

From: Jeff Barrett [mailto:jtbarrett@ucdavis.edu]

Sent: Thursday, June 16, 2011 3:27 PM

To: Gina Anderson

Subject: Administrative Systems Review (200-45) - Campus Asset Management Planning and Information System

Hello Gina,

We'd like to invite the Academic Senate to participate in the following review under the 200-45 Administrative Computing Policy:

Project: **Campus Asset Management Planning and Information System**

Sponsor: **Administrative and Resource Management**

Details: <http://admincomputing.ucdavis.edu/projects/campis.cfm>

Overview:

Classrooms, labs, roads, trees, dorms, recreational facilities, utilities, offices, and gardens frame UC Davis, creating the place for University life. Working collaboratively with the academic and administrative units, Administrative & Resource Management (ARM) and Student Housing share responsibility for planning, maintaining, and improving the physical environment -- ensuring our place advances the UC Davis academic mission. The decades-old technology currently used to execute and manage this work is deficient and inefficient. The proposed Campus Asset Management and Information System (CAMPIS) would replace Maximo and scores of existing single-use applications and databases with an enterprisewide, integrated framework. In doing so, CAMPIS would provide real-time information and tools to ARM, Student Housing, and the entire campus community.

Status:

- As part of the conceptual 200-45 review process for this project, we are seeking a brief statement summarizing the Academic Senate's feedback/position regarding the proposed system. You can send any Senate feedback directly to me, in whatever electronic format (Word, PDF, etc.) is most convenient for you.
- As with other projects, 200-45 provides a venue for ongoing review and discussion. In addition to a formal Academic Senate response, direct comments from Senate members are always welcome. (As previously discussed, we are careful to distinguish between individual comments and the official positions of campus organizations.)

Best Regards,

Jeff

Jeff Barrett
Technology Collaboration Liaison
Administrative and Resource Management / Information and Educational Technology
jtbarrett@ucdavis.edu
530-754-5666

If members wish to comment directly, we have established a SmartSite for 200-45 project reviews. For those who have not yet joined, directions for signing up and participating are as follows:

To access the 200-45 Review SmartSite

1. Go to SmartSite (<http://smartsite.ucdavis.edu>) and select the **Log In** button in the top right corner.
2. Enter your UC Davis LoginID and password.
3. The first time you access the site, you will need to join the 200-45 Review site so you can participate in the discussion forum.
 - o To join, click **Membership** under the My Workspace tab in the top left corner.
 - o Select **Joinable Sites** at the top of the Membership window.
 - o Select **Join** under the **200-45 Review** entry. (The site list is alphabetical, so it should be near the top.)
 - o You now should see a **200-45 Review** tab to the right of the My Workspace gold tab (or in the More pull-down menu in the upper right corner).
4. Click on the **200-45 Review** tab to enter the site.

To provide feedback or ask questions regarding a project under review

1. Within the 200-45 SmartSite, choose **Project Forums**.
2. **Select the specific project** (called a Topic in SmartSite) that you would like to discuss.
3. Within a Topic, you can choose **Post New Thread** to add new comments or questions.
4. To contribute to an existing discussion or respond to a question, select the item of interest and choose **Reply**.

You can also pose questions directly to the project contacts; they are listed on the project page referenced above.

(For examples of previously submitted projects and feedback, please see <http://admincomputing.ucdavis.edu/projects/>.)

Be green - please print only when necessary



Campus Asset Management Planning and Information System

Policy 200-45 Conceptual Review

Prepared by: Rebecca J. Nord

June 3, 2011

TABLE OF CONTENTS

OVERVIEW.....	1
BUSINESS NEED.....	2
VALUE AND IMPACT.....	4
OPPORTUNITIES AND CONSTRAINTS.....	7
PROJECT TEAM DELIVERABLES AND NEXT STEPS.....	8
APPENDIX A: DESIGN & CONSTRUCTION MANAGEMENT MAJOR CAPITAL PROJECT TIMELINE.....	/
APPENDIX B: STEERING COMMITTEE AND PROJECT TEAM.....	//
APPENDIX C: INDUSTRY OVERVIEW OF SIMILAR SYSTEMS.....	///

OVERVIEW

Classrooms, labs, roads, trees, dorms, recreational facilities, utilities, offices, and gardens frame UC Davis, creating the **place** for University life. While we can conceive of a university “in the cloud”, it is impossible to imagine a great university without a physical environment that advances learning, research, and community engagement.

