

# FORMAL PROJECT APPROVAL

Name of Project: Sitka Health Sciences Renovation

Location of Project: UAS Sitka Campus

Project Number: 2009-06

Date of Request: February, 2009

Total Project Cost: \$ 2,360,000

Approval Required: Formal Project Approval



## **MEMORANDUM**

### Designing Alaska Since 1935

Date: **January 13, 2009** 

To: Pua Maunu

**UAS Project Manager** 

**Facilities Planning & Construction** 

From: Charlene Steinman

RE: UAS Sitka Health Sciences Renovation

**Conceptual Design Submittal** 

CC:

Attached is the Conceptual Design Submittal for the UAS Sitka Health Sciences Renovation. Included in the submittal is the following:

- Design Narrative
- Program of Spaces
- Room Data Sheet
- Adjacency Bubble Diagram
- Adjacency Matrix
- Overall Conceptual Floor plan
- Enlarged Conceptual Floor plan

Please contact Tony, Corrie or myself with any questions regarding the submittal.

# CONCEPTUAL DESIGN NARRATIVE

University of Alaska Southeast Sitka Campus
Project: UAS Sitka Health Sciences Renovation

### PROJECT HISTORY: GRANT APPLICATION INFORMATION

A grant was awarded to UAS for the design of two high-tech, multi-purpose classrooms, a lab-based science prep and storage space and renovate the WWII-era hangar space that currently houses the UAS Sitka Campus.

The project will provide two large "smart" classroom spaces, versatile and multi-purpose, to help the Sitka Campus keep up with current and constantly changing curricular demands. It will also provide support space for lab-based science classes (anatomy, physiology, microbiology, and chemistry) that are included in statewide delivered prenursing program, and room for supply storage and assembly, as well as space for final evaluation of the lab projects that are sent out each semester. The health sciences curriculum includes:

- Pre Nursing Required Classes
- Lab-Based Sciences Classes
- Patient Care Assistants and Certified Nurse Aides
- Health Information Management
- Community Wellness Advocates
- Emergency Trauma Training

The Sitka campus has been tasked with primary responsibility for UAS' distance delivery of health sciences education and pre-nursing lab-based science classes. Lab kits are assembled on campus and mailed to students throughout the state. This requires space for assembly, mailing, receiving and grading of the lab projects each semester.

The campus will also use these spaces to receive distance delivered health science training in other health fields provided by the University of Alaska Anchorage Campus. The courses include pre-radiology, med tech, lab tech, dental tech, phlebotomy, and emergency medical services.

Key features indentified in the successful grant application included:

**Size:** Space to accommodate individual work and reflection, small and large group activities, team projects, common gathering spaces, and teaching team space.

**Activities**: Provide flexible, multi-purpose spaces that support individualized learning and reflection; group instruction; team learning; project space; preparation for and presentation of acquired skills and knowledge as a means of assessment; and informal learning.

**Adjacencies**: Spaces that will link traditional lab and more theoretical academic learning activities, provide visual access to the learning process and its end results, provide visual connections to the external environment, include storage supply space, and encourage access between learners and teachers.

**Furnishings:** Provide moveable, flexible, and comfortable furniture arrangements; a variety of surface areas such as tables and benches; durable finishes for floors and casings; display space, tack surfaces and white boards; appropriate lighting and air handling for various tasks and activities; adequate storage for supplies and projects; personal secured space; and technology, including computers and internet connectivity.

**Support:** Places for quiet reflection and individual work; natural lighting; and adequate and secure parking and access to public transportation.

**Structure:** Space designed in a flexible and adaptable way to accommodate a variety of learning and teaching styles and activities; rapid changes in curriculum, learning and assessment process; and to extend the useful like of the facility easily and at a reasonable cost.

The grant application also identified the following needs for spaces:

- Safe, secure, clean space to store and process distance lab supplies
- Safety equipment including eyewash station and ventilation
- Development and testing space for creative, new lab exercises
- Large lab assembly area lab set up and lab kit assembly area
- Photography set up area for creating demonstrations, photomircroscopy
- Lab kit check in, grading and clean up
- Records storage
- OSHA approved chemical storage area

#### STAFF INTERVIEWED BY JENSEN YORBA LOTT ARCHITECTS:

Interviews consisted of in person interviews, email and telephone communication.

