

The Architecture of
California Polytechnic State University
1980-2010

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Executive Editor

Robert E. Kitamura, AIA

Production & Design Manager

Pamela Timm

Photography

Josef Kasperovich
Forrest Doud
Dennis Steers
Pamela Timm

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Foreword

The book is dedicated to the presidency of Dr. Warren J. Baker at California Polytechnic State University at San Luis Obispo, California. President Baker's leadership and vision over the past three decades has placed Cal Poly as one the premier undergraduate universities in the country.

The following pages will demonstrate how this vision enabled state-of-the-art buildings to support the high level of education provided by the faculty of this university. He promoted an infrastructure and physical campus where students can live and learn. He envisioned the need for sustainability long before it was implemented as a building requirement. Because of his cooperation with the city, buildings on the campus have become a cultural center for the community.

He encouraged joint cooperation between colleges to streamline the planning process and make Cal Poly a virtual study in project delivery demonstrating best practices in regards to time and budget constraints. The 2001 Master Plan that was completed under the direction of Dr. Baker has become the model for all master plans within the CSU system. The 2001 Master Plan set a course for the physical development of the campus for twenty years. Dr. Baker created a campus planning committee that includes student leaders, community leaders and faculty and staff from various disciplines to create transparency and ensure strict adherence with the campus master plan.

He encouraged the continuous upkeep and development of the landscaped and built environment especially as it relates to spaces that are used by students for living, learning, recreation or leisure.

The continued enhancement of the campus and its architecture will remain as one of President Baker's lasting legacies. This book is compiled as testimony to that achievement.

Paul R. Neel, FAIA

Introduction

Would an observer standing on the ridge above the Cal Poly "P" when Warren Baker arrived in 1980 have foreseen the transformation of the campus that would occur over the next thirty years?

Some distinguishing features would have been very clear. The topography of the area was apparent – steep hill-sides surrounding Brizzolara Creek on the north and east, sloping into the rolling hills and rich agricultural plain on the west. The development of the City of San Luis Obispo focused circulation through three entrances – Grand Avenue, California Boulevard and Highland Drive. The prominent horseshoe shape of Inner and Outer Perimeter roads framed the instructional core.

Recent campus development patterns would also have been apparent. Dormitories on the west were converted to offices as new residence halls clustered on the hillside above Outer Perimeter Road. The most recently constructed buildings were filling in sites between Inner and Outer Perimeter Roads – the Julian A. McPhee University Union (1971), the more constrained placement of Architecture (1974), and Fisher Science (1977). And the buildings nearing completion in 1980 fit the same pattern – Faculty Offices North and Kennedy Library.

Thus, our observer would not have been surprised to return fifteen years later to find Engineering 13 (1985) on the west, Agricultural Sciences (1988) and the Corporation Administration Building (1989) on the north, and Student Services on the south (1990). The remodel of the Business Administration and Education Building (1992) would also correspond to earlier expectations as did the site for Faculty Offices East (1992). Similarly, the new Recreation Center (1993) would have seemed a logical placement near Mott Gym although our observer might not have anticipated the building materials.

However, in 1980 our observer would probably not have anticipated what would occur between 1995 and 2010. First, the carefully crafted partnership initiated by President Baker between the University, the City and a newly formed foundation created the opportunity for a magnificent Performing Arts Center (1996). Second, our observer would not have imagined that a 3,000 Acre campus would need to have a parking structure.

The location of the PAC not only established a striking architectural feature at the Grand Avenue entrance to the campus and enhanced the performing arts at Cal Poly, but was also a sign that the University's development could no longer stay within the horseshoe pattern of the historical core. Anticipating growth in enrollment and the need to replace obsolescent structures, President Baker commissioned the preparation of a new campus master plan that respected the University's history at the same time as it envisioned new opportunities for the campus to meet its growing space needs.

