

South Orange County Community College District  
**2011-2031 EDUCATION & FACILITIES MASTER PLAN**  
**VOLUME 5**

**Irvine Valley College**  
2011 FACILITIES MASTER PLAN



DECEMBER 2011

gkkworks



the 1990s, the incidence of *S. flexneri* has increased in the United Kingdom [10]. In the United States, *S. flexneri* has been reported to be the most common serotype of *Shigella* isolated from children with shigellosis [11]. In the United Kingdom, *S. flexneri* serotype 3 is the most common serotype isolated from children with shigellosis [12].

There is a paucity of data on the epidemiology of *S. flexneri* in the United Kingdom. In the 1980s, *S. flexneri* was the most common serotype of *Shigella* isolated from children with shigellosis in the United Kingdom [13]. In the 1990s, *S. flexneri* was the most common serotype of *Shigella* isolated from children with shigellosis in the United Kingdom [14]. In the 2000s, *S. flexneri* was the most common serotype of *Shigella* isolated from children with shigellosis in the United Kingdom [15].

The aim of this study was to determine the prevalence of *S. flexneri* in children with shigellosis in the United Kingdom. The study was conducted in the United Kingdom, where *S. flexneri* is the most common serotype of *Shigella* isolated from children with shigellosis [12]. The study was conducted in the United Kingdom, where *S. flexneri* is the most common serotype of *Shigella* isolated from children with shigellosis [12].

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# IRVINE VALLEY COLLEGE

## 2011 Facilities Master Plan

South Orange County Community College District

DECEMBER 2011





# 2011 FACILITIES MASTER PLAN

## IRVINE VALLEY COLLEGE

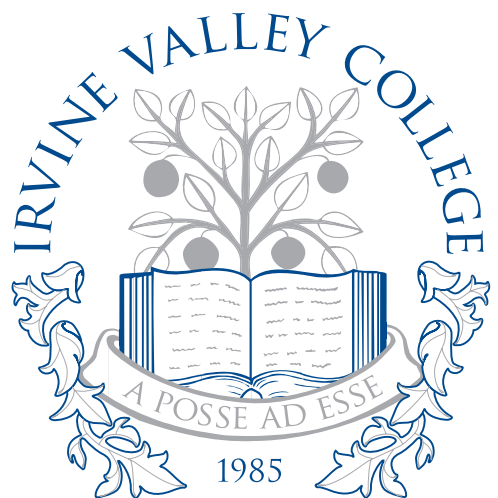
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the 'information' and 'communication' fields. The 'information' field is defined as:

...the study of the processes of information production, distribution, access, use and evaluation, and the study of the social, cultural, economic and political contexts in which these processes take place. (p. 10)

The 'communication' field is defined as:

...the study of the processes of communication production, distribution, access, use and evaluation, and the study of the social, cultural, economic and political contexts in which these processes take place. (p. 10)

The 'information science' field is defined as:

...the study of the processes of information production, distribution, access, use and evaluation, and the study of the social, cultural, economic and political contexts in which these processes take place. (p. 10)

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## LETTER FROM THE PRESIDENT

In just over three decades, Irvine Valley has grown from a small satellite campus to a standout among California's 112 community colleges. Enrollment has jumped from 6,000 in the fall of 1985, when the college first received independent status, to more than 15,000 students today.

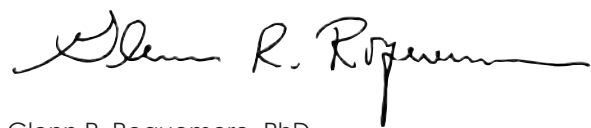
Irvine Valley remains committed to providing high-quality instruction and services to meet the needs of our diverse student population. Each semester, IVC welcomes students from surrounding communities and over 40 foreign countries. Whether students are looking to pursue a degree or certificate, transfer preparation, or career enhancement, or are still exploring their many options, they find that IVC offers distinguished faculty and staff concerned with promoting their academic development and success.

Long-range planning is essential to achieving our goals and fulfilling the college mission. For more than a year, we have evaluated our existing facilities and worked together to determine how new and renovated facilities could improve our instruction, support services, and campus operations while enhancing student success. The Facilities Master Plan is based on the college's 2011 Educational Plan and addresses current and projected needs through the year 2031. By linking these two plans, we can better ensure that our facilities meet the educational goals of the college.

The Irvine Valley College 2011 Education and Facilities Master Plan (EFMP) is the culmination of research and input from constituent groups across the campus and the community. The collegial process that produced the EFMP was facilitated by gkkworks, a nationally recognized planning, architecture, and construction services firm, retained by the South Orange County Community College District. The process began with the collection of existing data from all areas of the college including instruction, support services, and campus operations. Extensive interviews, focus groups, and surveys were conducted to gather further input from students, faculty, staff, and management. Finally, presentations and campus forums were held to share the data that was collected.

This plan is a living document that will be used as the foundation for planning our future over the next five years and serve as the springboard for our next round of planning in 2016. Ultimately, it will be used as a roadmap to guide the development of instructional programs, student services, and facilities.

I would like to take this opportunity to thank all who participated for their hard work and the invaluable contributions they have made to this planning process. I know we are all committed to serving the needs of our students and the community. The Irvine Valley College Education and Facilities Master Plan will enable us to achieve this goal and shape the future of the college thoughtfully, diligently, and collectively.

A handwritten signature in black ink, reading "Glenn R. Roquemore". The signature is fluid and cursive, with a long horizontal line extending from the end.

Glenn R. Roquemore, PhD  
President



A large blue sign with white text that reads "IRVINE VALLEY COLLEGE" in a large, bold, sans-serif font. Below it, in a smaller font, it says "SOUTH ORANGE COUNTY COMMUNITY COLLEGE DISTRICT". The sign is set in a landscaped area with green grass and some flowering plants. In the background, there are several tall, green trees and a parking lot with many cars. The sky is blue with some light clouds.

IRVINE VALLEY COLLEGE  
SOUTH ORANGE COUNTY COMMUNITY COLLEGE DISTRICT

# Chapter One

Executive Summary

1





Exhibit 1.1: 2031 Illustrative Campus Plan

## Introduction

### Purpose of the Facilities Master Plan

Irvine Valley College is nearing its 25th year as a certified community college serving the communities of South Orange County. The college's mission statement promotes student learning through exemplary faculty, innovative teaching methods and state-of-the-art facilities. To meet these complimentary objectives, the 2011 Education and Facilities Master Plan (EFMP) document outlines the collaborative twelve-month research, discussions, reviews and documentation process. The EFMP document provides insight to the process contributed to by many, and provides a long range planning framework for Irvine Valley College (IVC) to strategize new construction and accommodate changes in existing conditions through the 2031 planning horizon. This document presents planning and operations considerations to the South Orange County Community College District (SOCCCD), providing the District an outline for a District Five Year Development Plan and the foundation of subsequent plans for the allocation of campus resources to meet college values and strategic directions. The Facilities Master Plan (FMP) builds upon the documented data of the Education Master Plan and incorporates an understanding of the IVC campus, projects future growth and modernization potential, and outlines an approach to implementation. The FMP takes into account: history of Irvine Valley College and surrounding communities; core values of the institution as represented in its mission, vision, and strategic goals; data from within the college and from authoritative external sources; and the best thinking of all constituency groups regarding a vision of the Irvine Valley campus. This 2011 Facilities Master Plan document replaces the 2006 EFMP document as a vision and implementation resource.

The 2011 Facilities Master Plan incorporates a comprehensive review of existing, present, and proposed conditions, connecting historical reference with current need and projected outcome. The information and development strategies shown in this document reflect current forecasts for student and programmatic growth combined with facilities

upgrades to meet growth within a determined capital outlay program. The 2011 FMP will be utilized as a resource for current and future project decisions and coordination, and will guide the 2011-2016 strategic planning timeline. The following narrative summarizes content of the FMP document and key objectives defined by the Irvine Valley College, the South Orange County Community College District and community participants.

### Methodology and Process

This 2011 Facilities Master Plan examines the significant changes to Irvine Valley College and external conditions since the publication of the 2006 Education and Facilities Master Plan. The 2011 Education and Facilities Master Plan team followed a transparent process where college, district and community constituents were engaged to participate in an open dialogue, determining need and priority with intent to serve students and the community. The methodology of strategic visioning, planning development and documentation is founded upon this transparent process of participatory governance and communication. Concurrent with external and internal surveys and focus group interviews, the Facilities Master Plan team also engaged in an assessment and documentation of existing campus facilities. Information collected and strategies developed resulted in documentation of three development horizons: 2011-2016 Five Year Horizon, 2016-2021 Ten year Horizon, and 2021-2031 Twenty Year Horizon.

## Introduction

### College Background

Understanding the history of Irvine Valley College is an important step in understanding the college mission as it relates to future growth. Irvine Valley College was originally established as a satellite campus to Saddleback College in 1979 as the South Orange County area experienced significant population growth. The original campus site was 20 acres and included a cluster of buildings located on the northwest quadrant of the site. The campus is located in Irvine, California, approximately 45 miles southeast of Los Angeles. Responding to continued growth in the community and expansion of academic services throughout the 1980's, IVC established independent college status in 1985 and became an accredited institution in 1989.

Today, the campus has expanded to 100.4 acres and is bounded by three major arterial collectors; Barranca Parkway to the south, Jeffrey Road to the west and Irvine Center Drive to the north. The campus contains roughly 400,000 square feet of academic, student service and support building space. The college currently serves a student population of 15,000, with a combined full time and part-time faculty of 400 and classified staff of 178. Irvine Valley College has evolved strong partnerships with many Southern California four-year institutions, and provides baccalaureate quality transfer education, career and technical education, basic skills courses and lifelong learning opportunities.

## Goals and Influences

### Guiding Principles and Existing Conditions

The 2011 Education and Facilities Master Plan is shaped by guiding principles established by IVC (including vision, mission, values and college-wide goals), along with college strategic plans and other specific plans and working documents. Detailed description of the elements of guiding principles can be found in chapter three of this document. These key elements embody a commitment to provide highest quality education in partnership with the community and four-year institutions of the region. Combined with documents such as the 2006 Facilities Master Plan and Twenty-Year Facilities & Scheduled Maintenance Plan, the 2011 EMP document is consistent with the guiding principles

of Irvine Valley College and the South Orange County Community College District.

IVC existing academic conditions are fully documented in the Education Master Plan (EMP) and physical conditions documented in this FMP document. Chapter 4 provides an overview of facilities conditions. Noted in the appendix is access to a facilities assessment database where specific physical characteristics of each campus building are documented. This database is a combination of information gathered from the State Fusion database and individual building surveys performed by the FMP team.



## Development Strategies

### Project Prioritization Criteria

2006 EFMP information, current EMP forecasts and extensive campus group discussions provided a basis for a comprehensive Project Prioritization Criteria. The Criteria guided development of a comprehensive list of facilities construction projects, organized chronologically into five, ten and twenty year planning horizons. This process included campus focus group interviews, internal data assessment, physical improvement needs and external impacts such as the State of Chancellor's Office approval process and future student expectations. The Criteria provides a means to evaluate academic and student services need and identify dollar values for each campus project to be developed over the three development horizons. The result of planning discussions with the college is project list that addresses academic needs and alignments with WSCH forecasts. Individual projects were then strategically sequenced within the defined five year, ten year and twenty year horizons to strategize fiscal outlay consistent with revenue resources.

### Campus Organization

Developed in parallel with project prioritization campus organizational strategies were explored, creating a campus master plan that identifies how the campus will appear in the five, ten and twenty year development horizons. The campus master plan is based upon a concept of clustering related academic programs to create student and academic synergy, instructional efficiency and program identity, and provide clear access to student services. This concept embodies a theme of "Centers for Learning" that will promote a student-centered environment, and have a significant impact upon quality of instructional compatibility, provide opportunities for gathering and will facilitate

pedestrian navigation throughout the campus. Facilities projects are identified by program, scope in terms of WSCH or non-WSCH provision and cost value. Complimenting new construction and modernization of buildings, the master plan integrates a network of external open spaces and landscapes to encourage a collegial environment, and address the value of social or instructional gathering and the importance of a sustainable, well maintained campus.

### Project Sequence and Space Inventory

Project sequence logistics is a critical element of the facilities master planning effort and fiscal planning. It is also vital to procurement of project planning, state approvals and construction work identified by each project scope. Included in discussions of projects and campus organization were strategies for development of a logical project sequence to manage growth, address construction impacts to campus function and facilitate capital outlay planning consistent with funding resources. The result of numerous meetings with college representatives, guided by the Project Prioritization Criteria, is defined by the five, ten and twenty year development plan horizons.

In tandem with projects identified in the Project Sequence a Campus Space Inventory summarizes the composite growth of all WSCH and non-WSCH space anticipated in the twenty year span of the EFMP document. The composite area is measured against projected WSCH need identified in the EMP to validate forecasted construction extent and capital outlay.

## Facilities Master Plan

### Campus Vision

Irvine Valley College's campus vision aims to achieve an active, welcoming student-centered **"Arboretum of Education"**, providing places that are both educational and inspirational. It also utilizes the college's vision to "provide opportunities for student success and enter into dynamic community partnerships". The College will be organized by "Centers for Learning" to enhance academic synergy and provide exterior landscape environments that are people friendly. Dynamics of these spaces will enhance the student experience, compelling students to extend their time on campus and take advantage of opportunities for academic, athletic and social activity. Many factors that played a vital role in the planning process contributed to a focus upon pedestrian circulation, way-finding and accessibility, a diverse open space network, and vehicular circulation and access.

### Planning Horizons

To implement a strategic "pattern for growth" the Facilities Master Plan is organized into three development horizons: five, ten and twenty year. Each development horizon includes a general overview of all design and construction projects to be performed by consultants, including new buildings, renovated/modernized existing buildings and site improvements. A Project Sequence Chart identifies each project numerically, correlates each project with a campus map, and provides project value in 2011 dollars and escalated value based upon projected time when a given project will occur.

### Five-Year Plan

Projects identified in the five-year development horizon (2011-2016) are those currently in stages of approval, design or early construction processes or directly impacted by projects in the approval processes. Projects in this five-year plan will have significant impacts upon the quality of instruction by providing state-of-the-art labs, classrooms and support program space. The addition of secondary effect improvements and site improvements will also play a vital role in this span and also address the criteria.

### Ten-Year Plan

Projects identified in the ten-year development horizon (2016-2021) continue to modernization of the IVC Campus with some areas of growth. Project focus is upon building modernization, safety and functional improvement of instructional/athletic areas, infrastructure development of campus-wide facilities and new athletics building facilities.

### Twenty-Year Plan

Projects identified in the twenty-year development horizon (2021-2031) include instructional and student services growth and enhancement, development of athletic facilities and significant infrastructure developments, and a new parking structure.

## Facilities Master Plan

### Landscape Considerations

The landscape approach for IVC follows the principle of providing healthy landscape to complement local climatic conditions and significantly benefit campus character. The master plan is respectful of geometric agricultural patterns that previously dominated the Irvine context balanced with a subtle organic landscape overlay to soften pedestrian experiences. This balanced theme is intended to create character and order throughout the campus and be practical in terms of indigenous planting, reduced heat-island effects, reduced energy use and reduced water consumption.

### Sustainable Principles

The South Orange County Community College District is committed utilizing sustainable principles for energy consumption, impact upon the natural environment and people friendly places. In order to address this commitment, new projects on the IVC campus will meet established code energy requirements and seek to exceed requirements to achieve the benefits of a "Green Campus." The campus will utilize basic design principles defined by the current Leadership in Energy and Environmental Design – New Construction (LEED-NC) rating system for sustainable design and environmental sensitivity. These principles are as follows: Sustainable Sites; Water Efficiency; Energy and Atmosphere; Materials and Resources; Indoor Environmental Quality; and Innovation in Design.

## Advanced Technology & Education Park (ATEP)

The Advanced Education and Technology Park (ATEP), established in 2004, is located in Tustin, California on the former Marine Air Corps Station. It is a satellite campus serving both Irvine Valley College and Saddleback College. The purpose of ATEP is to provide "high performance, high impact" career-technical education and offer public-private partnerships as a mechanism of outreach to the

professional community of South Orange County. The current facilities occupy five buildings totaling 15,000 GSF on a 1.5 acre space. Current planning for ATEP is Phase 3A of the ATEP Long-Range Plan. Phase 3A will provide a new 30,000 square foot multi-disciplinary facility for academics and represent a critical step in the future growth of ATEP and expanded services to the South Orange County community.



A photograph of a campus intersection. A large, leafy tree stands in the center, casting a shadow on the road. A silver car is stopped at the intersection. In the background, a white bus is visible, along with a building and a parking lot. The sky is blue with some clouds. The overall scene is bright and sunny.

# Chapter Two

Introduction

2

## Purpose of the Facilities Master Plan

Irvine Valley College is part of the South Orange County Community College District (SOCCCD). The Education & Facilities Master Plan (EFMP) is a **"blueprint for future development"** of Irvine Valley College from 2011 through the 2031 planning horizon, informing planning and operations of the SOCCCD. The Plan also serves as the outline for a District Five Year Development Plan and the foundation of subsequent plans for the allocation of campus resources and college goal setting. The Facilities Master Plan (FMP) takes into account: the history of the college; the core values of the institution as represented in its mission, vision, and strategic goals; data from within the college and from authoritative external sources; and the best thinking of all constituency groups regarding a vision of the Irvine Valley College campus. The FMP is intended to be a **"living document"** that is read and reviewed throughout its planned five-year lifetime. The previous Facilities Master Plan, released in 2006, will be replaced by this 2011 Facilities Master Plan. Currently, the Strategic Planning Oversight and Budget Development Committee (SPOBDC) coordinates the annual and long-range planning process for the College. The Committee is responsible for integrating program review and college-wide facilities development, and maintaining open dialogue with campus constituencies. At each organizational level, the process will draw on useful, relevant, and reliable information to take a critical look at itself, student needs, community requirements, and external imperatives.

The 2011 Facilities Master Plan includes a comprehensive review of existing environmental and built conditions, and department/school planning data, acquired through a series of interviews with the constituents of the college including students, staff and faculty. Information and development strategies shown in the 2011 Facilities Master Plan will reflect current forecasts for student and programmatic growth combined with strategic visions for campus modernization. The Facilities Master Plan is a resource to inform current and future project decisions and coordination, and will be reviewed and updated on the 2016 strategic planning timeline. The Facilities Master Plan is intended to serve the following specific purposes:

- Establish clear development/modernization direction for the college by strategizing future growth relative to changing internal and external trends and influences.
- Provide a foundation for implementation strategies and serve as a primary resource for the development of other college planning activities.
- Support accreditation reviews and demonstrate compliance with accreditation standards.
- Inform the community of the college's present needs and future plans, forging a closer relationship between the college and the community.
- Serve as the basis for facility decisions regarding expansion and modification of facilities and the implementation of all funding measures provided to improve college facilities.
- Identify how the campus can serve students by emphasizing the strengths and capabilities of the college, and offer an environment supportive of academic and cultural pursuits.
- Stimulate synergies between students and faculty, and promote effectiveness of college programs.
- Increase coordination between master plan development and ongoing facilities maintenance projects.



## Methodology and Process: Overview

Utilizing the updated data, the 2011 Facilities Master Plan takes into account any significant changes to Irvine Valley College and external conditions since publication of the 2006 Education and Facilities Master Plan. These include changes in enrollment, academic priorities, age and condition of facilities, student and community expectations, sustainability initiatives, technology, incorporation of the Advanced Technology & Education Park (ATEP) campus and state of the economy. Within a continually evolving environment, long-range planning provides an important guideline for sequential growth, yet is flexible enough to incorporate adjustments throughout the course of its planning horizons. To achieve consensus on the 2011

Education and Facilities Master Plan the education and facilities master plan team followed a process where college, district and community constituents were engaged to participate in an open dialogue. The methodology of strategic visioning, planning development and documentation is founded upon this transparent process of participatory governance and communication. The process spanned a period of approximate twelve months, and included several means of information sharing, feedback and progress reporting. This process also enabled a continual process of definition and refinement that resulted in this 2011 Facilities Master Plan.

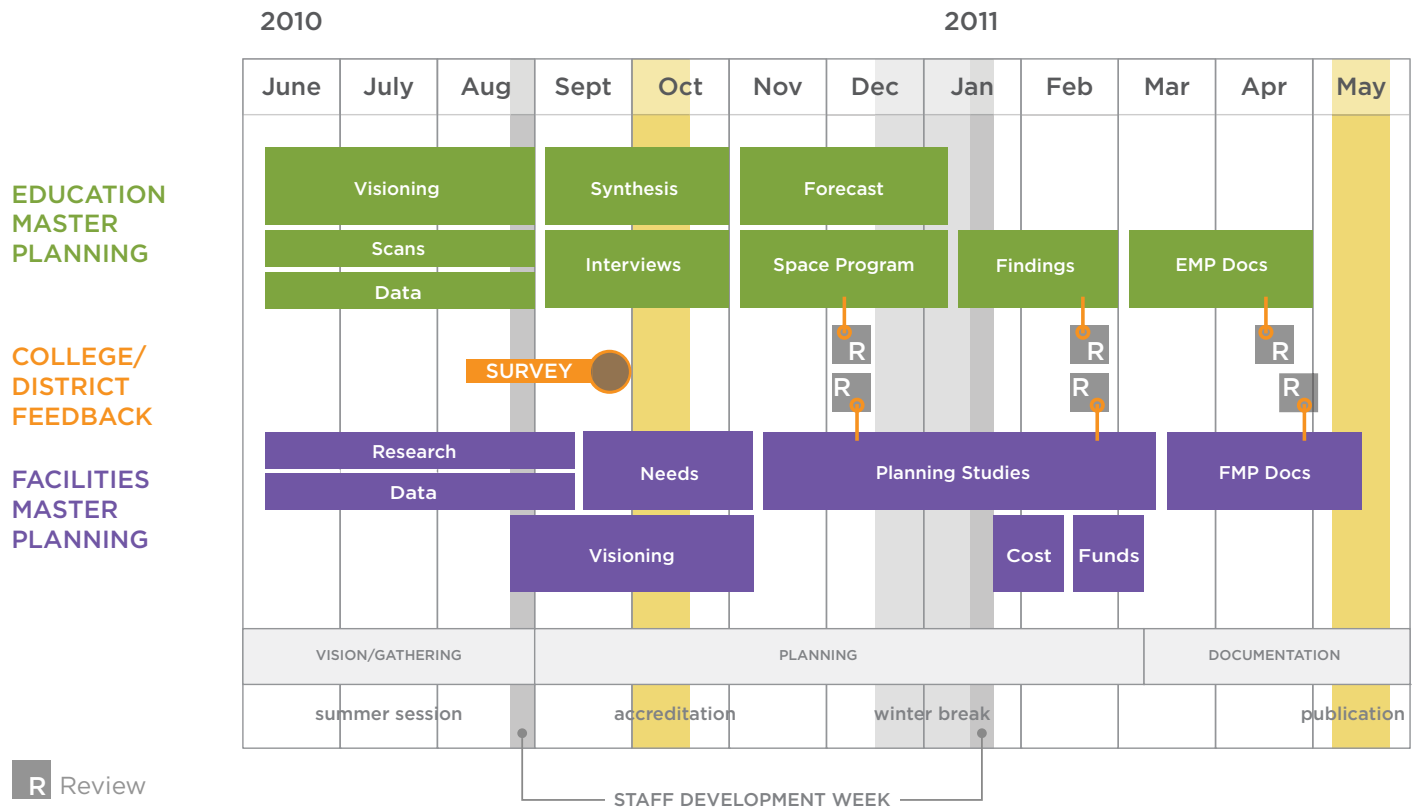


Exhibit 2.1: 2010-2011 Master Plan Process Schedule



## Methodology and Process: Communication

Transparency of communication with all constituencies and consistency between strategic facilities growth and the Irvine Valley College Mission Statement has been the core value of the 2011 Facilities Master Plan. To facilitate and coordinate the 12-month effort, Irvine Valley College involved several key groups representing students, faculty, classified staff, administration and the community. The groups provided a source of direction, guidance and feedback throughout the entire planning and documentation process, and the resultant Facilities Master Plan is a reflection of the many participants who have contributed. Listed below is a summary of methods utilized to communicate, share information and establish direction for the 2011 Facilities Master Plan:

- Strategic Planning Oversight and Budget Development Committee (SPOBDC) meetings
- Facilities Maintenance and Operations Department meetings
- Campus / Community Presentations
- Focus Group (Student, Faculty, Staff and Management) Interviews
- External Community questionnaires
- Internal Faculty questionnaires
- Internal Student questionnaires
- Web based progress reporting and information sharing
- Web based surveys and comments
- District Executive Committee reviews

Combined meetings and presentations totaled 40 sessions spanning nine months. Key milestones included: internal and external surveys in September 2010, faculty/staff/student interviews in October 2010, campus wide presentations in September 2010 and January and April 2011, and community surveys in April 2011. Included in the reference documents is a summary of the October 2010 Focus Group interviews which occurred over a three day period. These notes are located in a separate Reference Document along with existing facilities assessment materials.

