Board of Regents
SPECIAL MEETING AGENDA AND MATERIAL
November 19, 2012

Agenda
**Board of Regents**
**Special Meeting**
**Facilities and Land Management Committee**
Monday, November 19, 2012, 1:00 p.m. – 2:00 p.m.
1815 Bragaw Street, Room 205
Anchorage, Alaska

**Committee Members:**

| | |
|---|---|
| Carl Marrs, Committee Chair | Timothy Brady |
| Kirk Wickersham, Committee Vice Chair | Mary K. Hughes |
| Dale Anderson | Patricia Jacobson, Chair |

## I. Call to Order

## II. Adoption of Agenda

**MOTION**
**"The Facilities and Land Management Committee adopts the agenda as presented.**

**I. Call to Order**
**II. Adoption of Agenda**
**III. Full Board Consent Agenda**
**A. Approval of the University of Alaska Anchorage Campus Master Plan Amendment for the Engineering Parking Garage**
**B. Schematic Design Approval for the University of Alaska Anchorage Engineering and Industry Project**
**IV. Future Agenda Items**
**V. Adjourn**
**This motion is effective November 19, 2012."**

## III. Full Board Consent Agenda

A. Approval of the University of Alaska Anchorage Campus Master Plan Amendment for the Engineering Parking Garage — Reference 1

The President recommends that:

**MOTION**
**"The Facilities and Land Management Committee recommends that the Board of Regents approve the campus master plan amendment for the University of Alaska Anchorage Engineering Parking Garage as presented. This amendment will be incorporated into the existing 2004 Campus Master Plan. This motion is effective November 19, 2012."**

POLICY CITATION
In accordance with Regents' Policy 05.12.030.C.3, a campus plan may be revised or amended from time to time. An amendment to accommodate a proposed specific capital project shall be considered and approved by the board prior to consideration of the proposed capital project.

RATIONALE AND RECOMENDATION
Reference 1 contains the campus master plan amendment documents. Chris Turletes, associate vice chancellor for Facilities and Campus Services, will review the request with members of the committee.

B. Schematic Design Approval for the University of Alaska Anchorage Engineering and Industry Project Reference 2

The President recommends that:

**MOTION**
**"Consistent with and expanding upon the limited schematic design approvals at the June 2012 and September 2012 meetings of the Board, the Facilities and Land Management Committee recommends that the Board of Regents approve the schematic design approval request for the University of Alaska Anchorage Engineering and Industry Project, including the parking garage, in compliance with the amended campus master plan, and authorizes the university administration to complete construction bid documents to bid and award a contract within the approved total project cost budget of $123.2M, and to proceed with project construction not to exceed a total project cost of $62.6M. This motion is effective November 19, 2012."**

POLICY CITATION
In accordance with Regents' Policy 05.12.043, Schematic Design Approval (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.

**TPC > $4 million will require approval by the Board based on recommendations from the Facilities and Land Management Committee (F&LMC).**

RATIONALE AND RECOMENDATION
Reference 2 contains the schematic design approval documents. Chris Turletes, associate vice chancellor for Facilities and Campus Services, will review the request with members of the committee.

## IV. Future Agenda Items

## V. Adjourn

University of Alaska Anchorage
School of Engineering

Meeting Date: Nov 19
Meeting Time: 1:00 PM

Discussion Points for the Special Meeting of the
UAA Board of Regents Facilities & Land Management Committee

1. Long Range Traffic Planning – Master Planning Site Plan Review and Discussion.

2. Structured Parking Garage
    a. Parking rational and MOA Requirements
    b. TIA and Traffic Projections
        i. Mallard at UAA Dr. Intersection
        ii. King Career Center at Mallard, at Northern Lights.
        iii. UAA at Providence Dr.
    c. Images of revised design based on September Regents Meeting Comments
    d. Surface Parking Option Layout.

