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Location of Project:	University of Alaska Southeast, Juneau Campus x JS101 Hendrickson Building x JS137 BAS Building
Project Number:	20131113
Date of Request:	August 15, 2014

Total Project Cost:	$5,371,000 (Phase 1)	(TPC all Phases $12,771,000)
Approval Required:	Full Board	
Prior Approvals:	Formal Project Approval	February 22, 2014

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documents to bid and award a contract within the approved budget, and to proceed to completion of project construction not to exceed a Total Project Cost of $5,371,000. This motion is effective September 18, 2014.

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The Hendrickson and Whitehead buildings require upgrades to major building systems including mechanical and electrical systems, exterior envelope, and building controls. These improvements are

- Ground Floor design to centralize Information Technology Services management and staff, including Network and Desktop Support, Media Services, campus infrastructure and Information systems.

Project Scope

The scope of the project is twofold:

- to renovate and replace failing building systems with energy efficient systems; and
- re-purpose and reorganize spaces for greater efficiencies for sharing resources and with the intent to create a more vibrant, collaborative and student-centered campus in line with UAS mission and values.

Project Impacts

Funding for this phase is currently in place. The campus bookstore through a change in its service model will move to smaller campus space. The current bookstore space will be remodeled for UAA's Nursing program and UAS Health Sciences CNA program. UAA expressed a strong desire for its 2-year nursing program in Juneau to be co-located with UAS Health Sciences/CNA program. Through a MOU with UAA, costs to build the classroom lab will be shared between UAS and UAA. The design includes two 3-bed classroom labs with shared common spaces including a control room for testing, storage, a student lounge space and video-conference room. CNA classes are scheduled on Tuesday and Thursday, and UAA nursing classes are scheduled on M-W-F allowing flexibility for classroom lab set up if both classroom labs are needed. Five offices are provided for UAS, UAA and UAF faculty and one shared staff coordinator.

Variances

Since the FPA was granted in February, the Whitehead and Hendrickson R&R phases were swapped:

- Hendrickson Building Renovation is now Phase 1; Whitehead R&R is Phase 2;
- IT Services will still move out of Whitehead but to the Hendrickson Building instead of the Egan Library; and
- UAS Health Sciences will move from Hendrickson and be co-located with UAA Nursing at the BAS building rather than moving to new space in the lower Hendrickson Building.

Total Project Cost and Funding Sources

Funding Title	Fund Account	Amount
FY09 Capital appropriation	77101-563118	$3,000,000
FY15 DM&R Funding	77101-563145	$1,788,325
UAA Nursing contribution		$582,675
Phase 1 Project Funding		$5,371,000

Annual Program and Facility Cost Change Projections

Program Costs:-program costs are not affected

Facilities Cost Changes:

Energy costs are anticipated to be reduced due to more efficient lighting and ventilation systems.

Project Schedule -

DESIGN – Phase 1

Conceptual Design	completed
Formal Project Approval	February 22, 2014
Schematic Design	August 2014
Schematic Design Approval	September 19, 2014

Construction Documents	January 2015
BID & AWARD - Phase 1A and 1B	
Advertise and Bid	January 2015
Construction Contract Award	February 2015
CONSTRUCTION-Phase 1	
Start of Construction (1A CNA/UAA classroom labs)	February 2015
Construction Complete (1A CNA/UAA classroom labs)	Fall 2015
Start of Construction (1B Hendrickson Renovation)	October 2015
Construction Complete (1B Hendrickson Renovation)	Spring 2016
Date of Beneficial Occupancy	2015-2016
Warranty Period	1 year from substantial completion

Project Delivery Method
Design-Bid-Build

Project Design Team
The project Design team is:

Northwind Architects, Evelyn Rousso, Prime Consultant
Murray and Associates, Mechanical Consulting Engineers
Begenyi Engineering, Electrical Engineer
Jay Lavoie, Cost Estimator
Alaska Energy Engineering, Energy consultant

Supporting Documents

One-page Project Budget
Design Narrative Documents
Schematic Floor plans

Affirmation
This project complies with Regents Policy, the campus master plan and the Project Agreement.

Approvals
The level of approval required for SDA shall be based upon the estimated TPC as follows:

- TPC > $4.0 million will require approval by the board based on the recommendations of the Facilities and Land Management Committee (FLMC).
- TPC > $2.0 million but not more than $4.0 million will require approval by the FLMC.
- TPC > $1.0 million but not more than $2.0 million will require approval by the Chair of the FLMC.
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UNIVERSITY OF ALASKA

Project Name: Juneau Campus Modifications 2013-2015Y J.3RY J.3RYi lx¨>–Šƒæ J r lˆ¨>Yf˙56KgeMC1æ4>J ’ l"Šƒéb«•ÖM¡ â l& É"%`ÖJ'ÉB

