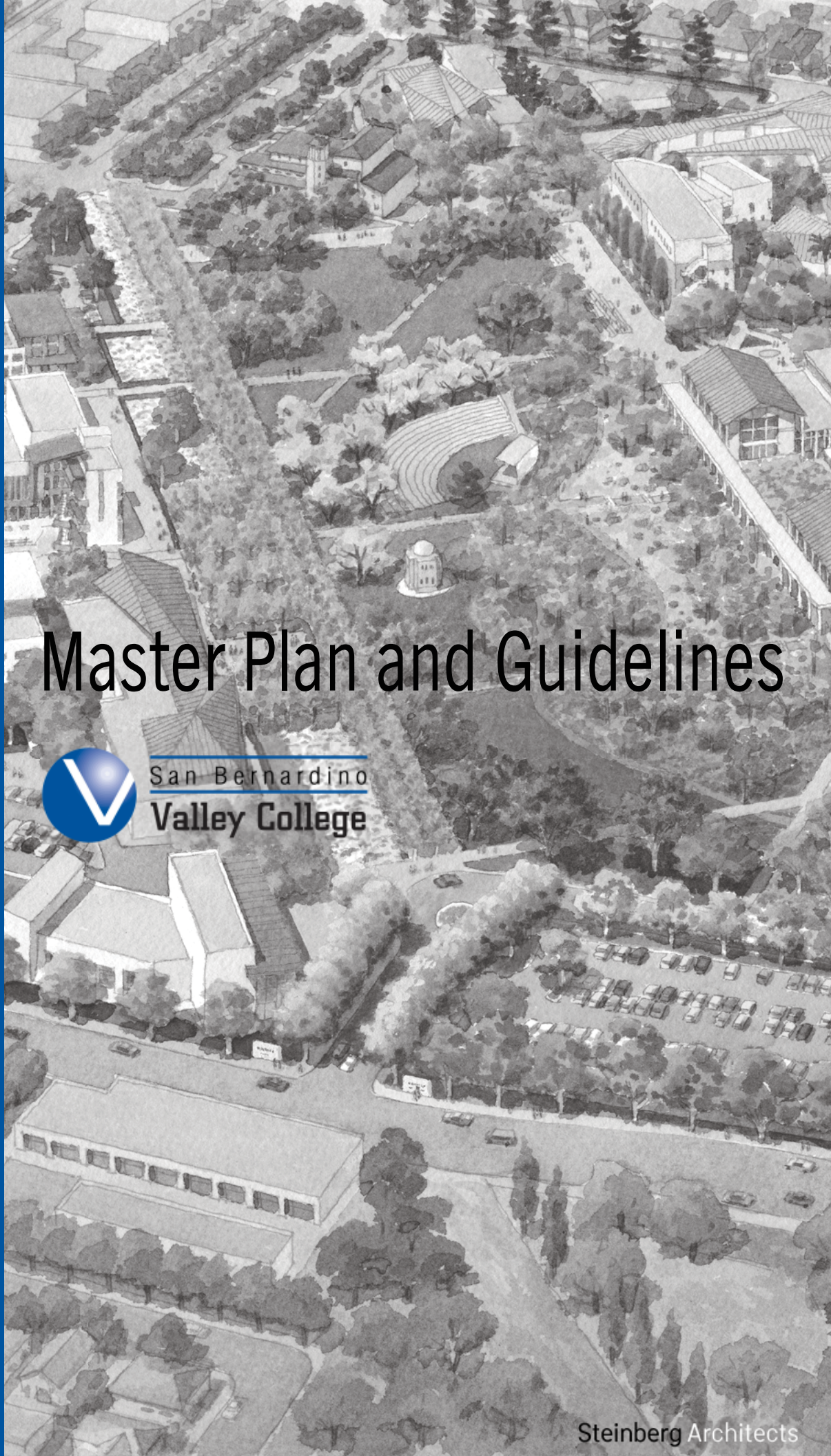
Master Plan and Guidelines

San Bernardino
Valley College



Steinberg Architects

COVER
VOLUME 1
MASTER PLAN

MASTER PLAN

MAY 2009

1
SUMMARY

OVERVIEW

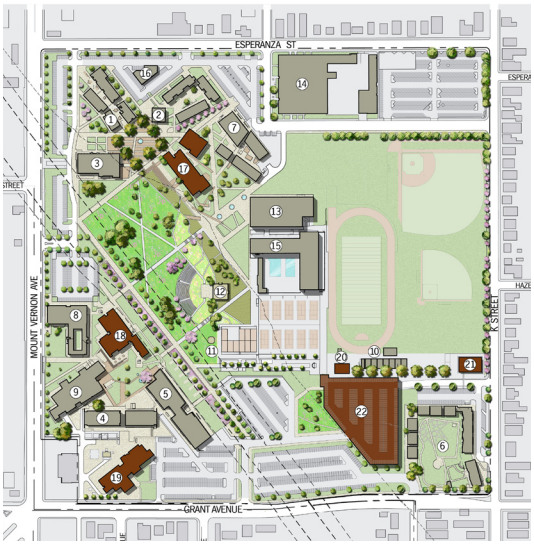
The master plan of San Bernardino Valley College (SBVC) unifies a campus that has been divided and physically transformed by the presence of an earthquake fault. The plan celebrates the geologic impact of the San Jacinto Fault in both the landscape and buildings while maintaining the institutional memory of the college and providing a new identity for generations to come.

The ultimate goal of the master plan is to provide connections that link and unify the campus and community. This is accomplished by capitalizing on SBVC's most valuable asset – its land. The large open space in the center, required because of the fault and folding zones beneath the surface, is transformed into a Glade that will be the heart of the SBVC experience. The Glade is surrounded by a series of destinations. As opposed to buildings in a traditional college plan, these destinations are outdoor rooms. The various exterior spaces allow for variety in gathering and interaction taking place on campus and enable SBVC to teach outside the traditional envrionment. These spaces also enable the college to reach out to the surrounding community, welcoming visitors and enhancing connections.

The creation of the Glade and outdoor rooms resolves the various geometries on the site, allowing the placement of the existing and future buildings to have meaning and purpose. Buildings are responsive to the adjoining exterior spaces and work in concert with the landscape to define the landscape places, each with their own quality and character. Paths, edges and entries to buildings, reinforced by the landscape, will provide direction and hierarchy to campus places. Open corridors through buildings will lead to defined plazas. The articulation of the buildings and landscape will blend the old with the new, resulting in a cohesive campus.

The following master plan represents a vision for the year 2030. It has been broken into three horizons for planning purposes. Horizon 1 illustrates the work completed by 2010 and is defined by four new buildings – the North Hall Replacement, Maintenance & Operations, Media/Communications and Chemistry/ Physical Science. These buildings replace three existing buildings that are required for demolition due to their location on the fault. This horizon assumes no overall growth for the campus.

Horizon 2 illustrates the work completed by 2020 and also assumes no overall growth for the campus. In this



Horizon 1 - 2010

Horizon 2 - 2020

Horizon 3 - 2030

OVERVIEW

horizon, the buildings and facilities most in need of repair or replacement are renovated or rebuilt. Horizon 3, synonymous with the master plan, is the ultimate build-out for the campus within the constraints of its current property boundary lines.

PROCESS

Four years after the 1992 Landers and Big Bear earthquakes damaged the old Library, San Bernardino Valley College began investigations to determine the vulnerability of the campus to future seismic activity. Geological studies revealed that the San Jacinto fault ran diagonally through the center of campus. Additionally, a folding zone on the northern side of the fault was discovered that would cause uneven changes in elevation during a seismic event. It was determined that nine of the existing 28 buildings on campus would have to be demolished and replaced due to their locations straddling the fault and folding zones.

In November 2002, voters of San Bernardino County approved Measure P, which provided $190 million of bond funds to improve the facilities at San Bernardino Community College District's two colleges, San Bernardino Valley College and Crafton Hills College. Using a combination of bond, state and FEMA funding, San Bernardino Valley College began design and construction to replace five buildings that were located directly on the fault.

In the fall of 2005 SBVC selected Steinberg Architects to develop and implement a master plan for the college. The master planning process began in January of 2006, and a series of workshops and meetings were held with the Core Committee, Expanded Core Committee and College throughout the next ten months. The result of the first of these workshops was the creation of the goals for the master plan (see page 2.12). Along with the college's mission statement and strategic educational objectives, the goals served as guiding principles for the master planning process. Meetings were held with the college's divisions to learn how current facilities were being used programmatically and physically in order to determine the best reorganization for the campus.

Concurrent with the early meetings, the architect/consultant team performed an assessment study for all the existing buildings, site and infrastructure on the campus. The purpose of the study was to document current conditions, assess potential life safety issues, and make recommendations to bring the campus up to current standards and codes.

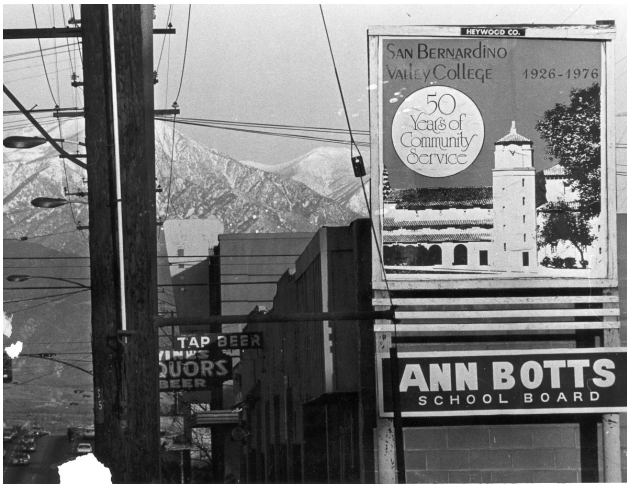
The master plan book describes the comprehensive plan developed to address the maximum build-out of the San Bernardino Valley College campus on its 87-acre property. The plan reconciles the college's facility needs with the San Jacinto Fault that dominates the physical future of the campus.

HISTORY

1926	Thirty acres on the east side of Mt. Vernon Avenue, equidistant between the downtown areas of San Bernardino and Colton were purchased for the location of San Bernardino Valley College.
1928	Administration Building, Life Science Building, Gymnasium and Library completed.
1929	Student Union completed.
1930	Astronomical Observatory completed.
1936-1938	Works Progress Administration (WPA) funded construction of the Auditorium designed by Stanley Wilson, concrete bleachers for the stadium and a new vocational building. State Emergency Relief Administration funds were obtained to construct the Greek Theater.
1946	War surplus buildings were brought on campus to provide additional offices, classrooms and space for student services.
1947	A clock was added to the Auditorium tower, a gift from John F. Vondey.
1949-1950	An Engineering Building, a Fine Arts building, a new Science building, a Business Education building, and an addition to the Library completed.
1955	Student Life Building completed. The Student Union was then remodeled to serve as an auxiliary gymnasium for women students.
1957	Residential property to the north, south and east was purchased to convert into parking. Chemistry Building completed.
1969	Medical Art building completed.
1970	Liberal Arts Building completed.
1975	The old Gymnasium was replaced by the Joseph Snyder Gymnasium.
1976	Art Gallery completed.

Admissions Building, 1968
photo by: SBVC Archives

SBVC Campus Aerial, 1962
photo by: SBVC Archives



50th Anniversary Sign on Mt. Vernon
photo by: SBVC Archives

HISTORY

1977	Planetarium completed.
1990	The Astronomical Observatory was restored to its original use after being used as storage and headquarters for the campus police.
1992	The Landers and Big Bear earthquake severely damaged the book stacks on the main floor of the Library, causing the facility to be closed for the summer for repair.
1995-1996	Trenching began to determine the vulnerability of the campus to future seismic activity. Nine of the 28 buildings on campus straddled or were near the San Jacinto earthquake fault, and would eventually have to be taken down.
1996-2006	Steven Ehrlich was hired to design the new Administration/Student Services, Health & Life Science, Campus Center, Library and Art Center & Gallery Buildings.
2003	Library Completed
2004	Health & Life Science Completed
2005	Administration/Student Services Completed
2006	Art Center & Gallery and Campus Center Completed

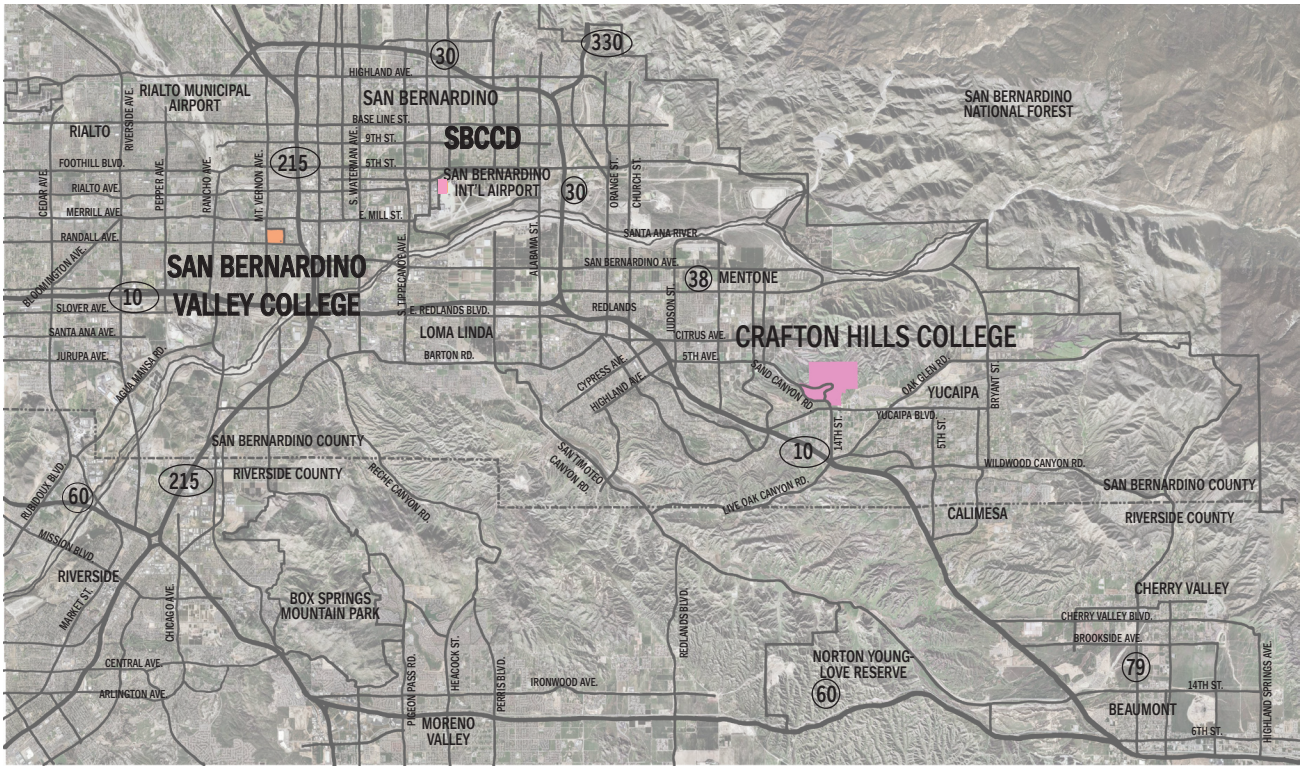
Information courtesy of www.valleycollege.edu.

Homecoming Parade, 1959
photo by: SBVC Archives

Arrowhead Plaza, 1970s
by: SBVC Archives

Health and Life Science Building, 2004

CONTEXT



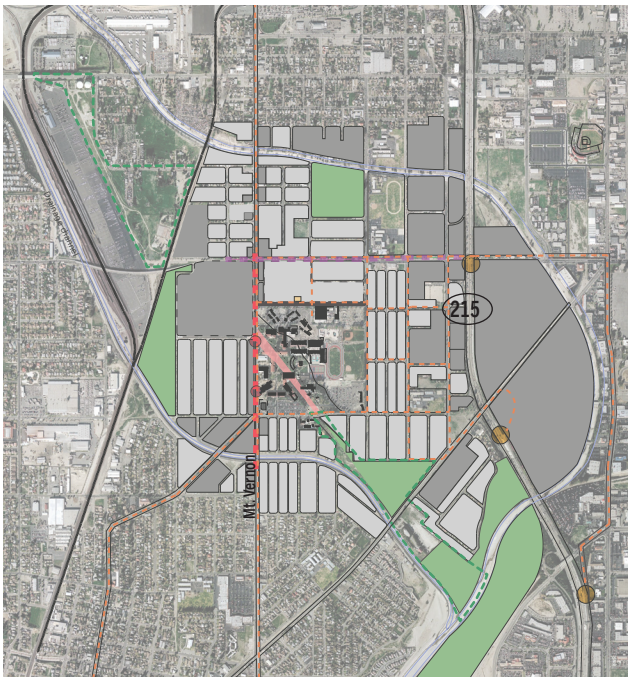
Vicinity Map

Established in 1926, San Bernardino Valley College occupies 28 buildings on an 87-acre site.

SBVC is approximately 16 miles from her sister college, Crafton Hills College in Yucaipa, California. The San Bernardino Community College District (SBCCD) offices, Professional Development Center and San Bernardino International Airport complex are approximately five miles away.

The campus is easily accessed by vehicle off the 10 or 215 Freeways. There are two bus stops for the campus on Mt. Vernon Avenue. The surrounding area is a mix of residential and commercial zones. Mt. Vernon Avenue is a main commercial corridor running north-south, while Esperanza, K and Grant Streets are primarily residential.

Since the campus is on the border of San Bernardino and Colton, SBVC has an opportunity to connect the two cites as an educational and cultural destination. Although no redevelopment projects for this area in either city existed



Zoning Map

CONTEXT

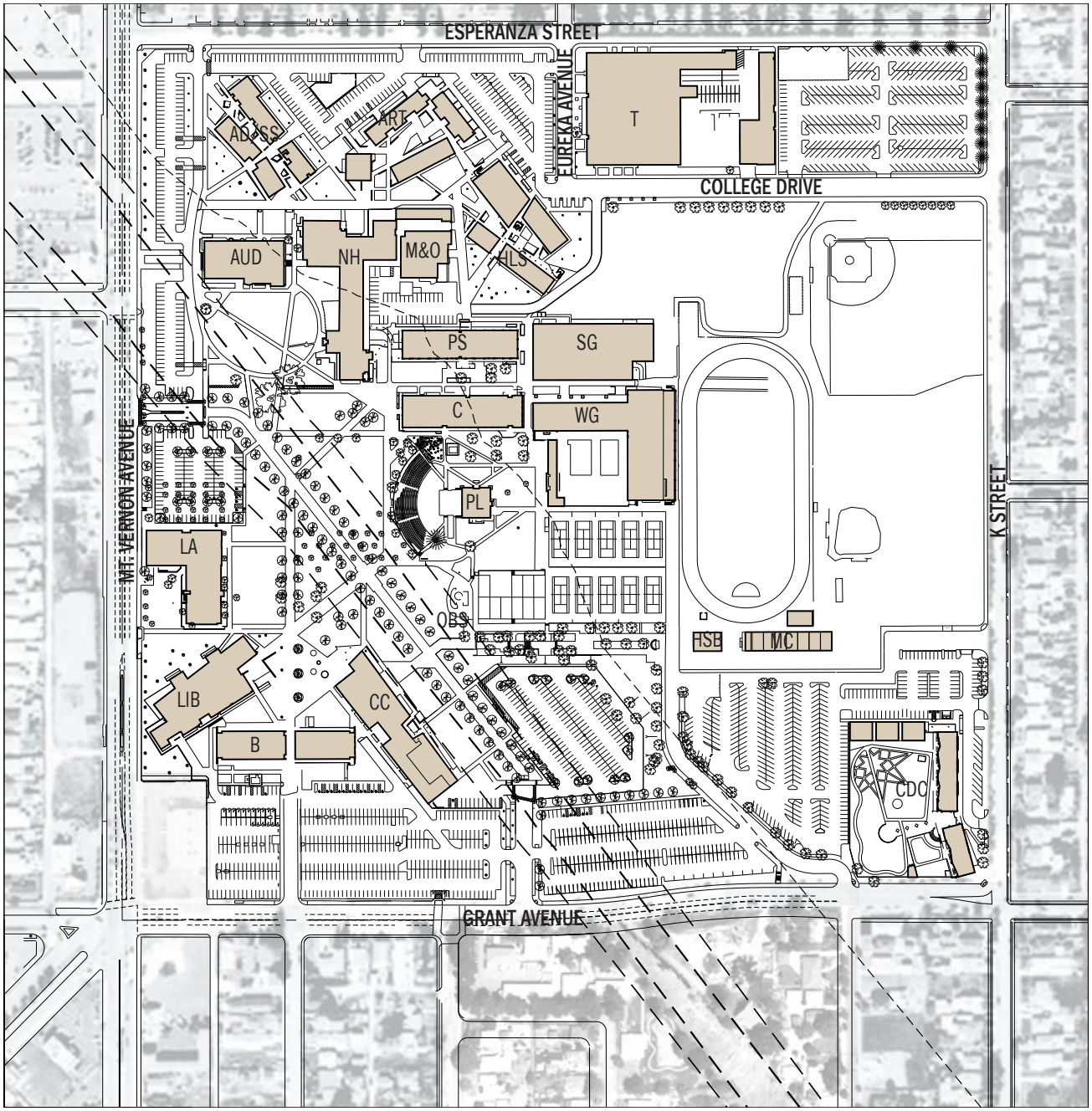
Area Map

at the time of the master plan, SBVC plans to continue to be a positive and influential force within the surrounding communities in fulfilling their mission (see page 2.12). The realization of the master plan will encourage the cities of San Bernardino and Colton to become partners in beautifying the area.

The Middle College High School (MCHS) is a program run by the San Bernardino City Unified School District to provide high school students an opportunity to take high school and college classes at the Valley Campus. The Middle College utilizes a series of portable classrooms buildings on campus but is planning to expand to a dedicated facility on property north of Esperanza Street to serve 400 students. With details not yet finalized, the master plan has assumed that the Middle College will successfully relocate off-campus to a location to-be-determined and continue their relationship with SBVC.

The diagram on page 1.8 is the existing site plan at SBVC and represents the starting point for the master planning efforts. Pages 1.9 - 1.11 are images intended to give a brief overview of the surrounding context and site at SBVC.

CONTEXT - EXISTING SITE PLAN



BUILDINGS

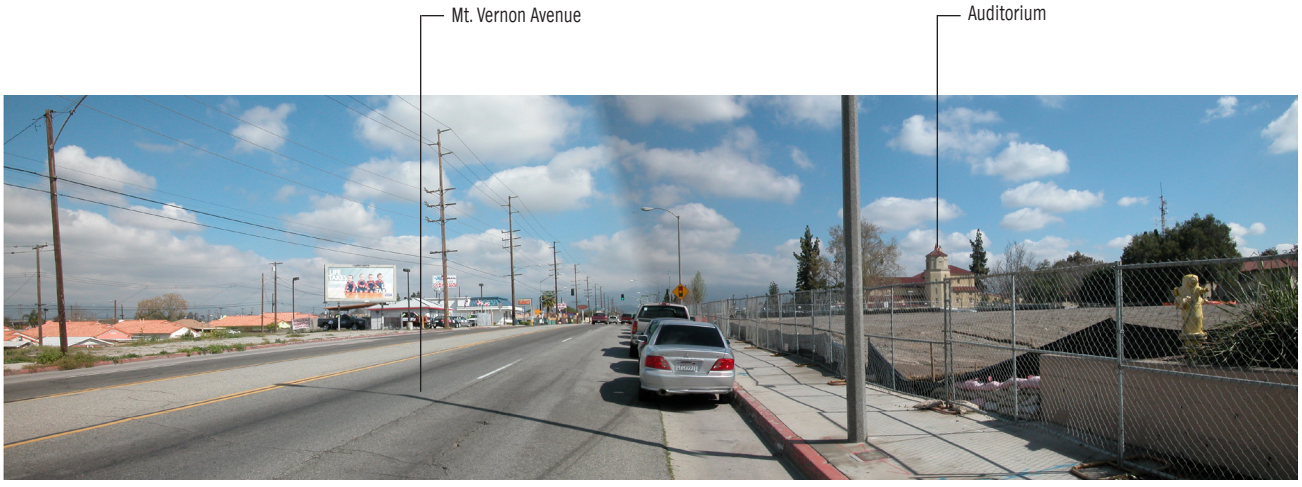
AD/SS	ADMIN./ STUDENT SERVICES	NH	NORTH HALL
ART	ART & GALLERY	OBS	OBSERVATORY
AUD	AUDITORIUM	PL	PLANETARIUM
B	BUSINESS	PS	PHYSICAL SCIENCE
C	CHEMISTRY	SG	SNYDER GYM
CC	CAMPUS CENTER	T	TECHNICAL
CDC	CHILD DEVELOPMENT CENTER	WG	WOMEN'S GYM
HLS	HEALTH & LIFE SCIENCES		
HSB	HEALTH SERVICES BUILDING		
LA	LIBERAL ARTS		
LIB	LIBRARY		
M&O	MAINTENANCE & OPERATIONS		

0' 175' 350'

CONTEXT - SITE IMAGES

View of Mt. Vernon Avenue looking south.

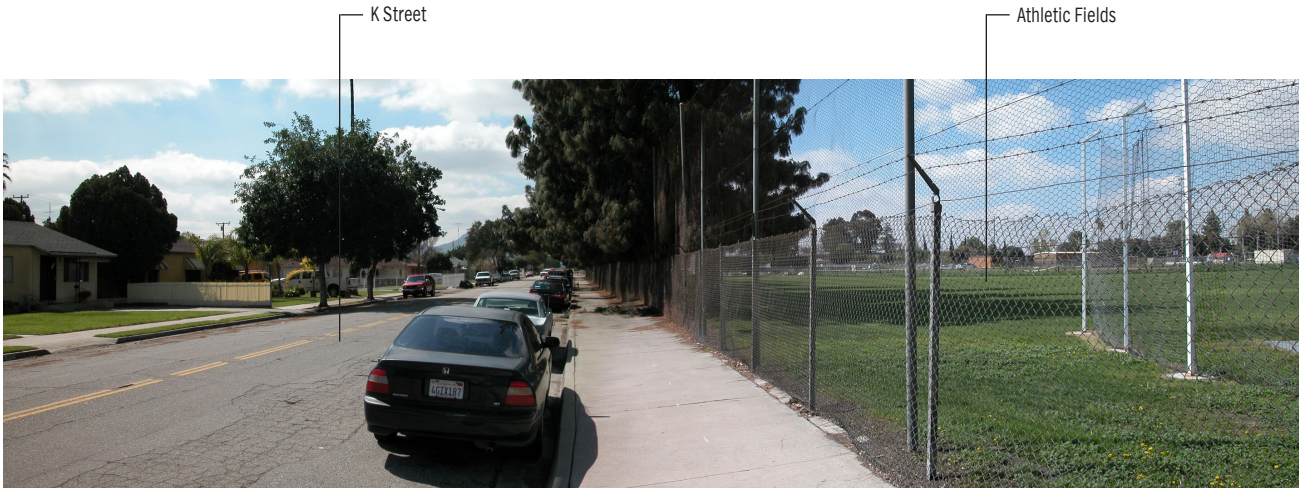
View of Mt. Vernon Avenue at the corner of Grant Avenue and La Cadena Drive looking north.



View of Mt. Vernon Avenue looking north.

CONTEXT - SITE IMAGES

View of Esperanza Street looking east.

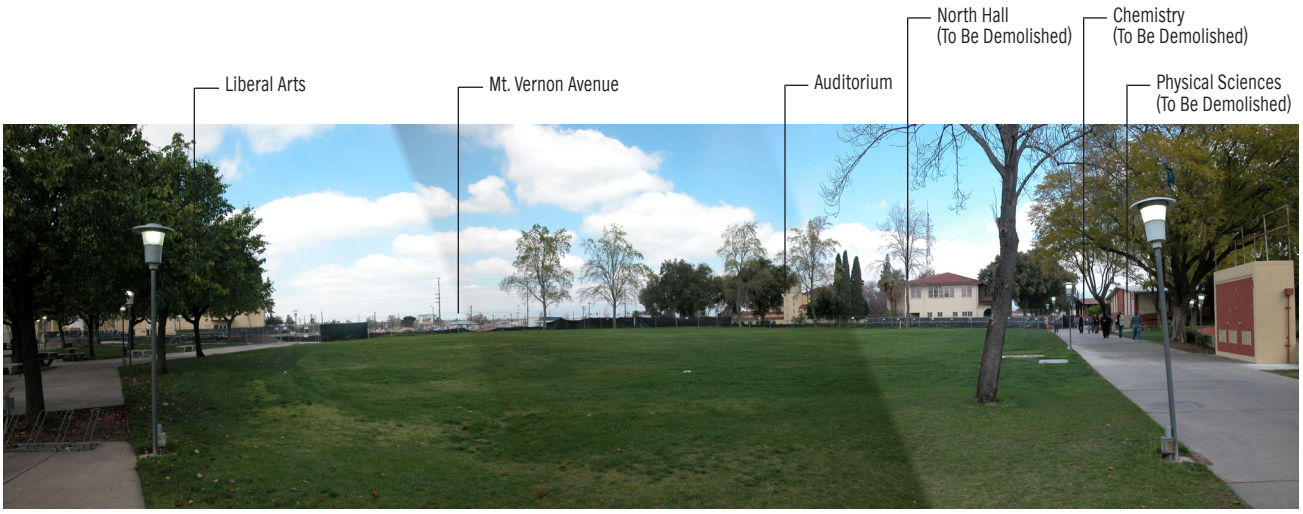


View of K Street looking south.

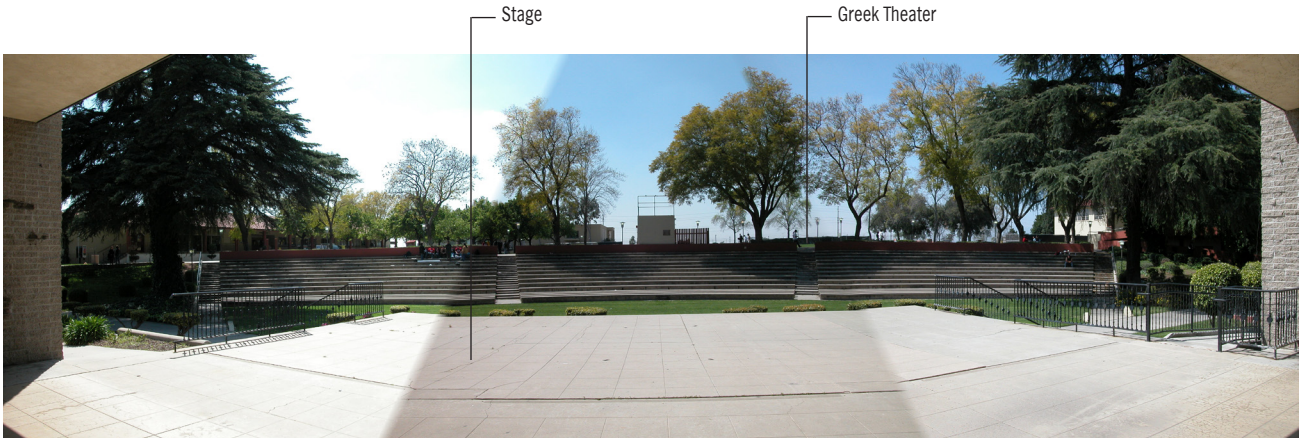
View of Grant Avenue looking into campus.

CONTEXT - SITE IMAGES

View of Library and Campus Center looking north.



View of open space at center of campus.