The responsibility for planning, maintaining, and improving the physical environment lies mostly with Administrative & Resource Management (ARM) and Student Housing. Working collaboratively with the academic and administrative units, ARM and Student Housing ensure our **place** advances the UC Davis academic mission. Our collective challenges: diminished funds, extraordinary complexity, burgeoning codes and regulations, labyrinthine review and approval processes, extensive interdependencies, and changing expectations. The decades-old technology currently used to execute and manage this work is deficient and inefficient. Information is fragmented and isolated in staff memory or compartmentalized in inaccessible “desk-drawer” databases housed on department-based servers.

For the 21st century, ARM and Student Housing need asset management technology that:

- systematically captures information
- is process-centric, spanning work flows across organizations
- is configurable to meet the needs of individual operation
- has the analytical tools necessary for effective management, decision-making, and work execution
- is accessible through the web and mobile devices
- is integrated with other UC Davis systems
- supports data integrity through formal data governance processes

Robust asset management technology will also support schools and colleges in their own efforts to better manage and allocate the capital resources with which they have been entrusted. It will:

- provide a single interface for work order placement, service requests, and project tracking that integrates cost and schedule information
- enhance access to campus building, land, equipment, and project information leading to better communication between campus service providers, Dean’s Offices, and departments
- integrate funding data with the physical assets assigned to faculty, staff and researchers (space, equipment, data communications infrastructure). This will enable more informed decision-making for indirect cost recovery and for allocating and managing physical assets. It will also create a framework for substantiating resource modifications.

The Campus Asset Management and Information System (CAMPIS) is a framework for this enterprise-wide integrated technology. The proposed system would replace Maximo and scores of existing single use applications and databases by integrating with Facilities Link, Quali Financial System, the planned

Project Management & Accounting System, Banner, and the new payroll system. CAMPIS would provide real-time information and tools to ARM, Student Housing, and the entire campus community.

CAMPIS meets three of the criteria of the UCD Administrative Review Process, specifically:

- It will cross organizational boundaries. Sponsored by ARM and Student Housing, CAMPIS will convey work processes across the enterprise, and will incorporate information created and used by Facilities Management, Student Housing, Design & Construction Management, Capital Resource Management, Campus Planning and Community Resources, Communications Resources, Environmental Stewardship & Sustainability, Accounting & Financial Services, campus police and fire departments, and Safety Services. Campus academic and administrative departments will use specific modules of the system to plan, request, track, and account for services, information, and events related to physical assets: space, buildings, land, and other infrastructure assets.
- The information and work processes to be managed by CAMPIS are critical for UC Davis. They include building maintenance, safety, project management and execution, building and utility schematics, regulatory protocols, energy efficiency, and resource scheduling and efficiency.
- The cost of CAMPIS is unknown at this time, but can be expected to exceed \$150,000.

Questions about the CAMPIS project should be addressed to:

Diane Davies-Conley, Project Sponsor dldavies@ucdavis.edu

Rebecca Nord, Project Manager rjnord@ucdavis.edu

David Moody, Project Advisor dkmoody@ucdavis.edu

Eric Rothgarn, Technical Advisor erothgarn@ucdavis.edu

BUSINESS NEED

CAMPIS will address a wide variety of business needs and tackle several long sought improvements for the UC Davis community. CAMPIS will help us:

MANAGE COMPLEXITY

The evolution of the UC Davis research portfolio, intricate funding mechanisms, and expanding regulatory requirements have increased the complexity of designing and maintaining campus land, facilities, and key infrastructure. Facilities' skilled tradespeople must master advanced building technologies while continuing to coax aging equipment and infrastructure to a longer life. They need quick access to the details and repair history of building systems. The range of project and service delivery methods has increased. Important and creative partnerships with developers, contractors, grantors, agencies, and academic programs intensify the complexity while the regulatory environment adds its own dimensions.

