

## University Architect & Associate VP Policy & Procedure #2

**TITLE**

**DEVELOPMENT OF FACILITY PROGRAM**

**OBJECTIVE AND PURPOSE**

To develop guidelines for the preparation of a clear, concise, and comprehensive facility program for all projects for which the construction cost exceeds \$500,000 (or for projects less than \$500,000 which are determined to be complex enough to warrant a facilities program) and which are to be included on the first year of the Three-Year Priority List. The scope of each project shall be clearly established to facilitate the management of construction projects, to provide for more accurate long-range campus planning, and to comply with the requirements of the Florida Statutes.

The Facility Program establishes the guidelines to which the Architect/Engineer is required to design the facility. Any variance from the approved Facility Program that is greater than 200 sq. ft. per space type and exceeds 10% of the original program space type may require a program amendment. Modification to the building program will require a recommendation from the user group, University Project Manager, and/or the Architect/Engineer and shall be submitted to the Office of the Associate Vice President to the University Architect for determination as to if a Facility Program amendment is required. The request for a program modification shall include a complete description of the proposed change and a narrative justification, including its impact on the project's budget and schedule. Recommendation for approval of program modification or a request for Program Amendment will be submitted by the AVP office to the University Architect and Vice President for final approval.

**RESPONSIBILITY**

**ACTION**

**PROGRAM COORDINATOR AVP OFFICE**

- ◆ Review 3-year priority list to determine which projects need to have a facility program initiated or updated (Projects in the first year of the 3-year priority list will require a program)
- ◆ Recommend building Program Committee (Ref. AVP#1)
- ◆ Issue Memorandum to appointed Program Committee Members to schedule initial kickoff meeting.
- ◆ Assemble orientation package for Committee Members. Package to consist of:
  - Copy of the latest Capital Improvement Plan (CIP)
  - Proposed Schedule for Program Development
  - State Requirement for Educational Facilities (SREF) – (guideline only)
  - Outline of Facility Program format (**Attachment "A"**)
- ◆ At initial meeting with Committee Members, review orientation package, areas of responsibility and information to be provided by each committee member.
- ◆ Meet with the following departments to ensure that utilities and infrastructure needs are adequately addressed for the proposed facility and that space category is properly assigned to the programmed areas:
  - Facilities Planning – Utilities Analysis
  - Information Resource Management – Telecommunication/ Voice/ Data Audio Visual needs
  - Office of Space Utilization

Issued By: Dashtaki	Date Issued: 4/2001	Date Revised: 4/2003	Effective Date: 4/2001
			<b>N/A</b>
APPROVED:	Vice President	Associate V.P.	Director

- FACILITIES PLANNING ENGINEERING**

  - ◆ Visit project site to verify proposed utility connection points/distances
  - ◆ Complete data for Utilities Impact Analysis section of the program
  - ◆ Determine cost estimates for extraordinary utilities infrastructure (extending utilities from point of connection to 5' of building site)
  - ◆ Generate site map identifying points of connection and proposed new utility lines
  
- INFORMATION RESOURCE MANAGEMENT DIRECTOR**

  - ◆ Review proposed Facilities Program to determine cost estimate for:
    - External telecommunication infrastructure cost
    - Internal wiring for building (this price to include design of system, and pulling and terminating all voice/data wiring within the building – this does not include cable trays and conduits)
    - Equipment cost for Voice, Data and Video
    - Provide written budget to Program Coordinator for inclusion in the Program
  
- OFFICE OF SPACE UTILIZATION**

  - ◆ Review Facilities Program area table and assign space category codes for identified program areas
  - ◆ Confirm that the Facility Program is consistent with the approved educational plant survey
  - ◆ Establish building name, number and 2 letter building code for new facility
  
- PROGRAM COORDINATOR AVP OFFICE**

  - ◆ Generate project budget and schedule to be reviewed by Associate Vice President:
  - ◆ Project budget to include:
    - Planning
    - Construction (include 3% per annum inflation cost to coincide with year of construction appropriation)
    - Furnishings and Equipment (including cost for Data, Voice and Video equipment provided by IRM) – 10% of total FF&E cost is dedicated for maintenance supply items and equipment to support the facility
  
- ASSOCIATE VICE PRESIDENT**

  - ◆ Review project budget and schedule and forward comments and or/approval to Program Coordinator.
  