Supporting Documents
Master Planning Site Plan
Traffic and Parking Impacts
Surface Parking Option Layout

University of Alaska Anchorage
School of Engineering

November 9, 2012

New Engineering and Industry Building
Traffic and Parking Impacts

The New Engineering and Industry Building coupled with the renovation of the existing Engineering Building will provide laboratory and classroom space to meet the need of current programs as defined by the 2010 UA Engineering Plan by Ira Fink Associates. In addition to serving the current program needs the project will allow engineering academic programs and support services that are currently off campus at the University Center (ESPM Program faculty and Staff) and the ULB Annex (fabrication shop) to be brought back to campus.

The impact of the project on traffic at the UAA campus can be described as follows: 1) shifting of existing traffic loads (trips) from one area of campus to another by building the garage at the Mallard site and eliminating parking in front of the Book Store, 2) additional parking spaces required due to the repatriation of the off-site programs, and 3) some anticipated growth of current engineering programs based on greatly improved classrooms and laboratories. Regardless of the actual need for parking or the impacts to traffic discussed above the project must conform to the land use requirements of the Municipality of Anchorage (MOA). These requirements are set forth in the Anchorage Municipal Code and Ordinances, Title 21.

Municipality of Anchorage Parking Requirements for the new Engineering & Industry Building:

1. The new building is sited on an existing parking lot south of the University Book Store. The facility site is displacing 260 existing parking spaces. The MOA will require these spaces to be replaced on campus. The New building site configuration recaptures 24 of these spaces leaving a deficit of 236 spaces to replace.
2. Under the requirements of MOA Ordinance, Title 21 new development in zoning districts other than Downtown Business Districts must provide off-street parking at a rate set forth in tables contained in Title 21. This project is located on university owned property zoned as PLI (Public Lands and Institutions). Title 21.45.080, R.3 lists universities as one space per 300 gross square feet (GSF) of building area. Although the useable space in the building is approximately 75,000 sf., the gross area is 81,500 gsf. as calculated using municipal standards, creating a requirement for an additional 272 parking spaces.
3. The total combined parking for the project to meet the minimum requirements of MOA Title 21 is then 236+272=508 spaces. The new Parking structure as currently designed provides 485 spaces. Within the PLI district a parking waiver can be requested for variations within 10% of the requirement. Our deficit of 23 parking spaces falls within this percentage and so we will be requesting a Staff Waiver for the 23 stall shortfall. Note that the parking calculations are based on Ordinance.

Surface Parking Options

Surface parking lot(s) that would provide an equivalent number of stalls as the garage (485 parking spaces) would require approximately 9.5 acres in land area. The Structure Parking requires 3.4 acres. The surface lot would have to be located within the west campus boundary area to meet MOA adjacency requirements. This option was reviewed by the design team and UAA FP&C and dismissed as impractical and an inappropriate use of limited UAA land and associated impacts. A significant disadvantage of surface parking is that many of the parking spaces would be far enough away from the developed areas of campus to discourage students from using them, thereby adding to the congestion already occurring in lots located in the center of campus. Other disadvantages include: increased operational cost for surface lot maintenance (snow removal); added light pollution; increased land clearing and extensive site work; increased pedestrian and traffic conflicts; and additional impact on neighbors.

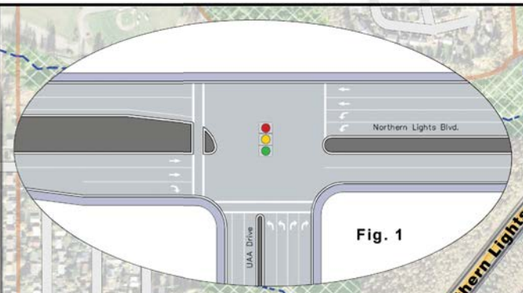


Fig. 1

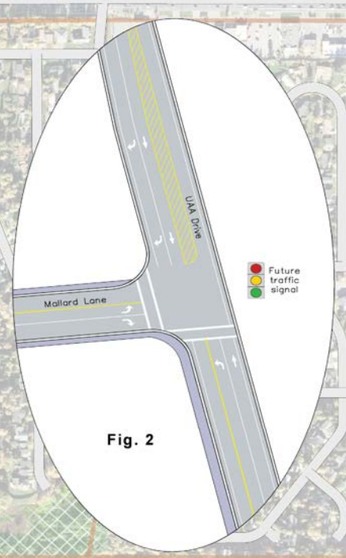


Fig. 2

Fig. 1

Fig. 2

E Northern Lights Blvd.