Following principles that instructional facilities should remain within a ten-minute walking radius and south of Brizzolara Creek, the new master plan called for infill along with replacement of older structures. An engineering complex emerged on the northwest, anticipated by the Advanced Technology Laboratories (1999). Engineering III (2005) stretched the campus westward to the railroad tracks, then Engineering IV (2006) and the Bonderson Projects Center (2006) filled sites back toward the Campus Market. The Construction Innovations Center (2008) provided expanded space for the College of Architecture and Environmental Design, near its other facilities in the Engineering West, Dexter and Architecture buildings. The new Science Center was designed to create a new architectural focus in the center of campus by replacing part of Building 52. The Spanos Stadium is a renovation

and expansion of the former Mustang Stadium rather than occupying a larger site farther away.

At the same time, the University recognized that some land uses could be located farther from the core, so the Sports Complex added recreational and athletic fields north of the Creek in 2001. Similarly, the Cerro Vista student apartments (2003) continued to move the locus of residential living along the hillsides. Poly Canyon Village (2008/2009) took this another step, creating a living complex north of Brizzolara Creek, supported by a retail, recreation and student service center along with parking.

Our observer from 1980, returning in 2010, would likely ask about the implications of all this construction for agriculture. The Dairy Sciences complex (1992, 1994) and Poultry Science Instructional Center (1994) provided modern applied research facilities for students and faculty in these disciplines. Some grazing operations have moved to the western ranches (another 3,000 Acres off Highway 1) where there is more ample land for sustainable farming practices. The Poly Canyon Village housing development provided an opportunity to remove and replace obsolete facilities from the Brizzolara Creek flood plain. The new Animal Nutrition Center (2008) and planned Meats Processing Center are located nearer to the animals involved, reducing transportation costs.

The University designated land outside the campus core for “teaching and learning” – consistent with its applied learning tradition. These lands include watersheds, geological formations, environmental study areas with endangered species, and the architecture experimentation area up Brizzolara Creek along with agricultural areas.

In 2010 the campus also reflects many other less visible physical investments during the three decades from 1980 to 2010. The utility (1998) and telecommunications (2004) upgrades were essential to its functioning as a modern university. A major increase in operational initiatives, both academic and administrative, have made Cal Poly a leader in environmental sustainability. The master plan included mobility improvements, with increasing emphasis on bicycle and pedestrian circulation, and accessibility of public transportation to ease dependence on the private automobile. The University’s landscape design, in existing areas as well as new projects, has become more attuned to native and drought tolerant plant materials.

Thus, our observer from 1980 would find continuity with Cal Poly’s past in the campus today, but would also take pride in the quality and attractiveness of the dramatic changes and innovations of the past thirty years during Warren Baker’s tenure as president.

*Linda C. Dalton, Phd, AICP,
Associate Professor (1983-87) and Professor of City and Regional Planning (1987-2006), Executive Vice Provost
and Chief Planning Officer (1995-2006) Cal Poly State University.*

The Cal Poly Master Plan

The Cal Poly Campus Master Plan

The award-winning 2001 Cal Poly Campus Master Plan replaced the previous plan, which had not had a major update since 1970. In serving as a guide for a twenty year plan starting in 2001, the Master Plan addressed academic program demand, physical and environmental constraints and opportunities, and capital and operating budget requirements to support a future headcount enrollment of over 20,000 students. The plan reflects a more rapid growth, in the early years of the 20-year plan, based on higher education projections and less demand in the later years.

The Master Plan redevelops and consolidates academic facilities within an expanded instructional core south of Brizzolara Creek. At the same time, the Plan was designed to protect natural environmental features and prime agricultural lands that surround the instructional core. A central feature of the plan, following President Baker's vision of creating a residential learning environment for more students, involved creating new student residential communities to accommodate over 3,000 additional students and provision for faculty and staff housing. Poly Canyon Village, a 2,700 bed student apartment complex with a major retail food area was implemented as a part of this plan. It was the first project at Cal Poly to be awarded LEED Gold certification.

The Master Plan took a broad approach to the analysis of the most suitable future use of all Cal Poly lands in San Luis Obispo County. This included management practices to protect the University's unique natural environment. Principles drawn from campus and community task forces provided recommendations to guide campus development including priority for future academic needs, environmental stewardship, compactness, accessibility, integration of support activities, and encouragement of alternative transportation. The plan is organized around nine elements:

- Natural Environment
- Outdoor Teaching and Learning
- Campus Instructional Core
- Residential Communities
- Recreation
- Circulation, Alternative Transportation, and Parking
- Public Facilities and Utilities
- Support Activities and Services
- Ancillary Activities and Facilities

The Master Plan received an Honor Award from the Southern California Chapter of the American Society of Landscape Architects for its professional achievement. The projects shown in this book starting in 2001 reflect the first ten years of the implementation of the Master Plan.

