAN NOTES AND DESIGN GUIDELINES

LANDSCAPE DESIGN GUIDELINES

How To Use

This section provides details to support implementation of the Landscape Master Plan. Multiple spatial overlays are proposed by the Landscape Master Plan, and some of these overlap one another. Plant species and materials selections for future landscape projects should follow this hierarchy:

1. Determine if the project includes outdoor spaces that fall within a Campus Corridor.
 - Refer to 5-14 for Campus Corridor overlays.
 - Refer to Exhibit 5-15, 5-15a and the Plant Palettes for guidelines for selecting tree species and hardscape materials.
 - Tree species along the corridor prescribed by the corridor guidelines take precedence over all other landscape guidelines.
 - Hardscape materials along the corridor prescribed by the corridor guidelines take precedence over all other landscape guidelines.
2. Determine which Landscape Zone(s) the project falls within.
 - Refer to Exhibit 5-10 for Landscape Zone overlays.
 - Refer to Exhibit 5-11 and the Plant

Palettes for selecting plant species.

3. Determine if the project falls within a Pollinator Pathway overlay
 - Refer to Exhibit 5-16 for Pollinator Pathway overlays.
 - Refer to the Plant Palettes for selecting plant species appropriate for Pollinator Pathways as well as the relevant Landscape Zone(s).
4. Determine which Landscape Typologies are applicable.
 - Refer to Exhibit 5-9 for descriptions of different Landscape Typologies.
 - Refer to Exhibit 5-20 for recommendations for programming outdoor spaces, character of landscape design, selection of paving materials, and furniture selections.

CAMPUS CORRIDOR GUIDELINES

Exhibit 5-14 shows a map of the Campus Corridors that may apply to the location of a specific project. Exhibits 5-15 and 5-15a table illustrates the tree species and materials being recommended for Campus Corridors.

New landscape projects that fall within or along a Campus Corridor should install the suggested tree species and landscape materials appropriate for that Corridor using the following guidelines:

- Corridor identity trees should be installed in a linear pattern paralleling the direction of the corridor's orientation.
- Spacing of trees should be consistent throughout the length of the corridor wherever possible, and should be separated by a consistent distance. The

distance between trees should be no less than 75% of the trees' estimated canopy spread at maturity, and no more than 100% of the canopy spread at maturity.

- Score patterns should align between all segments of the corridor. Where tree wells or grates are used in paved areas, paving score patterns should align with the edges of wells or grates.
- The campus signage program should be used to support the proposed naming of the campus corridors to increase ease of wayfinding and campus identity.

LANDSCAPE TYPOLOGIES GUIDELINES

Exhibit 5-20 provides a visual reference and guidelines for designing and programming various outdoor spaces on campus, using the five Landscape Typologies as a guide. Each typology has different spatial characteristics, suggesting a particular use and design strategy. These guidelines are meant as a starting point for considering spatial layout, character, and landscape materials.

PLANT PALETTES

The Plant Palettes in Appendix A will provide guidance for selection of plant species for newly landscaped areas and replacement/renewal.

In these tables, species are listed alphabetically, and can be selected for form, habitat and pollinator potential, California native status, flower color, drought tolerance, and general care instructions.

Material	Campus Edge	Courtyard	Plazas	Quads	Fields	Color	Finish
Paving							
Decomposed Granite						Southwest Gold	Stabilized
Natural Concrete						-	Topcast 15
Integral Colored Concrete						Dark Gray	Light Sandblast
*Permeable Pavers						Regimental Full Range	Herringbone Pattern
Furniture							
Movable Chairs							
Bench							
Trash Receptacle							
Bike Rack							
Tree Grate							
Drinking Fountain							
Planting							
Ornamental Grasses							
Screening Shrubs							
Lawn							
Flowering Trees							
Tall Broad or Large Spreading Trees							
Pollinator Plants							
Oak Mulch							

Exhibit 5-20: Landscape Typologies Implementation Guidelines Table

SUSTAINABILITY GUIDELINES



Chapter 6: Sustainability Guidelines

The 2018 Master Plan is an opportunity for CSUDH to implement and further develop its sustainability policies and practices within the contexts of both the physical campus and the University's academic program. The Sustainability guidelines build on work previously achieved and programs already in place and sets forth a series of practical ways that campus programs and physical infrastructure can continue to move the campus and all its users further toward environmental sustainability in all of its manifestations. The Sustainability Guidelines focus on campus physical facilities but also address other campus sustainability initiatives, including those related to academic programs.



CSU SYSTEM SUSTAINABILITY POLICY AND GOALS
ACADEMIC PROGRAMS AND INSTITUTES
Integrate sustainability into the curriculum
CLIMATE ACTION PLAN
Reduce GHG emissions to 1990 levels by 2020 and 80% below 1990 levels by 2040
Promote alternative transportation on campus
Take climate change into account in project planning and scoping
RENEWABLE GENERATION AND ENERGY DEPENDENCE
Increase on-site self-generation capacity to 80MW
Procure more than 1/3 of electricity purchased from renewable sources
ENERGY CONSERVATION AND UTILITY MANAGEMENT
Identify and implement energy efficiency measures to reach GHG reduction goals
Require metering and meter data reporting
WATER CONSERVATION
20% reduction by 2020
WASTE MANAGEMENT
Reduce solid waste disposal by 80% by 2020
SUSTAINABLE BUILDING PRACTICE
Build to LEED Silver equivalent, strive for Gold or Platinum
Consider energy use and life cycle cost in construction or renovation of any building
SUSTAINABLE PROCUREMENT
Promote use of environmentally-friendly business
Work with vendors to reduce waste from packaging
SUSTAINABLE FOOD SERVICE
Purchase 20% sustainable food by 2020

Exhibit 6-1: CSU System Sustainability Policy and Goals

DEFINING SUSTAINABILITY

One definition of sustainability being used on many university campuses is highly appropriate for institutions of higher education:

The simultaneous pursuit of human health and happiness, environmental quality, and economic well-being for current and future generations. Education for sustainability is a lifelong learning process that leads to an informed and involved citizenry having the creative problem-solving skills, scientific and social literacy, and commitment to engage in responsible individual and cooperative actions to support strong communities.

6.1 SUSTAINABILITY POLICY

CSU PROPOSED SUSTAINABILITY POLICY

The California State University System spans 23 campuses across the state and has an annual operating budget of over \$5 billion. The CSU system has identified sustainability as a system-wide priority, as detailed in the CSU Sustainability Policy, updated in 2014. The Policy focuses mainly on energy and emissions and largely aligns with the State of California energy and emissions goals. The policy also includes goals for water, waste, green building, and procurement.

In 2016, CSU issued an updated summary which re-affirmed many of its goals and added requirements for metering and for resilience to climate impacts (See Exhibit 6-1).

The campuses have been asked to develop strategic energy plans coupled with sustainability action plans that will become the road-maps for reaching system-wide sustainability, energy efficiency and climate change goals. In an effort to support all 23 campuses in their individual sustainability initiatives and create clarity and reporting for system-wide goals, the Office of the Chancellor has adopted a comprehensive policy that addresses multiple areas of sustain-

ability for each CSU campus to achieve. Policy and goals address climate action plan, sustainable food service, energy independence goals, renewable energy procurement, energy conservation and utility management, water conservation, waste management, sustainable building practices, physical plant management, transportation demand management, and environmental health and safety.

6.2 SUSTAINABILITY AT CSUDH

CSU Dominguez Hills has begun to implement many of the CSU System Sustainability Policy recommendations but specific strategies and implementation programs have not yet been formalized. Many of CSUDH's accomplishments can be found in the 2014 CSU Sustainability Report and on the CSUDH Website.

CSUDH has an opportunity to become leaders in sustainability in the South Bay region by demonstrating sustainability initiatives and formal commitments. An important step toward this goal is to integrate sustainability into academic programs and student life. CSUDH offers degrees in Earth Science, Environmental Science, and Ecology and Environmental Biology. CSUDH's intent is to create and fund a position of Sustainability Coordinator/Assistant Energy Analyst in 2017. This action would also facilitate the creation of a Campus Sustainability Committee tasked with integrating sustainability planning across all activities of CSUDH.

The Master Plan Sustainability Vision for the future CSU Dominguez Hills campus reflects a flexible framework for future development that can inform capital investment decisions as opportunities arise and priorities evolve. Resiliency to climate change utilizing natural solutions are a priority but all projects and decisions should use Life-Cycle cost

accounting to evaluate and compare infrastructure investments and alternatives.

GREEN BUILDINGS

Green Building rating systems and frameworks offer a clear process by which sustainability goals can be managed, measured and implemented. Leadership in Energy and Environmental Design (LEED) is the most widely recognized green building certification program. Developed by the U.S. Green Building Council, LEED offers third party validation of a project's green features. The CSU has adopted the LEED rating system as a guideline and metric for demonstrating responsible development, requiring LEED Silver equivalence on all new buildings. Actual certification through the Green Building Certification Institute (GBCI) is encouraged.

CSUDH aspires to full certification at the LEED Gold and Platinum levels as a way of promoting innovation and continual improvement, and as a means of tracking how individual projects are contributing to campus-wide sustainability goals.

CLIMATE ACTION PLAN

The Second Nature Climate Commitment (<http://reporting.secondnature.org/home/>) integrates carbon neutrality with climate resilience and provides a systems approach to mitigating and adapting to

a changing climate. Fourteen of the CSU campuses have signed the Commitment and have completed Climate Action Plans (CAPs) that address the following areas:

- Energy
- Water
- Transportation
- Waste
- Procurement
- Food
- People
- Communications
- Prosperity

This Commitment requires signatories to develop a climate action plan to achieve carbon neutrality by an established date. CSU Dominguez Hills has not yet signed this commitment.