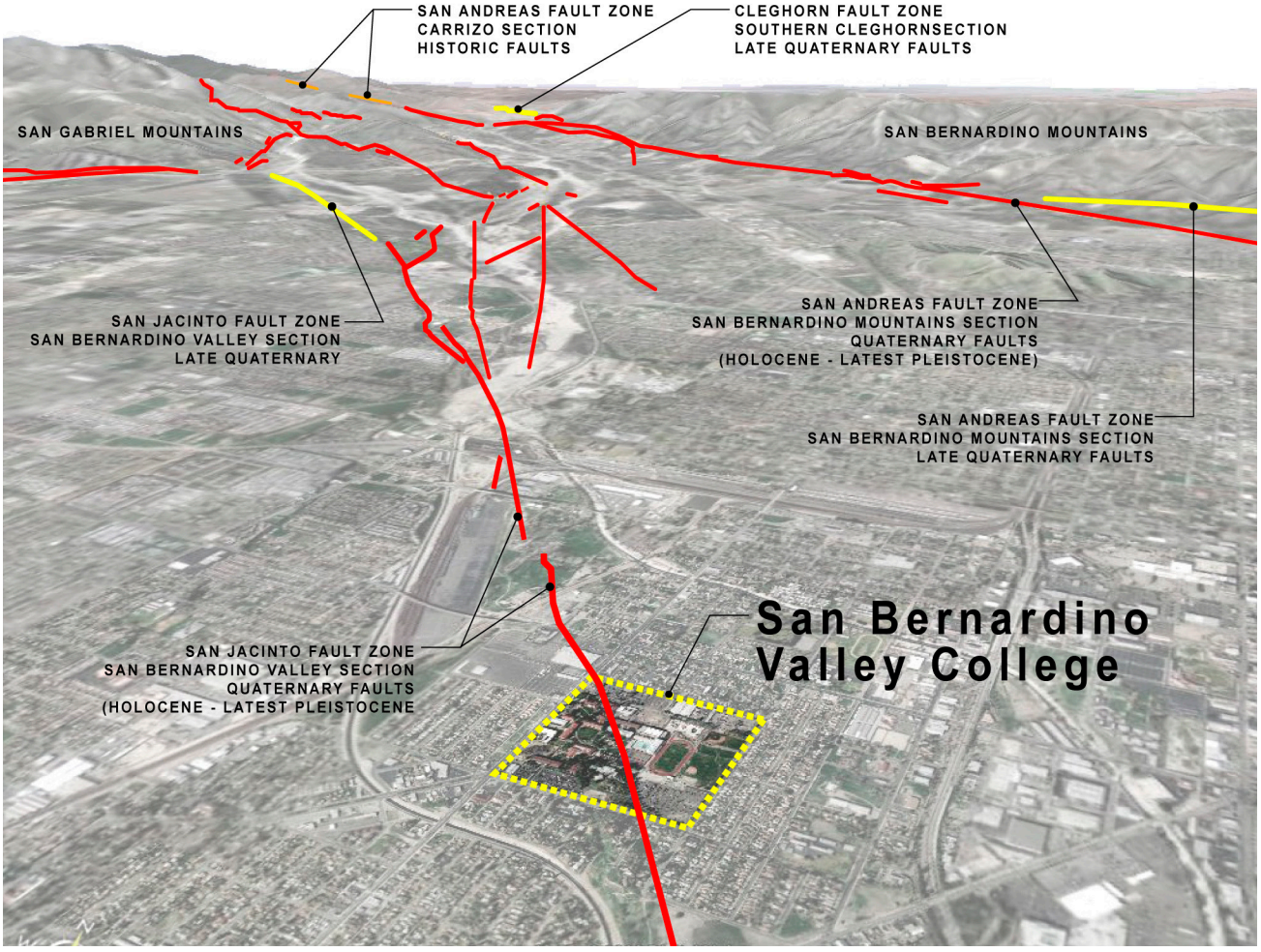
View of Greek Theater from stage.

2
CHALLENGE

CHALLENGE

There are three significant conditions that currently challenge the creation of a master plan for San Bernardino Valley College. They include:

- The **San Jacinto Fault** and its seismic impact on existing and future buildings.
- The **Loss of Organization** as a result of the fault.
- The disintegration of the **Campus Identity,** which will be worsened by the demolition of existing buildings.



Relationship of SBVC to the surrounding fault zones.

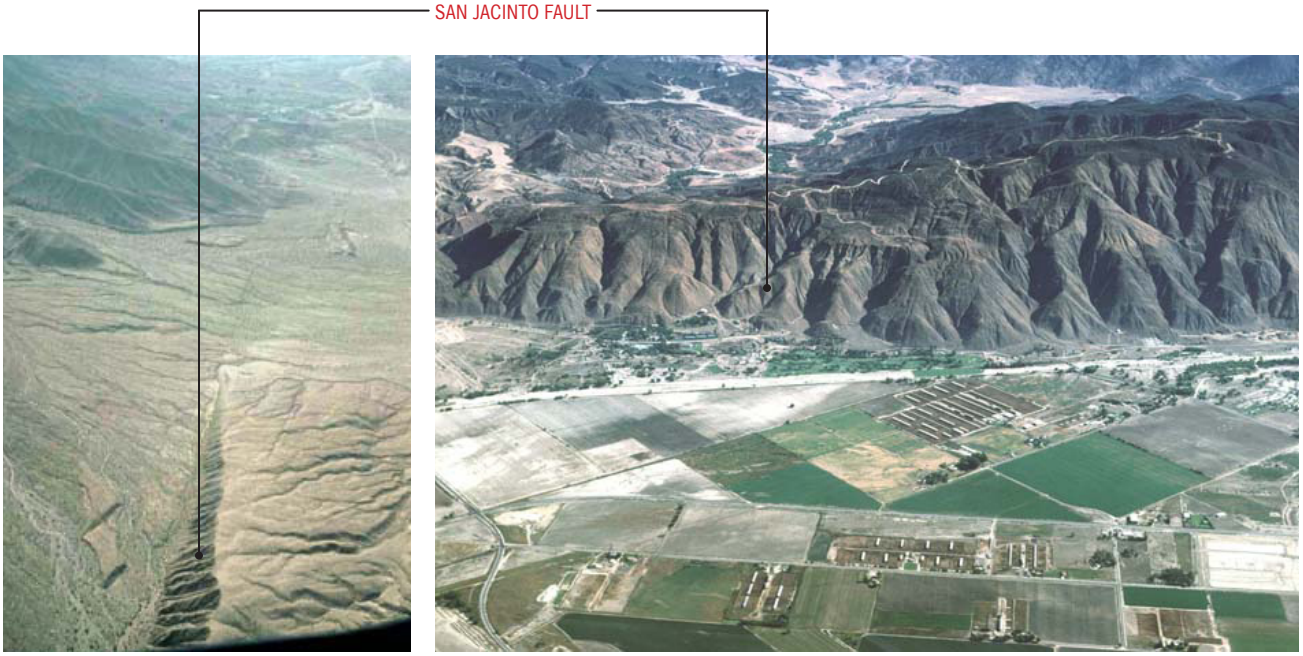
CHALLENGE

The San Jacinto Fault

With the extent of the San Jacinto fault at San Bernardino Valley College fully understood, approximately 18-acres or 20% of the campus became unusable for buildings. The San Jacinto fault is one of the main branches of the San Andreas fault system and is the most seismically active fault in Southern California. It is approximately 180 miles long and traverses the cities of San Bernardino, Colton, San Jacinto and Hemet. Over millions of years the tectonic plates that meet at these fault lines have shifted dozens of miles, creating the natural beauty of mountains and valleys in San Bernardino and throughout Southern California.

Despite the exquisite landscape created by faults, the San Jacinto Fault has had a tremendous impact at San Bernardino Valley College. On the campus, two lines of the fault run parallel to each other and have a required 50-foot setback to either side, creating a zone in which no structures are allowed to remain. Additionally, a folding zone exists to the northeast side of the fault, caused by the relative movement of two tectonic plates underneath the earth's surface. The southern plate is moving up while the northern plate is moving down, causing the visible elevation changes on campus. See page 2.4 for a diagram that illustrates these zones.

Location of the San Jacinto and San Andreas Faults in California.



Topographical changes caused by the San Jacinto Fault.
photos by: Arthur Gibbs Sylvester

CHALLENGE

Detailed investigation of the fault led to the identification of nine buildings that had to be demolished. Five of these replacement buildings, designed by Steven Ehrlich Architects and Thomas Blurock Architects, have already been constructed outside the fault/folding zone: the new Library (2003), Health and Life Science Building (2004), Administration/Student Services (2005), Campus Center (2006), and Art Building and Gallery (2006).

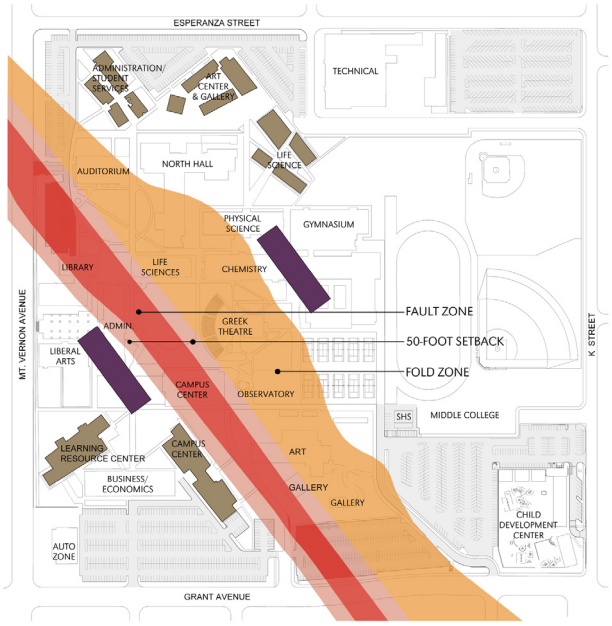
Per structural engineers' recommendations, the ideal orientation of all new structures is parallel or perpendicular to the fault. As a result, the new buildings are positioned at a different angle relative to the existing buildings, which are orthogonal to the city grid. Additionally, the ideal structural shape is a three-story rectangular bar.

The four remaining buildings scheduled for demolition – the North Hall, Chemistry, Physical Science and Maintenance & Operations buildings – will be replaced by the North Hall Replacement, Maintenance & Operations, Media/Communications, and the Chemistry/ Physical Science buildings.

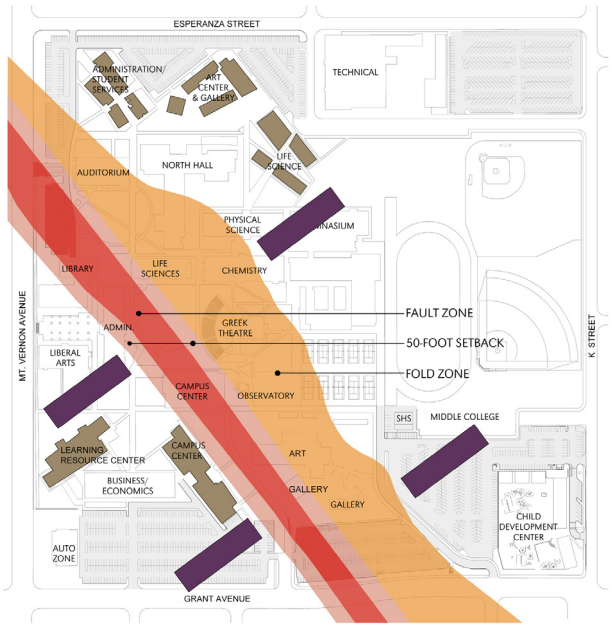
Structural analysis has indicated that both the Auditorium and Observatory, despite their locations in the folding zone, can remain. It is recommended that the Planetarium, due to its construction and location, be vacated or demolished.

The Folding Zone

In the event of an earthquake, the land within the folding zone will lift up along documented contour lines (the green lines shown in the above diagram). These contour lines vary from a few inches to five feet. While structures can remain entirely in the folding zone, depending on the contours beneath them, structures straddling the folding zone must be demolished. It is not recommended that any new structures be built within the folding zone.

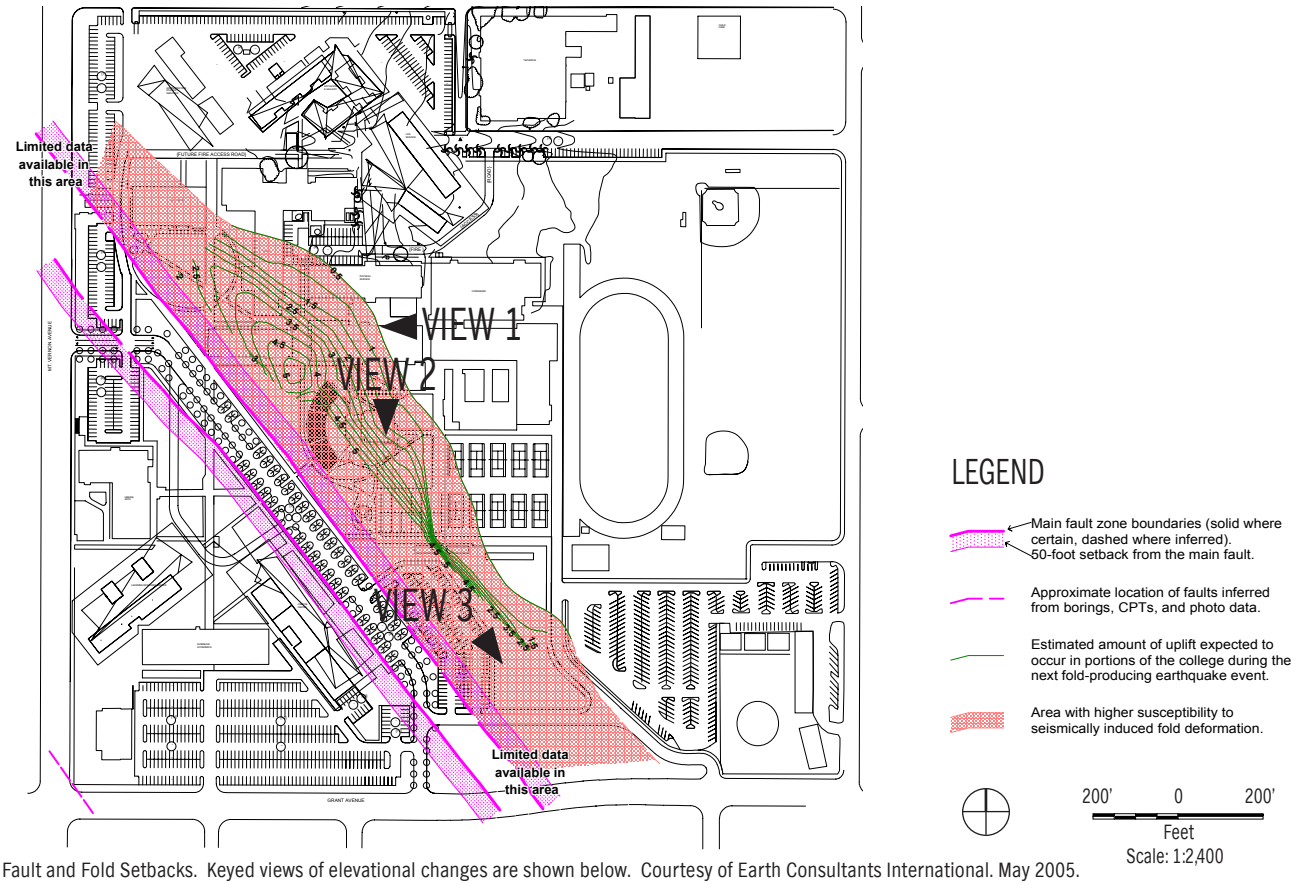


Recommended structural orientation and shape: three-story rectangular bar that is oriented parallel to the fault.

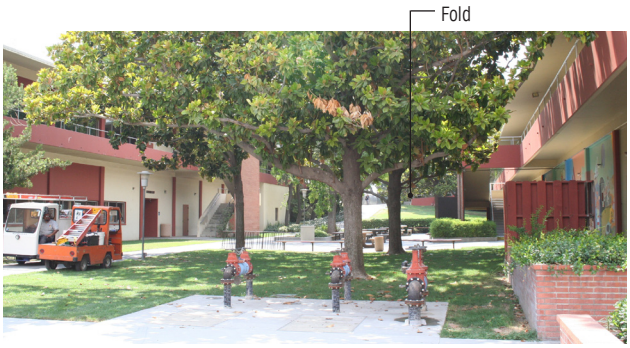


Recommended structural orientation and shape: three-story rectangular bar that is oriented perpendicular to the fault.

CHALLENGE



Fault and Fold Setbacks. Keyed views of elevational changes are shown below. Courtesy of Earth Consultants International. May 2005.

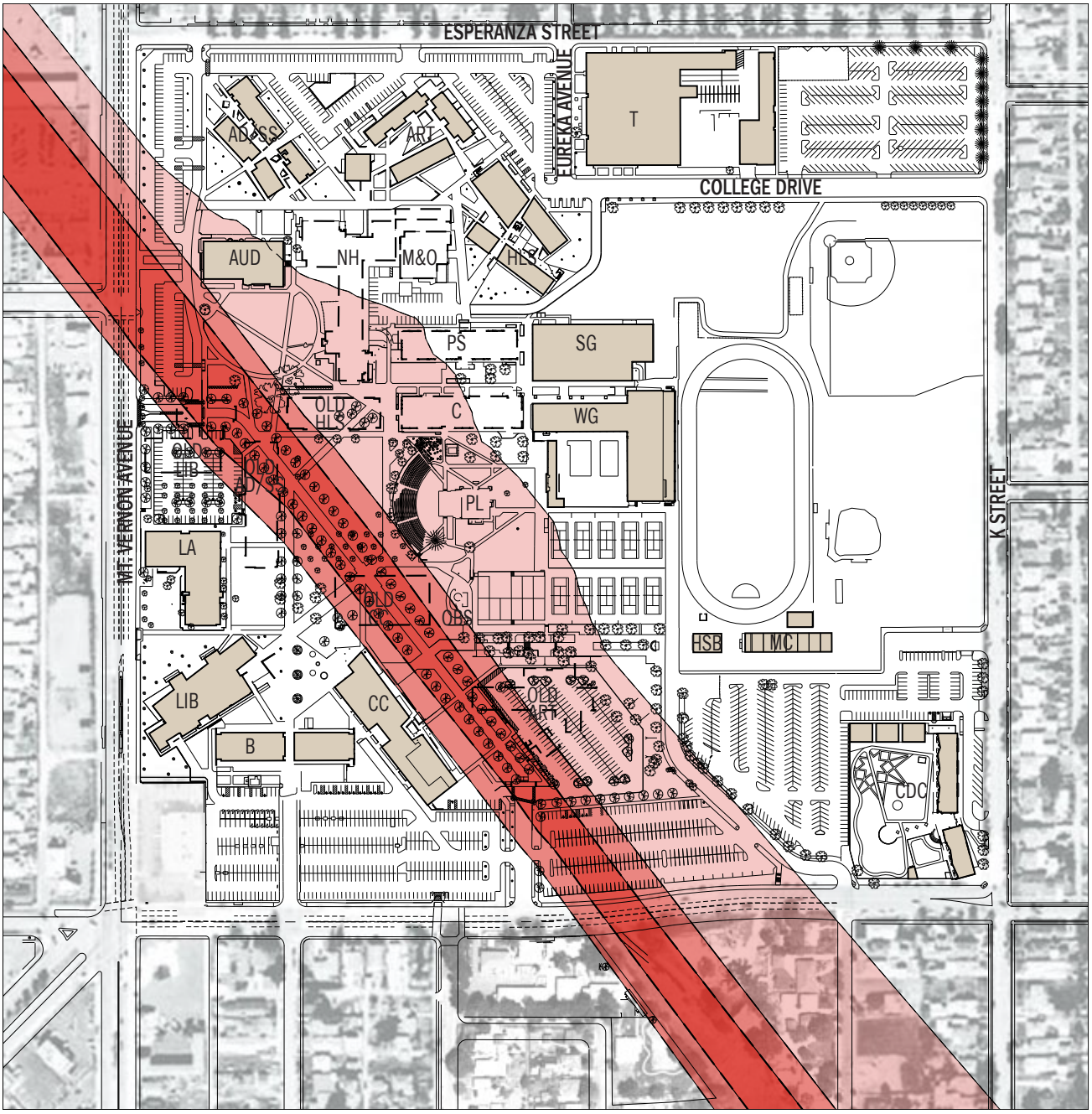


View 1 - Fold Zone between Physical Sciences and Chemistry buildings

View 3 - Fold Zone at South end of Campus

View 2 - Fold Zone at Greek Theater and Observatory.

FAULT/ FOLDING ZONES



LEGEND

- FAULT ZONE
- 50' SETBACK
- FOLD ZONE
- EXISTING BUILDINGS
- TO BE DEMOLISHED BUILDINGS

0' 175' 350'

BUILDINGS

AD/SS	ADMIN./ STUDENT SERVICES	OBS	OBSERVATORY
ART	ART & GALLERY	PL	PLANETARIUM**
AUD	AUDITORIUM	PS	PHYSICAL SCIENCE*
B	BUSINESS	SBCCD	DISTRICT WAREHOUSE
C	CHEMISTRY*	SG	SNYDER GYM
CC	CAMPUS CENTER	T	TECHNICAL
CDC	CHILD DEVELOPMENT CENTER	WG	WOMEN'S GYM
HLS	HEALTH & LIFE SCIENCES		
HSB	HEALTH SERVICES BUILDING		
LA	LIBERAL ARTS		
LIB	LIBRARY		
M&O	MAINTENANCE & OPERATIONS*		
MC	MIDDLE COLLEGE	*To be demolished	
NH	NORTH HALL*	**Recommended for demolition	

CHALLENGE

Loss of Organization

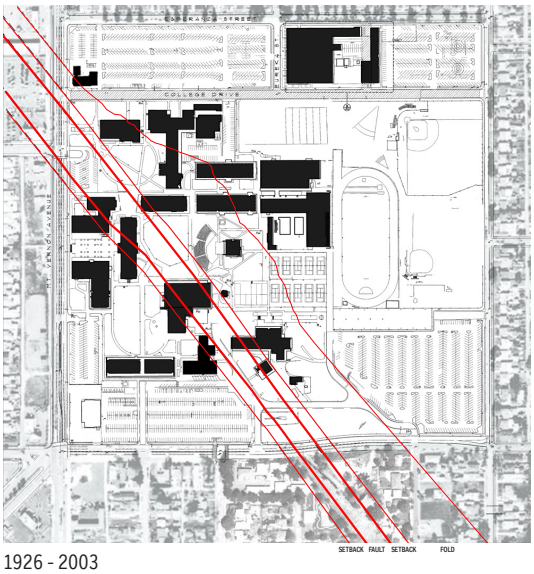
The original campus consisted of a traditional framework of buildings arranged around open landscape quads and hardscape plazas. The campus core developed towards Mount Vernon Avenue with athletic fields and parking lots located adjacent to the residential neighborhoods. Structures were orthogonal to the city grid, typically two stories in height and in the Mission Revival Style. As the campus grew, land north of College Drive was purchased for building and parking lot expansion.

The buildings constructed in the 1960s and 1970s were utilitarian in style, expressing their interior functions. While there was not a continuity in architectural style or building materials, the building configuration reinforced the network of quads and plazas. A major north-south pedestrian corridor developed along which important facilities were located - the Auditorium, Administration, and Campus Center as well as most of the classroom buildings.

When the fault was discovered, the necessary demolition destroyed the original framework of the campus, fracturing the physical understanding of the historic core. As discussed previously, replacement buildings were skewed relative to the orientation of the existing buildings in order to be parallel or perpendicular to the fault. The new buildings have little relation to those remaining and do not contribute to the definition of exterior campus spaces. With the network of quads and plazas defined by the original buildings gone, the logical sequence of circulation was lost.

Identity

Since new construction cannot be within the fault or folding zone, the first replacement buildings were located in available space on campus - primarily in parking lots at the edges of campus. This has led to a perceived separation between the north and south ends of campus. The demolition of the North Hall, Maintenance & Operations, Chemistry and Physical Science buildings will only exacerbate this perception. When this occurs, the progression of buildings and exterior spaces that linked the north and south ends of campus will no longer exist. Visual markers that identified places will be gone. The resulting scale of open space at the center of campus will be immense. Although one can still traverse the open space five minutes or less, the distance appears and feels much greater; the 18-acre unbuildable zone is large enough to fit the Rose Bowl Stadium.



1926 - 2003

2003 - 2006

2006

CHALLENGE

The progression of these events have led to the college's general lack of identity. In particular, the following items were identified by SBVC as problematic:

- Accessing the college is difficult because there is no clear "**Front Door**" to the campus; instead, multiple entry points exist, all of relatively equal importance.
- A consistent or **Recognizable Edge** to the campus that signals its presence to the community does not exist.
- There are disparate **Architectural Styles** ranging from Mission Revival to Deconstructivism.
- Other than the Auditorium, there is N**o Hierarchy** to the organization of the buildings or surrounding spaces.

At the propect of a total of nine buildings in the center of campus gone, the architecture and spaces that generations of Valley students identified with are gone. There will be only one building remaining of the treasured Mission Style - the Auditorium. The other buildings comprise either a 1960s-1970s or Deconstructivism style of architecture. The master plan will have to bridge the gap not only of the open space at the center but of the existing architectural styles to recreate a new campus identity.

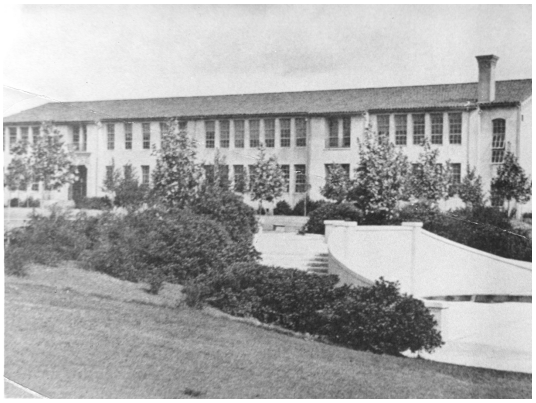
"Bridging the Gap" - Administration/ Student Services and Auditorium

Auditorium - Mission Revival

Liberal Arts - 60s-70s

Health & Life Science - Deconstructivism

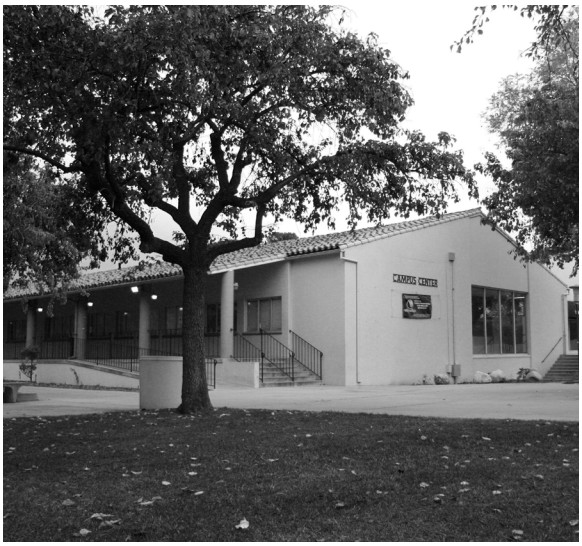
BUILDINGS WITHIN THE FAULT ZONE



Life Science - Demolished
photo by: SBVC Archives

Art - Demolished

Library - Demolished



Campus Center - Demolished

Administration - Demolished
photo by: SBVC Archives

BUILDINGS WITHIN THE FOLDING ZONE

Auditorium - To Remain

North Hall Building - To be Demolished

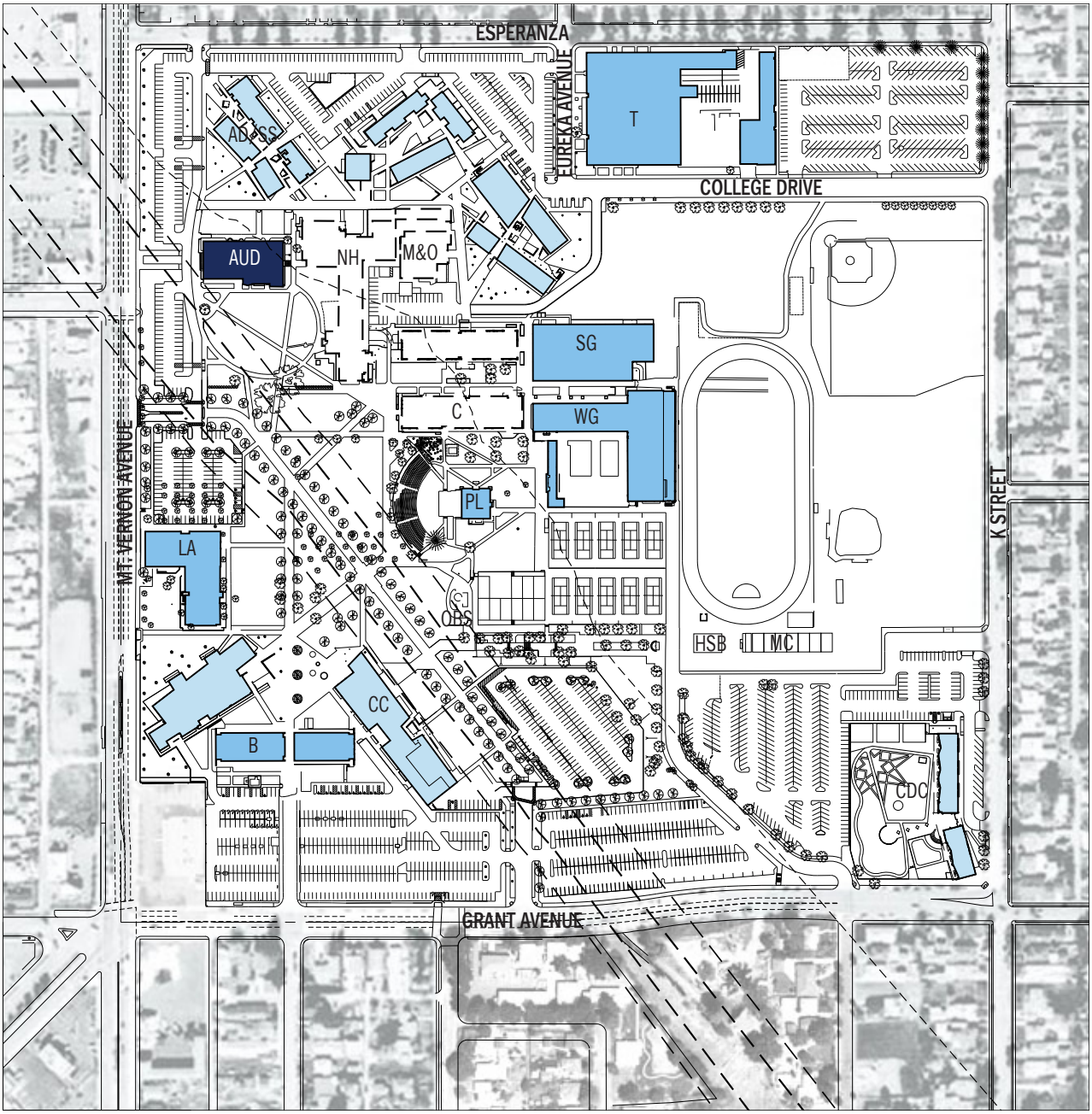
Observatory - To Remain

Chemistry Building - To be Demolished

Planetarium - Recommended for Demolition.