COORDINATE INTERDEPENDENCIES

Specialized knowledge and skills are essential to perform the work of these organizations. This specialization, coupled with heightened risk control efforts and the sheer size of the campus are driving an exponential growth of interdependency within and between units. Work processes frequently involve multiple units; planning and scheduling these activities requires constant communication and coordination that is only partially assisted by existing campus technologies. Most interdependencies are still managed by phone, mail, e-mail, fax, and personal contact, but need integrated and interrelated information systems and workflows.

In the appendix is a graphic, created by Design & Construction Management (DCM) several years ago, which beautifully depicts the interdependencies of planning and constructing a building. The graphic is at a high level; what is not shown are the countless smaller day-to-day activities which are also interdependent and roll up to complete the project, as well as the myriad of interactions, consensus building, and negotiation between outside service providers, academic departments, and DCM. This graphic represents only a portion of the work of ARM and Student Housing.

OPTIMIZE LIMITED FUNDS

General funding for campus units has remained level or decreased in the past decade, even as student population, campus square footage, and research activities continue to grow. The student population grew by 24% between 2000 and 2010, and maintained gross square feet also increased by 24% over the same period. Project and operations accounting, new financing models, complex recharge activities and billing, the need to forecast and use real time budget management extend beyond the functionality of the campus financial system.

PROVIDE INFORMATION FOR DECISION-MAKING

Reliable, real-time information is needed to plan, construct, and maintain building, land, and other assets, and to provide services in a cost effective way. The data needs to be entered and extracted easily, and should be accessible and visible across the organization. Analysis tools should be available to enhance decision-making and support performance improvement.

Information needs have led to an explosion of specialized applications and desktop data bases in ARM. Many applications and databases were initially created for limited uses within individual units. Confidence in the data can be shaky, because data definitions, standards, and data maintenance practices are not consistent. The data for decision-making is often difficult to extract without programmer intervention. Finally, the applications are seldom integrated with major campus systems such as DaFIS and Kual, so much time and effort goes into reconciling data between systems.

FULFILL USER EXPECTATIONS

Experience with service and technology outside of higher education has changed the expectations that students, staff and faculty bring to campus. A building coordinator expects to be able to track the progress of a work order, just like she can track a book ordered through Amazon.com. A department chair wants to be able to see the accounting detail of a laboratory remodel, just like he would track expenditures in his personal bank account. A new researcher would like to know the environmental systems associated with an animal room in the same way she reviews housing features on the Multiple Listing Service Online. A student expects real value for the room and board his family is paying for, and so anticipates immediate response to a facility problem. Finally, all users want easy, intuitive interfaces to technology.

TRACK REGULATORY COMPLIANCE, WARRANTIES, MAINTENANCE HISTORY, AND FUNDING SOURCE RESTRICTIONS

The regulatory environment is enormously complex, encompassing building codes, energy efficiency requirements, safety, tax code, accounting standards, animal health, environmental health, biosafety, and other concerns. Review processes cross multiple departments and professional specialties. A deliberate commissioning process is necessary to ensure building systems function properly. Building, room, and location-specific safety information should be immediately available to front line staff. Preventative maintenance and warranties must be tracked to get the most value from capital investments. Regulatory fund-source tracking and management, by project or by space, is essential for grant, donor, and federally-based monies associated with capital improvements.

ADVANCE SUSTAINABILITY

Continually rising energy costs as well as sustainability goals are substantial challenges that are addressed more effectively when measurement and monitoring is integrated with other decision data. Energy demands, repair history and cost, space use, and parts availability are important components for prioritizing deferred maintenance decisions, such as which building HVAC systems should be repaired and which must be replaced, or which roofs can survive another two years.