CSU Dominguez Hills is developing a Climate Action Plan as a road-map to achieving this goal by 2050 to serve the anticipated Master Plan enrollment capacity of 20,000 FTES and associated faculty/staff. For purposes of the 2018 Master Plan, background information and metrics commonly found in a CAP have been used as reference points for establishing CSUDH sustainability goals and strategies. These include:

- Infrastructure that moves the campus toward Zero-Net Energy;
- Annual energy-use-per-square-foot performance targets for common campus building types;
- Reduced use of water sources that have energy-intensive content related to treat-

ment and conveyance;

- Mixed-use and transportation-oriented development which reduces single-occupant vehicle trips and creates a more vibrant, walkable community;
- Creating policies and education to move the campus towards net zero waste; and
- Creating a Healthy and Equitable campus environment for all its occupants.

These “Flagship” strategies are recommended as ways of meeting the current CSU goals and accounting for future requirements and environmental constraints.

RESILIENCY TO CLIMATE CHANGE

Climate change has the potential to affect nearly all aspects of community function. The State of California has developed the California Adaptation Planning Guide (APG) in an effort to provide guidance and support to communities in addressing the consequences of climate change. California Senate Bill SB 379 also provides a framework for Climate Adaptation and Resiliency Strategies. CSUDH should prepare a vulnerability assessment that identifies the risks climate change poses to the campus and create a set of adaptation and resilience goals, policies, and objectives to implement. Examples of implementation measures could include:

- Identify natural infrastructure approaches to building resilience (e.g., urban tree planting, protection and restoration of habitat).

- Enroll in or internally adopt Demand Response energy shedding programs.
- Develop a heat response plan for extended heat waves.
- Develop early warning systems.
- Assess social and economic and equity vulnerabilities within the community focus intervention programs for those vulnerable.
- Refine emergency preparedness and response to address health impacts.

LIVING BUILDING CHALLENGE

The Living Community Challenge (LCC), a new framework evolving from the Living Building Challenge (LBC), envisions whole communities that are designed and constructed to act like a natural ecosystem. A Living Community is resilient and regenerative within the resources of its boundaries; is informed by and adapts to its bioregion’s characteristics; and operates at carbon, energy, and water neutrality. Living Communities can be a college campus or a city block that shares resources among buildings, promotes healthy and equitable functions for its members, and functions without a dependency on fossil fuel-based energy or transportation. The Living Community Challenge calls for a new era of community building and a new vision of urban design. It establishes the framework, standards, and results for what a Living Community should be and how it should perform.

The framework has seven categories (Pet-

ENERGY STRATEGIES AND TECHNOLOGIES TO ACHIEVE CARBON NEUTRALITY GOALS
Sub-meter new and existing buildings and equipment as part of improvements to connect and manage campus energy through an Energy Information System.
Battery storage for peak shaving and energy resiliency
Meter building level electricity and gas
Energy/ Water/ Waste dashboards in all buildings
Solar thermal systems for housing
Thermal Energy Storage (TES)
Photovoltaic Powered DC outdoor lighting
High-efficiency building envelopes and better use of natural lighting and ventilation
Indoor lighting upgrades for existing buildings
Improved HVAC controls (heating, ventilation, and air conditioning)
Solar PV installations through Public-Private Partnerships
Biofuel generator

Exhibit 6-2: Energy Strategies and Technologies

ENERGY USE INTENSITY: TYPICAL CAMPUS FACILITIES					
COMMON BUILDING TYPES		ESTIMATED ENERGY USE INTENSITY (EUI) ¹			
BUILDING TYPE	TYPICAL USES AND BUILDING SYSTEM COMPLEXITIES	US AVERAGE ²	BASELINE ³ ESTIMATE EUI FOR CSUDH	EUI TARGET, ZNE EXISTING BUILDINGS	EUI TARGET, ZNE NEW BUILDINGS
Offices / Classrooms	Academic, Administrative, Non-Complex Building Systems	90	59	33	22
Residences	Housing, Dormitories, Apartments, Non-Complex Building Systems	58	53	27	17
Food / Gathering	Cafeterias, Theaters, Sports Arenas, Semi-Complex Building Systems	302	182	100	91

Exhibit 6-3: Estimated Energy Use Intensity (EUI) measured in kBtu/square foot/year for typical campus facilities

als) comprised of 20 prerequisites (Imperatives). All imperatives must be achieved to become a Living Community, although Petal Certification may be earned as individual Petal performance is achieved. The seven categories are:

- Place
- Water
- Energy
- Health & Happiness
- Materials
- Equity
- Beauty & Spirit

The targets established by CSU and the goals described in the Dominguez Hills Master Plan align well with the categories and requirements of the LCC. The Carbon Action Plan, building performance targets, and renewable energy projects that are in place or being planned for are all key strategies to balance the campus's energy consumption and eventually eliminate dependency on fossil fuels. Attention towards water and waste management on campus via programs that address efficiency, recycling, and reuse will help

to further shrink the campus's footprint. Additionally, focusing on human-scaled and human-powered operations on campus as related to transportation, landscaping, agriculture, and art will enhance the user experience and promote a thriving and productive community.

1. Because buildings typically consume electric energy (measured in kWh) and natural gas or combustion energy (measured in kBtu) the two measures are statistically normalized and combined into a single metric called a Site EUI, measured in kBtu/square foot/year.

2. US Average adapted from AIA 2030 Commitment Set Use Types.

3. Baseline Estimate adapted from Benchmark-based Whole Building Energy Performance Targets for UC Buildings March 2014



Exhibit 6-4: Example of a chilled water storage facility



Exhibit 6-5: Example of battery storage



Exhibit 6-6: Example of photovoltaic panels shading a parking lot

6.3 ENERGY

The 2018 Master Plan strives to reduce demand for energy through efficient design and technologies while developing campus energy supply and distribution systems that enable the campus to meet its renewable energy and carbon neutrality goals as enrollment growth and total campus building areas increase.

If the campus seeks to meet the Carbon Neutrality goal by 2040, given the significant growth that is expected, the precise strategies, phasing approaches and technology selections will need to be evaluated in greater depth. To be the most cost effective, a Strategic Energy Plan should be developed to align growth, phasing, and infrastructure investment. Other CSU campuses including CSUN, CSU Long Beach, and CSU Monterey Bay have developed Strategic Energy Plans to comprehensively plan for energy use reduction over the long term development and operation of the campus; these sister campuses may be able to provide guidance to CSUDH as the campus moves ahead. Exhibit 6-2 shows energy strategies and technologies that can be pursued to achieve these goals.

EXISTING ENERGY USE

Buildings account for 80% of the energy used directly on campus. Most major buildings at CSUDH are served by the existing Central Plant. Almost all buildings

are metered for heating and cooling loads (as measured in British Thermal Units, BTU's) but not for electricity. The Central Plant is currently powered by natural gas but the CSUDH is in the process of switching the gas-powered chillers to electrical as a way of reducing carbon emissions. At this time, there are no on-site renewable energy sources but the campus is considering a 1.5MW solar array.

METERING

Metering of electricity, gas and water-use is an essential tool for facilities managers to maintain and improve operational costs across campus systems. The campus can undertake the following actions to make best use of metering strategies and systems: Sub-metering shall be installed as part of new construction and existing building and infrastructure improvements. Meters shall be connected to a campus Energy Information Systems. New meter installations shall be capable of communicating and compiling revenue grade data for all commodities used by the building/project, including but not limited to:

- Grid supplied electricity
- On-site renewable electricity
- Natural gas
- Potable water
- Irrigation water
- Heating hot water
- Chilled water
- Sanitary sewer
- Meters should be capable of commu-

nication by TCP/IP, BACnet or Modbus protocols

ENERGY EFFICIENCY TARGETS FOR BUILDINGS

Zero-net energy (ZNE) buildings will be required in California by code for Residential buildings by 2020, and for Non-Residential (commercial) construction by 2030. “Zero-net energy” means that, on an annual basis, the building’s energy consumption is offset by renewable energy created on the site.

ZNE buildings are an important strategy toward reducing GHG emissions associated with building energy consumption. In order to offset a building’s annual energy consumption, it is first important to understand the annual consumption of energy by common building types on the CSUDH campus. Some common building types on university campuses are listed in Exhibit 6-3. This table shows that laboratory buildings and food service facilities are high energy consumers.

Energy Use Intensity (EUI) is the amount of energy used by a building over one year, divided by the building area. The most cost-effective strategy to achieve ZNE buildings is to first achieve a low EUI through energy efficiency, and then purchase or develop on campus the amount of renewable energy that is needed annually to supply that building. Existing older buildings will typically have a higher EUI because they consume more energy

than newer or recently renovated efficient buildings. Buildings that incorporate energy-efficient techniques and technologies consume less energy, thus require fewer solar panels and are less expensive to offset with renewable energy.

The CSUDH campus currently does not have energy use metered on individual buildings, so it is difficult to determine precisely how much energy each building is now using annually and thus determine its EUI. Filling this information gap is a critical first step to understanding the current EUI of all existing buildings operating on campus. CSUDH is already undertaking a concerted effort to install meters in campus buildings to gather that information. Until existing buildings are metered, estimates may be used to approximate the annual energy demand of each building.

The total amount of estimated building energy consumed by all buildings on campus may also be used to estimate the amount of renewable energy to be purchased or installed on campus to achieve ZNE for each building and the campus as a whole.

The 2018 Master Plan also includes many new buildings yet to be developed. New buildings can be designed with energy metering installed. EUIs can also be prescribed for future design teams to follow. Based upon the projected academic, housing and other program needs anticipated through the planning horizon of the

2018 Master Plan, building area for development is estimated. Exhibit 6-3 outlines the estimated building development and estimated annual energy use for the campus, based on these assumptions.