Physical Science Building - To be Demolished

EXISTING ARCHITECTURAL AESTHETIC



LEGEND

- MISSION REVIVAL
- 1960s - 1970s
- DECONSTRUCTIVISM
- TO BE DEMOLISHED

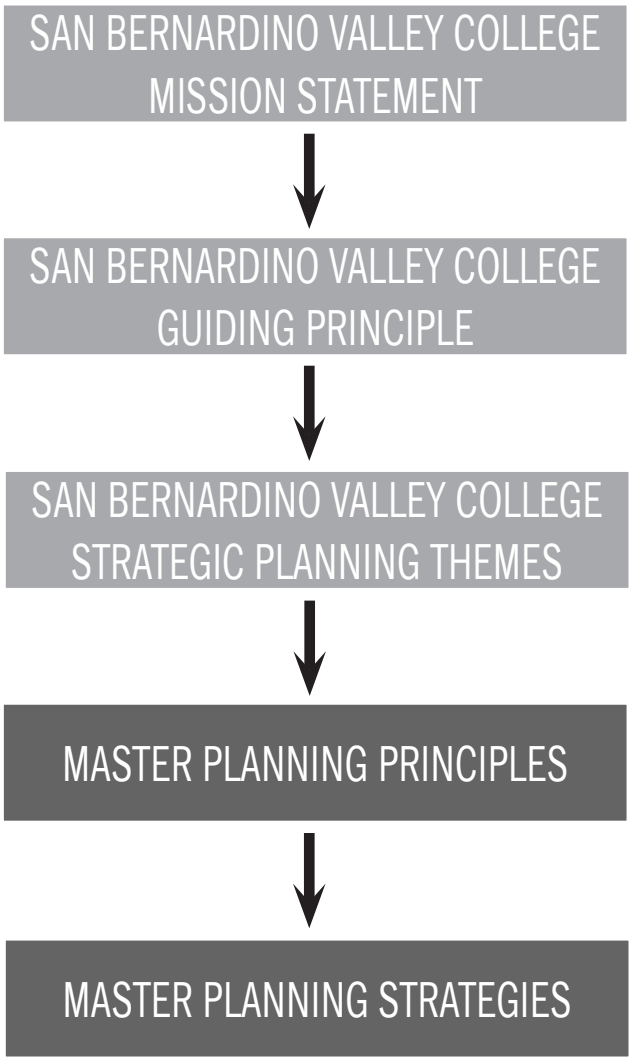
0' 175' 350'

BUILDINGS

AD/SS	ADMIN./ STUDENT SERVICES
ART	ART & GALLERY
AUD	AUDITORIUM
B	BUSINESS
C	CHEMISTRY
CC	CAMPUS CENTER
CDC	CHILD DEVELOPMENT CENTER
HLS	HEALTH & LIFE SCIENCES
HSB	HEALTH SERVICES BUILDING
LA	LIBERAL ARTS
LIB	LIBRARY
M&O	MAINTENANCE & OPERATIONS
MC	MIDDLE COLLEGE
NH	NORTH HALL
OBS	OBSERVATORY
PL	PLANETARIUM
PS	PHYSICAL SCIENCE
SBCCD	DISTRICT WAREHOUSE
SG	SNYDER GYM
T	TECHNICAL
WG	WOMEN'S GYM

GOALS

Establishing the goals for the Master Plan at San Bernardino Valley College began in February 2006 while the College was creating their Strategic Plan. This allowed the goals of the Master Plan and the Strategic Plan to inform one another during their development. Building upon the College's Mission Statement, SBVC defined an overall Guiding Principle and six Strategic Planning Themes to address their institutional goals. To support these, five Planning Principles were developed through a series of workshops with the Master Plan Core Committee and Expanded Core Committee. The Planning Principles are the physicla embodiment of the Strategic Plan goals and serve as guides for the evolution of the Master Plan. To implement the Planning Principles, Planning Strategies were developed. The Planning Strategies are specific concepts, actions or events that define how a particular Planning Principle can be realized. While associated with one Principle, the Strategies are intended to reinforce multiple Principles simultaneously.



SAN BERNARDINO VALLEY COLLEGE MISSION

The mission of San Bernardino Valley College is to prepare students to transfer to four-year colleges and universities; to provide students with the knowledge and skills needed to succeed in business, industry and the professions; to advance the state and region's economic growth and global competitiveness through continuous workforce development; to work in partnership with the local community to improve the quality of life in the Inland Empire; and to prepare students for active participation in a multicultural society. The faculty and staff of San Bernardino Valley College are committed to student success and to teaching and service excellence.

SAN BERNARDINO VALLEY COLLEGE GUIDING PRINCIPLE

Institutional Excellence: We are committed to quality and excellence in all of our efforts.

SAN BERNARDINO VALLEY COLLEGE STRATEGIC PLANNING THEMES

Access: We are committed to providing opportunities for acquiring educational and support services.

Campus Culture: We are committed to a safe, welcoming, culturally rich learning-centered environment.

Institutional Effectiveness and Resource Management: We are committed to standards of accountability, continuous improvement, and conscientious resource management.

Partnerships: We are committed to community involvement and dialogue.

Student Success: We are committed to helping students succeed in their educational and career goals.

Technological Advancements: We are committed to an educational environment which utilizes state-of-the-art technology.

MASTER PLANNING PRINCIPLES

The Master Plan will create **CONNECTIONS** that **LINK** and **UNIFY** the campus and community to foster a positive memorable **EXPERIENCE** and **IDENTITY** through the following planning principles:

- Student-Centered Culture
- Hierarchy of Elements
- Access
- Sustainable Design
- Functional Integration

MASTER PLANNING STRATEGIES

Student-Centered Culture	Hierarchy of Elements	Access	Sustainable Design	Functional Integration
Large Central Gathering Space Distinct Districts Sufficient Parking	Campus Edges/ Transitions Primary and Secondary Campus Entries Variety of Exterior Spaces	Vehicular/ Pedestrian Circulation Accessible Paths and Buildings Wayfinding	Response to Natural Environment Flexibility of Space - Long Term Use Energy Efficiency	Consolidate Instructional Divisions Programmed Exterior Spaces - Active and Passive Interior-Exterior Connections

3
MASTER PLAN

MASTER PLAN

South View of Campus

The master plan transforms the challenges of the fault, open space and seemingly random building placement into a new organizational framework. Acknowledging the geologic implications of the fault steered landscape to the forefront as a vital element of the master plan design. The conceptual framework focuses on the fault/folding zone as the primary open space in the center of campus which is surrounded by a series of exterior rooms. It expresses the intersecting geometries of the city and fault and at the same time provides an understandable order of building districts and open space that will evolve and become more apparent as SBVC continues to replace facilities. As a result of this framework, the disparate geometries of the buildings work with each other to define the outdoor rooms rather than act independently as objects sitting in the landscape with no relation to one another. This shift in focus from the buildings allows the landscape to becomes the unifying fabric for the campus.

BUILDINGS

1	ADMIN. / STUDENT SERVICES
2	ART & GALLERY
3	AUDITORIUM
5	CAMPUS CENTER
6	CHILD DEVELOPMENT CENTER
7	HEALTH & LIFE SCIENCES
9	LIBRARY
11	OBSERVATORY
17	CHEMISTRY & PHYSICAL SCIENCES
18	NORTH HALL REPLACEMENT BLDG
19	MEDIA/COMMUNICATIONS
20	STUDENT HEALTH SERVICES
21	MAINTENANCE & OPERATIONS
22	PARKING STRUCTURE 1
23	GYMNASIUM 1
24	GYMNASIUM2
25	LIBERAL ARTS
26	TECHNICAL BUILDING
27	STADIUM STANDS
28	FIELD IMPROVEMENTS
29	CENTRAL PLANT
30	PERFORMING ARTS
31	BUILDING 1
32	BUILDING 2
33	PARKING STRUCTURE 2

MASTER PLAN

HORIZON 1

17	CHEMISTRY AND PHYSICAL SCIENCES
18	NORTH HALL REPLACEMENT BLDG
19	MEDIA/ COMMUNICATIONS
20	STUDENT HEALTH SERVICES
21	MAINTENANCE AND OPERATIONS
22	PARKING STRUCTURE 1

HORIZON 2

23	GYMNASIUM 1
24	GYMNASIUM 2
25	LIBERAL ARTS
26	TECHNICAL BUILDING
27	STADIUM STANDS
28	FIELD IMPROVEMENTS
29	CENTRAL PLANT

HORIZON 3

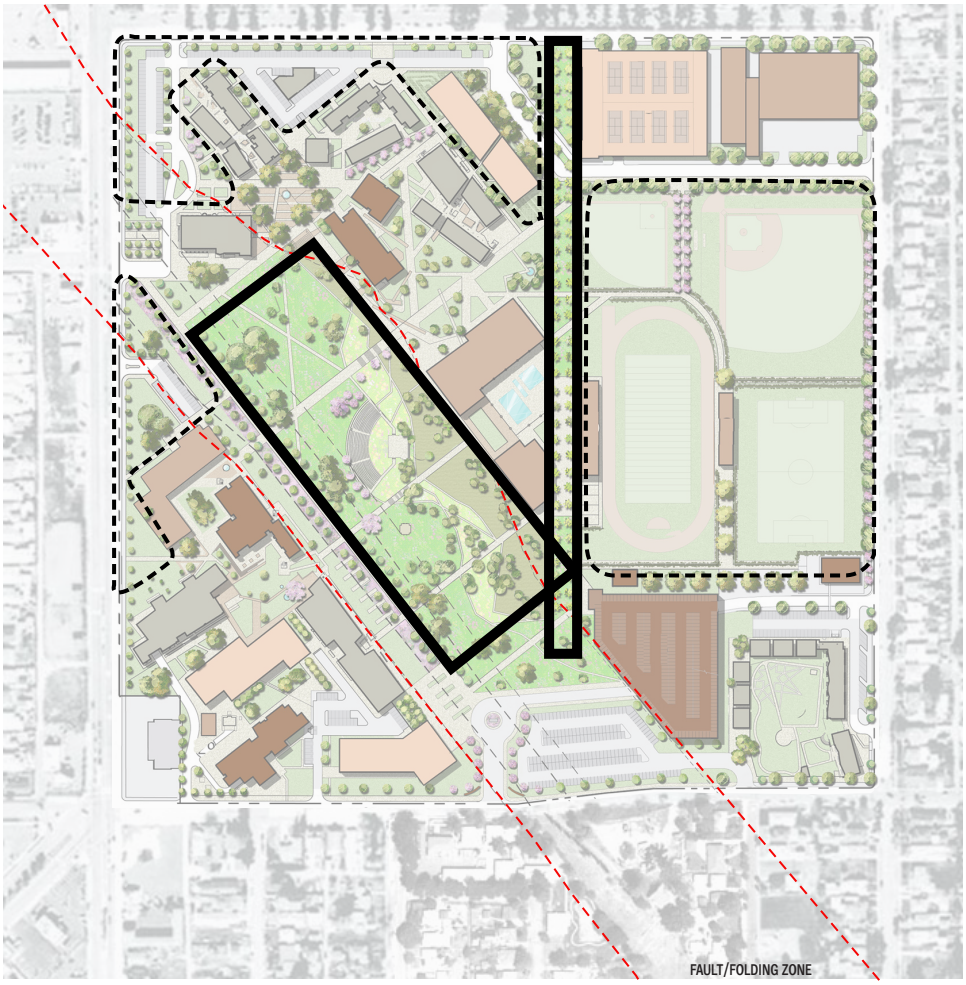
30	PERFORMING ARTS
31	BUILDING 1
32	BUILDING 2
33	PARKING STRUCTURE 2

EXISTING BUILDINGS

1	ADMIN./ STUDENT SERVICES
2	ART & GALLERY
3	AUDITORIUM
4	BUSINESS
5	CAMPUS CENTER
6	CHILD DEVELOPMENT CENTER
7	HEALTH & LIFE SCIENCES
8	LIBERAL ARTS
9	LIBRARY
10	MIDDLE COLLEGE
11	OBSERVATORY
12	PLANETARIUM
13	SNYDER GYMNASIUM
14	TECHNICAL BUILDING
15	WOMEN'S GYMNASIUM
16	CENTRAL PLANT

0' 175' 350'

CONCEPTUAL FRAMEWORK



The conceptual framework illustrates how SBVC is organized and identifies major elements within the plan. The framework consist of four major elements: edge, open space, outdoor rooms and building districts. While the framework describes the physical organization of the campus, the landscape places describe the quality and character of each of these spaces which is further described in Section 4 - Landscape.

CONCEPTUAL FRAMEWORK

Edge

Originally, SBVC had little visible impact to the community, particularly along Mt. Vernon Ave. The concept of the edge was developed to provide SBVC with a consistent, recognizable identity at its borders. Conceptually, the shift in grid due to the fault begins at the line of the north-south corridor, pivots, and moves westward across campus; it is at the edges of the campus where the reoriented grid intersects with the original city grid and becomes visible. The resulting triangular residual spaces are maintained as green zones to serve as a transition between the busy street and the academic campus.

Open Space

Two major open spaces form the framework's foundation – the quad and the north-south corridor. The open space of fault/folding zone at the center of campus is defined by a traditional quad. As a recognizable space, the quad is the much needed organizational element for the site. It reinforces the new orientation of the campus as parallel or perpendicular to the fault that was begun with the initial replacement buildings. Like other college quads, major paths define its perimeter and orthogonal nature. However, unlike typical quads, its interior is interrupted by the physical manifestation of the San Jacinto fault. Expanding on the strategy started with the Greek Theater, existing elevational changes are naturally incorporated into the overall landscape, creating two distinct zones within one large open space.

The quad occupies only a portion of the overall fault/folding zone. Additionally, it shifts the overall axis of the site from north-south to northwest-southeast. Traversing the campus from the 'north' side to the 'south' occurs along the short dimension of the quad. As a result, the immense open space is effectively minimized.

CONCEPTUAL FRAMEWORK

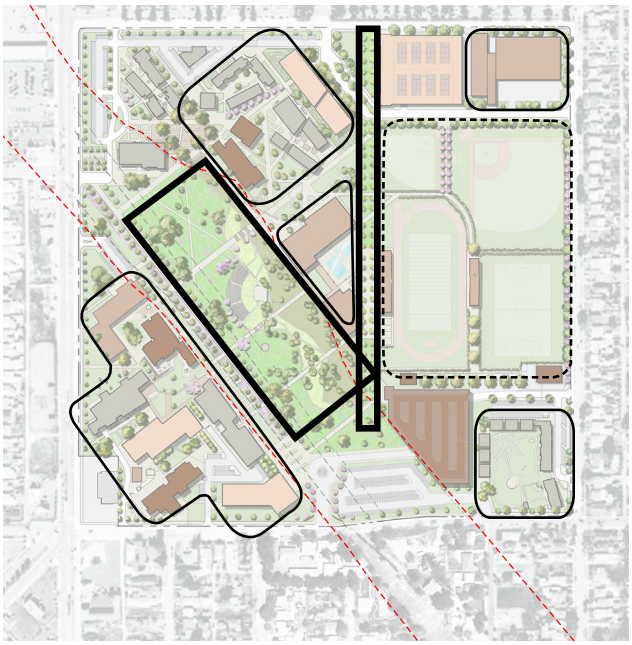
Outdoor Rooms

With various building geometries to resolve at the beginning of the master planning process, it became apparent that the exterior spaces would be the elements to give an overall order and understanding to the fragmented campus. Once the quad and north-south corridor were established as the main exterior spaces, secondary outdoor rooms were created along either side of the quad. While the large open spaces are more passive in nature, the outdoor rooms are active spaces. Defined by both landscape and architecture, the locations of the outdoor rooms give meaning to paths through and between buildings. Varying in size and character, these outdoor rooms are the main destinations on campus and act as thresholds from the quad to the buildings. The framework of the outdoor rooms creates a hierarchy of exterior space on campus that did not exist at the beginning of the planning process.

Building Districts

Because of the construction restrictions, the main building districts are located on either size of the fault/folding zone. These districts reinforce the edges of the central quad as well as define smaller areas for building locations where the necessary density can be achieved to provide a true campus experience. All buildings within these zones will be shifted and oriented to the fault grid. The notable exception is the Auditorium. This last remaining historic structure on campus will be the only building in these districts to have the original orientation. Its orientation in contrast to the surrounding structures coupled with its location at the head of the quad, will establish the Auditorium hierarchically as the most important building on campus.

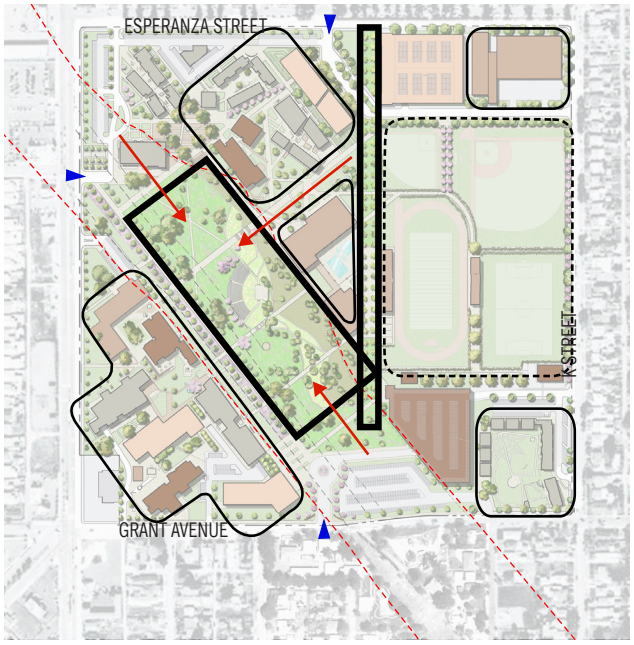
Two additional building districts anchor the opposite corners of campus. Unlike the districts flanking the central quad, these building districts respect the neighborhood edge and are oriented to the city grid. The Child Development Center and replacement of the Technical Building are both programs with a strong connection to the community so their visibility and accessibility on the corners of campus is ideal. Their locations provide definition to the perimeter of campus and the buildings will clearly identify the presence and boundary of SBVC.



CONCEPTUAL FRAMEWORK

Access

Main access occurs between the building districts at mid-block on three sides of the campus. All three points of access provide ceremonial front doors to the campus, by orienting the visitor to the central quad either visually or physically, or by leading to a drop-off or parking. The ceremonial front door off Mt. Vernon Avenue adjacent to the Auditorium leads to a drop off and parking next to the Administration/Student Services building; this is the first building students typically visit on campus. The remaining front door access points off Esperanza Street and Grant Street each lead to the Performing Arts Building and to one of the major parking structures on campus and provide drop off areas as well. From these points, the visitor is directed to the center of campus.



Sorth View of Campus

1	ADMIN. / STUDENT SERVICES	18	NORTH HALL REPLACEMENT BLDG	27	STADIUM STANDS
2	ART & GALLERY	19	MEDIA/COMMUNICATIONS	28	FIELD IMPROVEMENTS
3	AUDITORIUM	20	STUDENT HEALTH SERVICES	29	CENTRAL PLANT
5	CAMPUS CENTER	21	MAINTENANCE & OPERATIONS	30	PERFORMING ARTS
6	CHILD DEVELOPMENT CENTER	22	PARKING STRUCTURE 1	31	BUILDING 1
7	HEALTH & LIFE SCIENCES	23	GYMNASIUM 1	32	BUILDING 2
9	LIBRARY	24	GYMNASIUM2	33	PARKING STRUCTURE 2
11	OBSERVATORY	25	LIBERAL ARTS		
17	CHEMISTRY & PHYSICAL SCIENCES	26	TECHNICAL BUILDING		

HORIZONS

The master plan at San Bernardino Valley College has been divided into three planning horizons. Years have been attributed to each horizon but they in tended to be estimated time frames with the understanding that both the horizons and projects within each horizon are flexible and should respond to the needs of the college.

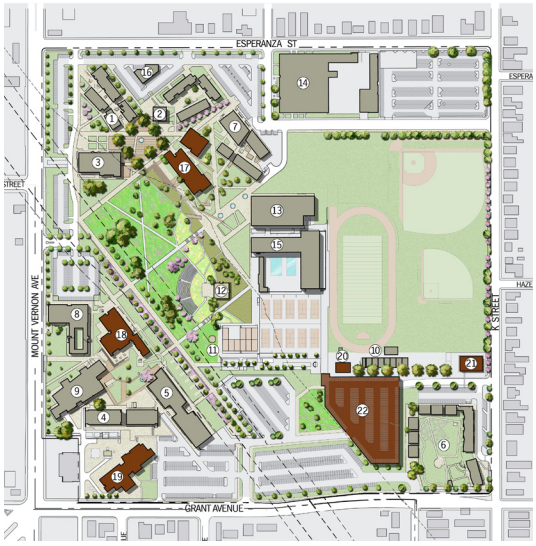
Horizon 1

Horizon 1 targets the year 2010 and is defined by four new buildings – the North Hall Replacement, the Chemistry/ Physical Science Building, Media/ Communication and Maintenance and Operations. Since the four new buildings are all replacement projects, this horizon assumes no overall growth for the campus. The location of the buildings work in conjunction with the existing conditions to begin to define the central quad and outdoor rooms .

The North Hall Replacement and Media/ Communication align with the existing Campus Center, forming a strong campus edge that delineates the southern boundary of the quad. The placement of Media/ Communications provides KVCR with desired public visibility and access. It also affords the opportunity for the building to have both a campus and public "front door", blending the public and academic worlds to becoming a model collaborative mass/ media enterprise.

The siting of the North Hall Replacement takes advantage of the positions of the Campus Center, Library and Business Building to form an outdoor plaza defined by buildings and landscape. Programmatically, its adjacency builds upon the uses in both the Liberal Arts and Library to foster a strong academic core the southern end of campus.

The Chemistry/ Physical Science Building along with the Auditorium defines the northern end of the quad and simultaneously works with the Administration/Student Services and Art buildings to create a second outdoor room for the campus. Its position also takes advantage of the obvious synergies with the Health and Life Science building and will anchor the academic core on the northern end. A 1,250 space multi-level parking structure is planned for this horizon.



Horizon 1 - 2010

Horizon 2 - 2020

Horizon 3 - 2030

HORIZONS

Horizon 2

Horizon 2 targets the year 2020 and is defined by the replacement of structures identified in the existing conditions assessments as in the worst condition – namely the Liberal Arts, Gymnasiums and pools, and the Technical Building. The Liberal Arts and two new Gymnasiums will be realigned to fully delineate the quad at the heart of campus as well as continue to define outdoor rooms as destinations for the campus.

The Technical building relocates to anchor the corner and provide the program and college with public visibility and access, improving the overall edge of the campus. Their position here allows the building to be built while the old Technical Building remains operational after which it can be demolished and provided space for future parking needs.

The softball field will be relocated, the baseball field will be resurfaced, a new soccer field will be located along K Street and the track and football field will remain in their current locations but new home and visitor stands will be added.

This horizon assumes that the Middle College has relocated off site per the intention of the San Bernardino City Unified School District's goal.

Horizon 3

Horizon 3 targets the year 2030 and represents SBVC's overall vision for the master plan. It is the full build-out of the campus within the existing boundary of the college. At this time, the Planetarium would be demolished, incorporated into one of the new or existing buildings and would be replaced by a new stage and backdrop for the Greek Theater.

Because of the space constrictions on site, a 1,100 space, multi-level parking structure with tennis courts on the top level will accommodate the growth and allow the college to maintain open space for athletic fields.

HORIZON 1

HORIZON 1	
17	CHEMISTRY AND PHYSICAL SCIENCES
18	NORTH HALL REPLACEMENT BLDG
19	MEDIA/ COMMUNICATIONS
20	STUDENT HEALTH SERVICES
21	MAINTENANCE AND OPERATIONS
22	PARKING STRUCTURE 1

EXISTING BUILDINGS	
1	ADMIN./ STUDENT SERVICES
2	ART & GALLERY
3	AUDITORIUM
4	BUSINESS
5	CAMPUS CENTER
6	CHILD DEVELOPMENT CENTER
7	HEALTH & LIFE SCIENCES
8	LIBERAL ARTS
9	LIBRARY
10	MIDDLE COLLEGE
11	OBSERVATORY
12	PLANETARIUM
13	SNYDER GYMNASIUM
14	TECHNICAL BUILDING
15	WOMEN'S GYMNASIUM
16	CENTRAL PLANT

0' 175' 350'

HORIZON 2

HORIZON 1

17	CHEMISTRY AND PHYSICAL SCIENCES
18	NORTH HALL REPLACEMENT BLDG
19	MEDIA/ COMMUNICATIONS
20	STUDENT HEALTH SERVICES
21	MAINTENANCE AND OPERATIONS
22	PARKING STRUCTURE 1

HORIZON 2

23	GYMNASIUM 1
24	GYMNASIUM 2
25	LIBERAL ARTS
26	TECHNICAL BUILDING
27	STADIUM STANDS
28	FIELD IMPROVEMENTS
29	CENTRAL PLANT

EXISTING BUILDINGS

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15	WOMEN'S GYMNASIUM
16	CENTRAL PLANT

0' 175' 350'

HORIZON 3

HORIZON 1

17	CHEMISTRY AND PHYSICAL SCIENCES
18	NORTH HALL REPLACEMENT BLDG
19	MEDIA/ COMMUNICATIONS
20	STUDENT HEALTH SERVICES
21	MAINTENANCE AND OPERATIONS
22	PARKING STRUCTURE 1

HORIZON 2

23	GYMNASIUM 1
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25	LIBERAL ARTS
26	TECHNICAL BUILDING
27	STADIUM STANDS
28	FIELD IMPROVEMENTS
29	CENTRAL PLANT

HORIZON 3

30	PERFORMING ARTS
31	BUILDING 1
32	BUILDING 2
33	PARKING STRUCTURE 2

EXISTING BUILDINGS

1	ADMIN./ STUDENT SERVICES
2	ART & GALLERY
3	AUDITORIUM
4	BUSINESS
5	CAMPUS CENTER
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15	WOMEN'S GYMNASIUM
16	CENTRAL PLANT

0' 175' 350'

CIRCULATION HORIZON 3

LEGEND

- VEHICULAR CIRCULATION
- SERVICE CIRCULATION
- PEDESTRIAN CIRCULATION
- PARKING

0' 175' 350'

EXISTING BUILDINGS

1	ADMIN. / STUDENT SERVICES
2	ART & GALLERY
3	AUDITORIUM
5	CAMPUS CENTER
6	CHILD DEVELOPMENT CENTER
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30	PERFORMING ARTS
31	BUILDING 1
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33	PARKING STRUCTURE 2

4
LANDSCAPE PLAN

OVERVIEW

At the beginning of the 21st Century, we are a society that is seeking connection - with our history, our ethnicity, our environment, and each other. The framework of a Campus becomes one of the few venues where a pure expression of this connection is possible. At San Bernardino Valley College (SBVC), this connection will be realized, in part, through the demolition of numerous buildings in response to the San Jacinto Fault zone.

Like many other campuses throughout the world, SBVC has the opportunity to establish a strong campus identity and experience that draws on its existing heritage. The San Jacinto Fault and the characteristics inherent in the Southern California native landscape will serve to enhance this heritage while symbolizing a vision of the future.

The landscape master plan for SBVC serves multiple functions. As an open space framework, assuring accessibility to our disabled student and community population, the landscape plan will create hierarchy and way finding through the arrangement of mature tree species, space definition, scale, nodes, function and seasonal quality. As a circulation framework, the landscape plan will connect people and places across the campus with a coherent system of pedestrian paths, trails and roads. And finally, as a place making framework, the landscape plan will create a series of 'intellectual collisions' where people meet on their way to various destinations throughout the campus. These points of 'intellectual collisions' within the landscape plan become real places- plazas, courtyards, gardens, open lawn- that respond to specific user group needs and activities.

Finally, the landscape master plan for SBVC is a master plan of possibilities. As the implementation of various projects identified in the master plan becomes realized so does the potential for campus needs to change and adjust. The landscape master plan for SBVC is designed to remain flexible in accommodating existing campus uses while absorbing new programs and activities as the campus evolves.

GOALS

The landscape master plan for SBVC is as practical as it is visionary. To fully realize a campus landscape, designer and planners must have a clear set of goals that establish the overall landscape structure, creative direction and programming. The following list is a list of recommended goals:

- REVEAL the physical, geological features of the San Jacinto Fault

The San Jacinto Interpretive Walk will showcase many aspects relating to the fault such as geologic make up, history, and its topographic effect on region. The fault has created not only the opportunity to create a new campus but to educate everyone through interactive and interpretive elements one of the most definitive features of the Southern California landscape.

- ESTABLISH campus identity with a landscape expression

Harvard Yard, Stanford Quad, The Great Lawn (University of Virginia) all have an identifiable campus landscape expression. SBVC will have its own campus idenity with the creation of the Glade, a seven acre open lawn area, centrally located and framed by mature oak trees.

- CREATE new, flexible open spaces with distinct character and function

Throughout the year, the SBVC campus hosts countless activities that are presently lacking in both visibility and space. The landscape master plan creates a series of lawns, courtyards, and plazas - each with its own characteristic planting, materials, and grading - that can accommodate a wide range of activities including but not limited to solitary walks, informal gatherings, recreation, studying, and ceremonies such as commencement.

- ENHANCE the walking experience by minimizing distances between destinations

Although a walk from one of the Administration buildings to the Child Development Center clear across campus may take up to ten minutes, most walking times between buildings on campus average between four to five minutes. Seemingly harmless, a five minute walk can be an arduous journey in the high temperatures prevalent in the San Bernardino area. The landscape master plan introduces outdoor spaces such as shady courtyards, plazas, and other outdoor destinations inbetween buildings to break up the walking experience.

- FOSTER 'intellectual collisions' throughout the campus

A campus is a place where learning occurs formally, and informally. Formally, in classrooms and informally, throughout the campus open space. These spaces could be a courtyard, a bench, outside a door or even on a sidewalk. We refer to these informal meeting occurances as 'intellectual collisons' and feel that learning happens as much outside the buildings as they do inside the buildings. Providing for these meeting places is important to the overall educational experience of being on campus.

- ENCOURAGE 'invisible' maintenance

The idea of 'invisible' maintenance suggests that anyone using the campus doesn't physically see the maintenance vehicles or personnel anywhere in the campus. The objective is to provide accessible routes of travel for maintenance that is secondary to where pedestrian traffic occurs.

- PROMOTE a sustainable campus

Selective use of native, or drought-tolerant plant material can lead to a new decrease in the amount of water used for irrigation purposes. A sustainable landscape is characterized by plants that could, over time, survive on natural rainfall only. Additionally, these plants shouldn't require a high level of maintenance in terms of mowing, pruning or trimming.

- COMMEMORATE the legacy of SBVC

It is critical to SBVC to maintain its institutional memory - particularly since students starting in the fall of 2007 will never know what the campus used to be. Several elements were identified by the Core and Expanded Core Committes to be considered for inclusion in the landscape plan. These items include but are not limited to: brick or pavers used for Foundation donor recognition, a labyrinth, water features, park-like descriptive displays depicting historic/educational information and incorporating salvaged items such as the friezes and oak tree stump that was previously located in front of the Auditorium. Salvaged artifacts such as the historic frieze and the wrought iron gate can be placed within the Cultural Plaza where, when combined with donor recognition plaques, pavers, and benches could form a memorable experience in tying the past with the present. Interpretive panels can be integrated into the overall campus program to further enhance the sense of history for SBVC.