Linda C. Dalton, PhD, AICP and Robert E. Kitamura, AIA



Projects



**Robert E. Kennedy
Library**

Building 35
Completed 1980

Architect: Marquis Associates

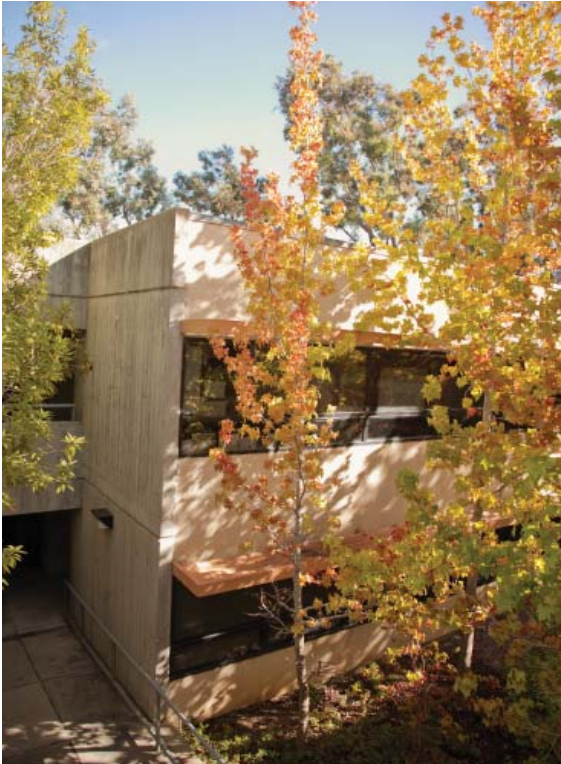


Faculty Offices North

Building 47
Completed 1980

Faculty Offices North was built for the College of Liberal Arts along North Perimeter Road. Architects Reibsamen, Nickels and Rex designed this concrete and stucco-finished complex to terrace down the sloping site broken into pods so each office had a window to an outside landscaped area.

Architect: Reibsamen,
Nickels and Rex





Engineering

Building 13
Completed 1985

Architect: Grant, Pedersen,
Phillips



Agricultural Sciences

Building 11
Completed 1988

Architect: Venture Architects



Cal Poly Corporation Administration Offices (Foundation Administration)

Building 15
Completed 1989

The Cal Poly Corporation Administration Offices, was designed by the architectural firm of Reibsam, Nickels and Rex. One of the first examples of Post Modern design at Cal Poly, its courtyard entrance allows for an ample amount of natural light into the interior spaces.

Architect: Reibsam,
Nickels and Rex





Student Services Building

Building 124
Completed 1990

The architecture firm of Sprankle, Lynd & Sprague, designed the Student Services building. It follows the early California architecture of the historical district of Cal Poly where it is located.

Architect: Sprankle, Lynd & Sprague





Dairy Science Milking Parlor

Buildings 18,
Completed 1991

The Dairy Science projects allowed Cal Poly to introduce state-of-the-art technology to a facility on campus. However the architectural solution provided a gesture towards the traditional farm vernacular which had been its previous home. The new instructional area allowed for several points of visual access to the milking area, including a second floor gallery which allowed faculty, students and visitors to observe the daily operations with the actual milking parlor. State of the art computerized feeding and milking monitoring systems were also introduced to the "learn by doing" curriculum for the first time on campus.

Architect: Grant, Pedersen
Phillips



Dairy Science Instructional Center I and II

Buildings 18A & 18B
Completed 1992, 1994

The Dairy Science Instructional Center was a major step in consolidating all of the dairy industry educational oriented components into one location. This facility uses state-of-the-art technology. The campus and the local community get to enjoy all of the milk products produced by the Center.

Viewing windows and alcoves allow for visitors, students, and faculty to observe processing operations without having to penetrate the required sterilized areas of the processing plant. Again a farm architectural vernacular was used to both emulate the adjoining dairy milking facilities but also to reflect the rural nature of Cal Poly's farm areas.