Jeff Johnston – UAS Sitka Campus Director Dave Barlow – UAS Sitka Pat Hughes – UAS Sitka Nicole Duclos – UAS Sitka Marnie Chapman – UAS Sitka Wes Schafer – UAS Sitka Maureen O'Halloran – UAS Sitka Diane Mille – UAS Sitka Karen Schmitt – UAS Juneau

### **PROJECT SCHEDULE:**

Project Planning/Conceptual Design Phase – 10/16/08 - 2/3/09 Schematic Design Phase – 2/4/09 - 3/20/09 Design Development – 3/21/09 - 5/26/09 Construction Documents – 5/27/09 - 8/31/09 Bidding – 9/1/09 - 10/12/09

#### **CONSTRUCTION COST ESTIMATES:**

A formal Cost Estimate will be prepared by HMS using the Conceptual Design information to be submitted as part of the Schematic Design Submittal. Following is an estimate based on cost per square foot:

Wet space 1,200 sf @ 300/sf = \$360,000

Dry space 3,900 @ 250/sf = \$975,000

Mezzanine 5,100 sf @ 30/sf = \$153,000

Total Conceptual Construction Cost Estimate: \$1,128,360

#### TIE INTO MASTER PLAN

The Health Sciences Addition has been an integral component of the overall campus development masterplan process. The current proposal includes the following masterplan consideration:

- 1. The primary floor plan functions are located in general compliance with masterplan zoning concepts
- 2. The primary corridor through the new addition maintains existing and planned future circulation patterns.
- 3. The floor/ceiling assembly over the new addition is structured for floor loads and allows for future expansion of the second floor classroom area in compliance with the masterplan.
- 4. The present design considers future first floor expansion by delineating the location of a corridor that will provide egress for present and future functions through the hangar bay. This is an issue that has been raised by the local building official. The corridor is not presently a part of the scope of work of this project but can be incorporated if funds permit.
- 5. An exit from the south side of the hangar has been identified as a long term goal for hangar development. The current plan illustrates how it can be implemented.
- 6. A stair can be installed on the open hangar side of the current plan that will serve the future second floor and coordinates with future corridor development.
- 7. We have located future toilet rooms adjacent to existing toilets to simplify expansion.
- 8. The current plan leaves sufficient space for expansion of vocational education programs, especially the space between the existing welding technology space and the proposed health sciences wing. Storage and corridor spaces will isolate each program to ensure comfortable acoustic and environmental separation.

### PROGRAM OF SPACE AND ROOM DATA INFORMATION: SEE ATTACHED

Science Support Lab Area: Lab to store and process distance lab supplies and kits for use by 1 to 3 staff at a time. The room should have casework around the perimeter with "black top" chemical resistant countertops and center work counters with cabinet storage underneath. One double compartment sink, and one deep utility sink to allow for cleaning of large lab equipment and containers. Electrical, power and data support above perimeter casework to support countertop mounted equipment and staff work areas. Ceiling mounted power is also required over the center tables. Some equipment will require deep counters to support large countertop equipment with specific electrical and mechanical requirements. An eye wash station and fume hood is required in lab room.

**Storage Room:** An adjacent storage should to allow storage of lab materials that can be stored on a wheeled cart and easily rolled out into the lab area as well as space for UAS provided storage cabinets that will hold lab materials. Storage Room and Mezzanine level should also accommodate plastic 'tubs' that will be stored for lab use. Space for a stand up freezer and refrigerator is required.

**Virtual Production Lab**: A counter area for production of videos is required with overhead lighting and ceiling space to mount a video camera. A computer monitor adjacent to video equipment is required.

**Lab Assistant Office:** Adjacent to with view into Science Support Lab with line of sight into existing lab and new Science Support Lab. Standard office furnishings and equipment.