Residential and Non-residential buildings meeting these EUI targets will result in the University consuming 164,741,821 kBtu annually. The resulting developed solar needed for each building to be ZNE would require 47 acres of solar. More aggressive (lower EUI) targets would reduce the amount of solar needed to within the physical limits of the campus developable area for solar. Appendix B: Photovoltaic Concept, illustrates the location and projected photovoltaic systems that could be built on core campus facilities including academic buildings, parking structures and a ground-mounted system along the southern edge of the campus.

Based on best practice, key electrical savings can be achieved with high efficiency lighting, better building envelopes, and improved HVAC equipment. Exhibit 6-3 shows recommended EUI targets by building type and key energy strategies that will enable the campus to achieve these reduced energy-use targets.

RESILIENCY TO CLIMATE CHANGE

Energy efficiency and a reduction in reliance on fossil fuel-generated energy is the first step to create a more resilient

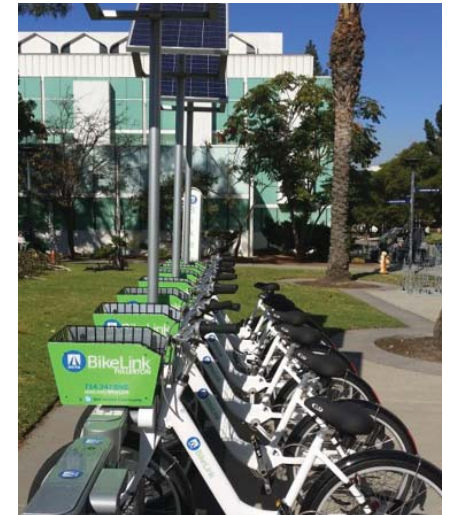


Exhibit 6-7: Example of Bicycle Facilities



Exhibit 6-8: Zipcar Ride Sharing



Exhibit 6-9: Example of LED and PV Powered Site Lighting

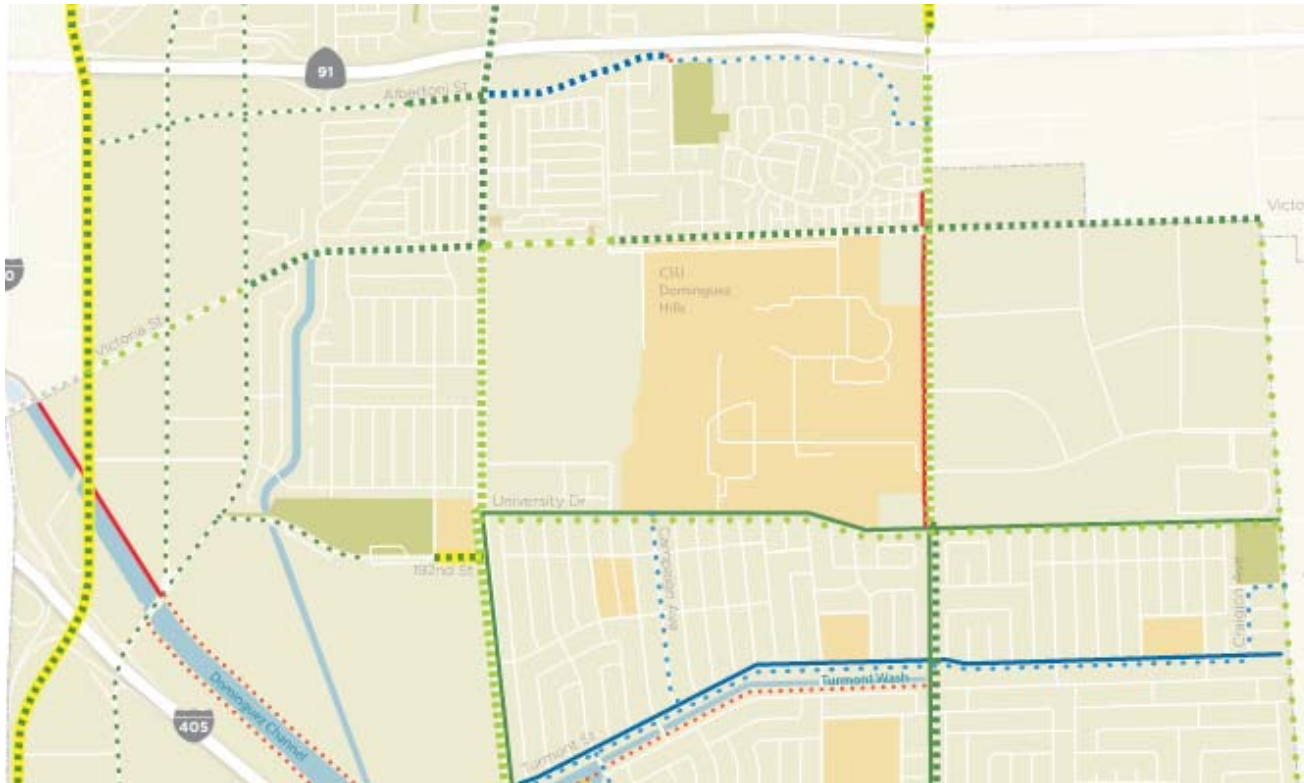


Exhibit 6-10: Proposed Carson Regional Bikeway Plan

LEGEND

EXISTING	—	Bike path
	—	Bike lane
	—	Bike route
	—	Bikeway in other jurisdiction
PROPOSED	 	Road diet
	 	Parking removal
	- - -	Cycletrack
	· · ·	Bike path
	· · ·	Bike lane
	- · -	Buffered bike lane
	· · ·	Colored bike lane
	- · -	Colored buffered bike lane
	- · -	Bike route
	- · -	Type B sharrows
	- - -	Bikeway in other jurisdiction

future for the campus. In addition, CSUDH should prepare a vulnerability assessment that identifies the risks climate change poses to the campus and create a set of adaptation and resilience goals, policies, and objectives to implement.

6.4 TRANSPORTATION

Campus development strategies and campus programs that reduce the number of single-occupant vehicle trips are a very important component of the CSUDH Sustainability Plan. CSU campuses such as CSUDH where most students, faculty and staff commute by single-occupant automobile use a significant amount of fossil fuel energy. These trips also contribute to traffic congestion, noise, localized air quality issues and Green House Gas (GHG) emissions, particularly CO₂ (usually quantified as “carbon”).

PARKING AT CSUDH

CSUDH existing parking policy provides relatively low-cost parking permits and plentiful parking facilities: parking permits cost \$220 per year, compared with the CSU system average of \$300; and the campus parking supply provides 0.42 parking spaces per FTES (full-time equivalent student), in line with the CSU system average of 0.4 spaces per FTES.

Inexpensive parking is a benefit for working students, but, at the same time, it encourages single-occupant vehicle trips. As campus enrollment increases, the concomitant requirements for parking facilities will eventually create a need to build parking structures, which will, in turn, have the effect of increasing the cost of parking.

It is therefore beneficial for all members of the CSUDH campus community if the campus develops strategies to encourage alternatives to single-occupant vehicle use.

TRANSPORTATION ALTERNATIVES TO SINGLE-OCCUPANCY VEHICLES

CSUDH transportation programs that provide alternatives to single occupant automobiles include Student Toro Connection, a ride matching service/ ride-share program, guaranteed ride home, a full-time student monthly bus pass program, as well as the Toro Express shuttle bus that connects CSUDH students with the Artesia Transit Center and the Metro Blue Line. Equally important, CSUDH is connected to the region and local communities at least 6 bus lines provided by LA Metro, Long Beach Transit and Torrance Transit. See also Chapter 4.

Bicycles represent an important alternative transportation mode that is good for the environment and can enhance the health of the users.

Although the city of Carson has a regional Bike Plan (see Chapter 4), there are currently few dedicated bicycle lanes leading to the campus, which may make bicycling to campus dangerous. The 5-foot wide lane along University Drive is not clearly marked and does not extend past Central or Wilmington. The City of Carson published and approved the Master Plan

RECOMMENDED FLOW AND FLUSH RATES		
FIXTURE TYPE	CALGREEN BASELINE	RECOMMENDED
Water Closet (academic)	1.26 gpf	1.1 gpf
Water Closet (residential)	1.26 gpf	0.8 gpf
Urinal	0.125 gpf	0.125 gpf
Lavatory (academic)	0.5 gpm / 0.2 gpc	0.5 gpm / 0.1 gpc
Lavatory (residential)	1.2 gpm	1.0 gpm
Shower	2.0 gpm	1.5 gpm
Kitchen / Break-room Sink	1.8 gpm	1.5 gpm

Exhibit 6-11: Recommended Water Fixture Flow and Flush Rates



Exhibit 6-12: Example of water conserving planting

of Bike-ways in 2013 which does include plans to add and improve bicycle routes around CSUDH (see Exhibit 6-10). The Plan includes adding a 6-foot wide buffered bike lane on Victoria Street, essentially connecting cyclists from the Artesia Transit Center to the campus and extending to Wilmington (Compton city limit). There are also plans to improve bicycle lanes on University Drive and provide new lanes on Wilmington and 192nd street.

Although current CSUDH policy does not allow bicycles in the campus core (as identified in Chapter 4), CSUDH can support bicycle use as an alternative to driving. As described and illustrated in Chapter 4, the 2018 Master Plan recommends that CSUDH provide secure bicycle storage in well-lit locations throughout campus, within 100 feet of building entrances throughout campus or distributed as the campus finds appropriate. In general, the university should strive to provide bicycle parking for 5 percent of students and staff in academic areas of the campus and provide bicycle parking for 30 percent of students in student housing areas. Chapter 4 contains a Bike Plan for the campus that identifies adjacent bike-ways into the campus and proposed bike support facilities (see Exhibit 6-7 for an example of bicycle facilities).

