

SCHEMATIC DESIGN APPROVAL

Name of Project:	Bristol Bay Campus Applied Sciences				
Project Type:	Renovation and Repurposing				
Location of Project:	UAF, Bristol Bay Campus, Bristol Bay Applied Science Building (BB101), Dillingham				
Project Number:	2012130 BBAS				
Date of Request:	December 18, 2012				
Total Project Cost:	\$2,550,000	Increase of \$350,000 from FPA			
Approval Required.					
Approvals:	Preliminary Administrative Approval Formal Project Approval (TPC \$2,200,00	May 17, 2012) December 7, 2012			

A Schematic Design Approval (SDA) is required for all Capital Projects with a Total Project Cost in excess of \$250,000.

SDA represents approval of the location of the facility, its relationship to other facilities, the functional relationship of interior areas, the basic design including construction materials, mechanical, electrical, technology infrastructure and telecommunications systems, and any other changes to the project since formal project approval. Unless otherwise designated by the approval authority or a material change in the project is subsequently identified, SDA also represents approval of the proposed cost of the next phases of the project and authorization to complete the design development process, to bid and award a contract within the approved budget, and to proceed to completion of project construction. Provided however, if a material change in the project is subsequently identified, such change will be subject to the approval process.

Action Requested

"The Facilities and Land Management Committee approves the Schematic Design Approval request for the University of Alaska Fairbanks Bristol Bay Campus Applied Sciences project as presented in compliance with the campus master plan, and authorizes the University administration to complete construction bid 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 \$2,550,000. This motion is effective February 21, 2013."

Project Abstract

Bristol Bay Campus (BBC) has purchased the NAPA auto parts store in Dillingham in order to expand its Applied Science programs. The building is a 2-story wood-framed structure that has a retail auto parts store on the ground floor and three residential apartments, and a mechanical/electrical room on the second floor. The building is approximately 40 feet by 90 feet with a total floor area of 7,200 gross square feet.

UAF Facilities Management is planning to remodel the first floor of the NAPA building in order to accommodate the Bristol Bay Applied Science programs. The new program spaces scheduled for this remodel project include:

- Nursing Lab/Classroom
- Science Lab
- Sustainable Energy Lab with Library/Office
- Tele-Presence Conference Room
- Two Offices
- Storage Rooms
- Building Support (Lobby, Commons, Circulation, Restrooms and more)

RATIONALE AND REASONING

Background

This project and the programs it will support are in alignment with the current Bristol Bay Campus Master Plan. The project is primarily funded by a Title III grant obtained by the Bristol Bay Campus.

Programmatic Need

This project will allow for the expansion of the Bristol Bay Campus Applied Sciences programs including Rural Allied Health and Nursing, the Environmental Studies, and Sustainable Energy.

Project Scope

The Allied Health and Applied Science program needs for the NAPA building will utilize the entire first floor. This remodel area is approximately 3,600 gross square feet. The second level of the NAPA building will not be remodeled and is not in the scope of this project. The campus will maintain the apartment residences in their current condition.

The Nursing Lab is the teaching center for the Health Sciences Program. The program requires two simulated hospital bed teaching stations with privacy curtains, a flexible teaching area for tables and chairs or an open floor area for EMT demonstrations, a handicap accessible bathroom facility that can be used for teaching, a sink with countertop and storage cabinets, an eyewash station, and a large storage room for simulation equipment and supplies. In addition, there is an observation station located in the office adjacent to the hospital bed station. Lockers in the hall are available for use by Allied Health students. Ample power and data outlets will be provided to meet the needs of the program. Durable recycled rubber sheet flooring will be provided.

The Marine Science Lab will be furnished with salt water tanks, work benches and workstation counters with three moveable exhaust hoods and pull-down lighting units with power outlets. There will be internet access at least one dedicated lab computer station, cabinet storage, a wash-up sink and student lockers. The Lab will occupy the southwest corner of the building which has an existing overhead door and an adjacent 450 sf concrete floor. Durable recycled rubber sheet flooring will be provided in the non-concrete flooring areas. Ample power and data outlets will be provided to meet the needs of the Environmental Studies Program.

The Sustainable Energy Lab will be furnished with a long work counter with storage on the south wall, three 4x6 feet island work counters with storage below and a reference library and office located on the west end of the lab. Durable recycled rubber sheet flooring will be provided. Ample power and data outlets will be provided to meet the needs of the Sustainable Energy Program.

The E-Learning classroom/conference room will be furnished with a teleconference room layout and the electronic infrastructure for the IT department's installation of the distance education delivery media equipment. The room will have flexible seating and can be configured as a small seminar room, an E-Learning classroom or a conference room.

Two private offices are scheduled for the Allied Health faculty. The smaller office will have a window that will allow for observation and simulation testing. They will be furnished with ample power and data outlets, carpet and upgrades to the existing ceiling (possibly glue-up ceiling tiles).

The lobby is a small gathering space that will be furnished with comfortable seating, a small counter with sink, and a microwave shelf. The lobby will have a durable walk-off mat carpet and a bold colored accent wall.

The NAPA main floor will have all new architectural finishes. The new finishes will enhance the functional effectiveness of the Applied Science teaching areas. New windows will add daylight in the teaching areas. New wall colors will enhance and update the interiors, providing welcoming public spaces and teaching areas. The colors chosen for the interior will be bold and dramatic in the public areas. The entry lobby and commons area will be bright and welcoming with signage and color assisted way finding. The primary new finishes will be durable rubber flooring, carpet, ceramic tile, wall paint, and acoustic ceiling tiles.

New hydronic baseboard heat will be distributed to the rooms in the new plan layout. Ventilation will be by operable windows, HRVs and exhaust fans. The existing mechanical room will serve the new plan layout from the second level. New power and data runs will support the new rooms. Lighting will be upgraded; however, the existing ceiling and structure above will only allow surface mounted light fixtures. These fixtures will have a low profile due to the existing 8 ft ceiling height.

Also included in the scope for this remodel is an exterior building envelope upgrade. The exterior upgrades will include new rigid insulation on all exterior walls, added roof insulation,

new air barrier, and new fiber cement siding. New energy efficient windows will be installed at selected locations on the first floor level.

The first floor of the NAPA building will be completely remodeled. The existing walls and rooms will be removed in order to construct the new first floor walls. The second floor is supported by the perimeter bearing walls and interior columns, so the interior columns will remain in place in order to maintain the structural integrity of the building. At the first floor exterior walls, new structural headers will be installed to create openings for the new windows. The existing window openings will be in-filled. The existing entry door location is going to be re-located, and the current door opening will be in-filled. Most of the interior building mechanical and electrical systems will be demolished.

The renovation areas will be in full compliance with the Americans with Disabilities Act (ADA). The main entrance doors will be set to meet pull force requirements, the new entry vestibule and the toilet rooms will be sized per ADA requirements.

The work scope also includes upsizing of the water service line between the building and the city water main. The upsizing is necessary to support the sprinkler system as required by the UAF Fire Chief.

Project Impacts

Rural Allied Health and Nursing, Environmental Studies, and Sustainable Energy will remain in their current space in the main building of the Bristol Bay Campus, so no renovation or reallocation of their current spaces will be necessary.

Bristol Bay Campus is pursuing a \$250,000 grant from the Rasmuson Foundation as an additional source of funding. If this grant is obtained, project furnishings and equipment will be purchased and installed in their entirety. The College of Rural and Community Development has also requested an additional \$100,000 to upsize the existing water service line to the NAPA building. The waterline work is a project requirement, so if the additional funding is not received work scope from other areas of the project must be reduced. Two additive alternates have been identified for this purpose and will not be awarded, if the additional funding is not received.