**Chemical Storage:** Secure and vented room for storage of chemicals adjacent to lab areas.

### **Health Sciences Program:**

**Health Sciences Classroom**: Lecture space for up to 20 students to accommodate desks or tables, a presentation wall, and built in casework and countertops for storage of classroom materials and small equipment. A double sink is required for washing of hands and other classroom demonstrations. Classroom equipment accommodation including overhead projector and cable connection.

**Health Sciences Lab:** A room to accommodate hands on demonstration of nursing procedures and operating of medical equipment. Lab to include space to accommodate hospital beds and wall units with space on all sides. Close proximity to a storage area is required for medical equipment and resources needed for Health Science students. Casework and countertops with a sink for handwashing is required in lab area. Close proximity to a toilet room is preferred for classroom use to demonstrate patient care for toilet room functions.

**Health Sciences Office:** Instructor office adjacent to lab and classroom space with standard office furnishings and equipment.

**Server Room:** To accommodate IT equipment for the building.

**Toilet Rooms**: To support wood shop and Health Science spaces.

#### **COMPLIANCE CRITERIA:**

2003 IBC as amended by the City of Sitka including ANSI 117 for accessibility requirements. The building qualifies under section 302.3.1 non separated uses, so mixed occupancies of the existing building and new addition need not be separated from the rest of the building by a fire rated wall.

The scope of the project is as follows:

#### **INTERIOR CONSTRUCTION:**

**Partitions:** Metal stud partitions at 16' on center with sound batt insulation and 5/8" sheet rock each side.

**Doors:** Steel frames, and wood veneer doors to match existing. Commercial grade hardware will be provided to match existing building hardware and keying system.

**Ceilings**: Suspended acoustical ceiling panel system to match existing at classroom, offices, and lab areas. Painted gypsum wallboard ceiling finish at toilet rooms.

**Casework**: Plastic laminate cabinets and countertops at general classroom areas. Solid chemical resistant countertops at science prep room. Tall storage cabinets to house lab equipment and supplies for lab areas.

**Floor Finishes**: Welded seam vinyl flooring at lab areas and wet areas. Rubber base throughout with rubber transition strips. Carpet tile at classroom area. Sheet vinyl at toilet room, storage and janitor rooms.

**Wall Finishes**: Latex enamel paint at walls, ceramic tile at toilet rooms.

**Specialties:** Door signage to match building standard. Fire extinguisher cabinets.

#### STRUCTURAL:

Design of remodel spaces will include a floor to ceiling assembly structure to support a future second floor. Generally, the structure will consist of metal stud bearing walls and steel columns supporting repetitious manufactured trusses such as "Truss Joist" TJI's or a similar product. Lateral loads will be resisted by plywood floor deck and shear walls. The area of the new addition will be built over the existing, sloped floor of the hangar bay, so a new level topping slab will be required. Depending on the loads imposed, bearing walls and columns will either bear directly to the existing, 8" slab, or on concrete foundations cut into the existing slab. The proposed shear walls and foundation included in this phase will be sized to support the future second floor loads. At this time the new addition is planned to tie into existing structure at the north and east walls, with no seismic separation planned. The addition will be free standing at the west and south walls. The building will be structured with a conservative floor load, assuming that all future areas will be used for storage. This will provide greater planning flexibility in the future.

#### **MECHANICAL**:

Heating of the new addition will be provided from the existing boilers located in the second floor boiler room. Vent, water piping, and fire protection will be designed to tie into existing building systems. Waste will tie into the existing sewer ejection tank located near existing door 100C3. Likewise, control and monitoring requirements can be accommodated into the existing building automation system. However, a new supply and return air system will need to be provided to the new addition, including a dedicated exhaust air system for the science areas. Systems will include service for new eye wash and fume hood devices as required in lab areas.

#### **Plumbing Fixtures and Equipment:**

Plumbing fixtures will be commercial quality. Vitreous china products will be utilized for the water closets and laboratories with faucets and toilet accessories as approved by UAS maintenance personnel to work with existing products. Utility and double sinks will be stainless steel with goose neck style faucets and stainless steel trim. Chemical resistant sinks will be provided in the lab areas, with faucets fitted for connection to rubber piping. Chemical resistant piping may be required in some areas. Additional water and waste piping can be stubbed to strategic locations to help support possible future changes in program or need. Such provisions shall be limited to perimeter walls which will be unlikely to move in the future.