VALUE AND IMPACT

The CAMPIS business objectives include:

- Improving financial stewardship
- Reducing operating costs
- Streamlining business practices
- Conserving energy
- Advancing sustainability
- Providing an excellent user experience

CAMPIS will provide critical support to ARM and Student Housing, and improve service and support for the business operations of colleges and academic departments as well as other administrative organizations, such as Communications Resources and the University Registrar. Once fully implemented, CAMPIS will have a profound impact on all campus business operations and bring value in the following ways:

CAMPUS COMMUNITY BENEFITS

- A single web interface for service requests, with opt-in automated responses when the status of the request is updated
- Real-time access to project and work order information
- Real time access to a department's current expenditures for facility or project-related work, and better information for indirect cost allocation
- Comprehensive space management for deans and department facility coordinators
- Potential for department-level control of access cards and keys
- Enhanced integrated energy management information to reduce energy costs
- Optimization of dollars and time spent on planning, preserving, maintaining and improving the UC Davis campus

ASSET MANAGEMENT

- Asset life cycle management. Assets include buildings, building systems, major equipment, land, gardens, plant collections, trees, roads, paths, linear assets such as utility lines, architectural features, fleet vehicles, and heavy equipment. Assets would be searchable and referenced through an asset ID and geo-location
- Capability to monitor asset cost and condition throughout the asset lifecycle
- Ability to extend asset life through more effective preventative maintenance
- Integration with Capital Asset Accounting
- Event planning and room reservation support

BUSINESS INFORMATION

- Capability to capture data automatically or through web-based input
- Enterprise-wide information with role-based access to various modules
- Robust reporting capability and easy-to-use queries
- Floor plans and engineering drawings, with layered, searchable information, such as building systems, fire zones, chemical storage.
- Real estate management capability
- Integrated energy management information
- Document management capability

- Ability to establish and track metrics to improve building system performance and business operation improvement

AUTOMATED AND MANAGED WORKFLOWS

- Improved scheduling, with transparency that will lead to opportunistic and more efficient scheduling between units, resulting in fewer delays and disruptions to the campus community
- Better capability for establishing and managing maintenance priorities and emergencies
- Mobile capability, e.g. craftsman would be able to access work orders, see equipment repair history, update work orders with a mobile device
- Integrated purchasing, warehouse, and inventory functions for better supply chain management. Parts availability and turnaround time is critical for maintenance and renovation work

FINANCIAL MANAGEMENT

- Capability to track project and recharge costs
- Capability to track operations costs, including labor, materials, equipment
- Regulatory fund source tracking for capital projects
- Integrated timekeeping for projects and work orders, leading to better estimates and cost control
- Improved billing for many departments
- Estimating, budgeting, and forecasting tools

PLANNING AND PROJECT MANAGEMENT

- Integrated capital planning, design, engineering, maintenance and renewal activities
- Automated plan review and inspection processes
- Project management¹
- Utility shutdown planning and notification

¹ Design & Construction Management is acquiring a Project Management & Accounting System. That system is highly focused on construction-type projects. We anticipate their specialized need may not be met fully by the software the CAMPIS project will be looking at. If we find a product which includes a robust construction project management capability, DCM would consider moving that activity to the CAMPIS system. The CAMPIS software will need to include, at minimum, basic project management components for more conventional projects.

OPPORTUNITIES AND CONSTRAINTS

OPPORTUNITIES

Technology

Vendors have made significant advances in developing technologies for integrated software systems. These systems encompass project delivery, asset management, workflow, accounting, inventory, drawings, and more. Many vendor applications are now web-based, making them accessible to a wider group of people and reducing user training time. The emerging “Software as a Service” model, in which the software is developed and hosted by the vendor and accessed online, gives purchasers access to state of the art technology, including enhancements and upgrades, while leveling cost over time without the major upheaval often associated with in-house upgrades.