Variances

The TPC for the Formal Project Approval was \$2,200,000. CRCD is requesting \$350,000 in additional funding for furnishings and equipment and to upsize the existing water service line to the building as indicated under Project Impacts.

Total Project Cost and Funding Sources

Funding Title	Fund Account	Amount
Title III Grant	515227-50216	\$2,000,000
FY11 Capital Funds (CC Feasibility Study)	571326-50216	\$65,000
DOE Federal Grant	515325-50216	\$60,000
BB/CRCD Operating Funds	103010-42018	\$45,000
UA Foundation Grant	336825-42003	\$24,750
Technical and Vocational Education Program	Requested	\$100,000
Rasmuson Foundation Grant	Requested	\$250,000
Total Project Cost		\$2,550,000

Annual Program and Facility Cost Projections

This project will renovate existing space. This space will move from revenue generating space to academic use space and this will result in an increase to the Facilities Costs.

Facilities Costs:	
Maintenance & Repair	\$38,250
Operations	\$100,000
Annual O&M Cost	\$138,250
Annual Renewal and Replacement	TBD
Total Annual Cost Projections	\$138,250
Project Schedule	
DESIGN	
Conceptual Design	September 2012
Formal Project Approval	October 2012
Schematic Design	October 2012
Schematic Design Approval	February 2013
Construction Documents	March 2013
BID & AWARD	
Advertise and Bid	March 2013
Construction Contract Award	April 2013
CONSTRUCTION	-
Start of Construction	May 2013
Construction Complete	December 2013
Date of Beneficial Occupancy	December 2013
Warranty Period	1 Year
Project Delivery Method	
Project delivery method will be Design-Bid-Build.	
Supporting Documents	
One-Page Project Budget	
Design Narrative	
Drawings (Site Plan, Exterior Elevations, Floor Plans)	

Affirmation

This project complies with Regents' Policy and the Bristol Bay Campus Master Plan.

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.
- TPC \leq \$1.0 million will require approval by the AVP of Facilities and Land Management.

UN	IIVERSITY OF ALASKA			
Pro	iect Name: Bristol Bay Campus Appl	ied Science		
MA				
Rui	Iding: Nana Building Г)ate:	November 28	2012
Car	nnus: Bristol Bay Campus P	repared By:	Dagel	2012
Dro	viect #: 2012120 BBAS	repared by:	545007 5001	e
Tot	al GSE Affected by Project:	702	515227 5021	0
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	Concultant: Design Services			\$130 303
	Consultant: Design Services			\$17,318
	Consult Extra Services (List: Eyel tank sprink)	er and more)		\$17,510
	Site Survey	er and more)		1+C,C+Ç 02
	Soils Testing & Engineering			50 \$0
	Special Inspections			\$5 000
	Plan Poviow Ease / Parmite			\$3,000
	Othor			\$10,000 \$10
	Professional Se	rvices Subtotal		\$206 562
R	Construction			7200,302
υ.	General Construction Contract (s)			\$1 650 000
	Other Contractors (List:)		\$10,000
	Construction Contingency	/		\$149.000
	Construction contingency	truction Subtotal		\$1,809,400
	Construction Cost per GSE		\$488.76	<i>Ŷ1,003,400</i>
С.	Building Completion Activity		<i>\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ </i>	
	Fauipment			\$230.000
	Fixtures			\$0
	Furnishings			\$0
	Signage not in construction contract			\$0
	Move-Out Cost/Temp. Beloc. Costs			\$0
	Move-In Costs			\$0
	Art			\$0
	Other (List:)			\$0
	OIT Support			\$0
	Maintenance/Operation Support			\$6.000
	Building Completion A	ctivity Subtotal		\$236,000
D.	Owner Activities & Administrative Cos	ť		. ,
	Project Planning and Staff Support			\$101,518
	Project Management			\$173,037
	Expenses: Advertising, Printing, Furnishings			\$24,000
	Owner Activities & Administrative	e Cost Subtotal		\$298,555
E.	Total Project Cost			\$2,550,517
	- Total Project Cost per GSF		\$688.96	
F .	Total Appropriation(s)		•	\$2,550,000

UNIVERSITY OF ALASKA FAIRBANKS

BRISTOL BAY CAMPUS APPLIED SCIENCE BUILDING IMPROVEMENTS PROJECT NO. 2012130 BBAS DESIGN NARRATIVES AND COST ESTIMATE PREPARED BY MCCOOL CARLSON GREEN SEPTEMBER 27, 2012







BRISTOL BAY APPLIED SCIENCE DESIGN NARRATIVE

Executive Summary

The UAF Bristol Bay Campus in Dillingham is the regional center for postsecondary academic and vocational education. The curriculum at the Campus is delivered through local courses and by distance education methods to 33 Bristol Bay communities. The college is a non-residential campus serving students from the Southwest Alaska region. Originally constructed in 1980, with a major addition in 2005, the main Bristol Bay Campus facility is a single story building with approximately 9,770 square feet.

The Bristol Bay Campus has purchased the NAPA auto parts store in order to expand their applied science program offerings. The building is a two-story wood-framed structure that has a retail auto parts store on the ground floor with three residential apartments and a mechanical/electrical room on the second floor. The building is approximately 40-feet by 90-feet with a total floor area of 7,200 gross square feet.

UAF Facilities Management is planning to remodel the first floor of the NAPA building in order to accommodate the Bristol Bay Applied Science Programs. The new program spaces scheduled for this remodel project include:

Nursing Lab/Classroom (563 SF)

Science Lab (744 SF)

Sustainable Energy Lab with Library/Office (555 SF)

TelePresence Conference Room (235 SF)

2 Offices (222 SF)

2 Storage Rooms (199 SF)

Building Support: Lobby/Commons; Circulation; Restrooms; Comm Room

Facility improvements include heating distribution for the new plan layout, communications, power, lighting, and architectural finishes that support the new program areas. Building envelope improvements are included in the remodel scope. UAF provided an as-built plot plan for the property. This condition survey narrative is based on a physical inspection of the facility

The following narrative includes:

- 1. Architectural Design Narrative
- 2. Condition survey of the NAPA Building and Summary of the Building Systems, broken down by engineering discipline
- 95% Cost Estimate

DESIGN TEAM

University of Alaska Fairbanks - Facilities Services Mary Pagel, Project Manager (907) 474-1908, <u>mpagel@alaska.edu</u>

Bristol Bay Campus Debra McLean, Campus Director (907) 842-5109, <u>rfdlm@uaf.edu</u>

McCool Carlson Green - Architects Scott Brodt, Project Architect (907) 563-8474, sbrodt@mcgalaska.com

Coffman Engineers Peter Hewko, Structural Engineer (907) 276-6664, <u>hewko@coffman.com</u>

Coffman Engineers, Inc. William K. McNeal, P.E., Principal, Mechanical Engineering (907) 276-6664, mcneal@coffman.com

Coffman Engineers, Inc. Brent Little, P.E., Mechanical Engineer (907) 276-6664, <u>little@coffman.com</u>

Coffman Engineers, Inc. Tom Looney, P.E., Principal, Electrical Engineering (907) 276-6664, <u>looney@coffman.com</u>

Coffman Engineers, Inc. Andrew Yanoshek, P.E., Electrical Engineer (907) 276-6664, <u>yanoshek@coffman.com</u>

HMS, Inc. Dirk Imlach, Estimator (907) 561-1653, dirk@hmsalaska.com

1.0 - ARCHITECTURAL DESIGN NARRATIVE

BRISTOL BAY NAPA BUILDING APPLIED SCIENCE RENOVATION PROGRAM

The Allied Health and Applied Science program will utilize the entire first floor the NAPA building. This remodel area is approximately 3,600 gross square feet. The second level of the NAPA building will not be remodeled and is not in the scope of this project, except for fire alarm and fire sprinkler system installations. The Campus will maintain the apartment residences in their current condition.

