Proposal to Create  
*The College for Design and the Sustainable Environment*  
University of Arizona  
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Professor Corky Poster – Director, Drachman Institute

III. **Units Included within the Proposed Reorganization:**

<table>
<thead>
<tr>
<th>College of Architecture and Landscape Architecture</th>
<th>College of Fine Arts</th>
<th>College of Law</th>
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<tbody>
<tr>
<td>2. School of Landscape Architecture</td>
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<td>3. Planning Program</td>
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<td>4. Drachman Institute</td>
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<th>College of Agriculture and Life Sciences</th>
<th>Eller College of Management</th>
<th>College of Social and Behavioral Sciences</th>
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<td>1. Arid Land Studies</td>
<td>1. Public Administration and Policy</td>
<td>1. Department of Geography and Regional Development</td>
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<td>2. School of Natural Resources</td>
<td>2. Real Estate Development Curriculum</td>
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<td>1. Department of Civil Engineering &amp; Engineering Mechanics</td>
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<td>2. Department of Material Science and Engineering</td>
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This proposal outlines the establishment of the **College for Design and the Sustainable Environment** at the University of Arizona. The purpose of this proposal is to advance each of the contributing disciplines, achieve top-ten research university status for the University, as well as contribute to cost savings and revenue generation. As the only college to combine in a comprehensive and integrative way, the disciplines that foster environmental analysis, design, construction, and planning, **The College for Design and the Sustainable Environment** is destined to become the world’s educational leader in environmental sustainability.

Today’s world is confronted with challenges of immense environmental scale and complexity. Global climate change and unprecedented population growth are putting many societies under stress for such basic human needs as food, shelter, and water. Turbulent shifts in geo-political and economic structures have spawned threats and instability. Our dependence on oil has led to an urban infrastructure that is highly resource consumptive and unsustainable. The state of Arizona faces the multidimensional challenges of globalization along with those uniquely its own. As the second fastest growing state in the nation, Arizona is limited by an economy that is precariously dependent on growth, a resource consumptive construction industry, strained urban infrastructure, and limited water supply.

The idea of the **College for Design and the Sustainable Environment** is based on the premise that design, construction, and planning for a sustainable environment are dependent on the quality and quantity of natural resource and social science data collection and analysis. The associated premise is that the relevance of science to sustainability is dependent on the sound application of evidence-based design, construction, and planning decisions. For too long, design decisions were a matter of stylistic convention based on little or no scientific evidence. Conversely, design and planning based purely on biophysical determinants can ignore important human cultural and aesthetic factors. Good design does not come simply from intuition nor invention, nor from data collection, no matter how thorough. It proceeds instead from a base of [documentation and analysis](#) of environmental and social conditions through the *application* of knowledge of appropriate materials and technologies to the *creation* of new physical environments.

The traditional organizational structure of universities has hampered advances in environmental sustainability. Typically, universities have segregated the disciplines of design, construction, and planning from finance, economics, and the natural and social sciences. The University of Arizona contains nationally ranked programs in all of these areas, yet it too, has historically segregated these fields in different colleges. It is proposed that **The College for Design and the Sustainable Environment** bridge this gap by bringing together the full breadth of applied disciplines affecting environmental sustainability. The new college would provide students a single place to turn for applied degrees and research opportunities concerning the sustainable environment. The organizational structure would foster advances in the applied sciences, business and management, as well as evidence-based design and planning thus positioning the university to better address the problems of the 21st century.

The potential for educational advancement in sustainability is not limited to the university. Educational partnerships with community colleges and the K-12 system in the Tucson area could realize an entire generation well versed in the principles of environmental sustainability as well as how to build a sustainable world. The opportunity exists for the **College for Design for the Sustainable Environment** to help create the nation’s only seamless track of sustainability-related degree programs extending from junior high school through the associate degree level to the Ph.D. The new college would also create a focal point for the establishment of a powerful economic development cluster in Tucson centered on sustainability and engaging business and industry in the development of sustainability products, technology, and services. Finally, the merger of schools and departments, centralization of administrative functions, and shared curricula would lead to substantial savings.