Salvaged frieze

Wrought iron gate from Life Science Building (now demolished)

Labyrinth
photo by: Cindy A. Pavlinae

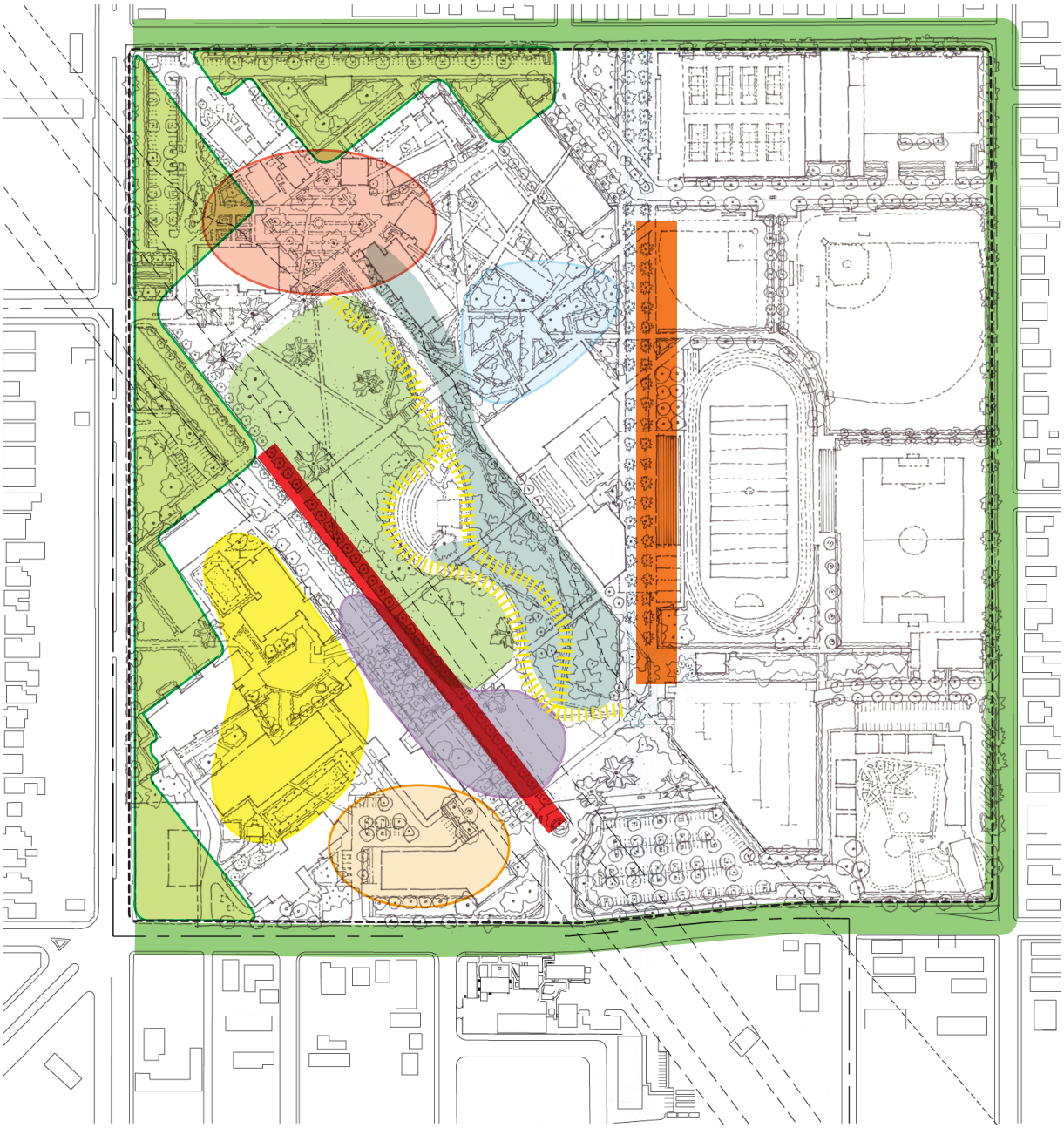
LANDSCAPE PLAN

LANDSCAPE PLACES

1	THE GLADE
2	SAN JACINTO FAULT INTERPRETIVE WALK
3	RIPARIAN GARDEN
4	CAMPUS WALK
5	NORTH/SOUTH CAMPUS WALK
6	CULTURAL PLAZA
7	WELLNESS GARDEN
8	EVENTS DISTRICT
9	STUDENT COMMONS
10	PLAZA
11	MOUNT VERNON LANDSCAPE
12	SBVC STREETSCAPE

0' 175' 350'

CONCEPTUAL FRAMEWORK



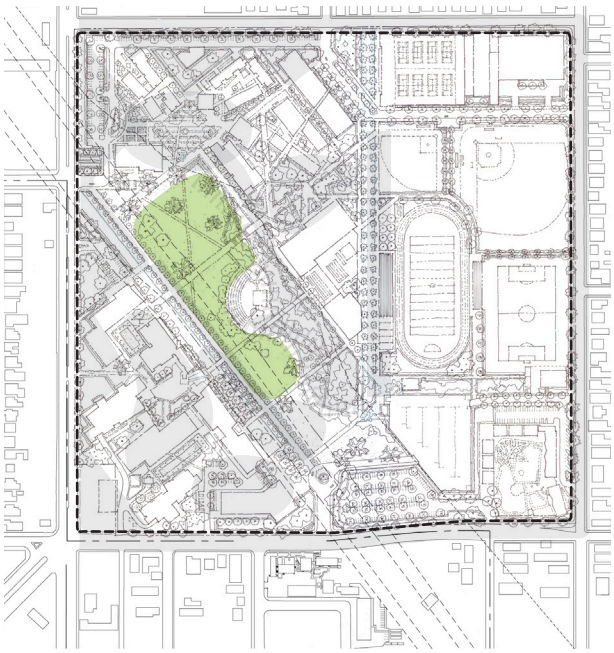
0’ 175’ 350’

THE GLADE

The Glade is the 'heart' of the campus. Centrally located and surrounded by old and new buildings, the Glade serves to provide the campus with a large open space lawn area in which to hold various events and activities.

The Glade is also the iconic element that students, faculty and vistors can remember years after their personal experience with the campus.

At over nine acres, the Glade includes a six acre multi-use lawn area, the renovated outdoor Amphitheatre and the Observatory. The landscape is defined by mature oaks, Jacarandas and evergreen groundcovers and hedges.

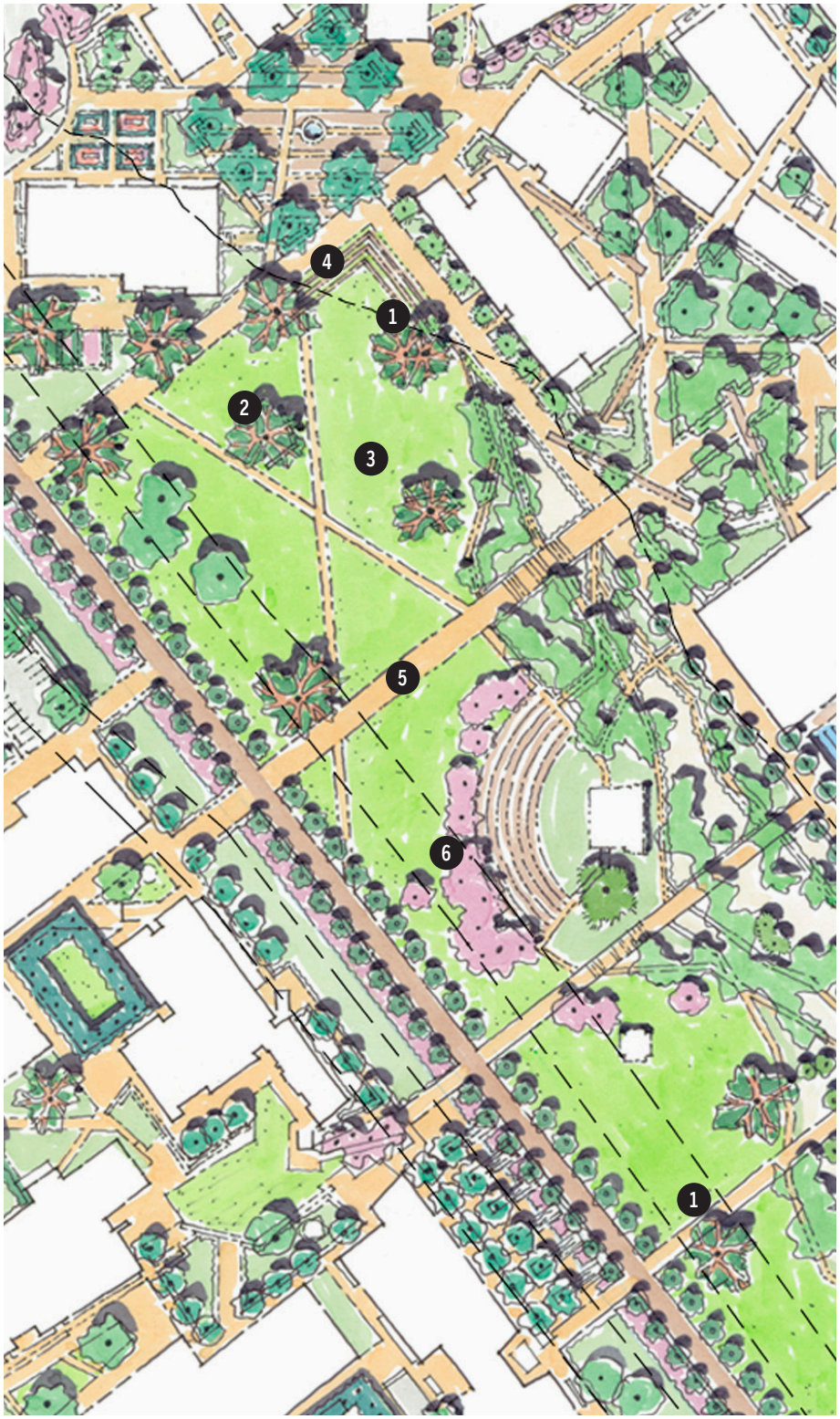


ACTIVITIES

Like a traditional college lawn or green, the Glade provides a large open space that can accomodate graduation ceremonies for up to 8,000 seated students and visitors, passive and active recreation - frisbee, tossing a football, picnics to individuals finding a shady spot under a tree.

- Graduation Ceremonies
    - San Bernardino Valley College
    - Middle College
    - Local High Schools
- Informal Gatherings
- Rest/Relaxation
- Picnics
- Passive Recreation
- Frisbee

THE GLADE



1 OAK CANOPY
2 EXISTING OAKS
3 LAWN
4 STEPPED SEATING
5 CONCRETE PATH TO MATCH EXISTING
6 EXISTING JACARANDAS

0' 75' 150'

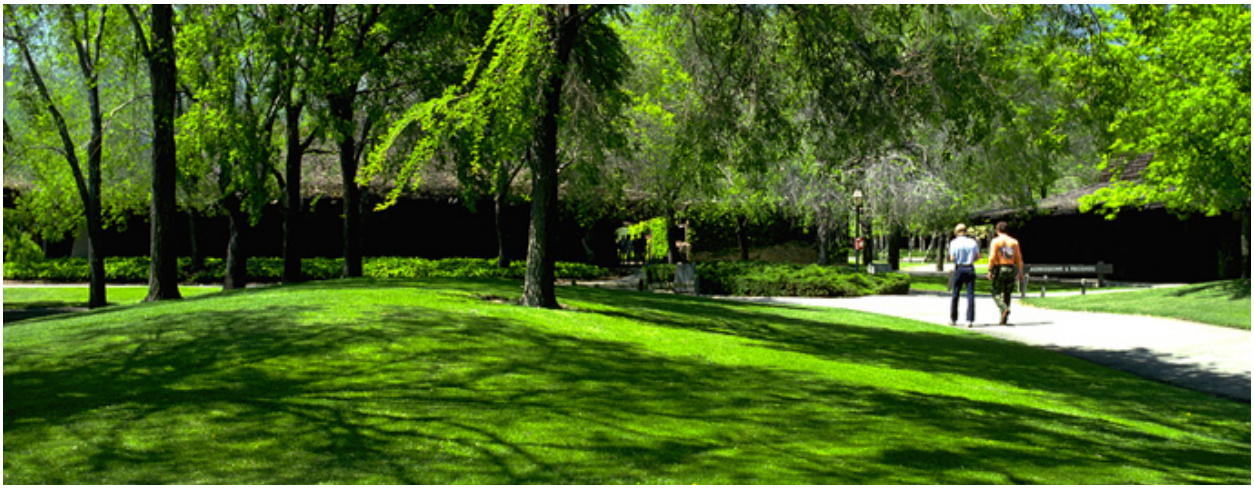
THE GLADE

Commencement ceremony
Harvard University / Cambridge, MA

Broad deciduous canopy
Millennium Park / Chicago, IL

Open lawn area
Texas Christian University / FOrT Worth, TX

informal gathering space
Sydney G. Walton Square / San Francisco, CA



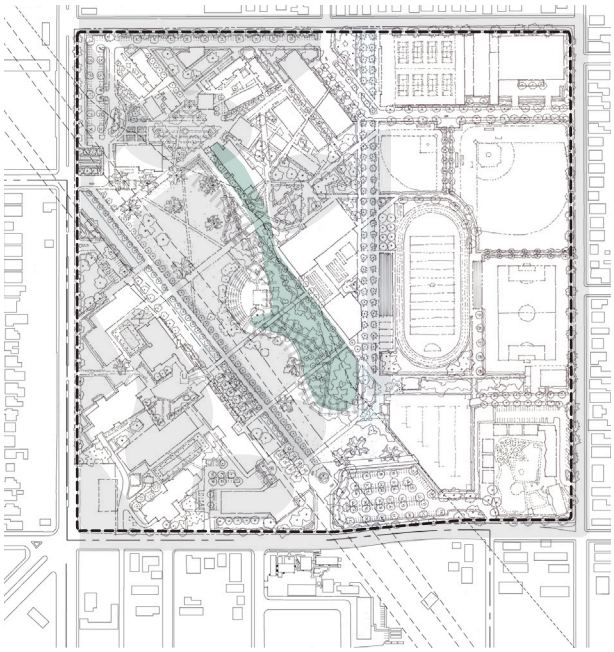
Shaded lawn
Foothill College / Los Altos Hills, CA

RIPARIAN GARDEN

The Riparian Garden is the intergration of stormwater collection and existing site topogrpahy to create an ecological landscape that is highly functional and educational.

Currently, stormwater on campus is either directed into the adjacent streets or into storm drains. The Riparian Garden offers an alternative the existing method by directing the run-off into a planted swale where the water can slow down and be readily absorbed back into the soil.

The planting palette within this zone will be specifically suited to the functional aspects of a 'riparian' (or arroyo) type of landscape. Seasonally, the landscape will contain water only through the rainy season, where its impact will be felt most. Though the dry season, the riparian garden will be characterized by a fairly flat, rock bottom swale with planted slopes of native to semi-native plant material.

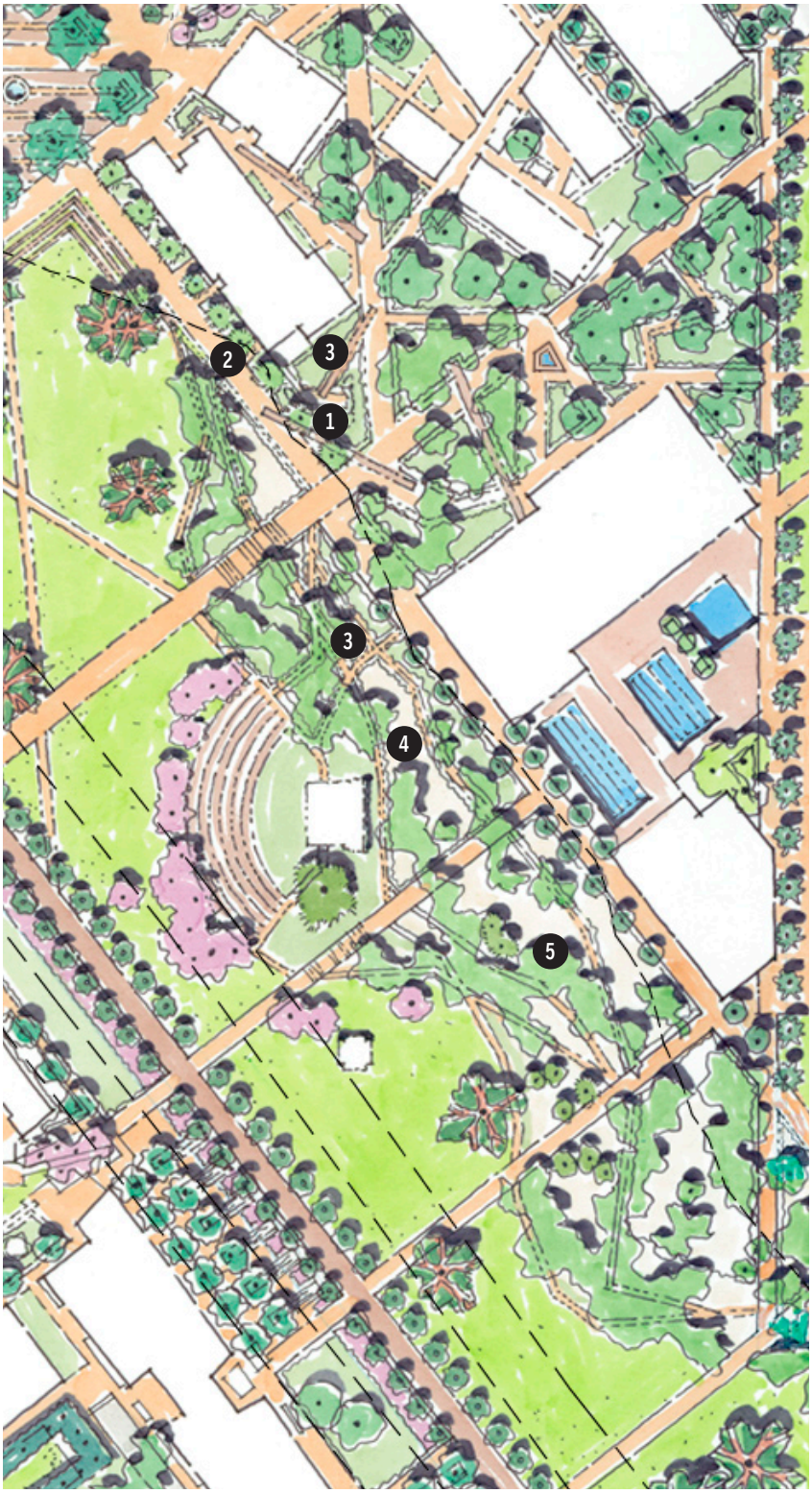


ACTIVITIES

As a counterpoint to the great lawn of the Campus Glade, the Riparian Garden will consist of native plantings and rocky areas that fill with water during storms. Pedestrian bridges and benches will make the Riparian Gardens a place where people and landscape can interact.

- Native Landscape
- Demonstration Garden
- On-Campus Stormwater Management
- Walkways
- Pedestrian Bridges
- Shaded Seating

RIPARIAN GARDEN



1 STORMWATER CATCHMENT DEMONSTRATION GARDEN
2 BIRCH
3 BRIDGE
4 ARROYO
5 MIXED RIPARIAN PLANTING

0' 75' 150'

RIPARIAN GARDEN

Seating areas at the foot of a slope
Sam Houston State University / Huntsville, TX

Retaining walls that double as benches along a sloped site
University of California at San Francisco / San Francisco, CA

Retention basin planted with riparian species
Millenium Park / Chicago, IL

Arroyo - dry river bed
Jeffrey Open Ppace / Irvine, CA

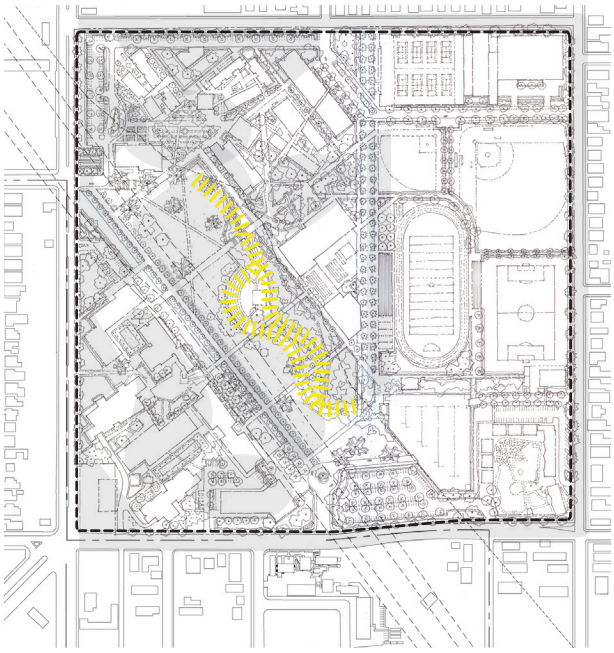
Photo: E. Michelot

Dry botanical garden
Park Citoren / Paris, France

SAN JACINTO INTERPRETIVE WALK

The San Jacinto Interpretitive Walk is inspired by the presence of the San Jacinto fault zone underlying a significant portion of the campus. As one of the most seismically active faults within Southern California the fault zone provides the campus an opportunity to create an educational landscape comprised of interpretive signage, native plant material, sculptual rock formations inspired by the fault and lighting to extend the experience into the evening.

The walk is located within the 'folding zone' of the fault and is situated along topography that currently exists. The walk will be enhanced with appropriate plant species to provide shade and definition to the pedestrian experience.

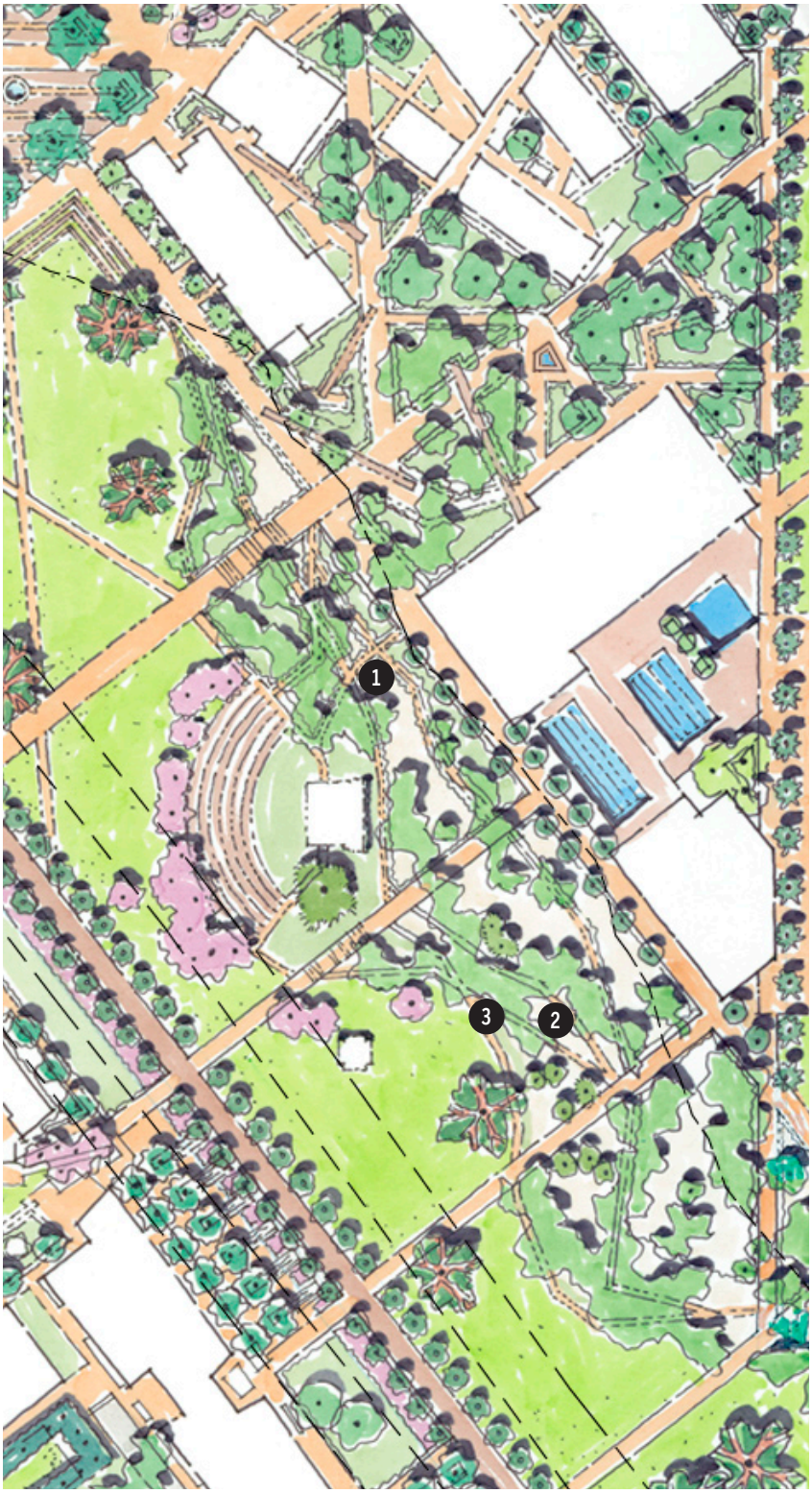


ACTIVITIES

Programming within the interpretive walk is limited to passive uses such as walking, sitting and visual observation. Various types of interpretive signage should be developed to reveal the story behind the Fault and its impact to the natural landscape as well as its direct physical impact to the SBVC campus.

- Shade Trees with Name Plates
- California Native Plants with Name Plates
- San Jacinto Fault "Outdoor Museum"
  Interpretive Elements - Signage, sculpture
- Rock Benches
- Educational Field Trips

SAN JACINTO INTERPRETIVE WALK



1 DECOMPOSED GRANITE PATHS
2 PLANTED SLOPE
3 INTERPRETIVE SIGNAGE AND ELEMENTS ALONG PATHS

0' 75' 150'

SAN JACINTO INTERPRETIVE WALK

Rock outcrop
Central Park / New York, NY

Photo: Allen Glazner

Expressive ecologic formation
Near Calico ghost town, CA

Historic and cultural interpretive elements
SGI Crittenden Complex / Mountain View, CA

Seasonal waterway
Lewis Ave pedestrian corridor / Las Vegas, NV

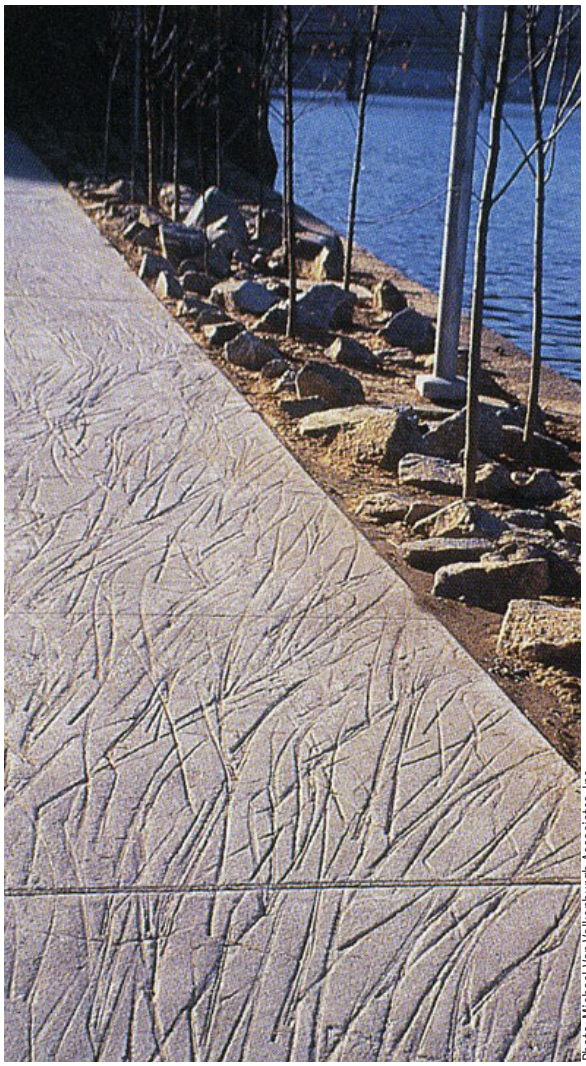
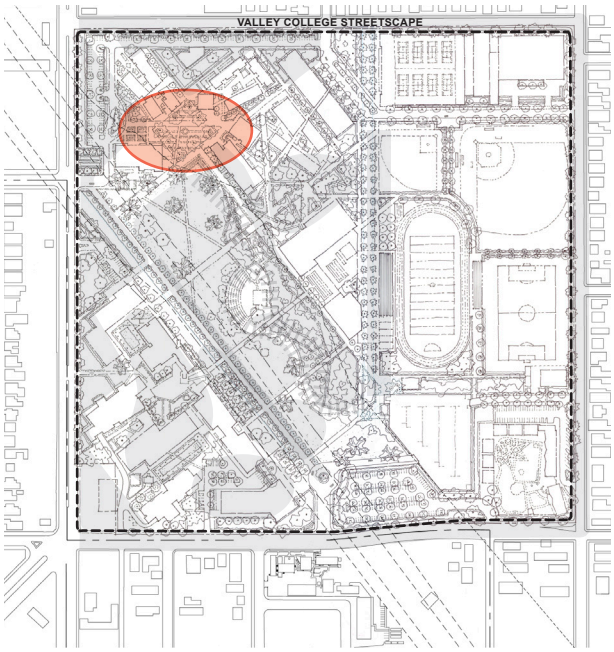


Photo: Michael Van Valkenburgh Associates, Inc.

Utilizing inexpensive methods to heighten expression
Allegheny Riverfront Park / Pittsburgh, PA

CULTURAL PLAZA

The Cultural Plaza is located at the confluence of the past, the present and the future. The plaza will contain architectural remnants such as an architectural frieze and a wrought iron gate salvaged from previous demolition of the College's earliest buildings. The remnants will be artistically displayed alongside other elements that could include a donor recognition area that highlights the continuing support of the College's alumni; formally arranged seating; a fountain; and a nearby rose garden. Existing mature oaks will lend spatial quality to the plaza giving it a strong sense of place and heirarchy amongst the campuses' other defined open spaces.



ACTIVITIES

The Cultural Plaza can accomodate a variey of activities dues to its size, location and layout. The openness of the plaza, combined with the incredible scale of the mature trees make the plaza an outdoor room suitable for formal gatherings, events and other functions. A simple fountain can add 'white noise' to the plaza effectively screening out adjacent traffic sounds.

- Formal Rose Garden
- Heritage Trees
- Historic Wrought Iron Gate
- Historic Friezes
- Donor Recognition
- Sculpture Garden
- Water Element/Fountain
- Auditorium Staging/Waiting
    - Plays
    - Orchestra
    - Scholarship Ceremony

CULTURAL PLAZA

1	HISTORIC FRIEZE
2	OAK CANOPY
3	CONCRETE UNIT PAVERS*
4	WATER FEATURE*
5	HISTORIC WROUGHT IRON GATE
6	ROSE GARDEN
7	SIGNAGE
8	EXISTING GOLDEN RAIN TREE
9	FIXED BENCHES*
10	EXISTING OAK

* OPPORTUNITY FOR DONOR RECOGNITION

0' 40' 80'

CULTURAL PLAZA

Evocative architectural features that frame the landscape
Stanford University / Palo Alto, CA

Historic frieze to be displayed in cultural plaza

Colorful plantings as foreground to a historical building
Stanford University / Palo Alto, CA

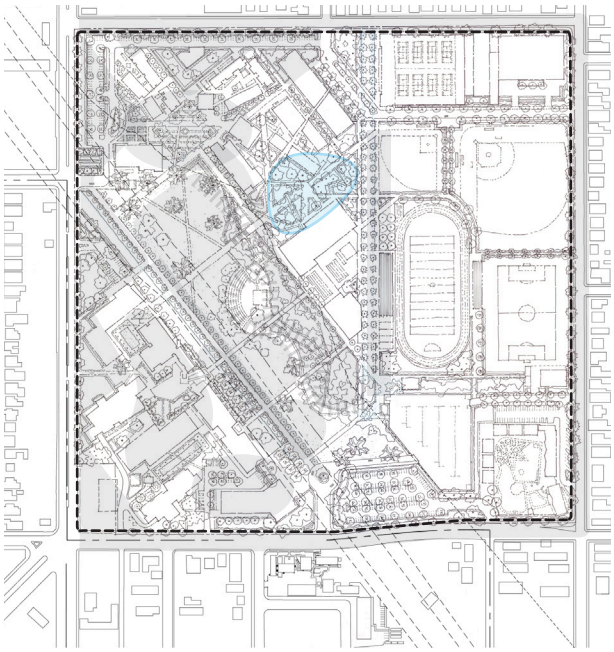
A formal courtyard garden
Stanford University / Palo Alto, CA

Photo: Alex Wetmore

Rose garden
Christchurch Botanical Bardens / Christchurch, New Zealand

WELLNESS GARDEN

The Wellness Garden is highlighted by plant species that have been used by cultures throughout the world for a variety of purposes - eating, medication, treatment of illness, etc. Some of these plants may include lavender, ginkgo, juniper, agave, jasmine, poppy, fescue, aloe. Located near the gymnasium and athletics fields, the Wellness Garden will also provide shady, secluded spaces for escape, relaxation, and fitness. Yoga, tai-chi, and meditation classes could be held here, in view of a botanic garden and a calming water feature. The Wellness Garden could also be popular for lunches and studying. The activities associated with the Wellness Garden are passive in nature. Individuals and small groups can find refuge here.