Goose Lake

Parking Garage

Alumni Dr.

UAA Drive

Lake Otis Pkwy.

W Campus Dr.

Providence Dr.

Wells Fargo Sports Complex

Student Union

Rasmuson Hall

Wendy Williamson Auditorium

Seawolf Drive

Engineering Bldg.

Central Garage

Consortium Library

NE Parking Garage

Fine Arts Building

CP Integrated Science Bldg.

Mosquito Lake

Sports Arena

Wellness St.

Elmore Rd.

University Lake Dr.

University Lake

Middle Fork Chester Creek

E 36th Ave.

E 40th Ave.

E 42nd Ave.

E Tudor Rd.

Laurel St.

Piper St.

Dale St.

Ambassador Dr.

Tudor Centre Dr.

## Legend

- UAA Buildings
- Property Boundary
- Lakes
- MOA Wetlands
- Planned Facility Outline
- MOA Short Term Projects 2011-2023
- Future Trail Over / Under Crossings
- UAA Future Projects
- Future UAA Loop Road
- UAA 1 To 5 Years
- Potential Side Street Closure
- Existing Trails
- 65 FT Lake Setback

350 0 175 350 700

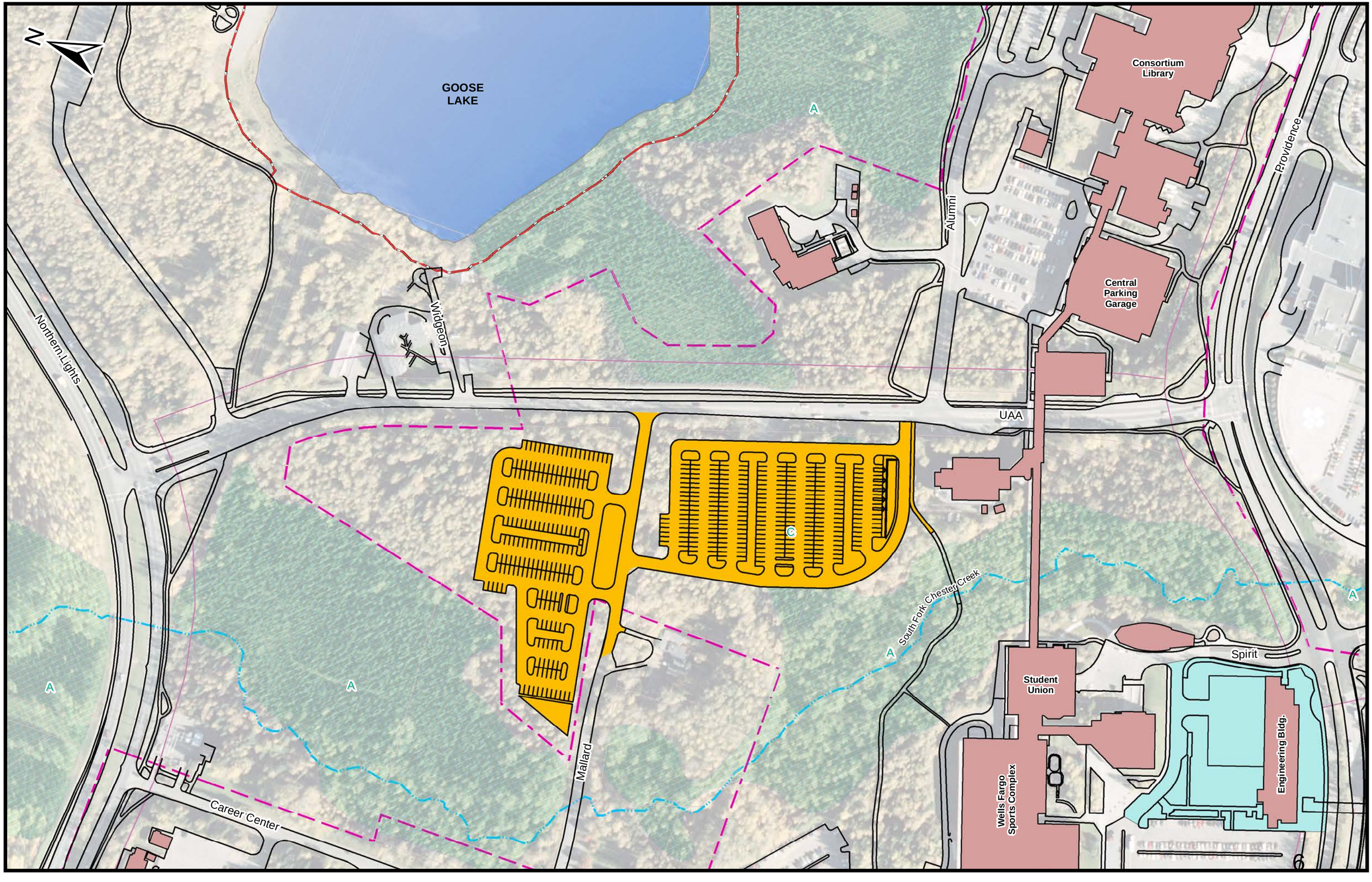
GRAPHIC SCALE

Team Members:
ECI/Hyer Architecture
CRW Engineering Group
ZGF Architects
Corvus Design

MOA Short Term Project Source:
AMATS 2035 Metropolitan Transportation Plan

Created: Nov 8, 2012

UAA UNIVERSITY of ALASKA ANCHORAGE


N
GOOSE LAKE
A
Consortium Library
Providence
Alumni
Central Parking Garage
Widgeon
Northern Lights
UAA
C
South Fork Chester Creek
A
Spirit
Student Union
Wells Fargo Sports Complex
Engineering Bldg.
Mallard
Career Center
A
A
A
A

UNIVERSITY OF ALASKA
ANCHORAGE

| | |
|---|---|
| Total Project Cost | $ 123,200,000 |
| Approval Level: | Full Board |

## SCHEMATIC DESIGN APPROVAL

TO: Pat Gamble
President

THROUGH: Kit Duke
AVP Facilities and Land Management

THROUGH: Tom Case
Chancellor

THROUGH: Elisha Baker
Interim Provost

THROUGH: William Spindle
Vice Chancellor, Administrative Services

THROUGH: Chris Turletes
Associate Vice Chancellor, UAA Facilities & Campus Services

THROUGH: John Faunce
Director, UAA Facilities Planning & Construction

FROM: John Hanson
Sr. Project Manager

DATE: November 5, 2012

SUBJECT: Project Type: NC, R&R Project