Timing

Design & Construction Management, Facilities Management, and Student Housing all have outmoded and failing technology systems which do not meet their needs and must be replaced soon. The CAMPIS project provides an opportunity to introduce an integrated enterprise-wide system that will meet both current and future requirements of many campus organizations.

Organizational Alliances

Design & Construction Management and Facilities Management have been situated in ARM since 2007. With Capital Resource Management and Campus Planning & Community Resources, ARM is now structured to align the operating units responsible for entire capital planning, construction and maintenance process chain. The budget situation also creates a different climate in which all operating units are looking across organizational boundaries to leverage resources in solving problems; hence, the project partnership between ARM and Student Housing, which is a part of Student Affairs.

CONSTRAINTS

The primary constraint is funding and staffing CAMPIS. In addition, ARM and Student Housing will need a sustained effort to foster and reinforce a system perspective on data, data governance, and process standardization.

A key to success will be bringing multiple campus operating units to the realization that data standardization is critical to the development of effective, efficient systems that offer uniform usability, information and process sharing among all stakeholders throughout the lifecycle of a project or facility. To that end, we have established a Data Governance Group, led by Keith Kanda, to develop and recommend data governance policy, processes and roles.

PROJECT TEAM DELIVERABLES AND NEXT STEPS

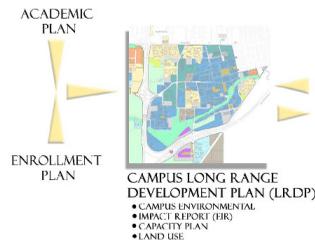
The CAMPIS Project Team developed a business case and are finishing up a Request for Proposals. The project team identified features and functions and vendor test scenarios for the following areas:

- Accounting and Financials
- Asset Management
- Capital and Space Planning, GIS/CAD, Real Estate Management
- Project Management
- Supply Chain Management
- Work Management

Representatives from a broad spectrum of the campus have been consulted informally, and this consultative process will expand as we move into the next stage, which includes evaluating the responses to the RFP, and preparing for development and implementation.

**Campus Asset Management Planning and Information System
Policy 200-45 Conceptual Review**

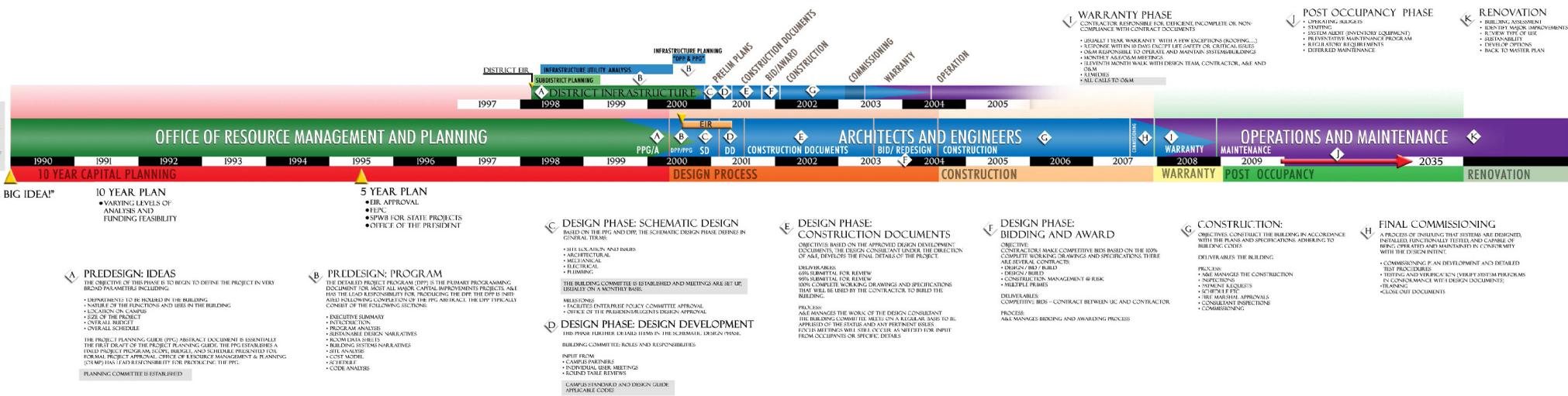
**Appendix A
Design & Construction Management Project Timeline**