NURSING LAB

The nursing lab is the teaching center for the health sciences program. The program requires two hospital bed teaching stations with privacy curtains, a flexible teaching area for tables/chairs or open floor area for EMT demonstrations, a handi cap accessible bathroom facility that can be used for teaching, a sink with countertop and s torage cabinets, an eyewash station, and a large storage room for simulation equipment and supplies. In addition, there is an option to include an observation/testing station located in the office adjacent to the hospital bed station. Lockers in the hall are available for use by allied health students. Ample power and data outlets will be provided to meet the needs of the program. Durable recycled rubber flooring will be provided.

MARINE SCIENCE LAB

The marine science lab will be furnished with salt water tanks, work benches and workstation counters with moveable exhaust hoods and pull-down lighting units with power outlets. There will be internet access and at least one dedicated lab computer station. There will be cabinet storage, a wash-up sink and student lockers. The science lab will occupy the southwest corner of the building which has an existing overhead door and a 450 sf concrete floor area. Ample power and data outlets will be provided to meet the needs of the program. Durable recycled rubber sheet flooring will be provided in the non-concrete flooring areas.

SUSTAINABLE ENERGY LAB

The sustainable energy lab will be furnished with a long work counter with storage on the south wall, six 2-feet by 6-feet modular island work tables and a reference library/office located on the west end of the lab. Ample power and data outlets will be provided to meet the needs of the program. Durable recycled rubber sheet flooring will be provided.

TELEPRESENCE DISTANCE EDUCATION CLASSROOM

The distance education classroom/conference room will be furnished with a teleconference room layout and the electronic infrastructure for the IT department's installation of the distance education delivery media equipment. The room will have flexible seating and can be configured as a small seminar room, a distance education classroom and a conference room.

OFFICES

The two private offices are scheduled for the Allied Health Faculty. Each office will have a window and one office will have a window that looks into the adjacent hospital simulation station for observation and s imulation testing. The Nursing Lab will be furnished with ample power and data outlets, carpet and glue-up acoustical ceiling tiles.

LOBBY/COMMONS

The lobby is a small gathering space that will be furnished with a reception work station and a small counter with sink and a m icrowave shelf. The lobby will have a durable walk-off mat carpet and a bold colored accent wall.

INTERIOR DESIGN

The NAPA main floor will have all new architectural finishes. The new finishes will enhance the functional effectiveness of the Applied Science teaching areas. New windows will add daylight in the teaching areas. New wall colors will enhance and update the interiors, providing welcoming public spaces and teaching areas. The colors chosen for the interior will be bold and dramatic in the public areas. The entry Lobby/Commons will be bright and welcoming with signage and color. The primary new finishes with be durable rubber flooring, carpet, wall paint and acoustic ceiling tiles.

BUILDING SERVICES

New hydronic baseboard heat will be distributed to the rooms in the new plan layout. Ventilation will be by operable windows, HRV's and exhaust fans. The existing mechanical room will serve the new plan layout from the 2nd level. New power and data runs will support the new rooms. Lighting will be upgraded; however, the existing ceiling and structure above will only allow surface mounted light fixtures. These fixtures will have a low profile due to the existing 8-foot ceiling height. Refer to the Engineering Condition Survey for more detailed information.

BUILDING ENVELOPE UPGRADES

Also included in the scope for this remodel is an exterior building envelope upgrade. The exterior upgrades will include: a new 6-inch insulated metal panel siding system on all exterior walls, added roof insulation, new air barrier and new foundation insulation. New energy efficient windows will be installed at selected locations on the first floor level.

BUILDING DEMOLITION AND REMODEL

The first floor of the NAPA building will be completely remodeled. The existing walls will be removed in order to construct the new first floor walls. The second floor is supported by the perimeter bearing walls, interior beams and columns. The interior columns will remain in place in order to maintain the structural integrity of the building. At the first

floor exterior walls, new structural headers will be installed to create openings for the new windows. The existing window openings will be infilled. The existing entry door location is going to be re-located, so the current door opening will be infilled also. Refer to the structural narrative for additional building upgrades. Most of the interior building mechanical and electrical systems will be demolished.

ACCESS FOR THE DISABLED

The renovation areas will be in full compliance with the American Disabilities Act. The main entrance doors will be set to meet pull force requirements, the new entry vestibule will be sized per ADA requirements and the toilet rooms will have accessible features. The Unisex bathroom is fully accessible.

FUTURE REMODEL/EXPANSION

In order to access the 2nd floor of the Applied Science building in the future, consideration has been given to locating an elevator, elevator lobby and accessible stair on the north side of the building – adjacent to the Lobby. The elevator access will allow Faculty/Staff offices or other Campus activities that are open to the public to be located on the 2nd floor of the NAPA building. The buildable area on the NAPA site is limited, so additions will be small areas at the existing building perimeter. Converting the 2nd floor spaces into offices or teaching areas has been considered. Storage additions for the marine science equipment and energy lab are being considered.

CODE ANALYSIS

The International Building Code 2009 Edition is the building code that will be used for the design of this facility improvement. The building has two occupancy types. After the first floor remodel is complete, the current M occupancy will be classified as a 'B Occupancy', providing education beyond the 12th grade. The three apartments on the second floor are not included in the scope of this remodel. However, a fire alarm and fire sprinkler system will be added throughout the residential occupancies. The mechanical equipment on the second floor will be upgraded as part of the remodel scope, if budget funds are available. The type of construction for the entire building is Type V-B.

SITE INFORMATION - NAPA BUILDING

Plat information: Block 18, Lot 1 USS 2732B - Dillingham Townsite Survey

Physical Address:	U.A.F. Bristol Bay Campus
	315 D Street
	Dillingham, AK 99576

The NAPA Site area is approximately 12,410 square feet.

UAF BRISTOL BAY APPLIED SCIENCE - NAPA BUILDING RENOVATION Dillingham, Alaska MCG Architects/Coffman Engineers, Inc.

LEED STRATEGIES

The NAPA building remodel project is primarily an interior remodel with building envelope upgrades and a small entry addition. The design intent for this remodel is to create contemporary teaching environments in a healthy, high performing building. The building will be adapted to a more people-oriented environment with abundant natural light and ventilation. The goal is to modify this existing building so that it uses far less energy to operate and reduces its impact on the environment. The project will be LEED Certified using the LEED for Commercial Interiors rating system (2009).

The primary LEED strategies that will benefit this project are related to improving the overall energy efficiency of the building systems. The following building system upgrades and supporting LEED strategies will be implemented as part of the project:

- thermal envelope efficiency
- mechanical equipment efficiencies
- electrical equipment efficiencies
- indoor air quality upgrades related to interior finishes and user comfort
- water conserving plumbing fixtures
- Daylighting and views
- Materials and resources related to waste management and recycled content
- Commissioning

September 27, 2012

ENGINEERING CONDITION SURVEYS/NARRATIVES

General:

The scope of this project is to renovate the first floor of the existing NAPA building to provide operational functions for the UAF Bristol Bay Campus. The first floor of the building is currently used for light storage for automotive parts. The second floor is has three residential apartments and a mechanical room which serves the entire building.

As-built drawings of the building are not available. A site visit was made to field verify the construction of the building on April 8, 2011. The building's general construction is outlined in this narrative. S ome details of the building's construction were not determined due to concealment by finished surfaces.