- PROGRAM COORDINATOR AVP OFFICE**

  - ◆ Assemble draft Facility Program, make appropriate copies and distribute for review. Copy of the draft program is to be submitted to:
    - Facilities Planning (FP)
    - Information Resource Management (IRM)
    - Physical Plant (PP)
    - Program Committee Members
    - Office of Space Utilization and Analysis (OSUA)
  
- FP/ IRM / PP / OSUA PROGRAM COMMITTEE**

  - ◆ Review draft Facility Program and submit comments and/or approval to Program Coordinator.
  
- PROGRAM COORDINATOR AVP OFFICE**

  - ◆ Incorporate/address all comments appropriately and/or assemble Facility Program and submit copy of the program to Associate Vice President for review.
  
- ASSOCIATE VICE PRESIDENT**

  - ◆ Review Facility Program and forward comments and/or approval to Program Coordinator. Initial signature sheet indicating review and approval of Facilities Program.

**PROGRAM  
COORDINATOR  
AVP OFFICE**

- ◆ Prepare memorandum for routing of Facility Program for review/approval in accordance to the signature sheet. Signatures are required from the following:
  - Director of Facilities Planning
  - Associate Vice President to the University Architect
  - Information Resource Manager
  - Program Committee Chairperson
  - Campus Vice President
  - Vice President for Student Affairs (for CITF Funded Programs)
  - University Provost (for Academic Buildings)
  - University Architect and Vice President
  - University President (Route through University Architect's Office)

**UNIVERSITY  
ARCHITECT AND  
VICE PRESIDENT**

- ◆ Obtain President's signature on original signature sheets and return signed sheets to Program Coordinator in the Office of the Associate Vice President to University Architect.

**PROGRAM  
COORDINATOR  
AVP OFFICE**

- ◆ Upon receiving completed signature sheet transit an electronic copy of the approved Facilities Program and a hard copy of the signature sheet to OSUA to be electronically posted on AVP web page.
- ◆ Prepare memorandum notifying the departments/individuals listed below that the approved Facilities Program is posted on the AVP web site:
  - Facilities Planning
  - Physical Plant
  - Information Resource Management
  - Office of Space Utilization
  - Building Committee Members
  - Signature List (President's copy sent to University Architect's Office)

**OSUA**

- ◆ Electronically post a copy of the approved Facilities Program for viewing and/or downloading on the AVP web page.
- ◆ Facilities Program to be listed under BR# and Facilities Program Title

**PROGRAM  
COORDINATOR  
AVP OFFICE**

- ◆ File a copy of the approved Facilities Program (original signature sheet) in the Office of the Associate Vice President.

**REFERENCE**

- ◆ AVP Policy & Procedure #1

**ATTACHMENTS**

- ◆ ***Outline of Facility Program Format – Attachment "A"***
- ◆ ***Program Area Table – Attachment "A-1"***
- ◆ ***Space Description Form – Attachment "A-2"***
- ◆ ***Project Space and Budget Summary – Attachment "A-3"***

## Outline for Facility Programs

### **I. Title Sheet**

Include the name of the program, the name of the university, and the program date.

### **II. Table of Contents**

Provide a descriptive list of the contents, illustrations, diagrams, and charts.

### **III. Signature Sheet**

Signature sheet shall contain the required signatures of approval.

### **IV. Introduction**

Provide an introductory statement giving an overview of the program or project. The overview statement shall provide the following information:

- A. A description of the project history
- B. General project description
- C. An outline of the project goals and objectives
- D. Outline of desired design objectives
- E. Proposed construction delivery method (e.g. construction management, design build, conventional bid, etc.)

### **V. Academic Plan**

Identify any proposed academic programs that will be housed within the facility and provide the following information:

- A. Include a statement that the proposed academic program is consistent with the current adopted Master Plan.
- B. Include the date and program number of all relevant academic program reviews. Explain how the proposed facility program meets the recommendations of the most recent academic program review.
- C. List the recommendations of the review consultants.
- D. If the proposed academic program is inconsistent with the current adopted Academic Master Plan, explain how the program meets the recommendations of the review consultants, or justify any inconsistency.