CAMPUS MASTER PLAN

SPACE PLANNING
BUILDING PLACEMENT
OPEN SPACE
CIRCULATION
INFRASTRUCTURE

SITING AND INFRASTRUCTURE NEEDS TO BE INTERACTIVE AND CONSIDER THE TIMING OF DELIVERY AND FUNDING IN 5 YEAR PLAN, THEN IN THE INFRASTRUCTURE DELIVER.



"THE BIG IDEA"

10 YEAR PLAN

- VARYING LEVELS OF ANALYSIS AND FUNDING FEASIBILITY

5 YEAR PLAN

- IIR APPROVAL
- FEPC
- IPOWER FOR STATE PROJECTS
- OFFICE OF THE PRESIDENT

A. PREDESIGN: IDEAS

THE OBJECTIVE OF THIS PHASE IS TO BEGIN TO DEFINE THE PROJECT IN VERY BROAD PARAMETRIC REGIONS.

- DEPENDENCIES TO BE HONORED BY THE BUILDING
- NATURE OF THE FUNCTIONS AND USES IN THE BUILDING
- LOCATION ON CAMPUS
- SIZE OF THE PROJECT
- OVERALL BUDGET
- OVERALL SCHEDULE

THE PROJECT PLANNING GUIDE (PPG) ABSTRACT DOCUMENT IS ESSENTIALLY THE FIRST DRAFT OF THE PROJECT PLANNING GUIDE. THE PPG ESTABLISHES A FINED PROJECT PROGRAM, SCOPE, BUDGET, AND SCHEDULE PRESENTED FOR FORMAL PROJECT APPROVAL. OFFICE OF RESOURCE MANAGEMENT & PLANNING (ORMP) HAS THE RESPONSIBILITY FOR PRODUCING THE PPG.

PLANNING COMMITTEE IS ESTABLISHED

B. PREDESIGN: PROGRAM

THE DETAILED PROJECT PROGRAM (DPP) IS THE PRIMARY PROGRAMMING DOCUMENT FOR MOST ALL MAJOR CAPITAL IMPROVEMENT PROJECTS. SHE HAS THE LEAD RESPONSIBILITY FOR PRODUCING THE DPP. THE DPP IS INITIALLY DEVELOPED IN COLLABORATION WITH THE PPG AND TRACKS THE DDP. IT TYPICALLY CONSIST OF THE FOLLOWING SECTIONS:

- EXECUTIVE SUMMARY
- INTRODUCTION
- PROGRAM ANALYSIS
- RESPONABLE DESIGN NARRATIVES
- BUILDING SYSTEMS NARRATIVES
- SUE ANALYSIS
- COST MODEL
- SCHEDULE
- CODE ANALYSIS

D. DESIGN PHASE: DESIGN DEVELOPMENT

THIS PHASE FURTHER ELABORATES THE SCHEMATIC DESIGN PHASE.

BUILDING COMMITTEE RULES AND RESPONSIBILITIES

- IRIT FROM
- CAMPUS OWNERS
- INDIVIDUAL USER MEETINGS
- SCHEDULE REVIEWS

CAMPUS STANDARDS AND DESIGN GUIDE APPLICABLE CODES

C. DESIGN PHASE: SCHEMATIC DESIGN

BASED ON THE PPG AND DPP, THE SCHEMATIC DESIGN PHASE DURING IN GENERAL TERMS:

- SITE CALCULATION AND DRAIN
- ARCHITECTURAL
- MECHANICAL
- ELECTRICAL
- PLUMBING

THE BUILDING COMMITTEE IS ESTABLISHED AND MEETINGS ARE SET UP. MEETINGS:

- FACILITATES INTER-PHASE POLICY COMMITTEE APPROVAL
- OFFICE OF THE PRESIDENT PROJECTS DESIGN APPROVAL

E. DESIGN PHASE: CONSTRUCTION DOCUMENTS

OBJECTIVES BASED ON THE APPROVED DESIGN DEVELOPMENT DOCUMENTS, THE DESIGN CONSULTANT UNDER THE DIRECTION OF A&E, DEVELOPS THE FINAL DETAILS OF THE PROJECT.

