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HISTORIC PRESERVATION PLAN

MAY 2006





University of Arizona

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The University of Arizona was awarded a 2004 Getty Campus Heritage Grant to complete Historic Preservation Plan to assist in the management and preservation of the integrity of the significant historic buildings, sites, and landscapes on the campus. The entire project team thanks the Getty for their support and input as this plan was developed.

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Appendix 2: Campus Development Maps

Appendix 3: Maintenance Manual for Historic Buildings (bound separately)

Appendix 4: Maintenance Manual for Historic Landscapes (bound separately)

A. Project Overview

In January 2005 Architectural Resources Group (ARG) was retained to complete a Historic Preservation Plan for the University of Arizona in Tucson. Funded by a grant from the Getty Foundation Campus Heritage Grant Program, the University of Arizona Historic Preservation Plan will establish the framework for preserving historic and cultural resources within the boundaries of the Tucson campus.

The University's historic and cultural resources are a diverse collection of buildings, sites, structures, districts, cultural landscapes, trees and historic plants, as well as archaeological sites that relate to varied historic contexts. These include resources of statewide significance as well as local interest.

This document is based on the outline for a historic preservation plan developed by the National Trust for Historic Preservation and the American Planning Association in Preparing a Historic Preservation Plan (1994) by Bradford White and Richard Roddewig. According to Roddewig and White, the standard preservation plan has 10 elements:

- Purpose of the Preservation Master Plan and Summary Statement of Historic Preservation Goals
- 2. Definition of the Historic and Archaeological Character of the Campus
- 3. Summary of Past and Present Preservation Efforts
- 4. Summary of Past Survey Efforts
- 5. Explanation of the Legal Basis for Protection of Resources
- 6. Relationship Between Historic Preservation and Zoning, Land Use Ordinances, and Growth Management Policies
- 7. Statement of Public Sector Responsibility for Publicly-Owned Historic and Archaeological Resources
- 8. Statement of Incentives to Assist in the Preservation of Resources
- 9. Statement of the Relationship Between Historic Preservation and the Community Education System
- 10. Goals, Policies, and Implementation Program

Roddewig and White's outline is most relevant for municipalities undertaking a broad preservation planning effort. For the purposes of the University of Arizona Historic Preservation Plan, the overall outline has been modified and tailored to meet the needs of the campus and to ensure that as many relevant issues as possible are discussed.



A historic postcard featuring an aerial view of campus.



Memorial Fountain looking west from the steps of Old Main c. 1919



A historic photograph of the University of Arizona Campus mall with the University marching band in formation.



A historic photograph of the University of Arizona's oldest building: Old Main. This structure serves as the focal point of the west end of the Campus Mall.

B. Plan Purpose

The purpose of the University of Arizona Preservation Plan is to:

- Further the goals and policies set forward in the Campus' 2003 Comprehensive Plan by focusing planning efforts on historic preservation issues;
- Define the historic character of the campus;
- Describe, understand, and integrate past campus preservation planning efforts;
- Inventory campus historic resources;
- Determine whether current practices and policies will encourage and contribute to the continued preservation of resources associated with the history and development of the campus;
- Analyze long-term needs for historic resource assessment, maintenance, and treatment to ensure the longevity of the historic campus;
- Evaluate the need to protect additional historic resources that may not previously have been identified;
- Set forth goals to further historic preservation policies;
- Provide a Maintenance Plan for historic buildings; and
- Provide a Maintenance Plan for historic landscapes.

A. Research & Information Collection

To initiate the development of the Historic Preservation Plan, the ARG project team began gathering information through meetings with members of the campus community during a site visit from February 14 - 18, 2005. ARG toured the campus and met with representatives from many different campus departments including Campus & Facilities Planning, Facilities Design and Construction, Facilities Management, Real Estate Management, members of the campus Historic Preservation Committee, the Center for Preservation Studies, the Department of Plant Sciences, the Campus Arboretum and others. ARG also met with building users, students, faculty, and staff.

The goals of the campus visit were to:

- familiarize the project team with the campus;
- discuss preservation history and planning on the University of Arizona campus;
- review landscape evaluation and preservation practices;
- understand policies related to preservation and past practices;
- become aware of the dynamics of the nearby neighborhoods; and,
- understand the relationship with outside agencies such as the Arizona State Historic Preservation Office, Tucson-Pima County Historical Commission, and the City of Tucson.

A second site visit to the campus, conducted in April 2005, focused on inventorying the character and condition of historic building interiors. This coincided with the Vernacular Architecture Forum Annual Conference held in Tucson from April 13 - 17. The conference was hosted by the University of Arizona and ARG team member Katherine Petrin participated in the conference.

On November 9 and 10, 2005, the ARG team returned to Tucson and visited with the Disability Resource Center, the Space Committee, Grounds, Renovation Services, the Paint and Carpentry shops, Deferred Maintenance, and Risk Management.

Another element in the preparation of the Preservation Plan involved documentary research and an evaluation of the campus' existing conditions to appreciate the history and development of the campus and to understand the relationship of the campus to Tucson's surrounding urban and residential fabric. Research was conducted at the following locations: University of Arizona Library, Special Collections; the Arizona Historical Society; and the Arizona Architectural Archives at the University of Arizona.

B. Plan Area & Boundaries

The Preservation Plan area includes the boundaries of the Tucson main campus. The Preservation Plan does not include areas outside these geographic boundaries. The neighborhoods adjacent to the University act as "perceived" borders and are discussed later in this document. The map on the following page depicts the area studied for the preservation plan. It includes the Historic Core and extends to encompass areas where potential historic resources exist as well as historic resources that the University has acquired, such the Smith and Cannon/Douglas Houses.

C. Mapping

During the course of the project ARG worked collaboratively with UA staff and students who provided the maps and graphics that help illustrate this Preservation Plan. GIS base maps of the campus were provided by Campus & Facilities Planning.



Map showing historic campus properties and approximate boundary of the preservation plan.

Approximate boundary of the preservation plan
 Historic district

Individually listed properties

D. Workshops / Public Meetings

The consultant project team and University of Arizona Planning staff conducted meetings and public workshops to inform and engage the community in the Preservation Plan process.

Susan Bartlett of Campus Facilities and planning, presented the scope of the Preservation Plan project to the Campus Community Relations Committee on April 12, 2005.

ARG and Susan Bartlett participated in an informational presentation of the project to the Tucson-Pima County Historic Commission on April 13, 2005. The focus of the presentation was the scope of the project, the Getty Grant, and to introduce the Commission to the consultant team. The Commissioners were able to ask questions and a discussion regarding the project brought forward their initial thoughts on the scope and content of the preservation plan.

On July 15, 2005 Susan Bartlett presented the project to the University of Arizona's Planning and Design Review Advisory Committee (PADRAC). The following comments and suggestions came out of the meeting:

- Steel Windows UA could set the standard for what kinds of materials are used in replacement projects.
- Review TEA 21 Historic Components to see how it ties in and if there would be funding for improving historic circulation systems, etc.
- Many vendors still make original building components. Need to inventory the available suppliers particular to the types of materials we use on this campus.
- Landscapes require maintenance and upkeep renewal just as buildings do. That should be emphasized in the plan.

The first public Preservation Plan workshop was held on Thursday, September 15, 2005. Members of the campus community, the general public, the State Historic Preservation Office, the City of Tucson Planning Department as well as others were invited to participate. The consultant Project team gave a presentation of the project outlining goals and presenting initial progress. The presentation was followed by an open discussion where the involved parties were able to voice their ideas and concerns regarding the project. As part of the discussion, a questionnaire was distributed to those attending which was intended to provoke a discussion of the public's perception of campus. The following is a summary of the issues raised at the workshop:

- Shade for pedestrians. Should identify a variety of routes to allow a shady network for passage, especially in the summer. Consider seasonal issues sun is needed in the winter.
- Roof issues. Roof drains clog with tree debris which can cause serious flood damage inside the buildings.
- Locating fruiting trees close to buildings allows the transport of tree litter as well as bugs into the adjacent building. This is a problem, especially for museums and buildings that house organic/cultural collections of artifacts.
- Consider locations of air intakes. Trash bins and landscape debris close by can cause organisms and other elements to enter the buildings.
- Reforestation is the single most important thing in the consideration of cultural landscapes. Constant and thoughtful replacement over time is necessary.

- Generally, it seems that landscape lighting is diminishing on the campus. Should the lighting standards address this?
- The Plan should forthrightly address the "Treatment" philosophy. It should not convey that everything must be preserved as is. Change, adaptation and updates are part of the desired goals for the campus. This is a "Rehabilitation Plan."
- Building signage issues with regard to historic building name and the current use. This is confusing to many students especially freshman and in the first weeks of a semester.
- The Plan must set priorities for maintenance. For example, the roofs are usually the most important to fix in terms of vulnerability of the rest of the building.
- It is important to include discussion and clarification about what are appropriate upgrades to a building and what is allowable under the UBC.

On November 9 and 10, 2005, ARG participated in a series of meetings to further gather information for the Preservation Plan. The following individuals, departments and committees were consulted during the November campus visit and the corresponding issues were discussed.

- University Disability Resource Center, Alan Strauss, Sherry Santee
 Approximately 1,600 individuals with physical and learning disabilities use the campus. The Maintenance Manual for Historic Buildings addresses retrofitting for universal access. In the Plan, the issues can be addressed in the goals and strategies section.
- Space Committee

 The discussion centered on the problem of overprogramming older buildings. Adapting them to compatible uses is better. Adapting Old

 Main for use by the Admissions program is a good example. Space Committee suggested presenting the final draft to the President's Cabinet
 in the Spring, 2006.
- Grounds Department
 The discussion centered around maintenance differences between turf for athletics and turf for lawns, in addition to the appropriate places on campus associated with seasonal color change in planting beds and planters. Old Main and Arizona State Museum are good candidates. The plant palette developed by the University addresses overlapping issues.
- Renovation Services
 Recent renovations and priorities were discussed. It was suggested that the University could maintain a crew of multi-disciplinary craftsmen to focus on the campus historic district and complete work on a building-by-building basis.
- Risk Management
- Frank Soltys, Alumni Campus Docent

On Thursday March 30, 2006 ARG presented the entire Preservation Plan at a campus-wide workshop that was widely attended including by the

following:

University of Arizona Departments and Staff: Campus and Facilities Planning Facilities Design and Construction Risk Management Facilities Management Community Relations

Building Users and Academics:
College of Architecture and Landscape Architecture
Arboretum
UA Presents
Steward Observatory
Campus Recreation
Arizona State Museum
Chemistry
Agriculture Education
Dean of Students

Others:

Arizona State Historic Preservation Office McGann and Assoc. Landscape Architects

The primary focus of the workshop was to review the draft Goals and Strategy section of the plan. Many ideas and strategies were crafted at this workshop and they are reflected in the final goals section of the document.

On Wednesday, May 24, 2006 the ARG team met with Facilities Management staff and grounds crews to discuss the *Maintenance Manual for Historic Buildings* and the *Maintenance Manual for Historic Landscapes*.

D. Student Involvement

As a component of the Getty Campus Heritage Grant, the University of Arizona committed to including students in the plan process. The Preservation Plan project team worked closely with staff from Campus and Facilities Planning and the University's School of Architecture to identify the best methods for involving students in the project.

During the site visit in April 2005, ARG staff members Bridget Maley and Katherine Petrin spoke with Brooks Jeffery's "Documentation and Interpretation of the Historic Built Environment" (ARC 497j) seminar and Pat O'Brian's "Preservation Planning" (PLN 564) seminar.

A Preservation Studies Graduate Student, Michael Lovato, spent time working with ARG on the Preservation Plan beginning in Spring 2005 and culminating in Spring 2006. Mr. Lovato was a key individual on the project team. He spent the summer in the San Francisco office and made additional smaller visits to ARGs San Francisco office coinciding with key deadlines. His work on the project included initial document layout, document illustration, including drawings and photograph, work on the Maintenance Manual for Historic Buildings, and coordination with the Landscape Architect consultant in the preparation of the Maintenance Manual fro Historic Landscape.

On November 9, 2005 ARG staff member Bridget Maley participated in Professor James Knight's class "The Heritage and Traditions of the University of Arizona" (UNVR 295). Ms. Maley presented general information regarding ARGs work in historic preservation and then gave the class an overview of the Historic Preservation Plan. She stressed the importance of campus heritage in the form of the physical environment.

On March 31, 2006 Steven Farneth, a Founding Principal at ARG as well as Bridget Maley and Katherine Petrin both Architectural Historians with ARG spoke with students in Brooks Jeffery's "Documentation and Interpretation of the Historic Built Environment" (ARC 497j) seminar. Also, Mr. Farneth and Ms. Petrin participated in a jury of projects dealing with preservation issues by fifth year architecture students being advised by Professor John Messina. Finally, Mr. Farneth delivered a lecture, hosted by the College of Architecture and Landscape Architecture, but open to the general public, on issues of architecture, preservation and time.

The University of Arizona Comprehensive Campus Plan was updated in 2003 with a goal of "carefully balancing and weaving of interconnected and interdependent issues." Historic preservation is one element of the Comprehensive Plan and one of many tools that can be used to retain and enhance the unique character of the campus. The Preservation Plan is one of a series of specific plans that are or will be an outgrowth of the Comprehensive Plan.

While the Comprehensive Plan identifies particular needs for campus growth, the overall goal is to achieve the long-range space needs of the University within the existing campus growth boundaries. With that goal clearly identified during the Comprehensive Plan process, the Preservation Plan must assess the locations of the proposed infill buildings and determine if there are conflicts between historic preservation issues and the goals of the Comprehensive Plan.

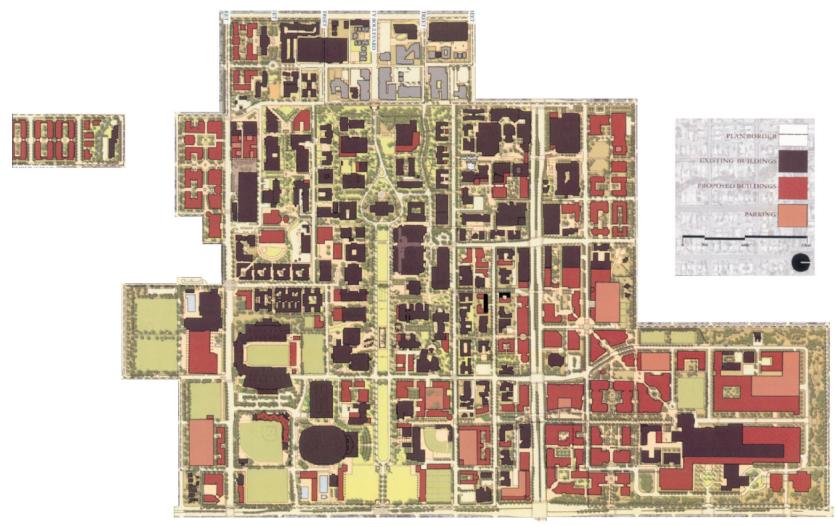
A. Precincts

Based on specific campus traits including mass, scale, materials and character, the Comprehensive Plan identified four discrete precincts that comprise the campus:

- Central Core
- Arizona Health Sciences Center and Environs (AHSC)
- North Campus
- South Campus

The Comprehensive Campus Plan outlined campus-wide issues but tailored those issue for specific zones. The campus core, the most historic area of the campus centered around the mall, is what distinguishes the campus and is the focus of this Preservation Plan. The University clearly values the unique architecture of the historic core and the Executive Summary of the Comprehensive Plan states, "A major goal is to continue building a great campus with superior architecture that frames inspiring outdoor spaces."

"The historic core and mall demand special attention to the history and traditions of the University of Arizona. New projects should strive to reflect a continuity of architectural theme. Reinforcing the powerful campus structure of the historic core and the mall should be paramount. Enabling clear pedestrian connections to other parts of the campus is also critical."



Map showing existing buildings in relation to proposed buildings and parking. The Campus Comprehensive Plan. Courtesy Ayers Saint Gross

B. Infill, Additions, and Campus Connections

The Comprehensive Campus Plan identified proposed new buildings, additions to existing buildings, additional parking areas and improvements in pedestrian circulation around campus by accenting and "greening" a number of courtyards and pathways. The following older, historic buildings on campus, may be affected by additions or new buildings in their immediate vicinity as the Comprehensive Plan is implemented:

- Arizona State Museum Building
- Gila Hall
- Maricopa Hall
- Douglass Building
- Centennial Hall
- Bear Down

When assessed cumulatively, the proposed new buildings and additions could impact the historic campus core. However, if designed with care and so that the existing development patterns defined by the older buildings are respected then the results should be generally positive. The important issues will be height, scale, massing, addition placement, materials, and fenestration patterns.

The Comprehensive Campus Plan stresses the creation of a "mosaic" of connected open spaces throughout campus. This system of open spaces would build upon existing spaces and provide connecting spaces where necessary. Multiple uses should be encouraged and provided for in open space design. There should be no "left over" spaces on campus, all spaces should be thoughtfully considered. The campus's historic core possesses some of the most successful and oft-utilized open space on campus. Preserving the quality of that open space, and insuring that the proposed additions to historic buildings do not encroach on that space should be a priority as these future projects are implemented.



Under the Comprehensive Plan several historic buildings would receive additions. The Arizona State Museum (north), pictured above, would receive its fourth addition.



The comprehensive plan calls for surface parking, such as this area between Business and Public Administration (now Cesar Chavez) and Humanities (now CESL) to be converted to usable open space.

C. Landscape

The Comprehensive Campus Plan addresses a wide range of topics related to landscape, open space and greenery. It includes open space as one of the major components of the University of Arizona campus and acknowledges the unique contribution of the Sonoran Desert setting in defining the University's sense of place. The Plan suggests that the design of campus and facility development must be an integrative and collaborative process among members of all the design disciplines, landscape architecture, architecture, and engineering.

The Plan assesses natural systems, landscape, landscape typologies, and vegetation at the historic core of the campus, at its edges and in the open spaces, plazas and courtyards that define the campus. The Comprehensive Campus Plan categorizes trees in four types and defines their distinct roles: spreading trees, skyline trees, upright trees, and patio scale trees. The Plan identifies a network of open space corridors, malls, plaza, greens, and courtyards.

The Plan notes that open spaces, except in the historic core, lack clear definition and states that, "The malls' edge is increasingly jagged toward the east. At Campbell Avenue the mall loses definition." Old Main terminates the west end of the Main Mall. A new gateway will frame views to and from the campus at the east end. The Plan also notes that significant open green lawns for recreation are lacking in the vicinity of the residence halls west of Park Avenue. Connecting existing and future open spaces via pedestrian pathways will form an open space network that organizes the campus Shaded walkways are integral to the campus. Pedestrian linkages under arbors can convey more "perceived" green.

The Plan suggests that enhancing definition through building infill and landscaping achieves various goals including improving the quality of experience in existing open spaces. The Plan calls for enhanced gardens, lawns, courtyards and placing groves of trees for shading, cooling and outdoor comfort and notes that deciduous trees provide seasonally appropriate shade and sun. The Plan notes the benefits of green spaces as visually pleasing places to collect water and provide cooling. The Plan acknowledges the importance of the Campus Arboretum in determining plant palette and material choices and calls for botanical and common name labels for both typical and unusual plants.

The Maintenance Manual for Historic Landscapes addresses issues related to the historic landscape and seeks to further the goals outlined in the Campus Comprehensive Plan.

Endnotes Relationship to Comprehensive Plan

¹ Comprehensive Campus Plan, p. 5.

² Comprehensive Campus Plan, p. 5.

³ Comprehensive Campus Plan, p. 127.

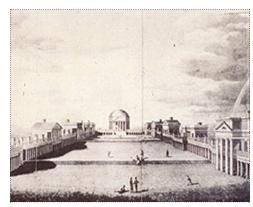
A. Historical Overview

Thomas Jefferson's theories of the "academic village" formed the basis of campus design in the United States, as implemented in the design of the University of Virginia. Other important early college settings such as Virginia's College of William and Mary, Schenectady New York's Union College and then the classic, Collegiate Gothic campuses of Yale, Princeton and Duke Universities (to just name a few) also provided model campus settings. Many land grant universities began as enclaves or villages with minimal landscape elements and one or two buildings for both learning and living. After the design and construction of the 1893 World's Columbian Exposition in Chicago, order and formality were overlaid on many American campuses in the form of Beaux Arts buildings, landscapes and City Beautiful principles. The next major physical change to most American campuses came with the introduction of the GI Bill after World War II. With thousands of new students entering academic institutions, campus administrators called upon designers to build structures and landscapes to accommodate the new students and change the fabric and appearance of the American campus.