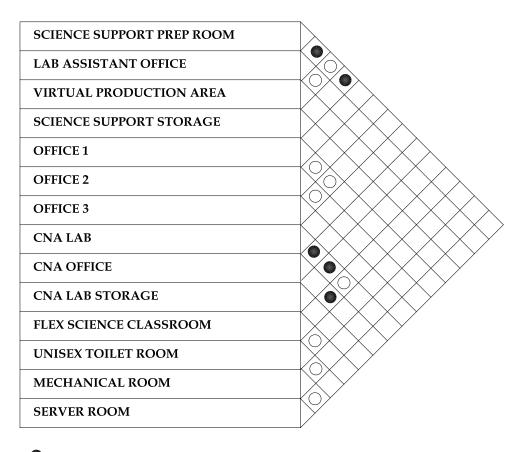
#### **ELECTRICAL**:

Power, for the facility will be provided by connecting to the existing main distribution panel which is located on the south wall of the hangar within the proposed utility room extension. New subpanels will be located strategically to supply the current addition as well as provide for the future second floor addition. New fluorescent fixtures with electronic ballast will be energized from these panels as will all power consuming devices. Telephone will be conduit only, stubbing to the ceiling space. A cable tray system will be installed in the ceiling space to allow conductors to be routed from the new telephones to the existing main telephone panel in the electric room. The cable tray will support the new data system runs as well. Individual connection points will be provided in the various rooms as determined later in design. They will stub to the ceiling space where cable can be routed via the cable tray to a new router hub to be located in the new space. This will allow expansion not only into the new first floor space but elsewhere in the hangar bay. The fire alarm/smoke detection systems will tie into existing system, so a new fire alarm panel will not be required.

Typical services will include: phone/power data ports on each wall of office areas; purpose specific electrical connections for devices necessary for programs; outlets (phone/power/data) at work height at perimeter walls of work areas; provisions for future electrical in the ceilings. Floor outlets will be eliminated or minimized. Overhead power at lab area will be provided to center table areas. Card access system to tie into existing building security system.

Sustainable energy practices will be explored during design for architectural, mechanical and electrical systems that will tie into the existing building systems.