## Methodology and Process: Facilities Assessment

Concurrent with the Surveys and Focus Group Interviews in September and October of 2010, the gkkworks Facilities Master Plan Team engaged in an assessment and documentation of existing campus facilities. The individual assessment process included research of State records, reviews with campus facilities staff, physical evaluation of facilities and photographic recording of the campus and facilities. Documentation of the assessment process may be found in the appendices or a separate publication listed under Reference Documents. For each building the facilities assessment information includes an individual summary page of building data, building plans, descriptive summaries of building conditions and systems, and program space outline. The Facilities Assessment is located in a separate Reference Document along with the Focus Group interview notes. A photographic record of the existing campus is located in Appendix B of the Facilities Master Plan. The photographic recording includes building interior and exterior images, and campus site conditions.



*Exhibit 2.2: A-200 Building*



*Exhibit 2.3: A-100 (Administration Building)*

## College Background

Irvine Valley College campus is located in the residential and commercial community of Irvine, California, approximately 45 miles southeast of Los Angeles. The campus originally was surrounded by a successful agriculture infrastructure, but in the 32 years since the college originally opened to serve the community the immediate area has evolved into a vibrant residential area. The current campus is approximately 100 acres in land area with approximately 400,000 square feet of academic, student service and support building space. The college currently serves a student population of 15,000, with a combined full time and part-time faculty of 400 and classified staff of 178. Positioned in close proximity to the University of California, Irvine campus and the Spectrum commercial, retail and entertainment center, Irvine Valley College provides an important service to the residents of Irvine who seek higher education certificates and degrees, acquire career and basic skills, and pursue lifelong learning opportunities.

Irvine Valley College was originally established in 1979 as a satellite to Saddleback College and designated the Saddleback College North Campus. This development was a response to growing higher education needs in the Irvine community. The original campus site area was 20 acres and included a cluster of buildings located on the northwest quadrant of the site. Growth of the community in the early 1980's and expansion of academic services resulted in establishment of Irvine Valley College as an independent community college in 1985. In 1987 the South Orange County Community College District (SOCCCD) acquired additional acreage, completing the campus site. In 1988, the College received accreditation as a separate institution by the Western Association of Schools and Colleges, becoming the 105th Community College in the State of California. Irvine Valley College has grown and evolved in tandem with the development of Irvine and adjacent communities, achieving success in its service to the community and as a partner with other community colleges and nearby four year universities. In addition, the SOCCCD acquired land formerly known as the Tustin Air Base for development of an academic satellite, The Advanced Technology and

Educational Park (ATEP). Currently Irvine Valley College provides service to students in 16 individual Schools and 10 affiliated programs and has a top rated transfer rate to four-year institutions.

Since the previous Facilities Master Plan, Irvine Valley College has established a Strategic Planning and Budget Development Process and Planning and Decision-Making Manual to identify protocol, roles of constituent groups and methods of the review and decision-making process. These defined parameters will guide campus facilities growth and existing building modernization as defined in the 2011 Facilities Master Plan and provide necessary updates or revisions to reflect internal and/or external influences.

*“Irvine Valley College is an institution of higher learning that seeks to deliver innovative instruction and student services programs, provide opportunities for student success and enter into dynamic community partnerships. The college maintains high educational standards as measured by student learning outcomes including skills and knowledge gained.”*

*Exhibit 2.4: Groundbreaking for the Saddleback College North Campus in October 1977, attended by then Board of trustees members.*



*Exhibit 2.5: Aerial view of the Saddleback College North campus in 1982. The original buildings are now identified as the "A Quad" buildings, completed in 1979. Combined, they provided approximately 50,000 gross square feet of building area. The original buildings are located in the northwest quadrant of today's campus. In 1982, the majority of the campus was agricultural fields, with a wind barrier tree line extending west to east through the campus. Jeffery Road to the west and Irvine Center Drive to the northeast exist. Areas east and south of the campus were primarily agriculture, with an existing barranca running west to east south of the campus.*





## College Background



**Exhibit 2.6:** Aerial View of Irvine Valley College in 1994. Expansion of the campus is seen with additions of the "B Quad" buildings, built between 1981 and 1988, the Student Services Center, built in 1991, the Child Care Center, Physical Education Buildings PE-100 and Hart Gymnasium, and athletic fields.



## College Background

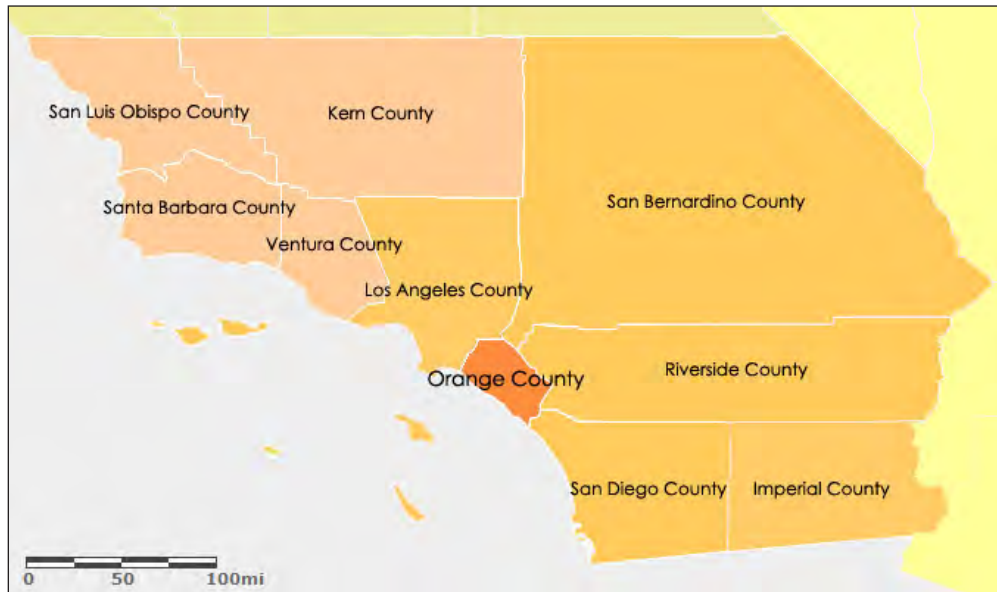


*Exhibit 2.7: Aerial View of Irvine Valley College in 2006. Expansion of the campus is seen with additions of the Library, maintenance/operations facilities and portable classrooms. Barranca Parkway exists south of the campus. Early site preparation can be seen in the center of the campus for the Performing Arts Center (PAC) and Business Science Technology Innovation Center (BSTIC).*

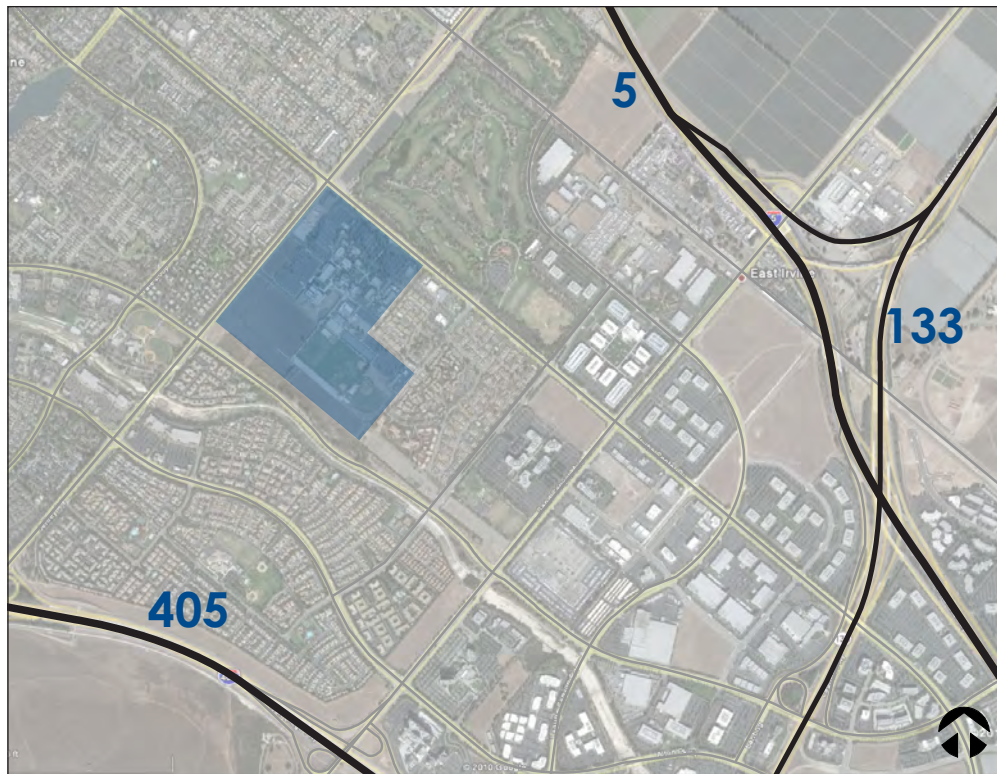


## Existing Conditions: Community and Regional Context

Orange County is bounded by Los Angeles County to the north, Riverside County to the east and San Diego County to the west. It is the smallest county in Southern California in terms of land area, 948 sq mi (2,455.3 km<sup>2</sup>), and is the second largest in terms population (3,315,000 in 2010).



*Exhibit 2.8: Map of Southern California Counties*



*Exhibit 2.9: Satellite Image of Irvine Valley College Vicinity*



## Existing Conditions: Campus Context



*Exhibit 2.10: Current aerial view of Irvine Valley College. Parking lots 5 and 7, facilities management and operations, and campus police buildings are complete.*

Existing Conditions: Campus Assessment

The existing Irvine Valley College Campus is approximately 100 acres, bounded by three major arterial collectors; Barranca Parkway to the south, Jeffrey Road to the west and Irvine Center Drive to the north. The east perimeter is bounded by a single family residential community.

Topography

The campus has a natural, gentle slope to the south toward Barranca Parkway and City of Irvine easement. On campus the perception of slope or terrain change is negligible and impacts of topography upon building construction and accessibility is minimal. The most significant impact of topography is apparent in campus drainage as the minimal slopes impede drainage and can result in areas of annual flooding. These impacts can be detrimental to function and durability of paved areas such as parking, and will require regular maintenance and corrective work.

Buildings

The campus currently has 22 permanent structures for academic, administrative and facilities functions. Buildings range in age from older structures (30+ years - A Quad) to modern structures (3-5 years – PAC, BSTIC, CP-100 and M Buildings). The older structures are challenged programmatically with systems issues, and often not meeting contemporary standards of accessibility or code standards. These conditions of age and deterioration will influence future modernization projects as necessary upgrades of accessible facilities (restrooms) or infrastructure upgrades (structure or mechanical systems) will be incorporated as part of identified projects. These upgrades will improve facilities but also impact project costs.

Some space provisions for academic and student support programs are marginal and impact daily functions for students, faculty and classified staff. Instructional spaces in older facilities often compromise state-of-the-art teaching methods, including technology needs. In addition, student services spaces compromise ease of accessibility and privacy concerns. Though the college has diligently worked to upgrade and improve conditions to meet new

instructional trends and practical function there is a definite need to incorporate facilities modernization into the Facilities Master Plan Development Strategy along with new facilities. In addition, some academic programs are located in multiple buildings. As new and modernization projects are planned and developed efforts to consolidate programs and services will foster academic synergy, enhance functional efficiency and improve identity of individual programs or related course of study.

The combined floors areas of all existing buildings are summarized below. An itemized list of existing and future building areas is provided in Section 4, Development Strategies – Campus Space Inventory. All building areas are identified in ASF (assigned square feet) and GSF (gross square feet):

Academic Function	156,725 ASF
Non-Academic Function	115,961 ASF
<b>Building Total</b>	<b>272,686 ASF</b>



## Existing Conditions: Campus Assessment

### *Parking / Vehicle Access*



*Exhibit 2.11: Parking Lot 9*



*Exhibit 2.12: Main Campus Entrance*



*Exhibit 2.13: Campus Loop Near Lot 1*

The campus currently provides 2,262 permanent parking spaces spread across eight surface lots. Currently there are three entrance/exit drives, two signalized. The three entrance/exit drives are: Irvine Center Drive (signalized), Jeffrey Road (one signalized, one not signalized). In addition, there is a bus transit stop and auto court located at the Irvine Center Drive entrance. The existing campus parking ratios are approximately 6.2 students per parking space or 6.0 spaces per 1000 GSF. By integrating use of community transit systems these ratios are acceptable but marginal. This assessment is validated by noting parking issues that occur in the first weeks of an academic term when a majority of students and faculty are on campus concurrently. These conditions ease as an academic term progresses and daily/weekly attendance patterns evolve based upon schedules. Impacts upon parking will increase commensurate with future growth and must be addressed within the Master Plan Development Strategy.

In addition to necessary provisions for parking, access and egress to/from the campus must be addressed. The current provision of three entrance/exit drives can meet current traffic needs; however combined use of the Irvine Center Drive entrance for parking, bus access and an auto court causes significant congestion issues at this location. Queuing distances are short and integration of cars and buses impede vehicular flow. As the campus grows, parking inventory will increase and traffic will increase. Provisions for additional means of ingress/egress and mediation between bus and car traffic will be incorporated into the Master Plan Development Strategy.

Existing Conditions: Campus Organization

Buildings

The original campus was developed as a small grouping of buildings located in the northwest quadrant of the current Irvine Valley College campus. Now identified as the A Quad and B Quad, these buildings were conceived as building "clusters" and organized in orthogonal patterns on the campus. The balance of campus organization follows the theme of "orthogonal patterns", responding to the A and B Quads and reflective of historic agricultural patterns and contemporary parcel mapping and street patterns. Though future building placement strictly adheres to the orthogonal arrangement building appearances vary in character, height and exterior materials and finishes. Earlier buildings tend to be smaller in scale and reflect courtyard building design patterns intended to embrace outdoor gathering spaces. More current buildings are larger in scale and reflect contemporary architectural style with expressions of technology and sustainability, and enclosure of open space relative to current buildings is less defined. Improvement of open space definition can be achieved with careful arrangement of planned buildings and enhanced placement of landscape.

Campus

The current campus is efficient for navigation with parking located at the campus periphery and the center of campus primarily pedestrian oriented. Open space patterns follow the orthogonal nature of building organization with landscape offering some degree of color, pattern and texture variation. Increased use of landscape as means to enhance outdoor areas may greatly benefit the integrity of the campus. The new "Great Lawn" project, currently under construction, is an example of landscape as an organizing theme and will provide a much needed central outdoor gathering space for the campus. The Great Lawn may also become a focal point for a network of future open space development and enhanced existing open spaces.

Plan diagrams in Section 5 of this document convey patterns for vehicle access, pedestrian circulation and the potential of an open space network that will unify and beautify the campus.

LEGEND	
A-100	Administration
A-200	Social Sciences
A-300	Humanities and Fine Arts
A-400	Life Sciences
B-100	Classrooms & Offices
B-200	Math and Physical Science
B-300	Classrooms & Labs
BS	Bookstore
BSS	Bookstore Storage
BSTIC	Business Sciences & Technology Innovation Center
CDC	Child Development Center
CEC	Community Education Complex
CP-100	Campus Police & Parking
CP	Central Plant
ED	Electrical Distribution
GL	Great Lawn
KAPLAN	Kaplan Aspect International
LIB	Library
M-100	Facilities Management
M-200	Maintenance & Operations Shops
M-300	Maintenance & Operations Storage
PAC	Performing Arts Center
PE-100	Health Fitness
PE-200	Hart Gymnasium
SA	Science Annex
SSC	Student Services Center
WH	Warehouse
NOTE*	The Great Lawn (GL) is currently under construction.

## Existing Conditions: Campus Organization

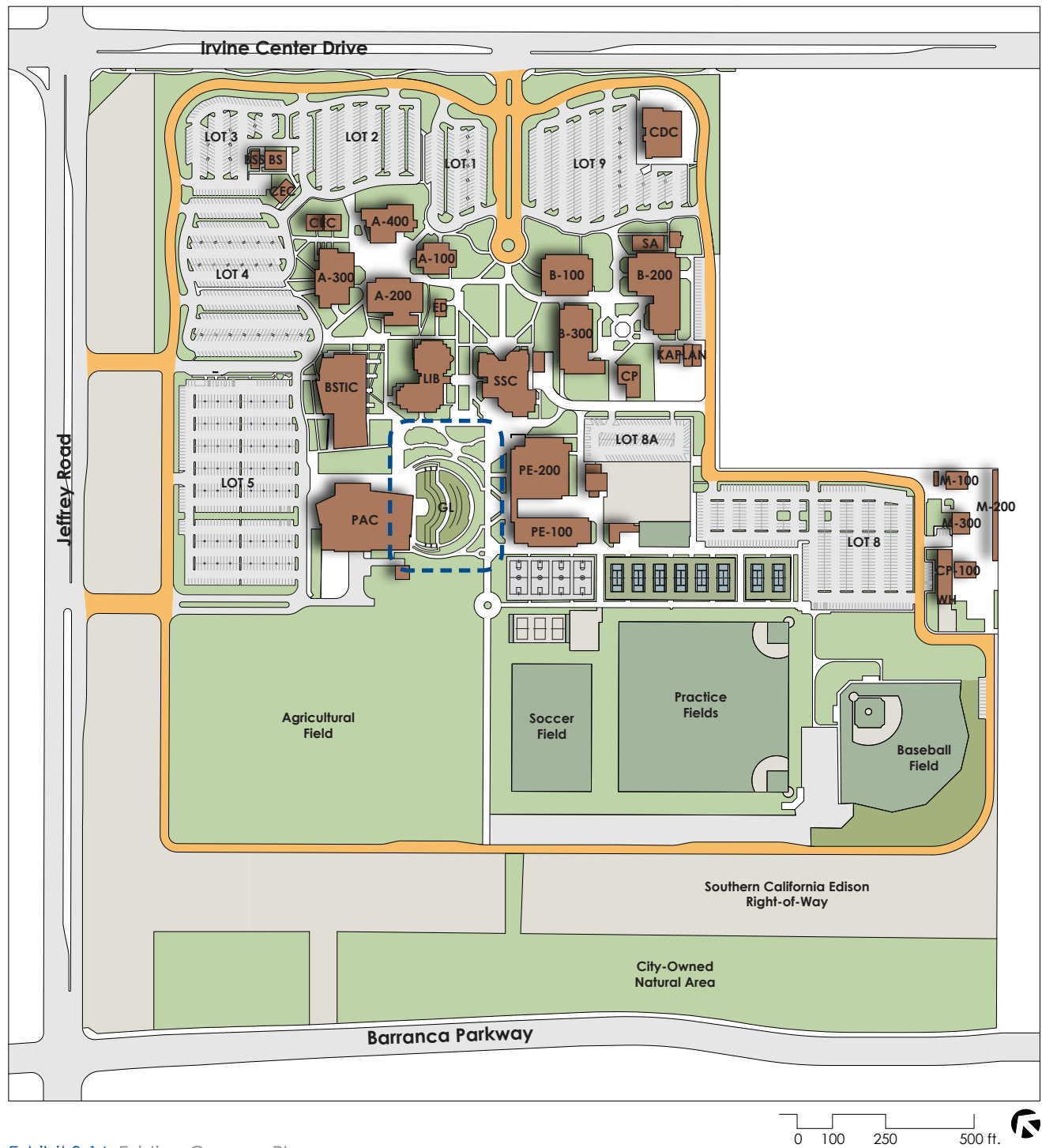


Exhibit 2.14: Existing Campus Plan



## Existing Conditions: Aerial Campus Views



*Exhibit 2.15: Aerial view of campus.*



*Exhibit 2.16: Campus Main Entrance*



## Existing Conditions: Aerial Campus Views



*Exhibit 2.17: A-Quad with A-100, A-200, A-300, A-400 and CEC.*



*Exhibit 2.18: B-Quad with B-100, B-200, B-300, Science Annex, CP and KAPLAN*



## Existing Conditions: Aerial Campus Views



*Exhibit 2.19: PAC, BSTIC, Library and SSC Buildings*



*Exhibit 2.20: PE Buildings, Tennis Courts, Basketball Courts and Sand Volleyball Courts*



## Existing Conditions: Aerial Campus Views



*Exhibit 2.21: Agricultural Field, SCE Right-of-Way and City-Owned Natural Area*



*Exhibit 2.22: Baseball Field, Practice Fields, Campus Police and Maintenance*

the 1990s, the number of people in the UK who are aged 65 and over has increased by 1.5 million (1990–2000) and is projected to increase by a further 1.5 million by 2020 (Office for National Statistics 2001). The number of people aged 65 and over is projected to increase by 2.5 million by 2020 in the USA (U.S. Census Bureau 2000). The number of people aged 65 and over in the UK is projected to increase by 2.5 million by 2020 (Office for National Statistics 2001).

There is a growing awareness of the need to develop strategies to meet the needs of the ageing population. The World Health Organization (WHO) has developed a 'Global Strategy on Ageing and Health' (WHO 1999) which aims to 'improve the health and well-being of older people and to ensure that they are able to live in dignity and security, and to participate in the life of their communities'. The WHO has also developed a 'Global Strategy on Ageing and Health' (WHO 1999) which aims to 'improve the health and well-being of older people and to ensure that they are able to live in dignity and security, and to participate in the life of their communities'.