For the first four decades of the University of Arizona's development, the center of campus was west of Old Main. Early classrooms, libraries and residence halls were all located within the historic core, roughly bounded by Second and Fourth Streets, Park Avenue and Old Main. The original historic buildings were generally three to four stories in height, with the exception of Herring Hall (one story plus mezzanine), with attractive fenestration patterns and an intimately, human scale. Located with fairly generous dimensions of surrounding open space, this open landscaped area has become one of the distinguishing characteristics of the University of Arizona.

The original 40-acre parcel that comprised the University of Arizona, reluctantly donated by a Tucson saloon keeper and two gamblers, was obtained in May of 1886. Ground breaking ceremonies were held on October 27, 1887. Tucson lawyer C. C. Stephens gave a passionate inaugural speech, envisioning the day when the University would have "its cool verandahs, its broad porches, its silvery fountains, its shaded walks, its academic groves, its crowded halls of thoughtful students, . . . quaffing with sparkling eyes and eager delight of the ever-living fountain of learning of all ages, their countenances illumined with the clear light of ever-living truth, their souls hungering for that knowledge which is more precious than rubies and above all price." The driving imagery was that of a physical and intellectual oasis.

The first campus building was Old Main, completed in 1891 and located near the eastern edge of the parcel. It was sufficient for nearly all needs of the small population of thirty-six students and six professors. Its unusual half-sunken first story and wide verandahs seems to have been



Thomas Jefferson's University of Virginia. With the domed Library placed centrally and two, long rows of alternating student rooms and professor's residences/classroom parlors. The great lawn served as a model for many subsequent campuses.



Duke University is one of many campus' that evoke the Collegiate Gothic style of architecture.



In many of the early campus buildings the approach curved to allow the buildings to be viewed from multiple perspectives. To a certain extent, this effect is still present in the approach to Old Main.



1901 map of the University as it appeared in UA Registers. Notice how multiple paths approach buildings from oblique angles.

partially influenced by St. Mary's Hospital in Tucson. Lumber for Old Main was shipped from San Diego by railroad, which had reached Tucson in March of 1880, linking the city with San Diego, San Francisco and points between. Old Main was followed shortly by the President's House (1893) and two wood-frame turreted Victorian "cottages" for professors, all set at some distance away along the north edge of the campus. The three houses overlooked playing fields (mostly a large baseball diamond) to the south. This could be called an academic village, but did not yet have enough structures fully to enclose or define the space or put forward a cohesive campus plan. Some areas around the buildings included planted ornamental grounds with some sort of rough lawn as the basic ground cover. From the beginning of the campus development the landscape was an important component.

Roskruge's 1893 Map of the City of Tucson with Additions shows the University property already nearly surrounded by platted streets and blocks. The U.S.G.S. 15 minute quad surveyed in 1904 shows Old Main and its entry road and loop, Second and Fourth Streets, Park Avenue and Center Street defining the property. At the east a road angled off to Old Fort Lowell indicating the street grid had not yet in fact been extended this far. A strong western edge to the campus was begun in 1895 when two parallel rows of olive trees were set out about a hundred feet east of Park Avenue. This band of trees was in effect the gateway to the campus.

In 1898 the 3rd Street (now University Boulevard) railway linked the campus with downtown Tucson, about a mile and a half to the west. The route was determined by the municipal street grid, and is therefore not on axis with Old Main. By 1901 a Shops Building sat north of Old Main, where the Engineering Building is currently located. Further north, North Hall occupied the western part of what is now the Harshbarger / Mines Building. The main access was from Fourth Street which curved northerly on a three-foot high ridge to Old Main. A pedestrian path ran straight east from the railway terminus to this road. Note how these roads provide several different views of Old Main as one approaches. For a while it ignores the building, then briefly points one directly at it, then vers both north and south to allow several oblique views as one moves around the loop. Its many angles and deep shaded verandahs make Old Main a very sculptural form. Approaching buildings obliquely rather than axially gives the visitor a view of two sides of a buildings so that it appears as a sculptural mass in the landscape, rather than a flat facade. It is a design and placement technique used as far back as classical Greece.

For many years a large cactus garden, originally occupying a triangular area just west of Old Main, was the most iconic element (after Old Main) of the University campus. No other university had a feature of this kind. As can be seen on the 1901 map, it would have been one of the first things a visitor to campus would have seen. It was composed originally of indigenous plants of the Tucson Basin, technically part of the large Sonoran Desert which extends east to

Nevada and Arizona and south into Mexico. Plants included Paloverde trees, Giant Saguaro (Carnegia gigantea), Ocotillo (Fouqueria splendens) and several species each of Cholla, Opuntia, Echinocactus, Agave and Yucca. The Garden was used for botanical study and for drawing classes. In 1919 its area was diminished by the construction of the Berger Fountain and adjacent paving. In 1929-30, the garden was removed to the new mall to the east of Old Main, where it occupied a considerably larger area. Later, the western portion of the mall was grassed and the collection dispersed to a variety of small planting areas around campus, where the plants are treated as elements of sculptural designs and compositions, and their botanical associations and purposes have largely been lost. In 1980 a small portion of the garden was designated the Joseph Wood Krutch Garden to commemorate that naturalist and author.

The first South Hall (1899), a dormitory for men, was a cruciform building located southwest of Old Main where the Family and Consumer Sciences building sits today, just east of the present South Hall (1913). Herring Hall (1903) was the next building constructed and employed the classical revival style. It was located to the south of Old Main and helped define the large central open space, bisected by the curving tree-lined access road. As it was originally the men's gymnasium, it was logically located near South Hall.

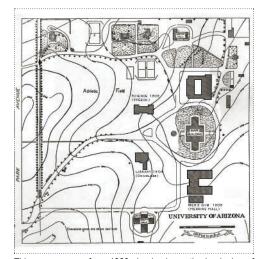
The University Library (1904) was given singularity of place surprisingly close to the axis line of Old Main. It was located quite near the center of the developed campus, perhaps symbolically to underscore its role as the center of the emerging academic village. The campus turned inward, away from the surrounding landscape of the City of Tucson, emphasizing the University as both a physical and intellectual oasis.

At the University, the City Beautiful Movement found its initial expression on campus when, in 1909, the Science Building (now Speech or Communications), was located symmetrically to the axis of Old Main with the Library of 1904. The arrangement of these three buildings created a new organization of space, forming the genesis of a formal mall extending westward from Old Main. The mall concept was to assert itself in ever-growing intensity over the next three decades.

The formality and axial arrangement of the mall is a design concept directly related to the City Beautiful Movement. Moving out from the center of the campus, the historic campus is organized in a linear system with the green lawn, the mall, at the center, academic buildings lining the mall, facing north and south and behind them, rows of dormitories. Old Main terminates the axis and serves as the focus of the University's academic village, as the Rotunda Library is the focus at the University of Virginia.



With the construction of the Science Building (now English as a Second Language) in 1909, the City Beautiful movement found its way onto the University campus. The placement of the building to the northwest of Old Main and directly on axis with the 1904 Library gave the campus a more formal arrangement.



This campus map from 1920 clearly shows the beginning of the overlaying of axial "City Beautiful" principles on the earlier tradition stressing oblique approaches.



This image from the 1950s shows the palms along both sides of the Mall and the roof lettering of the 1926 "Bear Down" Gym.



This 1963 aerial photograph stresses the differences between campus development pre and post-war. At the center is 2nd Street with pre -war development on the right and post-war on the left. Notice the decrease in the prominence of landscape on campus in postwar development.

In 1919 John (Jack) Lyman put forward a formal plan for expansion of the University. South Hall, North Hall and West Cottage were the early dormitories; all faced inward and date from before Lyman's plan. It appears that decisions leading to this formal organization were made before Lyman's 1919 plan. It also seems clear that Lyman understood very well the implications of those decisions, and in 1922 located his new Library Building (now the Arizona State Museum) accordingly.

Mining, Geology and attendant Mechanical Arts were a strong first academic emphasis, but the University regents realized that additional departments and curricula would be required. Agriculture in particular was assuming more importance. Between 1903 and 1914 the University purchased approximately twenty-seven acres in an L-shaped parcel east of the original 40-acres extending as far east as Cherry Avenue. The Poultry and Ostrich farm was located at the far eastern end and a portion of this farm was reserved the later Observatory.

The eastern edge of the central campus was reinforced in the next decade by the placement of the Agriculture Building (Forbes) in line with and south of Old Main in 1915 and Engineering to the north in 1918. These two buildings, both with westward facing entrances and matching in visual mass, created a significant east campus edge.

In 1919 the axis of the emerging mall was accentuated by the Berger Memorial Fountain, honoring Arizona's fallen of World War I. This required, or was an excuse for, redesigning the Loop Road around Old Main and the removal of nearly half of the Cactus Garden. The definition of the mall was completed on the north by the erection in 1923-27 of a new Library, now the Arizona State Museum, the south edge of whose footprint recalls that of its neighbor, the earlier Science Building. The mall was enhanced to the south with the addition of Arizona Hall (now Arizona State Museum South) in 1935 and the Auditorium (now Centennial) the following year.

The symmetry of this more formal layout was maintained by the addition of dormitories north and south of the mall area. This collection of generously disposed buildings made for a recognizable and contained center of the University.

Further expansion was provided for by extending the mall concept to the east of Old Main and setting its width with the placement of Bear Down Men's Gymnasium in 1926 on the south and the Women's Building in 1936 on the north. Bear Down Gym was set at a considerable distance east of Old Main, sufficient to allow future academic buildings between them, while the area further east would develop as sport and recreational facilities. The east Mall determined the organization of the entire core of the University as successive planners and architects have perceived and honored the importance of this open space.

In pre-war development the relationship between buildings and the overall harmony of the campus was carefully considered. Equal attention was given to the detailing of buildings and to their relationship to the landscape in which they were sited. As a response to drastic increases in enrollment, development that directly followed the war is characterized by buildings with increased footprints and heights, much closer spacing, and landscaping much less prominent. In general, buildings from this period were designed to be viewed as individual objects, not necessarily as a harmonious part of a larger campus. Right angles and a similar colored brick are visually the strongest unifying elements.

Through the decades, the scale and massing of the University buildings increased while the spaces between the buildings decreased. With the exception of the Mall and athletic turf, no significant new lawn spaces were added. With the addition of the first Student Union in the 1950s, the Administration Building, Pacheco Undergraduate Center, libraries and the present major expansion of Chemistry, the center of student activity has shifted to the east side of Old Main.²



The University Library constructed in 1923 by Lyman & Place Architects now houses the Arizona State Museum.

B. Campus Architectural Development 1891 - 1971

In order to classify architectural development on the University of Arizona campus, four phases have been established that accommodate roughly all the buildings built on campus from its inception through the early 1970s. The categories are as follows, with approximate range of associated dates: Academic Eclectic (1891-1956), Transitional (1940-1958), International Style Modern (1948-1960), and late Modern (1963-1971). These dates and phases are not meant to be definitive and the overlapping dates indicate the variety in architectural expression even for buildings that were constructed within the same period of time and for the variation in ideology of individual architects.

Academic Eclectic (1891-1956)

Although the character-defining features of campus architecture of the Academic Eclectic period are easily recognizable and have been well documented, this phase established the basic characteristics most associated with the architecture of the University's Historic Core.³

Old Main, the earliest extant building on campus is a territorial example of the Queen Anne style, a stripped down version of a style contemporaneously popular nationwide and in larger



Cochise Hall designed by J. B. Lyman possesses a strong classical character that defines the early Academic Eclectic buildings on campus.



The Cesar Chavez Building of 1952 designed by James Mac-Millan is an example of the Transitional period of architecture on the campus.



The Harshbarger Mines Building is one of the University's Modern buildings that fits into the Transitional period. The chevron pattern in the spandrels is a character-defining feature of the building.

metropolitan areas. Including and after the construction of Old Main, almost all architecture built on campus between the late 1800s and the 1940s can be classified as Academic Eclectic. Academic Eclecticism in architecture was influenced by design principles developed at the Ecole des Beaux Arts in Paris, the prominent architectural academy of the era. American examples of Beaux Arts Style principles are reflected in the work of such architects as McKim, Mead and White on the East Coast, A. Page Brown on the West Coast and Henry Trost in the Southwest. On the University of Arizona campus this ideology manifested itself primarily in the work of Roy Place, J.B Lyman, and David Holmes. The Academic Eclectic period of architecture on the University's campus can itself be divided into two periods, an early period extending to the mid-1930s dominated by mainly classical influences, and a later period stemming from 1936 forward that combines classical elements with elements derived from the Italian and Spanish Romanesque.

The architects of the newly established University turned first to classical forms in order to instill the newly established campus with a sense of permanence, solidity, and authority. Architects designing American campuses were adopting similar forms with parallel intentions. University of Arizona examples dating from this period are Herring Hall and Science Hall designed by David Holmes and completed in 1903 and 1909 respectively. Also demonstrating strong classical characteristics are the Agriculture Building (now Forbes), Mines and Engineering, and Cochise Hall, designed by J.B. Lyman with various partners and completed in 1915, 1918 and 1920 respectively.

The classical characteristics that are common to these buildings include strong symmetrical composition with entrances located at center under columned porticos of varying order and magnitude. Lyman's monumental porticos are raised above ground and accessed by grand flights of stairs. Almost all buildings constructed during this period demonstrate a classical tripartite horizontal organization with division between base, piano nobile, and cornice. A heavy cornice line conceals the hipped roof of the Mines and Engineering building, while the Agriculture Buildings and Cochise Hall have overhanging hipped roofs clad in Spanish tile. Architectural elements in the early 20th century incorporated classical references with regional expression in the building material generally associated with the Southwest to add layers of meaning to a building. Many of the buildings of Roy Place, rich in detail and with Italian and Spanish Romanesque influences, are primarily composed of red brick. These include the original Arizona State Museum, Centennial Hall, Humanities (now the Center for English as a second language), the Administration Building (now Nugent), the Chemistry-Physics Building, Gila Dorm, and Yuma Hall. Common details include Spanish tile roofs, round arches of alternating light and dark voussoirs springing from floriated columns, and rich geometrically composed ceramic tile spandrel panels.

Transitional (1940-1958)

The late 1930s brought to a close a major building campaign at the University and few buildings were constructed during the war years of the 1940s. While there was little new construction during this period, there was no lack of significant activity on campus. During this period, the Department of the Navy used the University to establish a Naval Indoctrination School. The Navy can be credited with saving the University's most important historic resource. In 1942 the Navy spent \$89,000 to restore Old Main, which had been slated for destruction in 1938, to serve as their main classroom building. Additionally 500 cots were set up in Bear Down Gym as a makeshift dormitory.⁵

The few buildings built on campus during the 1940s and early 1950s are significant in that they show a transition in architectural thought. The three most significant buildings of the Transitional Period include Mines and Metallurgy, Liberal Arts (now Social Sciences) and Business and Public Administration (now Caesar Chavez). Designed by James Macmillan, they were constructed in 1940, 1950 and 1952 respectively.

In the 1920s and 1930s, a new architectural movement, the International Style, arrived in the United States most commonly referred to simply as Modernism, it was becoming the dominant architectural language internationally. Pioneered by architects such as Mies van der Rohe, Le Corbusier and Walter Gropius, the new movement called for the use of modern technology and materials to build an efficient and more affordable architecture for the masses. Historical styles were denounced and all extraneous ornament was banished in favor of beauty gleaned from the truthful use of mass-produced, modern materials. Instead of relying on classical precedents for compositional organization, buildings were organized according to function, and expressed as such through overlapping, asymmetrically composed volumes. While this architectural idiom did not arrive on campus in its full form until the late 1950s, elements of the ideology can be seen in the work of James Macmillan from this time period. The major point of departure between these buildings and buildings preceding them is the celebration of modern materials and a decrease in the use of ornamentation. While steel and reinforced concrete were used in the construction of buildings preceding 1940, paint, decorative tiles, or red brick cladding frequently obscured these materials. While red brick was the main construction material in the Mines and Metallurgy building, completed in 1940, the building also uses cast concrete of a large aggregate so that the elements read clearly. Many of the same elements from previous buildings are present in Mines and Metallurgy, but are reduced to a stronger, simpler expression. The building remained symmetrical in composition and adhered to a classical horizontal ordering, with base, piano noble, and cornice, but instead of the elaborate cornices found in previous examples, the cornice is reduced to a bold concrete band accented by two



The use of glass block, decorative brick work and concrete block grilles are common elements of the Transitional period. The composition of the central entry at Social Sciences is a clearly Modern expression.



The clean lines and minimal decoration mark the change from Transitional to International Style Modern as seen in this 1948 photo of the Aeronautical Building.



Arthur Brown's Law Building (later Franklin) was demolished in 2006 but it was an excellent example of the asymmetrical massing, ribbon windows, and minimal detailing of the International Style.



The Civil Engineering Building combines elements of the International Style, such as expression of modern materials and minimal detailing with elements derived from earlier campus architecture, such as tiled spandrels and a simplified base and cornice.

rows of bricks running its length. Instead of an elaborate arched or columned entrance, a simple concrete frieze resting on inward curving brick walls serves as the entrance.

Social Sciences and Caesar Chavez also exhibit this stripped-down classical ordering combined with the use of modern materials as a basis of their architectural expression. In both buildings, two symmetrical wings flank a protruding central bay where emphasis is given to the entrance through the use of modern materials. Social Sciences uses glass block and a curvilinear steel screen to accent its central entrance, while Caesar Chavez relies on a geometrically patterned cast concrete screen to achieve the same results.

International Style Modern (1948-1960)

The introduction of Modern architecture onto the University's campus coincides with a rapid growth in the student population. GI Bill scholarships brought many young people who had been stationed in Tucson during World War II back to the University. Between the end of the war and 1960 the campus grew from approximately 3,000 students to over 13,000.6 The simplified design principles of Modernism complimented the corresponding efficiency-driven building campaign.

The first use of International Style Modern on campus was the Aeronautical Building (demolished late 1990s), designed by James Macmillan and constructed in 1948. While this building predated other more historicist buildings by Macmillan, it was more clearly influenced by the International Style than any other of his later campus buildings. Though classically organized with a symmetrical composition and a simplified tripartite horizontality, the concrete base is no taller than two feet and the cornice is reduced to a thin white concrete cap. The Aeronautical Building was the first major building on campus designed without historical references or decorative elements. Two continuous bands of steel sash windows along each façade refer to International Style Modern design principles.

Other fine examples of International Style Modern are seen in Arthur Brown's Law Building (now Franklin) and the early campus work of Friedman and Jobusch specifically Physics-Mathematics-Meteorology (PMM) Building (now Physics-Atmospheric Science). While these buildings differ from the pattern set by earlier previous campus buildings that had symmetrical wings, a prominent entrance at center, columned porticos or decorative screens, these examples are defined by an overlapping volumetric composition. The PMM building is composed of four primary boxes and relies, not on ornament to achieve desired aesthetics, but on the use of intersecting volumes and strong perspective views. By placing the off set entrance

perpendicular to the long, four-story volume, dramatic views of the window strip cantilevers converging on a common vanishing point are achieved.

One of the tenets of Modern architecture was that, through the use of modern mechanical systems, a universal building type could be appropriate in any climate. By using overhanging cantilevers to protect strips of windows from harsh southern light, these architects contradicted the ideology of the Modern movement, but at the same time were building a more regionally appropriate Modernism by using window-shading devices.

Late Modern (1963-1971)

The University's Late Modern period can be characterized by a fusion of earlier architectural principles and typologies with contemporary architectural ideas. The more brutal, monumental architecture of Paul Rudolph and Luis Kahn influenced the design of many buildings built on campus during this period. Several architects were active on campus at this time, including: Friedman and Jobusch, Terry Atkinson, Blanton and Cole, Place and Place, Gordon M. Luepke, and William Wilde. Despite the number of architects working on campus, work from this period still remains surprisingly cohesive, primarily executed in the common materials of red brick and concrete. All examples from this period are minimally ornamented, however, continuous bands of windows were no longer common, as much for budgetary reasons as for climactic. A return to a more classical building organization emerges with an emphasis on horizontal tripartite organization and symmetry. While the International Style Modern period represented a change in aesthetics, it did not represent a major shift in building scale. However, the buildings of the Late Modern period represent a great increase in the average square footage.

The first building on campus that marks this change in architectural expression and scale is the 1963, Education Building, designed by Gordon M. Luepke. Originally towering over its surroundings, this eight story building incorporates simultaneous International Style references and historicist precedents. The building is symmetrically composed, lacking the volumetric overlapping prevalent in earlier Modern buildings. It also references a tripartite horizontal organization, with a strong concrete base that encompasses the first floor, and a slim cornice, a protruding cap of white concrete. The building contains aluminum sash windows with cantilevered overhangs from the early modern period, but instead of a continuous band of windows, they are broken up by regular piers that reference an earlier façade composition demonstrated by the PWA buildings of Roy Place or the Transitional buildings of James Macmillan. The Education building also features decorative spandrel panels of red brick



The Education Building's geometric design and details are emblematic of the Late Modern buildings on the University of Arizona campus.