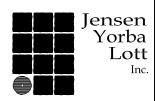
# **ADJACENCY MATRIX**

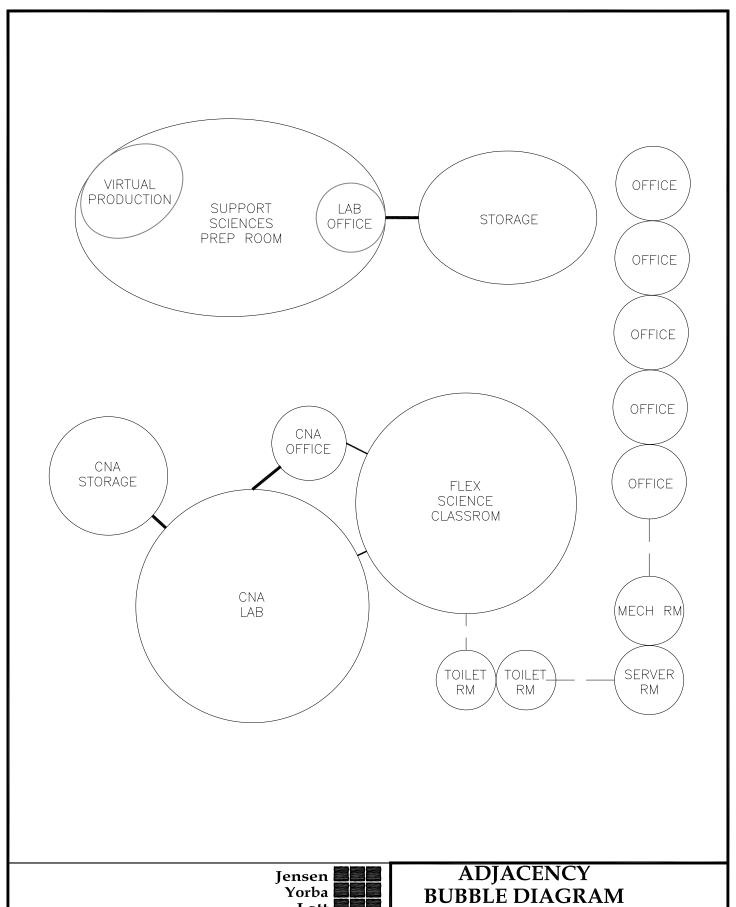


- IMMEDIATE ADJACENCY
- APPROXIMATE ADJACENCY

# **UAS SITKA HEALTH SCIENCE ADDITION**

# **PROGRAMMING**

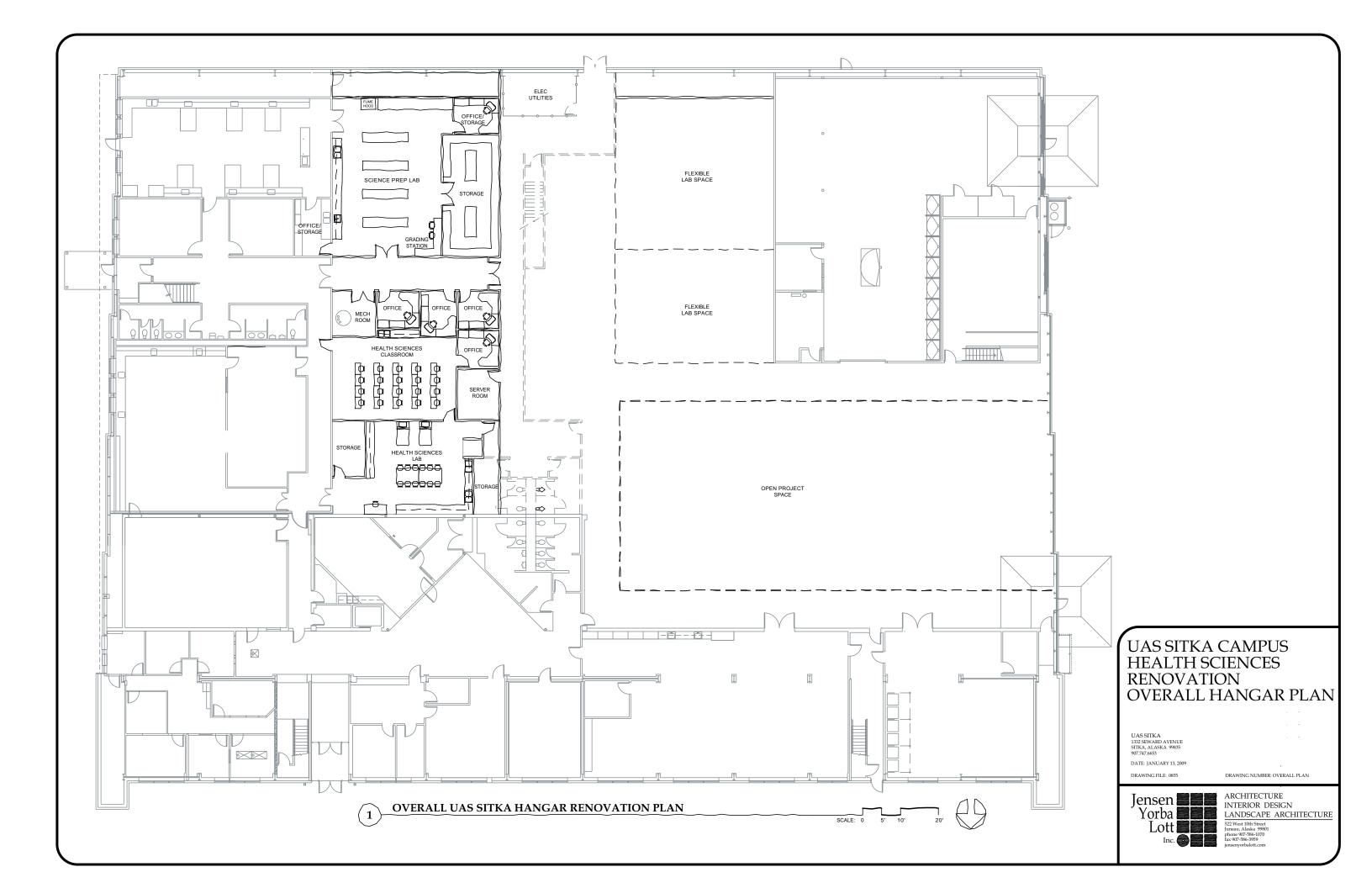


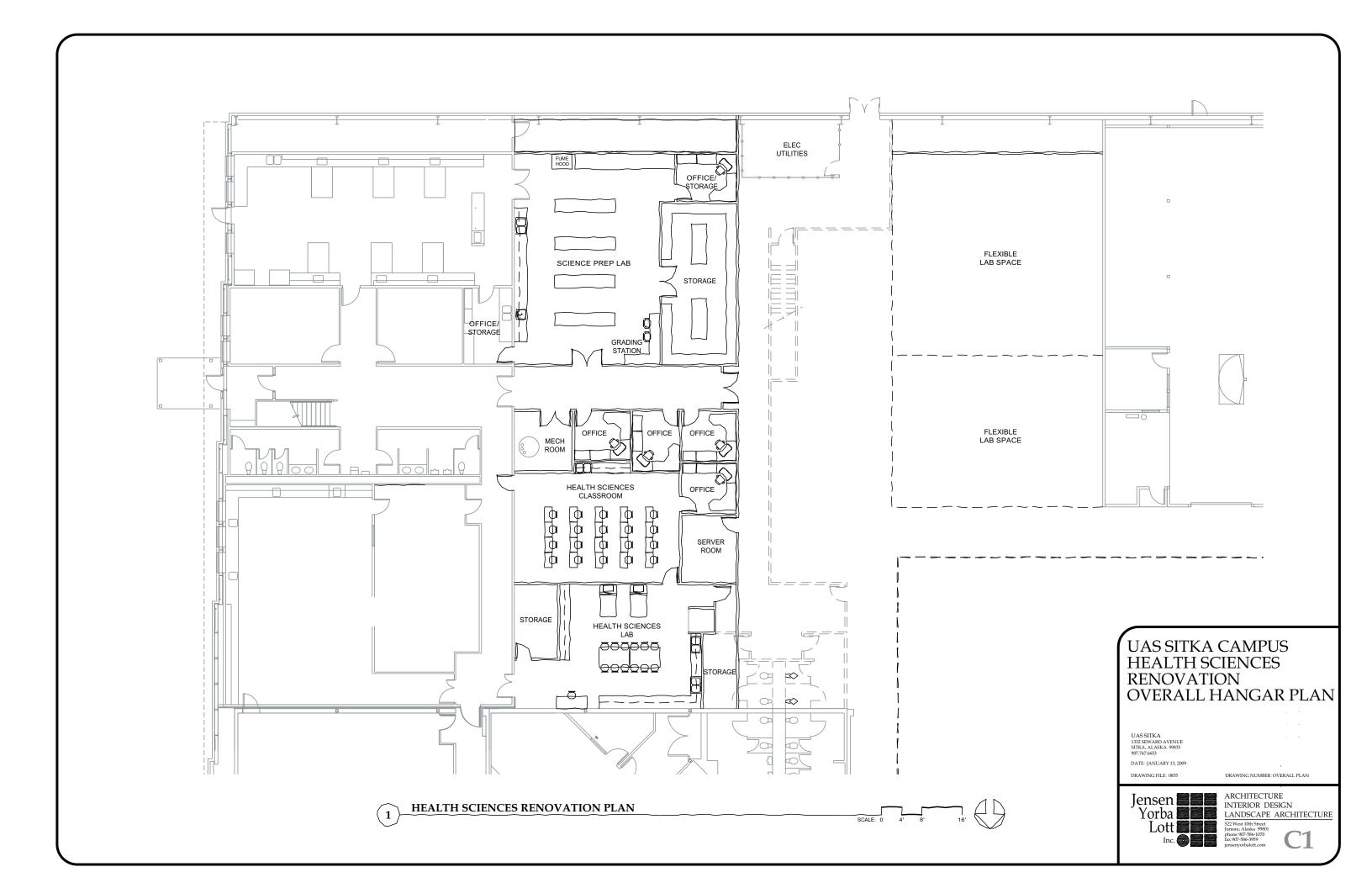




**UAS SITKA** HEALTH SCIENCES RENOVATION SITKA, ALASKA OCTOBER 24, 2008

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UNIVERSITY OF ALAS	SKA	SO	UTHE			Jensen	
SITKA CAMPUS							Yorba
HEALTH SCIENCES EXPANSION PROGRAM OF SPACES							Lott
							Inc.
ROOM NAME	QUANT	SF REQ'D		SPACE TYPE	PRIMARY ADJACENCY	SECONDARY ADJACENCY	NOTES
SCIENCE AND SCIENCE SUPPO	RT						VENTILATION
SCIENCE SUPPORT LAB: OFFICE EQUIPMENT:	1 1	1300 120	1,300	PRIVATE OFFICE			LINE OF SIGHT TO LABS