ACTIVITIES

- Botanical Garden
- Yoga & Tai-Chi Classes
- Meditation
- Faculty & Staff Lunches
- Water Element/Fountain
- Quiet Studying
- Paths
- Demonstration Pond for Use as an Educational Tool
- Labyrinthian Garden

WELLNESS GARDEN

1	MIXED PLANTING BEDS
2	INTERACTIVE WATER FEATURE
3	DEMONSTRATION POND FOR USE AS AN EDUCATIONAL TOOL
4	GINKGO AND EUCALYPTUS CANOPY
5	COLORED CONCRETE WITH SAWCUT JOINTS COLOR TBD
6	EXISTING SOUTHERN MAGNOLIA

0' 40' 80'

WELLNESS GARDEN

Photo: Bernhard Baier

Demonstration pond for use as an educational tool

Labyrinthian garden

photo courtesy of: www.barrierislandbb.com

Quiet reading and relaxing
Stanford University / Palo Alto, CA

Photo: http://www.sataichi.com

Shaded areas for outdoor exercises such as tai chi and yoga
San Pedro Park / San Antonio, TX

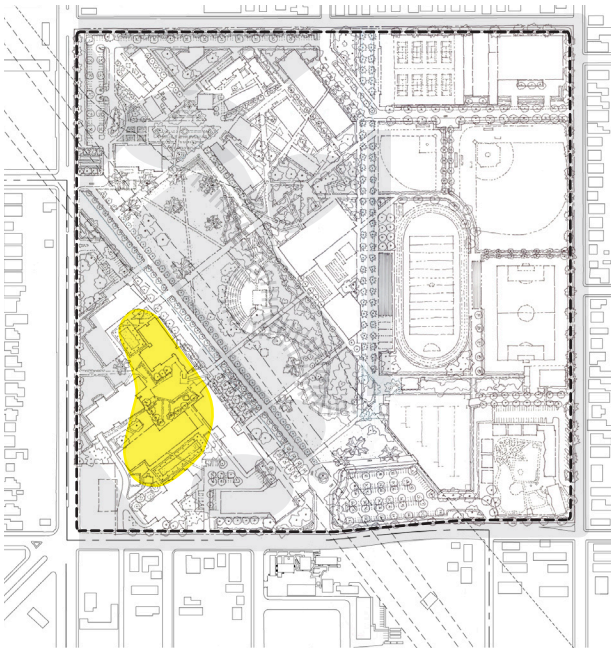
Interactive water feature
Millennium Park / Chicago, IL

Interactive water feature
Harvard University / Cambridge, MA

STUDENT COMMONS

The Student Commons is series of outdoor rooms spacially defined by the buildings that surround them. Each room will establish its own unique identity through plant material, hardscape and outdoor furniture such as tables, chairs and benches. As courtyards, these spaces maintain a scale that is more intimate than other spaces throughout the campus.

Framed by the Liberal Arts building, North Hall Replacement, the Learning Resource Center, and the Campus Center, this plaza will be a center of student life. Courtyards will flow freely from building interior to the outdoors.

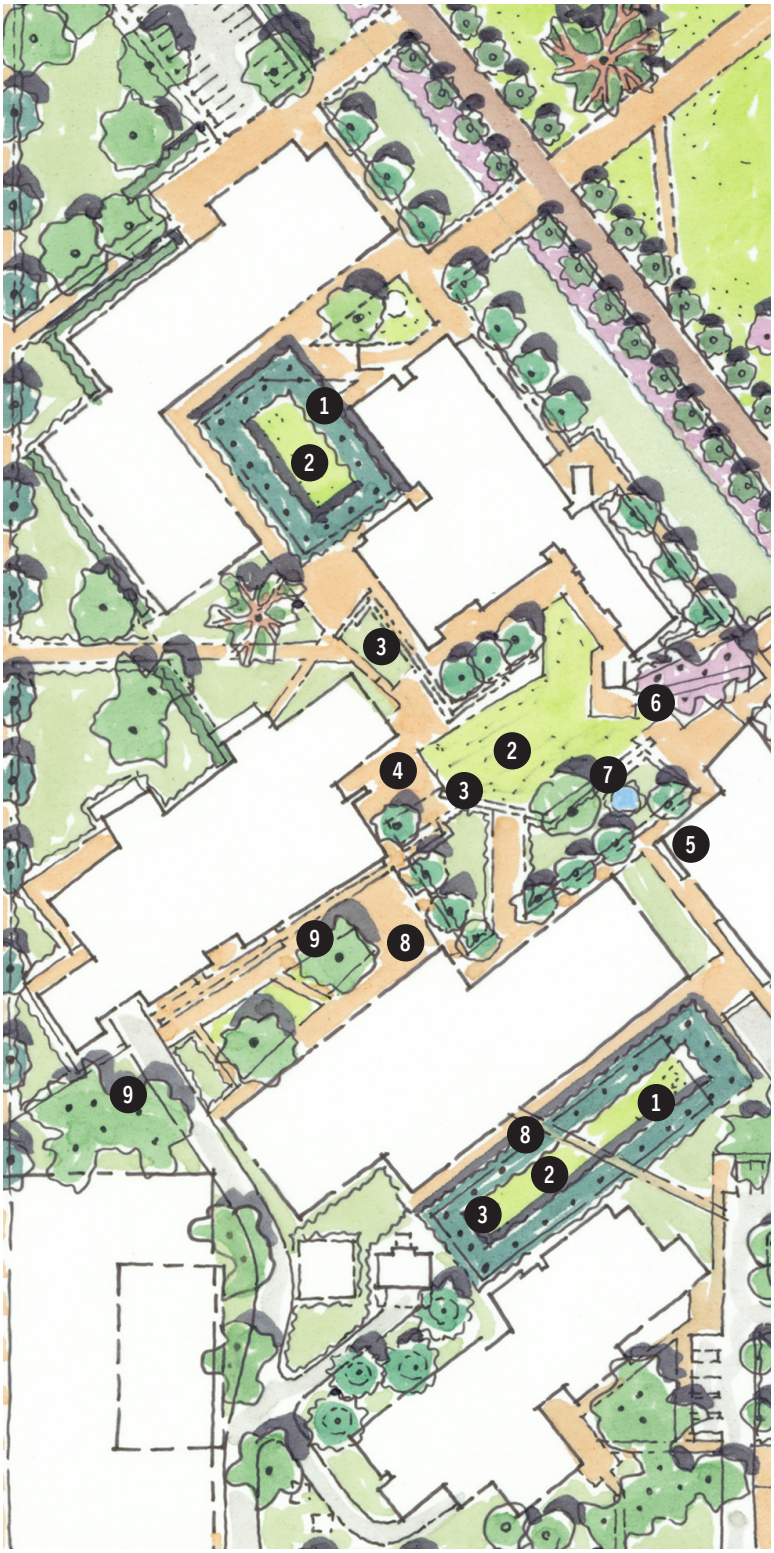


ACTIVITIES

Hardscape and lawn will combine to offer space for classes, studying, and quiet contemplation as welll as more active spaces for outdoor dining an dinformal gatherings.

- Courtyards
- Shaded Tables
- Informal Seating
- Outdoor Classrooms
- Poetry Readings
- Small Student Gatherings
    - Study Groups
    - Club Meetings
    - Informal Discussions
- Water Element/Fountain

STUDENT COMMONS



1 TREE BOSQUE
2 LAWN
3 STEPPED SEATING
4 COLORED CONCRETE
W/ SAWCUT JOINTS
COLOR TBD
5 OLIVE GROVE
6 EVERGREEN PEAR ORNAMENTAL
7 WATER FEATURE
8 STONE PAVERS IN COURTYARDS
COLOR AND PATTERN TBD
9 SOUTHERN MAGNOLIA CANOPY

0' 60' 120'

STUDENT COMMONS

Small courtyards for studying and taking breaks between classes
Stanford University / Palo Alto, CA

Shaded courtyards with ornamental plantings
Stanford University / Palo Alto, CA

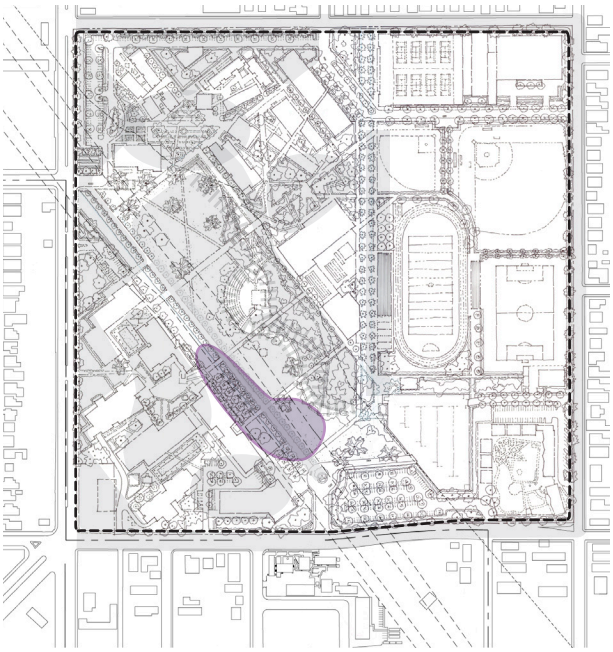
Water features to provide a cooling effect
Stanford University / Palo Alto, CA

Informal group gatherings
World Wide Plaza / New York, NY

Spaces that serve both as circulation and as place
Tokyo University / Tokyo, Japan

EVENTS DISTRICT

The Events District is located between the Campus Walk and the Student Commons and is highly accessible by pedestrians. The space is a mix of hardscape and softscape and can accommodate a variety of uses. This flexible open space directly adjacent to the Campus Center will be the prime destination for student activities - from Homecoming to Career and Book Fairs to Pep Rallies. Hardscape areas and a relatively flat grade will allow groups and individuals to set up temporary booths and tents for events. The Events District can absorb a variety of uses both existing and proposed.



ACTIVITIES

- "Welcome / Welcome Back"
- Club Rush
- Homecoming
- Barbecues
- BookFest
- Health, Career and Job Fairsx
- Pep Rallies
- Awareness Week Events

A plaza large enough to accommodate multiple group gatherings
Anaheim Convention Center / Anaheim, CA

Informal group gatherings
Stanford University / Palo Alto, CA

Programmable areas that also accommodate heavy foot traffic
Stanford University / Palo Alto, CA

EVENTS DISTRICT

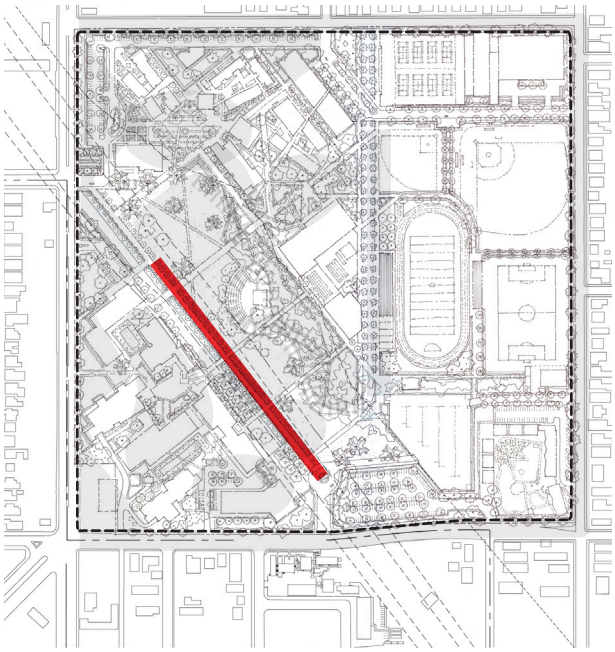
1 CONCRETE UNIT PAVERS
COLOR AND PATTERN TBD
2 CHINESE ELM GROVE
3 DWARF PURPLE FOUNTAIN
GRASS GROUNDCOVER
4 OVERFLOW/SURGE SPACE

0' 40' 80'

CAMPUS WALK

The Campus Walk is the major pedestrian walkway within the campus and is defined by its allee of London Plan Trees and its 20-foot wide gracious walkway. At 1,600 feet, the walkway stretches from Mount Vernon Avenue to Grant Avenue and traverses the Glade, the Student Commons and the Events District.

The walkway creates a conduit for students- walking and on bicycle- moving through the campus from one building to another. The structure of trees is enhanced by an evergreen groundcover (Jasmine) that defines the western edge of the walkway. The eastern edge of the walkway is primarily open lawn with a few mature oaks and Jacarandas.



ACTIVITIES

The Campus Walk can support any number of campus uses. While the primary use is pedestrian/bicycle circulation, it could be also used for informal events such as overflow from the Events District and/or campus wide activities.

- Pedestrian Circulation
- Bicycle Circulation
- Informal Activites/Events
- Seating

An allee of canopy trees along a major pedestrian corridor
San Jose State University / San Jose, CA

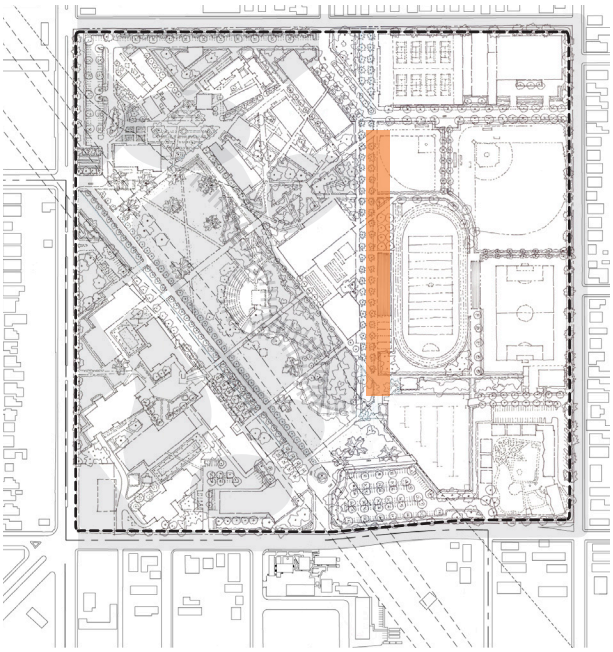
An active pedestrian thoroughfare
Stanford University / Palo Alto, CA

An allee with evergreen groundcovers
University of Washington / Seattle, WA

NORTH/SOUTH CAMPUS WALK

The North/South Campus Walk is the linear area situated between the athletic fields to the East and 'The Glade' to the West. This walk, or promenade, serves to connect the two parking structures on campus and acts as a 'green' filter between the competing uses that flank either side. At a width over over 80 feet and a length of over 1,400 feet, the North/South Campus Walk is designed to accomodate various uses both passive and active.

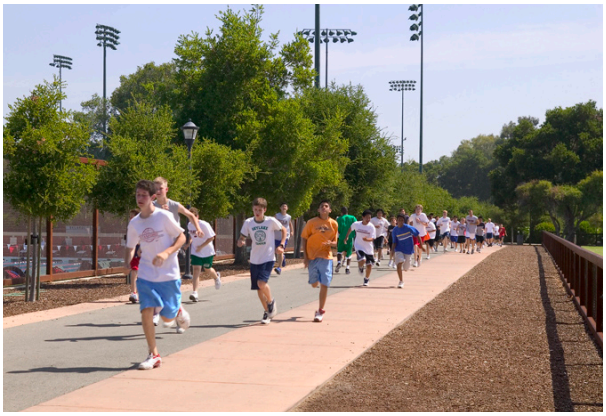
The walk incorporates a 12 foot wide path defined open lawn and palm trees along both sides. A physical break in the palm trees occurs at the athletic/swimming pool facility where a grove of shade trees fills the gap and establishes a plaza within the walk.



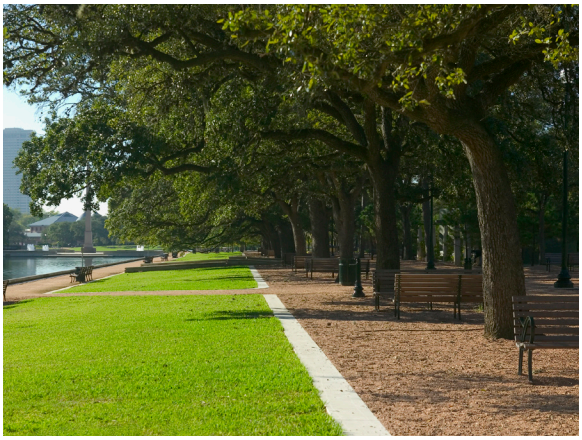
ACTIVITIES

The North/South Campus Walk will provide the second major pedestrian access route across campus. Passing by the College's athletic facilities, the North-South Campus Walk will provide areas for pre- and post-game gatherings, refreshment stands, temporary restroom facilities, and overflow seating. The Walk can also host large events requiring hardscape, such as the Car Show.

- Pre-Game Picnics & Gatherings
- Refreshment Stands
- Staging for Stadium Events
- Restroom Facilities
- Overflow Seating
- Car Show



A space that can be programmed for active recreation
Stanford University / Palo Alto, CA



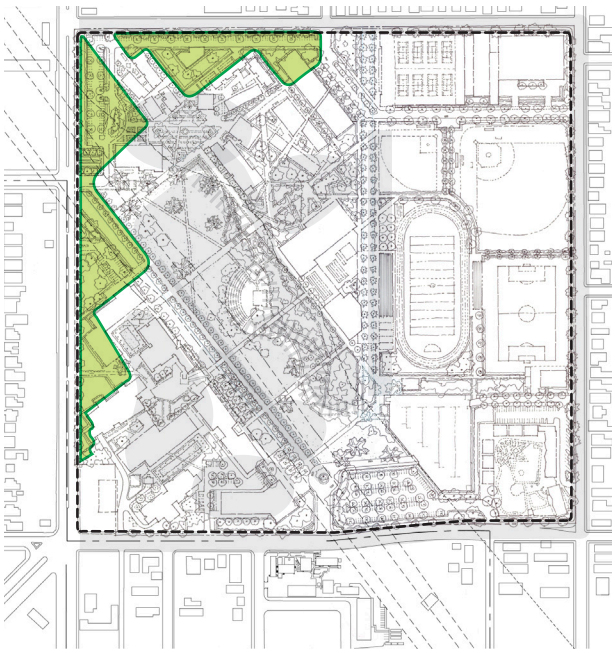
Linear lawn space
Hermann Park / Houston, TX

A place for rallies and other sports-related events
Stanford University / Palo Alto, CA

MOUNT VERNON LANDSCAPE

The Mount Vernon Landscape is an intentional landscape gesture that gives the campus identity along its western edge. Heavy vehicular circulation along this road can be mitigated visually, through a creative landscape approach of introducing large-scale triangular shaped gardens continuously along Mount Vernon Avenue and wrapping into Esperanza Street.

These gardens contain a simple planting pallette of large Magnolia species combined with a layering of evergreen hedges, evergreen groundcover, semi-native grasses and open lawn.



ACTIVITIES

The activites realted to the Mount Vernon Landscape are limited to pedestrian and vehicular circulation.

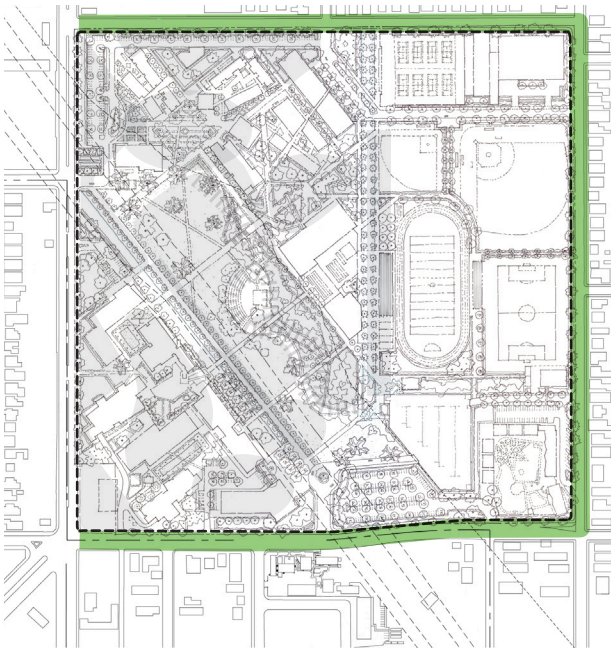
- Enhanced Mount Vernon Streetscape
- Campus Identity
- Ceremonial Campus Entry
- Campus Tour Starting Point
  - Prospective Students
  - Local Schools
- Connection to Swap Meet

Regional landscape expression
Exxon Headquarters / Irving, TX

Planting arrangements that create lasting impressions
Soka University / Aliso Viejo, CA

SBVC STREETSCAPE

The SBVC Streetscape is a strategy intended to create a stronger pedestrian experience along the edges of the campus. Along Esperanza and K Streets, the proposed landscape plan recommends a layering of plant material to create a visual buffer betwee the campus and the adjacent neighborhoods. This plant material can come in the form of ornamental trees and evergreen hedges along a low garden wall



ACTIVITIES

Activites within the streetscape zones are limited to pedestrian and vehicular circulation.

- Walking
- Bicycling
- Parallel On-street Parking

Ornamental trees that provide color to an otherwise banal street

Canopy trees that filter light

Planting arrangments that buffer pedestrians from traffic
Filinvest Corporate City / Manila, Philippines

THE GLADE

BEFORE

AFTER

RIPARIAN GARDEN

BEFORE

AFTER

CULTURAL PLAZA

BEFORE

AFTER

CAMPUS WALK

BEFORE

AFTER

SBVC STREETSCAPE

BEFORE

AFTER

HORIZON 3 LANDSCAPE PLAN

LANDSCAPE PLACES

1	THE GLADE
2	SAN JACINTO FAULT INTERPRETIVE WALK
3	RIPARIAN GARDEN
4	CAMPUS WALK
5	NORTH/SOUTH CAMPUS WALK
6	CULTURAL PLAZA
7	WELLNESS GARDEN
8	EVENTS DISTRICT
9	STUDENT COMMONS
10	PLAZA
11	MOUNT VERNON LANDSCAPE
12	SBVC STREETSCAPE

0' 175' 350'

5
ARCHITECTURAL GUIDELINES

SUMMARY

The architectural guidelines will enable future buildings at San Bernardino Valley College (SBVC) to bridge the aesthetic gap between the various architectural styles that currently exist on campus in order to create a unified atmosphere. The guidelines are the result of a study of the existing aesthetics or style of buildings on campus as well as an analysis of how buildings interact with exterior spaces.

It is important for SBVC to understand how their buildings fit within the larger historical framework of architectural styles. Characteristics of the three main styles present on campus were identified in order to see the relation of the buildings to larger architectural movements – specifically the Mission Revival and Deconstructivism. Particular characteristics of these styles will become elements that can be incorporated into future buildings on campus to allow them to have a relation to the past.

The architectural guidelines are non-prescriptive by design and instead identify particular facades or edges of buildings that have a responsibility to the overall conceptual framework of the master plan. Since the exterior spaces such as the Glade, Cultural Plaza and Student Commons are the main focus of the campus, the buildings need to define and reinforce these areas. Looking at the interaction of exterior spaces and buildings within the master plan led to the development of four zones – Glade, Campus Edge, Plaza, and Courtyard. Descending in scale, each zone has a distinct environment that will be described by the landscape and the architecture. The facades that front these particular zones will have characteristics that address and respond to the scale and activities that occur within each zone.

The quality of space that the Glade, Campus Edge, Plaza and Courtyard represent are not new to the campus and can be found in both the historic and current conditions on campus. Past and present buildings at SBVC were analyzed with regards to the four categories where applicable. Elements within the buildings that enhance the exterior space are called out in a series of images of SBVC's past and present buildings.

The proposed aesthetic at SBVC is neither historical nor extremely contemporary but instead is a blend of the old and the new. In order to allow creative freedom, the proposed aesthetic is illustrated through four example projects that represent a variety of design approaches which are appropriate at SBVC.

EXISTING ARCHITECTURAL AESTHETICS

There are two major architectural eras that define San Bernardino Valley's campus – Mission Revival and Deconstructivism.

Mission Revival is an architectural style of the late 19th century that first emerged at the Chicago Exposition in 1893 as an organized effort to express the nation's Hispanic past in built form. Inspired by the Spanish Missions in California, it was the first architectural style to begin in the West and move eastward. Not only did the Mission Revival style rapidly move east, it was adopted by the Southern Pacific and Santa Fe Railways as their chosen design style for train stations, resort hotels, and all other rail corridor buildings in an effort to "theme" or brand the Southwest.

Deconstructivism, also called deconstruction, is an architectural style which began in the late 1980s. Inspired by the French philosopher, Jacques Derrida, the style attempts to dismantle the basic elements of architecture and recompose them into disharmonious abstract forms. It is characterized by ideas of fragmentation, a non-linear process of design, an interest in manipulating the structure's surface or skin and the use of non-rectilinear shapes.

A third type of architecture exists on campus that does not necessarily fall into a defined movement and for the purposes of this discussion is referred to as 1960s-1970s, named for the time frame in which it was built. Utilitarian in nature, the buildings are designed for function and efficiency.

Auditorium - Spanish Mission Revival

Physical Science - 1960-1970

Library - Deconstructivism

EXISTING ARCHITECTURAL AESTHETICS

THE AUDITORIUM

After all the buildings in the fault/folding zone are demolished, only one building of the Mission Revival style will remain – the Auditorium. As the signature building for SBVC built in 1935, it is historically significant because it was designed by the architect G. Stanley Wilson and funded by the Works Progress Administration (WPA).

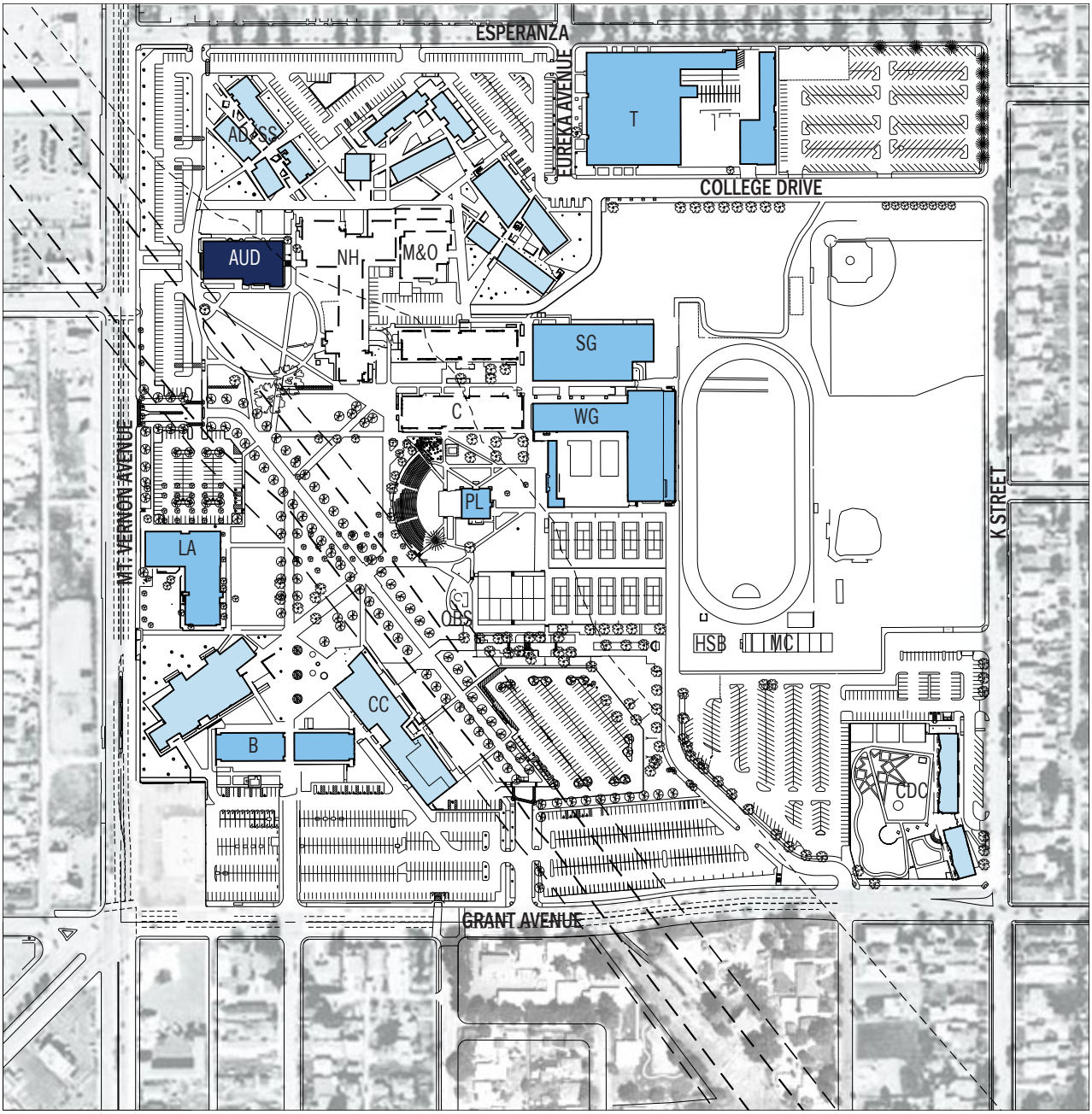
G. Stanley Wilson was born in Bournemouth, England in 1879 and immigrated to Riverside in 1896, where he lived until his death in 1958. As one of the most well-known and influential architects in the Riverside area, Wilson was a leader in the civic efforts to create a Mission Revival and Spanish Colonial Revival image for downtown Riverside. His buildings include the Riverside Community College Quad, the Mission Inn, the Fullerton City Hall.

Mission Inn
photo by: SBVC Archives

Riverside Community College Quad
photo by: SBVC Archives

Fullerton City Hall
photo by: SBVC Archives

EXISTING ARCHITECTURAL AESTHETIC



LEGEND

- MISSION REVIVAL
- 1960s - 1970s
- DECONSTRUCTIVISM
- TO BE DEMOLISHED

0' 175' 350'

BUILDINGS

AD/SS	ADMIN./ STUDENT SERVICES
ART	ART & GALLERY
AUD	AUDITORIUM
B	BUSINESS
C	CHEMISTRY
CC	CAMPUS CENTER
CDC	CHILD DEVELOPMENT CENTER
HLS	HEALTH & LIFE SCIENCES
HSB	HEALTH SERVICES BUILDING
LA	LIBERAL ARTS
LIB	LIBRARY
M&O	MAINTENANCE & OPERATIONS
MC	MIDDLE COLLEGE
NH	NORTH HALL
OBS	OBSERVATORY
PL	PLANETARIUM
PS	PHYSICAL SCIENCE
SBCCD	DISTRICT WAREHOUSE
SG	SNYDER GYM
T	TECHNICAL
WG	WOMEN'S GYM

MISSION REVIVAL 1900-1940

CHARACTERISTICS

- Massive walls with broad unadorned surfaces
- Low pitched clay tile roofs
- Arched windows and doors
- Exterior plaster, stucco, or concrete
- Towers on larger buildings
- Curved gables
- Arcaded corridors
- Piered arches
- Exposed rafters

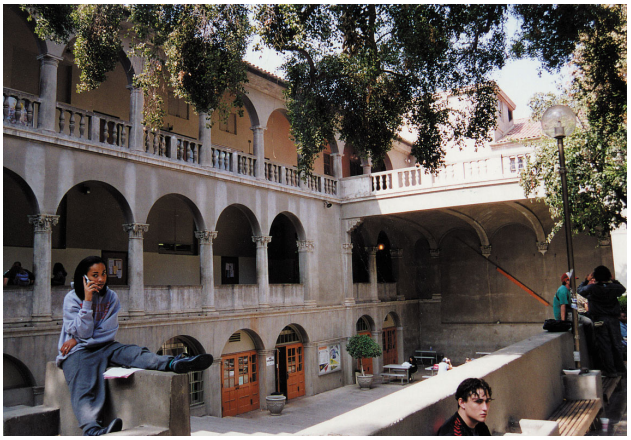
Mission Santa Clara de Asisi
photo by: SBVC Archives

Santa Fe Depot, San Bernardino
photo by: SBVC Archives

Santa Fe Depot, Riverside
photo by: SBVC Archives

MISSION REVIVAL 1900-1940

Pasadena Public Library, Myron Hun
photo by: SBVC Archives



Riverside Community College Quad, G. Stanley Wilson
photo by: SBVC Archives

Riverside Arts Museum, Julia Morgan
photo by: SBVC Archives

Riverside Municipal Auditorium, G. Stanley Wilson
photo by: SBVC Archives

Carnegie Library, Julia Morgan
photo by: SBVC Archives

First Church of Christ Scientist, Irving Gill
photo by: SBVC Archives

1960-1970
CHARACTERISTICS

- Exterior and interior circulation
- Stucco, brick, stone and split-face concrete block
- Punched and storefront windows
- Sloped and flat roofs

Business Building

Planetarium/ Greek Theater

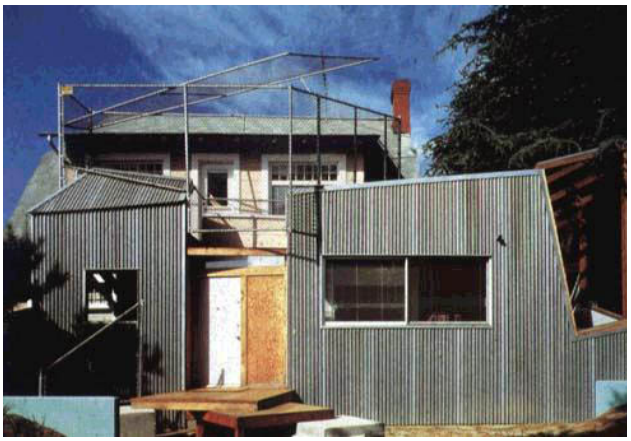
Liberal Arts Building

DECONSTRUCTIVISM 1989 - PRESENT

CHARACTERISTICS

- Architecture in “bits and pieces”
- Irregular, fragmented forms
- Metaphoric expression
- Warped space
- Composition of different geometries
- Illogical patterns
- Expressions of material
- Manipulation of surface or skin
- “Controlled chaos”

Jewish museum in Berlin, Daniel Liebeskind
photo by: arcspace



Gehry House, Frank Gehry
photo provided by: great buildings

Vitra fire Station, Zaha Hadid
photo by: arcspace

DECONSTRUCTIVISM 1989 - PRESENT

Hypo Alpe-Adria Center, Austria. Morphosis
photo provided by: www.aia.org

Chapel of St. Ignatius, Steven Holl
photo provided by: www.stevenholl.com

Hysolar Institute, Gunter Behnischt + Partner
photo by: Jacob Albert

Aachen Bus shelter, Peter Bisenman
photo provided by: www.eisenmanarchitects.com

Phaeno Science Center, Zaha Hadid
photo by: www.reiseland-niedersachsen.de

UFA cinema center, Coop Hilmmelblau
photo provided by: de.wikipedia.org

EDGES

LEGEND

- GLADE
- CAMPUS EDGE
- PLAZA
- COURTYARD
- ENTRY

0' 175' 350'

The above diagram identifies the architectural edges that must address the four exterior zones prescribed by the master plan – the Glade, Campus Edge, Plaza and Courtyard (outdoor rooms).