While the Gittings Buildings is unremarkable in its form and materiality, it responds nicely to Tucson's excellent climate by featuring a large interior courtyard.



Historic view showing Old Main and the Memorial Fountain with "A" Mountain in the background prior to 1930.



An historic photograph of the campus with berms, as well as clear walkways and pathways to the west of Old Main. Bear Down is to the east in the background.

with a square protruding concrete pattern. Although minimal, this gesture would have been considered unnecessary by staunch early modernists.

As mentioned earlier, buildings of this period were sited to accommodate automobiles. The harmonious design linking landscape and architecture that defines the historic core of campus was not present during this period with much of the space between buildings devoted to roads and surface parking. Terry Atkinson's buildings while often sited near busy streets or parking lots, always incorporated a sheltered interior courtyard. While his Home Economics Building (now Family and Consumer Sciences) is chiefly designed in the modern/monumental language that dominates much of his work on campus, it also includes a very sensitively designed sunken courtyard with plantings and water features that provides a haven within the building. Other Atkinson-designed buildings such as the original architecture building (1965) and the New Law Building (1979) contained similar courtyard spaces.

C. Important Landscape Features & Concepts

Man-made landscapes are expressions of both aesthetics and cultures. The intentional placement of buildings, plants, structures, paths, fences or other objects exhibit symbolic relationships and values. At the University of Arizona, the landscape of the Historic Core is defined by a unique collection of elements, mostly man-made but some natural, that represent expressions of aesthetic, cultural and functional influences unique to specific periods of time and created in the context of a campus as an outdoor laboratory for a land grant institution. These elements also represent successful responses to the unique environmental conditions of the desert southwest and are used in the 2003 Comprehensive Plan as examples of successful application of the principles of shade, enclosed space and contained greenery. As such, these elements have intrinsic historic value and should be managed to preserve the unique expression of influences present at the time of installation.

The University of Arizona landscape elements were not designed in a void; they are remnants of landscapes that were the expressions of time periods in which they were created. While we cannot view the landscape in isolation, the related buildings, structures and built features such as fences, gates, water features, and irrigation systems are all inter-related. For the purposes of this project we have discussed the evolving landscape elements in relationship to their respective eras. A full Cultural Landscape Study was beyond the scope of this project, but the information developed here is certainly a start to fully documenting the integrated designed historic campus at the University of Arizona. Generally, the campus landscape evolved over a period of several overlapping eras including: Victorian Eclectic Landscape Design (1880s

– 1909), the City Beautiful Movement and Traditional Campus Planning (1909 – 1930s), and the Development of University of Arizona a Land Grant Institution and Landscape Experiment (1901 – present day).

Victorian Eclectic Landscape Design (1880s - 1909)

The University was founded in the mid-1880s and ground was broken for the first building (Old Main) in October 1887. The first structures and the surrounding landscape on the campus evoked the traditions established during the Victorian Era. "Victorian landscapes emphasized a variety of detail within very uniformly open spaces. These diverse details, whether an accent piece, a planting bed, or a small specialty garden, were not linked either spatially or through related motifs. Every feature was intended to stand out as a separate, internally unified element." The use of curving paths and roads and the irregular placement of buildings provide multiple views as one moves through spaces. Victorian elements such as greenhouses, East Lake style houses, lily ponds, gardens, use of vines on buildings to create shade were all present on the campus during this era.

The remaining legacies of the Victorian Era at the University of Arizona included: the campus' main gate, the lava rock wall, the lily pond, growth of vines on buildings, planting of lawns, and the Old Main approach loop.

Main Gate

The earliest photographs of the Main Gate date to approximately 1906 and show a curved low cement wall, a wooden fence element and brick posts. In October 1916, a Lava Rock Wall and Gate were constructed to surround the campus. In total 1,440 feet of lava stone wall was constructed including two other gates.

Old Main Approach Loop

Old Main is the most recognized building on campus. Moving from the Main Gate at Park Avenue, the campus roadway approached Old Main and then at the building a loop was established that encircled a garden element at the loop center. The features and plantings that surround Old Main contribute to the historic character of this campus landscape element. From the earliest days, this landscape was based upon lawn, a variety of trees and interesting plant species such as Pampas Grass and a Weeping Mulberry. This greenery contrasted with



Picture of the University Main Gate constructed in 1905. This photograph is from approximately one year later.



The second gate constructed of Lava Rock in 1916 also included the Lava Rock Wall that defined the campus boundary.



A view looking north down Park Aveune showing the realtionship of the Lava Perimeter Wall to the campus landscape and Park Avenue sidewalk and lamp posts.



The lawn on the Mall is an important component of the campus character.

the Cactus Garden, originally to the west and, then in 1930, relocated to the east of Old Main. Lawn has replaced the original site of the Cactus Gardens; the area immediately around Old Main has become the largest expanse of desert plantings. Within the Loop Road some plants survive from earlier planting programs, including a group of five olive trees on the north side.

The ground plane here is nearly flat, though it is a high point in elevation for this area. It has been covered with brown gravel, and is planted with a number of species native to the Sonoran Desert. This garden is similar in content to the original Cactus Garden to the west but the Old Main Loop Landscape serves, to a certain extent, as an interpretive element of this earlier era.

Lava Rock Wall

In 1916 a lava rock wall was constructed to identify the campus boundary and to keep livestock out of the more formal campus center. "Although Victorian design relied primarily on plants, there were a number of essential site amenities. Fencing defined the boundaries of one's suburban "estate," as well as framing the grounds." Although, this feature was constructed in a year not normally associated with the Victorian Era, its design qualities reflect this era more so than the subsequent City Beautiful. The somewhat rough or "crenellated" feel of the wall and its lack of Classical detailing firmly ground it in the Victorian tradition.

The University of Arizona wall defined and framed the campus. A dark lava rock from local extinct volcanic activity was selected as the building material. This rock is dark reddish-brown to nearly black in color, and is very porous. At one time the lava rock wall edged most of the original campus acreage; now it defines much of the Historic Core. Along most of Park Avenue the campus landscape is at a higher elevation than the street and the wall also serves as a retaining wall. Along Second Street and Cherry Avenue the wall is free-standing. The portion of the wall continuing south on Cherry to Fourth Street and then west to Park Avenue was never completed.

Lawns

The use of lawn as a landscape element is evident on campus in early photographs. "Lawn was a living carpet upon which all the 'furnishings' of the Victorian landscape, be they plants, gazebos, or the main structure itself, could be set out. The lawn was at once the primary, and often only, unifier of the site, and the homogeneous background that emphasized just how diverse and scattered were the elements set out upon it." Lawns are found predominantly

where English is either the native tongue or a preferred second language. At first spread by British colonization they were ultimately maintained long after British rule came to an end in these areas of the world. Lawns are cultural statements as much or more than horticultural, technological or aesthetic treatments. In Britain and northern Europe (north of a line connecting Berlin and Paris), lawns are a default; mow whatever grasses grow in these regions and eventually you have a lawn. South of this line, however, increasing effort is required to create and maintain the illusion that lawn naturally occurs. From Abu Dhabi to San José (and Tucson) people have obviously thought the result was worth the effort and cost. As those costs continue to rise, however, more people will re-evaluate the benefits and costs of greensward. There are economies of scale to be realized in large lawns over small ones.

The campus lawns, especially those in the Historic Core, are one of the most important contributors to the campus character. The large lawn areas and the green spaces between buildings in the Historic Core have resulted in park-like settings, and they are arguably some of the best maintained public spaces of their size in Tucson.

Lily Pond

The exact origin of the University of Arizona Lily Pond is not known. It is located near the intersection of Park Avenue and First Street. The pond may have been associated with the President's house that was removed for the construction of Gila Hall. The Lily Pond was originally planted with palms and other lush appearing species to give the impression of an oasis. Turtles and blue herons frequented the pond. Due to its relative isolation and romantic exoticism, it has long been a favorite quiet place on campus. Lily ponds were a favorite of Victorian gardeners who knew of the Victoria Regia giant lily displayed in a new glass hothouse at Chatsworth, England in 1849 by Joseph Paxton. The lily pond landscape feature grew in popularity and became commonplace during the native plant fashion of the 1870s.

Vines on Buildings

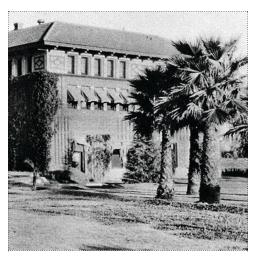
In a number of locations in the Historic Core vines, of a variety of species, grow over fences or up masonry building walls. "Just as important to Victorian design as lawn, annuals, and perennials were vines. No other period has used this material as effectively and consistently. Vines were the sole plant material used to create a link between the grounds and buildings which sat upon them. In this they were a precursor to the ubiquitous foundation plantings of the early twentieth century." The use of vines on buildings has a long tradition on the



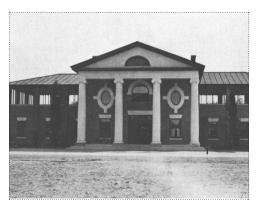
An historic photograph of the Lily pond around 1941.



The vines on Forbes almost form pilasters or an architectural element of the building.



This historic image of the campus shows an early use of palm trees and vines on building exteriors.



The Neoclassical detailing of South Hall (now demolished).

University of Arizona campus. The south façade Arizona State Museum (North) was once almost entirely covered with vines, most likely Cat's Claw, that shaded the masonry from the sun, thus reducing heat buildup in the building.

A photograph of students posed at a corner of Old Main, probably around 1915, shows the entire lower story up to the railing full of a rather fine-textured vine. This would have provided a delightful cool green shade for the sunken lower story. The texture of the vine is medium fine, smaller than that of Algerian ivy, and not as regular as English ivy. It was possibly *MacFadyena unguis-cati*, or cat's claw. Indeed, an early reminiscence of the campus mentions Bignonias. One available at the time was *Bignonia tweediana*, later *Doxantha unguis-cati* and now known as *MacFadyena unguis-cati*.

The Douglass Building is also shown with its north façade covered in vines, probably a species of ivy (*Hedera sp.*). Creeping fig (*Ficus pumila*) can be found on walls at the rear of Gila Hall. Shantz and the Science Library also have vines on portions of the building facade.

City Beautiful Movement & Traditional Campus Planning (1909 - 1930s)

In the twentieth century, American campus planning began to take on a more formal, sometimes Classical, expression when American architects trained at the Ecole des Beaux Arts in Paris began to design in the Classical traditions they learned abroad. Additionally, City Beautiful proponents sought to improve cities through beautification, hoping that social ills would be eradicated by the beauty of the city. These efforts, they thought, would bring American cities (and campuses) into a new realm through the use of the Beaux-Arts idiom.

With the formal axial placement of the Science Building in 1909, the campus core organizational structure became a linear system with a green lawn, the mall, at the center, academic buildings lining the mall, facing north and south and behind them, rows of residential dormitories. Old Main terminated the axis and served as the focal point of the University's academic village. The Historic Core essentially attained its present appearance by 1935 and can be simply described as a ground plane of lawn around buildings, in which are scattered a variety of specimen trees, ornamented by various features, with exterior spaces and major circulation ways defined and articulated by rows of plantings including olives and palms.

The remaining legacies of the City Beautiful Movement and Traditional Campus Planning are found in the following landscape elements: the palm-lined east and west mall areas, the system of placing buildings along the Mall, the Berger Memorial Fountain, Observatory Circle, the Citrus Walk, and the green belt and olive lined North Campus drive.

The Palm-Lined East and West Malls

A mall is a public plaza, walk, or system of walks often set with trees designed for pedestrian use. Grounded in Jefferson's use of the expanse of lawn at the University of Virginia, the mall concept is most fully expressed in the City Beautiful with the completion of the National Mall in Washington, D.C., lined with monuments and museum buildings. The University of Arizona campus emulated this design treatment as architects placed buildings in axial relationship to one another and began to frame the landscape.

Originally, the campus center was focused on the area west of Old Main. As the University expanded east, the lawns on the east and west sides of Old Main became the significant open space for the Historic Core. The large, flat lawn east of Old Main is one of the campus' most prominent character-defining features. The formality of the space is enhanced by the axial placement of Palms along the east and west circulation routes lining the mall and that frame buildings. Palms are also often used to mark building entries or line other important circulation routes through campus.

Berger Memorial Fountain

In 1919 the axis of the emerging mall was accentuated by the Berger Memorial Fountain, honoring Arizona's fallen in World War I. The fountain is centrally located at the west side of Old Main. It is an octagonally-shaped concrete fountain raised above the level of the turf. There is a walkway edged with a planter bed surrounding this feature. The fountain has long been a meeting place on campus and has been an icon for generations of students. In the 1930s the annual cleaning of the fountain was a participatory student event. A 1948 photograph shows the fountain surrounded by small Palo Verde trees; however, these trees have been removed.

Observatory Circle

Steward Observatory was officially established in 1916 by Andrew Ellicott Douglass, with a generous bequest made by Mrs. Lavinia Steward in memory of her late husband, Henry B. Steward. The Steward gift was used to build an observatory on an isolated tract of university land a short walking distance to the east of the University's first building, Old Main. Its construction was delayed by World War I, and was finally completed in 1923. The Observatory and its associated landscape were built along North Campus Drive which ringed the Observatory, forming a circular drive around the building. Olive trees lined the outer part



The Berger Memorial Fountain constructed in 1919.



The Observatory and its landscaped circle constructed in the early 1920s.



The citrus walk or orange arbor between Gila and Maricopa Residence Halls is one of the campus' most unique land-scapes.



In 1929 it was decided to move the Cactus Garden from in front of Old Main to the east side in the east mall. This photograph shows the relocated garden looking southeast toward Bear Down Gym.

of the circular drive and were also planted along North Campus Drive. Orange trees were subsequently planted in 1960s along the inner circle, and the interior area was been converted to lawn. By 1963 the Observatory circle was cut off, the road grade was lowered about 30 inches and the grade change contained by a segment of Lava Rock Wall similar in appearance to the Lava Rock Walls found at other historic areas of campus.

Citrus Walk

The citrus walk between Gila and Maricopa Halls began as parallel hedges. Over the years it has grown to fill out the area between the utilitarian service road behind the residence halls and the expansive green lawns of the historic core. It is a delightful passage on an intimate scale. It has been well-maintained and the installation of an electrolier has increased nighttime security.

University of Arizona as Land Grant Institution & Landscape Experiment

The systematic botanical study of true deserts was in its infancy when the University of Arizona campus was founded. Indeed, one of the purposes of a land grant institution was to develop college level instruction relating to the practical realities of an agricultural and industrial society and to distribute the knowledge acquired during academic research to the community via the agricultural extension service. The earliest plantings on campus were very much experimental, at first drawing upon the flora of the local Sonoran Desert. Inquiry then expanded to species from other deserts and climatic regimes, to see how they would fare under the unique and challenging local conditions of climate and soils. Some have been successful; others are no longer extant for various reasons. This emphasis on botanical research has had a significant impact on the landscape associated with the University of Arizona campus.

The remaining legacies of this experimental garden include the Krutch Garden, the Olive Walk, the Flood Irrigation System, the Heritage Trees and the Great Trees of Arizona.

Joseph Wood Krutch Garden

One of the University campus's most iconic elements, the Cactus Garden, originally occupied a triangular area west of Old Main and was used for botanical study and subjects for drawing classes. It was composed originally of indigenous plants of the Tucson basin and the Sonoran Desert including: Giant Saguaro (Carnegia gigantea), Ocotillo (Fouqueria splendens) and several other species of native plants. The Garden was used for botanical study and for drawing classes.

In 1919 the Cactus Garden was diminished by the construction of the Berger Fountain and adjacent paving. In the 1920s, the Cactus Garden was removed to the newly developing mall east of Old Main, where it occupied a considerable area. In the last few years, a number of plant species that were in the original cactus garden have been replanted within the loop road around Old Main. Over time, the Cactus Garden on the East Mall diminished until, in 1980, a very small portion of its original area was designated the Krutch Garden to commemorate the work of Joseph Wood Krutch, naturalist and author. At present, the Krutch Garden is remarkable mostly for its three mature Boojums (Fouqieria columnaris). In 2005 the tallest of the Boojums, arguably the oldest and largest in this country, died, was removed and carefully studied. Other mature Boojums remain in the garden; small Boojums have been planted elsewhere on campus. The other plantings in the Krutch Garden of Acacias and cactus have been selected as an association of plants of the Sonoran Desert.

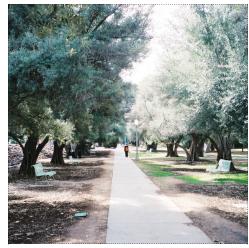
Olive Walk

One of the most important landscape features on campus is the hundred-foot wide strip of land on the west edge of campus, between the rock perimeter wall along Park Avenue and the rows of olive trees planted by Robert Forbes. Some time after 1901 this long strip, sloping gently from north to south, was lightly re-graded to make a series of flat terraces, each divided from the other by a low earth berm, which could be flood-irrigated. The berms were irregularly planted to a collection of trees, mostly exotics. This feature is discussed in more detail below.

The Olive Walk is an excellent example of the mix of influences that result in the unique qualities of historic landscapes on campus. It is a tree lined alleé, a popular feature in European landscapes and emphasized anew in Victorian times. However, Forbes integrated the research mission of the University with the improvement of landscape by planting several different varieties of olive on a trail basis. Normally an alleé would have been lined with one variety of tree.

Flood Irrigation Beds

The terraces created around 1901 were further enhanced in 1914 when Park Avenue was lowered, requiring a retaining wall, as the campus was 2 to 3 feet higher than the new street elevation. The strip of land between the Olive Walk and Park Avenue already had a scattering of trees, mostly young conifers. The ground surface was irregular and torn up. Shortly thereafter, the land was leveled into a series of beds each about 90 feet in length from the wall on Park Avenue



Two rows of olives planted by Robert Forbes in the early 1900s define one of the University's most pleasant throughways.



Irrigation beds near the campus entry.



The Boojum trees in the Krutch Garden are Heritage Trees.



Rock revetments in the historic campus core.

to within the drip-line of the olives on the Olive Walk and varying in width from approximately 25 to 60 feet or so. They were separated by low earthen berms, 12 to 18 inches high. Lawns in front of the dormitories along North Campus Drive were also constructed in this way.

Flood irrigation was developed millennia ago in such disparate places as Arabia, Iran, China, Peru and Egypt. At one time it was commonly seen in Tucson and Phoenix, but this method has been increasingly replaced in the 20th century by automatic sprinkler systems and mechanized mowing, which are both more efficient on larger areas. Although the terraces are obsolete as an irrigation system, this landscape element is one of the character-defining features of this campus. Pedestrians frequently use the berm ridges as informal paths. Many people use this area as passive recreation, although it is not as intensely used as other large lawn areas.

Heritage Trees and Great Trees of Arizona

The experimental nature of the campus plantings throughout the twentieth century has resulted in a collection of rare and instructional plant material located on the University of Arizona campus. Essentially, the older areas of campus are a ground plane of generous expanses of lawn supporting a variety of "test trees." Within the Historic Core there are a number of trees that have achieved Heritage Tree or Great Tree of Arizona status; however, trees of this status can also be found in other areas of campus. Many of these trees, planted by Warren Jones, were located near buildings constructed from the 1950s - 1980s. This collection of trees has special links to the faculty and research of the Land Grant Institution, and are very much connected with the University's mission.

Rock Slope Revetments

While these are not historic features they are unique to the University of Arizona and contribute to the character of the campus. They are also useful in retaining gravel in place on slopes and controlling pedestrian traffic.

D. Important Architects & Designers

Introduction

Some American university campuses were designed with the influence of one major architect, such as at McKim, Mead and White at early Columbia University, or a coordinated team of designers, as at the University of California, Santa Cruz. The overall character of the University of Arizona has been shaped over time by a number of talented individuals. Certainly, Roy Place had the most influence given the number of buildings he designed; however, others have left their mark on the campus. The following is not a comprehensive list of every architect involved in the University. Nonetheless, it provides some important biographical and career information about those architects who influenced the University of Arizona's development through multiple or especially significant buildings. They are discussed chronologically.