FUME HOOD  12' COUNTER 42" DEEP:  (2) AUTOCLAVE; DRYING OVEN;  CABINETS BELOW;					DISHWASHER		CABINETS BELOW, NO OH CABS
INCUBATOR UV STERILIZER (5'x1.5') EMERG. SHOWER/EYE WASH MICROWAVE							LARGE, DEEP
COMPUTER WORKSTATION DOUBLE SINK DEEP BASIN UTILITY SINK							
DISHWASHER - UNDER COUNTER STORAGE CABINETS/COUNTERTOPS CHEM RESISTANT COUNTERS					AUTOCLAVE		OH AND BELOW CAB STORAGE
CENTER TABLE (S) CHEM RESISTANT COUNTER COMPUTER/GRADING STATION							STORAGE BELOW W/ KNEE SPACE
VIRTUAL PRODUCTION AREA: WET AND DRY AREA (2) MICROSCOPES COMPUTER							

ROOM NAME		SF REQ'D	TOTAL	SPACE TYPE	PRIMARY ADJACENCY	SECONDARY ADJACENCY	NOTES
CAMERA AND LIGHTING							
CAMERA AND EIGHTING							
MEZZANINE	1	300	300				STAIRS/POSSIBLE DOOR FROM 2ND FLR
PLASTIC TOTE STORAGE - 350 MISC STORAGE							
STORAGE ROOM				LAB			