Architect: Grant, Pederson
Phillips



Bert and Candace Forbes Center for Engineering Excellence

Building 20A
Completed 1992

The Bert and Candace Forbes Center was the first completely donor-funded building at Cal Poly. The architects, Kruger Bensen Ziemer, on a very tight site, designed a simple two-story building to blend into the existing buildings around it. The atrium, within the building, provides natural light and a feeling of spaciousness to the interior.

Architect: Kruger, Bensen,
Ziemer





Business Administration

Building 02
Completed 1992

Architect: Kaplan,
McLaughlin & Diaz



Education Building

Building 03
Completed 1992

Architect: Kaplan,
McLaughlin & Diaz





Faculty Offices East

Building 25
Completed 1992

"I have been involved in two major capital projects under President Baker's leadership. We proposed Faculty Offices East when I was interim dean in 1984-85 with a surprise and presumptuous presentation to the president, vice-presidents and deans, complete with a shovel for groundbreaking. Amazingly, less than seven years later we moved into the building, the first in the CSU constructed to improve the quality of office accommodations for the faculty. Today it is LEED Certified Silver EB. "

Phil Bailey, Dean
College of Science and
Mathematics
June, 2010

Architect: The Steinberg
Group



Recreation Sports, PE & Events Center and Kinesiology

Building 43, 43A
Completed 1993

In 1993, the Cal Poly Recreation Center, jointly funded by ASI and Cal Poly, opened its doors as a state-of-the-art health and wellness facility for the campus community. Seventeen years later, the students passed a referendum to expand the existing facility. Construction began January 2010; completion is expected in winter 2012 with amenities such as significantly expanded weight and fitness space, an indoor running track, multi-activity room and a leisure pool.

Architect: Ebasani and Logan

Architect (Kinesiology):
Donald Francis Haines





Poultry Science Instructional Center

Building 150
Completed 1994

Architect: RRM Design
Group





University Dining Complex

Building 19
Completed 1994

The renovation of the existing 30,000 square foot 1950's "institutional" university dining and conferencing facility created new entries, seating areas, pre-function space, and interiors. The design reconfigures and expands the plan and increases the volume with new ceiling forms and skylights. With the incorporation of expansive, glazed overhead doors, all spaces open to the outdoors.

Architect: R. L. Binder FAIA
Architects, LLP



Orfalea Family and ASI Children's Center

Building 133
Completed 1994

In 1992 the ASI Children's Center was opened to serve Cal Poly's student parents, faculty and staff; it was renamed Orfalea Family and ASI Children's Center after a generous gift endowment from the Orfalea Family Foundation in 2001.

Architect: Wes Doubledee





Christopher Cohan Center Performing Arts Center

Building 06
Completed 1996

"The Christopher Cohan Center opened in 1996. A state-of-the-art performing arts venue, the Center occupies a prominent place on the Cal Poly campus

The design, construction and management of the Center is a three-way partnership together with the City of San Luis Obispo and the private, community-based Foundation for the Performing Arts Center.

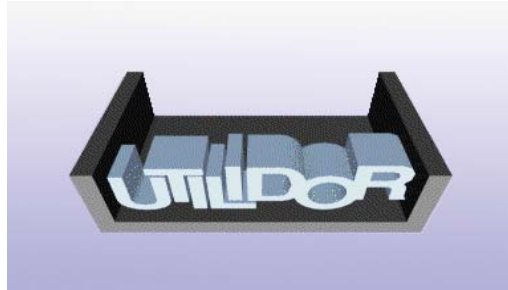
The Cohan Center serves the performance needs of multiple campus and community performing arts ensembles.

The Cohan Center, a unique venture, would not have been possible without the visionary leadership of President Warren Baker, leaving a legacy of artistic enterprise and creativity, and an enduring symbol of campus-community cooperation."

Managing Director of PAC,
Ron Regier

Architect: Arthur Erickson
John Carl Warneke
DMJM





Utilities Upgrade

Campuswide
Completed 1998

The construction of the Utilidor replaced infrastructure that had exceeded its useful life. The University realized a 23% reduction in natural gas usage with this project.