The process of consultation within the College of Architecture and Landscape Architecture began with the development of its first strategic plan upon request of Provost Hay in July. The Strategic planning process engaged all faculty, staff, and student representatives through numerous task force work sessions, retreats, and general assembly meetings. The Transformation Planning process was undertaken as a direct offshoot of the consultative process within the College in addition to numerous meetings Dean
Cervelli had with leaders of the following units to discuss potential collaboration: College of Agriculture and Life Sciences, College of Engineering, College of Fine Arts, College of Management, College of Public Health, AzRISE, Department of Art, Department of Geography and Regional Development, Department of Material Sciences and Engineering, School of Natural Resources, School of Public Administration and Policy.

The new College of Design & the Sustainable Environment represents a new cross-college organizational model for the university. The new College for Design & the Sustainable Environment will be comprised of three academic units:

- School of Sustainable Architecture, Landscape Architecture and Planning
- School of Human Environment Studies
- School of the Visual Arts three new self-supporting interdisciplinary research centers:
  - Solar City Institute
  - Design Center for Healthy Communities and one interdisciplinary outreach unit: Drachman Institute.

Collaborating programs from across the college would participate in the new college via joint faculty positions, joint research and outreach projects, and integrated curricula. The College of Design & the Sustainable Environment would be comprised of academic programs from four of the university’s colleges including the College of Architecture and Landscape Architecture, College of Social and Behavioral Sciences, College of Agriculture and Life Sciences, and the College of Engineering. The list below identifies current departments, schools, or centers that would, as a whole or in part, join the new college.

1. **School of Sustainable Architecture, Landscape Architecture, and Planning**
   Description: Joins three former schools into a single school that confers tenure and degrees in the areas listed below and collaborates with university programs outside the college and with partners in the community. Below is a listing of each school and the existing units to be included as well as those programs that are anticipated to collaborate in research, teaching, and/or outreach.

   **Accredited degree**

   **Home Academic Programs**
   - Architecture
   - Landscape Architecture
   - Planning
   - Preservation Studies
   - Real Estate Development

   **Collaborating Programs**
   - Civil Engineering
   - Mechanical Engineering
   - Electrical Engineering
   - Material Sciences
   - Anthropology
   - Fine Art
   - Arizona Water Institute
   - Performing Arts
   - Finance
   - Marketing
   - AzRISE
   - UA Arboretum
   - Water CASA

2. **School of Human-Environmental Studies**
   Description: The School focuses on the development of quantitative methods for measuring environmental and cultural change. Faculty in regional development concentrate on population geography, economic geography, urban geography, and environmental justice and risk. Landscape ecologists and remote sensing scientists work on processing and GIS resources focusing on spatial and temporal landscape dynamics. The School merges four departments into a single school that confers tenure and degrees in the areas listed below.

   **Home Academic Programs**
   - Geography & Regnl Development
   - Arid Land Studies
   - Southwest Center
   - Arizona Remote Sensing Center

   **Collaborating Programs**
   - Anthropology
   - Bureau of Applied Research in Anthropology
   - School of Natural Resources
   - Environmental Law, Society, & Policy
   - Arizona Water Institute
   - Biosphere II
   - Sociology
   - Center for Applied Sociology
   - Institute for Society and Environment
3. **School of the Visual Arts**
   **Description:** The School of the Visual Arts represents the former School of the Arts in the College of Fine Arts and presumes the establishment or transfer of the performing arts disciplines as a distinct unit.
   