DELIVERABLES:

- GRS SUBMITTALS FOR REVIEW
- 100% COMPLETE WORKING DRAWINGS AND SPECIFICATIONS THAT WILL BE USED BY THE CONTRACTOR TO BIDD THE BUILDING.

PROCESSES:

- A&E MANAGES THE WORKS OF THE DESIGN CONSULTANT
- THE BUILDING COMMITTEE MEETS ON A REGULAR BASIS TO BE AWARE OF THE STATUS AND ANY PRESENT ISSUES
- EXECUTIVE MEETINGS WILL BE HELD AS WELL AS MEETINGS FOR INPUT FROM ARCHITECTS OR SPECIFIC DETAILS

F. DESIGN PHASE: BIDDING AND AWARD

OBJECTIVE:

- CONTRACTORS MAKE COMPETITIVE BIDS BASED ON THE 100% COMPLETE WORKING DRAWINGS AND SPECIFICATIONS. THERE ARE SEVERAL CONTRACTS.
- DESIGN AND BIDD
- CONSTRUCTION MANAGEMENT @ RISK
- MULTIPLE PRIZES

DELIVERABLES:

- COMPETITIVE BIDS - CONTRACT BETWEEN UC AND CONTRACTOR

PROCESS:

- A&E MANAGES BIDDING AND AWARDING PROCESS

G. CONSTRUCTION:

OBJECTIVES: CONSTRUCT THE BUILDING IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, ADHERING TO BUILDING CODES

DELIVERABLES: THE BUILDING

PROCESSES:

- A&E MANAGES THE CONSTRUCTION
- PAYMENT REQUESTS
- SCHEDULE
- IIR APPROVALS
- CONSULTANT PARTICIPATION
- COMMISSIONING

H. FINAL COMMISSIONING

A PROCESS OF INSURING THAT SYSTEMS ARE DESIGNED, DEVELOPED, FUNCTIONALLY TESTED, AND CAPABLE OF BEING OPERATED AND MAINTAINED IN CONFORMITY WITH THE DESIGN INTENT.

- COMMISSIONING PLAN DEVELOPMENT AND DETAILED TEST PROCEDURES
- TESTING AND VERIFICATION (VERIFY DESIGN INTENTIONS)
- IN CONFORMANCE WITH DESIGN DOCUMENTS
- TRAINING
- CLOSE-OUT DOCUMENTS

WARRANTY PHASE

CONTRACTOR RESPONSIBLE FOR DEFICIENT, INCOMPLETE OR NON-COMPLIANCE WITH CONTRACT DOCUMENTS

- USUALLY 1 YEAR WARRANTY WITH A FEW EXCEPTIONS (ROOFING...)
- RESPONSE WITH IN 24 HRS. TO GET ITT LITIGATION OR CRITICAL ISSUES
- A&E RESPONSIBLE TO COORDINATE AND MANAGE THE BUILDING
- MONTHLY MEETINGS
- SEVENTEEN MONTH WALK WITH DESIGN TEAM, CONTRACTOR, A&E AND TEAM
- KUMONDS
- ALL GOES TO O&M

POST OCCUPANCY PHASE

- OPERATING BUDGETS
- SUSTAINABILITY
- SUSTAINABLE INVESTMENT (EQUIPMENT)
- PREVENTATIVE MAINTENANCE PROGRAM
- RESEARCH & INNOVATION
- DEFERRED MAINTENANCE