STRUCTURAL SYSTEMS - BASIS OF DESIGN

Codes and Standards:

The following codes will apply to the structural portion of this project:

- 2009 International Building Code (IBC)
- ASCE7-05

Design Loads:

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- Building Category: II
 - Snow: 144psf Ground Snow Load
 - Unbalanced and drift in accordance with ASCE7-05
- Wind: 130mph, Exposure B, I = 1.0
- Seismic: Site Class D, S_s=0.25, S₁=0.15, I=1.0
- Foundation/Soils: Per IBC table 1806.2, 1500psf allowable bearing pressure

September 27, 2012

EXISTING CONDITIONS SURVEY OF STRUCTURAL SYSTEMS

Foundation:

The existing building foundation consists of concrete footings with 2x6 pressure treated wood exterior stem walls. The perimeter concrete footing appears to be 10" thick and 2'-0" wide (approx.). The exterior pressure treated wall is 2'-6" tall. Therefore, the bottom of footing is approximately 3'-2" below grade. The 2x6 stem wall studs are spaced at 16" oc. The exterior pressure treated plywood sheathing thickness and anc hor bolt size/spacing has not been determined since the wall cavity is concealed by insulation/vapor barrier.

Two rows of interior bearing walls are present and align directly below each row of building support columns above. The interior bearing walls are spaced at approximately 13'-4"oc. The interior footings appear to be 8" thick and 2'-0" wide. 4'-0" x4'-0" spread footings are spaced at 12'-10" oc (approx) to support the building columns above. The depth of the spread footings has not been determined. Four (4)2x6 wood stud posts are present at each building's column locations. The interior bearing stem walls have a height of 2'-8" with 2x6 studs spaced at 16" oc. $\frac{1}{2}$ " diameter anchor bolts spaced at approximately 5'-0" oc along each of the interior bearing stem walls tie the base plate to the concrete footing.

A 15'-0"x30'-0" (approx.) slab on grade is present at the southwest corner of the building. The slab thickness has not been determined. The crawlspace portion of beneath the slab on grade is contained by a pressure treated stem wall with 2x6 studs spaced at 16"oc, with a height of 2'-6". The thickness of the pressure treated plywood thickness has not been determined. Gravel fill is suspected to be placed beneath the slab on grade within the area contained by the pressure treated walls.

1st & 2nd Floor Framing:

The first floor framing consists of 2x12 dimensional lumber spaced at 16"oc. The 2x12 floor framing members bear on top of the interior and exterior foundation bearing walls. The framing is broken into three 14'-0" long sections along the 40'-0" width of the building. Solid blocking is present between floor framing members at each interior bearing wall. The floor diaphragm consists of 1-1/8" plywood sheathing throughout the entire first floor.

Based on measurements taken the second floor framing appears to be 2x12 floor joists with 3/4" plywood sheathing. The spacing of the floor framing has not been determined. We suspect beams are framed into the floor structure above the columns, running the along the length of the building. Further inspection of the floor framing is required if the use of the second floor is altered from its existing residential use.

UAF BRISTOL BAY APPLIED SCIENCE - NAPA BUILDING RENOVATION Dillingham, Alaska MCG Architects/Coffman Engineers, Inc.

Wall Framing:

Based on field measurements the wall construction consists of 2x6 standard framing. The location of shear walls is not known since the location of hold downs is concealed by interior and exterior finishes.

Roof Framing:

The roof framing consists of pre-manufactured wood trusses spaced at 2'-0"oc. The trusses have 2x6 wood top and bot tom chords and 2x4 wood web members. The trusses appear to be designed to span the 40'-0" width of the building with no support required by interior walls.

FACILITY RENOVATION WORK:

The first floor exterior walls that are having openings moved or added will be analyzed to ensure that they meet the needs of the structure. New headers and opening framing will need to be installed. Adequate shear wall sections will be designed and holddowns installed. The interior wall next to the overhead door is scheduled to be demolished. This wall may be a bearing wall; further investigation will be required to determine if this is the case, or if a beam already exists above it. If it is a bearing wall, a new beam and column will need to replace the wall. The 1st floor structure will be reinforced as required to support the change in use of space above.

The arctic entry will have a concrete footing supporting a concrete stem wall and a slab on grade floor. The walls will be wood frame, and will support a roof structure of premanufactured wood trusses. The second floor access walkway will be replaced, with new concrete footings and steel posts supporting the outside edge. New treated wood framing will support the reused existing walking surface. The fuel tank will be supported on treated timber sleepers, and secured against overturning forces by duckbill anchors.

MECHANICAL SYSTEMS - BASIS OF DESIGN

Codes and Standards:

The following codes will apply to the electrical portions of this project:

- 2009 International Building Code (IBC)
- 2009 International Fire Code (IFC)
- 2009 International Mechanical Code (IMC)
- 2009 Uniform Plumbing Code (UPC)
- 2009 International Energy Conservation Code (IECC)

 NFPA 13R: Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height

We will use the following additional standards as a basis of design for this project:

UAF Division 21, 22, 23 Design Standards

EXISTING CONDITIONS SURVEY OF MECHANICAL SYSTEMS

Plumbing:

The domestic water service and waste both enter the building at the Northeast corner within the crawlspace. The domestic water is provided to the building with 1" soft drawn copper, the water entrance is comprised of a gate valve, strainer and pressure gauge.

The sanitary waste is a gravity drainage system and the main in the crawlspace is 4" ABS piping. On the first floor the waste serves a single restroom with 3" ABS. The three apartments of the second floor are served with 3" ABS. Where these two lines converge in the crawlspace 4" ABS continues through the crawlspace unit it exits through the floor. Waste piping throughout the building appeared to be ABS. A yard cleanout was observed within 5 ft of the building perimeter along the Northeast side of the building.

The building crawlspace has a sump pump installed in a bucket approximately 6" below grade.

Plumbing fixtures within the building appeared to be original and in fair condition. The first floor fixtures consist of a service sink and floor mounted tank style water closet. The second floor apartments each have a single bathroom and kitchen. Plumbing fixtures include a floor mounted tank style water closet, lavatory, shower/tub combination, washing machine box, kitchen sink, and dishwasher. The boiler room has a floor drain without trap primer. All plumbing fixtures appear to be in working condition.

Domestic water is provided with a side arm heat exchanger integral to the fuel oil boilers. The heat exchanger utilizes two 50 gallon electric water heaters. Both electric water heaters are not connected and are utilized only for storage purposes. An aqua stat on one of the water heaters cycles a circulation pump to maintain set point. A second domestic water pump is installed as a circulation pump and operates continuously. The heat exchanger for the domestic hot water is not double wall construction and does not meet current code. Double wall construction for heat exchangers is required per code to ensure no cross continuation between the domestic water system and the heating system.

Heating:

UAF BRISTOL BAY APPLIED SCIENCE - NAPA BUILDING RENOVATION Dillingham, Alaska MCG Architects/Coffman Engineers, Inc.

Building heat is provided with two Burnham model V-76-T fuel oil boilers. Each is capable of providing a DOE net heating capacity of 221 MBH. The boilers are pipe in series with lead/lag circulating pumps. An air separator and steel compression tank are located within the mechanical room. The boiler flues combine and exit through the roof of the mechanical room; there are signs of leaks from the roof penetration. Combustion air to the room is provided high and low, along with a supply fan for cooling. The combustion air serving the boilers does not appear to meet current code. The lead/lag pumps serving the building are two different sizes (Grundfos UP 50-75F and UMC50-80), one pump is used at a time.

The first floor space is heated with multiple unit heaters, each has isolation valves, water is continuously circulated through each heater and the fan is energized by a local thermostat to provide heat. The second floor space is served with baseboard throughout. Each apartment has a control valve and associated thermostat to provide heat on demand. The crawlspace is served with bare fin tube that energizes on a thermostat located in the crawlspace. Copper piping was observed in the crawlspace and is insulated with residential grade closed cell type insulation.