TALL CABINETS W/ HANGING STORAGE - 5	1	500	500				
SKELETON STORAGE							
REF; FREEZER; CHEST FREEZER (5) MOBILE CARTS @ 44" W							
HEALTH SCIENCES							
CLASSROOM (20 STUDENTS)	1	1200	1,200				
STORAGE CABINETS/COUNTERTOP	S						
	4	1000	4 000		0700405 0004		
HEALTH SCIENCES LAB	1	1000	1,000		STORAGE ROOM		
STORAGE CABINETS/COUNTERTOP DOUBLE SINK	3						
STORAGE ROOM	1	300	300		CNA LAB		
HOSPITAL BEDS (3)	•	550					
TALL STORAGE CABINETS (2)							
MISC EQUIP/MATERIALS							
HEALTH SCIENCES OFFICE	1	120	120		HEALTH SCIENCE	S	
OFFICE	3	120	360	PRIVATE OFFICE			
TOILET ROOM	2	75	150				UNISEX
SERVER ROOM	1	100	100				
MECHANICAL ROOM (LIFT STATION)	1	100	100				MECH VENTILATION/DBL DOOR
SUBTOTAL			5,430		<u> </u>		
Circulation Factor	1.33		1,792				
SUBTOTAL NET (USF)			7,222				