Engineer: Brown and
Caldwell



Mustang Electrical Substation

Building 75
Completed 1998

This project allowed the University to own its own substation and purchase power from the utilities at transmission level rates. Power outages were reduced and service is more reliable.

Engineer: The Bentley
Company



Advanced Technology Laboratories

Building 07
Completed 1999

A 17,000 square foot research facility funded through private funding and grants.

Architect: John Trautman Associates





Campus Market Expansion

Building 24
Completed 1999

Architect: Design ARC





- Sports Complex**
- **Baggett Baseball Stadium**
 - **Sports Fields**
 - **Softball Stadium**

Building 160
Completed 2001

Fall of 2001 marked the opening of the Cal Poly Sports Complex. Also jointly funded, this facility provided for student recreation, intercollegiate athletics and academic related activities. Due to high field usage, ASI retrofitted the three upper fields with synthetic turf in 2009, allowing for year-round use. ASI also added five lighted and fenced basketball courts to the Complex.



Architect: Edwin D, Darden Associates, Inc.



Grand Avenue Parking Structure

Building 130
Completed 2002

Architect: Waltry Design
Group





Cerro Vista Student Housing

Building 170
Completed 2003

Architect: Fisher Friedman
Associates



Printing Press Building

Building 26A
Completed 2003

Architect: Omni Design
Group



**Grant M. Brown
Engineering Building**

**Baldwin & Mary Reinhold
Aerospace Engineering
Laboratory**

Building 41
Completed 2003-2005

Architect: Robert S. Grant
MBT Architects
RRM Design Group



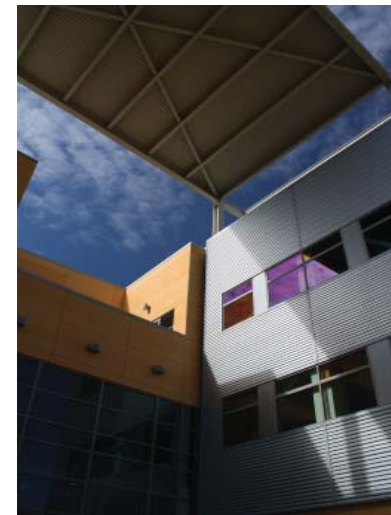


Engineering IV

Building 192
Completed 2006

Opened in 2007, Engineering IV concentrates much of the university's engineering programs in a single complex. The 104,000-square-foot facility includes modern classroom space for the aerospace, mechanical, civil, environmental, industrial and manufacturing engineering programs. In 2009, Engineering IV became home to the Quality of Life Plus (QL+) Laboratory dedicated to research and development of products and techniques that improve the quality of life for veterans and others injured in the line of duty while serving their country.

Architect: AC Martin Partners, Inc.





Bonderson Student Project Center

Building 197
Completed 2006

13,576 square foot student project laboratory constructed with donations from Paul and Sandi Bonderson.

Architect: John Trautman in consultation with Arete Architecture





Alex G. Spanos Stadium

Building 61
Completed 2006

Architect: RRM Design Group



Housing Administration Offices

Building 31
Completed 2006

Housing and Residential Services consolidated its Housing Administration and Student Programs functions in a New Housing Administration Building within the context of existing dormitory buildings. The site for the project is situated on Mountain Road in the midst of the student residential area and affords a wonderful view across the campus. The 9,000 square foot facility provides the students, their families and the staff an expanded home and was designed as “the great room” for the campus community. Key to the design’s success is its residential scale coupled with its presence as a community facility.

Architect: R. L. Binder FAIA
Architects, LLP



**Cal Poly Pier- Marine
Education Center**

Completed 2007

Architect: RRM Design Group
Goss Engineering





Bella Montaña Faculty and Staff Housing

Completed 2007

Architect: Leonard Grant
Associates



Construction Innovation Center

Building 186
Completed 2008

Architect: Austin, Veum,
Robbins, Partners





Animal Nutrition Center

Building 154
Completed 2008

The Animal Nutrition Center is a state-of-the-art training and research facility. The facility is both a teaching facility and a destination site for feed industry short courses. Students experience a technologically advanced “real world” education in this modular feed plant.