The boilers are supplied with fuel oil from a 300 gallon tank located outside the second floor mechanical room. A single fuel oil supply is routed to the mechanical room, no

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return pipe or tiger loop is installed. The fuel oil piping appeared to be threaded schedule 40 and appeared in fair condition. No check valves are installed on the fuel oil supply to each boiler. Oil filters were present at each boiler.

Ventilation:

Ventilation is provided to the building with operable openings. Each restroom is provided with an exhaust fan and wall switch. Each kitchen is provided with a range hood.

Fire Protection:

The building is not protected with a fire alarm or suppression system.

Controls:

The building is equipped with local thermostats and does not have a whole building control system. Thermostats throughout are simple and do not include night setback or programmable functions.

RECOMMENDATIONS TO SUPPORT FACILITY RENOVATION

Plumbing:

The existing 4" sanitary sewer size is adequate for the new plumbing fixtures added to the first floor. The new floor mounted tank style water closets will be provided with 4" piping to the main. A new waste vent will be routed through the mechanical room on the second floor and terminate with a 4" vent through roof.

ADA plumbing fixtures will be incorporated into the design per the architectural plans. Water closets will be manual 1.6 gallon per flush and will be pressure assisted tank type, with a minimum MaP rating of 800, and capable of operating at 20 psi water pressure, American Standard brand or similar. Lavatories will be wall hung vitreous china with single lever ADA faucets and 0.5 gpm flow restricting aerator. Showers will include commercial grade Moen thermostatic mixing valves and floor drains, shower wand will be included in ADA location. Service sinks will be 19 gauge minimum 18-8 stainless steel single compartment units with gooseneck faucet and wrist blade handles for easy operation.

Domestic water isolation valves will be provided for each floor and each restroom to allow ease in maintenance. Further domestic water isolation will be provided at each fixture.

Floor drains will be provided with grate and trap primer.

The domestic hot water recirculation line will be replaced to serve first floor fixtures in order to minimize wait times for hot water and to save energy.

New 1" domestic hot and cold water will be provided to the first floor fixtures. Domestic water piping will be Type "L" copper. Waste, vent, and rain leader piping to be hard temper copper drainage tubing (DWV) or ABS. Domestic water piping will be insulated in accordance with UPC requirements and the International Energy Conservation Code.

One new Superstore indirect 80 gallon double-walled water heater will be provided with a temperature and pressure relief and thermostatic control. It will be specified with an additional closed cell insulated jacket to minimize standby losses. Heating capacity will provide for quick recovery and slight redundancy. A new single circulation pump will be provided for the glycol side indirect water heater. A second new domestic water circulation pump will be provided for hot water circulation throughout the building.

The second floor plumbing fixtures are to remain as is, minimal upgrades will be provided to the space.

Heating:

Heating will be provided to the building with two new boilers, Weil McLain Ultra UO-5, each boiler will be sized to provide 2/3 of the building load and include standalone controls for boiler staging and alternation. Boilers will require combustion air to be provided to the mechanical room. Boilers will be provided with 30 psi relief valve and direct vent kit. Boilers will have LCD display and run hours log for easy troubleshooting and operation. Boiler will have domestic hot water priority and post purge cycle. Each boiler will be piped and provided with valving to allow it to be taken out of service while the other is in operation. Each boiler will be provided with a primary pump connected to the building main. Two new building circulation pumps will be provided in a lead/lag function to provide redundancy for the system. Each pump will be sized for 100% of the building load. A new 30 gallon glycol makeup unit will be provided to allow for an easy point for inhibitor supply to the heating system. A new strainer and diaphragm expansion tank will be provided for air removal and thermal expansion respectively. New 1-1/2" heating supply and return lines will be provided to the crawlspace for heating distribution. 1-1/2" supply and return lines will be routed within the crawlspace to the new baseboard throughout the building. The Science classroom is the only room that will be not be provided with baseboard, this room will be heated with two small cabinet unit heaters recessed into the new walls and suspended from the ceiling. The reception area will also be provided with a single small cabinet unit heater to provide quick recovery for the front entrance.

Heating coils will be provided in the common outside air intake of each pair of heat recovery units to provide tempered air to the space. Local temperature sensor will activate a control valve for each to provide 75 deg F supply air temperature around (adjustable).

All heating piping to be Type "L" copper.

The heating distribution to the second floor to remain as is with minimal upgrades. The units will benefit from the installation of higher efficiency domestic hot water and heating equipment.

Ventilation:

Ventilation will be provided to the first floor space through four new heat recovery units. Each unit will include standalone controls and have the ability to operate at five different speeds and two different ventilation modes. All four units will be mounted in the crawlspace supply and exhaust ductwork will be provided to the units through the storage spaces on the first floor. Wall hoods will be used to reduce weather intrusion into the building. Exhaust hood will be located to ensure code minimums to operable windows and exterior doors. The units will be zoned based on occupancy. Each unit will have an integral defrost mode to reduce heat frosting and improve year around efficiencies. Ventilation air will be ducted through the crawlspace and supplied to each room. Exhaust will be drawn from common spaces and restrooms. Light commercial grilles and registers will be provided with opposed blade dampers for balancing.

Fire Protection:

The current design does provide fire protection for the second floor apartments alone. New fire service will be routed from the crawlspace to the second floor apartments. Sidewall sprinkler heads will be used to minimize impacts to the apartments.

Controls:

The first floor controls will consist of individual room thermostats for each distinct area. Ventilation controls for the heat recovery unit will be located in common spaces. The ventilation controls will allow for multiple settings to allow adjustments for building occupancy. The heating coil associated with the heat recovery unit will be standalone and setup to provide 75 deg F supply ventilation air (adjustable). The second floor controls are to remain as is.

Energy Conservation and Sustainability:

LEED certification for commercial interiors will be provided. The enhanced HVAC and plumbing systems, as described above, will contribute to achieving of LEED points for this facility. In addition to the sustainability features, the benefit of lower operating and maintenance factors will be an added benefit.

ELECTRICAL SYSTEMS - BASIS OF DESIGN

Codes and Standards:

The following codes, standards, and statutes were applied for this assessment:

- 2009 International Building Code (IBC)
- 2009 International Fire Code (IFC)
- 2008 National Electric Code (NEC)
- NFPA 101: Life Safety Code
- NFPA 72: National Fire Alarm and Signaling Code
- Alaska Statute AS 18.70.095

We will use the following additional standards as a basis of design for this project:

- Illuminating Engineering Society of North America (IESNA) Handbook, Tenth Edition.
- UAF Division 26, 27, 28 Design Standards

EXISTING CONDITIONS SURVEY OF ELECTRICAL SYSTEMS

Electrical Service:

Nushagak Electric and Telephone Cooperative provides electrical service to the NAPA Building via a 25kVA pole-mounted transformer, which solely serves the building. The overhead electrical service feeds a 400A-rated, 240/120V, single-phase, 3-wire meter center mounted on the exterior west wall of the building. The meter center has four (4) service meters and four (4) 100A-rated service main breakers. Three of the services feed the second-level apartments and the fourth service feeds the first-level NAPA auto parts store.

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Power Distribution:

The NAPA auto parts store has an existing 100A, 240/120V, single-phase, 3-wire, recessed Square-D QO load center panelboard with 24-poles. There are three spaces available for future use. Existing breakers are plug-in style breakers. Loads on this panelboard consist of receptacle loads, lighting loads, garage door, and boiler equipment loads.

The second floor apartments each have a 100A, 240/120V, single-phase, 3-wire, recessed Square-D QO load center panelboard with 16-poles. Existing breakers are plug-in style breakers. Panel loads throughout the three apartment included receptacle and lighting, washer and dryer, dishwasher, and range loads. Existing panelboards in all three apartments were noted to be in fair condition.