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A photograph of the Irvine Valley College Student Services Center, a large brick building with a prominent gabled roof. The building is surrounded by green lawns and trees. In the foreground, a person with a backpack is walking on a paved path. Several blue banners with the college's name and logo are hanging from light poles. The sky is clear and blue.

# Chapter Three

Goals and Influences

3

## Guiding Principles for the 2011 Facilities Master Plan

The South Orange County Community College District and the colleges that comprise it operate within the California Community College system. The vast system of 72 districts and 112 colleges educates approximately 2.5 million students in the state. Under the authority of the state legislature and the California Master Plan for Higher Education, the colleges offer lower division education and community education including lower division transfer, career and technical education, basic skills, and lifelong education. A state level Board of Governors oversees policy for the colleges as a whole.

Locally, elected members of boards of trustees are responsible for college districts. The South Orange County Community College District is the administrative arm of the seven-member board of the district and its colleges, Saddleback College and Irvine Valley College.

Within the context of its legal authority and the state and local boards, Irvine Valley College shapes its vision, mission, values and establishes college-wide goals. The aforesaid guiding principles, along with college strategic plans and other specific plans and working documents, have formed a written platform for the work of the 2011 EFMP. The 2011 EFMP is consistent with state, district, and college authority and guiding principles and was developed in accordance with existing college goals and objectives.

- Compliance with State System Parameters
- Consistent with College Strategic Plan
- Strategy for Short Term Development
- Awareness of a Long Term Campus Vision
- Academic/Instructional and Student Support Needs

<b><i>Vision Statement</i></b>	Irvine Valley College is an institution of higher learning that seeks to deliver innovative instruction and student services programs, provide opportunities for student success and enter into dynamic community partnerships. The college maintains high educational standards as measured by student learning outcomes including skills and knowledge gained.
<b><i>Mission Statement</i></b>	<p>Irvine Valley College is committed to serving members of the community who seek to transfer, obtain degrees and certificates, acquire career and basic skills, and pursue lifelong learning. The college also provides student support services, opportunities for cultural experiences, and activities promoting partnerships with the community.</p> <p>The college is dedicated to successful and measurable student learning through the commitment of exemplary faculty and staff who offer a variety of traditional and innovative teaching methods, and provide access to state of the art technologies and facilities.</p> <p>The college is guided by a strategic plan based on data regarding changing student needs, evolving community diversity, and a rapidly changing economy.</p>

## Guiding Principles for the 2011 Facilities Master Plan

### College-wide Goals

- To meet the current and future learning needs of our diverse community.
- To foster a college environment that is dedicated to attracting and supporting excellent faculty, staff, and students.
- To develop and implement curricula that prepare students to transfer, obtain degrees and certificates, improve basic skills, and pursue life-long learning and community education.
- To provide exemplary support services focused on student success and retention.
- To provide programs and activities that promote economic development and partnerships with the community.
- To focus college processes on providing programs and services that educate students to think critically and prepare them for making career and academic choices.
- To provide leading edge instructional and administrative technologies to facilitate student success.
- To promote IVC as an institution of higher education dedicated to student access and success.
- To ensure institutional effectiveness through systematic assessment, intentional dialogue, and continuous improvement.
- To continue integrating the strategic planning process with budget development in a systematic cycle of evaluation for effective resource allocation.
- To promote environmental stewardship in college planning and decision making.

## 2006 Facilities Master Plan

The 2006 Facilities Master Plan identified a list of 18 projects to occur in the 2006-2021 timeframe. Most projects identified in the 2006-2011 timeframe have been completed or in process. The 2006 project list, shown on the next page, was reviewed and discussed during this Facilities Master Plan process. The discussions resulted in several projects re-prioritized or re-defined by Irvine Valley College in addition to new projects being identified. Section 4 of this document, Development Strategies, identifies a Project Prioritization Criteria list that informed the current prioritization process and updated Project Sequence for 2011-2031.

## 20-Year Facilities & Scheduled Maintenance Plan

To identify and guide campus improvement concurrent with the 2011 Facilities Master Plan (FMP) Irvine Valley College has developed a 2011 20-year Scheduled Maintenance Plan (SMP). Similar to the FMP, the SMP is a living document, adjusted over time to address the aging infrastructure of the campus as new needs become apparent. Similar to the FMP, projects are identified and organized chronologically. Project scopes range from painting and minor repairs to accessibility upgrades, site repair and minor building remodels. Coordination between scheduled maintenance projects and master plan projects will be guided by College Maintenance, the South Orange County Community College District Facilities Committee and the College Strategic Planning and Development Process.

The current SMP project list has identified 95 items to be addressed in the 2011-2031 timeframe, and is included in Appendix C for reference.

## 2006 Facilities Master Plan

### 2006 Facilities Master Plan Project List

Horizon	Project Description	Status
<b>2006-2010</b>		
1.	Relocation of Greenhouse	Completed
2.	A-300 Secondary Effects, Slab Repair and Planter Wall & A-500 Demo	Completed
3.	Irvine Center Drive Entry Reroute and New Bus Drop Off	Re-prioritized
4.	B-200 Lab Science Annex, B-239 Lab Conversion and Slab Repair	Completed
5.	New Central Plant, Relocate Water and Power at Proposed Site for Life Science Building	Completed
6.	New Business Science and Advanced Technology and Innovation Center; Move B-200 Business Science Faculty and Dean; Move B-300 Computer Labs	Completed
7.	New Joint Use Soccer Stadium	Re-prioritized
8.	New Life Sciences Building and Utilities; Relocate Portables B-400, P0 and P1; A-400 Move to New Life Sciences Building	In Construction
<b>2011-2015</b>		
9.	A-400 Secondary Effects and Planter Wall	Re-prioritized
10.	PE-100 Slab Repair	Re-prioritized
11.	New Fine Arts Building; Move Arts from A-300, A-400, B-100 Art Gallery, and Digital Media Arts, A-200 Fine Arts Faculty, B-100 Photography, Music A-200, and A-300	Re-prioritized
12.	Secondary Effects B-100, B-200 and A-400 Arts	Re-prioritized
13.	New Library/LRC/Administration Annex	Re-defined
14.	Renovate A-Quad for Humanities/Language/General Education and Bookstore; Remove Portables	Re-prioritized
<b>2016-2030</b>		
15.	New Barranca Parkway Entrance	Re-prioritized
16.	New Student Services Annex and Slab Repair	Re-defined
17.	Complete Baseball Stadium	Re-prioritized
18.	P0/P1 and B-400 Portables Removal	Re-defined







# Chapter Four

Development Strategies

4

## Project Prioritization Criteria

Projects to be funded and completed under the guidance of this Facilities Master Plan must follow State established criteria for capital outlay projects and address specific categories utilized for State evaluation and approval. State defined criteria are defined as follows:

- Provide for safe facilities and activate existing space
- Increase instructional capacity
- Modernize instructional space
- Promote a completed campus concept
- Increase institutional support services capacity
- Modernize institutional support services space

To reflect State criteria and establish a development strategy for facilities projects, the following **Project Prioritization Criteria** were established to identify and prioritize new building, existing building modernization and site improvement projects for Irvine Valley College. These projects would be strategically sequenced within the defined 2011-2031 Facilities Master Plan Planning Horizons. The criteria consider global and specific influences, and incorporate input gathered during the 2011 Education and Facilities Master Plan Process, including campus focus group interviews, internal data assessment, physical improvement needs and external impacts such as the State Chancellor's Office approval process and future student expectations. Once projects were identified by the college, the criteria was utilized to assist the process to sequence project development and provide a basis to implement development strategy.



*Exhibit 4.1: A-Quad*



*Exhibit 4.2: View of Library and SSC*



*Exhibit 4.3: BSTIC & PAC buildings*

## Project Prioritization Criteria

### Instructional Program Need

- a. Response to external factors (Labor Market Indicators)
- b. Inadequate facilities (performance, growth)
- c. Inefficient facilities (size, program need, functionality, technology)
- d. New student recruitment to specific programs
- e. Department/Division adjacencies
- f. Academic synergy

### Student Support Services

- a. Inadequate facilities (performance, growth)
- b. Inefficient facilities (size, program need, functionality, technology)
- c. New student recruitment
- d. Department/Division adjacencies
- e. Academic and/or Students Services synergy
- f. Response to external factors (economic and demographic)

### Facilities Condition: Safety and Compliance

- a. Conditions (building systems/infrastructure, campus lighting)
- b. Inefficient facilities (age deterioration, systems failure)
- c. Accessibility
- d. Parking availability
- e. Title IX
- f. Environmental sensitivity (water, natural preservation)
- g. Sustainability
- h. Life-cycle (energy cost, maintenance, durability)

### Campus Amenities: Benefit to a Student Centered Culture

- a. Pedestrian orientation (gathering, landscape)
- b. Services (food, entertainment, extra-curricular activities)
- c. Student gathering space (interior and exterior)
- d. Athletics and PE (local funding only)
- e. Other

### Funding Feasibility/Coordination

- a. State Funds
- b. Basic Aid Funds
- c. College Funds
- d. External Funds
- e. Other



## Facilities Organization: Centers for Learning

The **Facilities Organization** diagram acknowledges the value of clustering related academic programs to create student synergy, instructional efficiency and program identity. In addition, the college has identified ease of access to student services essential to the quality of student life. Though much of the campus already embraces the philosophy to meet these ideals, conscious organization of "**Centers for Learning**" will have a significant impact upon quality of instruction, synergy between programs and ease of pedestrian navigation. The adjacent Facilities Organization diagram suggests a guideline to influence project and program decisions over the life of the Facilities Master Plan and projects to be developed over the next 20 years. Though all programs and projects may not fit exactly within the defined diagram boundaries, their intent to place buildings and programs relative to academic relationships is intended to maintain emphasis on serving the student and maintaining rewarding collegiate experiences.

LEGEND	
<b>A-100</b>	Administration
<b>A-200</b>	Social Sciences
<b>A-300</b>	Humanities and Fine Arts
<b>A-400</b>	Life Sciences
<b>B-100</b>	Classrooms & Offices
<b>B-200</b>	Math and Physical Science
<b>B-300</b>	Classrooms & Labs
<b>BS</b>	Bookstore
<b>BSS</b>	Bookstore Storage
<b>BSTIC</b>	Business Sciences & Technology Innovation Center
<b>CDC</b>	Child Development Center
<b>CEC</b>	Community Education Complex
<b>CP-100</b>	Campus Police & Parking
<b>CP</b>	Central Plant
<b>ED</b>	Electrical Distribution
<b>GL</b>	Great Lawn (Under Construction)
<b>KAPLAN</b>	Kaplan Aspect International Library
<b>LIB</b>	Library
<b>M-100</b>	Facilities Management
<b>M-200</b>	Maintenance & Operations Shops
<b>M-300</b>	Maintenance & Operations Storage
<b>PAC</b>	Performing Arts Center
<b>PE-100</b>	Health Fitness
<b>PE-200</b>	Hart Gymnasium
<b>SA</b>	Science Annex
<b>SSC</b>	Student Services Center
<b>WH</b>	Warehouse
CENTERS FOR LEARNING	
<b>a</b>	Social Sciences/Humanities
<b>b</b>	Math & Sciences
<b>c</b>	Business Sciences and Technology Innovation
<b>d</b>	Fine Arts
<b>e</b>	Athletics
<b>f</b>	Day Care
<b>g</b>	Student Services

## Academic Organization: Centers for Learning

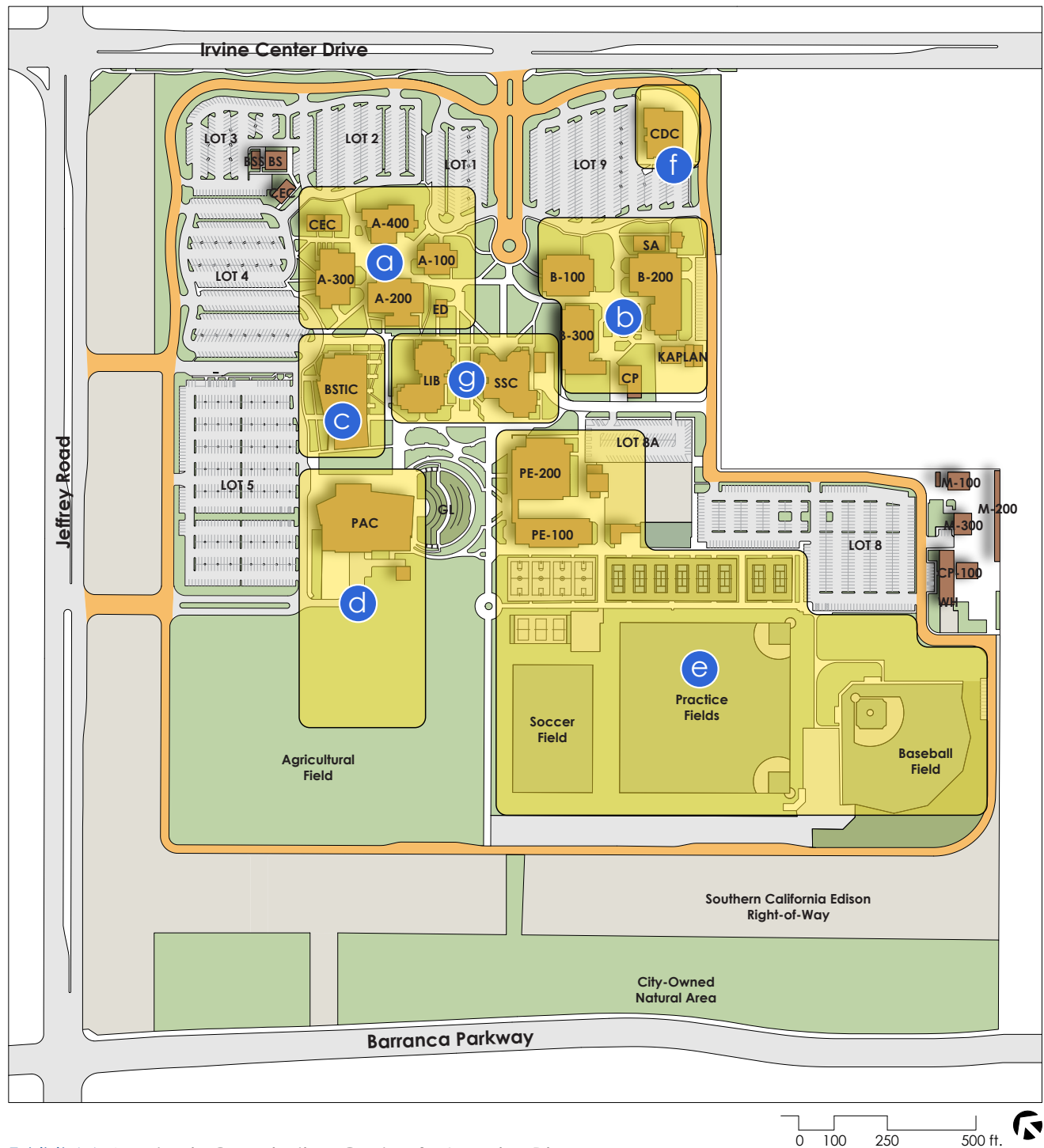


Exhibit 4.4: Academic Organization: Centers for Learning Diagram



## Project Sequence: 2011-2031

The following **Project Sequence** for Irvine Valley College defines all projects anticipated to begin within the 20 year Facilities Master Plan Horizon. Projects and their respective sequence is the result of numerous meetings with college representatives to identify need or value, define project scope and forecast project cost. Definition of the final project sequence was established by the college and guided by the Project Prioritization Criteria. Projects listed include new buildings, renovated/modernized existing buildings and site improvements. For clarity of definition all projects are identified as “New” or “Renovate”, and are listed sequentially in specific 5, 10 and 20 year planning horizons. Detailed specific planning horizon descriptions, found later in this section, define each project is briefly to

define intent and scope of the project and guide project cost forecasts.

Though projects are identified sequentially it is likely some project developments may overlap and/or some projects may adjust in position, responsive to changing needs or as yet undefined funding opportunities. Projects 1, 2, 3 and 4 in the 5 year planning horizon are already approved and moving forward. Projects 8 and 9 are currently in the State submittal and review process. Appendix E provides a complete Project Cost Summary, itemizing each individual project in terms of construction value, project costs (including management, fees and FF&E), and escalation.

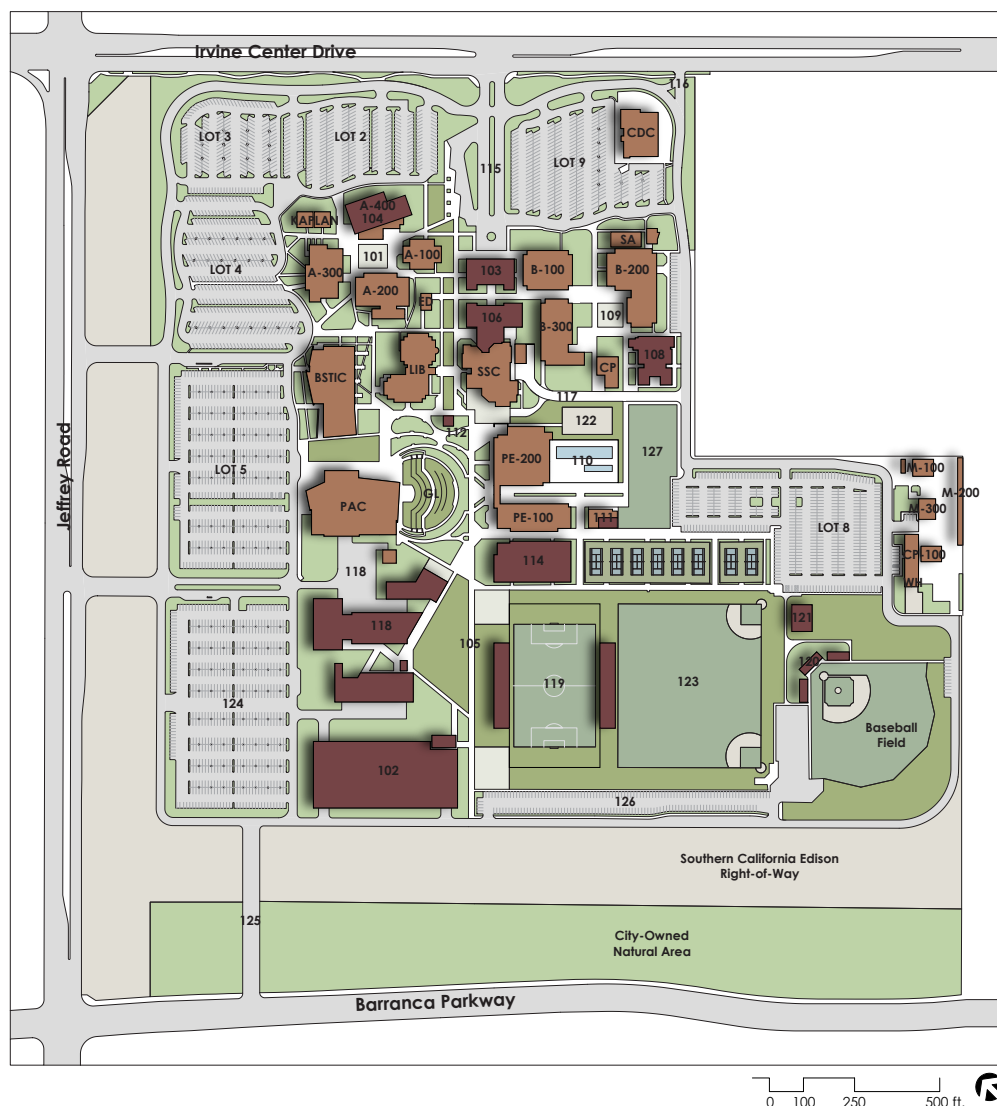


Exhibit 4.5: 2031  
Building Projects  
Plan

**2011-2016 Planning Horizon**

Project Identification		Campus Plan Location
1.	New Life Sciences Building	108
2.	New Barranca Parkway Campus Entrance /Exit Drive	125
3.	New ATEP Building	ATEP Campus
4.	Renovate A-400: H&L/SBS/Co-curricular Center	104
5.	Renovate A-200: Success Center (Writing Lab, World Language/ESL, Reading/Tutoring)	A-200
6.	Renovate B-300 Second Floor: Math/Computer Science	B-300
7.	New Surface Parking Lot (Phase I - 400 spaces)	124
8.	New Fine Arts Complex	118
9.	New Fine Arts Site Work/Renovate Performing Arts Yard	118

**2016-2021 Planning Horizon**

Project Identification		Campus Plan Location
10.	Renovate Soccer and Practice Fields	123
11.	New Surface Parking Lot (Phase II - 250 spaces)	124
12.	Renovate A-Quad Landscape/Hardscape	101
13.	Renovate B-300 First Floor	B-300
14.	New Fine Arts Promenade Landscape/Hardscape	105
15.	Renovate Campus Entrance Plaza	115
16.	New Baseball Restrooms / Bleachers / Concessions	120/121
17.	New Clock Tower	112
18.	New Auxiliary Gymnasium	114

**2021-2031 Planning Horizon**

Project Identification		Campus Plan Location
19.	Renovate B-100: New Bookstore/Conferencing Center	B-100
20.	Renovate B-Quad Landscape/Hardscape	109
21.	New Irvine Center Drive Campus Entrance/Exit Drive	116
22.	New Parking Lot	126
23.	New Outdoor Lab / BEES Garden Expansion	127
24.	New Student Services Center Expansion Annex	106
25.	Renovate Student Services Center (SSC) Building	SSC
26.	Renovate Service Road: Pedestrian Improvement	117
27.	New Sand Volleyball Courts	122
28.	New Athletics Stadium	119
29.	New Humanities & Languages / Social Behavioral Sciences Building	103
30.	New Parking Structure	102
31.	New Swimming Pools / Enclosure	110

## Campus Space Inventory

The following **Campus Space Inventory** itemizes each existing and proposed building in the 2011 Facilities Master Plan. Building identification for future buildings is based upon the Master Plan legend. Each existing and new building is described in terms of **instructional program space** (WSCH), **non instructional program space** (Non-WSCH) and **gross building space**. Identification of proposed instructional and non instructional reflects program growth projections established by the 2011 Educational Master Plan. Gross building space (GSF) for existing buildings is representative of existing conditions. Gross building space (GSF) for future buildings is based upon a standardized building efficiency factor 68%. Future building instructional, non instructional, gross and efficiency factors will be validated during subsequent programming processes.

Below the inventory tabulation a forecasted program space need is identified based upon the respective growth projects established by the Educational Master Plan. The variance shown compares the campus composite provided program area with forecast program need.