### **VI. Space Needs Assessment**

- A. Described the space needs in terms of present or projected deficiencies and the proposed solution, as well as alternative solutions that were considered, such as rescheduling of classes, remodeling of existing space, jointly using facilities on or off campus, and leasing of space.

## **ATTACHMENT "A"**

- B. If a new facility is proposed, provide reasons why other alternatives were not chosen and why a new facility is the best solution.
- C. Provide quantitative analysis indicating how the proposed amounts and types of space were arrived at using requirements of programs to be housed.
- D. Describe any differences between the project and survey recommendations for the project.

## **VII. Consistency with Adopted Campus Master Plan and Associated Campus Development Agreement**

Include a statement as to whether the proposed project is consistent with the adopted campus master plan and associated campus development agreement, which were prepared and adopted pursuant to section 240.155, F.S. If the proposed project is not consistent with the adopted campus master plan and/or the associated campus development agreement, include a description to how the campus master plan or campus development agreement must be amended in order to ensure consistency.

## **VIII. Site Analysis**

Provide a site analysis of the proposed project site, including:

- A. General campus map which indicates location of proposed project site on campus
- B. Local area site map of the proposed site and provide analysis of the following data:
  - 1. site topography and soil conditions
  - 2. site water table, flood hazard, and storm water drainage requirements
  - 3. vehicular and pedestrian circulation
  - 4. site vegetation
  - 5. archaeological history (per Section 267.061(2), F.S.)
  - 6. location of existing utilities and proximity of utilities to site
  - 7. architectural significance of any structure on site and the proximity and significance of structures on adjacent sites which will have an impact on the project.
  - 8. any unusual site condition which may impact the cost or design of the project
  - 9. direction of prevailing winds

## **IX. Program Area**

- A. Provide Program Area Table (**Attachment A-1**)
- B. Provide description of each space, which provides the following information (**Attachment A-2**).
  - 1. function/equipment required
  - 2. special requirements such as lighting, acoustical treatments, etc.
  - 3. relation of each space to other spaces, providing functional diagrams of relationships

## **X. Utilities Impact Analysis**

Provide the following preliminary utility analysis for the project. Estimates may be based on experience of similar building types, or established engineering "Rule of Thumb" standards of practice.

- A. Chilled Water – estimate tons required and identify source of supply (package or central plant). Analysis of adequacy of off-site capacity.
- B. Steam – estimate BTUH required and identify source of supply. Analyze adequacy of off-site pipe capacity.
- C. Electrical – estimate KVA load and identify source and adequacy of supply.
- D. Potable Water and Sanitary Sewer – identify number of gallons per day, identify source of water supply and method of sewage disposal. Analyze capacity of supply and disposal sources. Discuss any permit requirements.
- E. Irrigation Water – identify number of gallons per day required and identify supply source. Discuss any permit requirements.

## **XI. Information Technology and Communications Resources Requirements**

Facility Programs must identify all proposed “information technology resources” and “communications” resources that will be included in this project regardless of method of acquisition or source of funds. These acquisitions may be subject to the reporting requirements of Chapter 282, F.S., and therefore must be considered within the institution’s overall plans for computing and networking.

Facility Programs must certify that the University Information Resource Manager has reviewed and approved the program outlined with respect to conformance with the requirements of Chapter 282, F.S. as well as standards and/or practices for information technology and communications resources adopted by the particular institution.

“Information Technology Resources” shall include the hardware, software, services, supplies, personnel, facility resources, maintenance, and training involved in the function of data processing. Examples of information technology resources are computer hardware and peripheral equipment, such as personal computers, mini computers, file servers, printers, scanners, front-end processors, etc.

“Communications” (or communications systems) shall include the hardware, software, services, supplies, personnel, facilities and training involved in the transmission, emission, and reception of signs, signals, writings, images, and sounds of intelligence of any nature by wire, radio, optical, or other electromagnetic systems. Examples of communication resources are wiring of the facility for voice, data, and video; connections within/between buildings and campus networks; backbones; electronic classrooms; communication/data jacks in rooms; satellite up-links and down-links; communications closets; television; security systems; and radio transmission facilities equipment.

Only information technology and communication resources that will be newly acquired for the facility are included in this section. Equipment that is already owned and is being relocated to the new or renovated facility is not required here. However, standards and/or preferred practices for conduit, wiring, etc., of renovated facilities are included in this section.