NEC Article 210.12 in the 2008 National Electric Code requires arc-fault circuit interrupter (AFCI) protection in dwelling unit family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms or areas. The breakers serving these areas are not AFCI-rated circuit breakers.

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Wiring Devices

The quantity of receptacles in the NAPA auto parts store is limited and serves specific equipment loads only.

Exterior head bolt outlets (HBO) for the tenants are located on the east end of the building, and are building-mounted. The covers are broken off, and should be replaced per NEC 406.8(B). According to the current building manager, the HBOs are never used, and can be removed.

NEC 210.52(E)(3) requires a ground-fault circuit interrupter (GFCI) rated receptacle at balconies, decks and porches of dwelling units. These exterior receptacles were not observed at these locations for each apartment.

Lighting:

Exterior illumination is provided via wall-mounted high-pressure sodium (HPS) luminaires. There are two HPS luminaires on the north wall, one on the west wall, and one on the south wall. Each dwelling unit has an additional incandescent luminaire mounted adjacent to the doorway. Existing exterior luminaires are in fair condition.

The NAPA auto parts sales floor has 5 rows of fourteen (14) surface-mounted, T12, 2lamp fluorescent strip lights. The stocking area in the back of house has twenty-one (21) strip lights. Two of the offices have a 1x4 surface-mounted fluorescent wraparound fixtures and the restroom has a fan/light combination unit. It is recommended that the existing light fixtures be demolished and not be reused for future renovation projects for the first level.



The interior illumination in the apartments is provided via ceiling-mounted incandescent fixtures in the bedrooms, bathroom, and corridors. The kitchen and laundry areas have a

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surface, ceiling-mounted fluorescent luminaire. Existing interior luminaires are in fair condition.

The crawl space illumination is provided via incandescent fixtures. Fixtures appear to be in fair condition.



Emergency Exit Signage and Egress Lighting:

The NAPA auto parts store has an exit sign above the main exit door and a second exit sign at the back of house exit on the southwest corner of the building. Exit signage coverage is not sufficient to meet the requirements and intent of the IBC and NFPA 101.

Emergency egress lighting is provided above the main exit door at the sales floor and by the NAPA store panelboard at the back of house. There is insufficient illumination to safely exit the building.

The exit discharge area must also be provided with emergency illumination at the exterior of the facility per NFPA 101.



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Telecommunications and Data:

Nushagak Electric and Telephone Cooperative provides telephone and internet service to the NAPA Building. The overhead telephone service is adjacent to the overhead electrical service. The telephone network interface panel is located to the left of the existing electric meter center. The telephone terminal board (TTB) is located in the garage bay area on a plywood board adjacent to the distribution panel. Punch down blocks and telephone switch are mounted to the TTB.



Fire Alarm:

The building currently does not have a fire alarm system or a fire suppression system.

Battery-operated smoke alarms are provided outside of bedrooms; however, smoke alarms are not currently installed inside the bedrooms as required by IBC 907.2.11.2(2). Carbon monoxide detection devices must be installed in the dwelling units per AS 18.70.095 - Smoke and Carbon Monoxide Detection Devices.

FACILITY RENOVATION DESIGN

Electrical Service:

The existing 100A service for the first level is not sufficient to support the new renovation. The first level alone will require up to a 200A, 240/120V, single-phase, 3-wire service to support new functions intended for the space. This service upgrade will require the meter pack to be upgraded to a 600A service with each individual service

rated at 200A. The 25KVA pole mounted transformer will need to upsized to a 50KVA pole mounted transformer to support the additional loads.

The existing grounding system will need to be upgraded to support the larger electrical service for the building.

Power Distribution:

A new 200A, 240/120V, single-phase, 3-wire panelboard will be provided to support the first level electrical loads, existing exterior lighting, and mechanical systems supporting the building.

Existing panelboards in the dwelling units are in fair condition and may remain. Existing circuit breakers serving dwelling unit dining rooms, living rooms, bedrooms, closets, hallways, or similar rooms or areas will need to be replaced with AFCI-rated circuit breakers.

Wiring Devices

All existing wiring devices on the first level will need to be demolished, and replaced with all new 125V, 20A grounding type receptacles and 125V, 20A light switches. Receptacles will be installed throughout the building to support the designated usage of each of the new rooms.

Lighting:

Exterior lighting will be replaced with high efficiency LED fixtures. Each of these fixtures will be provided with a motion detector and will operate at a low light output mode until motion is detected. All exterior lighting will be controlled by a single photosensor controlled contactor.

All existing interior light fixtures on the first level will be demolished and replaced with energy-efficient, surface-mounted fluorescent fixtures. Due to minimal plenum space between the ceiling of the first level and the floor of the second level, low-profile, surface-mounted fixtures will be used for the first level. The renovation will be illuminated per IESNA recommendations and UAF standards. The lighting in each room will be controlled by occupancy sensors with switches used in utility rooms. The conference room will provided with dimming switches for improved controllability.

Existing interior apartment light fixtures may remain until further plans are projected for the second level apartments.

Emergency Exit Signage and Egress Lighting:

All existing emergency exit signage and egress lighting will need to be demolished, and a new exit signage and egress lighting design will need to be provided to support the new function of the first level. Battery-backed, wall-mounted LED fixtures will be provided to provide emergency egress lighting in accordance to the IBC. LED remote heads will be installed at the exterior exit doors to illuminate the exit discharge.

Communications:

The existing service demarcation will be relocated to a dedicated Comm Room within the renovation. A new wall-mounted data rack with integral fan and surge suppression, and two (2) 48-port data patch panels will be provided on the rack. The room will be provided with a fire-treated plywood board on one wall to support patch panels and the telephone switch. CAT6 cabling will be provided to support data and telephone.

All data outlets shall have three (3) RJ45, CAT-6 cabling ports. Data outlets shall be labeled with data patch panel equipment number and port number.

Fire Alarm:

Per IBC 907.2.3, Group E occupancy does not require a manual fire alarm system if the occupant load is less than 50.

A fire alarm system consistent with IBC and NFPA 72 will be provided.

CIVIL SYSTEMS - BASIS OF DESIGN

Existing Site Conditions:

Site Location

The project location is the NAPA building in Dillingham, Alaska on "D" Street.

The site is currently developed. Paved areas include parking spaces located at the northwest face of the building and a concrete loading ramp to the garage door on the southwest side of the building. The remaining parking areas, along with the alley on the southeast side of the building are gravel.

The building, to which the renovation and future addition will be constructed, consists of one two story building. The future addition will be two stories.

Site Topography

A site survey has not been received by the A/E team as yet. Site photos indicate that the site drains well away from the building. Existing drainage patterns have yet to be determined.

Site Soils

At this time a geotechnical investigation for the site has not been performed.

Existing Utilities:

Water

As-built information has not been received by the A/E team as yet. The existing building is serviced by the city water utility and is believed to enter the building near the most southern corner of the building.

Sewer

As-built information has not been received by the A/E team as yet. The existing building is serviced by the city sewer utility. The sewer service is believed to exit the building near the most southern corner.

Storm

Existing storm water as-built information has not been received by the A/ E team as yet. The 2009 building as-built shows a S torm Drain Manhole to the southwest of the building.

RECOMMENDATIONS TO SUPPORT FACILITY RENOVATION

The scope of this project is to renovate the first floor of the existing NAPA building to provide operation functions for the UAF Bristol Bay Campus. A future project may be an addition to the northwest side of the building.

Site Grading

Development of the site will provide positive drainage away from the new addition for a minimum of 10 ft. Drainage will be achieved by grading the existing ground surface surrounding the future addition.

Site Drainage

The site survey has not been received by the A/E team as yet. However, the existing site drainage will maintain the predominate drainage patterns to the extent possible.