Project Name: UAA Engineering and Industry Building
Project No.: 08-0024

Cc:

UNIVERSITY OF ALASKA
ANCHORAGE

# *SCHEMATIC DESIGN APPROVAL*

| | |
|---|---|
| **Name of Project:** | **Engineering and Industries Building** |
| **Project Type:** | **NC, R&R** |
| **Location of Project:** | **UAA, Main Campus, Engineering and Industries Building (AS162), Anchorage, AK** |
| **Project Number:** | **08-0024** |
| **Date of Request:** | **November 05, 2012** |

| | | |
|---|---|---|
| **Total Project Cost:** | **$ 123,200,000** | |
| **Approval Required:** | **Full Board** | |
| **Prior Approvals:** | **Preliminary Administrative Approval** | **November 2011** |
| | **Formal Project Approval** | **February 18, 2011** |
| | **Schematic Design Approval (partial)** | **June 8, 2012** |
| | **Schematic Design Approval (partial)** | **September 28, 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**

**"Consistent with and expanding upon the limited schematic design approvals at the June 2012 and September 2012 meetings of the Board, the Facilities and Land Management Committee recommends that the Board of Regents approve the schematic design approval request for the University of Alaska Anchorage Engineering and Industry Project, including the parking garage ~~facility~~, in compliance with the amended campus master plan, and authorizes the university administration to complete construction bid documents to bid and award a contract within the approved total project cost budget of $123.2M, and to proceed with project construction not to exceed a total project cost of $62.6M. This motion is effective November 19, 2012."**

RATIONALE AND REASONING

**Background**

UAA Engineering has been experiencing growth in its enrollments since Board adoption of the 2007 Engineering Initiative. New baccalaureate engineering and related associate and certificate programs were created to meet industry demand and have been one of the driving forces for the enrollment increases.