*Exhibit 4.6: Science Annex building*



*Exhibit 4.7: Library*



*Exhibit 4.8: A-100 building*

## Campus Space Inventory

Building Identification	ASF (WSCH)	ASF (Non-WSCH)	GSF
<b>EXISTING BUILDINGS</b>			
A-100	5,146 ASF		7,774 GSF
A-200	8,423 ASF	2,105 ASF	16,149 GSF
A-300	11,652 ASF		14,066 GSF
A-400/104	16,320 ASF		24,000 GSF
B-100	10,615 ASF		13,086 GSF
B-200	20,431 ASF		34,131 GSF
B-300	19,169 ASF		28,330 GSF
BSTIC	27,701 ASF	6,884 ASF	53,238 GSF
CDC	705 ASF	8,923 ASF	12,361 GSF
CP-100/WH		4,742 ASF	7,588 GSF
CPLANT		4,064 ASF	4,516 GSF
LIB	2,938 ASF	19,762 ASF	33,478 GSF
KAPLAN		4,992 ASF	5,760 GSF
M-100		2,854 ASF	2,935 GSF
M-200		2,974 ASF	3,000 GSF
M-300		2,890 ASF	3,000 GSF
PAC	9,382 ASF	21,893 ASF	58,625 GSF
PE-100		12,451 ASF	14,878 GSF
PE-200		19,951 ASF	26,577 GSF
SA	3,443 ASF	1,476 ASF	4,919 GSF
SSC	20,800 ASF		30,588 GSF
<b>SUBTOTAL</b>	<b>156,725 ASF</b>	<b>115,961 ASF</b>	<b>398,999 GSF</b>
<b>FUTURE BUILDINGS</b>			
103 - H&L/SBS	14,960 ASF		22,000 GSF
106 - SSC Expansion	10,880 ASF		16,000 GSF
108 - Life Sciences	19,704 ASF		30,000 GSF
111 - Facilities		4,663 ASF	5,181 GSF
114 - Aux. Gymnasium		20,000 ASF	25,000 GSF
118 - Fine Arts	40,155 ASF		57,560 GSF
119 - Stadium/RR's		800 ASF	1,000 GSF
120 - Baseball RR's		560 ASF	700 GSF
ATEP	20,400 ASF		30,000 GSF
<b>SUBTOTAL</b>	<b>106,099 ASF</b>	<b>26,023 ASF</b>	<b>187,441 GSF</b>
<b>TOTAL PROVIDED</b>	<b>262,824 ASF</b>	<b>141,984 ASF</b>	<b>586,440 GSF</b>
<b>PROJECTED 2031 NEED (WSCH)</b> (Instructional/Office)	<b>263,032 ASF</b>		
<b>VARIANCE</b>	<b>-208 ASF</b>		





A photograph of a campus courtyard. In the background is a large, multi-story brick building with a series of large, dark-framed windows. The courtyard in the foreground is paved with light-colored concrete and red brick. There are several picnic tables and benches. A person is walking on the left side of the courtyard. There are trees and bushes around the building. A large, dark, cylindrical trash can is on the left. A large, light-colored rock formation is on the right. The sky is blue with some clouds.

# Chapter Five

Facilities Master Plan

5

## 2031 Illustrative Campus Vision

The 2031 **Campus Vision** defines the Irvine Valley College campus as an active, welcoming student-centered environment and the College's Vision to "[provide opportunities for student success and enter into dynamic community partnerships](#)". The campus will include several new and modernized instructional "Centers for Learning" united by an exterior landscape envisioned as an "**Arboretum of Education**", providing places that is both educational and inspirational. As the campus grows and matures, students will be compelled to extend their time on campus and take advantage of opportunities for academic, athletic and social activity. Provisions for individual study and group gathering spaces will encourage synergy between students and faculty.

### Campus Organization

Organization of the Irvine Valley College Campus will respect the **patterns of agriculture** development that was prevalent throughout south Orange County. These patterns exist in the current campus organization of building clusters, pedestrian paths and tree rows, emphasizing order and pedestrian navigation. The 2031 Campus Vision promotes a subtle **organic landscape overlay** reminiscent of patterns found in nature, notably the barranca that flowed through the area. Combining ordered and natural patterns in an arboretum setting will emphasize the heritage of agriculture and nature, and provide a diversity of people friendly, pedestrian oriented plazas, green spaces, gathering places and circulation paths.

### Circulation Effectiveness

Circulation effectiveness suggests **people friendly environments** that include awareness of pedestrian safety, ease of vehicular and pedestrian navigation around the campus and effective way-finding. Incorporation of 2 new campus ingress/egress drives and redesign of the Irvine Center Drive entrance will ease burdens of vehicular traffic flow on a daily basis, notably as parking inventory and student population increase over time. Emphasis of peripheral parking and a central pedestrian environment will limit interaction between people and vehicles, thus

improving campus safety. Development of a parking structure in the future will preserve land area for landscape and pedestrian activities. Positioning of the structure near the Barranca Parkway entrance drive will facilitate vehicular access and egress.

### Centers for Learning

Development of "Centers for Learning" will **increase student synergy** and interaction between related instructional programs, and **promote identity** of programs/schools that share common building groupings. Identity of programs/schools may be emphasized with design of exterior environments that reflect the nature of the instructional purposes of their surrounding buildings. Landscape and hardscape areas may incorporate signage, graphics, sculpture or student projects that characterize the nature of academic endeavors such as sciences and mathematics, humanities and languages, arts and athletics.





*Exhibit 5.1: 2031 Illustrative Campus Plan*

## Facilities Master Plan: 2031 Building Projects

The following campus plan graphic identifies all future building projects within the existing campus context. Placement of building projects in an appropriate order emphasizes the previously outlined Project Prioritization Criteria and several key features of the Campus Vision:

- **Proximity** of related instructional programs to increase academic synergy and instructional efficiency
- **State-of-the-art** instructional spaces
- **Welcoming** student services
- **Identity** of the College from the surrounding community
- Importance of a prominent **Campus “Front Door”** located on Irvine Center Drive.
- **Placement** of parking and vehicular access for ease of navigation
- **Project sequence** to enable secondary effects and program move-management

The combined impact of building projects on the Campus Vision is to maintain consolidation of building placement balanced with a diverse network of pedestrian open spaces and rich landscape. Following Development Horizon plan graphics and Project Sequence lists outline specific “**pattern of growth**” for the 5, 10 and 20 year planning horizons. The proposed pattern of growth was guided by the college and is based upon a practical sequence of expansion, minimal impact upon campus function during construction, and strict compliance with instructional and infrastructure needs defined by the Educational Master Plan forecasts.

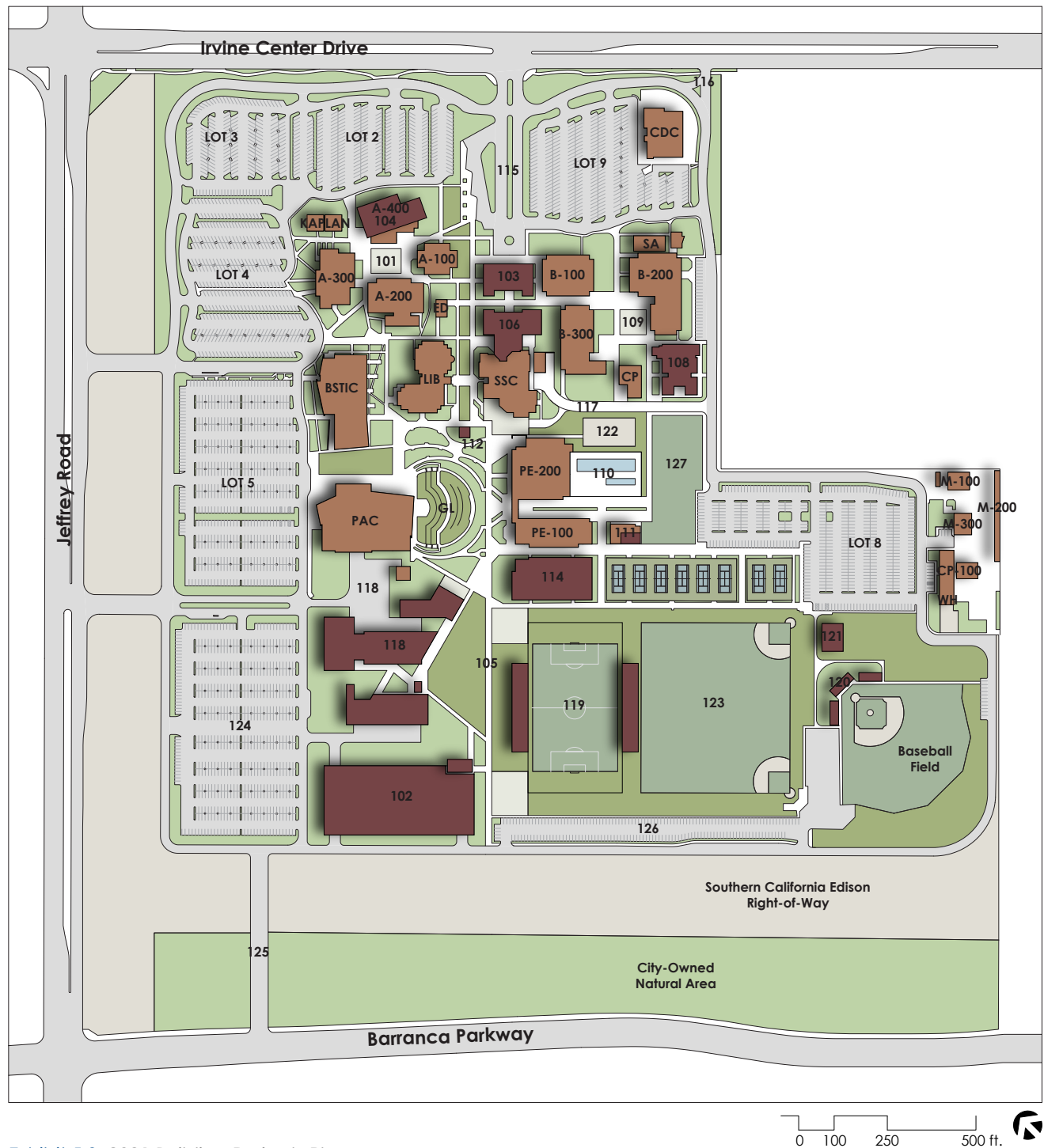
### LEGEND | EXISTING

<b>A-100</b>	Co-Curricular
<b>A-200</b>	Success Center
<b>A-300</b>	CEC
<b>A-400</b>	See Proposed 104
<b>B-100</b>	Bookstore & Conferencing Center
<b>B-200</b>	Math and Physical Science
<b>B-300</b>	Math/Computer Science
<b>BSTIC</b>	Business Sciences & Technology Innovation Center
<b>CDC</b>	Child Development Center
<b>CP-100</b>	Campus Police & Parking
<b>CP</b>	Central Plant
<b>ED</b>	Electrical Distribution
<b>GL</b>	Great Lawn (Under Construction)
<b>KAPLAN</b>	Kaplan Aspect International
<b>LIB</b>	Library
<b>M-100</b>	Facilities Management
<b>M-200</b>	Maintenance & Operations Shops
<b>M-300</b>	Maintenance & Operations Storage
<b>PAC</b>	Performing Arts Center
<b>PE-100</b>	Health Fitness
<b>PE-200</b>	Hart Gymnasium
<b>SA</b>	Science Annex
<b>SSC</b>	Student Services Center
<b>WH</b>	Warehouse

### LEGEND | PROPOSED

<b>101</b>	Renovate A-Quad
<b>102</b>	New Parking Structure
<b>103</b>	New Humanitie & Languages/Social Behavioral Sciences Building
<b>104</b>	Renovate A-400
<b>105</b>	New Fine Arts Promenade
<b>106</b>	New SSC Expansion Annex
<b>108</b>	New Life Sciences Building
<b>109</b>	Renovate B-Quad
<b>110</b>	New Swimming Pools/Enclosure
<b>111</b>	Facilities Storage
<b>112</b>	New Clock Tower
<b>114</b>	New Auxiliary Gymnasium
<b>115</b>	Renovate Campus Entrance Plaza
<b>116</b>	New Irvine Center Drive Campus Entrance/Exit Drive
<b>117</b>	Renovate Service Road: Pedestrian Improvement
<b>118</b>	New Fine Arts Complex
<b>119</b>	New Athletics Stadium
<b>120</b>	New Baseball Bleachers
<b>121</b>	New Baseball Restrooms/Concessions
<b>122</b>	New Sand Volleyball Courts
<b>123</b>	Renovate Soccer/Practice Fields
<b>124</b>	New Surface Parking Lot
<b>125</b>	New Barranca Parkway Entrance
<b>126</b>	New Surface Parking Lot
<b>127</b>	New Outdoor Lab/BEES Garden Expansion

## Facilities Master Plan: 2031 Building Projects



*Exhibit 5.2: 2031 Building Projects Plan*



## Facilities Master Plan: 2031 Site Improvement Projects

The following campus plan graphic identifies all future site improvement projects within the existing campus context. Identification of site improvement projects emphasizes several key features of the Campus Vision:

- **Diversity** of open spaces for study or group gathering
- Integration of an “**Arboretum of Learning**” to enrich campus culture
- Re-designed Irvine Center Drive entrance for improved traffic control and “**Campus Arrival**”
- **Clarity** of pedestrian and vehicular circulation paths
- Performing Arts Center service yard re-design to **facilitate Arts Program functions**
- Expanded BEES Garden for **instructional enhancement**
- Remodeled sports practice field for increased **athlete safety**
- **Project sequence** to correspond with adjacent building projects
- **Enable** campus circulation during and post construction

The combined impact of site improvement projects on the Campus Vision is to compliment building projects and enhance pedestrian activity throughout the campus. Following plan graphics identify specific 5, 10 and 20 year site improvement projects. The proposed project sequence addresses expansion of the campus open space and pedestrian network with minimal impact upon campus function.

### LEGEND | EXISTING

<b>A-100</b>	Co-Curricular
<b>A-200</b>	Success Center
<b>A-300</b>	CEC
<b>A-400</b>	See Proposed 104
<b>B-100</b>	Bookstore & Conferencing Center
<b>B-200</b>	Math and Physical Science
<b>B-300</b>	Math/Computer Science
<b>BSTIC</b>	Business Sciences & Technology Innovation Center
<b>CDC</b>	Child Development Center
<b>CP-100</b>	Campus Police & Parking
<b>CP</b>	Central Plant
<b>ED</b>	Electrical Distribution
<b>GL</b>	Great Lawn (Under Construction)
<b>KAPLAN</b>	Kaplan Aspect International
<b>LIB</b>	Library
<b>M-100</b>	Facilities Management
<b>M-200</b>	Maintenance & Operations Shops
<b>M-300</b>	Maintenance & Operations Storage
<b>PAC</b>	Performing Arts Center
<b>PE-100</b>	Health Fitness
<b>PE-200</b>	Hart Gymnasium
<b>SA</b>	Science Annex
<b>SSC</b>	Student Services Center
<b>WH</b>	Warehouse

### LEGEND | PROPOSED

<b>101</b>	Renovate A-Quad
<b>102</b>	New Parking Structure
<b>103</b>	New Humanitie & Languages/Social Behavioral Sciences Building
<b>104</b>	Renovate A-400
<b>105</b>	New Fine Arts Promenade
<b>106</b>	New SSC Expansion Annex
<b>108</b>	New Life Sciences Building
<b>109</b>	Renovate B-Quad
<b>110</b>	New Swimming Pools/Enclosure
<b>111</b>	Facilities Storage
<b>112</b>	New Clock Tower
<b>114</b>	New Auxiliary Gymnasium
<b>115</b>	Renovate Campus Entrance Plaza
<b>116</b>	New Irvine Center Drive Campus Entrance/Exit Drive
<b>117</b>	Renovate Service Road: Pedestrian Improvement
<b>118</b>	New Fine Arts Complex
<b>119</b>	New Athletics Stadium
<b>120</b>	New Baseball Bleachers
<b>121</b>	New Baseball Restrooms/Concessions
<b>122</b>	New Sand Volleyball Courts
<b>123</b>	Renovate Soccer/Practice Fields
<b>124</b>	New Surface Parking Lot
<b>125</b>	New Barranca Parkway Entrance
<b>126</b>	New Surface Parking Lot
<b>127</b>	New Outdoor Lab/BEES Garden Expansion

## Facilities Master Plan: 2031 Site Improvement Projects



Exhibit 5.3: Site Improvement Projects Plan

## Master Plan: 2016 5-Year Development Horizon

Projects identified in the 2011-2016 development horizon are those currently in stages of approval processes or directly impacted by projects in the approval processes. Approval processes include South Orange County Community College District (SOCCCD) Board approval, State Chancellors office approval and compliance with Board of Governors criteria for approval, and agreement between Irvine Valley College and the City of Irvine, California (Barranca Parkway drive), and agreement between the SOCCCD and the City of Tustin, California (ATEP). Projects and project sequence was prepared by the Master Planning team with guidance and direction from Irvine Valley College. The adjacent campus plan graphically identifies each project within this horizon and the following page provides itemization of projects in the order of intended sequence of development. Project itemization includes the following information:

- New or Renovation Project
- Plan Legend location
- Summary project description, status and secondary effects
- Project Value in 2011 dollars
- Project Value including cost escalation

Projects in the 5 year development horizon will have significant impacts upon the quality of instruction by providing state-of-the-art labs, classrooms and support program space. In addition, secondary effect improvements and site improvements will address previously noted criteria such as “**benefit student-centered culture**” and “**academic organization**”. In addition, forecast budget availability over the 5 year planning and development process guided the extent of projects to be pursued in the defined timeline.

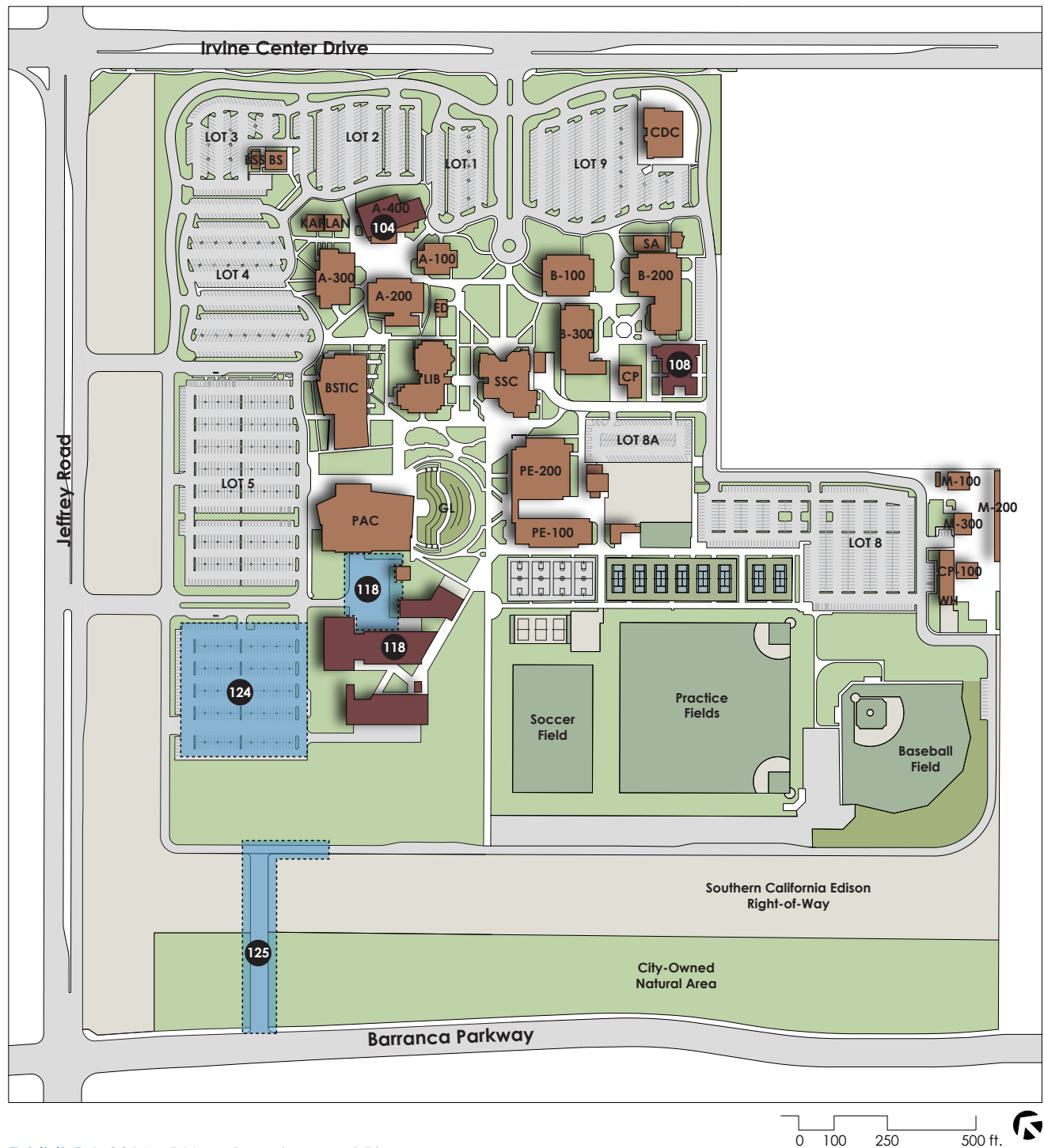
### LEGEND | EXISTING

<b>A-100</b>	Administration
<b>A-200</b>	See A-200 Proposed
<b>A-300</b>	See Proposed 104
<b>A-400</b>	See Proposed 104
<b>B-100</b>	Classrooms & Offices
<b>B-200</b>	Math and Physical Science
<b>B-300</b>	See Proposed B-300
<b>BS</b>	Bookstore
<b>BSS</b>	Bookstore Storage
<b>BSTIC</b>	Business Sciences & Technology Innovation Center
<b>CDC</b>	Child Development Center
<b>CP-100</b>	Campus Police & Parking
<b>CP</b>	Central Plant
<b>ED</b>	Electrical Distribution
<b>GL</b>	Great Lawn (Under Construction)
<b>KAPLAN</b>	Kaplan Aspect International
<b>LIB</b>	Library
<b>M-100</b>	Facilities Management
<b>M-200</b>	Maintenance & Operations Shops
<b>M-300</b>	Maintenance & Operations Storage
<b>PAC</b>	Performing Arts Center
<b>PE-100</b>	Health Fitness
<b>PE-200</b>	Hart Gymnasium
<b>SA</b>	Science Annex
<b>SSC</b>	Student Services Center
<b>WH</b>	Warehouse

### LEGEND | PROPOSED

<b>104</b>	Renovate A-400 for H&L/SBS/Co-Curricular Center; Social/Behavioral Sciences from A-200 & B-100 into A-400; Humanities/ Languages from A-200, A-300, & B-100 into A-400; Co-Curricular to A-400, CEC into A-300
<b>108</b>	New Life Sciences Building
<b>118</b>	New Fine Arts Complex
<b>118</b>	Renovate Performing Arts yard
<b>124</b>	New Surface Parking Lot (Phase I)
<b>125</b>	New Barranca Parkway Entrance
<b>A-200</b>	Renovate A-200 for Success Center; Humanities Success Center Programs from B-300 to Second Floor into A-200
<b>B-300</b>	Renovate B-300 Second Floor for Math/ Computer Science; Relocate Math/ Computer Science from B-100 into B-300 Second Floor

## Master Plan: 2016 5-Year Development Horizon



*Exhibit 5.4: 2016 - 5-Year Development Plan*

## Master Plan: 2016 5-Year Development Horizon

### Project Sequence

Project Identification		Plan Legend	Project Value	Escalated Value
1.	<b>New Life Sciences Building</b>	108	19,924,301	21,119,759
	a. Multi-story 30,000 GSF Building Approved and in construction			
	b. Secondary Effects – Relocate Life Sciences Program from A-400 to New Life Sciences Building			
2.	<b>New Barranca Parkway Campus Entrance /Exit Drive</b>	125	2,149,510	2,278,481
	a. Approved to begin construction 2nd quarter 2012			
3.	<b>New ATEP Building</b>	ATEP Campus	21,081,729	22,346,633
	a. Multi-story 30,000 GSF Building, Sitework, parking and site access Approved to begin program validation 2nd quarter 2011			
4.	<b>Renovate A-400: H&amp;L/SBS/Co-curricular Center</b>	104	10,912,895	11,567,669
	a. Remodel existing one story 12,094 GSF building and increase size to 24,000 GSF; update mechanical, replace 100% of interior partitions, lighting and finishes; renovate and modify exterior finishes			
	b. Secondary Effects – Relocate Social/Behavioral Sciences Program from A-200 and B-100 into A-400			
	c. Secondary Effects – Relocate Humanities/Languages from A-200, A-300 and B-100 into A-400			
	d. Secondary Effects – Relocate Co-curricular into A-400			
	e. Secondary Effects – Relocate CEC from portables into A-300			

- **Project Value** identifies project cost in 2011 dollar values. It includes construction cost, general conditions and contractor fee, bonds and insurance, design contingency, consultant fees, project management, agency review fees, FF&E costs.
- **Escalated Value** applies a 3% per year cost escalation to a project mid-point of construction.