ELECTRIC VEHICLE CHARGING AT CSUDH

There are a few electric vehicle charging stations on campus, but more are planned. Current building code requires infrastructure for EV charging for 6% of the parking capacity but does not currently require the actual charging stations. It should be anticipated that this requirement will change to include the charging stations in the future.

SHARED VEHICLE SYSTEMS

Although involving single-occupant vehicles, shared vehicle systems contribute to the reduction of GHG emissions by making it easier for students living on campus or coming to campus on public transit to avoid keeping a car on campus or driving to campus. CSUDH currently participates in a Zipcar program, and this could be expanded to the new housing facilities if demand warrants.

TRANSPORTATION DEMAND MANAGEMENT (TDM)

CSUDH can reduce traffic and the negative environmental impacts associated with single occupant vehicles by organizing and coordinating transportation through a Transportation Demand Management (TDM) program. A TDM plan has been considered at CSUDH; the first step will be identifying a TDM coordinator who could help further coordinate, advertise and promote alternative forms of transportation. Further and impor-



(This diagram demonstrates a typical bioswale)

Exhibit 6-13: Bioswale Concept



Exhibit 6-14: Rain Garden: native and adaptive species are more resilient to drought, requiring less regular watering provided from surrounding hardscape areas



Exhibit 6-15: Bioswale with Filtration Vault

tantly, to the degree that a TDM program is successful, it also reduces the demand for on-site parking which could translate into a reduced and/or delayed demand for cost-intensive parking structure construction, which would be paid for directly through parking fees. In this way the TDM program becomes part of an overall strategy that also increases the financial sustainability of the campus and its students.

6.5 WATER CONSERVATION

Because of recent and chronic drought conditions in the State of California, state-wide regulations designed to encourage water conservation across all economic and social sectors of the state have been implemented. CSU Dominguez Hills is committed to water conservation in all aspects of its operations. The University currently uses municipally-supplied recycled water for all irrigation on campus except for the areas within the student housing complex.

In the past, water quality issues prohibited using recycled water for cooling towers but the new cooling towers installed in the central plant are water-efficient¹, which may allow recycled water to be used.

Water infrastructure on campus is aging and often unreliable: high water pressures sometimes lead to flooding. Although new campus buildings are designed to meet Calgreen and LEED water-efficiency requirements, there are no formal campus standards for water fixture efficiency.

EDUCATION TO DRIVE CONSERVATION

It is a principle of sustainability planning that making water conservation goals and information on how to conserve water available to users improves water



Exhibit 6-16: Biofiltration Planter



Exhibit 6-17: Increase waste diversion and recycling containers



Exhibit 6-18: Campus composting and mulching capability to be enhanced



Exhibit 6-19: Dominguez Nature Reserve Sign



Exhibit 6-20: Monarch Butterfly Migration studied & supported at CSUDH



Exhibit 6-21: Dominguez Nature Reserve at CSUDH



Exhibit 6-22: Wildlife and nature on the CSUDH campus



conservation results. CSUDH teaches students about conservation, engaging them in water audits and retrofit recommendations through the Living Lab project. Other approaches to be explored could involve educating users by sharing water meter data, holding creative competitions between users (this is often done between student housing buildings), and direct outreach to students, faculty, and staff. One example of outreach could include email campaigns or an educational signage program promoting water efficiency.

BUILDING SCALE SOLUTIONS

Water-efficient fixtures in new and remodeled buildings can contribute to the overall water savings strategy. CSUDH can establish flow and flush rates (Exhibit 6-11) and integrate these into campus design standards to create uniformity and assist in lowering future potable water demands. Laundry-to-landscape systems, where greywater is diverted and treated at the building cluster scale to address that cluster's irrigation needs, can be implemented to reduce water use as well. The University may also consider configuring new buildings with dual plumbing to utilize greywater or future recycled water for toilet flushing.

DISTRICT SCALE / CAMPUS-WIDE SOLUTIONS

Future water savings measures should target areas with particularly high water demands, such as residential housing and campus irrigation. The Landscape Master Plan recommends limiting the use of high water-consumption turf grass to playing fields and areas dedicated for recreation or social activities. In addition, depending on the recycled water characteristics of mineral content and odor, infrastructure could be designed/expanded to accommodate using municipally-supplied recycled water for non-potable uses such as toilet flushing. Storm-water management infrastructure can also contribute to the university goal of using the campus as a learning laboratory, by making storm-water processes visible and attractive. Opportunities may arise in the future to use storm-water for irrigation or other non-potable uses.

6.6 STORMWATER MANAGEMENT

At 344 acres, the CSUDH site represents a large urban site area whose storm water runoff must be safely captured, cleaned and conveyed to an adjacent approved regional storm conveyance system—in this case the Los Angeles County Flood Control District (LACFCD) 60-inch storm drain facility located at the south of the campus along University Drive at Campaign Drive. Limits on the volume of run-off entering into this facility from the campus property have also been specified by the LACFCD. As regulated by the Environmental Protection Agency (EPA), this storm water must also be treated via on-site filtration systems to eliminate pollutants such as oil and trash that could contaminate natural waterways or the ocean—the ultimate destination of storm water.

As part of the 2018 Master Plan, the civil engineering firm Wheeler & Gray developed an approach to meet the LACFCD and EPA requirements. This approach relies on the capture of storm water run-off on each new development site on the campus (where new impervious surfaces like building roofs, concrete walkways and parking lots are to be constructed) and routing it through a series of shallow vegetated bioswales¹ and bioretention areas that will remove pollutants before the storm water is discharged into under-

ground conveyance drain pipes. Exhibit 6-13 through 6-16 illustrate some of their storm-water management techniques. These pipes will in turn discharge into the large LACFCD storm drain facility on University Drive. Wheeler & Gray estimates that around 4 percent of a development site, typically at the site perimeter, will be devoted to vegetated bioswales with a depth of 18-inches. Because the CSUDH soils do not appear to be highly conducive to infiltration, the use of infiltration facilities such as infiltration trenches designed to retain storm-water while simultaneously recharging underground aquifers are therefore not thought to be an appropriate form of storm water management at CSU Dominguez Hills².

Notes:

1. *Low Impact Development Best Management Practices (BMPs)* from: County of Los Angeles Department of Public Works, *Low Impact Development Standards Manual*. February 2014.

2. *The only available percolation for the campus consists of the soils work completed for the design of the New Center for Science & Innovation Building by the firm Geo-technologies. See: KPFF Consulting Engineers. California State University Dominguez Hills Land Development Plan Existing and Proposed Wet Utility Infrastructure Analysis. October 2016. Page 16.*

6.7 WASTE MANAGEMENT

The CSU system-wide goals for waste are to reduce solid waste disposal to landfills by 80% by 2020. The 2018 Master Plan recommends that CSUDH move toward a zero-waste goal and develop a more comprehensive waste management plan. This activity would likely be one of the tasks of a future Sustainability Committee. It is also recommended that the Sustainability Committee develop ways to extend the recycling program to include batteries and electronics.

Facility Services currently handles solid waste on-site. Some recycling bins on campus collect paper, plastics, glass and aluminum separately.

EDUCATION TO DRIVE CONSERVATION

The sustainable college campus should be designed as a learning opportunity for everyday practices that will use resources responsibly and reduce waste. Campus buildings, grounds and operational systems can act as a teaching laboratory to instill the concepts of foresight and environmental stewardship into student consciousness and practice.

BUILDING SCALE SOLUTIONS

The best way to move the campus toward a zero-waste goal involves making ways available for all campus users to easily

participate in recycling. Placement areas for recycling, landfill, and compost should be made available in common areas of all buildings as well as within offices and classrooms. Providing appropriate signage with detailed information on where to place materials is also important.

DISTRICT SCALE / CAMPUS-WIDE SOLUTIONS

A Recycling Center should be constructed in the Facilities Services complex to accommodate the growing CSUDH recycling and composting programs. Some CSU campuses have combined this program with a Sustainability Center to further integrate the process into student life and curriculum. Although Facilities Services already handles recycling, a centralized Recycling and Sustainability Center would create a focal point for educational programs, services, and issues related to the environment and sustainability. The Center could also be a base for the already existing CSUDH Green Vets job training program. The Center could be as small as 10,000sf with offices, a lecture room and a state-of-the-art recycling yard.



6.8 CSUDH AND THE NATURAL ENVIRONMENT

The CSUDH campus has several areas that represent fragments of the natural environment native to the original Dominguez Hills area or are areas that have become ‘naturalized’ after some sort of disruption. In addition to having intrinsic value, these areas are important parts of the learning environment where students can study natural species and ecosystems as part of biological, environmental studies, geographical and/or earth science curricula. This natural laboratory resource, relatively uncommon at CSU campuses, expands the feasibility of these types of academic programs and can reduce the need for time-consuming field trips. The Center for Urban Environmental Research (CUER) is an example of an interdisciplinary academic program that utilizes these campus resources.

The largest and most important of these natural resource areas is the Dominguez Nature Reserve. Encompassing about 3.5 acres, this fenced-off area at the extreme southwest corner of the campus is to the south and west of the StubHub Center. This area also functions as an ‘overflow’ storm water detention facility for major storms. Much of the Reserve is visually accessible through a perimeter pathway that encircles most of the western portions of the CSUDH site adjacent to Avalon Boulevard. This facility is a favorite

place for bird watchers.

Given the large number of trees present on the campus, the campus grounds can also be viewed as part of the ‘urban forest’. These trees and shrubs provide habitat for numerous native birds and invertebrates. A special part of this ‘urban forest’ at CSUDH is the Monarch Butterfly Migration Habitat (Exhibit 6-20). This Habitat is a small planter/plot located just east of the Natural Sciences and Mathematics Building and contains natural plant species that support Monarch butterflies during their yearly migrations across North America.