James Miller Creighton

While Phoenix architect James Creighton's contribution to the University's campus is small in quantity, his University Hall (Old Main today) of 1891, is the building that best embodies the University. It was the campus' first major building and all campus building since has developed with Old Main as its epicenter. Creighton has no other significant extant buildings in Tucson, but is responsible for the design of many prominent buildings in the Phoenix area such as Pinal County Hall and Phoenix City Hall.¹¹

David H. Holmes

David Holmes came to Tucson from the Midwest in 1898 to accept a teaching position at the University. His classical influences, demonstrated in buildings such as Herring Hall and Science Hall (now Communications), established the language that would dominate architecture on campus for the next quarter century. Holmes also maintained a firm with his brother that was responsible for many prominent buildings throughout Tucson such as the Corbett House.¹²

J.B. Lyman

J.B. Lyman came to Tucson from San Diego after winning the competition to design the University's Agriculture Building. He is responsible for many of the stately classical buildings



North/South elevation of Old Main drawn by James Creighton. This is the only extant building by the prominent early Phoenix architect in Tucson.



J. B. Lyman was responsible for the design of a number of buildings on campus, including Forbes Hall (originally the Agriculture Building) pictured above.



Yuma Hall is one of the older residential buildings on campus that was designed by Roy Place.



Nugent Hall, also designed by Roy Place, has similar Romanesque detailing as Yuma Hall, above. Nugent was designed as the campus Administration Building.

that contribute to the campus' historic core. Lyman designed buildings on campus from 1915 until 1925, first as Lyman and Bristow and later as Lyman and Place. His earliest buildings are largely Neo-classical in style, best demonstrated by the Engineering building, and the Agriculture Building (now Forbes). After becoming the partner of Roy Place, the firm's work became much more influenced by the Spanish and Italian Romanesque, as seen in the University's second Library (now Arizona State Museum North) and Bear Down Gymnasium.

Roy Place

Before his work on the University of Arizona campus, Roy Place worked in San Francisco, Chicago, Boston, and Los Angeles. He spent a portion of his early career working for Shepley, Rutan and Coolidge, the architects responsible for the highly publicized Romanesque Revival Core of Stanford University.¹³ Roy Place began his long and distinguished career at the University of Arizona as a partner to J.B. Lyman and assisted with the design of the Berger Memorial Fountain, the Steward Observatory, Bear Down Gymnasium, and the University's second library building (now Arizona State Museum North). Lyman left the firm in 1924. In 1940 the firm became Place and Place when Toy Place entered into a partnership with his son, Lew. Roy Place continued building on campus until his death in 1950. His most significant contribution the campus came with eleven projects funded by the depression era Public Works Administration. All PWA buildings were constructed in the second half of the 1930s. Since all of Place's buildings were constructed within a relatively short span of time, they are remarkably cohesive. Despite their speedy execution, detailing remains rich in all buildings, and while they are similar in appearance, each building is unique. The buildings are dominated by an Italian and Spanish Romanesque architectural language¹⁴ and include the original Arizona State Museum, Centennial Hall, Humanities (now the Center for English as a second language), the Administration Building (now Nugent), the Chemistry-Physics Building, Gila Dorm, and Yuma Hall. Roy Place is also responsible for the design of several Tucson landmarks such as the Pima County Courthouse, Mansfield Middle School, and the Benedictine Sanctuary.

James Macmillan

James Macmillan is responsible for the design of several buildings built on campus between 1940 and 1954. Macmillan's works are best distinguished from earlier buildings on campus by a simplification of ornamental detailing and by his embracement of "modern" materials, such as reinforced concrete and steel, for their aesthetic values. The Mines and Metallurgy (now Harshbarger Mines), the first Business and Public Administration Building (now Caesar

Chavez), and the Liberal Arts Building (now Social Sciences) are prominent examples of Macmillan's work. To students attending the University prior to 1999, the work of James Macmillan may have been as important in forming their perception of the University as that of Roy Place, as Macmillan was the architect of the original Student Union complex in 1951, which no doubt was the center of many students' lives at the University. The original Student Union was torn down in 1999 to make room for the current Student Union.

Terry Atkinson

Terry Atkinson several campus buildings between 1952 and 1979. Most of Atkinsons' buildings are Modern in their use of materials, but often more classical in their massing, such as the central entrance of the Home Economics Building (now Consumer Sciences) and the concrete peristyle that originally served as the entrance to the Architecture Building. Atkinsons' work is unique in that, while most buildings being executed during that period gave little attention to any kind landscape consideration beside automobile accommodation, many of his buildings contain sensitive interior courtyards. The courtyards of his Home Economics Building and Law building are still popular gathering spaces today.

Arthur T. Brown

Arthur Brown was active at the University from the early 1950s through the early 1960s. His buildings, with their strip windows, asymmetrical massing, and lack of ornament, are the campus' best examples of International Style Modern architecture. Some examples of his work on campus are the Graham-Greenlee residence halls and the second Law Building (now Franklin). Brown was prolific in his career and designed hundred of buildings, mostly residences, in southeastern Arizona.

Friedman and Jobusch

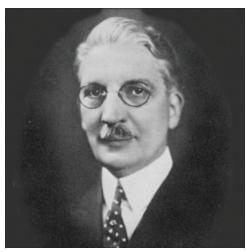
Friedman and Jobusch were prolific on campus from 1962 through the 1980s. The most distinguishing aspect of their architecture is the brutal and repetitive use of reinforced concrete as an aesthetic element. The third, and current, Main Library is their most prominent work.



The Home Economics building was designed by Terry Atkinson. This building now serves the Consumer Sciences department.



The courtyard at Graham-Greenlee residence halls is an integral part of Arthur T. Brown's design for the complex.



Rufus B. von Kleinsmid, president of the University from 1914 until 1921



Homer Shantz, president of the University from 1928 until 1936

E. Significant Individuals

Introduction

Designers are not the only individuals who have left an imprint on the campus development. The University campus attracts a wide range of professionals to serve as educators and administrators. During the course of the University's development a number of individuals have provided strong leadership resulting in the current character of the campus. The following provides an overview of the individual efforts of these members of the campus community.

University Presidents

Rufus B. von Kleinsmid

Von Kleinsmid, an Illinois native, came to Tucson from DePauw University, where he was Professor of English and Psychology. He was president of the University from 1914 – 1921. An admired and able leader, he has been generally credited with "the making of a University out of a school." He established a valuable alliance with Arizona Governor George P.W. Hunt, who was able to pressure the state legislature to provide the funds necessary to realize von Kleinsmid's vision for the University. During his administration the College of Letters, Arts, and Sciences, the College of Mines and Engineering, and the School of Law were established. The school's popular newspaper, the *Arizona Daily Wildcat*, was created. Several buildings that today anchor the campus were built including the Agriculture Building (now Forbes) the Mines and Engineering Building (now Engineering), the Steward Observatory and Cochise and Maricopa Halls. In 1921 he left Arizona for a long and distinguished term as president of the University of Southern California.

Homer LeRoy Shantz

In 1928 Shantz, the amiable head of the Department of Botany at the University of Illinois, became the University of Arizona's 10th President. Besides being a talented administrator, he was naturally invested in the campus' landscape and forwarding the University's programs related to agriculture and range management. During his tenure as president the College of Fine Arts, the School of Business and Public Administration, and the Graduate College were all established and the School of Law was accredited by the American Bar Association. He also had the daunting task of leading the University through the Great Depression, which he

handled admirably. Besides taking a voluntary 20 percent pay cut, he secured Public Works Administration funding for the Construction of 11 new buildings in 1936. All buildings were designed by Roy Place and include the Arizona State Museum (South), the Old Chemistry Building, and the University's first stadium. The PWA buildings have aged well and today are some of the best-loved and easily identifiable buildings on the University's campus. ¹⁶

Richard Anderson Harvill

A native of Tennessee, Harvill served as a popular economics professor at the University from 1934-1942. During World War II he worked in the Arizona Office of Price Administration, returning to the University in 1946 as Dean of the Graduate College and later Dean of the College of Liberal Arts. In 1951 he became the University's 14th president. An office he held until 1971. Harvill's tenure corresponded with huge growth of the University in all areas. During his administration student enrollment rose from 5,500 to over 26,500 and faculty rose from 1,131 to 8,593. At the end of his presidency, he had seen the construction of 45 new buildings, and the University was still pouring out into converted residences and commercial buildings. Several new schools and colleges were established, the most significant being the prestigious School of Medicine.¹⁷

Faculty

James W. Toumey

Toumey, a Botanist for the Agricultural Experiment Station, began the University's cactus garden in 1891. Under his direction, the garden quickly grew to over 600 species. ¹⁸ It originally occupied the area just west of Old Main. In 1929 it was moved and expanded, under the direction of Homer Shantz, to the east of Old Main. Eventually, all but the central island of the garden was removed, which is today known as the Krutch Garden. ¹⁹

Professor George E. Smith

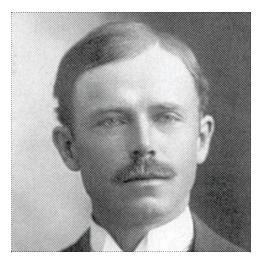
Professor Smith was, beginning in 1900, an important member of the University of Arizona community for over half a century. Included among his many accomplishments are the following: the establishment of the University's Department of Engineering and Physics, conducting Arizona's first groundwater survey along the Rillito River Valley, authoring and



Richard Harvill, president of the University from 1951 until 1971



James Toumey



Robert Forbes



Warren Jones

obtaining passage of Arizona's first water code, completing the first comprehensive land use survey for the state in 1930. Professor Smith's home, designed by Smith and constructed in 1904, was listed on the National Register of Historic Places in 1982 and donated to the University by his family in 1989.

Professor Andrew E. Douglass

Professor Douglass began teaching at the University in 1906 and is best known for his initiation of the science of dendrochronology, or the study of tree rings. He was also the University's first professor of astronomy and was instrumental in getting the Steward Observatory built on campus. The house on Speedway Blvd. that Professor Douglass purchased in 1913 from Dr. Cannon was listed on the National Register of Historic Places in 1982 and donated to the University in 1989.

Dr. Robert Forbes

Dr. Robert Forbes was head of the Agriculture Experiment Station at the turn of the 20th century. He is responsible for much of the earliest landscaping at the University. He studied the success of many species in Tucson, including cotton, dates, and figs. His most lasting landscape contribution is the olive grove planted along the University's western edge. The University recently celebrated the 100-year anniversary of the planting of this important campus element.²⁰

Warren Jones

Warren Jones is a retired University of Arizona professor of Landscape Architecture. From the 1960s through the 1980s, the University of Arizona in Tucson became the "proving ground" for dozens of arid-region, drought tolerant species. In an effort to evaluate them for use in urban landscapes, Jones installed trees and shrubs from around the world onto the University campus. The results of his lifelong dedication are the basis of the book "Landscape Plants for Dry Regions" which he co-authored with Charles Sacamano.²¹

Alumni

Several notable University of Arizona alumni include: U.S. Surgeon General Richard Carmona; Pulitzer Prize winner Richard Russo (for his novel Empire Falls); professional golfer Annika Sorenstam; comedian Garry Shandling; actors Craig T. Nelson and Greg Kinnear; TV celebrity Geraldo Rivera; artists Hal Empie and Fritz Scholder; musician Harvey Mason; psychologist and author Kevin Leman; congressman Mo Udall; AOL president Ray Oglethorpe; Mattel CEO Robert A. Eckert; Sesame Street creator Joan Ganz Cooney; astronaut Thomas Jones; and NBA stars Sean Elliott and Steve Kerr.²²

Tucson Community Members

Dr. William Cannon

Dr. Cannon came to Tucson in 1902 and served as the first resident Botanist for the Desert Botanical Laboratory, a project of the Carnegie Institute in Washington D.C. The Research Botanical Laboratory was the first center dedicated to the study of the North American desert ecology. In 1906 he built a house on property bought from Professor Smith north of Speedway Blvd. that he later sold to Professor Andrew Douglass. The house was listed on the national Register of Historic Places in 1982 and later donated to the University

Other Notable Residents

Some other notable residents, past and present of Tucson include: author Edward Abbey; athlete Michael Bates; astronomer Bart Bok; mobster Joseph Bonanno; anthropologist Francis Bordes; astronaut Frank Borman; author Charles Bowden; minister William M. Branham; author Ray Bradbury; professional football player Tedy Bruschi; model Brooke Burke; musician Joey Burns; playwright Erskine Caldwell; U.S. Surgeon General Richard Carmona; painter Ted DeGrazia; musician John Denver; mobster John Dillinger; actress Barbara Eden; professional football player John Fina; author Charles G. Finney; comedian Pablo Francisco; minister Perry Green; father of chicano music Lalo Guerrero; composer Ulysses Kat; novelist Barbara Kingsolver; author Joseph Wood Krutch; actor Lee Marvin; photographer Linda McCartney; musician/artist Paul McCartney; travel writer Tom Miller; basketball coach Lute Olson; librarian Lawrence Clarke Powell; musician Linda Ronstadt; singer/songwriter Barry Sadler; birth control advocate Margret Sanger; author Leslie Marmon Silko; photographer W. Eugene Smith; gymnast Kerri Strug; newscaster Lou Waters; Alternative medicine practitioner Dr. Andrew Weil.²³



Building placement along the mall is very important. Buildings that have strayed from the historical placement pattern have not been as successful in their final design contribution to the overall character of the mall.



The University's earliest buildings incorporated brick; the use of brick has continued as a building tradition at the University of Arizona.

F. The University's Character-Defining Features

Mall / Use of Open Space

- East of Old Main: Formal in character. Mall reads as one ½ mile long open space.
- West of Old Main: Picturesque in character. Open spaces are broken up by plantings, meandering roads, terraces and differing building sizes. There is a rich variety in scale of open
 space west of Old Main, from the monumental plaza in front of the Arizona State Museum
 (North) to the tiny orange grove between Maricopa and Gila Halls.

Building Placement

- East of Old Main: Buildings are oriented toward the mall.
- North of 2nd Street and south of 4th Street no overarching formal guidelines for building placement. Surfaces parking and streets dominate area around buildings.
- West of Old Main: Buildings are placed roughly symmetrically along an axis established by the entrance of Old Main and University Boulevard with academic buildings adjacent to axis and dormitories directly to the north and south. Due to the varying architectural and landscape character of the individual buildings and their interstitial spaces, this pattern is difficult to read except in plan. North of 2nd Street and south of 4th Street this organization breaks down.

Building Materials

- Red Brick: The most prevalent building material on campus. The continued use of red brick is encouraged to provide consistency of materials.
- Concrete: After red brick, concrete is the most visible building material on campus.
 However, it is only used in an aesthetic way in a handful of instances in the historic core.
 Examples being the columns in Cochise Hall's portico or the spandrel panels in Mines and Metallurgy (now Harshbarger Mines)
- Ceramic Tile: Ceramic tile was used in the 1920s and 1930s, mainly by architect Roy Place, in various surface decoration applications.
- Terra Cotta Tile: Terra cotta tile is used to accent buildings in the historic core in a few examples, all designed by James Macmillan. The Liberal Arts Building (now Social Sciences) uses terra cotta the most prevalently, but it is also used to a smaller degree in the first Business and Public Administration Building (now Cesar Chavez).

Fenestration

- Doors: There is a wide range of door styles and materials present in the campus' historic
 core. Most doors have either some variation of glass paneling or divided lights. Rails
 and stiles are primarily wood or bronze. Aluminum rails and stiles are dominant after the
 1950s.
- Windows: There are basically three eras of window types on campus. Wood double hung windows are almost exclusively used prior to 1915. With a few exceptions, buildings between 1915 and the early 1950s have operable steel sash windows with various opening actions. From the mid 1950s on, aluminum sash windows dominate.

Roof lines, Height, & Massing

Nearly all extant buildings on campus built prior to the 1950s have three stories, some with
a half story below ground. Also, almost all buildings built prior to the 1950s have hipped
red clay tile roofs; some true hipped roofs, others truncated. Also, classical tripartite horizontal massing dominates historic campus buildings, with a strong base, more refined mid
section, or *piano nobile*, and a cornice or protruding roof line.

Scale & Proportion

• Most historic buildings on campus are monumental in scale and are generally symmetrical in design.

Building Entries, Approach & Front

• A prominent central entrance flanked by symmetrical wings is the most common type of entrance found in the campus' historic core. Generally, earlier buildings have more monumental entrances than later buildings. This is well demonstrated by the early Engineering and Agriculture Buildings (now Forbes), which both have large colonnaded porticos that dominate their front facades. Several buildings built in the 20s, such as Maricopa and Cochise Halls also have central colonnaded portico entrances, but their porticos now dominate less of their front façades. By the 1930s entrances have become much less monumental, but are still centrally located and distinguished with some architectural accent.



A classic example of steel sash casement windows on the University's older buildings.



The older buildings on campus have a consistent height, roof form and scale that give the historic core its character.



A prominent entrance flanked by symmetrical wings is common in campus buildings built prior to World War II.



The campus's first major building. Old Main, was one of the last to provide, in the form of a veranda, effective shaded transitional spaces between dark interiors and the unrelenting Arizona sun. While the more Classically inspired later structures sometimes featured a small entry portico, these features were not as effective shade devices.

• Buildings along the axis established by the entrance of Old Main and University Blvd. tend to have front plazas that heighten the building's monumental appearance. Buildings along the secondary axes have less monumental approaches.

Shade Devices

• Shading devices have not been prominent in campus architecture since the campus' first building, Old Main, which is entirely surrounded by a shaded verandah. In other buildings columned porticos or deep set entryways help to provide a shaded transition from interior to exterior. West of Old Main trees have been planted to provide shaded walkways between buildings, but east of Old Main there is a noticeable lack of shade on the mall. The lack of built shade devices on campus makes walking through campus difficult during the hotter months.

G. Campus Relationship to Tucson's Urban Environment & Neighborhoods

Introduction

As the University has grown and developed it has impacted the surrounding neighborhoods that are integral to the City of Tucson. The University is surrounded by several historic districts, recognized at varying levels, including:

Those listed on the National Register of Historic Places;

Blenman-Elm;

Catalina Vista;

Sam Hughes;

Pie Allen;

Iron Horse Expansion;

West University; and

Speedway/Drachman.

Those eligible for the National Register;

Jefferson Park; and

Rincon Heights.

And one locally recognized historic district;

West University

There are also two individually listed properties in close proximity to the university;

Arizona Inn (Blenman-Elm);

University Heights Elementary School (Speedway-Drachman)

For contact information, or to view any Tucson neighborhood association's newsletter visit Tucson's Department of Neighborhood Resources website at: http://www.tucsonaz.gov/dnr/.

For information regarding the University's Campus Community Relations Committee, visit the University's Neighbor to Neighbor page at: http://web.arizona.edu/~community/neighbortone ighbor.html.



Small scale commercial buildings south of Sixth Street opposite large scale University buildings.



The campus boundary with lava rock wall and the Marshall Foundation building near the intersection of University Boulevard and Park Avenue.



The landscaping of the Sam Hughes neighborhood helps the transition from residential area to the boundary of the University.

Marshall Foundation Properties

The University's first female professor, Louise Foucar Marshall, began buying property along 3rd Street (now University Boulevard) in the 1920s. In 1930 she and her husband Thomas Marshall established the Marshall Foundation. As of 2004 the Marshall Foundation had given 8.8 million dollars to the University of Arizona and other various surrounding institutions and organizations as well as providing student scholarships. Today, the Marshall Foundation owns most of the property directly east of the University along University Boulevard. These properties are managed as major income generators for the Marshall Foundation. The Marshall Foundation has made an effort to respect the neighboring historic properties in the West University Neighborhood and is currently undertaking an effort to replace the northern side of University Boulevard between Park and Tyndall Avenues with buildings that reflect the architecture of the block in the 1920s.²⁴

Sam Hughes Neighborhood

The University is bounded on the east by the Sam Hughes neighborhood. Sam Hughes shares a half-mile long edge with the University along Campbell Avenue. The neighborhood extends west from Campbell Avenue to Country Club Road and South from Speedway Boulevard to Broadway Boulevard. The western portion of the neighborhood was originally called University Manor, but eventually took the name of the nearby Sam Hughes Elementary School. The Sam Hughes neighborhood is perhaps the most affluent neighborhood bordering the University and has remained an enclave of predominantly single-family homes. Average home sizes at its core range from 3,000 to 5,000 square feet. Deed restrictions, in effect until 1964, controlled minimum property values, mandatory heights and setbacks, and the ethnicity of residences.