## Master Plan: 2016 5-Year Development Horizon

	Project Identification	Plan Legend	Project Value	Escalated Value
5.	<b>Renovate A-200: Success Center : Writing Lab, World Language/ESL, Reading/Tutoring</b> a. Remodel existing one story 16,149 GSF building; update mechanical, replace 75% of interior partitions, 100% lighting and finishes; renovate and modify restrooms and exterior finishes b. Secondary Effects – Relocate Humanities Success Center Programs from B-300 Second Floor into A-200	A-200	4,005,281	4,365,756
6.	<b>Renovate B-300 Second Floor: Math/Computer Science</b> a. Remodel 10,000 SF of existing two story building; update first and second floor restrooms, replace interior lighting and finishes b. Secondary Effects – Relocate Math/Computer Science from B-100 into B-300 second floor	B-300	2,480,203	2,624,942
7.	<b>New Surface Parking Lot: Phase I - 400 spaces</b> a. 135,000 SF area, new construction with lighting	124	2,678,620	2,919,696
8.	<b>New Fine Arts Complex</b> a. Single-story 57,560 GSF Building for Arts Instructional Labs and support b. Secondary Effects - Relocate Fine Arts into New Fine Arts Complex c. Hardscape/landscape for Connectivity to Campus	118	38,666,372	43,306,337
9.	<b>Renovate Performing Arts Yard</b> a. 31,000 SF area; demolition of existing asphalt paved surface and replace and expand to new concrete surface	118	871,378	1,002,085
<b>Total Project Values</b>				<b>111,531,358</b>

- **Project Value** identifies project cost in 2011 dollar values. It includes construction cost, general conditions and contractor fee, bonds and insurance, design contingency, consultant fees, project management, agency review fees, FF&E costs.
- **Escalated Value** applies a 3% per year cost escalation to a project mid-point of construction.

## Master Plan: 2021 10-Year Development Horizon

Projects identified in the 2016-2021 development horizon continue modernization of the Irvine Valley College campus with some areas of growth. Project focus is upon building modernization, safety and functional improvement of athletic areas and infrastructure development of campus grounds and support needs (such as parking and traffic control). Projects and project sequence was prepared by the Master Planning team with guidance and direction from Irvine Valley College. The adjacent campus plan graphically identifies each project within this horizon and the following page provides itemization of projects in the order of intended sequence of development. Project itemization includes the following information:

- New or Renovation Project
- Plan Legend location
- Summary project description, status and secondary effects
- Project Value in 2011 dollars
- Project Value including cost escalation

Projects in the 10 year development horizon will have significant impacts upon the quality of site improvement for student activity and athletic participation, and campus infrastructure to support student population and facilities growth. Projects identified will significantly address previously noted criteria such as **"benefit student-centered culture"** and support the stated goal of **"academic organization"**. In addition, forecast budget availability over the 2016-2021 planning and development process guided the extent of projects to be pursued in the defined timeline.

### LEGEND | EXISTING

<b>A-100</b>	Administration
<b>A-200</b>	Success Center
<b>A-300</b>	CEC
<b>A-400</b>	Humanities/Languages, Social/Behavioral Sciences, Co-Curricular
<b>B-100</b>	Classrooms & Offices
<b>B-200</b>	Math and Physical Science
<b>B-300</b>	Math/Computer Science; See Proposed B-300
<b>BS</b>	Bookstore
<b>BSS</b>	Bookstore Storage
<b>BSTIC</b>	Business Sciences & Technology Innovation Center
<b>CDC</b>	Child Development Center
<b>CP-100</b>	Campus Police & Parking
<b>CP</b>	Central Plant
<b>ED</b>	Electrical Distribution
<b>GL</b>	Great Lawn (Under Construction)
<b>KAPLAN</b>	Kaplan Aspect International
<b>LIB</b>	Library
<b>M-100</b>	Facilities Management
<b>M-200</b>	Maintenance & Operations Shops
<b>M-300</b>	Maintenance & Operations Storage
<b>PAC</b>	Performing Arts Center
<b>PE-100</b>	Health Fitness
<b>PE-200</b>	Hart Gymnasium
<b>SA</b>	Science Annex
<b>SSC</b>	Student Services Center
<b>WH</b>	Warehouse
<b>108</b>	Life Sciences Building
<b>118</b>	Fine Arts Building

### LEGEND | PROPOSED

<b>101</b>	Renovate A-Quad Landscape/Hardscape
<b>105</b>	New Fine Arts Promenade landscape/Hardscape
<b>112</b>	New Clock Tower
<b>114</b>	New Auxiliary Gymnasium
<b>115</b>	Renovate Campus Entrance Plaza
<b>120</b>	New Baseball Restrooms/Concessions
<b>121</b>	New Baseball Bleachers
<b>123</b>	Renovate Soccer & Practice Fields
<b>124</b>	New Surface Parking Lot (Phase II)
<b>B-300</b>	Renovate B-300 First Floor

## Master Plan: 2021 10-Year Development Horizon



Exhibit 5.5: 2021 - 10-Year Development Plan

## Master Plan: 2021 10-Year Development Horizon

### Project Sequence

	Project Identification	Plan Legend	Project Value	Escalated Value
10.	<b>Renovate Soccer and Practice Fields</b> 400,000 SF area; remove northeast softball infield; install perimeter enclosure fencing; upgrade turf and drainage as required	123	4,823,169	5,836,034
11.	<b>New Surface Parking Lot (Phase II - 250 spaces)</b> 79,000 SF area, new construction with lighting	124	1,567,489	1,896,660
12.	<b>Renovate A-Quad Landscape/Hardscape</b> Renovate 100,000 SF area, demolition and new construction – 30% paved, 70% landscape	101	4,712,387	5,701,987
13.	<b>Renovate B-300 First Floor</b> Remodel 12,000 SF of existing two story building; replace interior lighting and finishes	B-300	1,984,163	2,400,837
14.	<b>New Fine Arts Promenade Landscape/Hardscape</b> 130,000 SF area, demolition and new construction – 20% paved, 80% landscape	105	5,803,676	7,196,558
15.	<b>Renovate Campus Entrance Plaza</b> Demolition and re-grading of existing 130,000 SF area; new transit drop-off; new car court; enhanced hardscape, landscape and lighting	115	6,770,955	8,395,984

- **Project Value** identifies project cost in 2011 dollar values. It includes construction cost, general conditions and contractor fee, bonds and insurance, design contingency, consultant fees, project management, agency review fees, FF&E costs.
- **Escalated Value** applies a 3% per year cost escalation to a project mid-point of construction.

## Master Plan: 2021 10-Year Development Horizon

	Project Identification	Plan Legend	Project Value	Escalated Value
16.	<b>New Baseball Restrooms / Bleachers / Concessions</b> 700 GSF building for restrooms and concessions; bleacher seating for 300 seats	120/121	746,541	948,107
17.	<b>New Clock Tower</b> 50 foot tall memorial tower	112	413,367	549,779
18.	<b>New Auxiliary Gymnasium</b> One story 25,000 GSF Building	114	13,435,435	17,466,150
	<b>Total Project Values</b>			50,392,096

- **Project Value** identifies project cost in 2011 dollar values. It includes construction cost, general conditions and contractor fee, bonds and insurance, design contingency, consultant fees, project management, agency review fees, FF&E costs.
- **Escalated Value** applies a 3% per year cost escalation to a project mid-point of construction.



## Master Plan: 2031 20-Year Development Horizon

Projects identified in the 2021-2031 development horizon incorporate instructional and student services growth and enhancement, development of athletic facilities and significant infrastructure developments relative to parking provisions and traffic control. Projects and project sequence was prepared by the Master Planning team with guidance and direction from Irvine Valley College. The adjacent campus plan graphically identifies each project within this horizon and the following page provides itemization of projects in the order of intended sequence of development. Project itemization includes the following information:

- New or Renovation Project
- Plan Legend location
- Summary project description, status and secondary effects
- Project Value in 2011 dollars
- Project Value including cost escalation

Projects in the 20 year development horizon will have significant impacts upon the quality of academic instruction, student service and campus infrastructure. Projects identified will significantly address previously noted criteria such as **“benefit student-centered culture”** and support the stated goal of **“academic organization”**. In addition, forecast budget availability over the 2016-2021 planning and development process guided the extent of projects to be pursued in the defined timeline.

### LEGEND | EXISTING

<b>A-100</b>	See Proposed 106
<b>A-200</b>	Success Center
<b>A-300</b>	CEC
<b>A-400</b>	Humanities/Languages, Social/Behavioral Sciences, Co-Curricular
<b>B-100</b>	See Proposed B-100
<b>B-200</b>	Math and Physical Science
<b>B-300</b>	Math/Computer Science
<b>BSTIC</b>	Business Sciences & Technology Innovation Center
<b>CDC</b>	Child Development Center
<b>CP-100</b>	Campus Police & Parking
<b>CP</b>	Central Plant
<b>ED</b>	Electrical Distribution
<b>GL</b>	Great Lawn (Under Construction)
<b>KAPLAN</b>	Kaplan Aspect International
<b>LIB</b>	Library
<b>M-100</b>	Facilities Management
<b>M-200</b>	Maintenance & Operations Shops
<b>M-300</b>	Maintenance & Operations Storage
<b>PAC</b>	Performing Arts Center
<b>PE-100</b>	Health Fitness
<b>PE-200</b>	Hart Gymnasium
<b>SA</b>	Science Annex
<b>SSC</b>	Student Services Center
<b>WH</b>	Warehouse
<b>108</b>	Life Sciences Building
<b>112</b>	New Clock Tower
<b>114</b>	New Auxiliary Gymnasium
<b>118</b>	Fine Arts Building
<b>120</b>	Baseball Restrooms/Concessions
<b>121</b>	Baseball Bleachers

### LEGEND | PROPOSED

<b>102</b>	New Parking Structure
<b>103</b>	New Humanities & Languages/ Social Behavioral Sciences Building
<b>106</b>	New Student Services Center Expansion; Relocate Administration from A-100 to SSC Expansion; Relocate Co-Curricular into A-100
<b>109</b>	Renovate B-Quad Landscape/Hardscape
<b>110</b>	New Swimming Pools/Enclosure
<b>116</b>	New Irvine Center Drive Campus Entrance/Exit Drive
<b>117</b>	Renovate Service Road: Pedestrian Improvement
<b>119</b>	New Athletics Stadium
<b>122</b>	New Sand Volleyball Courts
<b>126</b>	New Parking Surface Parking Lot
<b>127</b>	New Outdoor Lab/BEES Garden Expansion
<b>B-100</b>	Renovate B-100 for New Bookstore & Conferencing Center
<b>SSC</b>	Renovate Student Services Center Building

## Master Plan: 2031 20-Year Development Horizon



Exhibit 5.6: 2031 - 20-Year Development Plan

## Master Plan: 2031 20-Year Development Horizon

### Project Sequence

	Project Identification	Plan Legend	Project Value	Escalated Value
19.	<b>Renovate B-100: New Bookstore/Conferencing Center</b> Remodel existing one story 13,086 GSF building; update mechanical, replace 50% of interior partitions, 100% lighting and finishes; renovate and modify exterior finishes, including retail coffee shop	B-100	3,377,872	4,492,570
20.	<b>Renovate B-Quad Landscape/Hardscape</b> 108,000 SF area, demolition and new construction – 30% paved, 70% landscape	109	4,821,515	6,557,260
21.	<b>New Irvine Center Drive Campus Entrance/Exit Drive</b> Demolish existing landscape area and install new right-in/right-out drive	116	744,061	1,011,924
22.	<b>New Parking Lot</b> 106,000 SF area, new construction with lighting	126	2,103,213	2,860,370
23.	<b>New Outdoor Lab / BEES Garden Expansion</b> 40,000 SF area; provide perimeter fence enclosure, lighting and 600 LF of pedestrian walkways; Grade and install sprinkler infrastructure for future landscape	127	577,887	803,264
24.	<b>New Student Services Center Expansion Annex</b> Two story 16,000 GSF addition to the existing Student Services Center  a. Secondary Effects - Relocate Administration to Student Services Center Expansion Annex b. Relocate Co-curricular into A-100	106	9,259,426	13,148,385
25.	<b>Renovate Student Services Center (SSC) Building</b> Remodel existing two story 30,588 GSF building; update mechanical, replace 50% of interior partitions, 100% lighting and finishes; renovate and modify exterior finishes; include 6,500 SF Food Service	SSC	8,495,854	12,318,988

- **Project Value** identifies project cost in 2011 dollar values. It includes construction cost, general conditions and contractor fee, bonds and insurance, design contingency, consultant fees, project management, agency review fees, FF&E costs.
- **Escalated Value** applies a 3% per year cost escalation to a project mid-point of construction.

## Master Plan: 2031 20-Year Development Horizon

Project Identification		Plan Legend	Project Value	Escalated Value
a.	Secondary Effects - Relocate Food Services into temporary facility; provide three portables for temporary food service			
b.	Secondary Effects - Relocate Food Services into SSC Building			
26.	<b>Renovate Service Road: Pedestrian Improvement</b> 36,000 SF area, demolition and new construction – 70% paved, 30% landscape	117	1,815,509	2,686,953
27.	<b>New Sand Volleyball Courts</b> 12,000 SF area for three sand volleyball courts	122	777,130	1,150,154
28.	<b>New Athletics Stadium</b> New regulation grass soccer field; New bleachers for 500 seats each side; New 1,000 SF Building; restrooms, concessions and team room	119	2,486,817	3,680,489
29.	<b>New Humanities &amp; Languages / Social Behavioral Sciences Building</b> Two story 22,000 GSF Building	103	12,731,711	19,224,884
30.	<b>New Parking Structure</b> 800 space, multi story concrete parking structure	102	23,809,953	36,666,864
31.	<b>New Swimming Pools / Enclosure</b> One 4-lane Olympic length lap pool and one shallow training pool; non-competition standards; 20,000 SF paved pool deck, and perimeter fence enclosure	110	12,401,017	19,841,627
<b>Total Project Values</b>				<b>124,443,732</b>

- **Project Value** identifies project cost in 2011 dollar values. It includes construction cost, general conditions and contractor fee, bonds and insurance, design contingency, consultant fees, project management, agency review fees, FF&E costs.
- **Escalated Value** applies a 3% per year cost escalation to a project mid-point of construction.




Master Plan: Vehicle Access Diagram


The adjacent diagram describes the proposed concept for vehicular access and egress to the Irvine Valley College campus and projected parking provisions necessary for the forecasted 2031 student, faculty and staff population. Incorporated into the diagram is the reconfigured campus entrance/exit drive and “transit plaza”. Intent of the Facilities Master Plan is to improve campus identity and navigation, promote use of transit systems and provide necessary parking inventory to meet the needs of a commuter-based institution. Two additional campus entrance/exit drives have been added and parking is maintained at the campus periphery to promote a pedestrian-centered environment. Additional entrance/exit drives will improve traffic distribution and relieve queuing issues. Peripheral parking will greatly reduce pedestrian-vehicle interaction and result in higher levels of pedestrian safety.

On-campus emergency vehicle and campus service vehicle access will be accommodated, in addition to meeting accessibility needs. Placement of a new parking structure will provide for daily needs and accommodate large group events that will take place at the athletic fields, New Gymnasium and New Athletics Stadium.


LEGEND




Campus Entry/Exit




Signalized Entry/Exit




Existing & Proposed Building




City of Irvine Public Right-of-Way



Primary Campus Circulation Loop



Parking Lot



Parking Structure

## Master Plan: Vehicle Access Diagram

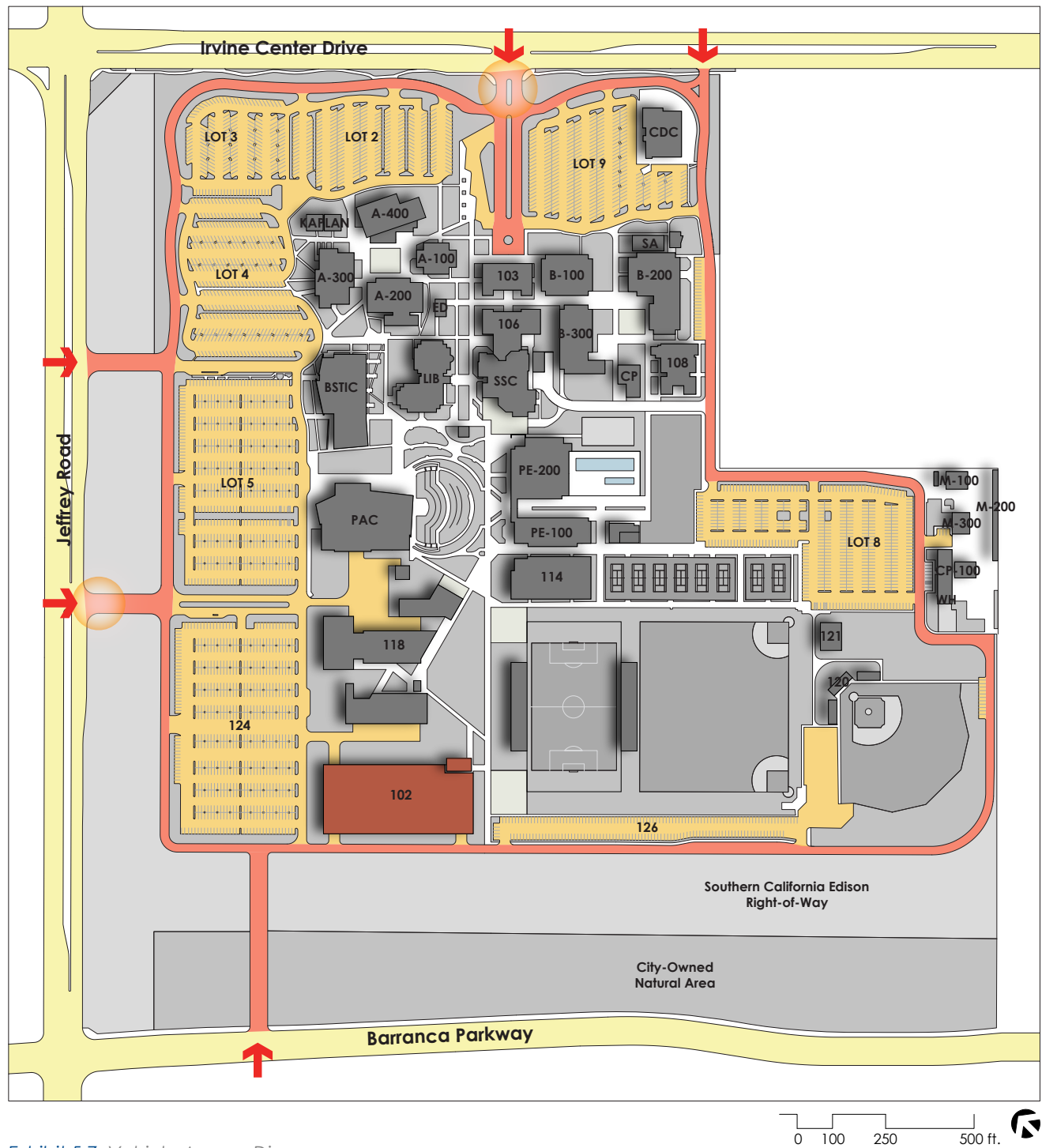
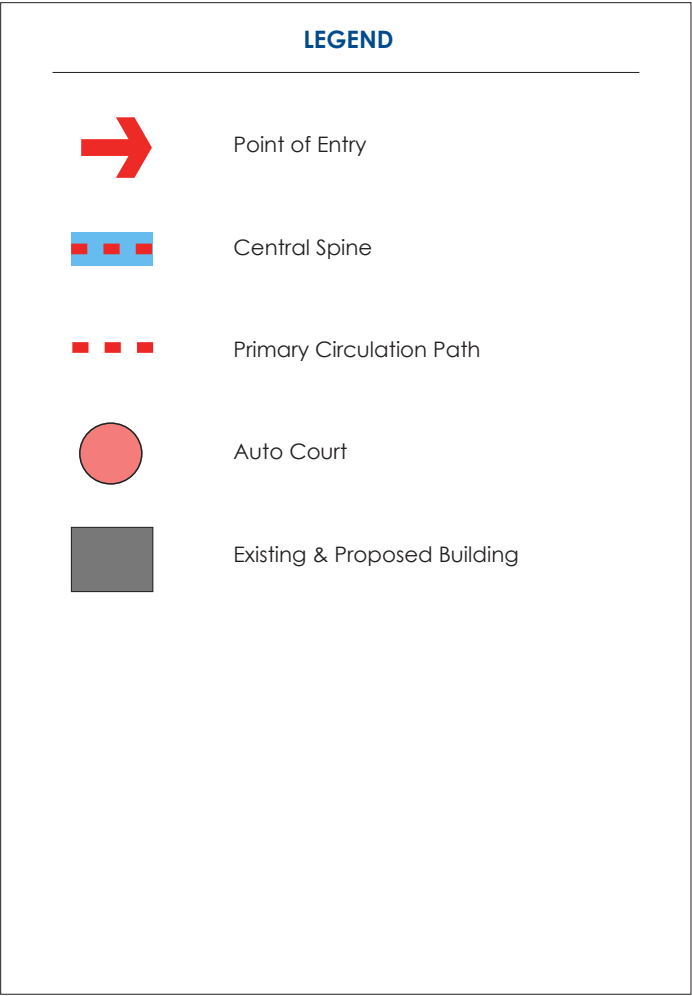