Architect: RRM Design Group







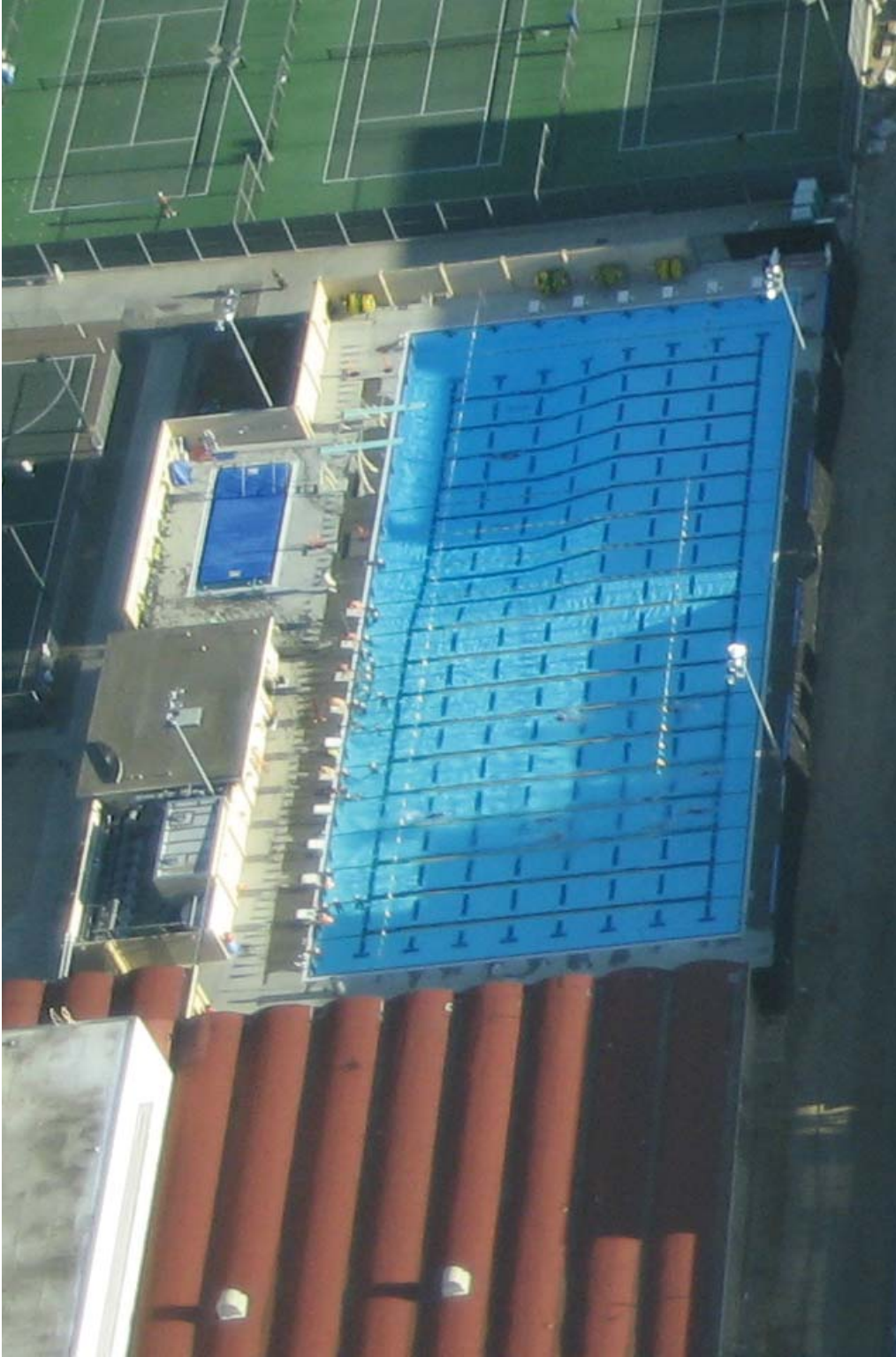
Poly Canyon Village

Building 171
Completed 2008/2009

Poly Canyon Village, a 1.4 million sq. ft., 2,670-bed village on the campus of Cal Poly in San Luis Obispo, CA, at the time of completion was the largest LEED certified student housing project in the United States. The Village consists of nine buildings, retail spaces and other residential support services. The Clark Construction Group-California, LP and Niles Bolton Associates (Clark/NBA) design-build team implemented Cal Poly's mission of environmental responsibility, which promotes a healthy living environment for its students and respect towards Poly Canyon and Brizzolara Creek.