The Sam Hughes neighborhood is separated from the University by the major arterial Campbell Avenue and is further insulated by traffic restrictions that make it difficult to turn directly from Campbell Avenue into the neighborhood. Laid out as a grid of 450 ft x 450 ft blocks, most houses are oriented toward the north and south with smaller front yards and larger rear yards. Carports and garages are accessed from unpaved alleys that bisect the blocks along the eastwest access. A gently southwest slope is expressed through relatively short, but prevalent, retaining walls. Sam Hughes is also the most verdant neighborhood bordering the University, with a greater number of residences maintaining green lawns than in surrounding areas. Mature trees give the neighborhood a verticality not generally found in midtown. Himmel Park serves as a recreation center for the neighborhood and contains a small neighborhood library. The majority of the homes that make up the neighborhood were built between 1920 and 1950.²⁷

In this neighborhood, homes are eclectic in style, richly detailed, and represent most of the styles popular, both locally and nationally, during the major era of the neighborhood's development. Representative elements from the following styles are prevalent in varying degrees of purity within the Sam Hughes Neighborhood: Transformed Sonoran, Territorial, Queen Anne, Mission Revival, Moderne, and Craftsman Bungalow among many others. In 1994 the Sam Hughes Residential District was added to the National Register of Historic Places.

The Sam Hughes Neighborhood Association can be reached at www.samhughes.org. Sam Hughes currently has one voting member on the Campus Community Relations Committee.

West University

The University is bounded to the west along Park Avenue by the West University neighborhood. West University extends west from Park Avenue to Stone Avenue and south from Speedway Boulevard to Sixth Street. Park Avenue is the least imposing of the roads that serve as boundaries to the University and, subsequently, connections between the campus and the West University neighborhood are porous, with the University's ceremonial entrance at the intersection of Park Avenue and University Boulevard. The West University neighborhood developed as a middle-to-upper-class neighborhood serving University faculty and students. The construction dates in the neighborhood range from the 1890s to the 1930s. The neighborhood is laid out in a grid pattern with small blocks and alleys contributing to the neighborhood's comfortable character. Houses are oriented equally to the east, west, north, and south, with many houses oriented on dirt alleys that bisect larger blocks along both the east-west and north-south axes. The neighborhood is bisected on its east-west axis by University Boulevard, which is lined with commercial properties, many of which are converted residences, near the University and large fraternities, sororities, and apartment buildings further west.

The residential character of this area of Tucson is slowly being usurped on its eastern edge by large buildings associated with the University, such as hotels and parking garages. In the neighborhood's western portion the north-south running Fourth Avenue serves as another commercial district. Due to the activity of Fourth Avenue and University Boulevard, the West University neighborhood is among the most urban in character of all Tucson's neighborhoods. With the exception of commercial buildings along University Boulevard, Park Avenue, and Fourth Avenue, most buildings are modest single-story detached residences.

Architectural styles in the neighborhood are eclectic with many variations on the Craftsman Bungalow represented including those with elements of the Sullivanesque, Prairie, Art Deco,



A craftsman bungalow in the West University neighborhood.



A bungalow converted into a commercial building along University Avenue in the West University neighborhood.



A Rincon Heights residence standing near the UA Stadium



A large parking lot for University use at the north edge of the Rincon Heights neighborhood.

Territorial, and Spanish Mission styles. Several architects who helped shape the early character of the University such as Roy Place, Holmes and Holmes, and Henry Trost all designed residences within this neighborhood.²⁸ The West University Neighborhood is a National Register Historic District. It is also a recognized local historic district.

The West University Neighborhood Association can be reached at <u>WUNA@theriver.com</u>. WUNA currently has one voting member on the Campus Community Relations Committee.

South of the University

The University is bounded to the south along Sixth Street primarily by the Rincon Heights neighborhood. Rincon Heights extends south from Sixth Street to Broadway Boulevard and west from Campbell Avenue to Euclid Avenue. To the west of the Rincon Heights neighborhood is the Iron Horse Neighborhood and the Pie Allen Neighborhood. The southwestern boundary of the Iron Horse neighborhood is delineated by the Southern Pacific Railroad right-of-way. The blocks are laid out in a 400-foot by 400-foot grid with alleys running east-west. Many blocks contain two east-west alleys with lots in-between oriented on the north-south streets. The vibrant Fourth Avenue commercial district bounds the Iron Horse Neighborhood on the west. The Rincon Heights neighborhood is bisected on its east-west axis by the High School water wash. The neighborhoods south of the University are primarily residential in character with the exception of a few commercial buildings, the University of Arizona Student Recreation Center, and two large Tucson public schools all located along the south side of Sixth Street and the small scale commercial buildings along Fourth Avenue. Sixth Street is a major arterial and has, with the exception of the Student Recreation Center, hindered the growth of the University to the south. Unlike other neighborhoods in the surrounding area, this section of Tucson did not develop to serve the University. Instead, it was developed largely for Southern Pacific Railroad Company workers who were required to live within one mile of the railroad tracks in order to hear the "whistle code" used by the company to communicate with its workers.²⁰

The majority of the area's construction was completed between 1880, with the arrival of the railroad, and the 1950s, with the older houses closest to the railroad tracks. The railroad system decline and the expansion of the University south to Sixth Street have changed the nature of these neighborhoods, with a large portion of the residences devoted to student rental housing. The single-family, detached residences that comprise most of the neighborhood vary in style with an emphasis on transformed Sonoran, Territorial, and Mission Revival. Several new multifamily units have been constructed, but these rarely exceed two stories. While the residences within the neighborhood are modest in nature, the area has two architectural landmarks in the

Tucson High Magnet School, designed by Lyman and Place with additions by Henry Jaastad and James Merry Associates, and the Mansfield Middle School, designed by Roy Place, both located just south of the University along Sixth Street. The Iron Horse Extension and Pie Allen are registered Historic Districts, Rincon Heights has been determined eligible for inclusion on the National Register of Historic Places.

Pie Allen, Iron Horse, and Rincon Heights each currently have one voting member on the Campus Community Relations Committee.

North of the University

The University is bounded to the north along Speedway Boulevard by the North University neighborhood, extending north from Speedway to Chauncey Lane and west from Campbell Avenue to Euclid Avenue. Mountain Avenue bisects the neighborhood along the north-south axis and provides a comfortable corridor for pedestrian, bicycle, and automobile traffic and is a major orientation point for the neighborhood. Of all the residential neighborhoods that currently encircle the University, the North University's character has been most affected by University expansion. The neighborhood was built in the early 20th century as a modest residential neighborhood of single-family, detached homes to service the University. Currently, the majority of the housing is student rental. Much of the eastern half of the neighborhood has been converted to the University of Arizona Health Sciences Center (AHSC). Many other buildings have been demolished or occupied by the University, replaced by largescale, multi-story apartment complexes to house students, or converted to rental housing. Speedway Boulevard, a major arterial, once served as a formidable barrier to the University's development, but in the late 1980s and early 1990s the area north of Speedway was connected with several pedestrian underpasses. Subsequently, the area directly north of Speedway has been almost entirely, with the exception of the Smith and Douglass Houses, replaced with largescale University buildings. According to the 2003 University of Arizona Comprehensive Plan, most of this neighborhood is to become part of campus.

West of the North University Neighborhood is the Feldman Neighborhood, which is similar in character to the North University Neighborhood, but with fewer student rentals and less intrusion from the University. Directly north of the North University neighborhood is the Jefferson Park neighborhood. Jefferson Park shares the same east-west boundaries as North University and extends North to Grant Road. It is comprised mostly of modest post-war, single-family detached residences and still retains its residential character, although many houses have been converted to student rentals. Mountain Avenue, as well as Jefferson Park Elementary, are



This North University neighborhood residence has been converted to University uses.



Massive McClellan Hall and this small residence are neighbors in the North University Neighborhood.

the major orientation points in the neighborhood. To the east of the AHSC across Campbell Avenue are the Blenman-Elm Neighborhood and the Catalina Vista Neighborhood. Both are middle to upper class post-war, single-detached residential neighborhoods dominated by ranch style homes. The Blenman-Elm neighborhood is distinguished by the presence of the renowned Arizona Inn, a historic resort constructed in the 1930s that continues to attract affluent clientele to the neighborhood. The Catalina Vista neighborhood is singular among the neighborhoods surrounding the University in that it breaks from the grid pattern, and has an organic meandering street pattern oriented around a central traffic circle. Blenman-Elm and Catalina Vista are both on the National Register of Historic Places as historic districts. Feldman's Neighborhood is recognized on the National Register as part of the Speedway-Drachman Historic District. Jefferson Park has been determined eligible for inclusion on the National Register. Blenman-Elm, North University and Feldman are each represented by one voting member on the Campus Community Relations Committee. Jefferson Park is represented by one Ward III voting member.

Endnotes Historic Campus Character

- ¹ Reported in the *Star*, 30 October, 1887.
- ² Information in the paragraph was summarized from various sources by project Landscape Architect Thomas Brown.
- ³ For a concise look at early architecture at the University of Arizona, see Robert C. Geibner, Douglas Hawkins, and Allen C. Lamper, *Look Around Arizona*, (Tucson: University of Arizona, School of Architecture, 1987).
- ⁴ Geibner, Hawkins, Lamper, *Look Around Arizona*, p. 12
- ⁵ Phyllis Ball, *A Photographic History of the University of Arizona 1885-1985*, (Tucson, Az.: University of Arizona Foundation, 1987), p. 219
- ⁶ Douglas D. Martin, the Lamp in the Desert, (Tucson, Ariz.: University of Arizona Press, 1960), p. 279
- ⁷ Pregill, Philip and Nancy Volkman. *Landscapes in History*. New York: Van Nostrand Reinhold, 1993: 505.
- ⁸ Ibid: 507.
- ⁹ Ibid: 504-505.
- ¹⁰ Ibid: 506.
- Anne M. Nequette and R. Brooks Jeffery, A Guide to Tucson Architecture (Tucson: University of Arizona Press), p.118 and 150
- ¹² Ibid: 50 and 55.
- ¹³ Ibid: 257.
- 14 Ibid.
- ¹⁵ Phyllis Ball. p. 96.
- ¹⁶ Ibid: 170.
- ¹⁷ Ibid: 268.
- ¹⁸ Ibid: 28.
- ¹⁹ University of Arizona Campus Arboretum (Tucson: Campus Arboretum: the University of Arizona, (2002), p. 7
- ²⁰ Ibid
- 21 Ibid
- ²² "Notable Alumni" *University of Arizona Alumni Association*, 13 January 2006, http:// www.arizonaalumni.com/About/notable.shtml
- ²³ "List of Famous People from Tucson" *Wikipedia*, 13 January 2006, http://en.wikipedia.org/wiki/List_of_famous_people_from_Tucson
- ²⁴ Bonny Henry "Louise survived murder charge to build legacy and foundation" *Arizona Daily Star.* 2 January, 2004
- ²⁵ Brian Rumsey, Sam Hughes Historic District Nomination Form, (Department of Interior: National Park Service), sec. 7, p. 2.
- ²⁶ Nequette and Jeffery, p. 199.
- ²⁷ Ibid: 198.
- ²⁸ Ibid: 132.
- ²⁹ Ibid: 133.
- ³⁰ Ibid: 127.



Football players in front of Old Main 1902. Note the steps in front of Old Main.

A. Introduction

Cultural resources on the campus include properties that can be defined as buildings, sites, historic districts, structures, objects, archaeological sites and historic landscapes. For the purposes of this Preservation Plan, archaeological sites are discussed only cursorily. See the Goals and Strategies Section of the document, pg. 73, for more information on understanding, documenting and preserving pre-historic and historic archaeological resources within the University's jurisdiction. Historic and cultural resources are defined by applying standard criteria at several levels including:

National Register of Historic Places

National Historic Landmarks

State Arizona State Register of Historical Resources

Local Tucson Landmark and Historic Preservation Ordinance

Currently there are a number of University resources recognized by register listing or formally determined eligible for these registers.

B. Historic Designation Categories

National Register of Historic Places

In 1972 Old Main was added to the National Register of Historic Places. The University's second library, now the Arizona State Museum, was added in 1979. In 1986 a historic district including 18 University buildings, ranging from 1887 to 1937 in date of construction, was added to the National Register. This historic district included the already National Register-listed Old Main and Arizona State Museum. Additionally, a list of important camus trees and plants was included in the National Register documentation. In 1989 Bear Down Gymnasium was added to the National Register. Also in 1989, the University acquired two residences, the Cannon/Douglas Residence and the Smith Residence that had been previously added to the National Register in 1982. Information on properties listed on the National Register of Historic Places can be obtained through the National Park Service website: http://www.cr.nps.gov/nr/.

Nomination of potential historical, archaeological, cultural, and architectural resources owned or controlled by the University of Arizona (Arizona Board of Regents) for state or federal designation (National Register of Historic Places) should only be undertaken with the express, prior, written authorization of the President of the University of Arizona.

Arizona Register of Historic Places

The State of Arizona also keeps an inventory listing of historic places. University of Arizona buildings that are on the State Register duplicate those on the National Register. Since the State uses the National Register form, the information provided for state and national listings is identical.

Tucson Landmark and Historic Preservation Ordinance

There are no officially recognized, locally designated resources or landmarks of the City of Tucson, on the University campus. However the West University Neighborhood, directly to the west of campus is covered by the Tucson Historic Overlay Zone, which gives it recognition as a local historic district and entitles properties within to certain protections.

C. Previous Documentation Efforts

Past Survey Efforts

Historic Resource Surveys regarding University architecture have been completed somewhat informally on the campus. The most complete inventory of historic properties on campus was completed during the development of the National Register historic district nomination. This nomination includes information on 20 historic structures and the historic landscape that surrounds them, including 42 plant species. Two other surveys have been conducted prior to the university's expansion into potentially historic districts. A survey of an area north of the University was completed in 1989 by Robert Giebner when the University was expanding across Speedway Boulevard. A study of properties from 800 to 1100 Sixth Street was completed in 1994 by Robert Giebner and Brooks Jeffery prior to the University's expansion along that corridor.

Historic American Buildings Survey (HABS)

Although the Historic American Buildings Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) is a federal government program that documents important architectural, engineering, landscape and industrial sites throughout the United States, it is not a designation program and does not have specific selection criteria like the National Register. The HABS Collections are archived at the Library of Congress. Throughout the history of the program, HABS has played a leading role in "preservation through documentation" and is recognized as the nation's oldest federal preservation program. In the HABS archive there are three high-resolution images of Old Main. These images were taken in 1938 when the building was condemned and there was a possibility that it would be demolished. These images are available AT: http://www.cr.nps.gov/habshaer/.

Heritage Tree and Great Trees of Arizona Programs

The Campus Arboretum has developed a Heritage Trees list that inventories trees on campus that are significant on a local or state level. Many of the trees on the list are the first example of their species in Tucson or Arizona, the only or largest example of the species in the region, or have some association with people important to the development of the University's landscape. A complete inventory with photos and a map locating the University's Heritage Trees can be viewed at the Campus Arboretum website at http://arboretum.arizona.edu/.

Also, several trees that are on the Arboretum's Heritage Trees list have also been recognized by the Arizona Community Tree Council's "Great Trees of Arizona" program, which recognizes important trees on the statewide level. Information on the Arizona Community Tree Council can be found at http://aztrees.org/.

D. Comprehensive Campus Plan

The stewardship of campus historic resources is discussed throughout the 2003, Comprehensive Campus Plan and it is a value that the University regards highly. President Likins set the tone of the Comprehensive Campus Plan when he notes, "Only by comprehensive, long-term planning can we preserve the unique character of our campus and extend our signature mall concept beyond its current place as the central East-West feature of the campus."

University Development and Procedural Policies

The Comprehensive Campus Plan sets forth the policies of the University with regard to planning, land use, development, and capital improvements. "As host to a significant historic district listed on the National Register of Historic Places, the University aspires to a stewardship role with existing resources and identification of future resources."

University Policy F. - Stewardship of Campus Historic Resources

Vision: The University recognizes that historical, archaeological, cultural and architectural resources must be considered in the planning for land and facility use and development. The University assumes a stewardship role and responsibilities regarding reservation of these resources within the University planning area and at other locations owned or under the control of the University (e.g. Tumamoc Hill, Campus Agricultural Center).

Policy 1

The University will continue to comply with the provisions of the State Historic Preservation Act of 1982 and the Arizona Antiquities Act of 1960, as amended.

Policy 2

The University will document historic or potentially historic resources consistent with the 1982 act in a professionally competent and reasonable manner and in consultation with the State Historic Preservation Office (SHPO).

Policy 3

The University will consider adaptive use or reuse of historic resources (e.g., buildings and sites) under ownership and control of the University in the planning and implementation of projects.

Policy 4

The University will encourage public appreciation of historic values through educational programs and through the study and interpretation of archaeological, architectural, and historic resources throughout Arizona.

Policy 5

The University designated Historic Preservation Coordinator (HPC) is responsible for ensuring compliance with the above policy guidelines and all applicable regulations of the State.

Policy 6

The HPC is responsible for coordinating University activities and projects with SHPO as necessary or appropriate and will be supported in these efforts by campus planning staff.

Policy 7

The University's HPC will be appointed by the President, is the University's designated liaison with the SHPO, and is responsible for annual reports, if requested, on preservation activities of the University.

Campus Core Policies

Additionally, the Comprehensive Plan outlined several goals for the Central Core of the campus² that have implications regarding historic preservation in this important area of campus:

Historic Core

- Minimally infill in historic core
- Provide for growth of Arizona State Museum
- Reduce surface parking

Main Mall

- Better define edges of the mall
- Orient buildings to face the mall with clearly defined entries at grade
- Redevelop under utilized or outdated buildings along the mall
- Refine east gateway at Campbell Avenue
- Provide sites for expansion of academic and student life facilities north and south of the mall
- Create usable outdoor intellectual space between buildings

Intercollegiate Athletics

• Enhance landscape buffer along Sixth Street and Campbell Avenues

D. Recent Projects Related to Campus Historic Preservation

In recent years the University has been actively renovating and remodeling some of the buildings within the Historic Core as well as rehabilitating some of the

- Smith House Rehabilitation This renovation carried out in the 1990s illustrates the challenges and successes of integrating a historic residence within an expanding campus. It is also relevant because of the northward expansion, outlined in the Comprehensive Campus Plan, into a neighborhood with historic resources.
- Herring Hall Re-Use and Rehabilitation This rehabilitation project, completed in 2004, converted the 1903 Herring Hall into a herbarium facility and Campus Arboretum office. The herbarium is a thoroughly modern facility, but retains elements that recall the building's former uses as a gymnasium and a theater. The rehabilitation project won a Governors Award for Historic Preservation.
- Adaptive Re-Use Study of Bear Down Gym Dated March 2000 the study of this National Register-listed property was based on the *Bear Down Gym, Historical & Architectural Evaluation Report* by Brooks Jeffery, completed in 1995.
- Old Main and Nugent Hall Renovations In 2006, with input from the consultant team for this Preservation Plan, the University decided to relocate the Office of Admissions from Nugent Hall to a much more prominent location in Old Main. The Multi-Cultural Programs will be house in Nugent Hall. At the time of the completion of this Preservation Plan, in May 2006, both of these renovations were on-going.
- Krutch Garden Renovation- In 2004, the Krutch Garden, the last vestige of a once larger southwest focused garden, was studied and rehabilitation occurred in association with Alumni Plaza
- Arizona State Museum Expansion Feasibility Study A study was conducted in 1996 to determine if an addition could be designed to meet the program needs of the museum. The 2003 Comprehensive Plan illustrates an addition, but the project has not yet been implemented.
- Arizona State Museum Entry Sequence Study First looked at in 2000, a recent 2006 effort will create universal access to the Arizona State
 Museum main entry. The entry sequence is complicated by grade changes and the proposed solution will create a gentle slope from the plaza
 to the entry.
- Maricopa Renovations In 1990 this residence hall received a new roof and during 2006 the interiors of this building were upgraded for continued residential use.
- Yuma Renovations In the early 1990s, this residence hall was upgraded and improvements executed.
- Yavapai Entrance renovation and ADA upgrades were completed in the late 1990s.
- Old Main Landscape Study In 2000 a comprehensive study of the landscape surrounding Old Main was undertaken and some of these recommendations are being executed as part of the 2006 work reference above,

- Park Avenue Bus Stop In the early 2000s, this project included the construction of a new bus shelter that required alteration to the campus' historic lava rock wall
- 1400 & 1416 E. Mabel Study 2005 Documentation prior to demolition of these historic structures that had been acquired by the University.
- Forbes Hall Window repair and renovation was completed in 2004 2005.

E. Maintenance Practices as Past Historic Preservation Measures

The following information summarizes general patterns and the philosophy behind existing maintenance practices and repair techniques in practice throughout the University of Arizona campus. The University has a solid record of stewardship of its historic resources. Many of these issues are also covered in appendices to this document: the *Maintenance Manual for Historic Buildings* and the *Maintenance Manual for Historic Landscapes*. The two documents illustrate well-crafted solutions and areas of improvement with campus maintenance practices.