The existing engineering building was built in the early 1980s and is significantly undersized for the current enrollment as documented in the 2010 UA Engineering Plan. The site selected for the new Engineering Building is directly south of the Bookstore and will eventually connect with the new Health Sciences Building across Providence Drive.

This study conducted by Ira Fink & Associates confirmed the need for additional space to meet the existing programmatic need for the engineering space at both UAA and UAF. Additional space would be comprised of classrooms, instructional laboratories, educational shops and office space to accommodate the high demand for engineers in Alaska. The UAA Master Plan approved by the Board of Regents in June 2004 also identified the need for additional space to meet the needs of the Engineering Program as it was configured at that time.

This project will accommodate current program requirements detailed in the Board-approved Engineering Initiative and allow for the consolidation of Engineering Programs currently being taught elsewhere on and off campus.

**Project Scope**

The project consists of three major components: 1) construction of the new four story, 75,000 gsf Engineering and Industry Building located on Providence Drive, in the UAA South Parking lot, 2) renovation of the existing three story, 40,000 gsf School of Engineering Building and 3) construction of a multi-story structured parking facility with approximately 500 parking spaces.

**A. ENGINEERING AND INDUSTRY BUILDING:**

The Engineering and Industry Building, previously granted SDA at the September 28, 2012 Board meeting, will be designed to accommodate the first phase of the School of Engineering expansion. At four stories, the building will be similar to the Health Sciences Building in height and scale due to the change in topography across Providence Drive. The southwest corner of the Engineering and Industry Building will incorporate a future pedestrian bridge across Providence Drive, linking the Engineering Building to the Health Sciences District. Phase II of construction will likely occur to the north of the Phase I building and will allow an enclosed connection to the campus spine circulation network. Outdoor areas will be integral to the building design, serving both as amenities for students, faculty and staff and as functional spaces for project work display and storage areas.

The first floor includes the lobby, teaching labs and building support spaces include storage, mechanical and electrical room. A double height project work area provides connecting crane access for the Structures Testing and Properties of Materials labs, and allows outdoor access for the service yard and deliveries. Additional mechanical teaching labs, e-learning classrooms, and a student commons are located on the second floor. The third floor consists of environmental, computer system and electrical teaching labs, as well as a faculty office suite. An HVAC teaching lab, computational lab and faculty office suite are located on the fourth floor. In order to display the building's mechanical systems, the boiler room and fan rooms are also located on the fourth floor in high visible locations along the main corridor.

**Engineering on Display**

The influence of the School of Engineering on the UAA campus, in industry, and as an economic driver in Alaska will be illustrated in the Engineering and Industry Building. Elements of the design may include:

- Building systems and materials express architecturally to highlight the engineering of the building itself and creative use of engineered materials in conventional and unconventional ways.

- Interactive displays, both active and passive, that integrate civil, structural, mechanical and/or electrical engineering design, as well as exhibits that celebrate UAA Engineering achievements.
- Corridors and other public areas incorporating interior glazing for visual connections to engineering laboratories and student project work areas. Views into unique laboratory spaces may serve to stimulate interest in engineering for students or visitors.

**B. EXISTING ENGINEERING BUILDING**

In conjunction with construction of the Engineering and Industry Building the existing Engineering Building, previously granted SDA at the June, 7, 2012 Board meeting, will be upgraded and fully renovated to complete the first phase of the School of Engineering expansion. The three-story building was originally designed in 1980 as a classroom and office building, and has been modified over the last thirty years to accommodate various academic programs mostly recently the School of Engineering. Engineering labs, classrooms and offices will be relocated to the new Engineering and Industry Building, and existing spaces are intended to be renovated for the functions below. Equipment is insufficient for the program needs and will need to be purchased.