UNIVERSITY	OF ALASKA SOL	JTHEAST								Jensen
SITKA CAMPUS										Yorba
HEALTH SCIENCE	ES EXPANSION									Lott
Room Data Sheet									Inc.	
Room/Space Name	Function	Equipment/ Furnishings	Cabinetry/Shelves Storage	Specialties/ Accessories Doors	Window Coverings	Plumbing Fixtures	Special HVAC Needs	Power/ Special Systems	Lighting	P/T/D TV, etc.
SCIENCE SUPPORT LAB:										
Lab Assistant Office	Private Office - oversee lab operations	Desk, chair, computer by Owner								P/T/D
Lab	Support for science program.  Packaging, unpackaging, and grading of distance delivery kits	Center table(s) with some stor below. Chem resistannt countertops	Wrap perimeter of room with casework OH and below cabs with chem rest countertops	Emerg eye/shower wash	1	(1) Dbl sink; -(1) deep utility sink	Fume Hoo Ventilation	Overhead power	Counterto p task lighting	P @ all counters; specialty outlets
Virtual Production Lab	Video taping lab procedures for class use and distance delivery program	Video Camera (Owner Furnished)	Lab Counter						OH light	P/D
Storage Room	Storage of totes, moblie carts,  cabinets w/ supply storage, misc lab equip. Storage for freezer,REF		Freestanding tall storage cabinets by Owner							
Chemical Storage	Secure chemical storage		Lockable cabinet				Chemical piping			
HEALTH SCIENCES:	Support for Health Sciences program						p.pg			
Classroom	Lecture space for up to 20 students	Freestanding tables/desks and chairs by Owner	Built in casework at one wall with OH and below cab storage. Plam @ cabinets and		Room darkening ability (if			OH projector	;	P/T/D
Health Sciences Lab	Open space for hands on instruction  and demostration of medical  procedures and equipment use	(2)Hospital beds, manniquins, skeletons, and other medical equipment provided by Owner	Built in casework at one wall with OH and below cab storage. Plam @ cabinets and	Suspended curtains		(1) Dlb Sink				P/T/D
Health Sciences Storage		Storage manniquins, skeletons, and other medical equipment provided by Owner								
Health Sciences Office	Staff office for instructor(s)	Desk, chair, computer by Owner								P/T/D

Function	Equipment/ Furnishings	Cabinetry/Shelves Storage	Specialties/ Accessories Doors	Window Coverings	Plumbing Fixtures	Special HVAC Needs	Power/ Special Systems		P/T/D TV, etc.
IT support equipment for building						Cooling(?)	Verify		Verify
						Ventilation			
Staff office space	Desk, chair, computer by Owner								P/T/D
Serve Health Sciences and adjacent									
	IT support equipment for building  Staff office space	Furnishings  IT support equipment for building  Staff office space Desk, chair, computer by Owner  Serve Health Sciences and adjacent	Furnishings Storage  IT support equipment for building  Staff office space Desk, chair, computer by Owner  Serve Health Sciences and adjacent	Furnishings Storage Accessories Doors  IT support equipment for building  Staff office space Desk, chair, computer by Owner  Serve Health Sciences and adjacent	Furnishings Storage Accessories Doors  IT support equipment for building  Staff office space Desk, chair, computer by Owner  Serve Health Sciences and adjacent	Furnishings Storage Accessories Doors Fixtures  IT support equipment for building  Staff office space Desk, chair, computer by Owner  Serve Health Sciences and adjacent	Furnishings Storage Accessories Doors Coverings Fixtures HVAC Needs  IT support equipment for building Cooling(?)  Staff office space Desk, chair, computer by Owner  Serve Health Sciences and adjacent	Furnishings Storage Accessories Doors Coverings Fixtures HVAC Needs Systems  IT support equipment for building Cooling(?) Verify  Staff office space Desk, chair, computer by Owner  Serve Health Sciences and adjacent	Furnishings Storage Accessories Doors Fixtures HVAC Needs Systems  IT support equipment for building Cooling(?) Verify  Staff office space Desk, chair, computer by Owner  Serve Health Sciences and adjacent