Building funds must include the costs of information technology and communications. Included are the costs of embedded information technology and communications resources. This category includes information technology infrastructure, internal communication wiring and wiring of the building from the campus telecommunication infrastructure.

## **XII. Codes and Standards**

List all Life Safety Codes, health codes, construction codes, design standards, and university construction standards, which shall govern the design and use of the proposed facility.

## **XIII. Project Schedule**

Provide a critical path schedule for development of the project and correlate with funding cycle. The project schedule should be in enough detail that those impacted by the project implementation can estimate workload, such as advertisement, shortlist, interview, contract award, fee negotiations, contract execution, design, bidding, construction contract award, construction and close-out.

## **XIII. Program Funds**

Describe in detail the source of all funds available or anticipated to be available for funding of the project for planning, construction, equipment, and operating expenses. Establish the proposed project Capital Outlay Implementation Plan (COIP), in the format described in Facilities Planning Policy & Procedure # 19, Capital Outlay Implementation Plans, Budget Releases, and Encumbrance Authorizations, based on anticipated total funding.

## **XIV. Project Space and Budget Summary**

The Project Space and Budget Summary (**Attachment A-3**) must identify space types according to the following space categories: Classroom, Teaching Laboratory, Study, Research, Laboratory, Office, Instructional Media, Auditorium/Exhibition, Gymnasium, Student Academic Support, Campus Support Services, or Other Assignable.

The Project Space and Budget Summary must identify the basis for the building construction costs and other project budget categories such as site development and equipment. Building construction costs shall be based on the major type of space within the project and shall be consistent with either: 1) the Division of Colleges & Universities (DCU) average construction costs for the major type of space, or 2) a specific project used to develop the DCU average costs that is very similar to the proposed project based on the combination of space types. The basis for the estimate must be indicated on the form.

The term "site development cost" includes not only development cost on the immediate construction site, but also the cost of any item of infrastructure, which must be constructed off the immediate project site for the project to be completed and fully operational.

While the site development requirements of each project will vary, some examples include: landscaping, irrigation systems, construction of parking lots on and off the site, construction of roadways, construction of storm water and drainage systems, modifications or expansion of existing utility systems or plants, construction of new utility plants (if construction mandated by project). Excessive fill dirt or site grading, etc. Each item of site development cost shall be listed as a separate budget line item (**Attachment A-3**).

**IX. PROGRAM AREA**

**Program Name**

A. PROGRAM AREA TABLE (Reference AVP Policy & Procedure #2 - Attachment A-1)

<b>PROGRAM AREA TABLE</b>						
Reference: State Requirements for Educational Facilities Chapter 6, Section 6.1, Size of Spaces and Occupant Criteria Table						
DESCRIPTION	NO. OF STATIONS	NASF/STATION	AREA/SPACE	NO. OF SPACES	Total NASF	TOTAL STATIONS
<b>100 Classroom</b>						
110 Classroom	35	24 NASF	840 NASF	1	840 NASF	35
<b>Sub-Total</b>			<b>840 NASF</b>		<b>840 NASF</b>	<b>35</b>
<b>200 Teaching Laboratory</b>						
210 Infancy Lab	5	42 NASF	210 NASF	1	210 NASF	5
210 Observation Room	2	40 NASF	80 NASF	1	80 NASF	2
210 Group Testing Lab	7	40 NASF	280 NASF	1	280 NASF	7
210 Wet Lab	4	45 NASF	180 NASF	1	180 NASF	4
210 Wet Lab (Small)	2	50 NASF	100 NASF	1	100 NASF	2
210 Individual Testing Rooms	1	65 NASF	65 NASF	4	260 NASF	4
210 Cognitive Labs	4	40 NASF	160 NASF	2	320 NASF	8
210 Personality Lab	5	42 NASF	210 NASF	1	210 NASF	5
210 Small Personality Lab	1	70 NASF	70 NASF	1	70 NASF	1
<b>Sub-Total</b>			<b>1355 NASF</b>		<b>1710 NASF</b>	<b>38</b>
<b>300 Office</b>						
310 Office (Faculty)	1	110 NASF	110 NASF	6	660 NASF	6
315 Office Services	1	110 NASF	110 NASF	1	110 NASF	1
310 Office	1	120 NASF	120 NASF	1	120 NASF	1
<b>Sub-Total</b>			<b>340 NASF</b>		<b>890 NASF</b>	<b>8</b>
<b>500 Special Use</b>						
590 Service/Storage	1	380 NASF	380 NASF	1	380 NASF	1
590 Utility (Service) Area	1	400 NASF	400 NASF	1	400 NASF	1
590 Multi-Purpose Area	1	3000 NASF	3000 NASF	1	3000 NASF	1
<b>Sub-Total</b>			<b>3780 NASF</b>		<b>3780 NASF</b>	<b>3</b>
<b>600 General Use</b>						
655 Lounge service - Kitchen	1	100 NASF	100 NASF	1	100 NASF	1
<b>Sub-Total</b>			<b>100 NASF</b>		<b>100 NASF</b>	<b>1</b>
<b>Total</b>			<b>6415 NASF</b>		<b>7320 NASF</b>	<b>85</b>