The lobby with an enclosed computational lab will be located in the first floor. The remainder of the floor will be dedicated to lab support spaces including the machine shop, wood shop, milling and lathing shop, composite materials lab, reverse engineering lab, and materials storage. Outdoor access to the service yard will be through two existing sets of double doors located on the east side of the building. The second floor will consist of classrooms, open student computational labs and Student Success and faculty office suite. The Dean's suite, faculty offices, computational labs and Geomatics labs will be located on the third floor.

**C. PARKING STRUCTURE**

This 500 space parking structure, the action item associated with this SDA request, will be a post tensioned concrete beam and slab structure with four levels of parking with the option of having a fifth level, accessible to faculty and students for research. Each level will have a 42" barrier at the perimeter for building safety. This will also provide, or work in coordination, with head light screening required by local authorities. The façade, facing UAA Drive, will include architectural concrete making the finish of the garage appear similar to the metal panel exterior of the Engineering Building.

Each floor of parking structure, including the roof, will be serviced by one elevator and two stairs. This will meet access and exiting code requirements. A bridge will be developed for pedestrian connection to existing School of Engineering Building, and thus, to existing pedestrian spine linking students to other core facilities.

**D. TEMPORARY PARKING LOT**

Temporary Parking, previously granted SDA at the June 7, 2012 Board meeting, for approximately 240 vehicles may not be required if the parking structure can be completed early.

**Variance Report**

The Alaska State Legislature provided $4,000,000 for the UAA Engineering and Industry Building project during the 26th legislative session (2010-2011) and an additional $58,600,000 during the 27th legislative session (2011-2012). This total amount represents approximately half of the funding required for the project. The UAA plan for this initial funding is to complete the design for all facilities, construct the parking structure, and begin site work for the new building.

**Proposed Total Project Cost and Funding Source(s)**

| | | |
|---|---|---|
| 80101-564337 | FY 11 UAA/SW Engineering Plan | $ 140,000 * |
| 17172-564341 | FY 11 UAA Engineer Building Planning | $ 3,860,000 |
| | FY 13 Capital Budget | $ 58,600,000 |
| | FY 14 Capital Budget Request | $ 60,600,000 |
| | Total | $ 123,200,000 |

* This was set aside for the 2010 UA Engineering Plan.

**Estimated Annual Maintenance and Operating Costs (O&M)**

| | |
|---|---|
| M & A | $ 1,293,640 / Year |
| Custodial: | $ 103,500 / Year |
| Grounds: | $ 310,800 / Year |
| Admin: | $ 310,809 / Year |
| Utilities: | $ 1,154,400 / Year |

**Consultant(s)**

Architect: Livingston Slone, Inc.
Associate Architect: Ayers/Saint/Gross
Laboratory Design: Research Facility Design
Mechanical/Electrical Engineering: AMC Engineers
Civil Engineering: Livingston Slone, Inc.
Structural Engineering: Reid Middleton Engineers
Geotechnical Engineering: Dowl, LLC
Landscape Architect: Corvis Design, Inc.
Cost Estimating: Estimations, Inc.

**CMAR Contractor**

Neeser Construction, Inc.

**Other Cost Considerations**

The cost estimate for the schematic design indicated that the current scope of the project may need to be reduced to stay within the Total Project Cost of $123,200,000. Items to be considered include, but not limited to: 1) eliminating the roof and reducing the size of the parking garage, 2) seeking road upgrade funding for Mallard Drive realignment, 3) defer the exterior siding, curtain wall of the atria, elevator refurbishment and installation of the smoke management system in the atrium of the existing building. The design development estimate for the new building and parking garage is currently under review with the CMAR contractor and project scope and/or budget elements will be adjusted as necessary to stay within budget. A similar review will be done for the existing building upon completion of design development for that building.