RENOVATION

- BUILDING ASSESSMENT
- RENOVATION IMPROVEMENTS
- A NEW TYPE OF USE
- SUSTAINABILITY
- FLEXIBLE OPTIONS
- BACK TO MASTER PLAN

Appendix B

Project Structure

Diane Davies-Conley, chief operating officer for ARM, is the project sponsor. The steering committee advises Diane at major milestones. Members of both the Steering Committee and the Project Team include:

Diane Davies-Conley – Project Sponsor
Rebecca J. Nord – Project Manager
David Moody –Project Advisor
Eric Rothgarn – Technical Advisor
Jeff Barrett – ARM/IET Liaison

CAMPIS Steering Committee

Allen Tollefson, Assistant Vice Chancellor, Facilities Management
Bob Segar, Assistant Vice Chancellor, Campus Planning & Community Resources
Clayton Halliday, Assistant Vice Chancellor/Campus Architect, Design and Construction Management
Karl Mohr, Assistant Vice Chancellor, Capital Resource Management
David Phillips, Director, Utilities
Michael Sheehan, Associate Director, Student Housing
Michele Platten, Executive Director, ARM Information Technology Service Center

CAMPIS Project Team

Carol Buckinger – Project Management Features Group Leader
Damian Chapman – Supply Chain Features Group Leader
Keith Kanda – Capital Planning Features Group Leader, Data Governance Lead
David Klippert
Peter Lentino
Dave Mackinnon – Asset Management Features Group Leader
David Phillips
Kim Rhodes
Brenda Scalzi
David Teter
Elizabeth Vaziri – Accounting Features Group Leader

Appendix C
Industry Overview for CAMPIS

The CAMPIS project team surveyed software offerings from some of the major vendors to determine the functionality these systems typically furnish.

Capability	Maximo V7	Indus Systems	Tririga	eMaint X3	Facility Manager
<u>Work Management</u>					
Work Order Management (With Standing / Preventative Work Orders)	Y	Y	Y	Y	Y
Project Management	N	Y	Y	Y	Y
Deferred maintenance?			Y	Y	Y
Planned projects?	N		Y	Y	Y
Resource-level scheduling program with assignment manager?	Y	Y	Y	Y	Y
Does it have unit price estimating capabilities?	Y	Y	Y	Y	Y
Timekeeping?	N	Y	Y	Y	Y
Comprehensive safety and hazardous material information at the asset level?	Y	Y	Y	Y	Y
Fleet management?	Y			Y	Y
Customer web interface?	Y	Y	Y	Y	Y
Customizable project modules (SEP, future projects, etc.)	N		Y	Y	Y
Does it highlight repeat maintenance?	Y		Y	Y	Y
<u>Space Management</u>					
Leasing Portfolio / Property Management	N	Y	Y		Y
Space Management	N	Y	Y		Y
Move & Relocation Management	N	Y	Y	Y	Y
Replacement Cost Calculation Abilities	N	Y	Y	Y	Y
Geo-Location	Y			Y	Y
<u>Accounting & Finance</u>					
GAAP compliant accounting sub-Ledger	Y	Y	Y	Y	Y
Does it have a GAAP compliant inventory accounting sub-ledger?	Y	Y	Y	Y	Y
Does it have budget and forecasting for financials and productive hours?	Y			Y	Y
Can we build an hours budget/forecast at all levels for multiple periods?	Y			Y	Y
Does it do customer billing?	N	Y	Y	Y	Y
Will it interface with an external accounting program such as Quali?	Y		Y		Y
<u>Asset Management</u>					
Does it have asset (Fixed and Non-Fixed Equipment) management?	Y	Y	Y	Y	Y
Can it manage the Building Commissioning process?	N		Y		Y
Does it have a configurable lock and key manager?	N		Y	Y	Y
Does it track warranty information on equipment and buildings?	Y	Y	Y	Y	Y
Can it do Lifecycle costing analysis?	N	Y	Y	Y	Y
Can it report on current Asset status (from a variety of sources)?	Y		Y		Y