The development of this site provided an opportunity for the remediation of the land and the reparation of the creek, permitting native flora and wildlife to prosper in non-developed site areas.

Architect: MVE Architects
Niles Bolton, AIA



Anderson Aquatic Center

Completed 2009

Architect: Arch/Pac

Technology Park Building

Building 83
Completed 2010

Architect: Omni Design
Group





University Union Plaza Renovation

Completed 2010

April 2010 saw completion of the renovated University Union Plaza. Per the students' request, ASI designed a more open and inviting UU Plaza by upgrading and relocating the stage, seating and landscaping

Architect: Omni Design Group





Simpson Strong Tie Materials Demonstration Laboratory

Building 187
Completed 2010

The Simpson Demonstration Lab is a privately funded laboratory that serves as an interdisciplinary learning laboratory for all five departments in Cal Poly's College of Architecture and Environmental Design: Architecture, Construction Management, Architectural Engineering, Landscape Architecture, and City and Regional Planning

Architect: Omni Design
Group



Projects in Design



Recreation Center Expansion

Building 43
Completion 2011

Architect: Cannon Design

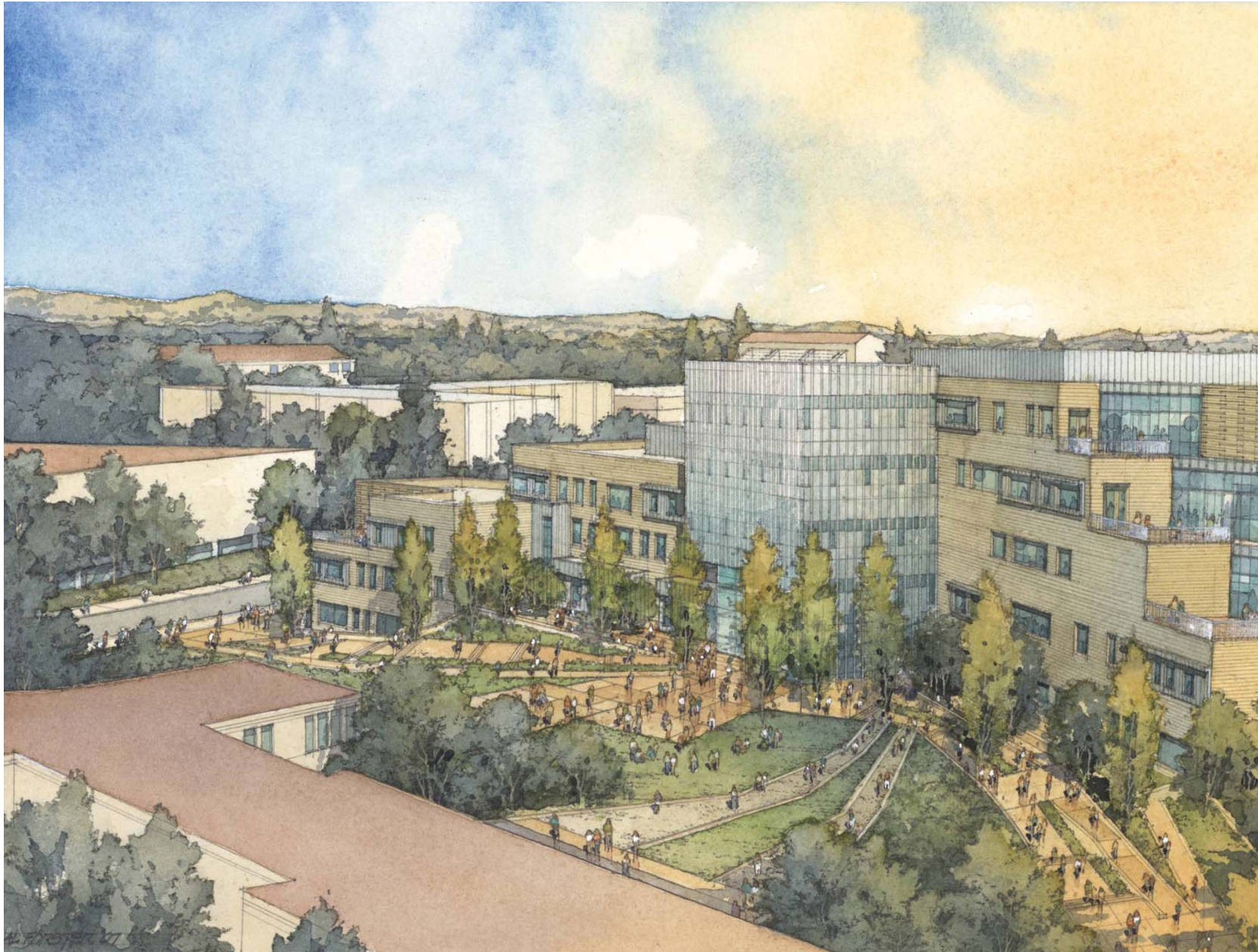




Meats Processing Center

Building 155
Completion 2011

Engineering: Delphey-Gerdes
Engineering, Inc.



Center for Science

Building 180

Completion: 2013

"The concept for the Center for Science and Mathematics originated in the mid-1990's. President Baker supported this project with a passion proclaiming he wouldn't retire until the building was secure. The Center will be adjacent to Centennial Park and become a defining landmark. Just as science and mathematics is central to the polytechnic curriculum, the Center is symbolically located at the geographical center of our campus. The facilities will support our treasured learn by doing philosophy in creative and innovative ways focused on student centered learning. Space for students to study and interact with one another and the faculty and staff will rival that available in the University Union. The Center for Science and Mathematics will be a crowning achievement among many in President Baker's career."