The Landscape Master Plan (Chapter 5) redirects the type of campus tree and shrub species towards species native to local, California and worldwide ‘Mediterranean’ bio-zones. Further, because the existing campus landscape consists of large lawn areas devoted to turf grass and a limited number of tree species (such as the signature eucalyptus trees), it is prone to damage during drought and pest infestation damage due to lack of bio-diversity.

The proposed Landscape Plan is themed after four regions across the world which share the same Mediterranean climate zone. The proposed transition plan, to replace lawn and various tree types such eucalyptus over time with adaptive species has several benefits which will contribute toward a more sustainable campus:

- World Mediterranean climate zones can serve as a theme which can educate and draw likeness to the traits and issues of other cultures that share the same climate (Africa, Australia, Chile, European Mediterranean and local indigenous California).
- Drawing from a world plant palette affords access to bright natural colors which may enhance the identity of different portions of the campus (See Chapter 5).
- A diverse plant palate may provide a platform for “pollinator pathways” to be created across campus, improving habitat for beneficial birds and insects.
- Native and adaptive species are more resilient to drought, requiring less regular watering and less water overall.
- Diverse plant selections are less likely to fail due to pest infestations.
- Landscape strategies that develop cooperative plant communities can support better functioning ecosystems to slow storm-water, cool the surroundings and improve air quality.

6.9 HEALTH AND EQUITY

A healthy and equitable community cannot be fabricated but can be encouraged through thoughtful planning of a community's infrastructure. A balanced and sustainable community/campus thrives on equal opportunity, community engagement, and an integrated approach to design.

THE PEDESTRIAN SCALE

The Master Plan accommodates the safe, efficient and graceful flow of pedestrian movement through campus by creating an aesthetically pleasing environment enhanced by climate- and scale-appropriate landscaping. This provides a first-order 'place' for students, faculty and staff to feel comfortable and to succeed within their spheres of activity. The campus environment is enhanced with opportunities for shaded walking paths, informal gathering spaces and outdoor classrooms.

The campus environment could be further experienced and appreciated through an enhanced campus-oriented educational program consisting of such elements as interpretative opportunities (for example, plaques, QR codes, screens or dashboards) or educational self-guided tour programs that highlight local history, historic campus events, botanical names and uses of campus trees, campus sustainability progress or 'fun facts' about

the campus. The Master Plan recommendations also deepen the human, cultural, social and economic nature of the campus. The expansion of student housing and the proposed residential Village adjacent to the campus core will help residential students better connect with the life of the campus and thereby increase the likelihood of their retention, graduation, and lifelong attachment and loyalty to CSUDH.

The development of the University Village neighborhood on the east side of campus will provide additional dining and other small-scale retail opportunities for students, faculty and staff within easy walking distance from the campus core. This area, with its planned residential component, business park and central neighborhood park, will create a small university-oriented community similar to many of the most successful universities.

LANDSCAPE AND HEALTH

The open spaces and landscape at CSUDH contribute to the well being of students, faculty and staff on a variety of levels. Each 'green' space and place on the campus cumulatively creates an atmosphere and environment effused with colors of green, shade and clean air that support actual as well as a perceived sense of wellness. Individual campus green spaces and places are used to study, reflect, or engage in vigorous or passive activities, all contributing to human health. In all

CSUDH provides outdoor areas of active and passive recreation, native habitat, group gathering, individual seating and cultural significance--and even whimsy, such as the 'fairy garden' located north of University Theatre.

SUMMARY OF SUSTAINABILITY STRATEGIES AND MEASURES

As an aid to gaining an overview of the major sustainability measures available to CSUDH, Exhibit 6-23 summarizes several of them based on common themes. These measures listed in rows at the left are further identified in the matrix according how they address the seven performance areas: Water, Energy, Health and Happiness, Materials, Equity and Beauty of the International Living Future Institutes's Living Community Challenge. The Living Community Challenge is a framework for master planning, design and construction. It is a tool to create a symbiotic relationship between people and all aspects of the built environment (See <https://living-future.org/lcc/>).













SUSTAINABILITY AT CSU DOMINGUEZ HILLS													
	Living Community Challenge	Water			Place		Energy	Equity	Materials		Health and Happiness		Beauty
	LEED	WE		SS	LT	EA	RP	MR	IEQ		ID		
SITE & PLACE	LT = Location & Transportation SS = Sustainable Site WE = Water Efficiency EA = Energy & Atmosphere MR = Materials & Resources IEQ = Indoor Environmental Quality RP = Regional Priority ID = Innovation in Design												
	Establish well-defined campus entrance, make sustainability an obvious focal point/theme				X	X		X					
	Develop Transportation Demand Management program: encourage use of public transit, bicycles and ride-sharing					X	X	X	X		X		
	Make south retention area a green space feature			X	X	X		X			X		X
	Landsaped bioswale areas within the campus; bike lane, solar shading			X	X	X	X	X			X	X	X
	Modular landscaping, learning laboratory		X		X			X					X
	Consider wetland for greywater recycling, community gathering and education space	X	X	X	X	X		X		X		X	X
	Native plants palate design guidelines	X	X		X								
EQUITY & COMMUNITY	Reduce turf areas	X	X		X								
	Outdoor shaded gathering/picnic areas				X			X			X		
	Informational placards, self-guided tour							X					X
	Increase enrollment to 20,000 FTES; seek partnerships and connections with the community; reduce vehicle congestion					X		X	X		X	X	
	Dedicated bike lanes and secure bike storage					X		X	X		X		
	Encourage students to remain on campus and enjoy amenities					X		X	X		X		
	Solar Panel installation; rooftop PV on new buildings and parking structures						X		X			X	X
	Battery storage for peak shaving and energy resiliency						X					X	X
ENERGY	Building-level metering for electricity and gas						X						X
	Energy/Water/Waste Dashboard in new buildings; retrofit into existing buildings where possible						X	X					X
	Solar thermal (pool, Residence Halls)						X		X			X	X
	Residence Hall energy competition						X	X					X
	Chilled water thermal energy storage (TES)						X					X	X
	PV powered DC outdoor lighting						X		X			X	X
	LED outdoor lights						X		X				
	Indoor lighting upgrades; LED, controls						X		X				X
RESOURCES	Upgrade to high-efficiency HVAC and controls						X		X				X
	Consider composting food and landscape waste						X		X	X		X	X
	Healthy materials									X	X		X
	Consider Residence Hall recycling & composting competitions							X		X			X
	Establish connection with local compost service company, encourage student support of composting							X		X			X

Exhibit 6-23: Sustainability at CSU Dominguez Hills

DESIGN GUIDELINES



2018 Master Plan

Chapter 7: Design Guidelines: Core Campus

The campus environment is a reflection of the quality of design of its buildings, facilities and landscape. The built structures, along with the campus landscape design and natural materials, are significant factors in creating a campus environment and image that expresses and serves California State University Dominguez Hills' mission. The design of every individual campus building arises from and contributes to the overall fabric, framework and aesthetic of the campus.

The design guidelines and aesthetic principles described in this chapter address the buildings and facilities of the Core Campus. The Landscape Master Plan described in Chapter 5 provides guidance for the development and care of the natural environment.

Design guidelines and development standards for the University Village are found in a separate document. New buildings in the University Village development are expected to reflect an aesthetic appropriate for their building type (residential, retail, business park), to embody a modern aesthetic commensurate with a forward-looking new development, and to incorporate some architectural elements of form, materials, color and landscape that create a clear aesthetic connection with the core campus.





Exhibit 7-1: Small Colleges (1969)



Exhibit 7-2: Leo Cain Library (1971)

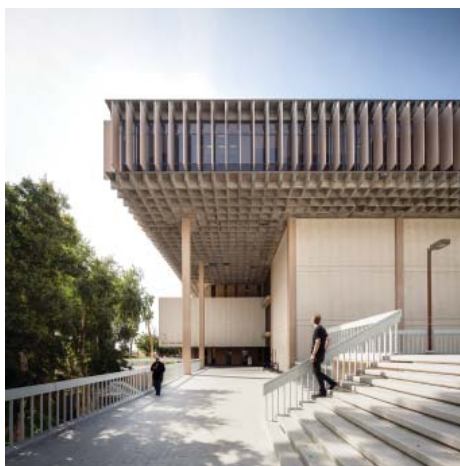


Exhibit 7-3: Original structural system (Leo Cain Library)

7.1 THE USE OF MASTER PLAN DESIGN GUIDELINES

Campus design guidelines provide guidance over the long term of campus development to ensure that the projects proposed in the Master Plan are designed and built in a manner that contributes to the University's over-arching vision of the campus. Design guidelines that apply to architecture, landscape and signage serve to guide the development of the campus and work toward an increasing visual and aesthetic integration.

Whereas a given building's design is the work of an individual architect, to be created under the direction of the University in response to a specific program and site, the Master Plan design guidelines make manifest the Planning Goals articulated in Chapter 3 and provide a framework that will inform the design of all new core campus buildings proposed in the 2018 Master Plan. The design guidelines in this chapter set a series of parameters for new and remodeled buildings, and for aspects of the campus landscape and sustainability features that will be addressed in the next fifteen to twenty years. Equally important, design guidelines point out the way those structures relate to existing buildings, to the campus open space system, and to the pedestrian circulation system.

Design guidelines are not meant to

dictate the architecture of a building or constrain university planning committees or the architects hired by the University; on the contrary, they are meant to guide decisions rather than regulate future actions, and as such, they lay the groundwork for creativity. Similarly, design guidelines are formulated to encourage a high level of aesthetic quality within the campus while simultaneously promoting a climate in which the aesthetic and technological innovation needed to create a stimulating and supportive learning environment can thrive.