**ATTACHMENT "A-1"**

C. SPACE DESCRIPTION FORM (Reference: AVP Policy & Procedure #2 - Attachment A-2)

<b>SPACE NUMBER</b>	<b>C.1</b>	
DEPARTMENT:	Lifelong Learning Service	
AREA:	Auditorium	
SPACE NAME:	Auditorium	
DESCRIPTION / USE:	500 seat auditorium – state of the art space for lectures, presentations and performances	
SUS SPACE CATEGORY:	Assembly	ROOM USE CODE: 610
PERSONNEL ASSIGNED / MAX.:	500	
DIMENSION / AREA:	5500 NSF	
NUMBER REQUIRED:	1	
<b>RELATIONSHIPS</b>		
PRIMARY:	Entry Lobby	
SECONDARY:	Courtyard	
<b>ARCHITECTURAL CRITERIA</b>		
FLOORS:	Mildew resistant carpet w/ vinyl base.	
WALLS:	Paint over gypsum wall board – sound absorptive treatment as required	
CEILINGS:	Acoustical treatment of ceiling for proper sound projection	
DOORS:	Solid core wood w/ HM frame.	
WINDOWS:	Not required	
LIGHTING:	Indirect lighting to enhance use of computer monitors w/ recessed down-lights and recessed fluorescent lights with parabolic lens. Lights to be on dimmers. Lights to be controlled from stage and back of auditorium (projection booth). Stage to have special spotlights.	
ACOUSTICAL:	State of the art acoustics treatment of the space	
<b>MECHANICAL CRITERIA</b>		
HVAC:	As required	
PLUMBING:	Not applicable	
COMMUNICATIONS:	Provide wireless technology, connectivity for smart podium with built in control systems, design with high tech video conferencing capabilities. Provide adequate speakers throughout space	
ELECTRICAL:	State of the art lighting systems for auditorium and stage area Provide adequate outlets on stage for maximum flexibility	
<b>FURNITURE/EQUIPMENT</b>		
FURNITURE (OWNER):		
EQUIPMENT (OWNER):		
FURNITURE (CONTRACTOR):	Retractable projection screen	
EQUIPMENT (CONTRACTOR):		
<b>SUPPLEMENTAL INFORMATION/REQUIREMENTS</b>		
Graduated upholstered fixed seating - designed for comfort		
Wide aisles with floor lights and gradual incline		
Steps on both sides of the stage		
Stage to have theatrical curtain		

**ATTACHMENT “A-2”**

**XV. PROJECT BUDGET SUMMARY**

**Program Name**

**PROJECT SPACE AND BUDGET SUMMARY** (Reference: AVP Policy & Procedure #2, Attachment A-3)

<b>SPACE SUMMATION</b> (from Section IX of Facilities Program)					
Program Space Type	NASF	Factor	GSF	\$ / GSF <sup>1</sup>	\$
<b>New Construction</b>					
Classrooms	4,290	1.5	6,435	138.62	\$892,019.70
Teaching Laboratories	600	1.5	900	157.69	\$141,921.00
Offices	2,430	1.5	3,645	144.88	\$528,087.60
Auditorium/Exhibit	8,625	1.35	11,644	151.78	\$1,767,288.38
Avg. Construction Cost <sup>3</sup>				<b>147.16</b>	
<b>Total Construction Cost</b>	<b>15,945</b>	<b>1.4</b>	<b>22,624</b>		<b>\$3,329,300.00</b>