Historic Building Maintenance

Some inappropriate treatments and measures have occurred in the past, mostly in the 1960s and 70s when dropped ceilings were installed in many buildings to conceal installation or upgrade of HVAC systems. There have been a number of interior remodels that have impacted historic fabric through placement of too many users or uses within a single building. Additionally, over the years a number of window replacement projects have resulted in the loss of original windows. Generally, however, new windows have been installed sensitively and their design has been appropriate to the historic building.

Exiting issues have clearly been a concern with some of the University's historic buildings. Beginning in the 1960s many buildings received exterior exit stairs to augment a single exit from upper floors. Many of these stair additions have been designed and installed with great sensitivity. There are a few examples that could have been more successful in their design. Today, many new buildings at the University incorporate exterior stairs in their design vocabulary. Additionally, the University has systematically begun to provide universal access to older buildings at both the front entry and to interior spaces. Some solutions have not been as sensitive as they could have been; however, the University's Disability Resource Center is aware of the need for special considerations for historic buildings.

As with most environments in an urban setting, the University is faced with some graffiti problems. However, the existing practice of graffiti removal seems to work very well. Currently, Facilities Management crews and building managers report graffiti as soon as it is noticed and within a very short period of time the a crew is dispatched to correct the problem. The *Maintenance Manual for Historic Buildings* in Appendix 3 discusses graffiti removal measures, especially for masonry surfaces.

Generally, the University's Facilities Management is under-funded and under-staffed and has some trouble accommodating all the preventative maintenance and upkeep requirements of the institution's collection of historic resources. Preventative maintenance and maintenance cycles are particularly important with regard to historic buildings. For instance, roof debris clean up and prevent damaged drainage systems and an appropriate cycle for paint coatings is

approximately seven years. Currently, the roofing crews do very little preventative maintenance and the paint shop crews are on a 14 year cycle. The University's collection of historic buildings should be cared for through appropriate maintenance which requires an appropriate level of funding and staff.

Historic Landscape Maintenance

Historic landscapes are not static and they require a good deal of management to convey their significance. The University as a designated Arboretum has a unique collection of plants and historic features within its landscape. Time, funding and staff are needed to manage such a collection. Plants require appropriate levels of water, fertilization, pruning and other maintenance treatments in order to remain viable within the University's collection. Currently, there is a conflict between the maintenance requirements and the staff available to execute required landscape treatments. Over time, as the University's designed landscape and its athletic fields have developed, matured and expanded, Facilities Management staff has actually dwindled leaving some areas of campus with limited staff.

Fostering Pride of Place

The University has a number of opportunities to foster a greater sense of pride of place. This can be achieved through mentoring programs within University Departments, and involvement of students in work / study programs within Facilities Management, Facilities Design and Construction, Residential Life, Campus Facilities and Planning and the Campus Arboretum.

Institutional Commitment

The University should commit resources and funding in a number of needed areas including:

- Fund appropriate levels of staff for the maintenance requirements
- Strive to train and keep employees through staff development programs and competitive salaries and benefits
- Provide the professional training necessary to maintain both historic buildings and landscapes in an appropriate manner.

F. Additional Preservation Activities on Campus

Publications

A number of publications that focus on campus history and architecture are widely circulated. As mentioned above Phyllis Ball's *A Photographic History of the University of Arizona, 1885-1985* is a complete documentation of the University's most important events, buildings and associated persons. The University of Arizona Foundation completed a second printing of Ms. Ball's book in 1987.

Arboretum Guide

Authored by Campus Arboretum Director Elizabeth Davison, this guide outlines the history of the unique collection of trees, shrubs, and plants from arid and semi-arid climates around the world that comprise the Campus Arboretum. For more information see the Arboretum website at: http://arboretum.arizona.edu/

Other Publications

Other works published by the University that are meant to accompany a self-guided walking tour of the campus and environs are *Look Around Arizona!*Architectural Guide to the University of Arizona Campus Historic District, written by the College of Architecture in 1987 and A Guide to Tucson Architecture by Anne M. Nequette and R. Brooks Jeffery.

Arizona Traditions Course

The course titled "Arizona Traditions" taught by Professor James Knight outlines campus history and traditions for undergraduates and came about due to alumni urging. First taught in 2002, the course has become extremely popular. At the conclusion of the course each student receives a copy of *A Photographic History of the University of Arizona, 1885-1985*, by longtime campus librarian, Phyllis Ball.

G. Campus Expansion and Neighborhood Preservation

Context of University Policies Regarding Campus Boundaries and Surrounding Neighborhoods

In the decades leading up to 1980, campus planning at the University, as well many other American colleges and universities, consisted primarily of a map identifying future building sites and a sense that options and space were unlimited. In 1980-81, a committee examined capital development planning and land acquisition policies for the University. The result was the Proposal for Realignment of the University Planning Area Boundaries, together with the Draft Statement of Land Acquisition Guidelines. Public comment was solicited during hearings. In 1981, and again in 1996, the adopted University Planning Area was reduced in size from that designated in 1967. In 2006, the physical growth limits represented by the University Planning Area boundaries are actually 85 100 acres fewer than those designated for the future campus in 1967, making the University of Arizona campus one of the smallest in the nation when compared with peer universities of similar enrollment. Subsequently, executive management at the University approved and funded a program to prepare the Comprehensive Campus Plan in 1983. This action culminated in the University's release of a draft campus plan for public review and comment in 1986, and the Arizona Board of Regents subsequent adoption of the plan in 1988. Today, Board policy requires all three state universities to prepare long-range campus development plans, with full public participations, and that the plans be updated at five-year intervals. In 2000, the University funded a comprehensive update of the 1988 plan. The Comprehensive Campus Plan 2003 document represents the final phase of that effort.

Managing growth in a highly urban environment has been a significant challenge for the University of Arizona. During the past few years two actions by the Board have together provided the means to manage the growth of the University for the foreseeable future. The Board granted the authority to manage future enrollments by easing the constraints on resident freshman admissions. The Board also approved the 2003 Comprehensive Campus Plan that develops in detail strategies for developing the "responsible capacity" of the land within the boundaries negotiated long ago with adjacent neighbors. In the absence of a campus plan and the capacity to control enrollment growth, decisions to accommodate uncontrolled growth are made incrementally, with negative consequences over time both for the University and for neighbors. Only by comprehensive, long-term planning can the unique character of the campus be preserved.

Campus Comprehensive Plan

From 2000 – 2003, the University of Arizona prepared a comprehensive update to its 1988 Campus Plan. This three-year long activity involved literally hundreds of meetings with more than a thousand participants. The initial draft plan was prepared under the auspices of Campus Planning Committee comprised of students, faculty and staff, as well as representatives from adjacent neighborhoods and the City of Tucson. The plan was developed with the assistance of the architecture and planning firm of Ayers Saint Gross, in collaboration with the University's Department of Campus & Facilities Planning.

The purpose of the University of Arizona's Comprehensive Campus Plan is to provide guidelines for the orderly physical development and enhancement of the campus planning area to the Year 2010 and far beyond. The Campus Plan functions as one component of a series of interrelated long-range planning activities at the University of Arizona. The other components include the mission and scope statement; strategic plan; academic plans; budget and finance plans; and the Capital Improvement Plan, which is a list of projects the University proposes to fund and initiate in the next several years.

The 2003 Campus Plan builds upon the best components of the 1988 plan, but also represents a change in overall direction. — While the plan demonstrates how the campus can accommodate significant new infill construction, its emphasis is not on buildings — largely the emphasis of the 1988 plan. Rather, this new plan recognizes that while formal learning and research may occur within buildings, it is the open space on a campus that fosters a true sense of connectedness and community. The theme of a better "connected campus" is carried throughout the plan through an enhanced network of pedestrian paths, or fostering interactions of with people with people in well-designed outdoor public space. The careful, intentional development of this "intellectual space" will enhance learning, increase chance encounters, and foster connection between people — essential for building a campus community. The plan represents focused excellence in that it pays special attention to those plan components which are essential to its successful implementation, and incorporates, whenever practicable, best practices of campus planning, architecture, and landscape architecture.

The 2003 update of the Comprehensive Campus Plan concluded that with a higher density of campus development, although the existing boundary of the University Planning Area may remain in place for the foreseeable future. In addition, the University could support the space needs associated with an enrollment of 40,000 full time equivalent, and approximately 80% growth in research. Retention of the existing planning area boundary delineated in 1996 functions as the limit of University development, and serves to protect the neighborhoods and commercial areas outside the planning area from encroachment. The boundary will be reviewed at five-year intervals in conjunction with the five-year review of the Comprehensive Campus Plan.

Healthy Neighborhoods: Initiation, Purpose and Composition of the CCRC

Cooperation with neighborhoods surrounding the University is crucial to maintaining sound functional and aesthetic relationships over time. The basis for this cooperation is the recognition that physical planning and development issues impact the University and its neighbors and are a mutual concern. To this end, the University and its neighbors and other community members participate in joint information sharing and working committees. The Campus Community Relations Committee (CCRC) exists for the purpose of bringing together the University of Arizona, the City of Tucson and the neighborhoods in the University area to discuss issues, resolve conflicts, find and implement mutually satisfactory solutions to problems, and work for the betterment of the community in an atmosphere of respect.

The Community Planning Advisory Committee (CPAC) exists to involve and gain input from neighborhood residents and representatives on aspects of new, capital projects that might impact n neighborhoods. The CPAC solicits community comment and advise on the external elements of the University projects. The committee is advisory in character; with the overall goal being to achieve a balanced design compiled from all input.

Endnotes Past and Present Preservation Efforts

- ¹ Comprehensive Campus Plan, p. 164
- ² Comprehensive Campus Plan, p. 48

A. Introduction

An inventory that identifies historic buildings within the campus boundary is a component of this Preservation Plan. The inventory of formally designated and potentially historic buildings on campus has been developed and is titled Main Campus Buildings Constructed 1891-1965. It is attached to this document as Appendix 1.

B. National Register Historic District

In 1986 a National Register Historic District comprised of 21 buildings, ranging in date of construction from 1891 through 1937, was created in recognition of the significance of the University of Arizona's historic core. The district's contributing properties and surrounding environs have been well preserved. Since 1937, many subsequent buildings have been constructed and the campus has expanded in every direction. Relatively little work has been done to evaluate the architectural development of the campus through the early 1970s and to assess the buildings as potential historic resources. While this document is not intended to result in an updated or expanded National Register Historic District nomination, it is a goal to present the relevant and pertinent information should the University of Arizona, with the authorization of the President of the University or the Arizona Board of Regents, wish to pursue such a nomination in the future.

Historic District Expansion Justification / Historic District Period of Significance

When it was listed on the National Register the period of significance for the Campus Historic District was identified as ending in 1937. The end date of the period of significance was arbitrary and was determined using the standard 50-year rule. Extending the period of significance of the existing National Register Historic District would capture additional historic resources that fall within the context of the campus development into the Modern period. The character of architectural development on campus after 1937 is part of an architectural continuum that reflects changing national and international trends while establishing an architectural language unique to the University of Arizona. A more appropriate end date for the period of significance would be 1958. This would accommodate the inclusion of several buildings that are contiguous to the existing National Register Historic District and would be roughly consistent with the historic context and categories of architectural development defined in Section IV of this document, Campus Character:

Academic Eclectic (1891-1956) Transitional (1940-1958) International Style Modern (1948-1960)

Campus buildings that have reached 50 years of age and are now potentially National Register eligible are listed below. (See Campus Map p. 55).

- Coconino Residence Hall (James Macmillan, 1954)
- Slonaker House (Roy Place, 1940)
- Mines and Metallurgy (James Macmillan, 1940)

Inventory of Campus Historic Resources

University of Arizona Preservation Plan

• Cesar E. Chavez Building (James Macmillan, 1952)

- Social Sciences (James Macmillan, 1950)
- Yavapai Residence Hall (James Macmillan, 1942)
- Central Heating and Refrigeration Plant (Luepke & Marum Associates, 1951)
- Hopi Lodge Residence Hall (Place and Place, 1946)
- Pinal Residence Hall (Place and Place, 1949)
- Navajo Residence Hall (Place and Place, 1949)
- East Stadium Addition (1938)
- Sierra Residence Hall (1946)
- Charles P. Sonett Space Sciences Building (Roy Place, 1936)
- 1540 East Second Street

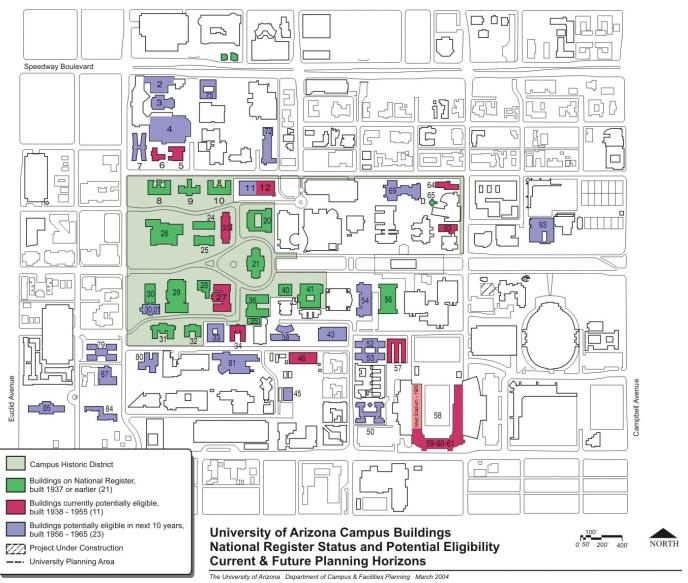
C. Individually Significant Buildings

- Individually designated National Register Buildings:
- Arizona State Museum (North)
- Old Main
- Bear Down Gymnasium
- Smith House
- Cannon-Douglass House

Other individual campus buildings are potentially eligible for National Register Buildings as exceptional examples of design or the work of a master architect. An inventory of historic buildings is attached as Appendix 1 of this document.

D. Significant Landscape Features

Significant landscape features are discussed in the "Campus Character" section of this document and in the Maintenance Manual for Historic Landscapes (Appendix 4).



Map prepared by Campus and Facilities Planning showing properties currently listed on the National Register of Historic Places, properties currently old enough to be reviewed for eligibility, and buildings that will be old enough for consideration by 2015.



The 1958 destruction of South Hall, a dormitory building designed by prominant southwestern architect Henry Trost and constructed in 1899.

A. Federal Regulations and Polices

There are several major federal laws that relate to historic preservation and over twenty additional other regulations that are also applicable.

National Historic Preservation Act (NHPA) of 1966

The University of Arizona is required to follow the policies of the National Historic Preservation Act of 1966 (NHPA) when it receives federal funds, grants or monies for projects within the University's jurisdiction. The corresponding Federal agency would be a partner in ensuring that the guidelines and policies of the NHPA are adhered during the course of the project. This NHPA is the most widely cited federal preservation law. Section 106 of this act specifies a process where federal agencies are required to consider the effects of their undertakings on historic properties. The Advisory Council on Historic Preservation (ACHP) has an opportunity to review and comment on proposed federally-funded projects. The Arizona State Historic Preservation Office is also a partner in these types of project reviews.

Properties listed on or eligible for listing on the National Register, whether as individual resources or collectively as contributors to an historic district, are subject to Section 106 review during federal undertakings. The National Register of Historic Places is the nation's master inventory of designated historic resources. The National Register is administered by the Keeper at the National Park Service (NPS). The National Register includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state or local level.

Under Section 106, alterations to sites, structures, buildings, districts or objects must meet *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings (The Standards)*. These ten standards constitute the primary tool used by federal agencies and others to plan and evaluate the treatment of historic buildings. As indicated in its introduction, *The Standards* are "neither technical nor prescriptive, but are intended to promote responsible preservation practices...For example, they cannot, in and of themselves, be used to make essential decisions about which features of the historic building should be saved and which can be changed. But once a treatment is selected, *The Standards* provide philosophical consistency to the work."

During the Section 106 process, federal agencies are required to include interested party groups into the discussions regarding the projects.

Over the years, the staff of the University's Campus and Facilities Planning office have forged a strong working relationship with the Arizona Historic Preservation Office (SHPO). The two offices have worked collaboratively. It works best when campus wide issues and correspondence related to historic resources are funneled through the Campus and Facilities Planning. This office should act as the main point of contact with Arizona SHPO.

The National Historic Preservation Act was a watershed in preservation law. The legislation created a means to achieve the Nation's preservation goals. Recognizing that increased knowledge and better administration of historic resources would improve the planning and execution of Federal undertakings and benefit economic growth and development nationwide, the act promoted the use of historic properties to meet the contemporary needs of society. It directed the Federal Government, in cooperation with State and local governments, Native Americans, and the public, to take a leadership role in preservation. Since 1966, Congress has strengthened national preservation policy further by recognizing the importance of preserving historic aspects of the Nation's heritage in several other statutes among them the National Environmental Policy Act (NEPA) and several transportation acts and by enacting statutes directed toward the protection and preservation of archeological resources. These laws require Federal agencies to consider historic resources in their planning and decision-making and, although they are not co-extensive with NHPA, often overlap with the provisions of NHPA. Should the University of Arizona accept Federal funds, grants or permits for projects within the Historic Core they would be subject to the guidelines put forward in relation to these laws.

National Environmental Policy Act (NEPA)

The National Environmental Policy Act was established in 1969. While parallel in some ways to Section 106 review, NEPA is a broader program requiring federal agencies to consider many environmental effects of their activities, one of which is potential impacts to historic resources. Few projects involving federal agencies take place on the University campus.

Other federal regulations that include policies related to historic preservation include:

Archaeological and Historic Preservation Act of 1974 Archaeological Resources Protection Act of 1979 Native American Graves Protection and Repatriation Act of 1990 American Indian Religious Freedom Act Department of Transportation Act of 1966

Americans with Disabilities Act

While not directly related to historic preservation, the Americans with Disabilities Act of 1990 has elements that relate to treatments of historic properties. The law prohibits private employers, state and local governments, employment agencies and labor unions from discriminating against qualified individuals with disabilities in job application procedures, hiring, firing, advancement, compensation, job training, and other terms, conditions and privileges of employment. Additionally, this act provides guidelines for making workplaces and residential units accessible to individuals with disabilities. The University's Disability Resource Center promotes universally designed environments and facilitates full access through reasonable accommodations, training, collaboration and innovative programming.

B. State Regulations and Policies

University Comprehensive Plan: Within a Legal Framework

As discussed above, the University's most recent Comprehensive Plan was adopted by the Board of Regents in 2003. The University is required to review its Comprehensive Plan and update, if necessary, at approximate 5-year intervals. The Capitol Improvement Plan implements the Strategic and Academic Plan, supported by the financial plan and directed by Long Range Developmental Plan. The University is not obligated to comply strictly to the letter of the plan, but is internally motivated to do so as closely as possible because it is a self imposed policy and land use plan.

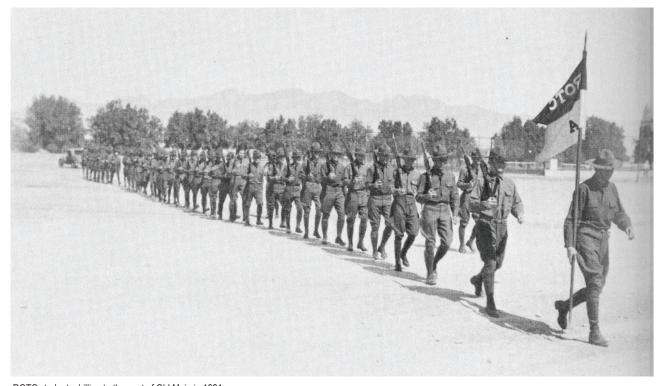
State Historic Preservation Act

In 1982, the State of Arizona passed the State Historic Preservation Act. This legislation requires State institutions and agencies to consult with the State Historic Preservation Office regarding changes, alterations, plans or decisions that may effect historic resources under their stewardship. With the implementation of this legislation, the University of Arizona consults with the SHPO on a number of issues and matters that involve change to the Historic Core.

C. Local Regulations and Policies

Tucson Landmark and Historic Preservation Ordinance

The University of Arizona plays an integral role in the larger Tucson community. All of the cultural, environmental, and historical factors on campus comprise a unique place. It is the University's view that the local and regional community will benefit substantially from a Preservation Plan to guide and direct activities that safeguard this excellent resource. The plan could be argued as a public benefit, because the campus resources cannot be preserved without the community having a vested interest in the preservation and a feeling that they also have a stewardship role. The campus is viewed by the community as public space and recognized for its cultural and architectural features. A sound policy and preservation plan could be the precursor to a range of cultural and environmental opportunities for the community and for all other constituents.