**Backfill Plan**

This new space currently does not exist on campus. Some relief in the existing engineering building will occur as labs are reconfigured and multi-purposed. The existing building will be reconfigured to supply the remaining scope items needed to meet the 2010 Engineering Plan space budget after the completion of the new building to allow existing spaces to be vacated for renovation.

**Schedule for Completion**

DESIGN

| | | |
|---|---|---|
| Conceptual Design | | August 2011 |
| *Formal Project Approval (Amended)* | | September 2011 |
| Schematic Design | | April 2012 |
| *Schematic Design Approval* | | June 2012 |
| Design Development | | December 2012 |
| Construction Documents | New Building | January 2013 |
| | Structure Parking | January 2013 |
| | Existing Building Renovation | February 2013 |
| BID & AWARD | | |
| Advertise and Bid | New Building | CMAR |
| | Structure Parking | January 2013 |
| | Existing Building Renovation | February 2015 |
| Construction Contract Award | | |
| | New Building | CMAR |
| | Structured Parking | February 2013 |
| | Existing Building Renovation | March 2015 |
| CONSTRUCTION | | |
| Start of Construction | New Building | April 2013 |
| | Structured Parking | April 2013 |
| | Existing Building Renovation | April 2015 |
| Date of Beneficial Occupancy | New Building | July 2015 |
| | Structured Parking | December 2013 |
| | Existing Building Renovation | July 2016 |

**Procurement Method for Construction**

| | |
|---|---|
| New Building Construction: | Construction Manager at Risk (Neeser Construction) |
| Existing Building Renovation: | Construction Manager at Risk (Neeser Construction) |
| Parking Structure: | Design-Bid-Build |
| Temporary Parking Lot: | Design-Bid-Build (If required) |

**Affirmation**

This project complies with Board Policy, the amended campus master plan, and the project agreement.

**Supporting Documents**

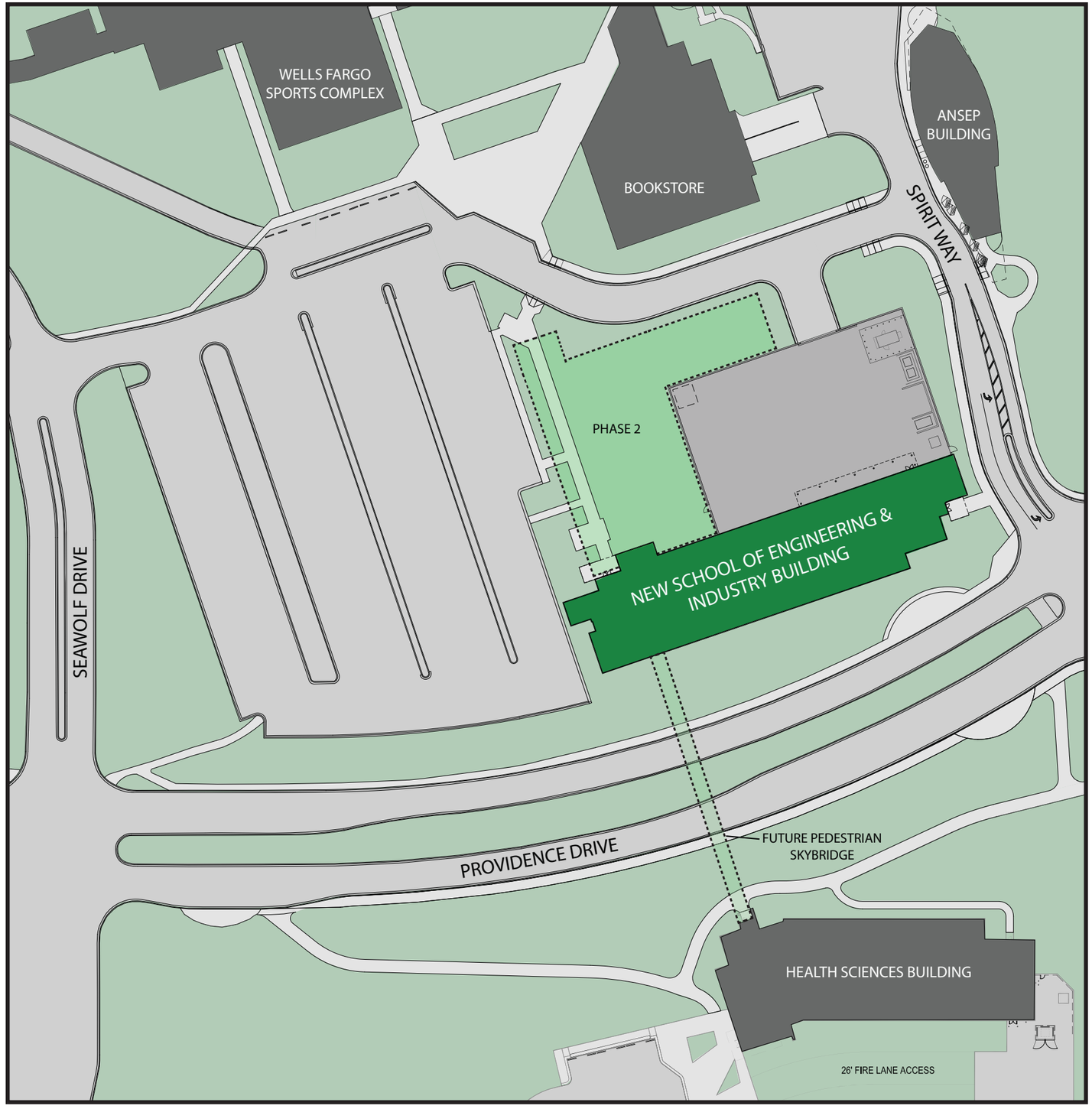
One-page Project Budget
New Building Site Plan
Renderings – UAA Engineering and Industries Building
Site Plan – Parking Garage
Renderings – Parking Garage