Exhibit 5.7: Vehicle Access Diagram

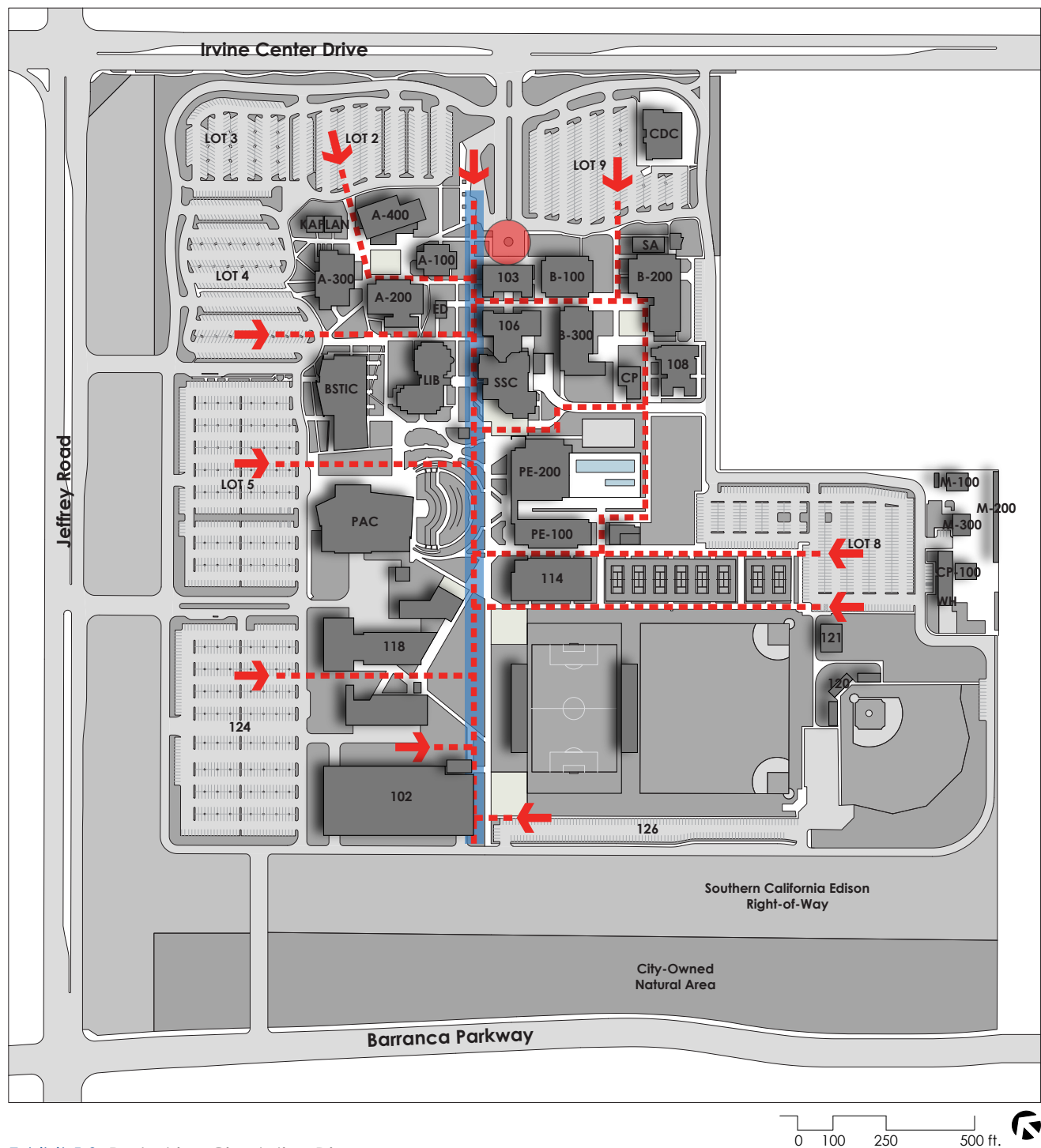
Master Plan: Pedestrian Circulation Diagram

The adjacent diagram describes the proposed concept for **pedestrian navigation** throughout the Irvine Valley College Campus. Intent of the Facilities Master Plan is to identify primary circulation paths between parking and the academic core and between buildings. Secondary means of circulation are also suggested to allow for alternate routes and anticipated “short-cuts”. Clearly defined pedestrian paths will facilitate access and way-finding, while primary paths may also accommodate emergency access and service vehicle access routes.

As the pedestrian network evolves over time, a “**Central Spine**”, located on a north-south axis in the center of the academic core becomes a primary organizing feature for buildings, open space and pedestrian paths. The Facilities Master Plan suggested enhancement of the central spine with landscape enhancement and additional primary open space. The “Great Lawn” project, currently under construction, is an initial step toward revitalizing a “Heart of the Campus” with regard to campus growth. As future projects such as the Fine Arts Promenade and Student Services food area are developed, group gathering, outdoor dining and impromptu study areas will foster campus synergy and improved campus culture. Functionally, the “Central Spine” will link the main Irvine Center Drive entrance and Transit Plaza all academic areas, the Great Lawn and Performing Arts Center, Stadium and future parking structure.



## Master Plan: Pedestrian Circulation Diagram



*Exhibit 5.8: Pedestrian Circulation Diagram*




Master Plan: Open Space Network


The adjacent diagram describes a series of primary open spaces to accommodate varieties of places for large group gathering, circulation and individual use. Combined with previously identified themes of “**Arboretum of Learning**” and “**Heart of the Campus**” the Facilities Master Plan identifies a network of open spaces that will evolve existing plaza or garden spaces into a vibrant, educational and sustainable student-centered environment.

Provision for pedestrian centered outdoor environments such as the “great Lawn” and Fine Arts Promenade” will support academic purpose and encourage on-campus synergy. In addition to projects identified in the 5, 10 and 20 year development horizons, this Facilities Master Plan promotes selected landscape augmentation opportunities to be incorporated into the 20-Year Maintenance Master Plan. Such augmentations will further unify the campus by completing landscape themes and impact sustainability. A diagram describing existing and proposed planting is in the next section, “Landscape Considerations”.

LEGEND




Open Space




Existing & Proposed Building


OPEN SPACE




Campus Entrance Plaza & Transit Stop




A-Quad




B-Quad



Business Sciences & Technology Innovation Center and Library



Great Lawn



Fine Arts Promenade

## Master Plan: Open Space Network

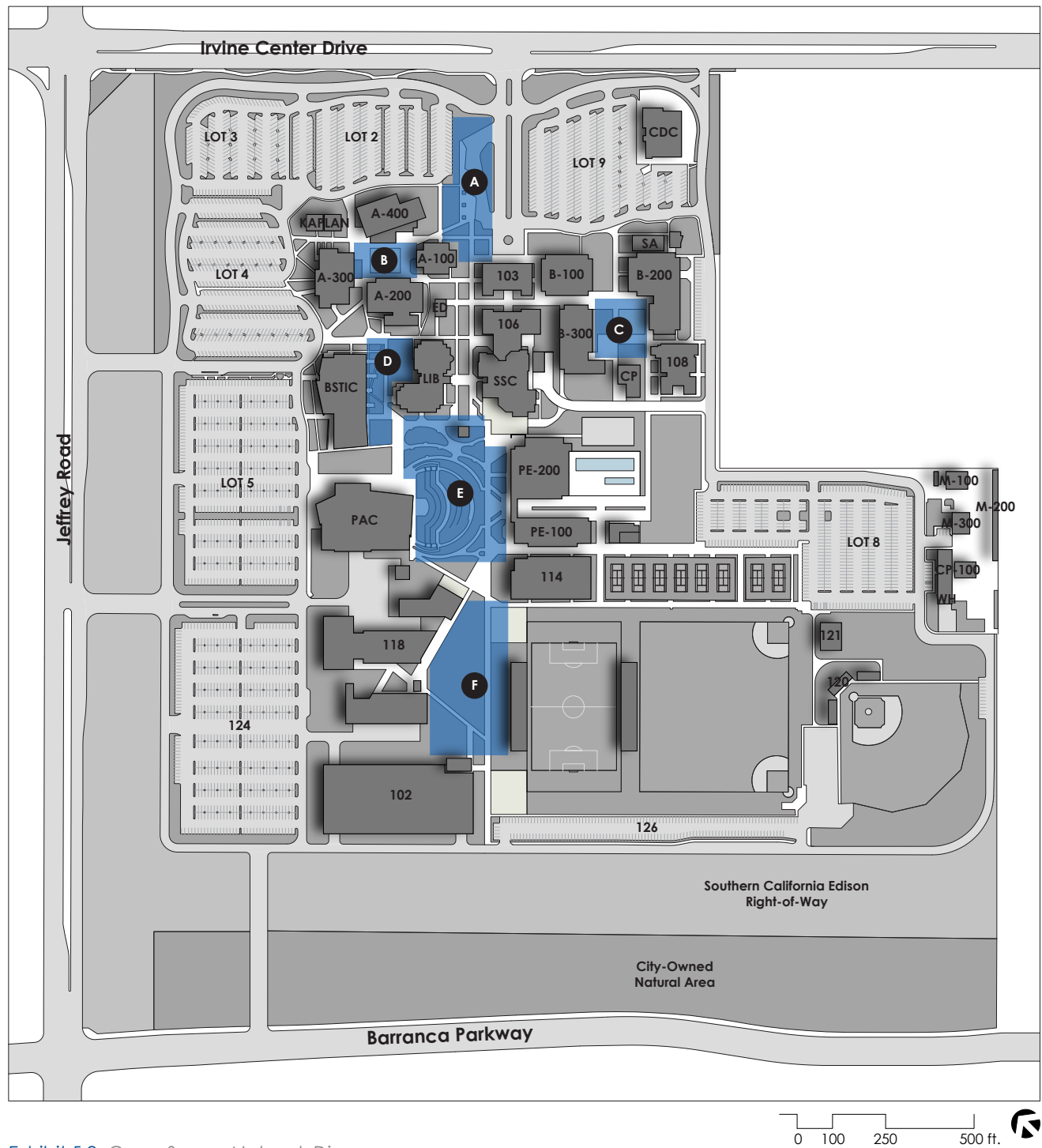


Exhibit 5.9: Open Space Network Diagram

## Landscape Considerations

### *Existing Campus Conditions*

Irvine Valley College is located in the City of Irvine, California. The climate is a combination of Temperate and Mediterranean with annual average rainfall of 13.87 inches. Campus topography slopes slightly to the southwest. Remnants of the Eucalyptus tree hedgerows along Irvine Center Drive acknowledge the agricultural history of the region. Orange trees, planted in a small grove, mark the corner of Jeffery Road and Irvine Center Drive. A Southern California Edison right-of-way easement along Barranca Parkway and Jeffery Road is maintained open and not vegetated. Also along Barranca Parkway is City of Irvine easement maintained as a natural area for water run-off control. Vegetation on campus is generally non-native evergreen and flowering species introduced with development of buildings and parking. The understory is generally turf lawn with shrubs at the building's foundations. Two distinct courtyards in the A-Quad and B-Quad have are currently maintained with perimeter planting around an open paved space. The BEES Garden located adjacent to the tennis courts is utilized for instructional and research functions. A small orange grove is maintained adjacent to the athletic fields. The athletic fields are natural turf with numerous areas succumbed to damage from use or animal infestation. The campus supports a variety of tree species. A formal line of deciduous trees extends southwest from the center of campus. Pedestrian pavement is standard concrete with special pavement in the courtyards. Roads and parking areas are primarily asphalt; the exception being a gravel parking lot south of the practice fields.

### *Landscape Approach*

Healthy landscape, selected to complement local climatic conditions, may significantly benefit campus character, reduce heat-island effects and reduce energy use and carbon footprints.

**Building and Paving Treatment:** New pavement and planting areas should be designed to collect, cleanse and reuse stormwater. Deciduous trees should be cultivated on

the south and west sides of buildings to reduce heat gain and energy use while allowing for filtered sunlight.

**People Centered Concept:** The campus landscape is an important resource for achieving a healthy social and educational environment. As the campus develops, diversity of outdoor places encourages students to spend more time on campus for study, gathering, instruction and athletic activity.

**Educational Focus:** The composition of plant materials offers opportunities for multi-disciplinary study including ethnobotany, agriculture, biology, climate, ecology, and ecosystems. New and infill planting on the campus could be designed and cultivated to serve as a botanical garden or arboretum.

All areas of the campus should have an intentional purpose – i.e. aesthetic, recreation, research, circulation. Areas defined for the use of outdoor research equipment could include signage informing the campus community of the work.

**Sustainable Strategy:** The campus landscape can set and achieve goals of minimizing waste and cultivating long-term value. The campus can be the community leader with the adjustment of the aesthetic from large areas of open lawn to open native groundcover which will save irrigation water, and minimize the use of fertilizers, pesticides and maintenance. Each new building's roof drainage, associate pavement, grading and planting areas should be designed to collect, cleanse and reuse stormwater.

**Maintainability:** Irvine Valley College can be a model for efficient maintenance through the use of properly sited and installed durable and low maintenance materials.



Exhibit 5.10: 2031 Illustrative Campus Plan



## Landscape Considerations

### *Context and Micro-climate Influences*

Included in this narrative is a reference to the City of Irvine **Sustainable Landscape Guideline Manual**. The manual is a guide to promote a sustainable program, sustainable development and may be referenced for future projects on the Irvine Valley College Campus. The stated goal of a sustainable program is:

"It is the goal of a sustainable landscaping program to assure that environmental impacts and benefits of landscaping are considered throughout the planning and design process, in conjunction with aesthetic and functional goals, and decisions will result in increased benefits, decreased impacts to the environment and reduced consumption of resources."

The referenced Guideline Manual also outlines objectives and design considerations to maintain and improve a healthy micro-climate.

#### **Objectives include:**

- Incorporate passive solar design principles which allow plants to optimize the conditions of sun and wind.
- Use landscape plants to manage solar incidence up to two stories in height on structures and to provide for optimum levels of summer cooling and winter heating.
- Use landscape plants to reduce heat gain from paved surfaces and provide pleasant, shaded pedestrian areas.

#### **Guidelines include:**

- Locate trees and/or shrubs to shade west facing windows, walls and outdoor living spaces to provide heat reduction benefits.
- Locate trees and/or shrubs to shade east facing windows, walls and living spaces during summer months.
- Trees and/or shrubs which provide shade on south facing windows, walls and outdoor living spaces are also encouraged.
- Locate trees with open canopies or deciduous habits along south and east facing walls to provide winter sun exposure on wall surfaces and shade during the summer months.
- Provide within parking areas, at a minimum, canopy trees necessary in a manner which, during the summer months, achieves maximum levels of shading from each tree canopy.

## Landscape Considerations

*Exhibit 5.11: Sketch of campus entrance looking towards the proposed clock tower.*



*Exhibit 5.12: Sketch of the A-Quad*



*Exhibit 5.13: Sketch of Great Lawn and clock tower from SSC building*



Landscape Considerations: Tree Planting Diagram

The adjacent Tree Planting Diagram defines a comprehensive strategy to add trees to the campus as part of an identified Master Plan project or augmentation as part of the 20 Year Schedule Maintenance Plan. The diagram identifies existing tree planting and proposed new tree planting. Combined with the previously outlined campus improvement projects plans this diagram can assist a planting sequence, applied incrementally to achieve a unified, cohesive campus environment.

Key planting suggestions beyond identified Master Plan projects include:

- Tree rows located along the east campus perimeter to screen the campus and adjacent residential neighborhood.
- Parking lot shade trees to filter sunlight for vehicles and reduce “heat-island effects”.
- Selective placement of natural tree planting patterns throughout the campus to augment the “Campus Arboretum” theme and introduce organic patterns to complement existing orthogonal patterns of buildings and walks.

LEGEND

Existing Trees/Vegetation

New Trees/Vegetation

City-Owned Natural Area

Existing & Proposed Building

Exhibit 5.14: Tree planting between Library & SSC

Exhibit 5.15: Trees near the A-100 building

74 | 2011 FACILITIES MASTER PLAN

DECEMBER 2011

## Landscape Considerations: Tree Planting Diagram

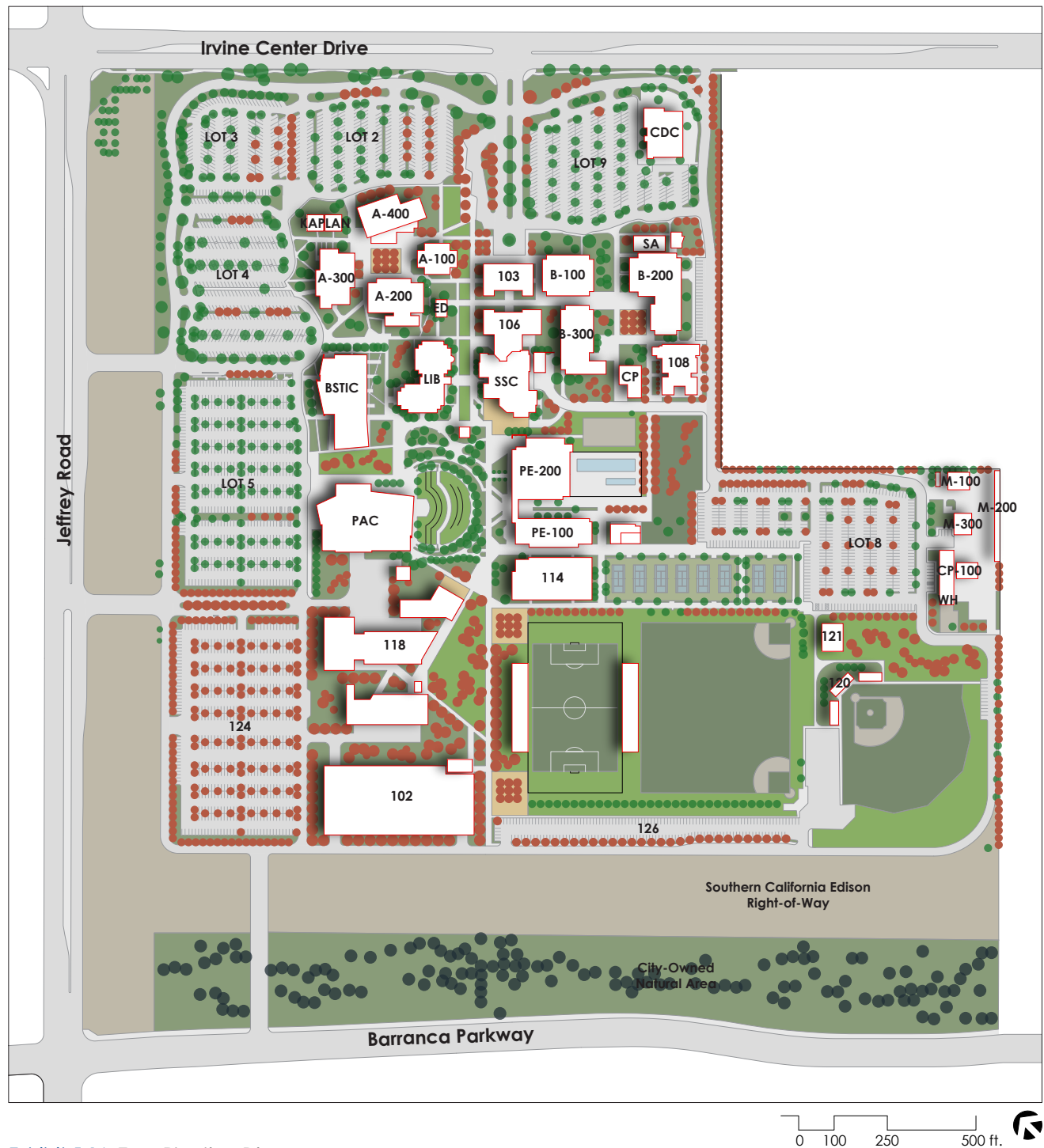


Exhibit 5.16: Tree Planting Diagram



## Sustainable Principles

### Making a Campus GREEN

The South Orange County Community College District is committed to an inventory of buildings and grounds that optimize sustainable principles for energy consumption, impact upon the natural environment and people friendly places. To address this commitment, new projects on Irvine Valley College campus will meet at a minimum established code requirements and seek to exceed requirements to achieve the benefits of a “Green Campus”. Currently, projects in the State of California must meet energy efficiency code compliance as describe by Title 24, and the CalGreen Building Code. In addition, optional measure of sustainable design measurement, such as LEED, is an expected objective for any new building of campus infrastructure project. Current standards of design should exceed Title 24 by 15% minimum, divert 75% of construction waste and meet USGBC LEED Silver compliance; and incorporate utility provider incentive programs such as “Savings by Design”.

During the projected lifespan of this Facilities Master Plan document numerous modifications and upgrades to building code compliance and energy standards will occur, and it is impossible to set specific criteria for projects to be accomplished in a long range planning context. However, an outline of Sustainability Principles can define a commitment for sustainable development, and reference to current standards may establish expectations that evolve as codes compliance changes and technology advances. The following outline of basic design principles offer criteria for initial projects within the Master Plan, and offer a basis for future evolution of criteria over time. These principles utilize current LEED-NC definitions for sustainable design and environmental sensitivity.

**Sustainable Sites:** This guideline defines the importance of site design and impacts of construction on water treatment, heat gain and pollution. Elements to be considered include:

- Orientation of building form to reduce heat gain and energy consumption
- Access to mass transit options to reduce vehicle use impacts

- Provisions for bicycle access and storage
- Enhancement of open space to improve environmental quality
- Storm water reduction and construction pollution
- Landscape and paving design to minimize heat island effects
- Landscape design to enhance passive cooling
- Lighting design to reduce energy consumption and light pollution

**Water Efficiency:** This guideline defines the importance of site and building design to reduce water use and wastewater production. Elements to be considered include:

- Native and adaptive landscape planting to minimize water requirements
- Irrigation system minimization and efficiency
- Captured rainwater when possible
- Reclaimed water for non-potable uses
- Water conserving plumbing fixtures
- Incorporation of bioswales to reduce water run-off
- Sensors to control fixture operation

**Energy and Atmosphere:** This guideline defines the importance of site and building design to energy consumption and air pollutants. Elements to be considered include:

- Building commissioning to ensure systems efficiency
- Energy Star certified high efficiency equipment specifications
- High efficiency lighting
- Occupancy sensors to minimize artificial lighting use
- Incorporation of appropriate natural day-lighting
- Use of natural refrigerants
- Roof surfaces to reflect solar radiation; such as “cool roofs”
- High efficiency building insulation
- High efficiency glazing and glazing systems
- Incorporation of renewable energy and/or “green power”

## Sustainable Principles

**Materials and Resources:** This guideline defines the importance of recycled materials use and local materials use. Elements to be considered include:

- Re-utilization of existing building or site materials and construction waste
- Regional materials specification
- Rapidly renewable materials specification
- Operation of a materials recycling program
- Utilization of low maintenance, durable materials
- Specification of materials and systems to minimize life-cycle cost impacts
- Utilization of products free of unsafe chemicals or resins
- Design of flexible environments to minimize secondary construction

**Indoor Environmental Quality:** This guideline defines the importance of materials use and space design to ensure occupant health and well-being. Elements to be considered include:

- Provision for adequate ventilation
- Provision for optimal day-lighting
- Specification of materials, products and adhesives with low levels of contaminants
- Individual lighting controls and task lighting
- Glazing or interior shading to reduce glare
- Individual space thermal comfort control
- Construction controls to minimize contamination

**Innovation in Design:** This guideline defines the importance of research and best practices beyond direct impacts of a given project. Elements to be considered include:

- Design consultant commitment to materials and methods research
- Construction professionals on-site methods to reduce energy consumption and waste
- Consultants business model to work efficiently and demonstrate environmental awareness
- Innovative uses of energy savings, waste control and environmental impact
- Utilization of Building Information Modeling to improve process efficiency and reduce waste
- Utilization of integrated delivery methods to reduce schedules and delivery
- Utilization of energy modeling technology to anticipate design impacts
- Inclusion of building performance management systems

Sustainable principles defined in the Facilities Master Plan should be reviewed and updated in each 5 year Master Plan cycle to address new parameters for energy efficient and environmentally sensitive design. The result with reduce negative impacts of building construction and use upon nature and provide effective results for optimized campus energy and maintenance costs and operational expenses.