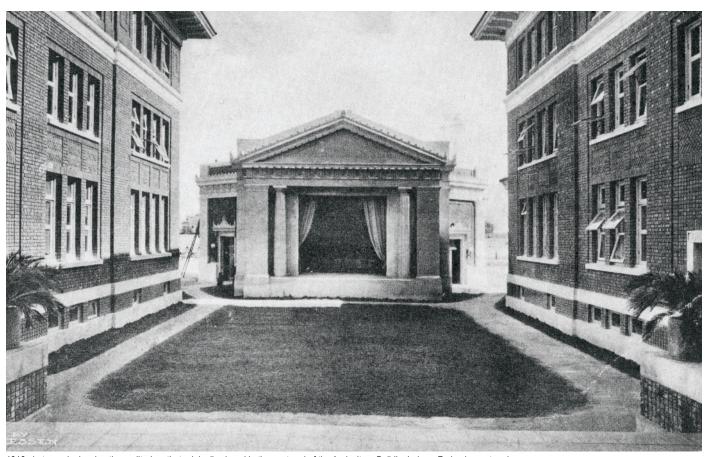


ROTC students drilling to the east of Old Main in 1931

A. Existing Outreach Opportunities

Within the University there are a number of programs that either directly promote historic preservation or there are future opportunities to incorporate more preservation components into these programs. Additional opportunities are discussed in the Goals and Strategies section of this document.

- Preservation Studies Program within the School of Architecture including the seminar Preservation Planning 564 is a regular element of the UA curriculum that includes participation of the University's partner in this class the National Park Service.
- Arizona Traditions Course taught within the School of Agriculture as an undergraduate lecture class
- Employee education, certification and professional development programs
- Campus Arboretum tours
- Prospective student and other visitor tours
- Alumni tours
- Indian art and basket shows held often at the Arizona Museum on campus
- Orientation activities
- Homecoming activities
- University Presidential inaugurations
- Campaign Arizona celebrations
- Athletic championship celebrations



1916 photograph showing the auditorium that originally closed in the east end of the Agriculture Building's (now Forbes) courtyard

Historic Preservation Goals

A. Introduction

The previous sections of this Historic Preservation Plan inform the goals that are presented below. Through a public process and working cooperatively with University of Arizona staff and faculty an over-riding philosophy with regard to identifying a set of goals for this Historic Preservation Plan has been formulated and they are as follows:

- Educate and inform the community about historic resources and issues relating to historic preservation in a campus environment;
- Listen to needs of the entire campus community with regard to historic preservation practice and policies;
- Create a usable document that will become a tool for everyday use and long-term planning;
- Create goals and policies that can be feasibly implemented;
- Formulate polices and goals that have a true public benefit;
- Determine appropriate time frames and strategies for implementation;
- Identify responsible parties for implementation;
- Implement goals that will unveil the unique character of campus and ensure that the historic campus character is visible and appreciated;
- Develop feasible institutional preservation policies through careful examination of what makes the University of Arizona a special environment;
- Discourage "sameness" (design and commercial enterprises that one finds in many college towns) as "sameness" does not draw students, educators, scholars, researchers and athletes to campus;
- Encourage high-quality design that responds to the strong contextual foundation established by the historic campus components; and,
- Understand that strong preservation practices can heal past mistakes that resulted in poor land-use concepts and non-contextual design.

The following goals and recommendations are broad-based and are grouped into several categories as follows:

- Historic Building Preservation
- Historic Landscape Preservation
- Historic Core Treatments and New Campus Development
- University Policies / Actions
- Educational / Public Outreach
- Campus Boundaries / Neighborhood Issues

B. Building Preservation Goals

Do not remove or alter character-defining features and spaces without careful study of the overall impact to the historic building.

Strategy: Understand that historic building projects should, wherever possible, utilize the concept of reversibility.

Strategy: Strive to comply with <u>The Secretary of the Interior's Standards for the Treatment of Historic Properties</u>. Carefully consider the approach to the project and select the appropriate treatment under <u>The Standards</u>: rehabilitation, restoration, preservation, or reconstruction. Formally adopt <u>The Standards</u> as a review tool for project evaluation. Assist members of the campus community in understanding the value of <u>The Standards</u> as a tool and develop educational outreach with this in mind.

Commit to using quality design and materials in renovation projects.

Strategy: Update design and construction standards to reflect goals and policies with regard to renovation of historic buildings.

Strategy: Consult with a qualified design professional if the scale of the renovation or historic merit of the historic building warrants it.

• Do no harm; do not over-program historic buildings. Wherever possible, take a long view, not a short-term approach of buildings and site.

Strategy: Understand that historic buildings require strong programming documents to ensure that character-defining features and spaces are maintained. Consider the original design intent when making changes and ensure that short-term fixes or upgrades are truly reversible or can be upgraded to long-term solutions. Look for opportunities to correct past errors, such as inappropriately designed system upgrades that lowered ceiling heights to accommodate new mechanical and electrical systems.

 Upgrade historic structures to meet ADA accessibility codes. However, avoid patterns of ADA alterations that detract from the character of the historic buildings and surrounding landscape.

Strategy: ADA upgrades should be preceded by design review to minimize the impact on the historic architectural integrity buildings and landscape and ensure that the character-defining features are maintained.

Strategy: Strive to complete the Campus Accessibility Guidelines; ensure that the document distinguishes between renovation projects and new construction guidelines; consider potential impacts to historic buildings when crafting the renovation guidelines.

Strategy: Campus Accessibility Guidelines should be illustrated with examples of well-executed and subtle ADA solutions as at Maricopa Hall.

Strategy: Strive toward a universal approach to removing barriers with regard to both buildings and the landscape of the campus. Consider various alternatives and understand their related impacts to historic buildings and landscape features.

Execute classroom renovations while retaining the maximum amount of historic fabric possible.

Strategy: Develop a Classroom Standards policy for consistency with historic preservation goals. Retain historic fabric while achieving goals regarding disabled access, improved efficiency or technology requirements (i.e., intensive computer terminals in one room, improved lighting, audio visual equipment projectors, etc.). Historic fabric can include: original windows; original doors, corresponding hardware and transom windows; blackboards; wood trim and molding; terrazzo or linoleum flooring; fixed seating or other historic furnishings.

• Maintain the original use of historic residential buildings. Limit changes in use wherever possible.

Strategy: Historic residential zones are an important component of the campus character and foster a sense of continuity with the past for the current student population. Commit to the continued use of these structures through a regime of cyclical maintenance and upgrades to ensure the safety and comfort of their student residents. Undertake feasibility or programming studies if residential properties are considered for other uses.

Use feasibility studies to understand how historic buildings can accommodate new uses.

Strategy: Undertake feasibility or programming studies when historic uses can no longer be adequately addressed in buildings. For instance, laboratory spaces are designed very differently today than in the 1920s. Consider adaptive reuse of older laboratory spaces for department offices, lecture spaces, or non-laboratory teaching spaces. Implement creative solutions to outdated interior spaces.

Take advantage of the significance, orientation, and location of Old Main as the signature campus building and architectural symbol of the University.

Strategy: Historic structures merit responsible stewardship and can be valuable for promotion and publicity purposes. Fund and carry out a high-quality restoration of Old Main that meets the Secretary of the Interior's Standards under the direction of a qualified preservation architect. Understand that while some preservation measures recommended for this structure may require additional funds, the lasting value of this building within the campus community is well worth the investment.

• Encourage the reuse or continued use of older campus buildings and regularly integrate sustainable design into historic building projects. Practice sustainable design whenever possible.

Strategy: Preservation of historic structures is inherently sustainable and saves costs of demolition, transportation of debris, addition to landfill, and environmental costs of accumulated waste. Provide encouragement and resources to achieve this goal and regularly integrate sustainable practices into historic building projects.

• Carry out exterior renovations in a systematic way and schedule exterior maintenance and upgrades on a regular cyclical schedule maintained by Facilities Management.

Strategy: Develop, fund and adhere to a regular schedule of exterior maintenance upgrades.

Correct life safety hazards immediately as they are identified; yet understand that creative solutions for problems in historic buildings may require investment of time and funding.

Strategy: Be prepared to develop creative solutions that may require additional funding to implement and a specialist with experience in historic preservation may need to be consulted.

• Formally adopt the *Maintenance Manual for Historic Buildings* and institutionalize the document through frequent use. Create schedules for building maintenance and necessary tasks to ensure longevity of historic buildings.

Strategy: After collaborative approach to development of maintenance manuals, work with building staff and Renovation Services during educational sessions to convey the over-riding historic preservation goals for both buildings and grounds.

Strategy: Understand that adequate staffing for buildings and grounds is crucial to historic preservation goals. Fund the appropriate level of staff to ensure that cyclical maintenance, repairs, and rehabilitation can occur in a timely manner.

Strategy: Undertake an assessment of cyclical maintenance practices and identify deficiencies. Strive to correct the deficiencies and create a schedule for maintenance that will improve preventative maintenance, ultimately improving the appearance and condition of buildings and grounds.

Understand that some maintenance practices have the potential to affect the historic integrity of buildings.

Strategy: Educate building maintenance crews for the tasks associated with repair, upgrade and rehabilitation of historic building features and materials; provide University maintenance staff with guidelines for completion of the work; or where in-house resources are not available, look outside the University staff for the resources necessary to complete the work to the appropriate historic preservation standards.

Strategy: Maximize the knowledge of long-term staff members through documentation of their institutional memory. Encourage mentoring between older and younger staff members and understand the value of craftsmanship learned through years of experience. Engage in pre-retirement and exit interviews with long-term staff members to collect information regarding successful best practice learned over time. Develop a strategy for continued implementation of best maintenance practices or craftsmanship.

C. Landscape Preservation Goals

Preserve historic campus landscapes in the Historic Core of the campus.

Strategy: Limit new construction within the Historic Core to the specific projects and buildings identified in the Comprehensive Campus Plan. Understand that historically the campus landscape had areas of open space and respect these spaces as new projects are designed.

Strategy: Conduct a complete Cultural Landscape Study of the Historic Core.

• Maintain the integrity of the historic landscapes on the campus.

Strategy: Utilize sound horticultural practices that extend the useful life of landscape plantings. Use replacement plants that are of the same species and variety as the specimen to be replaced where the plant is part of a larger unit or ensemble such as an allee, row or hedge, or a symmetrically disposed pair as at building entries. Plans for replacement of plants within the Historic Core should be reviewed by the Arboretum, Grounds and Campus Facilities and Planning.

• Formally adopt *Maintenance Manual for Historic Landscapes* and institutionalize the document through frequent use. Create schedules for landscape maintenance and necessary tasks to ensure longevity of unique landscape features and elements. Formally adopt national and regional standards that define appropriate landscape management practices.

Strategy: After collaborative approach to development of maintenance manuals, work with grounds staff during training sessions to convey the over-riding historic preservation goals for both buildings and grounds.

Strategy: Understand that adequate staffing for grounds is crucial to historic preservation goals. Fund the appropriate level of staff to ensure that cyclical maintenance, repairs, and rehabilitation of the landscape can occur in a timely manner. Undertake an assessment of cyclical maintenance practices and identify deficiencies. Strive to correct the deficiencies and create a schedule for maintenance that will improve the on-going care of the landscape, ultimately improving the appearance and condition of buildings and grounds.

Retain important historic landscape elements that contribute to the historic character of the campus and that are identified in both
the Landscape Character section of this document and the Maintenance Manual for Historic Landscapes.

Strategy: Educate the entire University community with regard to the importance of the historic landscape features through a multifaceted interpretation program. Implement maintenance and preservation recommendations within the Maintenance Manual to ensure this goal is fulfilled.

 Preserve and protect, to the greatest extent feasible, all specimen plants identified as Heritage Trees, Great Trees of Arizona, and valuable trees.

Strategy: Educate key grounds maintenance staff about the location, character, and requirements of these special plants. Ensure that each species is clearly identified with appropriate signage. Consider providing an introductory tour of the Campus Arboretum to both new and returning grounds staff to discuss maintenance issues.

• In newer portions of the campus, encourage the use of experimentation with various plant species in keeping with the concept of the campus as an Arboretum and as a plant science research facility.

Strategy: Underscore the importance of a diverse palette to design professionals working on campus and include discussion of this goal in any University standards used by these professionals.

• Understand that some maintenance practices have the potential to affect the historic integrity of the landscape.

Strategy: Train landscape maintenance crews for the tasks associated with practices that relate to historic landscape elements; provide University maintenance staff with guidelines for completion of the work; or where in-house resources are not available, look outside the University staff for the resources necessary to complete the work to the appropriate landscape preservation standards.

Strategy: Maximize the knowledge of long-term staff members through documentation of their institutional memory. Encourage mentoring between older and younger groundskeepers and understand the value of craftsmanship learned through years of experience. Engage in pre-retirement and exit interviews with long-term staff members to collect information regarding successful best practices learned over time. Develop a strategy for continued maintenance practices or craftsmanship.

• Encourage a collaborative approach from the Campus Arboretum, Grounds, Campus and Facilities Planning and the consulting Landscape Architect who may be hired for a specific campus project.

Strategy: Create and institutionalize a forum for regular discussions between these parties especially with regard to the introduction of new plantings.

Strategy: Respect the campus tradition and philosophy of past University presidents by introducing new trees and plants that will expand the mission of the Campus Arboretum while achieving compatibility with the historic campus landscape.

• Adopt specific pruning and planting standards, such as the International Society of Arborists Standards for Pruning, and best local practice standards for planting.

Strategy: Make these documents readily available to all groundskeepers, ensure they are up to date, and provide for educational and training opportunities relating to these standards. (See Groundskeeping discussion in Maintenance Manual for Historic Landscapes.)

Strategy: Use ANSI-A-300 Standard for Tree Care Operations - Tree, Shrub, and other Woody Plant Maintenance and ANSI-Z133.1: American Standard for Tree Care Operations.

D. Historic Core Treatments and New Construction

The Comprehensive Campus Plan contains guidelines for new campus construction tailored for specific zones and their unique circumstances. The Historic Core and Mall require new construction of the highest-quality design and materials in keeping with the mass, scale and character of the existing buildings. New projects should reinforce the existing structure of the historic campus and seek to complement the University's unique context through architectural continuity.

 Preserve the character of buildings in the Historic Core and on the Mall and provide special attention to the history and traditions of the University.

Strategy: The design of new buildings should be compatible with established architectural themes of the Historic Core.

Strategy: Reinforce the edges and boundaries that define the space.

Strategy: Reinforce both the east and west end of the Mall by improving the Old Main landscape to enhance the University's most iconic building, and by creating an appropriate gateway at the east end of the Mall.

Strategy: Enable clear pedestrian connections and create a network of secondary open spaces so that pedestrians will linger in the Historic Core.

Use opportunities presented by necessary renovation or ADA upgrades or major maintenance to improve the historic appearance and
materials of buildings and features within the Historic Core, and to reduce incompatibility of modern additions or alterations.

Strategy: Plan for and implement ADA upgrades to historic buildings on campus. Understand that these upgrades may require a higher level of effort or cost. Develop realistic budgets to complete these projects using the Standards as a guideline.

Strategy: Invest in more permanent, high quality ADA improvements.

Limit new development to the areas defined in the Comprehensive Campus Plan to preserve spatial and historic character relationships in the Historic Core.

Strategy: Follow the recommendations regarding infill and additions within the Historic Core that are outlined in the Comprehensive Campus Plan.

• Consider the amount of intervention required to accomplish a defined program for buildings in the Historic Core. Determine what level of renovation, remodeling is necessary; what historic features will potentially be impacted by the project.

Strategy: Understand the program requirements and building deficiencies before determining what actions are required. Identify the character-defining features of the building and its associated landscape before making design decisions. Recognize that the adaptability of some historic buildings is limited. Determine if the program and the subject building are compatible and understand that sometimes a building program may have to be altered in order to best preserve the historic features.

Strategy: Encourage completion of an existing conditions report and historic structure report for the buildings that contribute to the character of the Historic Core. These documents should include recommended treatments and should assess the potential cost of these treatments.

Invest in high quality design.

Strategy: Retain qualified design professionals to guide projects from conceptual design through construction. Follow current and established design standards as adopted by the University.

• Update and expand the National Register Historic District documentation including re-evaluation of the district boundary and the district contributors, including historically significant buildings or clusters of buildings representative of the Recent Past.

Strategy: Adopt a policy that the President of the University is the designated individual to implement any changes to the Historic District documentation. Work collaboratively with all members of the University community to update the National Register information.

Strategy: Develop educational materials regarding the historic structures that relate to the Recent Past and promote understanding of Modernism.

• Take historic compatibility into account in the design and placement of signage and lighting.

Strategy: Study the needs and requirements of signage and lighting in the Historic Core and understand that special considerations may be required to design appropriate treatments in these areas.

E. University Policies / Actions Goals

Incorporate Historic Preservation into early discussions regarding Capital Projects and Fiscal Budgeting Considerations.

Strategy: Institutionalize early consultation with interested parties with regard to preservation. Consider the input of the Historic Preservation Committee at an early stage in the project and understand that some compromises may be required in the final design to accommodate the historic preservation requirements.

 Demonstrate commitment to historic preservation through dedication of a full or part-time position within Facilities Design and Construction Department and within Facilities Management to coordinate historic preservation issues on campus and within these departments.

Strategy: Create and fund such a position or ensure that a qualified outside consultant can fill this role on an on-call basis. The advance planning team for any project in the Historic Core should include a qualified historical architect. Similar staff positions have been institutionalized at the following academic campuses: University of Virginia; Stanford University; the University of North Carolina, Chapel Hill; the University of California, Berkeley; and the University of Illinois, Urbana-Champaign.

• Inventory, preserve and utilize the archive of as-built and historic drawings of campus buildings currently housed in the University Services Building.

Strategy: Revise inventory of as-built drawings and make list available, within reasonable security concerns, when a project for a historic building is under consideration. Understand that this collection of drawings is a wealth of information that can inform building upgrade projects.

• Continue to promote pride of ownership in University employees.

Strategy: Provide training to University employees and assign employees to specific tasks that are compatible with their strengths and training. Consider implementing an "A" team within Facilities Management that would oversee management and repairs to the historic buildings and grounds.

• Create opportunities for to integrate students into the design, construction, rehabilitation, maintenance, renovation and reuse of historic buildings and landscapes on campus.

Strategy: Promote incorporating opportunities for students into temporary or hourly positions in Facilities Management; Residential Life Maintenance; Facilities, Design and Construction; and the Department of Campus and Facilities Planning.

Demonstrate leadership in Historic Preservation practices at the National, State and Local levels.

Strategy: Become an advocate of building codes that provide for alternative solutions for code upgrades to historic buildings.

Strategy: Demonstrate best practices through institutional policies and operations.

Strategy: Celebrate successful building renewal and adaptive re-use projects with receptions and grand openings with the entire community.

Assess current structure of University departments and their corresponding responsibilities to minimize conflicts with historic
preservation goals and policies. As an example, the athletic field maintenance staff should be separate from the landscape staff
that is dedicated to other areas of campus where historic preservation is a higher priority.

Strategy: Make historic preservation a priority and raise awareness to achieve greater sensitivity and fewer conflicts among departments.

• Formalize the Campus Historic Preservation Committee.

Strategy: Better define the committee's role, similar to that of a design review committee. Establish a set number of individuals and administer activities in a formal way. Prepare meeting minutes and recording of meetings and issues, etc. Engage a student member as well as a member for the greater University community in the work of the committee. Formulate a sub-committee of the Historic Preservation Committee to discuss use of historic building codes for campus projects.

Strategy: Encourage attendance of relevant University staff at regional and national conferences regarding planning and preservation such as the National Trust for Historic Preservation, Society of College and University Planners, and the Facilities Management Conference.

• Formalize the Campus Arboretum. The designation of the campus as an Arboretum entails more than just cataloging and preserving plants. While many of the associated tasks such as maintenance will continue to be handled by various campus departments, other tasks need the continuity of permanent staff. These tasks include: periodic plant inspections: record-keeping: keeping plant maps up-to-date; correspondence; events publicity; and community outreach.

Strategy: Continue to develop and implement updated walking tour guides and other flyers and handouts that highlight the Campus Arboretum collections. These should be available in Spanish.

Strategy: Establish a budget for a Full Time Equivalent (FTE) position (adjunct or tenure) for Directorship of the Campus Arboretum.

Strategy: Establish two half-time positions as assistants to the Director of the Campus Arboretum. At least one of these should require computer data-base management and word-processing skills.

Strategy: Develop private and public partnerships to fund and support the continued prosperity and growth of the Campus Arboretum.

Strive to create beneficial partnerships with regard to rehabilitation work undertaken in the Historic Core.

Strategy: Request for Proposals involving historic building rehabilitation projects should call for a project consultant team that can demonstrate an understanding of historic preservation practices and develop an approach to the project that will retain the primary character-defining features of the building and its associated landscape.