The Master Plan campus design guidelines provide a framework for future design decisions that will be made about building site, form and materials. Building form guidelines address the means of establishing a hierarchy of structures on the campus. Building height recommendations are a function of both the building type and the building's location on the campus.

Design guidelines for vehicle circulation and parking facilities and guidelines specific to the campus residential areas are also included in this chapter. Design guidelines for landscape and open space development, including guidelines for site furnishings, are incorporated in Chapter 5, Landscape Master Plan. A project to improve the campus's signage system is underway.

In order for the Master Plan Design Guidelines to be truly useful to CSUDH, the campus must develop an operational mechanism for ensuring that both in-house staff and architects with whom the University contracts for new and remodeled buildings become aware of the design guidelines and adhere to their components. These guidelines should be used as benchmarks for campus review of architecture and landscape architecture projects.

7.2 THE EXISTING CAMPUS VISUAL ENVIRONMENT

Over the period of 50 years since the campus was first established, CSUDH has added a variety of classroom, laboratory, student services, recreational, housing and support services facilities to the campus.

These facilities, numbering some 35 structures, reflect a range of architectural styles, building materials, heights and massing. There is a clear visual distinction between buildings designed in the 1960's through the 1980's and those developed between 1980 and today.

OLDER BUILDINGS

The earliest buildings, those housing the Small College Complex, are low-rise block buildings. Some of the earlier buildings have conformed to the design aesthetic and philosophy of A. Quincy Jones, the original campus architect. Some of these older buildings have exterior corridors, capitalizing on Jones' philosophy of using outdoor space for instruction, gathering and display/performance. Some use a waffle-slab structural system that results in heavy cornices, roof details or sun-shade details that have become out-moded. Many of the older buildings have large blank or nearly blank facades or imposing massing that create an unconge-

nial presence and an environment that is not consistent with human scale. Sometimes the heavy architectural elements overwhelm the building entries, gathering areas, or space adjacent to the building.

The use of white, gray and beige colors creates some visual continuity but also contributes to a lackluster visual environment.

The walkways and lower-level courtyards of these early buildings create a unique pedestrian environment and contribute to a singular CSUDH aesthetic. However, due to deferred maintenance and other factors, the exterior physical environment around these buildings lack appeal. The metal railings, necessary for safety, are faded and in poor repair (Exhibit 7-12). The lower courtyards are used by students for studying, but these otherwise well-scaled gathering areas need greater aesthetic attention regarding materials and furniture to be truly comfortable and inviting.

In several cases, the upper-level walkways in important areas have views into lower-level loading docks and service areas, marring the aesthetic advantage of A. Quincy Jones' multi-level architectural approach (Exhibit 7-14). Pedestrian circulation areas and building entries at lower levels sometimes present a harsh and barren visual environment (Exhibit 7-11).



Exhibit 7-4: University Theater (1977)



Exhibit 7-5: Natural Sciences and Mathematics Building (1974)



Exhibit 7-6: Social and Behavioral Sciences Building (1971)



Exhibit 7-7: Lacorte Hall (1977)



Exhibit 7-8: Gymnasium (1978)



Exhibit 7-9: View into service area from upper level



Exhibit 7-10: Welch Hall (2002)

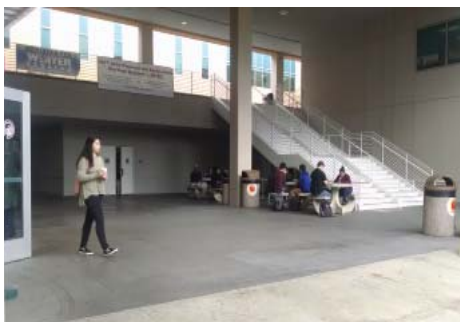


Exhibit 7-11: Welch Hall Lower/Entry level

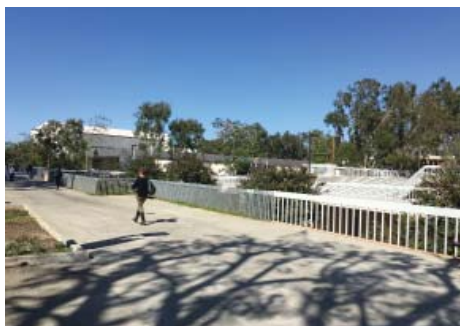


Exhibit 7-12: East Walkway railing

NEWER BUILDINGS

The newer campus buildings have mixed success. Although the materials and forms are updated, some of these facilities seem to reflect a compromise between the older aesthetic and a new direction. The newest buildings--Loker Student Union and Library South--show a decidedly contemporary aesthetic in both their form and materials. They tend to incorporate high proportions of glass and metal panels as facade materials and they move away from strict rectilinear massing.

It is these newer buildings that will serve as the aesthetic basis for new campus buildings and remodeled facilities.

CONNECTIONS BETWEEN BUILDINGS AND SITE

The CSUDH campus presents a challenge to legibility and wayfinding which is due, at least in part, to the original two-tiered nature of A Quincy Jones' approach to the campus. The connections between campus buildings and the pedestrian pathway system are usually well-defined, because most building entries are accessed from the East or West Walkways or from bridges extended from one of these pathways. The confusion comes at the lower levels of some buildings, where the location of the building entry is not always immediately apparent. Welch Hall presents this difficulty to first-time

campus visitors .

Pedestrians entering the campus from Lots 3 and 6 cannot always find how to get up to the upper level campus: the stairways are narrow and minimal, and present the appearance to service or utility stairs rather than a welcoming way of moving between campus levels. The tunnel into the lower level of the Student Union also presents a confusing and forbidding picture to those new to the campus.

These flaws serve to negatively affect both the appearance and accessibility of campus buildings and contribute to a somewhat confusing and disorganized campus character.

7.3 BUILDING DESIGN: SITE AND ORIENTATION

The goals of the 2018 Master Plan building design guidelines are to:

- assure a high quality of architectural design appropriate to the status of California State University Dominguez Hills;
- ensure that new buildings harmonize with existing campus structures chosen to serve as models for new development;
- encourage development that results in a hierarchy of campus buildings; and
- reinforce visual unity throughout the campus while supporting appropriate architectural variation.

Building design considerations include the siting of the building vis-à-vis neighboring buildings, campus open space, and the pedestrian pathway system; the overall building form and massing; and the materials used to construct the building. Each of these factors contributes to the quality of the buildings which, in turn, create the overall quality of the campus.

BUILDING SITE AND ORIENTATION

Choice of Development Site

The Illustrative Master Plan (Exhibit 4-1) shows sites for over 20 new buildings on land owned by the University; some of these projects are currently under development. The building sites identified in the Illustrative Master Plan provide

the University with flexibility to make choices based upon a wide range of circumstances, including future changes in existing academic programs; the development of new programs; considerations of pedagogy that may benefit from co-locating particular programs; and inevitable changes in technology.

Consistent with the Master Plan Goals and Objectives stated in Chapter 3, the majority of the sites identified were chosen to reinforce existing functional precincts by siting new buildings in the vicinity of existing buildings of similar function. In the case of student residential buildings, the sites were chosen to reinforce the mixed-use residential nature of the University Village development but were deliberately placed adjacent to the core campus to maintain the important connections between living and learning for CSUDH on-campus residential students.

Relationship to Open Space

As discussed in Chapter 5 (Landscape Master Plan), the relationship between a building and its adjacent open space is of critical importance in the development of the campus. Future development on the campus should acknowledge the following general viewpoints:

- New buildings should be sited to enclose open space and, in concert with adjacent buildings, form congenially-sized and well-proportioned open space areas

throughout the campus.

- Open spaces between buildings should be of varying size to accommodate a variety of programmed activities.
- Open spaces enclosed by the mass of a building may include courtyards, plazas, patios, building entry forecourts, lawn areas, landscape areas, seating areas and areas that provide seating for nearby food services.
- New buildings constructed facing the North Lawn should visually and functionally connect with the North Lawn and the East Walkway, as shown in the Illustrative Master Plan [Chapter 4].
- Building service areas and loading docks should not face main pathways or campus open spaces, and should be screened.

The programming effort that forms the start of any new building project should include an account of the activities that will take place in the open space that adjoins the building. This will allow outdoor spaces to be well-connected to compatible adjacent indoor spaces. The form, articulation and building materials employed in a structure have significant impact upon the adjacent open space areas; these are discussed in more detail below.

Relationship to the Pedestrian Circulation System

Although buildings may seem to be separate categories of development from pathways, buildings and their entries function as important components of the pedestrian circulation system.



Exhibit 7-13: Pathway to Upper Campus, between Welch Hall and Student Health Center



Exhibit 7-14: Social and Behavioral Sciences interior courtyard



Exhibit 7-15: Courtyard at Small College



Exhibit 7-16: Library South (2002): View from south



Exhibit 7-17: Library South: View within courtyard



Exhibit 7-18: Library South: North Facade

- New buildings should reinforce the campus pedestrian system by being sited adjacent to the pathway and by having their major entries directly accessible from the pathway. This not only provides assistance with wayfinding, but also encourages engagement and interaction: individuals are more likely to enter a building or join an activity if they have visual access as they approach.
 - Buildings may address more than one pedestrian pathway and are likely to have more than one entry point.
 - Consideration of natural paths of travel from one building to adjacent buildings via the pedestrian network should also be a factor in decisions about the siting of a new building and the location of building entries.
- the entry from the building massing; enhanced materials and/or contrasting colors; sun shades; clear glass; special lighting; and/or special entry pavement.
 - Service entrances and areas should not be located in the fronts of buildings and should be consolidated where possible to serve more than one buildings, by creating or joining a shared service corridor.
 - Existing service entrances and loading areas that are now fronting streets or the public realm should be appropriately screened. Exhibit 4-17 shows service roadways and the recommended locations for loading areas.