A photograph of a modern, single-story building with light gray horizontal siding and a flat roof. A long banner with the text "ADVANCED TECHNOLOGY & EDUCATION PARK" in yellow capital letters is mounted along the side of the building. A white vertical banner on the right side of the building features the ATEP logo, which consists of the letters "ATEP" in a stylized blue font with a circular arrow around them, and the full name "ADVANCED TECHNOLOGY & EDUCATION PARK" in smaller text below. The building has large windows and is partially obscured by green shrubs and trees in the foreground. The sky is clear and blue.

ADVANCED TECHNOLOGY & EDUCATION PARK



# Chapter Six

Advanced Technology & Education Park (ATEP)





## Background

The South Orange County Community College District, in agreement with the City of Tustin, established in 2004 the Advanced Technology & Education Park (ATEP) as a satellite campus in a coordinated effort with Irvine Valley College and Saddleback College. The purpose of ATEP is to provide “high performance, high impact” career-technical education and offer public-private partnerships as a mechanism of outreach to the professional community of South Orange County. The ATEP Campus is located on a portion of the former Marine Corps Air Station in the City of Tustin, now known as “Tustin Legacy”. In 2007, ATEP opened as a 1.5 acre transitional campus in five buildings totaling 15,000 GSF, and currently serves a student population of 540. The current facilities are located at the intersection of Red Hill Avenue and Valencia Avenue, at the northernmost portion of the proposed campus.

ATEP was conceived as an education-oriented development as described in the District Conveyance Agreement. The program uses proposed for ATEP Concept Plan area support the education-oriented concept and an initial permanent building development has been approved by The South Orange County Community College District (SOCCCD). This first building has been defined as a multi-story facility of 30,000 GSF and approximately 21,000 ASF, and will be placed in the area designated as Phase 3A. The building site plan will be developed based upon a Master Campus Plan Concept, providing for logical facilities growth that will incorporate instructional and support space, public-private partnership development, peripheral areas of parking and a centralized network of pedestrian centered open space.



*Exhibit 6.1: Current ATEP Facility*



*Exhibit 6.2: Aerial View of Current ATEP Facility*

## ATEP Campus Context



*Exhibit 6.3:* This map identifies location of the ATEP campus relative to its community context. The campus is approximately 4.4 miles northwest of Irvine Valley College.



## Phase 3A Development

As an education-oriented development design of ATEP facilities will combine traditional and timeless campus elements such as pedestrian paths, courtyards and landscape. However, building and site design will provide distinctive expressions of architecture, influenced by contemporary ideals of technology, sustainability and 21st century cultures.

The 68-acre ATEP Site poses unique challenges in development, most notably the odd configuration of the campus boundary and unusual land area shapes. A primary challenge will be to envision a Campus organization that is consolidated and systematic for ease of pedestrian navigation but also effectively planned to accommodate

vehicular flow, function and synergy between buildings as they are developed.

To serve the needs of Campus users and create an attractive and Site-unifying element, development of the central pedestrian network of open spaces will connect all phases of the project. Creation of a main plaza can eventually become a central organizing feature where all buildings and pedestrian paths collect, and a unifying theme for building development that occurs over a long time period. The initial education building will be located near Valencia Avenue, creating a strong Campus identity and ease of access for daily traffic. Future growth will ultimately generate a physical presence on Valencia Avenue and Red Hill Avenue.



*Exhibit 6.4: Aerial view of New ATEP Site*

## Phase 3A Development

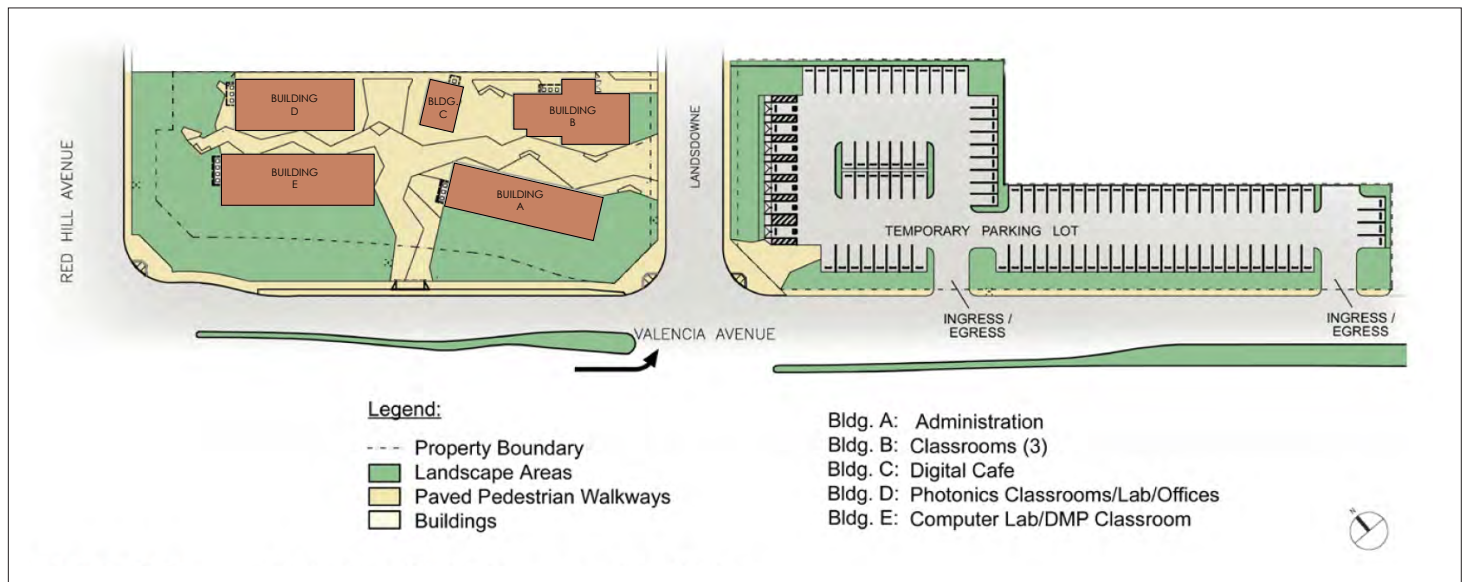


*Exhibit 6.5:* This site diagram depicts the current boundary for the ATEP camps as a portion of the Tustin Legacy development area. Highlighted in green is the area approved by the South Orange County Community College District as Phase 3A and location of a new 30,000 GSF instructional building.



## Instructional Program

Program definition for the new building to be developed on the Phase 3A area is still under determination at the time of this Facilities Master Plan Document publication.



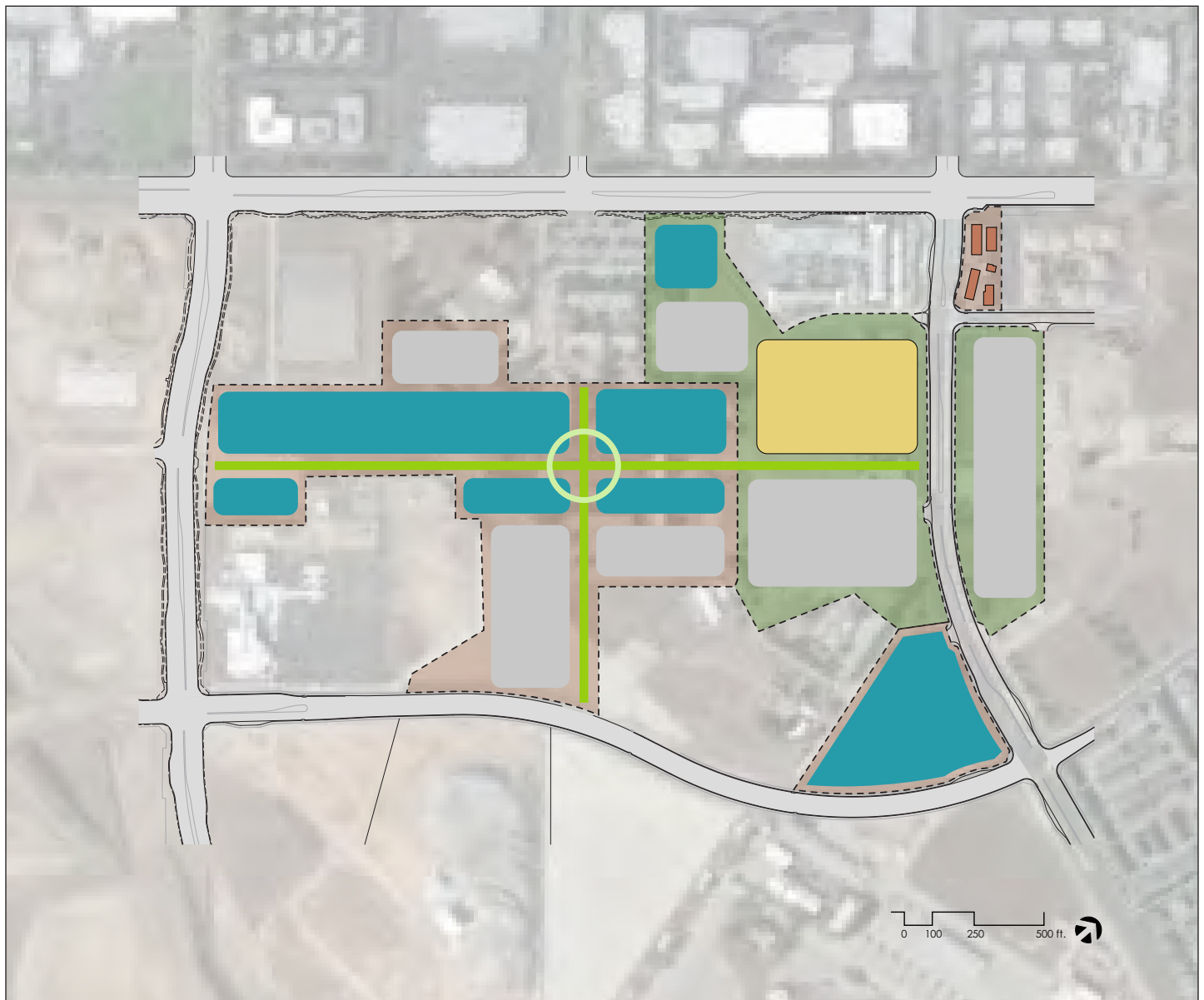
*Exhibit 6.6: This plan depicts the Phase 1 development of ATEP. Opened in 2007, the five building campus provides 15,000 GSF of instructional and support space.*

The existing ATEP Campus facilities will be designed as state-of-the-art instructional facilities, and to demonstrate the District's strong commitment to environmental stewardship. The permanent ATEP Campus will incorporate sustainable design and construction measures to meet current the State of California Green Building Code and standards for LEED certification. Design will incorporate LEED-NC program measures including the following areas of environmental action:

- Sustainable Sites,
- Water Efficiency
- Energy and Atmosphere
- Materials and Resources
- Indoor Environmental Quality
- Innovation in Design

Further definition of LEED-NC standards may be found in the Sustainable Principles section in this Master Plan Document.

## ATEP Land Use Plan



*Exhibit 6.7:* This site diagram depicts the Phase 3A Development and Long Range Land Use for the ATEP site. A 30,000 SF building will be developed in the yellow area.



A photograph of a modern university campus. In the foreground, a large, bright yellow, abstract sculpture sits on a patch of green grass. To the left is a light-colored building with large windows and a curved section. To the right is a red brick building. A paved walkway runs through the center, lined with trees and benches. A few people are visible in the distance. The sky is blue with some clouds.

# Chapter Seven

Appendices

7



## Appendices

- A. Glossary of Terms
- B. Campus Photographic Record
- C. 2011 20 Year Scheduled Maintenance Plan
- D. Project Cost Summary
- E. Reference Documents

## A. Glossary of Terms

### Bioswale

A landscape area utilized for water run-off collection and natural filtration back into the ecosystem

### Ecosystem

A natural system of organisms, such as air, water and earth, working in harmony within their environment

### Full Time Equivalent Faculty (FTEF)

One full time faculty member teaching the equivalent of a full load of classes

### Full Time Equivalent Student (FTES)

A full time equivalent student is one student taking 15 hours of instruction per week for two semesters of 17.5 weeks

### Heat Island Effect

Impact of reflective heat from radiant sources (sunlight) on people, buildings and the environment.

### Midpoint of Construction (MOC)

Construction estimating standard when applying escalation of costs for future projects; Standard for this document is 3% per year

### Photovoltaic Panels

A technology to produce electricity through exposure to radiant energy sources, such as sunlight

### Secondary Effects

Secondary work performed in response to construction projects, such as program relocation, minor repair or replacement of finishes

### Weekly Student Contact Hours (WSCH)

A measure of the number of students enrolled in a course multiplied by the number of hours the course meets per week. If a class meets for three hours a week and has 30 students enrolled, the WSCH is 90

### WSCH per FTEF

This calculation, sometimes called 'productivity,' is the number of weekly student contact hours (WSCH) per Full Time Equivalent Faculty (FTEF)

## Acronyms

<b>ASF</b>	Program assignable building area in square feet
<b>ATEP</b>	Advanced Technology & Education Park
<b>CEQA</b>	California Environmental Quality Act
<b>DSA</b>	Department of the State Architect
<b>EIR</b>	Environmental Impact Report
<b>EMP</b>	Education Master Plan
<b>FMP</b>	Facilities Master Plan

<b>GSF</b>	Gross building area in square feet
<b>LEED</b>	Leadership in Energy and Environmental
<b>LEED-NC</b>	LEED for New Construction
<b>MCAS</b>	Marine Corps Air Station
<b>MMP</b>	Maintenance Master Plan
<b>MOC</b>	Midpoint of Construction
<b>SCE</b>	Southern California Edison
<b>SOCCCD</b>	South Orange County Community College District

B. Campus Photographic Record | Campus Loop



## Campus Loop



Southwest view of agricultural field and campus loop.



View from western end of agricultural field looking at the Performing Arts Center.



View of old city flood control and SCE right of way.



Walkway from outer loop leading to the main part of campus.



Looking east towards gravel athletic fields, gravel parking and outer loop.



View into the baseball field and campus police from loop.



B. Campus Photographic Record | Campus Loop



## Campus Loop



View of private residence to northeast and parking lot 8.



Secondary circulation leading to the Student Services Center.



Northeastern part of campus loop with a view of B-200.



View near the Child Development Center of parking lot 9 and Irvine Center Drive.



Primary Entrance off Irvine Center Drive looking into central part of campus.



Looking into parking lots 2 and 3.

B. Campus Photographic Record | Campus Loop



## Campus Loop



Southwest view of campus loop looking towards parking lot 4.



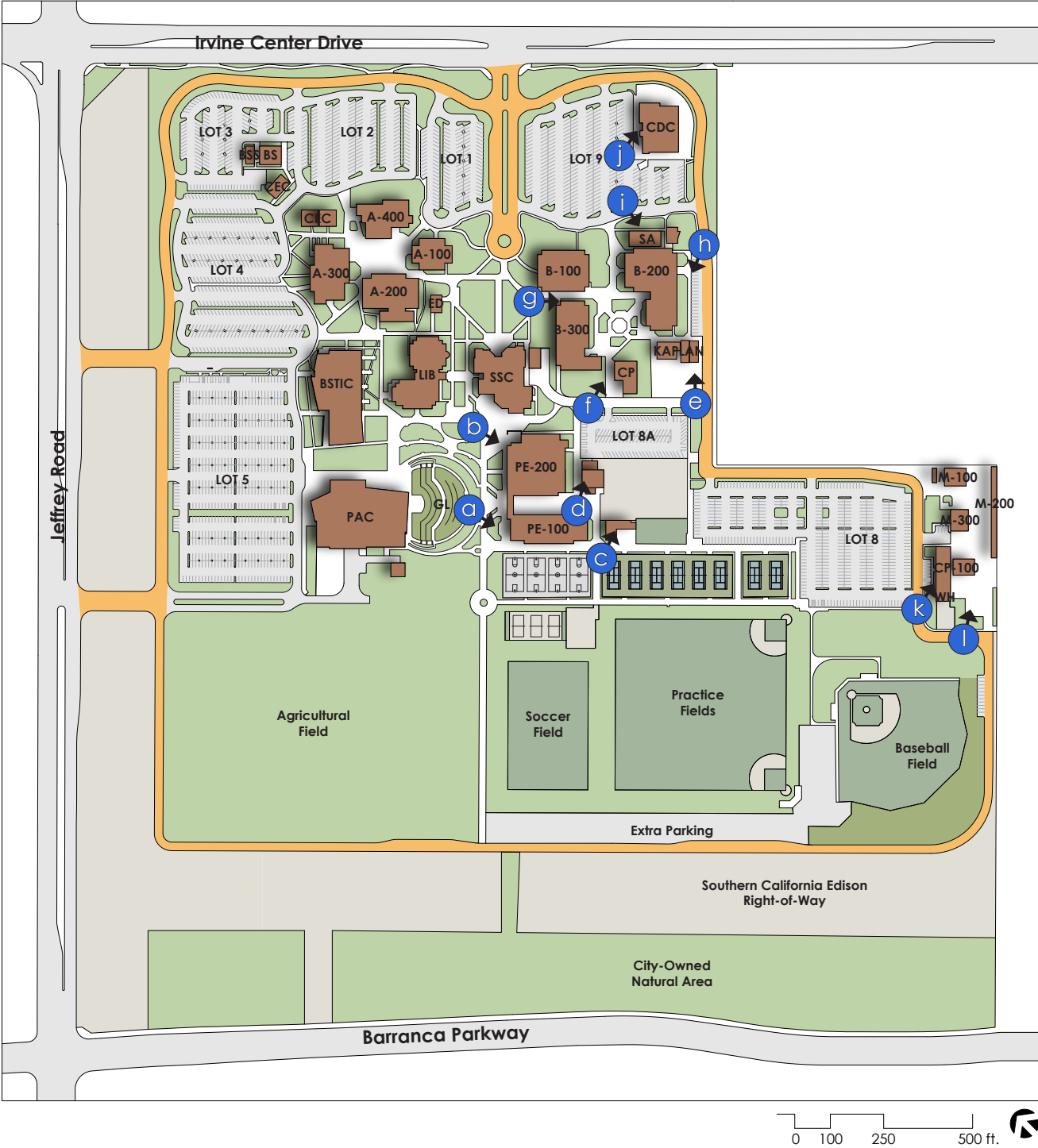
View from parking lot 5 towards BSTIC & PAC.



Secondary entrance off of Jeffrey Road leading to parking lot 4 and 5. BSTIC looks straight on.