Strategy: Engage the Arizona Historic Preservation Office in early consultation regarding projects in the Historic Core.

Strategy: Foster relationships with professionals who have demonstrated capabilities with prior successful historic preservation or adaptive reuse projects.

• Complete an archaeological context statement of the University's Main Campus.

Strategy: Collaborate with University's Anthropology Department and the Arizona State Museum to develop a guiding document relating to the potential for archaeological sites within the main campus boundaries. Facilitate dissemination of this information once the project is completed through workshops or publications.

• Develop preservation plans for other historic sites within the University's jurisdiction.

Strategy: Fund the study of these sites with regard to interpretation, maintenance, potential future development policies, and public access to these sites.

Consider the historic use of building when relocating users or contemplating new uses.

Strategy: Provide for a cooperative working relationship between University departments to ensure that historic buildings are converted to compatible uses. These departments should include but not be limited to: Facilities, Design and Construction; Renovation Services; Department of Campus and Facilities Planning; the Space Management Department; and the Campus Historic Preservation Committee.

• Consider the potential historic value of a building or site before acquiring additional parcels for University use.

Strategy: Perform due diligence in terms of understanding the potential historic nature of a site or building so that proper planning for these resources can occur.

• Understand that Value Engineering practices will impact the final design and appearance of a project.

Strategy: Strive to spread Value Engineering cost cutting practices (when they must be implemented) across the project so that a single aspect of the project does not suffer (i.e. often the landscape component of a project is eliminated.) Undertake cost analysis at the beginning of the project so that cost cutting is not necessary toward the end of construction. Build in solid contingency costs to ensure an adequate budget.

F. Educational / Public Outreach Goals

• Create opportunities for the campus community and the public to appreciate and participate in exploration of Historic District.

Strategy: Expand campus tour opportunities to included tours with alumni and students. Engage the entire University community in the development of tour scripts, promotional materials and signage to enhance the tour experience. Coordinate scripts for campus tours to integrate information about campus history and development.

Educate the campus and greater community about campus heritage and history.

Strategy: Develop and periodically update educational materials on the campus history, related buildings and landscapes (i.e., walking tour booklets, Campus Arboretum tour brochures, etc.). It is worth noting that Look Around Arizona! Architectural Guide to the University of Arizona Campus Historic District, published by the University in 1987 is an excellent preservation tool and merits re-printing and wide distribution.

Strategy: Implement a visible interpretive program for the Historic Core. Provide brochures about the campus history to new students, faculty, and staff as they arrive on campus.

• Educate the campus residents, students, residential advisors, and Residence Life Administrators about the historic significance of the older dormitory housing.

Strategy: Develop simple educational materials regarding the historic dormitories and publicize within each residential hall by means of posted information with a historic photo and some historical information. Provide funding and staffing for these projects.

G. Campus Boundaries / Neighborhood Issues

• Collaborate with the City of Tucson Planning Department, property owners, and the various surrounding Neighborhood Groups to preserve the distinct neighborhood character along the University's boundary.

Strategy: Inform and engage the community through various forums and venues including the Citizen Participation Advisory Committee (CPAC). Encourage an open and cooperative relationship with the City of Tucson Planning Department. Engage in conversation and planning exercises regarding boundary areas.

Strategy: Continue to implement, protect and maintain the policies, guidelines and ideas presented in the Comprehensive Campus Plan.

Determine appropriate uses along campus boundaries.

Strategy: Coordinate with the City of Tucson, interested parties in the community, property owners and merchants to determine where uses might be changed for the better. Recognize that the campus boundary was last amended and stabilized by the Arizona Board of Regents in 1996.

Strategy: Recognize that the University does have a responsibility to provide adequate student housing and should engage in planning efforts and discussions in regard to housing both on and off campus.

Strategy: Understand that campus gateways serve as both entry to the campus and entry from the campus to established older neighborhoods and factor this into campus planning that happens within the University's set boundaries.

Strategy: Frame views into the campus to allow surrounding neighborhoods to appreciate the visual quality of the University's established historic character as well as its newer contributions to the urban fabric.

Inform and engage neighborhood organizations about University historic preservation efforts.

Strategy: Continue to coordinate with the Campus Community Relations Committee and make historic preservation and design issues a special category for discussion at meetings.

Strategy: Understand that the members of the surrounding neighborhoods consider themselves part of the University community and they have much to offer the University with regard to preservation efforts both on and off campus.

Strategy: Understand that many neighborhood members hold a great deal of institutional memory related to University activities along the boundary. Use this information to inform current and future decisions.

• Include one member of the greater University community in the Campus Historic Preservation Committee.

Strategy: Develop a link between the Campus Community Relations Committee and the Campus Historic Preservation Committee.

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Inventory of Main Campus Buildings and Landscape Features 1891-1976

Building Number	Construction Year	Building Name	Address	Architect	Style Period	Historic Status
2	1956	ART BUILDING & ART MUSEUM	1031 N OLIVE RD	Place and Place	Transitonal	
3	1956	DRAMA	1025 N OLIVE RD	Place and Place	International Style Modern	
4	1957	MUSIC	1017 N OLIVE RD	Place and Place	International Style Modern	
5	1954	COCONINO RESIDENCE HALL	1003 N OLIVE RD	James Macmillan	Academic eclectic	potential historic district addition
6	1940	SLONAKER HOUSE	1027 E 2 ST	Roy Place	Academic eclectic	potential historic district addition
7 & 7.01	1957	MANZANITA/MOHAVE RESIDENCE HALL	1010 N PARK AVE	Arthur T. Brown	International Style Modern	
8	1937	GILA RESIDENCE HALL	1009 E NORTH CAMPUS DR	Roy Place	Academic eclectic	included in historic district
9	1921	MARICOPA RESIDENCE HALL	1031 E NORTH CAMPUS DR	Lescher and Kibbey (1918) Lyman and Place (1919)	Academic eclectic	included in historic district

Building Number	Construction Year		Building Name	Address	Architect	Style Period	Historic Status
10	1937		YUMA RESIDENCE HALL	1107 E NORTH CAMPUS DR	Roy Place	Academic eclectic	included in historic district
11	1958		JOHN W. HARSHBARGER BUILDING	1133 E NORTH CAMPUS DR	D. Burr Dubois	Transitonal	potential historic district addition
12	1940		MINES AND METALLURGY	1235 E NORTH CAMPUS DR	James Macmillan	Transitonal	potential historic district addition
20	1918		ENGINEERING	1127 E NORTH CAMPUS DR	J.B. Lyman	Academic eclectic	included in historic district
21	1891	2.4	OLD MAIN	1200 E UNIVERSITY BLVD	James Miller Creighton	Academic eclectic	included in historic district
23	1952	10	CESAR E. CHAVEZ BUILDING	1110 E NORTH CAMPUS DR	James Macmillan	Transitonal	potential historic district addition
24	1935	iti m mi	CENTER FOR ENGLISH AS A SECOND LANGUAGE	1100 E NORTH CAMPUS DR	Roy Place	Academic eclectic	included in historic district
25	1909		COMMUNICATION	1103 E UNIVERSITY BLVD	D.H. and J.H. Holmes	Academic eclectic	included in historic district

Building Number	Construction Year		Building Name	Address	Architect	Style Period	Historic Status
26	1925		ARIZONA STATE MUSEUM NORTH	1013 E UNIVERSITY BLVD	Lyman and Place	Academic eclectic	included in historic district
27	1950		SOCIAL SCIENCES	1145 E SOUTH CAMPUS DR	James Macmillan	Transitonal	potential historic district addition
28	1904		DOUGLASS	1100 E UNIVERSITY BLVD	Russel, Mauran, Garden; original plans modified and scaled down by David H. Holmes	Academic eclectic	included in historic district
29	1936	11111	CENTENNIAL HALL	1020 E UNIVERSITY BLVD	Roy Place	Academic eclectic	included in historic district
30	1936	THE	ARIZONA STATE MUSEUM SOUTH	1010 E UNIVERSITY BLVD	Roy Place	Academic eclectic	included in historic district
30.01	1961		EMIL W. HAURY ANTHROPOLOGY BUILDING	1009 E SOUTH CAMPUS DR	Place and Place	Transitonal	potential historic district addition
31	1921		COCHISE RESIDENCE HALL	1018 E SOUTH CAMPUS DR	Lyman and Place	Academic eclectic	included in historic district
32	1912		SOUTH HALL	1042 E SOUTH CAMPUS DR	David H. Holmes	Academic eclectic	included in historic district

Building Number	Construction Year		Building Name	Address	Architect	Style Period	Historic Status
33	1959		FAMILY AND CONSUMER SCIENCES	1110 E SOUTH CAMPUS DR	Terry Atkinson	International Style Modern	potential historic district addition
34	1942		YAVAPAI RESIDENCE HALL	1222 E SOUTH CAMPUS DR	James Macmillan	Academic eclectic	included in historic district
35	1903	The same	HERRING HALL	1130 E SOUTH CAMPUS DR	David H. Holmes	Academic eclectic	included in historic district
36	1915	#	FORBES	1140 E SOUTH CAMPUS DR	Bristow and Lyman	Academic eclectic	included in historic district
38	1962		SHANTZ	1177 E 4 ST	Friedman and Jobusch	Transitonal	
40	1937		ROBERT L. NUGENT BUILDING	1212 E UNIVERSITY BLVD	Roy Place	Academic eclectic	included in historic district
41	1936		CHEMISTRY	1306 E UNIVERSITY BLVD	Roy Place	Academic eclectic	included in historic district
43	1956		BIOLOGICAL SCIENCES EAST	1311 E 4 ST	Place and Place	Academic eclectic	potential historic district addition

Building Number	Construction Year		Building Name	Address	Architect	Style Period	Historic Status
45	1965		MATHEMATICS EAST	603 N MOUNTAIN AVE	Cain, Nelson and Wares	Late Modern	
46	1951		CENTRAL HEATING AND REFRIGERATION PLANT	640 N MOUNTAIN AVE	Luepke & Marum Assoc.	Transitonal	
50 & 50.01 & 51.01	1957		SANTA CRUZIAPACHE RESIDENCE HALL	1441 E 5 ST	D. Burr Dubois	Transitonal	potential historic district addition
52 & 53	1956		GREENLEE/GRAHAM RESIDENCE HALL	610 N HIGHLAND AVE	Arthur T. Brown	International Style Modern	potential historic district addition
54	1963		SCIENCE-ENGINEERING LIBRARY	745 N HIGHLAND AVE	Place and Place	International Style Modern	potential historic district addition
56	1926	ii-O	BEAR DOWN GYMNASIUM	1428 E UNIVERSITY BLVD	Lyman and Place	Academic eclectic	Individually listed historic property
57	1946		HOPI LODGE RESIDENCE HALL	1440 E 4 ST	Place and Place	Academic eclectic	potential historic district addition
58	1929		WEST STADIUM	530 N VINE AVE	Roy Place	Academic eclectic	potential historic district addition

Building Number	Construction Year	Building Name	Address	Architect	Style Period	Historic Status
58.01	1929	WILDCAT STADIUM & TRACK	540 N VINE AVE	Unknown	Academic eclectic	potential historic district addition
59 & 60	1949	PINAL/NAVAJO RESIDENCE HALL	1511 E 6 ST	Place and Place	Academic eclectic	potential historic district addition
61	1938	EAST STADIUM ADDITION	Unknown	Unknown	Academic eclectic	potential historic district addition
61	1946	SIERRA RESIDENCE HALL	541 N CHERRY AVE	Unknown	Academic eclectic	potential historic district addition
63	1936	CHARLES P. SONETT SPACE SCIENCES BUILDING	1541 E UNIVERSITY BLVD	Roy Place	Academic eclectic	
65	1921	STEWARD OBSERVATORY	933 N CHERRY AVE	Lyman and Place, dome Godfry Sykes	Academic eclectic	included in historic district
79 & 79.01 & 79.03 & 80.01	1958	KAIBAB/HUACHUCA RESIDENCE HALL	923 E 4 ST/940 E 4 ST	Arthur T. Brown	International Style Modern	
80	1961	FRANKLIN	1011 E 5 ST	Arthur T. Brown	International Style Modern	

Building Number	Construction Year		Building Name	Address	Architect	Style Period	Historic Status
81	1960	F	PHYSICS-ATMOSPHERIC SCIENCES	1118 E 4 ST	Friedman and Jobusch	International Style Modern	potential historic district addition
177	1928		ROUNTREE HALL	1145 N MOUNTAIN AVE	Unknown	Academic eclectic	Potential individual historic property
199	1903		DOUGLASS HOUSE	1189 E SPEEDWAY BLVD	Unknown	Residential	Individually listed historic property
199.01	1906		SMITH HOUSE	1195 E SPEEDWAY BLVD	Designed by George E. Smith	Residential	Individually listed historic property

Building Number	Construction Year		Building Name	Address	Architect	Style Period	Historic Status
ndscape	Features Included i	n Historic District					
22	1919	A	MEMORIAL FOUNTAIN	Unknown	Lyman and Place	Unkown	included in historic district
	1916		MAIN GATE AND ROCK WALL	Unknown	Unknown	Unkown	included in historic district
dscape	Elements Potential	y Eligible for Inclusion in	Historic District KRUTCH CACTUS GARDEN	Unknown	Unknown	Unknown	potential historic district addition
	1920s		EAST MALL	Unknown	Unknown	Unknown	potential historic district addition
	Unknown		WEST CAMPUS TERRACE	Unknown	Unknown	Unknown	potential historic district addition
	Unknown		ORANGE GROVE	Unknown	Unknown	Unknown	potential historic district addition
	Unknown	<u>n</u> -a-	OLIVE GROVE	Unknown	Robert Forbes	Unknown	potential historic district addition

Inventory of Main Campus Buildings and Landscape Features 1891-1976

University of Arizona Preservation Plan

Historic Status

Style Period

Additional M	odern Buildings						
55	1976		LIBRARY	1510 E UNIVERSITY BLVD	Friedman and Jobusch	Late Modern	
66	1966		ADMINISTRATION BUILDING	1401 E UNIVERSITY BLVD	Place and Place	Late Modern	potential historic district addition
67	1967	1	MODERN LANGUAGES	1423 E UNIVERSITY BLVD	Gordon M. Luepke	Late Modern	potential historic district addition
68	1968		PSYCHOLOGY	1503 E UNIVERSITY BLVD	Blanton and Cole	Late Modern	potential historic district addition
69	1964		EDUCATION	1430 E 2 ST	Gordon P. Luepke	Late Modern	potential historic district addition
71	1966		SPEECH AND HEARING SCIENCES	1131 E 2 ST	Blanton and Cole	Late Modern	
72	1965		CIVIL ENGINEERING	1209 E 2 ST	Blanton and Cole	Late Modern	
73	1969		COMPUTER CENTER	1077 N HIGHLAND AVE	Gordon M. Luepke	Late Modern	

Address

Architect

Building Name

Building

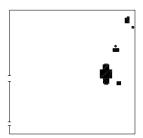
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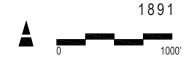
Construction Year

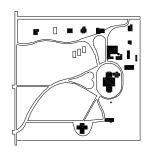
Building Number	Construction Year		Building Name	Address	Architect	Style Period	Historic Status
75	1965		ARCHITECTURE	1040 N OLIVE DR	Terry Atkinson	Late Modern	
84	1964		ARIZONA/SONORA RESIDENCE HALL	910 E 5 ST/940 E 5 ST	Friedman and Jobusch	Late Modern	
85	1966		CORONADO RESIDENCE HALL	822 E 5 ST	Friedman and Jobusch	Late Modern	
87	1964	E HI	PARK STUDENT UNION	615 N PARK AVE	Beck, Edson and Goldblatt	International Style Modern	
89	1968		MATHEMATICS	617 N SANTA RITA AVE	Cain, Nelson, Wares, Cook, Swain	Late Modern	
91	1975	HEAD	GRACE H. FLANDRAU PLANETARIUM	1601 E UNIVERSITY BLVD	Blanton and Co.	Late Modern	
92	1966	100	GERARD P. KUIPER SPACED SCIENCES	1629 E UNIVERSITY BLVD	William Wilde	Late Modern	
93	1964		INA A. GITTINGS BUILDING	1713 E UNIVERSITY BLVD	Place and Place	International Style Modern	

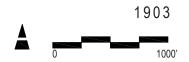
Building Number	Construction Year	Building Name	Address	Architect	Style Period	Historic Status
94	1970	MEINEL OPTICAL SCIENCES	1630 E UNIVERSITY BLVD	Blanton and Co.	Late Modern	
96	1973	MCKALE MEMORIAL CENTER	1721 E ENKE DR	Place and Place	Late Modern	
176	1979	LAW	1201 E SPEEDWAY BLVD	Terry Atkinson	Late Modern	
201	1971	ARIZONA HEALTH SCIENCES CENTER	1501 N CAMPBELL AVE	Friedman and Jobusch	Late Modern	
203	1968	NURSING	1305 N MARTIN AVE	Terry Atkinson	Late Modern	

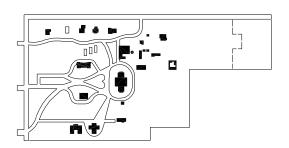
The following series of maps are based on information found in the Phyllis Ball's *A Photographic History of the University of Arizona, 1885-1985*. Ideally, these maps would be printed on maylar or transparent paper so that they would overlay each other and one could compare campus development. As such, these pages are set up as single sided not double sided like the remainder of the document. The date of each map is located in the lower right corner of each page.



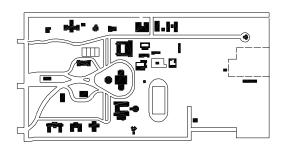




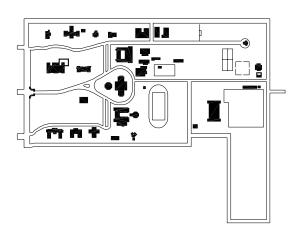




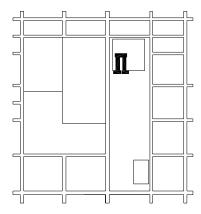


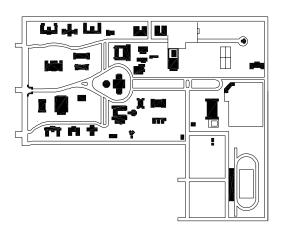




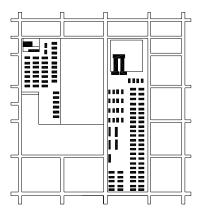


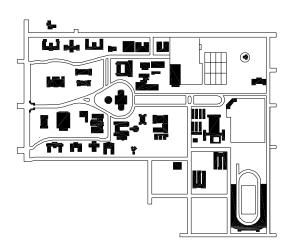




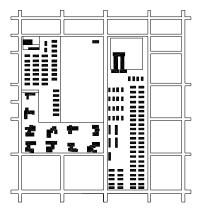


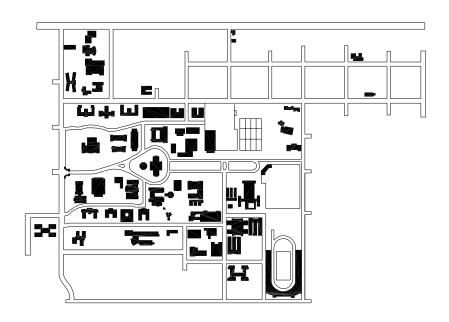




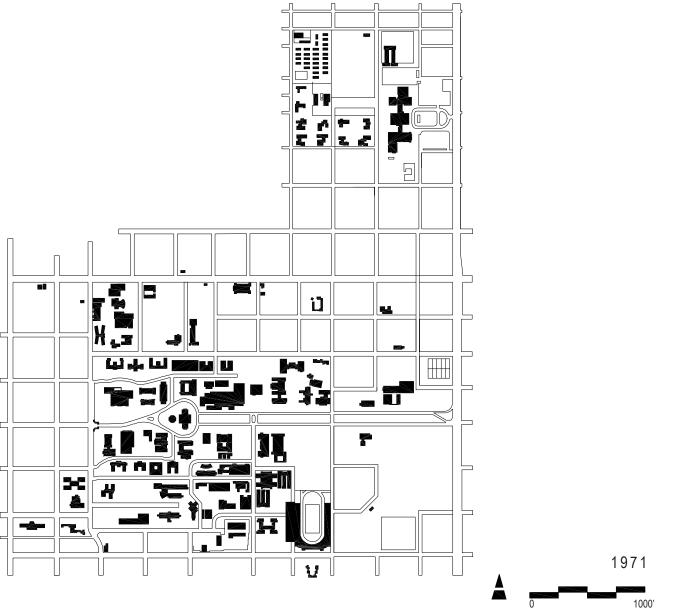
























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