Acct #: various

		14,464 GSF	
PROJECT BUDGET	FPA Budget Tota Project	FPA Budget Phase 1	Schematic Phase 1
A. Professional Services			
Advance Planning, Program Development	120,000	120,000	120,000
Consultant: Design Services 12.0%	1,092,080	431,436	321,000
Consultant:5.3(o)&nBDC BT 933(nsns)-0.t(t)-3.- TJ 0.001 Tw -3.427 0 Td (	)Tj 0 Tw ( )Tj ET EMC /P <</MCID 180 >>BD		
Construction Subtotal	10,010,733	3,954,832	4,099,000
Construction Cost per GSF			283.39
C. Building Compl 0 34S73(m)83.min0%iviTJ ET E Q BEP <</MCID 290 >>BDC BT 2.08 400374 427.721 10.921 r W n BT /TT0 1 Tf -0.005 Tc			
		319,093	328,000
E. Total Project Cost	12,711,662	5,228,221	5,371,000
Total Project Cost per GSF			371.34

Project Overview

As a result of the 2013 UAS Masterplan the University sold the Bill Ray Center in downtown Juneau. That property housed two health sciences programs; a Certified Nursing Certificate

Interior glass walls – hollow metal with 3/8" tempered glass.

Interior Doors – 7' standard hollow metal with metal frames

Flooring – Carpet will be used in all offices and the corridor. The teaching labs will have a sheet vinyl marketed to the medical industry such as Armstrong's Connection Corlon series. The break rooms and storage rooms will be linoleum 0.125" thick. Wall base to be 4" rubber.

Ceilings – Ceilings in the offices will be 2x2 ACT suspended. The area under the lower roof between gridlines 5 & 6 will retain their existing 12" x 12" adhered tile ceiling, which will require some patching. The wood decking will be left exposed in the corridor, labs and storage room.

Casework – cabinets will be plastic laminate with edge banding. Countertops will be a solid surface.

Electrical Narrative

Report by Barry Begenyi, Begenyi Engineering

General

The electrical systems will comply with accepted codes, standards and recommended practices common to the electrical industry and as required by local and state authorities, including but not necessarily limited to the following:

- National Electrical Code (NEC)
- International Fire Code (IFC)
- National Fire Protection Association (NFPA)
- ASHRAE 90.1 Energy Standard
- Illuminating Engineering Society (IES)
- National Electrical Manufacturers Association (NEMA)
- National Electrical Contractors Association (NECA)

All equipment will be listed and labeled by a nationally recognized testing agency acceptable to the State of Alaska.

General

The building was renovated into administrative space and a bookstore in 2007. The existing electrical systems are in good condition. This renovation will utilize the existing equipment as much as possible, with the addition of devices and components as required to coordinate with the new floor plan.

Utility Services and Distribution Equipment

Power for the renovation will be sourced from existing Panelboard A, located in Hall 116. The panelboard is configured 120/240 volts, 1 phase and is equipped with an integral transient voltage surges suppressor unit.

Communications Services and Distribution Equipment

A new 48-port patch panel will be installed on the existing data rack in Work Room 113 to terminate workstation cables. The patch panel will be Cat 6, 48-port, with insulation displacement connectors.

Feeders and Branch Circuits

Feeders and branch circuits will be single conductors in conduit. All conductors will be copper with insulation Type THHN

Project Overview

The Hendrickson Building was constructed as a one story building in 1910 to house a woodshop. In 1979 a second floor was added for classroom space. Since that time the ground floor has been completely renovated to create classrooms and storage space, while many of the classrooms on the upper floor have been adopted for office space. Based upon our review of University Records we have constructed a timeline of substantial work on the .

Building Code

The building is construction type VB with a Business Occupancy. The building has an automatic sprinkler system which is used for one hour substitution.

Fire rated construction – One hour fire ratings are required for shafts and storage rooms over 100 s.f.

Plumbing fixtures – The local authority CBJ uses the Uniform Plumbing Code to determine the required number of restrooms. An analysis of plumbing requirements was performed assessing the restrooms available between the three buildings on the east end of campus; Hendrickson, Sobol Ea and Whh69u]TJ Sobole86 -1 /TT0 1 -4(h)6T0 1 cusus fo u(h)6ong6(e)3(d)10(

Exterior windows – We are replacing all existing windows and installing several new windows. All new windows will be fiberglass with insulated glazing units; basis of design will be Marvin Ultra casement

Mechanical Design

Report by Roger Smith, Murray and Associates

DESIGN CRITERIA The mechanical systems will be designed and constructed in accordance with the following codes and standards:

- 2009 International Building Code (IBC)
- 2009 International Mechanical Code (IMC)
- 2009 Uniform Plumbing Code (UPC)
- 2009 International Fire Code (IFC)
- CBJ Title 19 and State of Alaska Code Modifications
- National Fire Protection Association (NFPA)
- ASHRAE - American Society of Heating, Refrigeration, and Air-conditioning Engineers

Novatney Building (Back-up Oil-Fired Boiler), and Soboleff Building (Alternate Back-up Oil-Fired Boiler System).