B. Campus Photographic Record | Existing Buildings



## Existing Buildings



PE-100 | Health Fitness Building



PE-200 | Hart Gymnasium



Utility Building



Storage



Kaplan | Kaplan Aspect International



Central Plan





## Existing Buildings



B-300 | Classrooms & Labs



B-200 | Math and Physical Science



B-200 Annex | Science Annex



CDC | Child Development Center



CP-100 | Campus Police



Maintenance & Operations Shops/Storage





## Existing Buildings



PAC | Performing Arts Center



BSTIC | Business Sciences & Technology  
Innovation Center



LIB | Library



SSC | Student Services Center



A-200 | Social Sciences



A-300 | Humanities and Fine Arts





## Existing Buildings



A-100 | Administration



B-100 | Classrooms & Offices



A-400 | Life Sciences



CEC | Community Education Complex



CEC | Community Education Complex



BS | Bookstore & Bookstore Storage





## Campus Parking



Parking Lot 1



Parking Lot 2



Parking Lot 3



Parking Lot 4



Parking Lot 5



Gravel Parking Area near Practice Fields





## Campus Parking



Parking near Baseball Field



Parking Lot 8



Parking Lot 8A



Parking near Math & Physical Science Building



Parking Lot 9





## Athletic Facilities



Soccer Field



Softball Fields & Practice Fields



Baseball Field



Beach Volleyball



Outdoor Basketball Courts



Tennis Courts

## C. 2011 20-Year Facilities & Scheduled Maintenance Plan

Priority	Building	Location	Description
1	Campus wide	All	Replace main water valves
2	Campus wide	A & B Quads	Replace gas piping
3	A 1-400 & B 100	Exterior	Repair building exteriors
4	SSC	All areas	Replace HVAC system
5	<b>B 300</b>	<b>Roof</b>	<b>Replace roof</b>
6	<b>A Quad</b>	<b>Storm Drains</b>	<b>Repair storm drains</b>
7	<b>PL8, A 400 &amp; A 100</b>	<b>206B</b>	<b>Replace exterior lighting in PL8A &amp; upgrade plumbing in both A 100 &amp; A 400</b>
8	Library		Exterior Paint and repair windows
9	<b>B 300</b>		<b>Elevator Rebuild elevator</b>
10	<b>SSC</b>	<b>SSC</b>	<b>Replace exterior doors and floor</b>
11	Campus Wide	All	Repair trip hazards and accessibility
12	PE 100	Roof	Replace roof
13	Campus wide	Sewers	Upgrade & repair sewers
14	<b>B 300</b>	<b>Throughout</b>	<b>Replace HVAC system</b>
15	SSC & Campus wide	All	Replace and upgrade electrical
16	<b>B 300</b>	<b>Exterior</b>	<b>Repair brick, stabilize and paint</b>
17	<b>A Quad</b>	<b>Interior</b>	<b>Replace handicapped doors and upgrade restrooms</b>
18	Campus wide	All	Repair trip hazards and accessibility
19	<b>A 100 &amp; A 400</b>	<b>Roof</b>	<b>Replace roof</b>
20	<b>B 100</b>	<b>All</b>	<b>Replace HVAC systems</b>
21	<b>B 200</b>	<b>Elevator</b>	<b>Repair/rebuild elevator</b>
22	Campus wide	Exterior	Rebuild electrical infrastructure & upgrade lighting
23	<b>B 200</b>	<b>Exterior</b>	<b>Repair brick façade and paint</b>
24	<b>B Quad</b>	<b>Interiors</b>	<b>Repair and rebuild restrooms and plumbing infrastructure</b>
25	<b>A 200</b>	<b>Roof</b>	<b>Rebuild roof</b>
26	Campus wide	Storm Drains	Repair and upgrade storm drains
27	<b>A 100 &amp; PL</b>	<b>Roof &amp; parking lots</b>	<b>Rebuild HVAC units and continue parking lot lighting</b>
28	PAC	Exterior	Paint and repair windows
29	Campus wide	Exterior	Upgrade/repair security fencing
30	<b>Bookstore</b>	<b>Roof</b>	<b>Replace roof</b>

## C. 2011 20-Year Facilities & Scheduled Maintenance Plan

Priority	Building	Location	Description
31	Library	Interior	Elevator rebuild and HVAC upgrades
32	CDC	Exterior	Paint and repair exterior of Child Development Center
33	PE 100	Interior	Rebuild locker rooms and restrooms
34	Campus wide	All	Sidewalk, trip hazards and access upgrades
35	Library	Roof	Repair/replace roof
36	SSC	Exterior	Repair siding, brick and glass
37	<b>B 300</b>	<b>Exterior &amp; Interior</b>	<b>Major structural repair process</b>
38	Campus wide	All	Improve access to sports fields and repair trip hazards
39	<b>B 200</b>	<b>Roof</b>	<b>Repair/replace roof</b>
40	<b>B 200</b>	<b>Throughout</b>	<b>Replace hoods and HVAC system</b>
41	Campus wide	All	Road and walkway repair, including trip hazards
42	<b>B 100 &amp; A 300</b>	<b>Roof</b>	<b>Repair/replace roof</b>
43	SSC	Elevator	Rebuild elevator
44	PE 200	Interior	Gym and other floor replacement
45	PE Area	Courts	Rebuild tennis courts
46	Campus wide	All	Rebuild & clear storm drains
47	PAC	Interior	Replace floors and refresh interior
48	PE 100	All	Brace and level building
49	Campus wide	B Quad	Rebuild handicapped doors & access
50	Police & Maint	All buildings	Repair/replace roofs
51	Campus wide	Exterior	Repair gas lines
52	<b>A 300</b>	<b>All</b>	<b>Replace HVAC system</b>
53	<b>B 100</b>	<b>Throughout</b>	<b>Replace floors and refresh interior</b>
54	Campus wide	All	Repair perimeter road and sidewalks
55	PE 200	Roof	Repair/replace roofs & replace solar panels as needed
56	Campus wide	All	Repair and relace sewer lines
57	Campus wide	Elevator	Repair and rebuild elevators
58	Police & Maint	Exterior	Repair siding and paint
59	Campus wide	All	Road and walkway repair, including trip hazards
60	Campus wide	Roofs	Campus wide roof tune up to extend usable life



## C. 2011 20-Year Facilities & Scheduled Maintenance Plan

Priority	Building	Location	Description
61	<b>A Quad</b>	<b>Exteriors</b>	<b>Repair and paint exteriors of the four buildings</b>
62	Life Sci	Interior	Replace floors and refresh interior
63	Campus wide	Exterior	Road and walkway repair, including trip hazards
64	<b>A 400</b>	<b>All</b>	<b>Replace HVAC system</b>
65	BSTIC	Interior	Replace floors and refresh interiors in needed spaces
66	Campus wide	All	Road and walkway repair, including trip hazards
67	PAC	Roof	Repair/replace roof
68	Campus wide	All	Rebuild & clear storm drains
69	Campus wide	Elevators	Repair and rebuild elevators
70	Campus wide	All	Road and walkway repair, including trip hazards
71	<b>B Quad &amp; Life Sci</b>	<b>Exterior</b>	<b>Repair siding, brick and glass &amp; paint</b>
72	Library	Interior	Replace floors and refresh interior
73	Campus wide	All	Road and walkway repair, including trip hazards
74	BSTIC	Roof	Repair/replace BSTIC roof & complete campus wide tune up
75	PE 100	Throughout	Replace HVAC units
76	Campus wide	All	Repair perimeter road and sidewalks
77	Campus wide	Roofs	Complete a roof tune-up to extend usable life
78	Campus wide	All	Rebuild & clear storm drains
79	Campus wide	All	Upgrade and repair parking lot lighting
80	PE 200	Interior	Resurface gym and other floors - upgrade interior
81	Campus wide	All	Rebuild handicapped doors & access
82	PAC	Exterior	Paint and repair windows
83	PAC	Interior	Replace floors and refresh interior
84	<b>B 200</b>	<b>Throughout</b>	<b>Evaluate and maintain structural integrity, building previously has had trouble, this is to ensure continued usability campus</b>

### C. 2011 20-Year Facilities & Scheduled Maintenance Plan

Priority	Building	Location	Description
85	Campus wide	All	Road and walkway repair, including trip hazards
86	Campus wide	Roof	Roof tune up to extend usable life
87	Campus wide	All	Rebuild & clear storm drains
88	PE 200	Throughout	Replace HVAC system
89	College Entrances	All	Road and walkway repair, including trip hazards
90	Campus wide	All	Gas system repairs and upgrades
91	Campus wide	Elevators	Rebuild tune up elevators throughout the campus
92	<b>A Quad</b>	<b>Exterior</b>	<b>Paint and repair all four buildings as needed</b>
93	Campus wide	All	Road and walkway repair, including trip hazards
94	Library	Roof	Rebuild roof as needed
95	Library	Exterior	Paint and repair window systems
96	Campus wide	All	Road and walkway repair, including trip hazards

## D. Project Cost Summary

Element	Construction Cost Excluding Markups	Construction Cost Including Markups	Total Cost Including Markups + 30%
1. New Life Sciences Building	\$12,050,000	\$15,326,385	\$19,924,301
2. New Barranca Parkway Campus Entrance / Exit	\$1,300,000	\$1,653,469	\$2,149,510
3. New ATEP Building	\$12,750,000	\$16,216,715	\$21,081,729
4. Renovate and Expand A-400 Bldg: H&L/SBS/ Co-Curricular Center	\$6,600,000	\$8,394,535	\$10,912,895
5. Intermediate Level Renovation To A-200: Success Center (Writing Lab, World Language, ESL, Reading, Tutoring)	\$2,422,350	\$3,080,985	\$4,005,281
6. Intermediate Level Renovation To B-300 Second Floor: Math / Computer Science	\$1,500,000	\$1,907,849	\$2,480,203
7. Provide New Surface Parking	\$1,620,000	\$2,060,477	\$2,678,620
8. New Fine Arts Complex	\$23,385,000	\$29,743,363	\$38,666,372
<b>TOTAL FOR 2016 5-YEAR DEVELOPMENT HORIZON</b>	<b>\$61,627,350</b>	<b>\$78,383,778</b>	<b>\$101,898,911</b>
9. Renovate Performing Arts Yard	\$527,000	\$670,291	\$871,378
10. Renovate Soccer and Practice Fields	\$2,917,000	\$3,710,130	\$4,823,169
11. Provide New Surface Parking	\$948,000	\$1,205,760	\$1,567,489
12. Renovate Quad Landscape / Hardscape	\$2,850,000	\$3,624,913	\$4,712,387
13. Minor Level Renovation To B-300 First Floor	\$1,200,000	\$1,526,279	\$1,984,163
14. New Fine Arts Promenade	\$3,510,000	\$4,464,366	\$5,803,676
15. Renovate Campus Entrance Plaza	\$4,095,000	\$5,208,427	\$6,770,955
16. New Baseball Restrooms / Bleachers / Concessions	\$451,500	\$574,262	\$746,541
17. New Clock Tower	\$250,000	\$317,975	\$413,367
18. New Auxiliary Gymnasium	\$8,125,000	\$10,334,181	\$13,434,435
<b>TOTAL FOR 2021 10-YEAR DEVELOPMENT HORIZON</b>	<b>\$24,873,500</b>	<b>\$31,636,584</b>	<b>\$41,127,560</b>
19. Minor Level Renovation To B-100: New Bookstore / Conferencing Center	\$2,042,900	\$2,598,363	\$3,377,872
20. Renovate B-Quad Landscape / Hardscape	\$2,916,000	\$3,708,858	\$4,821,515
21. New Irvine Center Campus Entrance / Exit	\$450,000	\$572,355	\$744,061
22. New Parking Lot	\$1,272,000	\$1,617,856	\$2,103,213
23. New Outdoor Lab / BEES Garden Expansion	\$349,500	\$444,529	\$577,887
24. New Student Services Center Expansion Annex	\$5,600,000	\$7,122,636	\$9,259,426
25. Intermediate Level Renovation To Student Services Center (SCC) Building	\$5,138,200	\$6,535,272	\$8,495,854

Element		Construction Cost Excluding Markups	Construction Cost Including Markups	Total Cost Including Markups + 30%
26. Renovate Service Road (Pedestrian Improvement)		\$1,098,000	\$1,396,545	\$1,815,509
27. New Sand Volleyball Courts		\$470,000	\$597,793	\$777,130
28. New Athletics Stadium		\$1,504,000	\$1,912,936	\$2,486,817
29. New Humanities and Languages / Social Behavioral Sciences Building		\$7,700,000	\$9,793,624	\$12,731,711
30. New Parking Structure		\$14,400,000	\$18,315,348	\$23,809,953
31. New Swimming Pool / Enclosure		\$7,500,000	\$9,539,244	\$12,401,017
<b>TOTAL FOR 2031 20-YEAR DEVELOPMENT HORIZON</b>		<b>\$50,440,600</b>	<b>\$64,155,359</b>	<b>\$83,401,965</b>
Subtotal		\$136,941,450	\$174,175,721	
General Conditions	9.0%	\$12,324,731	Incl Above	
Subtotal		\$149,266,181	\$174,175,721	
Fee	4.0%	\$5,970,647	Incl Above	
Subtotal		\$155,236,828	\$174,175,721	
Bonds & Insurance	2.0%	\$3,104,737	Incl Above	
Subtotal		\$158,341,564	\$174,175,721	
Design Contingency	10.0%	\$15,834,156	Incl Above	
Subtotal		\$174,175,721	\$174,175,721	
Escalation to MOC, Excluded		Excluded	Excluded	
<b>TOTAL ESTIMATED CONSTRUCTION COST</b>		<b>\$174,175,721</b>	<b>\$174,175,721</b>	
<b>TOTAL ESTIMATED PROJECT COST</b>				<b>\$226,428,436</b>



## D. Project Cost Detail

Element			Total Excluding Markups
<b>1. New Life Sciences Building</b>			
-New science building	30,000 sf	\$400.00	\$12,000,000
-Relocate Life Sciences program from A-400 to new Life Sciences Bldg	1 ls	\$50,000.00	\$50,000
<b>-Construction Cost Excluding Markups</b>			<b>\$12,050,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$15,326,385</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$19,924,301</b>
<b>2. New Barranca Parkway Campus Entrance / Exit</b>			
-Widen entrance for increased vehicle capacity	20,000 sf	\$40.00	\$800,000
-City requirements	1 ls	\$500,000.00	\$500,000
<b>-Construction Cost Excluding Markups</b>			<b>\$1,300,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$1,653,469</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$2,149,510</b>
<b>3. New ATEP Building</b>			
-ATEP Building	30,000 sf	\$350.00	\$10,500,000
-Site upgrades	45,000 sf	\$50.00	\$2,250,000
<b>-Construction Cost Excluding Markups</b>			<b>\$12,750,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$16,216,715</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$21,081,729</b>
<b>4. Renovate and Expand A-400 Bldg: H&amp;L/SBS/Co-Curricular Center</b>			
-Full renovation	6,000 sf	\$200.00	\$1,200,000
-Expand building	18,000 sf	\$300.00	\$5,400,000
<b>-Construction Cost Excluding Markups</b>			<b>\$6,600,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$8,394,535</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$10,912,895</b>
<b>5. Intermediate Level Renovation To A-200: Success Center (Writing Lab, World Language, ESL, Reading, Tutoring)</b>			
-Intermediate level renovation	16,149 sf	\$150.00	\$2,422,350
<b>-Construction Cost Excluding Markups</b>			<b>\$2,422,350</b>
<b>-Construction Cost Including Markups</b>			<b>\$3,080,985</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$4,005,281</b>

## D. Project Cost Detail

Element			Total Excluding Markups
<b>6. Intermediate Level Renovation To B-300 Second Floor: Math / Computer Science</b>			
-Intermediate level renovation	10,000 sf	\$150.00	\$1,500,000
<b>-Construction Cost Excluding Markups</b>			<b>\$1,500,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$1,907,849</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$2,480,203</b>
<b>7. Provide New Surface Parking</b>			
-Provide new parking lot	135,000 sf	\$12.00	\$1,620,000
<b>-Construction Cost Excluding Markups</b>			<b>\$1,620,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$2,060,477</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$2,678,620</b>
<b>8. New Fine Arts Complex</b>			
-New Fine Arts Bldg	57,560 sf	\$375.00	\$21,585,000
-Move program space back to new facility	1 ls	\$100,000.00	\$100,000
-Sitework	85,000 sf	\$20.00	\$1,700,000
<b>-Construction Cost Excluding Markups</b>			<b>\$23,385,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$29,743,363</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$38,666,372</b>
<b>9. Renovate Performing Arts Yard</b>			
-Site clearance	31,000 sf	\$2.00	\$62,000
-Hardscape	31,000 sf	\$15.00	\$465,000
<b>-Construction Cost Excluding Markups</b>			<b>\$527,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$670,291</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$871,378</b>
<b>10. Renovate Soccer and Practice Fields</b>			
-Renovate fields	400,000 sf	\$7.00	\$2,800,000
-Perimeter fence	2,600 lf	\$45.00	\$117,000
<b>-Construction Cost Excluding Markups</b>			<b>\$2,917,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$3,710,130</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$4,823,169</b>

## D. Project Cost Detail

Element	Quantity	Unit Cost	Total
<b>11. Provide New Surface Parking</b>			
-Provide new parking lot	79,000 sf	\$12.00	\$948,000
<b>-Construction Cost Excluding Markups</b>			<b>\$948,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$1,205,760</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$1,567,489</b>
<b>12. Renovate Quad Landscape / Hardscape</b>			
-Site clearance	100,000 sf	\$2.00	\$200,000
-Hardscape	30,000 sf	\$20.00	\$600,000
-Landscaping	70,000 sf	\$15.00	\$1,050,000
-General site upgrades (Site specialties, amenities, walls and fences, lighting, etc)	100,000 sf	\$10.00	\$1,000,000
<b>-Construction Cost Excluding Markups</b>			<b>\$2,850,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$3,624,913</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$4,712,387</b>
<b>13. Minor Level Renovation To B-300 First Floor</b>			
-Minor level modernization to B-300	12,000 sf	\$100.00	\$1,200,000
<b>-Construction Cost Excluding Markups</b>			<b>\$1,200,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$1,526,279</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$1,984,163</b>
<b>14. New Fine Arts Promenade</b>			
-Site clearance	130,000 sf	\$2.00	\$260,000
-Hardscape	26,000 sf	\$15.00	\$390,000
-Landscaping	104,000 sf	\$15.00	\$1,560,000
-General site upgrades (Site specialties, amenities, walls and fences, lighting, etc)	130,000 sf	\$10.00	\$1,300,000
<b>-Construction Cost Excluding Markups</b>			<b>\$3,510,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$4,464,366</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$5,803,676</b>

## D. Project Cost Detail

Element	Quantity	Unit Cost	Total
<b>15. Renovate Campus Entrance Plaza</b>			
-Site clearance	130,000 sf	\$2.00	\$260,000
-Hardscape	117,000 sf	\$20.00	\$2,340,000
-Landscaping	13,000 sf	\$15.00	\$195,000
-General site upgrades (Site specialties, amenities, walls and fences, lighting, etc)	130,000 sf	\$10.00	\$1,300,000
<b>-Construction Cost Excluding Markups</b>			<b>\$4,095,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$5,208,427</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$6,770,955</b>
<b>16. New Baseball Restrooms / Bleachers / Concessions</b>			
-New bleachers	450 lf	\$70.00	\$31,500
-Concession / Restroom bldg	700 sf	\$600.00	\$420,000
<b>-Construction Cost Excluding Markups</b>			<b>\$451,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$574,262</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$746,541</b>
<b>17. New Clock Tower</b>			
-New clock tower	1 ea	\$250,000.00	\$250,000
<b>-Construction Cost Excluding Markups</b>			<b>\$250,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$317,975</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$413,367</b>
<b>18. New Auxiliary Gymnasium</b>			
-New Auxiliary Gym	25,000 sf	\$350.00	\$8,750,000
<b>-Construction Cost Excluding Markups</b>			<b>\$8,125,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$10,334,181</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$13,434,435</b>



## D. Project Cost Detail

Element	Quantity	Unit Cost	Total
<b>19. Minor Level Renovation To B-100: New Bookstore / Conferencing Center</b>			
-Minor level renovation of bookstore / conferencing center including small coffee stand	13,086 sf	\$125.00	\$1,635,750
-TI allowance to coffee area	400 sf	\$200.00	\$80,000
<b>-Construction Cost Excluding Markups</b>			<b>\$2,042,900</b>
<b>-Construction Cost Including Markups</b>			<b>\$2,598,363</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$3,377,872</b>
<b>20. Renovate B-Quad Landscape / Hardscape</b>			
-Site clearance	108,000 sf	\$2.00	\$216,000
-Hardscape	32,400 sf	\$15.00	\$486,000
-Landscaping	75,600 sf	\$15.00	\$1,134,000
-General site upgrades (Site specialties, amenities, walls and fences, lighting, etc)	108,000 sf	\$10.00	\$1,080,000
<b>-Construction Cost Excluding Markups</b>			<b>\$2,916,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$3,708,858</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$4,821,515</b>
<b>21. New Irvine Center Campus Entrance / Exit</b>			
-Widen entrance for increased vehicle capacity	6,000 sf	\$75.00	\$450,000
<b>-Construction Cost Excluding Markups</b>			<b>\$450,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$572,355</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$744,061</b>
<b>22. New Parking Lot</b>			
-Provide new parking lot	106,000 sf	\$12.00	\$1,272,000
<b>-Construction Cost Excluding Markups</b>			<b>\$1,272,000</b>
<b>-Construction Cost Including Markups</b>			<b>\$1,617,856</b>
<b>-Total Cost Including Markups + 30%</b>			<b>\$2,103,213</b>

## D. Project Cost Detail

Element	Quantity		Unit Cost	Total
23. New Outdoor Lab / BEES Garden Expansion				
-Site clearance	40,000	sf	\$2.00	\$80,000
-Hardscape	3,000	sf	\$20.00	\$60,000
-Irrigation for future landscaping	37,000	sf	\$2.50	\$92,500
-Perimeter fence	2,600	lf	\$45.00	\$117,000
-Construction Cost Excluding Markups				\$349,000
-Construction Cost Including Markups				\$444,529
-Total Cost Including Markups + 30%				\$577,887
24. New Student Services Center Expansion Annex				
-Expansion to student services building	16,000	sf	\$350.00	\$5,600,000
-Construction Cost Excluding Markups				\$5,600,000
-Construction Cost Including Markups				\$7,122,636
-Total Cost Including Markups + 30%				\$9,259,426
25. Intermediate Level Renovation To Student Services Center (SCC) Building				
-Intermediate level student services building	30,588	sf	\$150.00	\$4,588,200
-Kitchen equipment	1	ls	\$500,000.00	\$500,000
-Move kitchen equipment back to renovated facility	1	ls	\$50,000.00	\$50,000
-Construction Cost Excluding Markups				\$5,138,200
-Construction Cost Including Markups				\$6,535,272
-Total Cost Including Markups + 30%				\$8,495,854
26. Renovate Service Road (Pedestrian Improvement)				
-Site clearance	36,000	sf	\$2.00	\$72,000
-Hardscape	25,200	sf	\$20.00	\$504,000
-Landscaping	10,800	sf	\$15.00	\$162,000
-General site upgrades (Site specialties, amenities, walls and fences, lighting, etc)	36,000	sf	\$10.00	\$360,000
-Construction Cost Excluding Markups				\$1,098,000
-Construction Cost Including Markups				\$1,396,545
-Total Cost Including Markups + 30%				\$1,815,509

## D. Project Cost Detail

Element	Quantity		Unit Cost	Total
27. New Sand Volleyball Courts				
-Volleyball courts	12,000	sf	\$35.00	\$420,000
-Equipment	1	ls	\$50,000.00	\$50,000
-Construction Cost Excluding Markups				\$470,000
-Construction Cost Including Markups				\$597,793
-Total Cost Including Markups + 30%				\$777,130
28. New Athletics Stadium				
-New regulation grass soccer field	1	ls	\$500,000.00	\$500,000
-Bleachers	500	seat	\$200.00	\$100,000
-Press box	1	ls	\$50,000.00	\$50,000
-Restroom / concession building	1,000	sf	\$800.00	\$800,000
-Perimeter fence	1,200	lf	\$45.00	\$54,000
-Construction Cost Excluding Markups				\$1,504,000
-Construction Cost Including Markups				\$1,912,936
-Total Cost Including Markups + 30%				\$2,486,817
29. New Humanities and Languages / Social Behavioral Sciences Building				
-Humanities / Social Behavioral Sciences Bldg	22,000	sf	\$350.00	\$7,700,000
-Construction Cost Excluding Markups				\$7,700,000
-Construction Cost Including Markups				\$9,793,624
-Total Cost Including Markups + 30%				\$12,731,711
30. New Parking Structure				
-Provide new parking structure with 800 stalls	800	ea	\$18,000.00	\$14,400,000
-Construction Cost Excluding Markups				\$14,400,000
-Construction Cost Including Markups				\$18,315,348
-Total Cost Including Markups + 30%				\$23,809,953

Element	Quantity	Unit Cost	Total	
31. New Swimming Pool / Enclosure				
-Olympic 4 lane swimming pool, exercise pool, associated support buiding and accessories	1	Is	\$7,500,000.00	\$7,500,000
-Construction Cost Excluding Markups				\$7,500,000
-Construction Cost Including Markups				\$9,539,244
-Total Cost Including Markups + 30%				\$12,401,017
TOTAL - CONSTRUCTION COST EXCLUDING MARKUPS			\$136,941,450	
TOTAL - CONSTRUCTION COST INCLUDING MARKUPS			\$174,175,721	
TOTAL COST INCLUDING MARKUPS + 30%			\$226,428,436	



## E. Reference Documents

The following documents can be downloaded for further review on the South Orange County Community College District website:

- 2011 Irvine Valley College Education Master Plan
- Focus Group Interview Notes
- Existing Facilities Physical Assessment
- 2008 Advanced Technology & Education Park (ATEP) Long Range Plan
- 2009 Advanced Technology & Education Park (ATEP) Phase 3A Concept Plan





**gkkworks**

| 1775 Hancock Street | Suite 150 | SAN DIEGO | CA 92110 | 619.398.0215