   **Accredited Degree**
   **Home Academic Programs**
   - Studio Art
   - Graphic Design & Illustration
   - Art History
   - Art Education
   **Collaborating Programs**
   - Architecture
   - Landscape Architecture
   - Architectural History

4. **The Solar City Institute**
   The mission of the Solar City Institute would be to lead the world in the development of next generation of buildings, landscapes, and urban infrastructure that are both high performance and cost less to operate and maintain, are less consumptive of natural resources, and better accommodate human needs through innovations in building materials and manufacturing to industrialized building systems and energy and lighting, to air quality and water harvesting, and prudent land planning and design. In partnership with the U. of A., the City of Tucson and the surrounding region can form a powerful economic development cluster centered on solar energy development and advanced sustainable building technology.

5. **The National Center for GeoDesign**
   The mission of the National Center for GeoDesign is to advance the development of decision support science, geo-visualization & modeling, GIS, and remote sensing software and hardware in support of sustainable landscape-scale design and physical planning.

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7. **Design Center for Healthy Communities**
   The Design Center for Healthy Communities focuses on research related to the impact of physical design and planning on human health risk factors and the improvement of public health. At the building scale, the Center works on the design of workplace environments, housing, schools, community space, as well as health care facilities such as hospitals, clinics, and senior care facilities. At the community scale, factors such as walkability, universal health, safety, and landscape therapeutics are considered to enable greater physical activity.

8. **Drachman Institute**
   The Institute targets the development of demographically diverse neighborhoods, rich in environmental amenities and built from good-quality, well-designed, regionally-appropriate housing that conserves land, energy, and water. It is our contention that good quality and innovative architectural design and technology, sensible community planning, and a landscape architecture that fosters beautiful and healthy private and public space is the cornerstone of this work.

The proposed creation of the **College for Design and the Sustainable Environment** assumes the following budgetary considerations:
A. **Projected Savings**

1. **Consolidated Administration, Staff Support, and Facilities** - The proposed new college structure provides opportunities for the centralization of administrative and support functions. The total number of academic units will be reduced from five to three, reducing the needed number of program administrators and support staff. Individual undergraduate and graduate academic programs would be supported by college central level administration and staff. Consolidated research and outreach units managed centrally would reduce overhead costs through the use of combined facilities and support staff. Finally, centralization of common facilities such as technology, equipment, and space would also provide more opportunities for all programs as well as maintenance and purchasing efficiencies.

2. **Collaborative Curriculum** - Significant similarities and overlaps exist between required courses in such areas as art and architectural history; basic foundation design in architecture, landscape architecture, and art; computer aided drafting and 3-D visualization; and geographic information systems. An integrated, interdisciplinary approach to these subjects could save resources as well as provide students with a more comprehensive and integrated understanding of the skills, concepts, and dynamics that exist between the visual arts and design professions. Potential curricular collaborations are outlined below:
   a. **History Courses** - Between U. of A. architecture, landscape architecture, studio arts, and media arts.
   b. **AutoCAD, BIM, and GIS** – Between U. of A. architecture, landscape architecture, planning, media arts, regional development, and landscape studies programs and Pima Community College AutoCAD, digital arts studies and digital game, modeling, and simulation programs.
   c. **Foundation Studio** - Design, representation, and visualization courses are required by all U. of A. architecture, landscape architecture, art studio, and media arts students as well as Pima Community College students in digital arts studies.

3. **Off-Campus Experience** – The School of Architecture and the School of Landscape Architecture faculty are currently considering initiating a graduation requirement for all students to complete a semester or year-long study abroad program and/or a full co-op education experience. The departure of students from campus during the school year will reduce basic overhead costs of instruction.

B. **Revenue Generation**

We are confident that the establishment of the College for Design and the Sustainable Environment will generate new revenue to the university via increased competitiveness for grants and contracts, summer school and online education, as well as private donations and naming opportunities. Interest would be strong in such a new college, its strong brand, and community partnerships. Growing public interest in environmental sustainability coupled with the challenges of diminishing resources would drive interest in and support of the college. The college would be distinctive nationally for its composition and integrated approach to sustainability teaching, research, and outreach, thus drawing increased support from the corporate, governmental, and foundation sectors as well as private donors.