GLADE

The Glade is the heart of campus and will become the recognizable feature for SBVC, similar to the Lawn at the University of Virginia. The buildings along the Glade are the backdrop for campus life. As a "stage", it witnesses everyday activity so the view out to the Glade from the buildings is as critical as the facades of the buildings themselves. Arcades will provide protected walkways as well as informal gathering spaces. While major entries to buildings do not occur off the Glade, the elevations must direct visitors towards the Plazas which can be accomplished through a variety of methods such as increased glazing or a disruption in the overall rhythm of the façade.

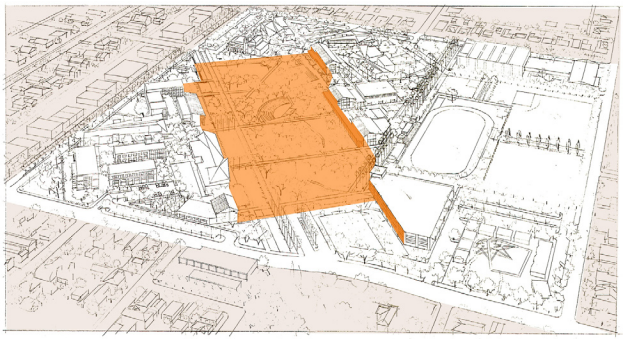
Because of the immense size of the Glade, proportions of the adjacent elevations should be at a campus scale to emphasize the three-story nature of the new buildings. The majority of the elevations are solid with a regular repetition of window openings. Building upon the language developed in the existing Auditorium and Campus Center, roofs are pitched and of a similar color to provide a consistent language around the Glade. Elements that are appropriate include arcades, punched windows, roof overhangs and shading devices.

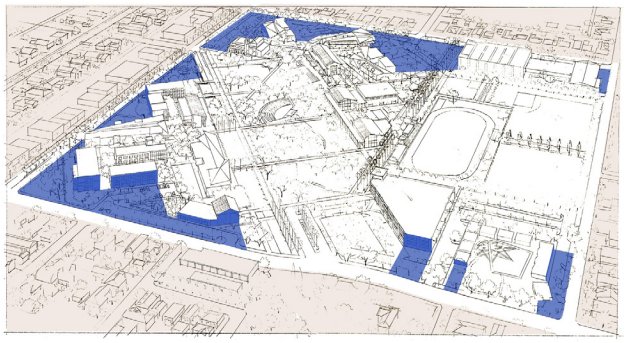
Facades on opposing sides of the Glade must acknowledge their different solar orientations. Sustainable design will lead to comfortable interior environments. While the use of arcades and punched windows will provide unity, their design should be appropriate to the orientation – northeast or southwest.

CAMPUS EDGE

The Campus Edge is the transitional zone between the public and the academic community. The facades that address the campus edges present the formal identity for SBVC. Secondary entrances are juxtaposed with simple traditional elements such as a patio or short wall to render the campus inviting to the individual but at the same time, provide a safe and secure environment.

The scale of the facades should be sympathetic to the adjacent streetscape. The full height of three stories can be emphasized along the commercial streets while a breakdown of the height can occur along the residential streets. Like the Glade, the majority of the elevations are solid with a regular repetition of window openings. Roofs along the Campus Edge are flat to distinguish themselves from the buildings that face the Glade. There must be an expression of how the roof meets the façade and the sky. Sustainable elements can be incorporated as necessary. Since there are no major entries along the Campus Edge (with the exception of the Auditorium), arcades are incorporated into the facades.





PLAZA

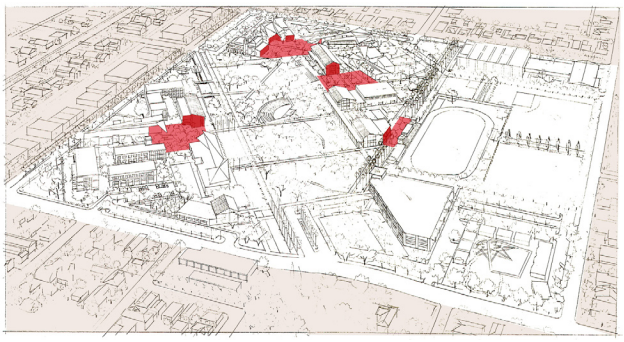
While the Glade is the heart of the campus, the Plazas are the main destinations. From the Glade, buildings frame the openings to the Plazas that are defined by both buildings and landscape. In order to create a concentration of activity and interaction, major entries to the buildings are located in the Plazas. Due to the structural requirements and orientations of the new structures, these are typically located on the short end of the buildings. Building upon the precedent of the Library and Campus Center entries, the main entries to the buildings are monumental, articulated with exposed steel, horizontal glazing and roof overhangs.

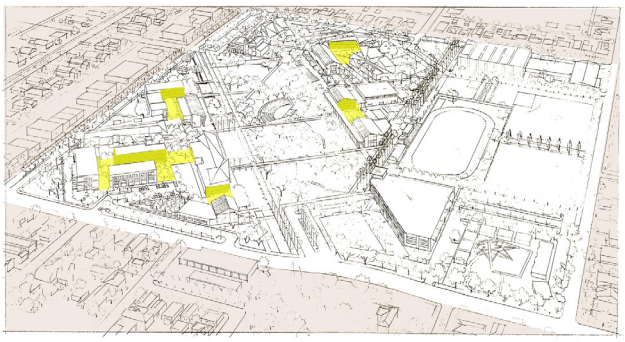
Within the Plazas, there is a shift from the campus scale to the human scale. The facades must address this transition and act as the threshold into the buildings. The Plaza facades combine the language of exposed steel and glazing with the solid walls and regular rhythm of the Glade and Campus Edge. Elements that are appropriate in the Plaza include roof overhangs, exposed steel, glazing, arcades and vertical elements. Vertical elements can consist of a stair/elevator tower or clock tower and provide visual markers or points of reference for the campus.

Because of the nature of a community college, the facades along the Plazas must be as expressive at night as they are during the day. The increased amount of glazing will allow light to spill out into the Plazas, allowing them to become lit beacons when viewed from the Glade.

COURTYARD

The Courtyards are the most intimate exterior spaces on campus. As such, the facades that define the Courtyards have a human scale dominated by glass and exposed steel. There is an emphasis on allowing light into and out from the building to encourage the viewing of activity in the Courtyard and building. In order to capitalize on the open quality of the courtyards, shading devices for the glazing are acceptable but arcades are not recommended.





CAMPUS EDGE

Auditorium - Main entry

Old Library

CAMPUS EDGE

Administration/ Student Services Building

Health and Life Sciences Building

Administration/ Student Services

GLADE

Building as a Backdrop

Expression of Roof

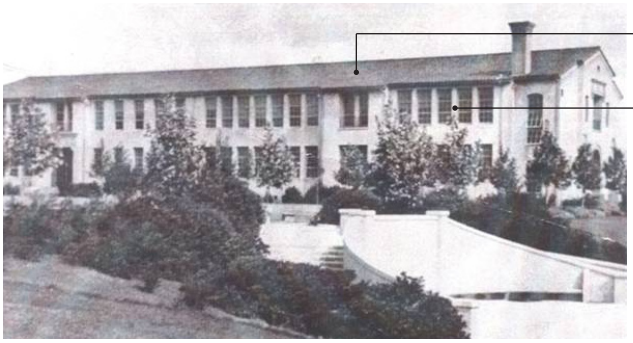
Arcade

Auditorium

Pitched Roof

Arcade

North Hall - To be demolished



Pitched Roof

Rhythmic Repetition
Vertical Punched Windows

Science Building, 1932
photo by: SBVC Archives

Buildings as Backdrop

GLADE

PLAZA

Arrowhead Plaza, 1969
photo by: SBVC Archives

GLADE

Visible Entry/Destination

Campus Center

Expression of Roof

Entry out to and in from Glade

Campus Center

Arcade

GLADE

Campus Center

PLAZA

Monumental Main Entry to Building

Administration Building, 1968
photo by: SBVC Archives

Multiple Main Entries of Plaza

PLAZA

Elevation/Material Change

GLADE

Campus View from Clock Tower, 1963
photo by: SBVC Archives

Vertical Element
(Appropriate for plazas)

Auditorium Clock Tower

PLAZA

Campus Center - Main Entrance

Library - Main Entrance

View from Business business building

COURTYARD

Administration/ Student Services Building

Health and Life Science Building

Health and Life Science Building

PROPOSED AESTHETIC

In order to illustrate the proposed aesthetic for San Bernardino Valley College, four example projects were chosen that embody elements appropriate for the Glade, Campus Edge, Plaza or Courtyard facades.

Drucker Graduate Management Center, Anshen & Allen

The Drucker Center at Claremont Graduate University exhibits the dichotomy of elevations that will occur between the Glade/ Campus Edge and Plaza/ Courtyard. The public façade is formal and solid with a regular rhythm of punched windows while the courtyard on opposite side transforms into an open façade of glass and steel. The pitched roof combined with the exposed steel presents a modern evolution of a traditional style. A datum line on the solid wall relates to the height of adjacent buildings which is a technique that can be employed at SBVC to acknowledge the two-story height on the future three-story buildings. Note the use of sun shades and landscaping to address the solar orientation of the building.

Learning & Technical Center, Steinberg Architects

Located at Evergreen Valley College, the Learning & Technical Center is a gateway building to campus with a scale appropriate to the larger campus community and adjacent open spaces. Reminiscent of traditional campus architecture because of its massing and proportion, the building articulates how the roof meets the sky whether a flat or sloped roof. The arcade is a threshold between the main pedestrian campus corridor and provides a human scale to the building, inviting passersby to walk next to the building. However, the articulation of the arcade continues up for three stories which gives a campus scale appropriate to the Glade. Glazing is used to identify entry and glazing, building, and landscape lighting are designed to present an approachable façade at night with recognizable destinations.

Knight Building Addition, SOM

The Knight Building at Stanford University is a distinctly modern interpretation of Stanford University's collegial style. The overall massing, proportions and materials relate to the context while particular details such as the split pitched roof and windows provide a unique identity. The elevation is a uniform backdrop to the landscaped space in front yet it is clear both during the day and at night, where the main entry to the building is because of the disruption in the rhythm of the arcade.

Paganini Auditorium, Renzo Piano

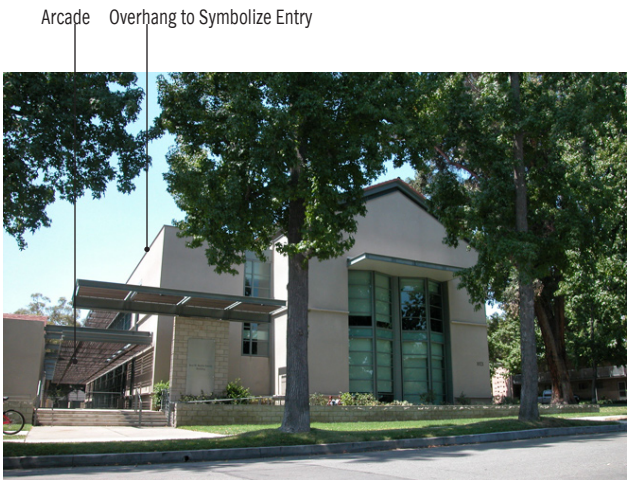
The Paganini Auditorium in Parma, Italy is the conversion of an old factory building into a performance auditorium. It has similar proportions to the ideal building massing at SBVC – long, three-story high rectangular boxes. The solid walls with punched windows are appropriate for the Glade. Similar to the structures at SBVC, the main entrance is at the end of the building, fronting a plaza and is composed entirely of glass and steel.

Bridging the gap - the Administration/ Student Services building and the Auditorium

DRUCKER GRADUATE MANAGEMENT CENTER

CLAREMONT GRADUATE UNIVERSITY

Edge



Plaza

End Treatment

DRUCKER GRADUATE MANAGEMENT CENTER

CLAREMONT GRADUATE UNIVERSITY

Courtyard
photo by: SBVC Archives

End Treatment

Courtyard

LEARNING & TECHNICAL CENTER

EVERGREEN VALLEY COLLEGE

Plaza
photo by: SBVC Archives

Glade
photo by: SBVC Archives

End Treatment
photo by: SBVC Archives

KNIGHT BUILDING ADDITION

GRADUATE SCHOOL OF BUSINESS, STANFORD UNIVERSITY

Glade
photo provided by: www.som.com

Glade
photo provided by: www.som.com

KNIGHT BUILDING ADDITION

GRADUATE SCHOOL OF BUSINESS, STANFORD UNIVERSITY

End Treatment

Glade

PAGANINI AUDITORIUM

PARMA, ITALY

Glade

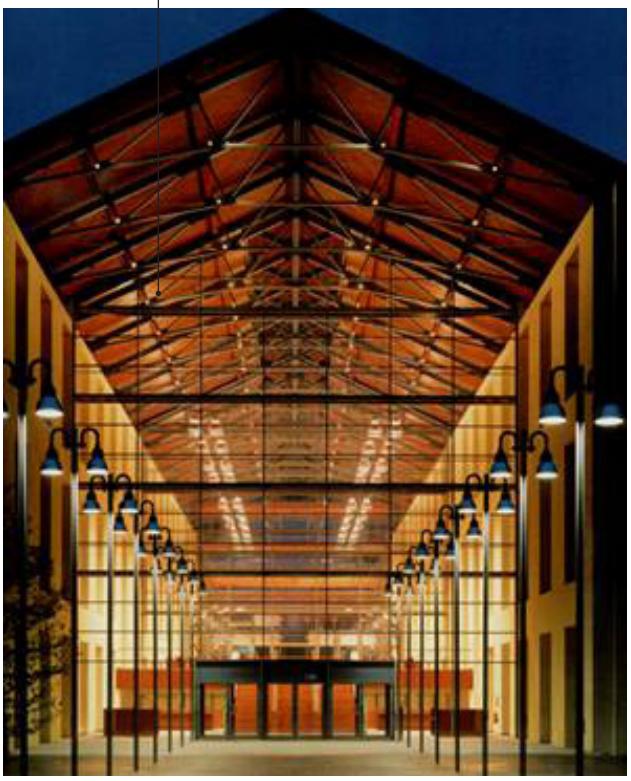
Glade

photos by: Enrico Cano

PAGANINI AUDITORIUM

PARMA, ITALY

End Treatment



photos by: Enrico Cano

MATERIAL PALETTE

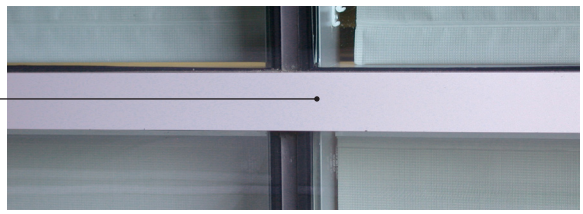
Red Metal Cladding

One tone stucco

Two tone stucco

Seamless Glazing

Minimal Mullion usage



Exposed steel

6
LANDSCAPE GUIDELINES

PLANTING

LANDSCAPE PLACES

1	THE GLADE
2	SAN JACINTO FAULT INTERPRETIVE WALK
3	RIPARIAN GARDEN
4	CAMPUS WALK
5	NORTH/SOUTH CAMPUS WALK
6	CULTURAL PLAZA
7	WELLNESS GARDEN
8	EVENTS DISTRICT
9	STUDENT COMMONS
10	PLAZA
11	MOUNT VERNON LANDSCAPE
12	SBVC STREETSCAPE

0' 175' 350'

PLANTING

1. THE GLADE

- Build on existing plants palette
- Create open lawn areas for passive recreation
- Provide broad canopies for shade

2. RIPARIAN GARDEN

3. SAN JACINTO FAULT INTERPRETIVE WALK

- Contrast The Glade landscape
- Provide large patches of shade using the canopies of many and varied trees
- Create an arroyo landscape which is dry most of the year with occasional flooding
- Structure to absorb experiments with native plants for educational purposes

4. CAMPUS WALK

- Accentuate San Jacinto Fault orientation
- Build on existing London Plane Tree promenade
- Provide year round color with evergreen shrubs

5. NORTH/SOUTH CAMPUS WALK

- Accentuate north - south axis in line with the city grid
- Maintain visual connection in between athletics area and academic area
- Create lawn areas for sport event related activities

6. CULTURAL PLAZA

- Build on existing plants palette
- Convey notion of heritage and history

7. WELLNESS GARDEN

- Plants with medicinal and aromatic properties
- Provide canopies that filter light
- Create an environment lush with vegetation
- Convey a sense of serenity and calm

8. EVENTS DISTRICT

- Provide a large expanse of shade to accommodate outdoor activities

9. STUDENT COMMONS

- Create bosque of light canopy around main plaza
- Utilize smaller scale tree to match the scale of space
- Provide shade in small patches throughout to accommodate smaller gatherings
- Accent with color

10. MEDIA PLAZA

- Enhance visibility from Mount Vernon Avenue by accenting with color

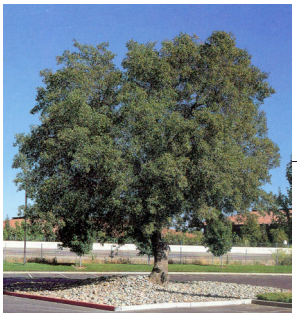
11. MOUNT VERNON LANDSCAPE

- Build on existing plants palette
- Select trees with stature
- Contrast light foliage along sidewalk with darker, dense foliage of canopy within triangular patches
- Create lawn areas to convey a campus feel

12. SBVC STREETSCAPE

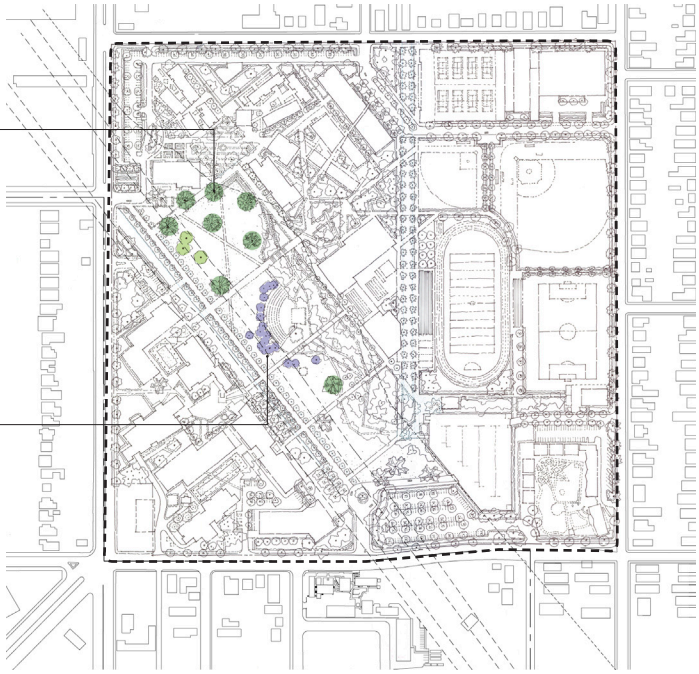
- Create visual consistency along adjacent streets
- Expand SBVC's sphere of influence
- Provide shade
- Accent with color

1 | THE GLADE



Evergreen Tree
COAST LIVE OAK
Quercus agrifolia

Deciduous Tree
JACARANDA
Jacaranda mimosifolia



Evergreen Shrub
TOYON
Heteromeles arbutifolia

Evergreen Shrub
JAPANESE PRIVET
Ligustrum japonicum

Evergreen Groundcover
STAR JASMINE
Trachelospermum jasminoides

2| RIPARIAN GARDEN
3| SAN JACINTO FAULT INTERPRETIVE WALK

Deciduous Tree
HACKBERRY
Celtis occidentalis

Deciduous Tree
COTTONWOOD
Populus fremontii

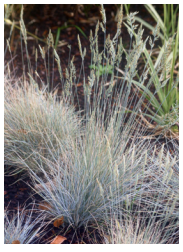
Deciduous Tree
BLACK BIRCH
Betula nigra

Evergreen Shrub
JAPANESE PRIVET
Ligustrum japonicum

Perennial Shrub
DOUGLAS IRIS
Sambucus mexicana

Evergreen Groundcover
STAR JASMINE
Trachelospermum jasminoides

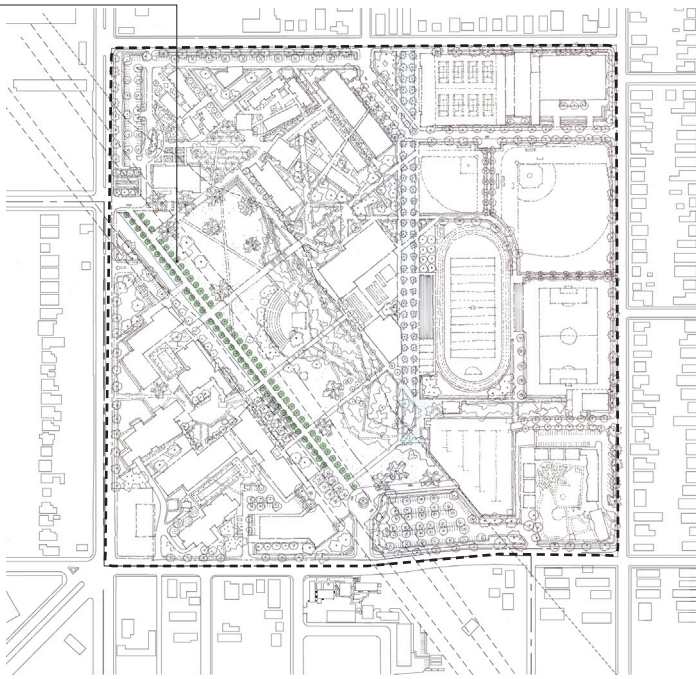
Foreground Grass
BLUE FESCUE
Festuca ovina "Glauca"



Perennial Grass
CA GRAY RUSH
Juncus patens

4| CAMPUS WALK

Deciduous Tree
LONDON PLANE TREE
Platanus acerifolia



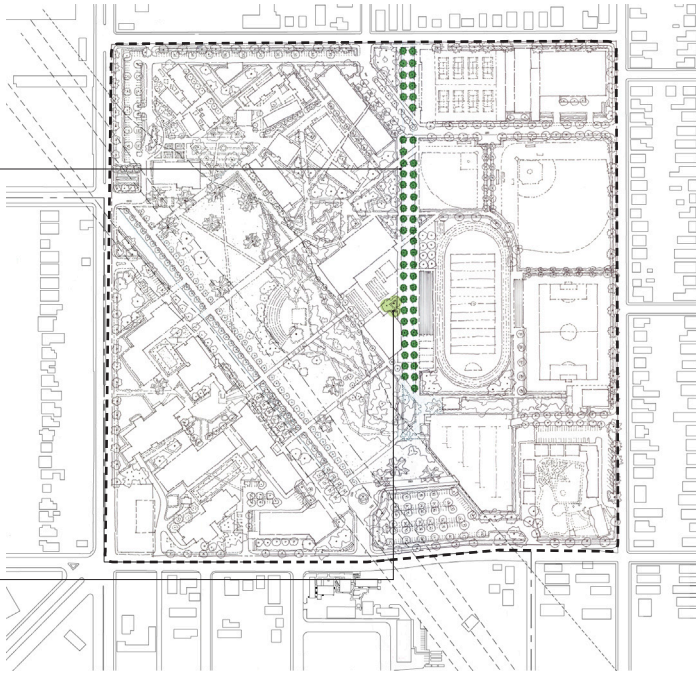
Evergreen Shrub
JAPANESE PRIVET
Ligustrum japonicum

Evergreen Groundcover
STAR JASMINE
Trachelospermum jasminoides

5| NORTH/SOUTH CAMPUS WALK

Evergreen Tree
DATE PALM
Phoenix dactylifera

Evergreen Tree
SOUTHERN MAGNOLIA
Magnolia grandiflora



Evergreen Shrub
JAPANESE PRIVET
Ligustrum japonicum

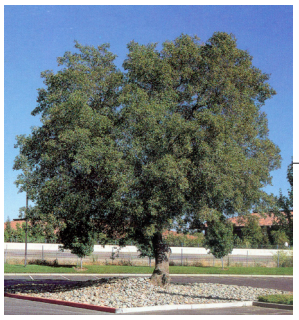
Background Grass
NEW ZEALAND FLAX
Phormium tenax

Evergreen Groundcover
STAR JASMINE
Trachelospermum jasminoides

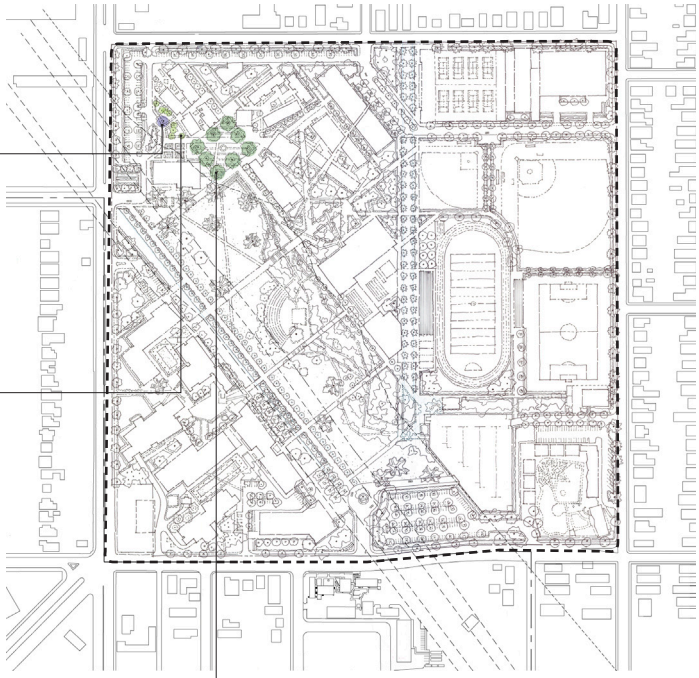
6| CULTURAL PLAZA

Deciduous Tree
JACARANDA
Jacaranda mimosifolia

Evergreen Tree
CANARY ISLAND PINE
Pinus canariensus



Evergreen Tree
COAST LIVE OAK
Quercus agrifolia



Evergreen Shrub
JAPANESE PRIVET
Ligustrum japonicum

Evergreen Shrub
CATALINA PERFUME
Ribes viburnifolium

Deciduous Shrub
CA HONEYSUCKLE
Lonicera hispidula

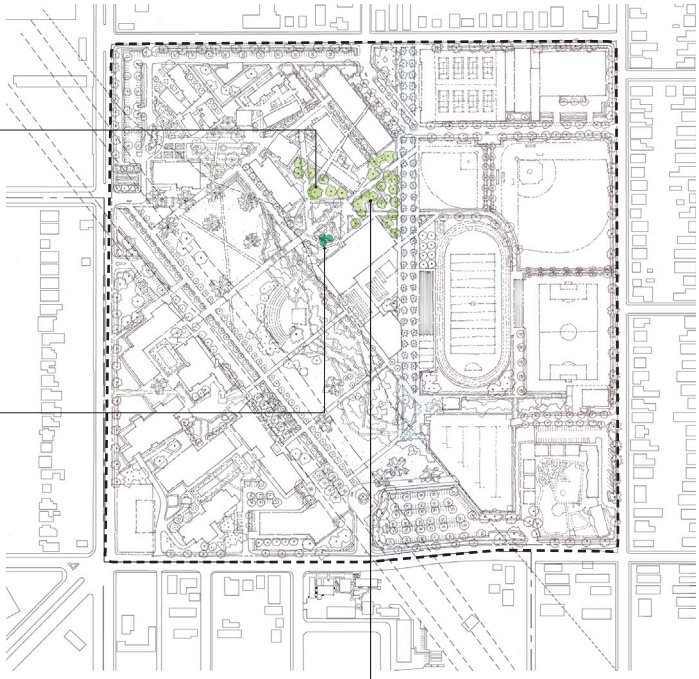
Deciduous Shrub
PINK FLOWERED CURRANT
Ribes sanguineum glutinosum

Deciduous Shrub
ROSES
Rosa sp.

Evergreen Groundcover
STAR JASMINE
Trachelospermum jasminoides

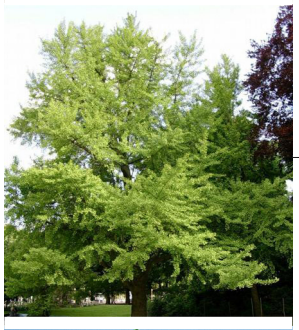
7| WELLNESS GARDEN

Deciduous Tree
SILK FLOSS TREE
Chorisia speciosa



Evergreen Tree
SOUTHERN MAGNOLIA
Magnolia grandiflora

Deciduous Tree
CHINESE ELM
Ulmus parvifolia



Deciduous Tree
GINKGO
Ginkgo biloba

Deciduous Tree
SWEETGUM
Liquidambar styraciflua

Evergreen Tree
EUCALYPTUS
Eucalyptus sp.

7| WELLNESS GARDEN (CONT'D)

Evergreen Shrub
YANKEE POINT
Ceanothus griesus horizantalis

Evergreen Shrub
ROSEMARY
Rosmarinus officinalis

Evergreen Shrub
WHITE SAGE
Salvia apiana

Evergreen Shrub
HUMMINGBIRD SAGE
Salvia spathacea

Evergreen Shrub
JAPANESE PRIVET
Ligustrum japonicum

Evergreen Shrub
JUNIPER
Juniperus sp.

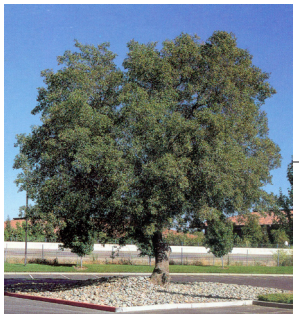
Evergreen Shrub
LAVENDER
Lavandula sp.

Succulent
AGAVE
Agave sp.

Succulent
ALOE
Aloe sp.