Relationship to Food and Beverage Services

Food services are not incidental to the development of campus facilities. On the contrary, they play an important role in the planning for any large space by serving as a “draw” for and a catalyst of social activity.

When a campus serves a largely commuting constituency, as CSUDH does, the role of food and beverage services is even more important. Food services on the campus as a whole (including those within the residential areas) provide the opportunities for informal social interaction among students, faculty and staff. These interactions form the basis for the development of social and intellectual ties that create a campus community. Food and beverage services can also help to activate the open-space areas adjacent to new and existing buildings while at the same time fulfilling basic needs.

Building Entries

- The design and orientation of building lobbies should acknowledge their role in the pedestrian experience and wayfinding.
- Primary building entries should be oriented to major campus pathways and open spaces.
- If the building site makes it possible, primary building entries should be placed at the end of pathway axes.
- Secondary but clearly identified entries should access courtyard areas or campus pathways.
- Primary and secondary building entries should receive architectural enhancements as a way of establishing a visual focus and a hierarchy of façade elements. Typically, such architectural enhancements include the use of accent forms and materials that clearly identify

- Every opportunity should be taken to incorporate food services into ground-floor uses. The convenient availability of food and beverage services will help the University achieve the goal of encouraging students, faculty, staff and community members to use the campus as a destination and to prolong their visits to campus.
- Food services should be distributed around the campus in ways that allow them to serve as the “first stop” on the campus for those leaving their vehicles or bicycles in parking facilities.
- Particular consideration should be given to incorporating food services in or near buildings that will serve evening student and faculty as they make their way to classes; such food services should offer seated snacks and dining as well as take-out.
- On the CSUDH campus, coffee or food carts in areas where more complete food services are distant from buildings will go a long way to supporting a highly interactive campus culture.
- The University may want to consider the use of food trucks as a very flexible way of offering food and beverages and to help determine where food services are needed, as part of the planning for future facilities.

Relationship to Natural Environmental Systems: Sun and Wind

- Natural lighting should be introduced into building interiors through windows, clerestories and light shelves. Exterior window shading devices should protect windows from direct sun exposure to help minimize building heat gain and

glare, while still affording views of the campus.

- Building orientation should encourage energy efficiency by creating optimum conditions for use of passive and active solar strategies. If optimal orientation can be achieved, heating and cooling requirements can be reduced, saving energy costs and reducing greenhouse gas emissions. See Chapter 6 for more information on sustainability guidelines.
- Buildings should be oriented to maximize benefits from cooling breezes in hot weather and shelter from undesirable winds in cold weather. If natural ventilation is employed, use internal spaces and structural elements to channel air through the building in different directions to achieve good cross-ventilation.
- Buildings featuring courtyards should orient the courtyard to maximize wind in the courtyard and cross ventilation through the building for cooling in the summer.



Exhibit 7-19: Loker Student Union Addition (2009)



Exhibit 7-20: Courtyard at Loker Student Union



Exhibit 7-21: New Center for Science and Innovation: Artist's rendering

7.4 BUILDING FORM: MASSING, MATERIALS & COLOR

A building's form and level of architectural distinction are related to its functions and its role in the visual development of the campus. Building form—a structure's massing, articulation and deployment of architectural features—has as much to do with an individual building's location on the campus and its position within the campus spatial hierarchy as it does with the program of activities the building is constructed to house.

The 2018 Master Plan proposals are consistent with the existing campus hierarchy in which academic/administrative buildings, along with open space and pedestrian pathway systems, create a legible academic core which forms the heart of the campus. The support functions of student activities, student housing and athletics surround the academic core, with plant and facilities functions and parking sited at the campus periphery.

SIGNATURE, FOREGROUND AND BACKGROUND BUILDINGS

When addressing building form, it is useful to make the distinction between 'signature', 'foreground' and 'background' buildings to provide guidance about the design of the building's form and the way

the building fits into the overall architectural and aesthetic fabric of the campus.

The identification of a foreground or background building, as opposed to a signature building, is not meant to imply that such a building has an unimportant role on the campus. It is expected that all new buildings on the campus will be designed and built with the utmost consideration of their aesthetic contribution to the campus environment and their architecture should be treated with a high level of attention and care.

Signature buildings are those which serve as campus landmarks, those whose functions are singular or unique, or those whose sites place them at important points of visual access from the outside of the campus. These features dictate that signature buildings should be architecturally distinctive and serve as dramatic focal points on the campus. Their form should contribute special qualities such as dignity or dynamism to the overall campus ambiance. Special attention should be given to the entry or entries of a signature building to ensure they address an important pedestrian path and give access to important public spaces within the building.

Buildings that may serve as signature buildings in the 2018 Master Plan are those sited along Victoria Street (Buildings A and J), because they will serve as symbols of the University to the City of Carson and the surrounding community.

The new Black Box Theater (Building C) may be a signature building because it will have a unique form and because it will anchor the south end of the Sculpture garden and the new Pedestrian Plaza. The Student Recreation Center (Building E) may be a signature building because it will house functions which require a distinctive form and as such, is likely to be visible from many points on the campus.

Foreground buildings include those located at campus entries or highly visible points on the campus, and those accommodating a use directly related to the University's mission. The new academic buildings proposed in the 2018 Master Plan will be foreground buildings.

Foreground buildings form the campus fabric by upholding a high level of aesthetic quality. They are meant to emerge, to serve as points of reference on the campus, and to incorporate a significant level of architectural distinction.

Foreground buildings are expected to define campus edges or enclose open space to form courtyards, plazas and quads.

The designers of foreground buildings have an obligation to acknowledge and address the design of neighboring or nearby buildings which serve as partners in enclosing shared open space, quads or courtyards. Although the design for a new foreground building should not attempt to match the form or details of

adjacent buildings, the design should skillfully accommodate those forms and details rather than ignoring or clashing with them.

Examples of existing foreground buildings are Welch Hall, which houses administrative functions and is the destination for many campus visitors; the new wing of Loker Student union; Library South, whose presence anchors the southern edge of the academic core; and the new Center for Science and Innovation, currently under construction.

Background buildings are those which are subordinate to the larger campus, whose function is duplicative rather than singular, or whose sites are in less public or visible areas of the campus.

Background buildings may tend to be smaller than foreground buildings; depending upon their function, they may be more rectilinear in form, with fewer or more subdued architectural features. Examples of background buildings in the 2018 Master Plan are the Student Residence Halls (Parcel 3A) because they are duplicative in function, and the proposed central plant expansion (Building P). The new Facilities Services complex (Building R) and the new Child Care Center (Building V) are expected to be background buildings.

Building Form, Function and Location

Buildings in the Academic Core are

generally larger, more visually dominant, and more architecturally distinctive than buildings in other campus precincts. Due to their location on the campus and their importance to the University's central mission, academic buildings are foreground buildings whose collective form and relationship to open space are meant to create a pleasing integrative whole in the academic core.

The building configurations shown in the Master Plan are for illustrative purposes only. However, many academic buildings are shown as L-shaped in plan view for two important reasons. First, L-shaped buildings are highly adaptable for academic purposes, allowing large-format laboratories, classrooms or lecture halls to occupy one wing, for example, while standard classrooms and offices occupy the other wing. Second, L-shaped buildings more fully define the campus open space system and contribute to campus ambiance by enclosing courtyards, patios or forecourts that can serve functional and aesthetic purposes.

Buildings at major campus gateways occupy an important place in the campus hierarchy because they serve as the 'front door' to the campus. Their design should incorporate a singular and recognizable architectural feature facing the campus entry. This will allow the building to serve as an anchor to the gateway and to highlight campus identity. This recognizable feature may or may not also serve as a building entry. Buildings at campus gateways should incorporate lighting and

landscaping to guide vehicles into the campus and to highlight their role as a welcoming campus feature.

Building Massing and Articulation

The massing of a building can be defined as the overall geometry (length, width, and height) of its perceived form. Massing is one of the more significant factors that contribute to establishing the "character" of a specific building.

Building massing, whether for signature, foreground or background buildings, should be articulated to create a comfortable relationship between the scale of a person and the scale of a building. This is especially important for over-scale buildings such as parking structures [see below for design guidelines addressing parking structures specifically].

Of particular importance in defining the massing of a building is the overall height of the form (actual and perceived) as well as the geometry of its roof. Two factors must be considered when determining the appropriate building height for a particular location:

- The overarching principle that future development must make the highest and best use of the limited campus land remaining for development.
- Buildings should be tall enough and massive enough (building length and width) to provide appropriate spatial relationships to existing adjacent buildings and open spaces.

Consequently, the following guidelines should govern the development of campus buildings:

- Buildings are to support the campus civic structure, giving architectural definition to campus streets, quads, and other open spaces. Buildings are to front directly on to these spaces and to support them by their form, massing and the design of their facades.
- Buildings are to be 4 to 5 stories tall. Academic and research buildings less than three stories in height are not permitted without special approval by administration, since they consume large amounts of land area and limit future growth.
- Building facades are to be articulated into constituent parts to mediate between the pedestrian scale and the scale of the building, provide visual continuity with neighboring buildings and engage the landscape design of open spaces.
- Academic buildings should have a base, middle and top. An articulated ground floor is especially important, as it reinforces a building's connection to the public space upon which it fronts.
- Where appropriate, buildings are to incorporate multiple uses, placing public functions on the ground floor and less public or more utilitarian functions on the upper floors. For example, in classroom buildings, interdisciplinary classrooms should be placed on the ground floor and specialized classrooms on the upper floors.
- Large blank walls or an uninterrupted building mass should be avoided in order to enhance the visual and physical experience of buildings, and to reinforce the feeling of safety.

rience of buildings, and to reinforce the feeling of safety.