Interior roof drains are not planned for this project. The new building addition's roof will be allowed to drain to the surface where it will combine with existing surface drainage patterns.

The project area is under 1.0 acres. As such a Storm Water Pollution and Prevention Plan (SWPPP) will not be required to comply with EPA or ADEC requirements. A Notice of Intent (NOI) will not be required either.

Ground water may be encountered during the construction process depending on rainfall events and the time of construction.

Parking Areas

There are no proposed changes to the existing parking areas for the first floor renovations. Using the B-Occupancy standard of 1 parking space per 300 sf, there are 12 spaces required for the Level 1 c lassrooms/offices. The Level 2 r esidential occupancies require one parking space per unit. A total of 15 parking spaces are required for the Allied Health building. An ADA parking area is provided on the northwest side of the building. There is an accessible route from this ADA parking area to the main entry door. The primary parking area for the building is across D St. A D St crossing area is recommended for direct access to the Applied Science building. UAF will coordinate with the City of Dillingham to establish a crossing location and features.

Utilities:

Water

Modifications to the existing water service are not expected for this project. However, if it is determined that a sprinkler system is required, the water service will likely require upsizing to provide enough water for the system.

Sewer

This project will not require modifications to the existing sewer.

On-site Storm

An on-site storm drain system will not be provided as part of this project. The roof and site will be allowed to surface drain to existing adjacent drainage patterns.





UNIVERSITY OF ALASKA FAIRBANKS BRISTOL BAY CAMPUS APPLIED SCIENCE DILLINGHAM, ALASKA

PROJECT NO. 2012130 BBAS

95% DESIGN SUBMITTAL



McCOOL CARLSON GREEN ARCHITECTURE - INTERIOR DESIGN - PLANNING 421 W 1st Ave. Suite 300 ANCH., AK 99501 (907) 563-8474

JOB NO. 2012011 REVIEWED BY: PROJ. MGR.: SEB DRAWN BY: WZ, DP Michael P. Carlson DATE: 09-27-2012 REVISIONS:

TOP OF PARAPET

TOILET PAPER

TACK SURFACE

TREADS

TYPICAL

TOP

TS TYP

TP

TR

STANDARD ABBREVIATIONS

OVER

OUTSIDE AIR

OUTSIDE DIAMETER

OWNER FURNISHED

CONTRACTOR INSTALLED

ON CENTER

	FAF FD FDN	FLUID APPLIED SPORTS FLOORING FLOOR DRAIN FOUNDATION	O/ O/A OC OD
DR	FE FIN FIXT FF FLASH	FIRE EXTINGUISHER FINISH FIXTURE FACTORY FINISH FLASHING FLOOD	O.F./C.I. OFD OFF OH
	FUR FOF FOS FPW	FLOOR FACE OF FINISH FACE OF STUD FIRE RETARDANT	OPNG OPP
V WALL	FRP	TREATED PLYWOOD FIBERGLASS REINFORCED PLASTIC	P PC
	FRT FT FTG FURR	FIRE RETARDANT TREATED FOOT OR FEET FOOTING FURRING	PERF P-LAM PLWD PLY PP PS
	GA GALV GFRC	GAUGE GALVANIZED GLASS FIBER REINFORCED CEMENT	PT PNL PR
	GL GWB GYP	GLASS GYPSUM WALLBOARD GYPSUM	R RAF R/A RB PD
AL PIPE RY UNITS	H HDPB HDW HDWD HORIZ HP HR HT	HIGH HIGH DENSITY PARTICLE BOARD HARDWARE HARDWOOD HORIZONTAL HORSEPOWER HOUR HEIGHT	RE REINF REQ'D REV RG RF RM RO RT RUB
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N	KIT	KITCHEN	Ú
NT OF PUBLIC	L LAM LAV LS	LONG LAMINATED LAVATORY LAG SCREW	<u>DET/</u>
	M MATL	MEN MATERIAL	A
	MAX MB MBR MECH MFP	MAXIMUM MARKER BOARD MEMBER MECHANICAL METAL FACED PLYWOOD	WAL
ENE	MFR MFRD MIN MISC MO	MANUFACTURER MANUFACTURED MINIMUM MISCELLANEOUS MASONRY OPENING	
	MTL MULL	METAL MULLION	
IRE	N NIC	NONE / NOT APPLICABLE NOT IN CONTRACT	DUIL
EILING	NOM NTS	NOMINAL NOT TO SCALE	A (A00
			\

OFD OFF OH	OVER FLOW DRAIN OFFICE OPPOSITE HAND / OVERHEAD	SEC SECT SF SHT	SECRETARY SECTION SQUARE FOOT SHEET	UBC UL UNO	UNIFORM BUILDING CODE UNDERWRITERS LABORATORY UNLESS NOTED OTHERWISE
OPNG OPP	OPENING OPPOSITE HAND	SHTG SHR SIM SM	SHEATHING SHOWER SIMILAR SURFACE MOUNT	VT VR VERT	VINYL TILE VAPOR RETARDER VERTICAL
P PC PERF P-LAM	PAINT PORCELAIN CERAMIC TILE PERFORATED PLASTIC LAMINATE	SPECS SQ SS STD	SPECIFICATIONS SQUARE STAINLESS STEEL STANDARD	VEST VST	VESTIBULE STAIR TREAD
PLWD PLY PP PS PT PNL PR	PLYWOOD PLYWOOD WAINSCOT PLASTIC PANEL WAINSCOT PROJECTION SCREEN PRESERVATIVE TREATED PANEL PAIR	STD STL STRUCT ST STL SUSP SV T	STANDARD STEEL STRUCTURAL STAINLESS STEEL SUSPENDED SHEET VINYL TOILET	W W/ WC WD WFB WOM WRGWB	WIDE / WOMEN WITH WATER CLOSET WOOD WOOD FIBER BOARD WALK OFF ENTRY CARPET WATER RESISTANT GYPSUM
R RAF R/A RB	RADIUS / RISER RAISED ACCESS FLOOR RETURN AIR RUBBER BASE	TEL T&G TOB TOD TOEB	TELEPHONE TONGUE & GROOVE TOP OF BEAM TOP OF DECK TOP OF EXISTING BEAM	W/O WP WWF	WALLBOARD WITHOUT WATERPROOF WELDED WIRE FABRIC
RD REF REINF REQ'D REV RG	REFERENCE / REFRIGERATOR REINFORCED REQUIRED REVISED/REVISION REFRIGERATOR	TOED TOEJ TOEP TOJ	TOP OF EXISTING DECK TOP OF EXISTING JOIST TOP OF EXISTING PARAPET TOP OF JOIST	NOTE: Mechar abbrevi	Reference Schedules, Structural, nical, Electrical for additional ation legends.
RF RM RO RT RTT RUB	ROOF ROOM ROUGH OPENING RUBBER TILE RUBBER TIRE TILE RUBBER ANTI-SLIP		<u> </u>		TYPICAL: DIMENSIONS ARE FROM FACE OF STUD (FOS) TO FACE OF STUD (FOS) UNLESS OTHERWISE NOTED.
			1 1/2" CLR -		INDICATES "CLEAR" DIMENSION FROM FACE OF FINISH (FOF) TO FACE OF FINISH (FOF).
		SECTION		DNING	CONVENTIONS
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WALI	L SECTION SYMBOL		5' DIA. REFI CIRCLE FO CLEARANC	ERENCE R E	
	A	A	DOOR KEY		(101)
'					<u>^</u>
AC	000	A000	WINDOW K	EY	(1)
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	DING SECTION SYMI		WINDOW K ROOM TAG 3 SHEET NO	EY TE KEYS	1 ROOM 101 000 SF 2 ^
	DING SECTION SYMI	A000 BOL A000 C MULTIPLE	WINDOW K ROOM TAG SHEET NO ASSEMBLY	EY TE KEYS TAG	1 ROOM 101 000 SF 2 1