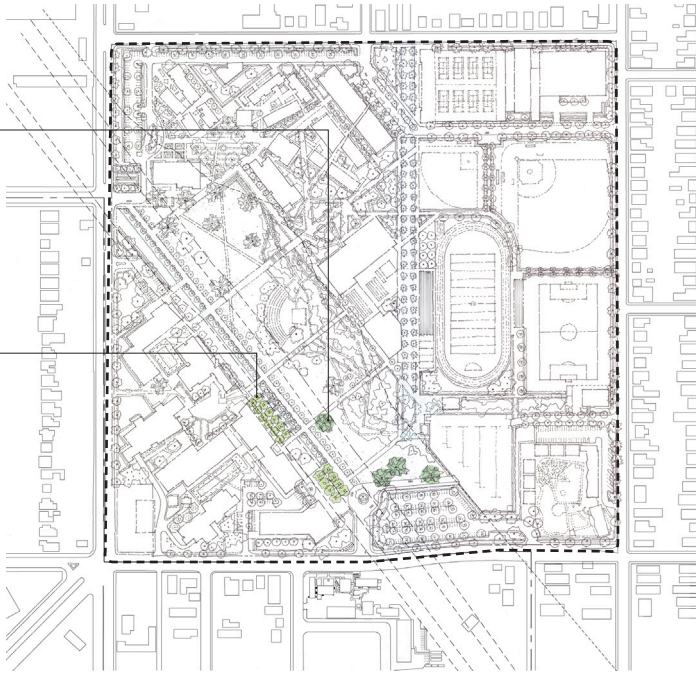
Evergreen Groundcover
STAR JASMINE
Trachelospermum jasminoides

8| EVENTS DISTRICT



Evergreen Tree
COAST LIVE OAK
Quercus agrifolia

Deciduous Tree
CHINESE ELM
Ulmus parvifolia



Evergreen Shrub
JAPANESE PRIVET
Ligustrum japonicum

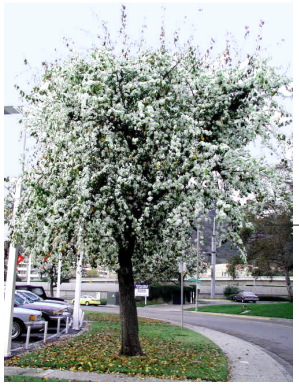
Foreground Grass
DWARF PURPLE FOUNTAIN GRASS
Pennisetum setaceum "Rubrum Dwarf"

Evergreen Groundcover
STAR JASMINE
Trachelospermum jasminoides

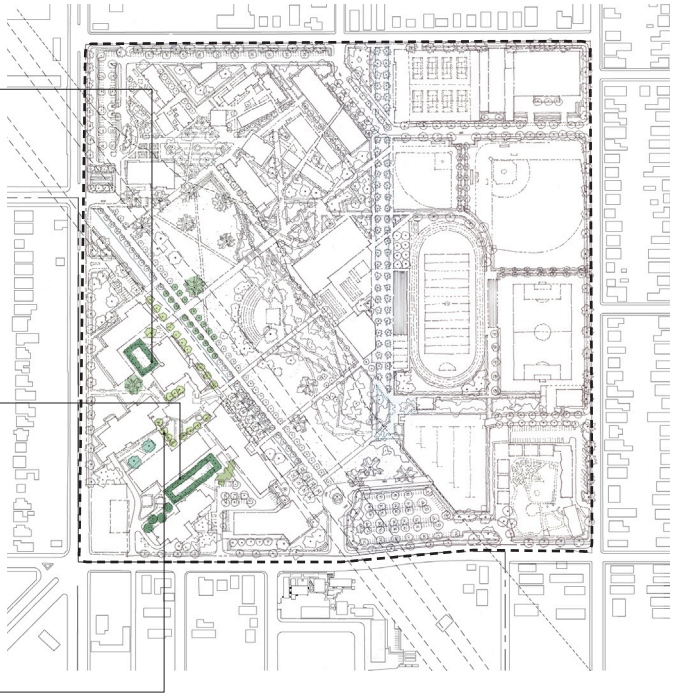
9| STUDENT COMMONS

Evergreen Tree
OLIVE
Olea europea 'Swan Hill'

Deciduous Tree
CRAPE MYRTLE
Lagestroemia indica



Evergreen Tree
EVERGREEN PEAR
Pyrus kawakamii



Deciduous Shrub
PINK FLOWERED CURRANT
Ribes sanguineum glutinosum

Evergreen Shrub
JAPANESE PRIVET
Ligustrum japonicum

Deciduous Vine
DESERT WILD GRAPE
Vitis girdiana

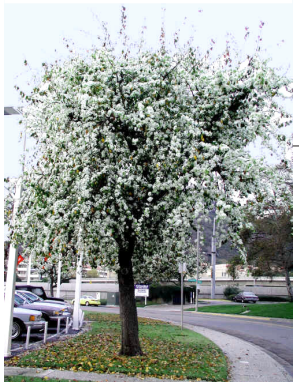
Foreground Grass
BLUE FESCUE
Festuca ovina "Glauca"

Background Grass
NEW ZEALAND FLAX
Phormium tenax

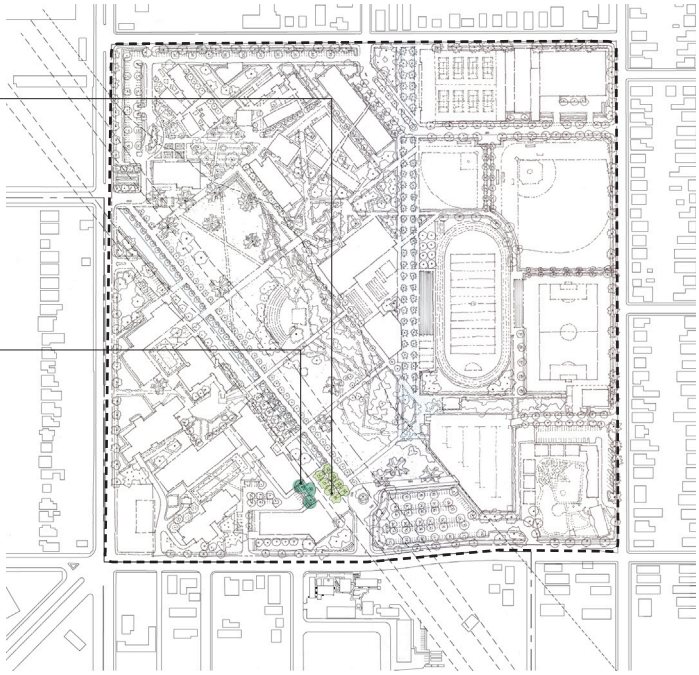
Evergreen Groundcover
STAR JASMINE
Trachelospermum jasminoides

10| PLAZA

Deciduous Tree
CRAPE MYRTLE
Lagestroemia indica



Evergreen Tree
EVERGREEN PEAR
Pyrus kawakamii



Evergreen Shrub
JAPANESE PRIVET
Ligustrum japonicum

Background Grass
NEW ZEALAND FLAX
Phormium tenax

Succulent Groundcover
SENECIO
Senecio mandraliscae

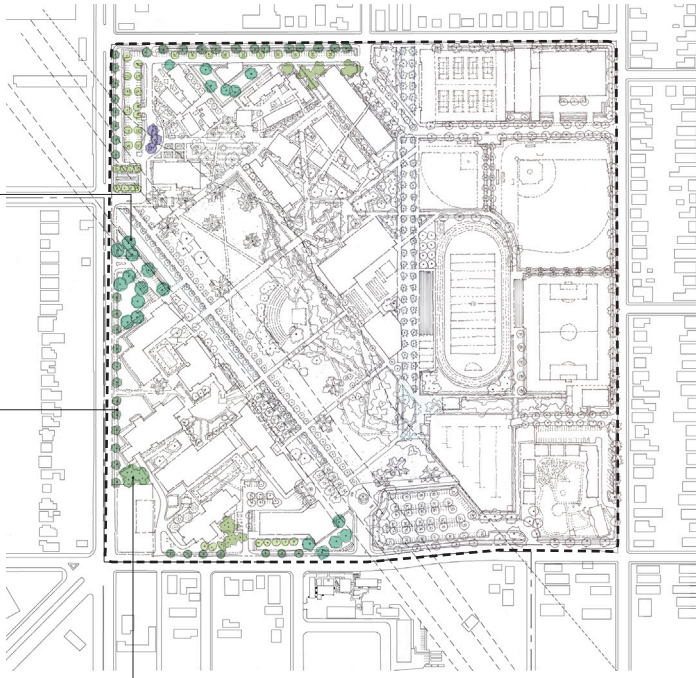
Evergreen Groundcover
STAR JASMINE
Trachelospermum jasminoides

11 | MOUNT VERNON LANDSCAPE

Evergreen Tree
SOUTHERN MAGNOLIA
Magnolia grandiflora

Deciduous Tree
TULIPTREE
Tulipifera liriodendron

Evergreen Tree
EUCALYPTUS
Eucalyptus sp.



Evergreen Shrub
JAPANESE PRIVET
Ligustrum japonicum

Background Grass
NEW ZEALAND FLAX
Phormium tenax

Evergreen Groundcover
STAR JASMINE
Trachelospermum jasminoides

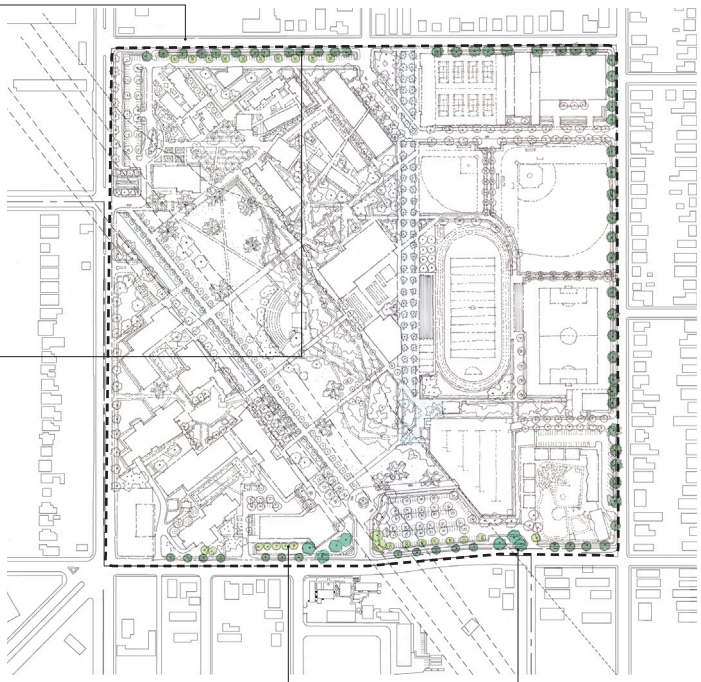
12| SBVC STREETSCAPE

Deciduous Tree
CRAPE MYRTLE
Lagestroemia indica

Evergreen Tree
CANARY ISLAND PINE
Pinus canariensus

Deciduous Tree
TIPU
Tipuana tipu

Evergreen Tree
EUCALYPTUS
Eucalyptus sp.



Evergreen Shrub
JAPANESE PRIVET
Ligustrum japonicum

Evergreen Groundcover
STAR JASMINE
Trachelospermum jasminoides

COMPREHENSIVE PLANT LIST

Campus Region	Botanical Name	Common Name	Plant Type
The Glade	*Jacaranda mimosifolia*	Jacaranda	Deciduous Tree
	Quercus agrifolia	Coast Live Oak	Evergreen Tree
	Heteromeles arbutifolia	Toyon	Evergreen Shrub
	Ligustrum japonicum	Japanese Privet	Evergreen Shrub
	Trachelosperumum jasminoides	Star Jasmine	Evergreen Groundcover
Riparian Garden & San Jacinto Fault Interpretive Walk	*Celtis occidentalis*	Hacktree	Deciduous Tree
	Populus fremontii	Cottonwood	Deciduous Tree
	Betula nigra	Black Birch	Deciduous Tree
	Baccharis pilularis	Dwarf Coyote Brush	Perennial Shrub
	Iris douglasiana	Douglas Iris	Perennial Shrub
	Ligustrum japonicum	Japanese Privet	Evergreen Shrub
	Festuca ovina 'Glauca'	Blue Fescue	Foreground Grass
	Juncus patens	CA Gray Rush	Perennial Grass
	Trachelosperumum jasminoides	Star Jasmine	Evergreen Groundcover
Campus Walk	*Platanus acerfolia*	London Plane Tree	Deciduous Tree
	Ligustrum japonicum	Japanese Privet	Evergreen Shrub
	Trachelosperumum jasminoides	Star Jasmine	Evergreen Groundcover
North/South Campus Walk	*Phoenix dactylifera*	Date Palm	Evergreen Tree
	Ligustrum japonicum	Japanese Privet	Evergreen Shrub
	*Phormium tenax**	New Zealand Flax	Background Grass
	Trachelosperumum jasminoides	Star Jasmine	Evergreen Groundcover
Cultural Plaza	*Jacaranda mimosifolia*	Jacaranda	Deciduous Tree
	Pinus canariensis	Canary Island Pine	Evergreen Tree
	Quercus agrifolia	Coast Live Oak	Evergreen Tree
	Lonicera hispidula	CA Honeysuckle	Deciduous Shrub
	Rosa sp.	Roses	Deciduous Shrub
	Ligustrum japonicum	Japanese Privet	Evergreen Shrub
	Ribes sanguineum glutinosum	Pink Flowered Currant	Deciduous Shrub
	Ribes viburnifolium	Catalina Perfume	Evergreen Shrub
	Trachelosperumum jasminoides	Star Jasmine	Evergreen Groundcover
Wellness Garden	*Chorisia speciosa*	Silk-Floss Tree	Deciduous Tree
	Ginkgo biloba	Ginkgo	Deciduous Tree
	Liquidambar styraciflua	Sweet Gum	Deciduous Tree
	Ulmus parvifolia	Chinese Elm	Deciduous Tree
	Eucalyptus sp.	Eucalyptus	Evergreen Tree
	Ceanothus griesus horizontalis	Yankee Point	Evergreen Shrub

COMPREHENSIVE PLANT LIST (CONT'D)

Campus Region	Botanical Name	Common Name	Plant Type
	Rosmarinus officinalis	Rosemary	Evergreen Shrub
	Salvia apiana	White Sage	Evergreen Shrub
	Salvia spathacea	Hummingbird Sage	Evergreen Shrub
	Ligustrum japonicum	Japanese Privet	Evergreen Shrub
	Juniperus sp.	Juniper	Evergreen Shrub
	Lavandula sp	Lavender	Evergreen Shrub
	Agave sp	Agave	Succulent
	Aloe sp	Aloe	Succulent
	Trachelosperumum jasminoides	Star Jasmine	Evergreen Groundcover
Events District	*Ulmus parvifolia*	Chinese Elms	Deciduous Tree
	Ceanothus arboreus	Island Ceanothus	Evergreen Shrub
	Ligustrum japonicum	Japanese Privet	Evergreen Shrub
	Pennisetum setaceum 'Rubrum Dwarf'	Dwarf Purple Fountain Grass	Foreground Grass
	Trachelosperumum jasminoides	Star Jasmine	Evergreen Groundcover
Student Commons	*Lagestromia indica*	Crape Myrtle	Deciduous Tree
	Olea europea 'Swan Hill'	Olive	Evergreen Tree
	Pyrus kawakamii	Evergreen Pear	Evergreen Tree
	Ribes sanguineum glutinosum	Pink Flowered Currant	Deciduous Shrub
	Ligustrum japonicum	Japanese Privet	Evergreen Shrub
	Vitis girdiana	Desert Wild Grape	Deciduous Vine
	Festuca ovina 'Glauca'	Blue Fescue	Foreground Grass
	*Phormium tenax**	New Zealand Flax	Background Grass
	Trachelosperumum jasminoides	Star Jasmine	Evergreen Groundcover
Media Plaza	*Lagestromia indica*	Crape Myrtle	Deciduous Tree
	Pyrus kawakamii	Evergreen Pear	Evergreen Tree
	Ligustrum japonicum	Japanese Privet	Evergreen Shrub
	Scenecio mandraliscae	Scenecio	Succulent Groundcover
	*Phormium tenax**	New Zealand Flax	Background Grass
	Trachelosperumum jasminoides	Star Jasmine	Evergreen Groundcover
Mt. Vernon Landscape	*Magnolia grandiflora*	Southern Magnolia	Evergreen Tree
	Ligustrum japonicum	Japanese Privet	Evergreen Shrub
	*Phormium tenax**	New Zealand Flax	Background Grass
	Trachelosperumum jasminoides	Star Jasmine	Evergreen Groundcover
SBVC Streetscape	*Pinus canariensis*	Canary Island Pine	Evergreen Tree

COMPREHENSIVE PLANT LIST (CONT'D)

	Eucalyptus sp.	Eucalyptus	Evergreen Tree
Campus Region	**Botanical Name**	**Common Name**	**Plant Type**
	Tipuana tipu	Tipu	Deciduous Tree
	Lagerstroemia sp.	Crape Myrtle	Deciduous Tree
	Ligustrum japonicum	Japanese Privet	Evergreen Shrub
	Trachelosperumum jasminoides	Star Jasmine	Evergreen Groundcover
Athletic Fields	*Cinnamomum camphora*	Camphor	Evergreen Tree
	Lagerstroemia sp.	Crape Myrtle	Deciduous Tree
	Ligustrum japonicum	Japanese Privet	Evergreen Shrub
	Trachelosperumum jasminoides	Star Jasmine	Evergreen Groundcover

* Plant with ample space in between plant, site furnishing and other site amenities to avoid crowding.
Notes:

1. When not specified, use a single variety of the species listed throughout the project to maintain consistency.

2. Avoid materials with limited distribution. Plant materials that are only distributed by a single grower may become unavailable or available only at a premium cost.

3. All trees to be inspected and approved by the client or client's representative. Purchase of trees to be verified by receipt at time of delivery.

4. All plant material coming from Red Fire Ant (RFA) regions must be accompanied by RFA free certificate. All plant material and sources must be approved by client or client's representative. Plant material must be inspected and may be rejected by client or client's representative at time of delivery.

5. Avoid placement of trees with significant fruit or flower drop over walkways, seating, or parking.

6. Identify current pest issues for each plant species.

7. Trees to be preserved in place must be protected and maintained during construction activities. The area 20% to 40% beyond the dripline of the tree must not be used for any purposes during construction including lunch and breaks for workers, storage, or for parking. Contractor is responsible for providing trees with deep irrigation and managing resultant runoff during construction.

8. Identify the feeding field of all trees to be preserved. Make sure impervious surfaces to be installed are not built over feeding fields.

9. Design drawings to include plant material and irrigation as-builds. To protect the integrity of the designer's intent though the life cycle of the project, designers should also include a maintenance manual describing the critical procedures for sustaining the intended planting scheme.

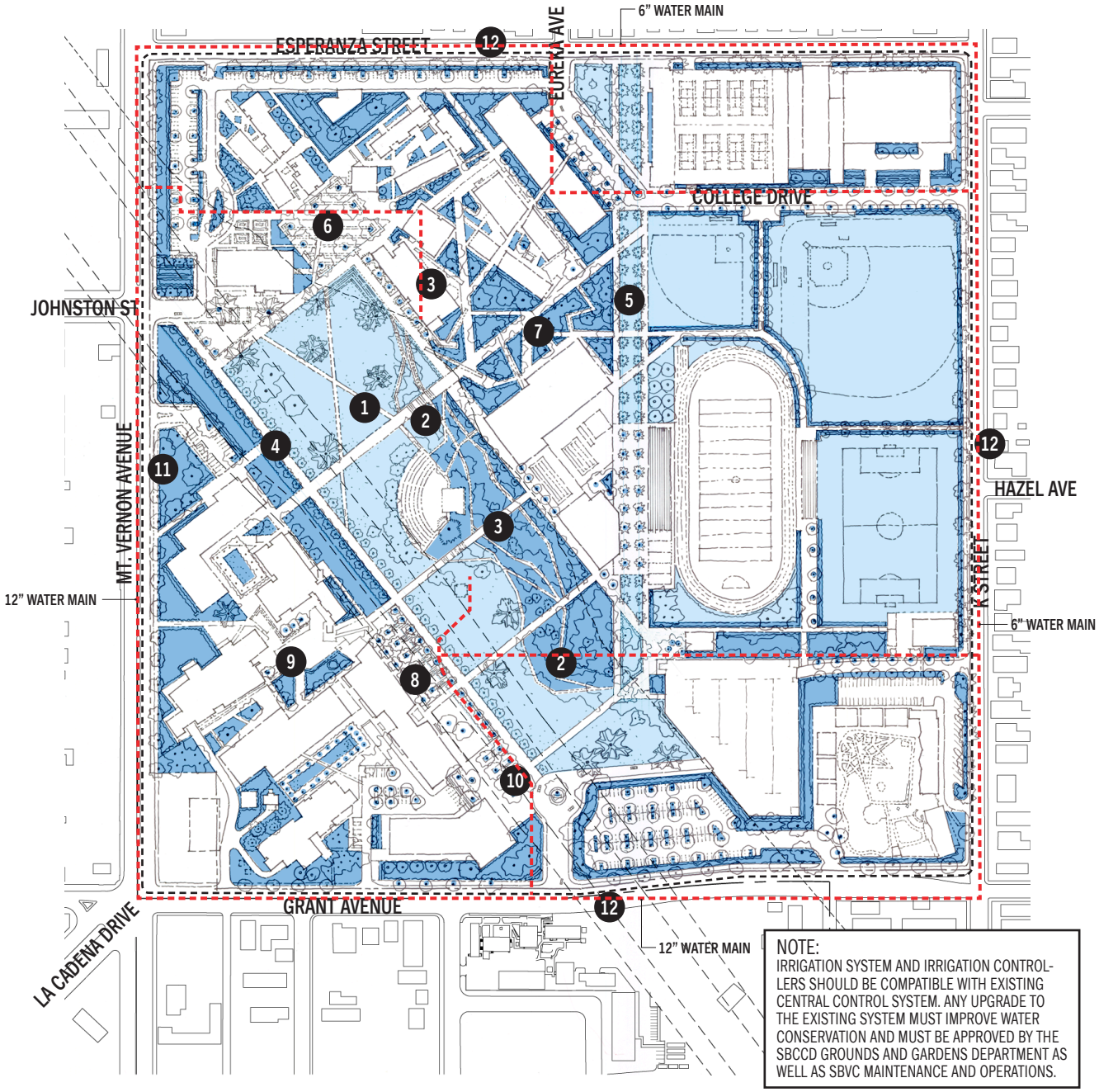
10. Soil amendment will be based recommendation of reputable soil label. Soil lab will take multiple representative soil samples for each landscape site. Soil amendments are to be purchased from agreed upon sources and verified with presentation of receipts at time of delivery (or).

11. Test all tree wells and planting pits for adequate drainage using standard methods.

12. Install geotextile weed barriers and 2" to 4" of mulch for all tree wells and planting beds.

13. Make sure tree wells for trees to be planted in turf areas are sized adequately. Tree wells in turf areas should be mulched and irrigated by a sub-surface irrigation system separate from the system intended for turf irrigation. The placement of

IRRIGATION



LEGEND

DRIP
INLINE AT GROUNDCOVER & SHRUBS

ROTORS
SPRAYHEADS AT LAWN & OPEN FIELD

DRIP
PER AGREEMENT WITH THE CITY OF SAN BERNARDINO

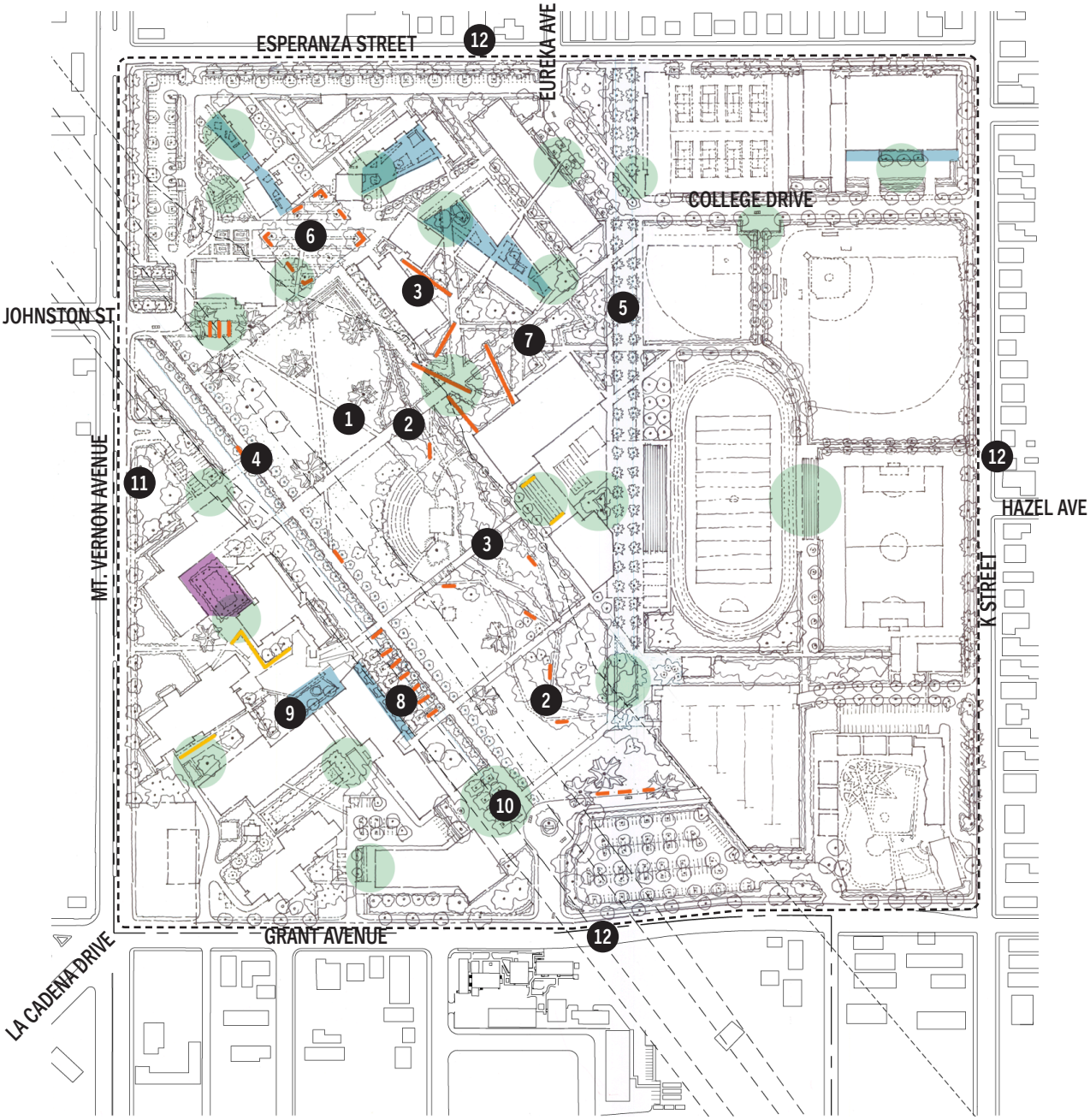
EXISTING WATER MAINS
TIE NEW IRRIGATION SYSTEMS INTO EXISTING WATER MAINS LOCATED ALONG ADJACENT STREETS. PROVIDE BACKFLOW PREVENTOR AT EACH POINT OF CONNECTION. SURVEY EXISTING IRRIGATION LINES TO SUPPORT NEW LINES

0' 175' 350'

LANDSCAPE PLACES

1	THE GLADE
2	SAN JACINTO FAULT INTERPRETIVE WALK
3	RIPARIAN GARDEN
4	CAMPUS WALK
5	NORTH/SOUTH CAMPUS WALK
6	CULTURAL PLAZA
7	WELLNESS GARDEN
8	EVENTS DISTRICT
9	STUDENT COMMONS
10	PLAZA
11	MOUNT VERNON LANDSCAPE
12	SBVC STREETSCAPE

SITE FURNISHING



LEGEND

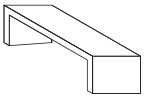
- CONCRETE BENCH — FIXED
- STEEL BENCH — FIXED
- TABLES + CHAIRS — FIXED
- COMBINATION — BENCHES + TABLES AND CHAIRS
- WASTE RECEPTACLES

0' 175' 350'

LANDSCAPE PLACES

1	THE GLADE
2	SAN JACINTO FAULT INTERPRETIVE WALK
3	RIPARIAN GARDEN
4	CAMPUS WALK
5	NORTH/SOUTH CAMPUS WALK
6	CULTURAL PLAZA
7	WELLNESS GARDEN
8	EVENTS DISTRICT
9	STUDENT COMMONS
10	PLAZA
11	MOUNT VERNON LANDSCAPE
12	SBVC STREETSCAPE

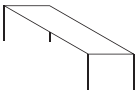
SITE FURNISHING



CONCRETE BENCH
FIXED

PRE-CAST CONCRETE

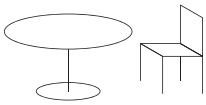
QUICK CRETE
'HOLLYWOOD' #Q2HD60B*
http://www.quickcrete.com



STEEL BENCH
FIXED

CLEAR-COATED STEEL

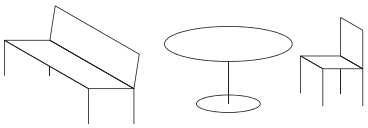
FORMS+SURFACES
'FOUNDATION BENCH'*
http://www.forms-surfaces.com



TABLES + CHAIRS
FIXED

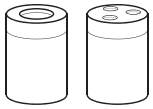
POWDER-COATED STEEL
[MATCH EXISTING]

LANDSCAPE FORMS
'CAROUSEL'*
http://www.landscapeforms.com



COMBINATION
BENCHES / TABLES+CHAIRS

[SAME AS STEEL BENCH ABOVE]



WASTE RECEPTACLES
GROUND FLOOR

PRECAST CONCRETE
COLOR: DOVE GRAY

'CONCRETE LITTER CONTAINER
W/CONVEX SPUN LID'
http://www.parkequipmentpro.com

[OR MATCH EXISTING}

WASTE RECEPTACLES
2ND FLOOR

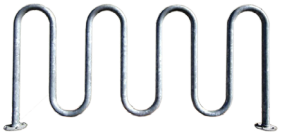
POWDER-COATED STEEL
COLOR: SILVER

LANDSCAPEFORMS
'CHASE PARK'*, 'PETOSKEY'*, OR
'SCARBOROUGH'*
http://www.landscapeforms.com

BIKE RACK
FIXED

GALVANIZED STEEL
COLOR: SILVER

[AS NEEDED]

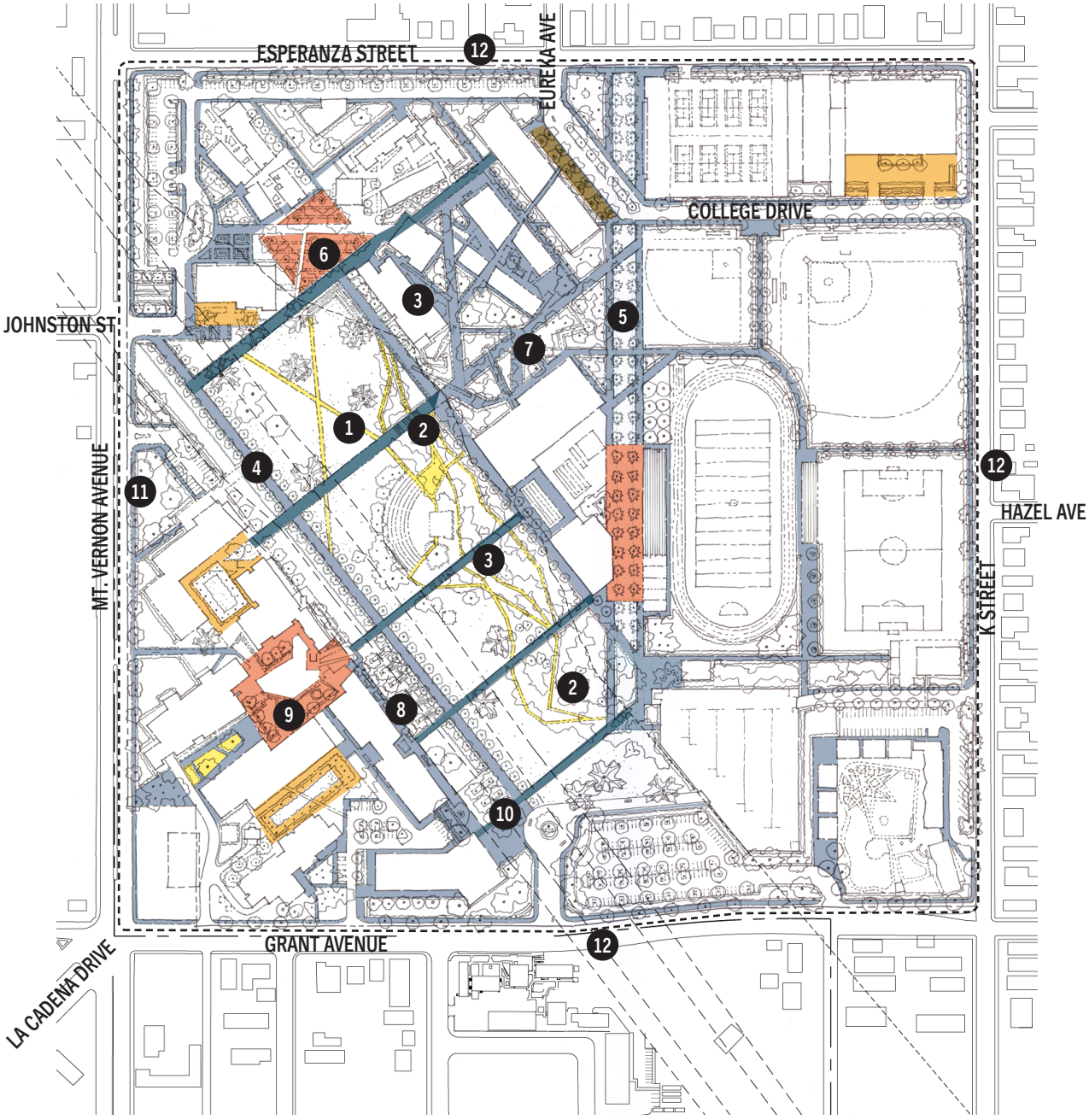


ASH RECEPTACLE

PRE-CAST CONCRETE
[MATCH EXISTING / AS NEEDED]

*OR SIMILAR TO BE APPROVED BY CLIENT.