- Building frontages along major paths must create a welcoming and attractive street environment for pedestrians.
- Building transparency plays a large role in achieving safe, comfortable, human scale pedestrian environments. The more transparent a building can be, especially at grade, the more welcoming and friendly it is to the pedestrian and the more it is able to integrate and engage the student, faculty, staff and visitor population.

BUILDING FAÇADE MATERIALS AND COLORS

Building Façade Materials

The primary design tool for unifying the campus is the use of materials. It is highly recommended that the campus develop an official materials and color palette to guide the development of new and remodeled buildings. Some guidance is provided below.

- It is expected that new academic/administrative buildings and other foreground buildings will use glass and metal panels to support the newer campus aesthetic currently being established by Loker Student Union, the Library South and the new Center for Science and Innovation.

The skillful use of façade materials should be used to produce both a level of visual consistency throughout the campus and sufficient variety from building to building. New and existing open-space areas

should be unified through the use of a common or related materials palette for the buildings facing the plaza, quad, lawn or courtyard.

- Designers should take every opportunity to introduce natural light into buildings, particularly into the lobbies, gathering areas and shared spaces within the building. Roof structures that allow for clerestory windows should be considered.
- Clear, high-performance glass should be used to introduce natural light into structures as well as allowing true color views into and out of classrooms, offices and other campus buildings.
- Care must be taken to harmonize glass colors with other facade colors. Generally, designers should avoid using blue-or green-toned glass, both for the effect of the color on the exterior of the buildings and for the way blue or green glass affects the color of light reflecting on people's faces in the interior.
- Polished/highly reflective metal materials should not be used.
- Industrial materials such as concrete masonry units (CMU), ribbed CMU or 'slump block' will not be used for buildings with public visibility.

Building Colors

Proposed new buildings and facilities should be light in color and warm in tone to harmonize with the existing campus. When gray is used, it should be a warm gray.

New buildings may add to the light/warm color palette sparingly by using an

accent color for detailing where appropriate. Residential buildings may use an expanded color palette but should use light colors to maintain a consistency within the campus.

7.5 DESIGN GUIDELINES FOR CAMPUS RESIDENTIAL AREAS

The design of these residential structures needs special attention to their scale, massing, placement of open space and indoor and outdoor gathering areas, and their connections to the pedestrian circulation systems.

BUILDING ORIENTATION

- Housing buildings should have clear and congenial connections to the core campus. Existing and planned new pathways should be landscaped according to the Landscape Master Plan recommendations (Chapter 5) and incorporate uses that encourage gathering, organized activities and informal interaction.
- Housing buildings should, where possible, incorporate food and beverage services to encourage student interaction.
- When possible, building placement and orientation strategies should be used to create new intimate courtyards for residents to use as their collective 'back yard'. Amenities that support and encourage interaction and social events might include gas grills, defined seating areas with integrated power and data, lawn areas, stepped seating such as amphitheaters or the use of the building's main stairway as an informal seating area.
- Residential buildings should be buffered from roadways by landscape. Pathways that cross vehicle circulation routes must

incorporate multiple layers of warning and notification, through change of pavement, change of landscape and signage, that a pathway will encounter a vehicle route.

BUILDING MASSING

- Housing buildings will typically be 4-6 levels.
- Housing buildings should be more residential in their massing, with articulated facades and architectural details and attention to scale to provide visual interest and human scale. Recessed wall planes and building off-sets may help to create shadow lines and visual diversity.
- Indoor meeting and gathering areas should have natural light.
- Interior shared spaces such as lounges, study rooms, living rooms and lobbies should be articulated differently than the student private areas. Opportunities for double height spaces provide large areas for glazing to break up the facades and create interest both inside and out.

MATERIALS AND COLORS

- Color can provide building identity at entrances or courtyards and can be used to accent building elements to create visual interest and human scale.
- Colors and materials for residential buildings must conform to the approved color and material palettes and be approved by University.

SCREENING

- Unsightly items such as garbage cans, utility boxes, and mechanical equipment

shall be screened to conceal them from view of neighboring lots and streets. Screening shall consist of approved fences or landscape buffers. Roof screens should be compatible and complement exterior materials and color.



Exhibit 7-22: Banners and signage

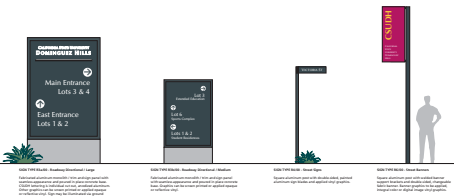


Exhibit 7-23: Example from CSUDH Signage Plan



Exhibit 7-24: Photo Simulation of Roadway Directional Signage from CSUDH Signage Plan

7.6 DESIGN GUIDELINES FOR PARKING STRUCTURES

Parking structures are often the largest and most prominent structures on a campus. The Master Plan design guidelines for parking structures do not address the engineering of parking structure design, such as circulation, ramping, site constraints, desired efficiencies and parking geometrics. Instead, they address the design of the parking structure building in a way that keeps these large facilities sensitive to scale, form and safety in ways that do not detract from the campus image.

With regard to the size and capacity of parking structures, the University will make decisions about the height of parking structures based on the need to increase campus parking inventory. However, as discussed in Chapter 4, it is anticipated that the need for parking will be reduced over time through use of a Traffic Demand Management program, with the added benefit of reducing the height of parking structures.

SIZE AND LOCATION

- Parking structures should be limited to 6 levels, including parking on the roof level. When possible, it is preferable for parking structures to be no more than five levels.
- The Master Plan locates sites for parking structures at the perimeter of the cam-

pus with good access from the North and South campus entries.

FORM AND MASSING

- Large blank walls and continuous sloped strip openings on structures facades should be avoided. Ramped areas should be located inside the structures and not at the perimeter.
- Large parking structures should incorporate internal light wells to increase natural light within the buildings.
- Structures should be designed for passive surveillance by maximizing openings and minimizing walls.
- Stair towers should be visible, well-lit and constructed without solid walls for safety. Lighting for stair/elevator towers should allow those elements of the structure to serve as a beacon to pedestrians at night.
- Elevators should be close to the main entrance with the entire interior of the elevator in view when the doors are open. Elevators should be designed so that their passengers are clearly visible to people outside or so that they are clearly visible or audible to security staff via television or sound monitoring equipment.
- The inclusion of office, academic or retail space in the exposed sides of parking structures will humanize adjoining open spaces. An example is the eastern-most parking structure in Lot 6, which will house the Campus Police facilities.
- Scrims and screens on the exterior must follow code requirements for natural ventilation.
- Landscape materials should be used to provide visual screening without compromising visibility and safety.

COLOR, MATERIALS, WAYFINDING

- Within budget constraints, parking structures should be designed to match the vocabulary of color materials and scale of the academic buildings on campus.
- Parking areas and driving lanes should be well-lit. The most effective way to increase the perception and reality of safety within a parking structure is to make walls and ceilings white or very light color. This will reflect and distribute light from light fixtures and reduce shadow areas.
- A well-designed graphics and signage system will effectively communicate necessary information to students, faculty staff and visitors navigating a large, complex and confusing building. Sign messages should be simple and succinct. Level identification theming and other wayfinding aids provide an opportunity to enhance parking interior environments.

SURFACE PARKING LOTS

One existing campus surface parking lot has been left intact by the 2018 Master Plan, and another lot, the South Surface lot, is planned. Striping for crosswalks and crossing areas should acknowledge the campus pathway system and natural desire lines to increase pedestrian compliance with crossing points. Landscaping for surface parking lots should incorporate trees to shade the parking area, bioswale areas to contribute to storm-water management systems, and vegetation at the transition points between the surface lot and the pedestrian pathway.

7.7 SITE DESIGN GUIDELINES

SITE FURNISHINGS

Site furnishings are an important aspect of planning and constructing new facilities, pedestrian areas and open space and should provide a clean, updated look.

Benches and seating should be placed to create gathering space, in addition to more private single benches. Site furniture should be comfortable and easily maintained. Wooden benches rank high on year-round comfort based on their low thermal conductivity, though they may be more subject to vandalism and other maintenance concerns over time. The life cycle cost of wooden products can vary based on the type of wood, but these products can be a sustainable, long-lasting option when FSC certified hardwood is specified. Though metal benches may become uncomfortable in high or low temperatures, they are very durable which makes them easy to maintain and provides for a low overall life cycle cost. Concrete furnishings are very durable but are not necessarily

Movable furnishings such as café style tables and chairs must be robust in design and solidly constructed in order to withstand heavy use while also being light enough to be secured on a nightly basis. Metal is the most suitable material for chairs to meet this criteria, but either wood or metal tables are appropriate.

Tables that are designed to accommodate an umbrella can further enhance these furnishings and ensure that metal chairs remain comfortable even in high temperatures.

Trash receptacles should be unobtrusive but recognizable in their design, materials and colors.

Site lighting includes lighting for pathways, parking areas and buildings. The University is encouraged to engage a consultant to develop a new lighting plan.

SERVICE AREAS, LOADING DOCKS AND MECHANICAL EQUIPMENT

The Master Plan locates new service areas adjacent to proposed buildings; these are shown on Exhibit 4-30. Most existing service areas are retained. Access to some service areas will be along pedestrian pathway routes, as described in Chapter 4.

Service areas are to be screened with opaque fencing, decorative masonry fences softened by landscape, particularly where service areas are in prominent locations or locations visible to the public.

CAMPUS WAYFINDING AND SIGNAGE

Wayfinding uses spatial and environmental information to find one's way in the built environment, creating an organized and comfortable campus experience.

By focusing on the challenges of the first time visitor and the campus master plan improvements, a successful, long term wayfinding plan can be established, supplementing existing signage by continuing to implement the signage package the University has initiated. Some examples are shown in Exhibits 7-23 and 7-24. Banners and other forms of informal signage are included in the signage package.