SEALER

CEILING

SUPPLY AIR

SCHEDULE

SMOKE BARRIER

SUSPENDED ACOUSTICAL

SB SAC

S/A

SCHED

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REFERENCE CODE PLAN - LEVEL 2

2

G201 / 1/8" = 1'-0"



CONSTRUCTION TYPE: OCCUPANCY GROUPS:

OCCUPANCY SEPARATIONS:

* NO HAZARDOUS CHEMICALS IN LABS

OCCUPANT LOADS: VOC/LABS 1732/50 = 35 TELEPRESENCE 275/14 = 19 OFFICE/LIBRARY 751/100 = 8 STORAGE 271/300 = 1 TOTAL OCCUPANT LOAD: 63

TABLE 1021.2: B OCCUPANCY > 49 OCCUPANTS REQUIRES 2 EXITS

PLUMBING FIXTURES PER 1997 UPC - TABLE 4 - 1:

SCHOOLS: COLLEGES AND UNIVERSITIES WOMEN: 2 WC, 1 LAV MEN: 1 WC, 1 URINAL, 1 LAV 1 DRINKING FOUNTAIN 1 JAN. SINK

FUEL TANK SEPARATION – 5' MIN.

LEGEND

<u> </u>	1 - HOUR FIRE I ABOVE
	ACCESSIBLE R
4 115 SF	ROOM NUMBEF ROOM AREA
\rightarrow	EXIT DIRECTIO
	EXIT ACCESS F
⊢⊖ FE	FIRE EXTINGUI
	FIRE EXTINGUS

CODE INFORMATION

V-B - LEVEL 2:13R SPRINKLER SYSTEM

- B EDUCATIONAL AFTER 12TH GRADE*
- R-2 RESIDENTIAL

B/R-2 1 HOUR CEILING/FLOOR R-2 1 HOUR BETWEEN DWELLING UNITS (EXISTING)

2009 IBC

PARTITION WALLS TO UNDERSIDE OF FRAMING

ROUTE, NON RATED CORRIDOR

R

DN

PATH

JISER; WALL BRACKET MOUNT 2A - 10BC DED AND INSTALLED BY CONTRACTOR

SHER IN RECESED CABINET TO BE PROVIDED FEC AND INSTALLED BY CONTRACTOR

REVIEWED BY:			Michael P. Carlson		
JOB NO. 2012011	PROJ. MGR.: SEB	DRAWN BY: DP, WZ	DATE: 09-27-2012	REVISIONS:	
		Z		474	





BB CAMPUS APPLIED SCIENC

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SHEET NOTES

- INFILL (E) OPENING (1)
- (E) ELECTRICAL SERVICE TO REMAIN (7) NURSING SINK/CASEWORK 2
- 3 (E) CONCRETE FLOOR TO REMAIN
- 4 EPOXY COUNTERS
- 5 WORK BENCH - MODULAR UNITS
- 11) FUEL TANK

10 JANITOR SINK

6 CUBBIES - CASEWORK

(8) COMMONS SINK / CASEWORK W/ MICROWAVE SHELF

(9) LAV MOUNTED EMERGENCY EYEWASH

- (12) SLOPED GRAVEL FILL
- (13) MARKERBOARD
- (14) CRAWLSPACE ACCESS

- 17) BICYCLE RACK

- (15) WALL MOUNTED WATER STATION
- (16) WALL MOUNTED VIDEO SCREENS (PROVIDE BLOCKING)
- (18) 5' X 4' CONCRETE PAD
- (19) 5' X 6' CONCRETE PAD
- (20) BABY CHANGING STATION
- (21) NURSING PRIVACY CURTAIN

JOB NO.	. 2012011	REVIEWED BY:
PROJ. M	MGR.: SEB	
MCCOOL CARLSON GREEN	JBY: WZ	
ARCHITECTIBE INTERIOR DESIGN , DI ANNING	09-27-2012	Michael P. Carlson
421 W 1st Ave. Suite 300 ANCH., AK 99501 (907) 563-8474	:SNC	
ARCHITECTURE - INTERIOR DESIGN - PLANNING 421 W 1st Ave. Suite 300 ANCH., AK 99501 (907) 563-8474 REVISIO	SNC:	

LEVEL A N ב FLOOR REMODEL

SCIENC APPLIED (



FIRE EXTINGUISHER; WALL BRACKET MOUNT 2A - 10BC TO BE PROVIDED AND INSTALLED BY CONTRACTOR

WINDOW TYPE TAG

⊢⊖ FE

 \mathbf{X}

(E)

– X WALL TYPE TAG

EXISTING



 0'
 2'
 4'
 8'
 22X34 SHEET @ 1/8" = 1'-0"

 11X17 SHEET @ 1/16" = 1'-0"



GENERAL NOTES

- 1. DEMO EXISTING SIDING DOWN TO SHEATHING
- 2. NEW EXTERIOR WALL: WALL TYPE C
- 3. (E) METAL ROOF TO REMAIN

KEY NOTES

- 1 NEW WINDOW
- 2 EXISTING WINDOW TO REMAIN
- 3 NEW DOOR
- (4) EXISTING DOOR TO REMAIN
- (E) METAL ROOF TO REMAIN
- 6 REMOVE AND REINSTALL (E) SERVICE PANELS
- 7 NEW STAIR DECK AND RAILINGS, REUSE EXISITING DECK AND TREADS. SEE STURCTURAL
- 8 NEW FUEL TANK

2 3 **5** 6 〔1〕 **4** X 7 N (2)(2) (2) (2) UAF BBC $\underline{(1)} (\underline{1}) (\underline{1})$

	NOTEO	GENERAL	NOTES
KEY	NOTES		
(1)	NEW WINDOW	1.	DEM
(2)	EXISTING WINDOW TO REMAIN	2.	NEW
3	NEW DOOR	3.	(E) N
4	EXISTING DOOR TO REMAIN		
5	(E) METAL ROOF TO REMAIN		
6	REMOVE AND REINSTALL (E) SERVICE PANELS		
7	NEW STAIR DECK AND RAILINGS, REUSE EXISITING DECK AND TREADS. SEE STURCTURAL		
8	NEW FUEL TANK		

MO EXISTING SIDING DOWN TO SHEATHING

〔2〕

7

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22X34 SHEET @ 1/8" = 1'-0" 0' 2' 4' 8' 11X17 SHEET @ 1/16" = 1'-0"

Roof BOD 18' - 8"

Level 2 9' - 0"

Level 1 0"

FOOTING -4' - 0"

VEXTERIOR WALL: WALL TYPE C

METAL ROOF TO REMAIN

N

BUILDING ELEVATON - EAST C 1/8" = 1'-0" A403

KEY NOTES

- 1 NEW WINDOW
- (2) EXISTING WINDOW TO REMAIN
- 3 NEW DOOR
- (4) EXISTING DOOR TO REMAIN
- (5) (E) METAL ROOF TO REMAIN
- (6) REMOVE AND REINSTALL (E) SERVICE PANELS
- 7 NEW STAIR DECK AND RAILINGS, REUSE EXISITING DECK AND TREADS. SEE STURCTURAL
- 8 NEW FUEL TANK

GENERAL NOTES

- 1. DEMO EXISTING SIDING DOWN TO SHEATHING
- NEW EXTERIOR WALL: WALL TYPE C 2.
- 3. (E) METAL ROOF TO REMAIN

22X34 SHEET @ 1/8" = 1'-0" 8' 11X17 SHEET @ 1/16" = 1'-0"

BUILDING ELEVATON - NORTH C 2 A403 / 1/8" = 1'-0"

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