HARDSCAPE



LEGEND

- STAMPED CONCRETE — MAIN PLAZAS / SPECIAL USE AREAS
- CONCRETE UNIT PAVERS — COURTYARDS / ENTRY PLAZAS / DROP-OFFS
- DECOMPOSED GRANITE — SECONDARY COURTYARDS / PARKING ADJACENT PLAZAS
- COLORED CONCRETE — MAJOR PATHWAYS
- GLARE REDUCED CONCRETE — HIGH TRAFFIC AREAS / HIGH VOLUME USE

0' 175' 350'

LANDSCAPE PLACES

1	THE GLADE
2	SAN JACINTO FAULT INTERPRETIVE WALK
3	RIPARIAN GARDEN
4	CAMPUS WALK
5	NORTH/SOUTH CAMPUS WALK
6	CULTURAL PLAZA
7	WELLNESS GARDEN
8	EVENTS DISTRICT
9	STUDENT COMMONS
10	PLAZA
11	MOUNT VERNON LANDSCAPE
12	SBVC STREETSCAPE

HARDSCAPE

STONE PAVERS



COLOR AND PATTERN TBD

CONCRETE UNIT PAVERS



STEPSTONE, INC.
'CAL-ARCH NARROW MODULAR PAVER'
2 7/8" x 23 7/8" , 17 7/8", OR 8 7/8"

ACKER-STONE
INTERLOCKING CONCRETE PAVERS
6" x 12" OR 12" x 24"

COLORED CONCRETE



COLOR, SCORING, PATTERN AND FINISHES TBD

GLARE REDUCED CONCRETE



COLOR, SCORING, PATTERN AND FINISHES TBD

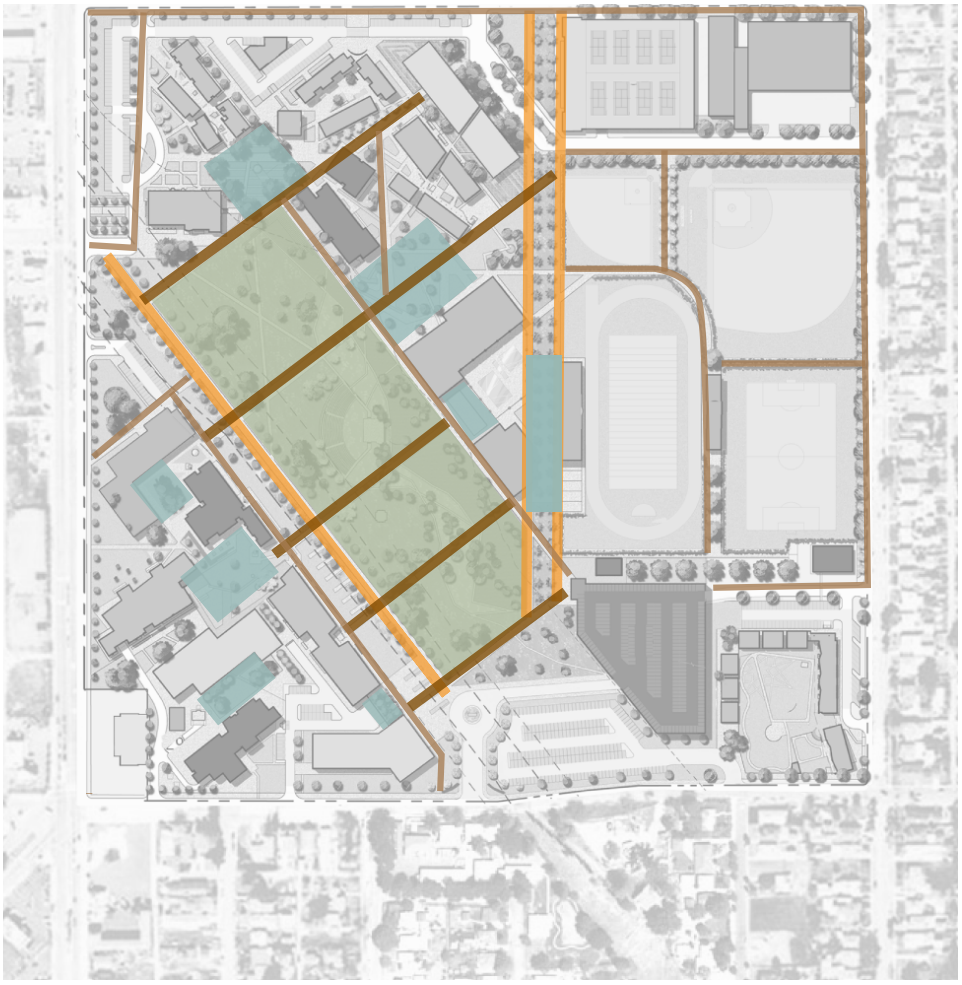
DECOMPOSED GRANITE



Note: Not to be used for primary pathways.

7
LIGHTING GUIDELINES

SUMMARY PROPOSED FIXTURE LOCATIONS



The above diagram illustrates the breakdown of zones of lighting which will be treated with varying lighting approaches, either due to differences in light level requirements or to assist with creating hierarchies and special areas within the campus.

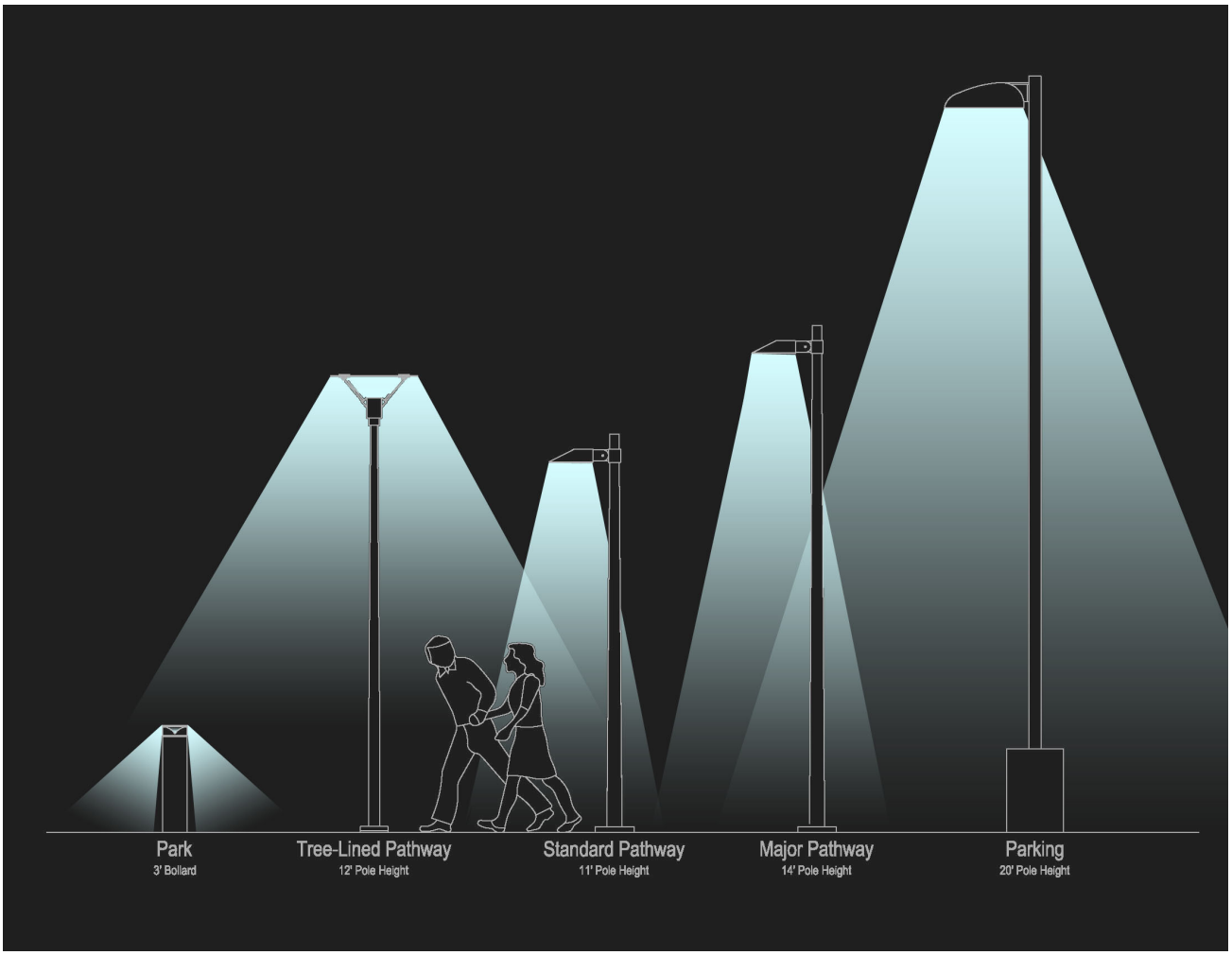
A general pathway solution will be utilized for the majority of public pathways throughout the campus. Major pathways will be delineated with larger scale luminaires. The tree-lined pathways will utilize unique fixtures to the project which will assist in providing accent light onto the trees, while lighting for the park paths and plazas will be smaller scale fixtures complimenting accent lighting that will be provided for the feature elements and landscaped elements within these areas.

The College shall advise regarding the sports fields and tennis courts as to whether it is desired to provide lighting to allow for the use of these facilities during evening hours. Fixtures utilized to illuminate the tennis courts should be full-cutoff type utilizing metal halide lamps, and shielding options should be considered for the sports fields luminaires to minimize any stray light from trespassing onto neighboring properties.

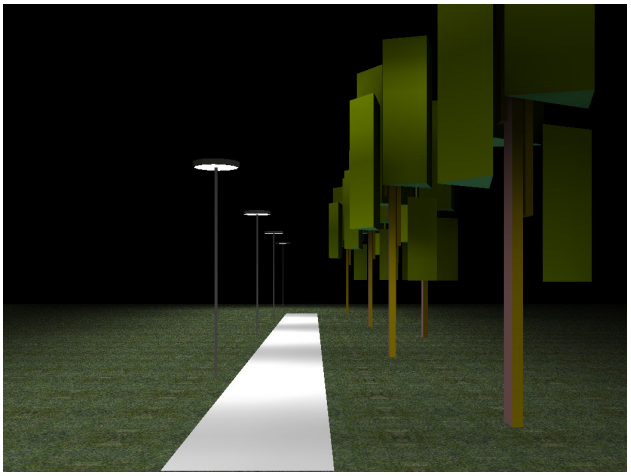
FIXTURE FAMILY

The following diagram illustrates the proposed family of fixtures to be utilized for the standard pathways, major pathways, tree-lined pathways, park pathways and open parking areas.

- The major pathway fixtures are to have a larger scale than the standard pathway fixtures, but utilize the same fixture head.
- The tree-lined pathway fixtures are to have a larger scale than the standard pathway fixtures, and utilize a unique fixture head to assist in creating a hierarchy for these pathways.
- The park fixture is to be a low scaled bollard to assist in creating a more intimate feel to these pathways.
- All fixtures/poles to have similar finish (satin aluminum/silver).



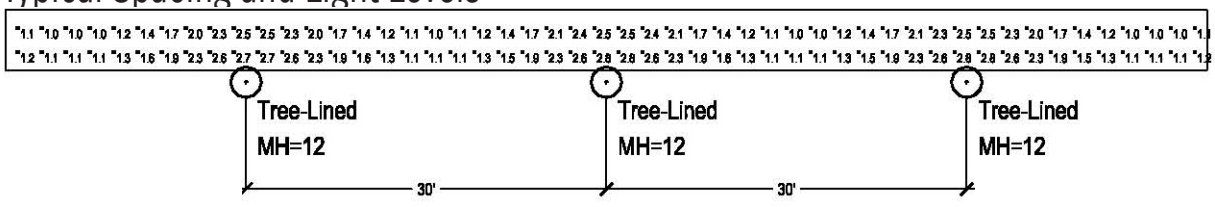
TREE-LINED PATHWAYS



The tree-lined pathway fixtures are of unique appearance to the site to assist in creating a unique character to these paths. The optical assemblies are indirect reflectors, which will assist in providing accent light onto adjacent trees, as well as provide appropriate light levels on the paths. The adjustable head angle is set into place with a locking mechanism. To achieve the desired lighting levels on the pathways of 1.0 Foot-candles minimum, the following typical fixture/spacing/lamp should be utilized (typical spacing to be adjusted as necessary for unique path geometries so that 1.0 Fc minimum is achieved):

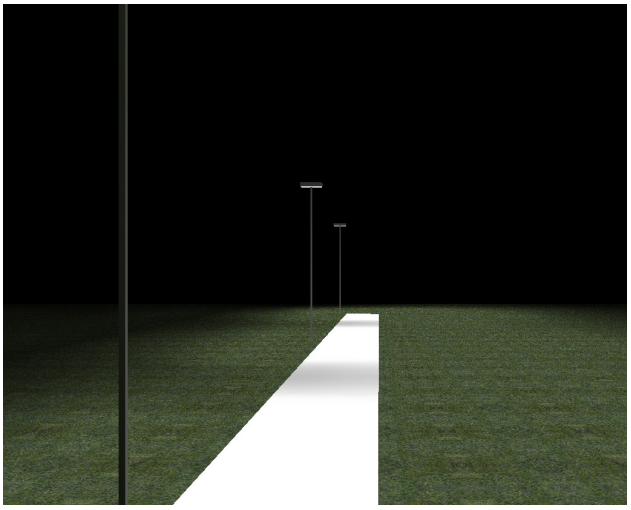
- Fixture: Bega 8200MH
- Lamping: MC70/T6/U/G12/830
- Pole height so that bottom of fixture head is 12' above grade
- Spacing: 30' OC

Typical Spacing and Light Levels



Scale: 1/16" = 1'-0"

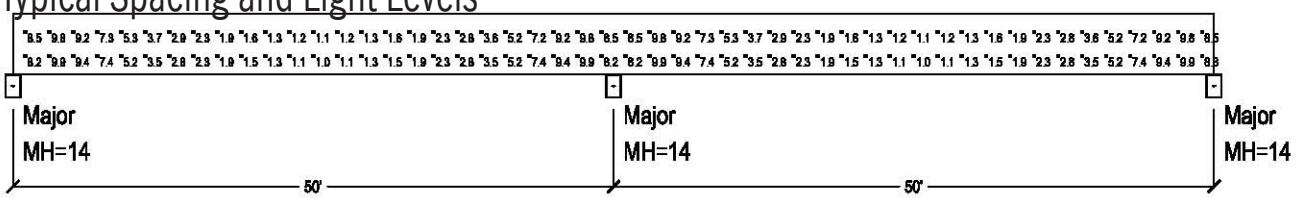
MAJOR PATHWAYS



The major pathway fixtures are the same as the standard pathway fixtures, except mounted on a taller pole and utilizing higher wattage lamps. To achieve the desired lighting levels on the pathways of 1.0 Foot-candles minimum, the following typical fixture/spacing/lamp should be utilized (typical spacing to be adjusted as necessary for unique path geometries so that 1.0 Fc minimum is achieved):

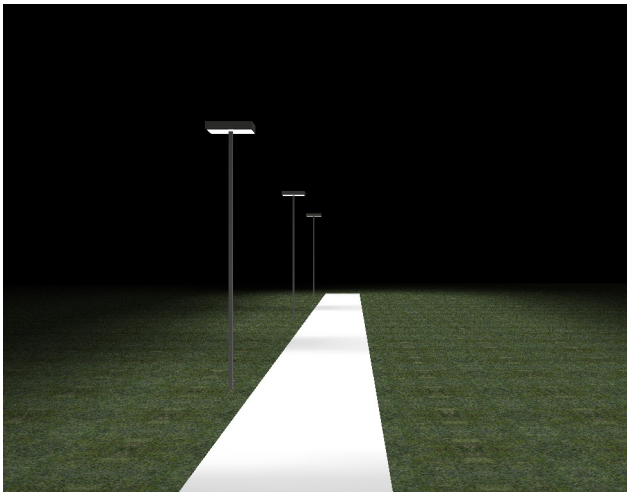
- Fixture: Pace ASFL-1650-III
- Lamping: CDM150/T6/830
- Pole height so that bottom of fixture head is 14' above grade
- Spacing: 50' OC

Typical Spacing and Light Levels



Scale: 1/16" = 1'-0"

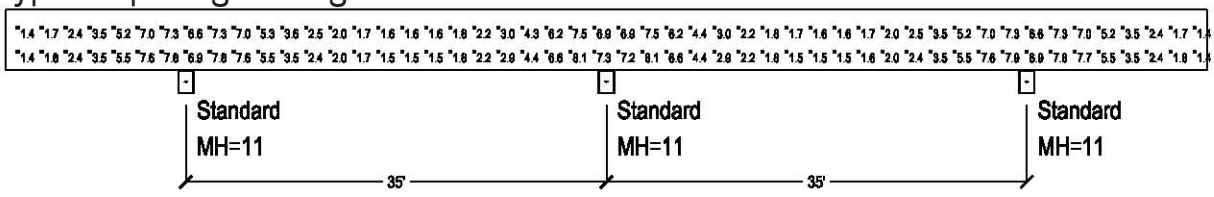
STANDARD PATHWAYS



The standard pathway fixtures are of similar appearance to the "modern" style fixtures currently used for the pedestrian paths. The optical assembly allows for a more uniform light level, however, when compared to the existing pathway pole fixtures. To achieve the desired lighting levels on the pathways of 1.0 Foot-candles minimum, the following typical fixture/spacing/lamp should be utilized (typical spacing to be adjusted as necessary for unique path geometries so that 1.0 Fc minimum is achieved):

- Fixture: Pace ASFL-1650-III
- Lamping: CDM70/T6/830
- Pole height so that bottom of fixture head is 11' above grade
- Spacing: 36' OC

Typical Spacing and Light Levels

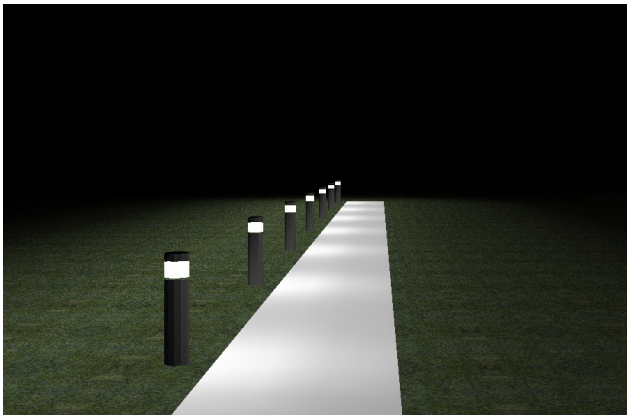


Scale: 1/16" = 1'-0"

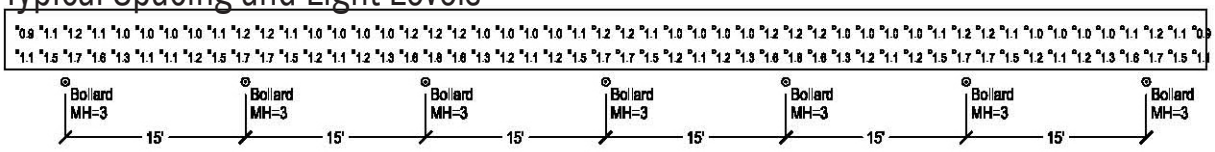
PARK PATHWAYS

The park pathway fixtures are small scale bollard fixtures to create a more intimate feel in the park. In addition to these bollard fixtures, in-grade uplights are to be provided to accent and highlight "feature trees" located in the park. To achieve the desired lighting levels on the pathways of 1.0 Foot-candles minimum, the following typical fixture/spacing/lamp should be utilized (typical spacing to be adjusted as necessary for unique path geometries so that 1.0 Fc minimum is achieved):

- Fixture: Erco 33352000
- Lamping: CDM39/T6/U/G12/830
- Spacing: 15' OC



Typical Spacing and Light Levels



Scale: 1/16" = 1'-0"

PLAZAS

Plaza lighting should respond to the design of each individual plaza so that the unique features of each space are highlighted. The following feature elements (as well as others) should be considered to be highlighted with light:

- Fountain Lighting
- Under Bench Lighting
- In-grade tree uplights

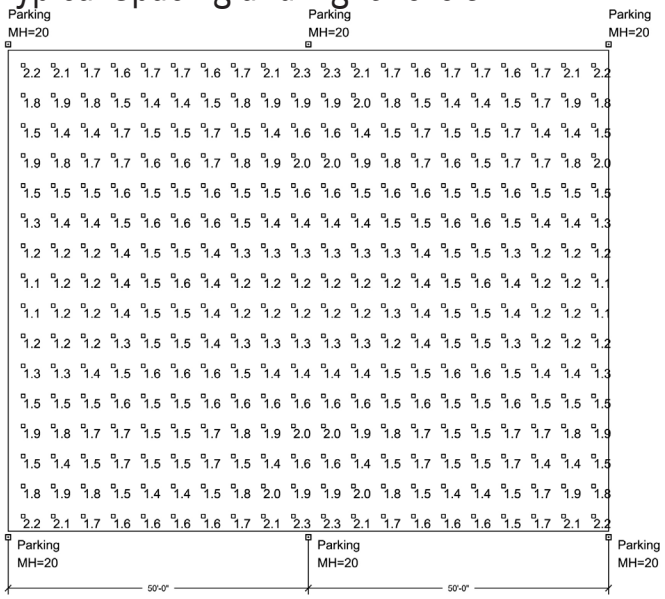
Pathway pole fixtures should be kept at the perimeter of the plazas to keep the focus of light onto the features within them.

PARKING

The parking lot fixtures currently utilized on campus provide appropriate light levels, and it is recommended to continue utilizing this fixture. To achieve the desired lighting levels on the parking lots of .9 Foot-candles minimum with an average/minimum ratio of 4:1, the following typical fixture/spacing/lamp should be utilized (typical spacing to be adjusted as necessary for parking lot geometries so that the above parking lot lighting level criteria is achieved):

- Fixture: Lithonia AS1/150M/SR4SC
- Lamping: MCP150/C/U/MED/830
- Pole height so that bottom of fixture head is 20' above grade
- Spacing: 50' OC

Typical Spacing and Light Levels



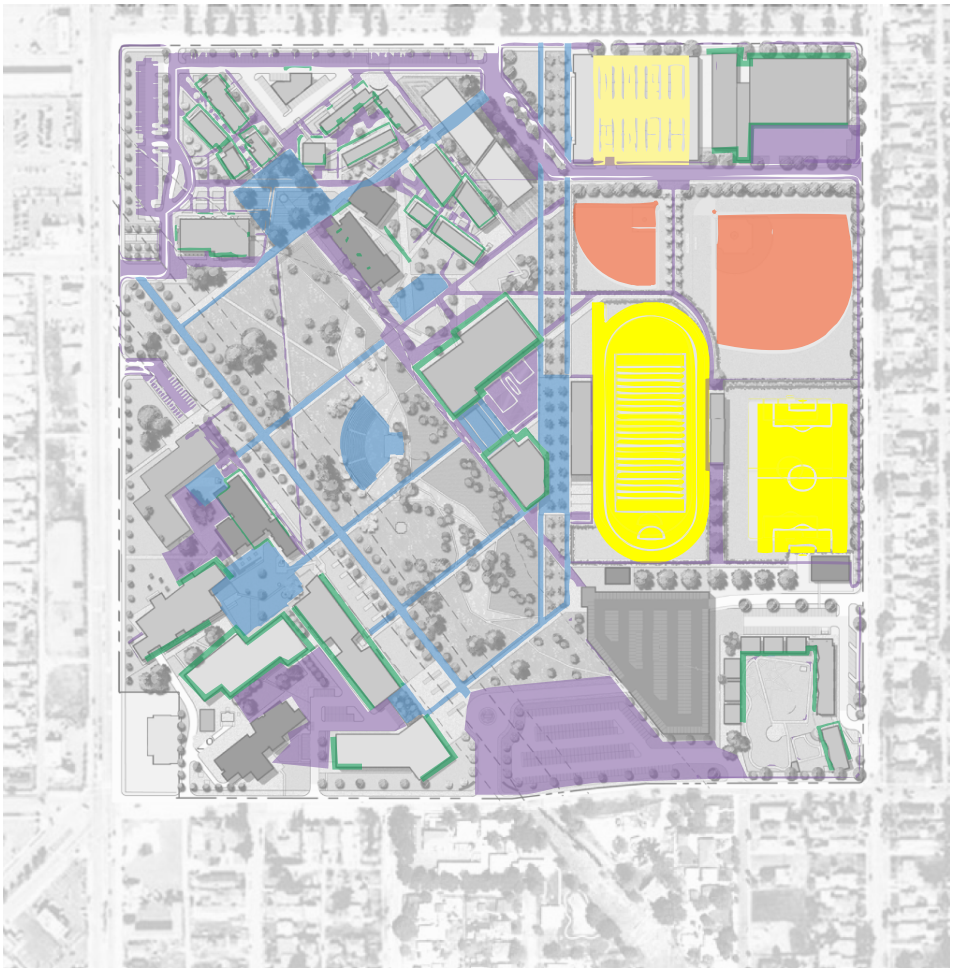
Scale: 1/32" = 1'-0"

BUILDING LIGHTING

New building feature facade elements should be highlighted, either with washing of light, patterns of light or decorative fixtures. Decorative or functional fixtures utilized on the building should have a strong relationship with the building's architectural forms. Since each building designed for the site will be unique, each will need appropriate study to determine which features will be highlighted or washed with light.

It is important for elements on the buildings to be illuminated, since the standard pathway lighting fixtures are full cut-off and will not provide a soft glow of light onto the building, which is important to create a volume of space next to the building which feels safe and welcoming.

PROPOSED LIGHT LEVELS - HORIZON 3



The following diagrams summarize the recommended light levels previously indicated in the summary of the individual area types (see pages 5.12 and 5.13 for a summary of the typical spacing summaries, including fixture/lamp information and illumination summary charts). The majority of the site (general pathways and parking areas) is recommended to have fairly even illumination levels, with feature pathways, and plazas to have slightly higher light levels to accentuate these spaces. Building entries/covered perimeters are to have higher illumination levels to focus attention to these areas and for security.

Recommended light levels for the tennis courts is based on existing tennis court light levels and IES recommended light levels for Class IV courts (see page 5.13). The football and baseball field recommended light levels are based on IES recommended light levels for Class II play. The College is to advise as to the classification of play that is closest to the intended use for each field to confirm light level goals for these areas.

TYPICAL SPACING CALCULATIONS NUMERIC SUMMARY AND LUMINAIRE SCHEDULES

Numeric Summary					
Project: 06131 San Bernandino Valley College Masterplan					
Label	Avg	Max	Min	Avg/Min	Max/Min
Tree-Lined Pathway	1.72	2.8	1.0	1.72	2.80
Major Pathway	4.42	9.9	1.0	4.42	9.90
Minor Pathway	4.13	8.1	1.4	2.95	5.79
Park Pathway	1.23	1.8	0.9	1.37	2.00
Parking Lot	1.56	2.3	1.1	1.42	2.09

Luminaire Schedule					
Symbol	Label	Description	Lumens	LLF	Filename
	Tree-Lined	Bega 8200MH with (1) MC70T6/U/G12/830	6700	0.611	8200MH.ies
	Major	Pace ASFL-1650-III with (1) CDM150/T6/830	14000	0.611	ASFL III-12.IES
	Minor	Pace ASFL-1650-III with (1) CDM70/T6/830	6600	0.611	ASFL III-12.IES
	Bollard	Erco 33352000 with (1) MC39T6/U/G12/830	3400	0.611	ERCO_33352000_1xHIT-CE_35W.ies
	Parking	Lithonia AS1 150M SR4SC wiht (1) MCP150/C/U/MED/830	12000	0.611	iesfiles_Lithonia_Lighting_Outdoor_Area_As_Ltl10092.ies

Date:9/13/2006

Filename: R:\06\06131 San Bernardino Valley College\CALCS\091206 All Pole Calcs (Masterplan)\All Poles_Optimized for Masterplanning.A32

RECOMMENDED LIGHT LEVEL TABLES AS PUBLISHED BY THE IESNA

Table 1: Class of Play and Facilities

Facility	Class			
	I	II	III	IV
Professional	X			
College	X	X		
Semi-Professional	X	X		
Sports Clubs	X	X	X	
Amateur Leagues		X	X	X
High Schools		X	X	X
Training Facilities			X	X
Elementary Schools				X
Recreational Events				X
Social Events				X
Class I - Facilities with spectator capacity over 5,000				
Class II - Facilities with spectator capacity under 5,000				
Class III - Facilities with some provision for spectators				
Class IV - Facilities with no provision for spectators				

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Table 2: Recommended Outdoor Illuminance Levels

Sport	Lighted Areas	Class of Play	fc, Horizontal
Baseball & Softball	Infield	I	150
	Outfield		100
	Infield	II	100
	Outfield		70
	Infield	III	50
	Outfield		30
	Infield	IV	30
	Outfield		20
Football		I	100
		II	50
		III	30
		IV	20
Soccer		I	75
		II	50
		III	30
		IV	20
Tennis		I	125
		II	75
		III	50
		IV	30

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Table 3: Recommended Maintained Illuminance Levels for Pedestrian Ways

Walkway and Bikeway Classification	Min. Average Horizontal Illuminance Levels
Sidewalks (Roadside) and Type A Bikeways:	
Commercial Areas	1.0 fc
Intermediate Areas	0.5 fc
Residential Areas	0.2 fc
Walkways Distant from Roadways and Type B Bikeways:	
Walkways and Bikeways	0.5 fc
Pedestrian Stairways	0.5 fc
Pedestrian Tunnels	2.0 fc

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Table 4: Recommended Maintained Illuminance Levels for Open Parking Facilities

Level of Activity	General Parking and Pedestrian Area		Vehicle Use Area (Only)	
	Min. Horizontal Illuminance	Uniformity Ratio (Avg:Min)	Min. Average Horizontal Illuminance	Uniformity Ratio (Avg:Min)
High	0.9 fc	4:1	2.0 fc	3:1
Medium	0.6 fc	4:1	1.0 fc	3:1
Low	0.2 fc	4:1	0.5 fc	4:1

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8
ACKNOWLEDGEMENTS

TEAM

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Kay Ragan, Interim Vice President of Student Services

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San Bernardino Community College District
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San Bernardino Valley College
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ARUP – Mechanical, Electrical, Plumbing
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SKA Design – Signage
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CREDITS

BIBLIOGRAPHY

Weitze, Karen J. California's Mission Revival. Santa Monica: Hennessey & Ingalls, Inc., 1984

San Bernardino Valley College. <http://www.valleycollege.edu/>

http://www.valleycollege.edu/Marketing/future_timelines.php

"Landers Earthquake." June 28, 1992 4:57:31 PDT. Southern California Earthquake Data Center (SCEDC). 9 Oct. 2006. <http://www.data.scec.org/chrono_index/landersq.html>

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