Phil Bailey, Dean
College of Science and
Mathematics
June, 2010

Architect: ZGF Architects

Year	Project
1980	Robert E. Kennedy Library
1980	Faculty Offices North
1985	Engineering 13
1988	Agricultural Sciences
1989	Cal Poly Corporation Administration
1989	Foundation Warehouse
1990	Student Services Building
1991	Dairy Science Instructional Center
1992	Bert and Candace Forbes Center
1992	Dairy Science Milking Parlor
1992	Business Administration & Education Building
1992	Faculty Offices East
1993	Recreational Sports, Physical Education and Events Center
1993	Kinesiology
1994	Orfalea Children's Center
1994	University Dining Complex Renovation and Expansion
1994	Dairy Science II Instructional Center
1994	Poultry Science Instructional Center
1996	Christopher Cohan Center - Performing Arts Center
1998	Utilities Upgrade Project
1998	Mustang Electrical Substation
1999	Advanced Technology Laboratories
1999	Campus Market Expansion
2001	Sports Complex
2002	Crops Unit Lab
2002	Grand Avenue Parking Structure
2003	Cerro Vista Student Housing
2003	Printing Press Building
2003	Grant M. Brown Engineering Building
2004	Telecommunications Infrastructure
2005	Baldwin & Mary Reinhold Aerospace Engineering Laboratory

Year	Project
2006	Engineering IV
2006	Bonderson Projects Center
2006	Alex G. Spanos Stadium
2006	Housing Administration Offices
2007	Bella Montaña Faculty Staff Housing
2007	Cal Poly Pier-Marine Education Center
2008	Construction Innovations Center
2008	Poly Canyon Village Phase I
2009	Poly Canyon Village Phase II (including Agricultural Facility Relocations)
2008	Animal Nutrition Center
2009	Anderson Aquatic Center
2010	Technology Park Building
2010	Union Union Plaza Renovation
2010	Simpson Strong Tie Materials Demonstration Laboratory
2011	Recreation Center Renovation and Expansion
2011	Meats Processing Center
2013	Center for Science

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Photography

Josef Kasperovich Pages: 13, 14, 16,17,18, 19, 20,21, 22, 23,
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Perry Judd Page: 48

Historian Rex Wolf, Architect

Printing V3