An air-water heat pump heating plant sized for 60% of design hourly heating load (90% of yearly heating requirements) is anticipated for primary heating of the Hendrickson Building.

installed for all heating units and shall be located within the heating unit cabinets for improved maintenance access. Each zone shall be controlled by its own respective wall mounted DDC room thermostat.

Heating for interior spaces including the open office area will be provided by (2) booster coils and respective room thermostats.

A heating coil in the air handling unit (AHU-1) will provide tempered ventilation air supply to the building.

Heating piping mains and branch piping shall be hard drawn copper tubing, ASTM B 88, Type L with press-fit joints, 95-5 solder fittings or equivalent. Press fit joints will also be acceptable.

VENTILATION AND EXHAUST AIR SYSTEM
The existing ventilation system shall be removed and replaced in its entirety, including fans, ducts, VAV boxes, louvers, controls, and related systems.

Ventilation will be provided to the Hendrickson building by a new constant volume air handling unit, AHU, with supply and return fans in an internally isolated insulated cabinet, located in the Mechanical Mezzanine. Preliminary size of the AHU unit is 7,200 cfm supply fan and 5,850 cfm return fan (7200 CFM SF a

wall. Outdoor unit will be located adjacent to air/water heat pumps under shed roof. Refrigeration piping, electrical, and controls will be routed to the outdoor condenser unit.

CONTROLS

Existing building electric and pneumatic control systems will be demolished in their entirety and replaced with a new Direct Digital Control System (DDC). Demolition includes removal of thermostats, control devices, control panels, pneumatic tubing, control wiring, and all related control accessories. Control tubing will be removed to Soboleff Building pneumatic controls air compressor and plugged.
Mechanical heating and ventilating units will be controlled through a new Direct Digital Control System (DDC) integrated into the existing UAS Siemens building automatic control system and graphics screens. If desired by the University, the automatic controls for the Hendrickson building could be opened up to other pre-approved control manufacturers. A new computer station and large screen monitor with graphics of the new building mechanical systems will be provided for ease in monitoring, programming, and scheduling operation of mechanical systems. An Ethernet BLN connection would be utilized for inter building communications. Terminal equipment controllers will be installed at each air handling system and possibly in several locations throughout the building for control of heating zones.
Individual room temperature control will be provided for each heating zone. The room thermostats will be capable of remote monitoring and overrides.

The control system will be capable of remote monitoring and control from the UAS maintenance office. Feedback to the building automation system from the heating system, room temperature sensors, ventilation controls, and other heating/ventilation systems provide the maintenance crew with the ability to monitor the operation and energy use of the HVAC system on-site or remotely. We estimate that a total of 60 input-output control points will be required.

Electrical Narrative

Report by Barry Begenyi, Begenyi Engineering

General

The electrical systems will comply with accepted codes, standards and recommended practices common to the electrical industry and as required by local and state authorities, including but not necessarily limited to the following:

- National Electrical Code (NEC)
- International Fire Code (IFC)
- National Fire Protection Association (NFPA)
- ASHRAE 90.1 Energy Standard

Lighting Systems

The ground floor and open area of the main floor will predominately use linear indirect/direct fluorescent light fixtures in pendant mount configurations. The remainder of the main floor will use recessed indirect light fixtures placed in an acoustic tile ceiling. Illumination levels shall comply with recommended practices outlined by IES. The enclosed offices, storage rooms, conference rooms, and break room will be controlled by occupancy sensors. Exterior lighting will be provided along decks, walkways, and stairs. Exit signs and emergency illumination will be provided as required along the means of egress, including the exit discharge. Lighting circuits will be connected to a separate panelboard with electronically operated circuit breakers.

Wiring Devices

Receptacles will be provided for workstations and equipment. The design will provide sufficient devices to allow for flexibility. Convenience receptacles throughout corridors and common areas will be located so that no point is more than 20 feet away from a receptacle. Four receptacles will be located in each enclosed office. Systems furniture will be electrified with separate power and communications raceway systems. Common areas, conference room walls will be provided with devices spaced approximately 6 feet apart. Receptacles with special configurations will be provided as required by the Owner.

All devices will be specification grade, or better. Convenience receptacles will be 125V, 20A. Ground fault devices will be provided as required by the NEC, feed through type. Toggle switches will be 120/277V, 20A. Wall box dimmers will be modular, wave, solid state units with integral, on-off switches. Smooth, high impact thermoplastic wall plates will be used, except in unfinished spaces where galvanized steel will be allowed. [illegible]

R & M ENGINEERING, INC.
ENGINEERS GEOLOGISTS SURVEYORS
8205 GLACIER HWY Phone 907-780-6868
JUNEAU, AK. 99801 Fax 907-780-
rmengineering@mjsinc.com

HENDRICKSON RENOVATIO
#Site City, #Site State
NWA-1404.2

SHEET # G 1

PLOT DATE: 7/16/2014