1. Based on BOR Construction & Project, Costs & Budget Guideline (2002)

**1. CONSTRUCTION COSTS**

(Reference: SUS CM-D-38.00-09/97, Attachment 1-B)

<b>a. Building Construction Cost</b>	
New Construction Cost	\$3,329,300.00
<b>Sub-Total Construction Costs</b>	<b>\$3,329,300.00</b>
<b>b. Additional/Extraordinary Construction Cost</b>	
Landscaping and Irrigation	Included in Building Construction Cost
Telecommunications / Information	\$ 75,000.00
Estimate provided by IRM - estimate includes internal wiring of building (does not include conduit & cable trays), external duct bank from the Central Utility Plant building to the building site (8-4" PVC conduits encased in concrete), and external wiring	
Parking Improvements (30 spaces)*	Included in Building Construction Cost
1500 Sq. Ft. Logia	Included in Building Construction Cost
<b>Utilities Infrastructure Cost</b>	
Site Electrical Service	Included in Building Construction Cost
Site Water Distribution System	Included in Building Construction Cost
Site Sanitary Sewer System	Included in Building Construction Cost
Site Storm Water System	Included in Building Construction Cost
Chilled Water System**	\$100,000.00
<b>Sub-Total Additional/Extraordinary Construction Costs</b>	<b>\$175,000.00</b>
<b>TOTAL CONSTRUCTION COST</b>	<b>\$3,504,300.00</b>

\* Ten of the 30 new parking spaces are to be designated as handicap spots and are to be located in close proximity to this building.

\*\* This amount is to be transferred to another project to pay for this buildings fare share contribution for the expansion of the utility plant. Infrastructure cost for connecting the building to the utility plant are included in the Building Construction Cost.

**ATTACHMENT "A-3"**

<b>2. OTHER PROJECT COSTS</b>	
<b>a. Land/Existing Facility Acquisition</b>	<b>\$ 0.00</b>
<b>b. Professional Fees</b>	
A/E Fees (6.40 % of Estimated Construction Cost based on BOR Fee Curve B - Above Average)	\$218,400.00
C/M Pre-Construction Management Fee (1% of Construction Cost)	\$34,000.00
<b>Sub-Total Professional Fees</b>	<b>\$252,400.00</b>
<b>c. State Fire Marshal Review and Inspection Fee.</b>	
SFM Fee (0.0025 x construction cost of building envelope only)	<b>\$8,800.00</b>
<b>d. Inspection Services</b>	
Roofing Inspection (During Construction) (\$ 7 / week x 1,800 weeks)	\$ 11,700.00
Threshold Inspection	\$20,000.00
Plans Review (Code Compliance)	\$8,000.00
Code Compliance Inspection	\$25,000.00
<b>Sub-Total Inspection Services</b>	<b>\$64,700.00</b>
<b>e. Insurance Consultant</b>	
Risk Management / Insurance Consultant,	<b>\$2,200.00</b>
<b>f. Surveys &amp; Tests</b>	
Site Survey	\$4,000.00
Geotechnical Survey	\$7,000.00
<b>Sub-Total Surveys &amp; Tests</b>	<b>\$11,000.00</b>
<b>g. Permit/Impact/Environmental Fees</b>	<b>\$6,000.00</b>
<b>h. Art in State Building (Section 255.043, F.S.)</b>	<b>\$16,600.00</b>
<b>i. Movable Furniture &amp; Equipment</b>	
Furniture & Equipment	\$ 310,000.00
Telecommunication Equipment Including Switches (voice \$19,600; Data \$37,000; Video \$90,000, Wireless \$18,600)	\$165,200.00
<b>IRM Infrastructure Fee - 50 Drops</b>	<b>\$7,500.00</b>
<b>Sub-Total Furnishings &amp; Equipment</b>	<b>\$482,700.00</b>
<b>j. Project Contingency</b>	
(4.5 % x Project Cost Sub-Total Above)	<b>\$151,300.00</b>
<b>TOTAL OTHER PROJECT COSTS</b>	<b>\$995,700.00</b>
<b>TOTAL PROJECT BUDGET COST ESTIMATE</b>	<b>\$4,500,000.00</b>