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 ≤ $1.0 million will require approval by the AVP of Facilities and Land Management.

| UNIVERSITY OF ALASKA | | | |
|---|---|---|---|
| | | | |
| Project Name: UAA Engineering Industry Building | | | |
| MAU: UAA | | | |
| Building: | Engineering | Date: | 10/31/2012 |
| Campus: | Anchorage | Prepared by: | J. L. Hanson |
| Project #: | 08-0024 | Acct #: | |
| Total GSF Affected by Project: | | | |
| **PROJECT BUDGET** | | FPA Budget | SDA Budget |
| **A. Professional Services** | | | |
| Advance Planning, Program Development | | 650,000 | $650,000 |
| Consultant: Design Services | | 7,900,000 | $7,900,000 |
| Consultant: Construction Phase Services | | 3,100,000 | $3,100,000 |
| Consultant: Extra Services (List: Special Inspections) | | 345,000 | $345,000 |
| Plan Review/Permits | | 4,312,000 | $4,312,000 |
| Professional Services Subtotal | | **16,307,000** | **$16,307,000** |
| **B. Construction** | | | |
| New Building (75,000 GSF) | | 54,767,283 | $54,767,283 |
| Existing Building (40,000 GSF) | | 11,530,190 | $11,530,190 |
| Parking Structure (204,000 GSF) | | 16,913,009 | $16,913,009 |
| Temporary Parking (125,000 GSF) | | 3,031,919 | $3,031,919 |
| Construction Contingency (10%) | | 8,624,240 | $8,624,240 |
| Construction Sub Total | | **94,866,641** | **$94,866,641** |
| *Construction Cost per GSF* | | *$0* | *$0* |
| **C. Building Completion Activity** | | | |
| Equipment | | $1,825,000 | $1,825,000 |
| Furnishings | | $1,850,000 | $1,850,000 |
| Move-Out Costs | | $250,000 | $250,000 |
| Move-In Costs | | $250,000 | $250,000 |
| Art | | $663,000 | $663,000 |
| Temp. Relocation Cost | | $1,250,000 | $1,250,000 |
| OIT Support / Equipment | | $1,300,000 | $1,300,000 |
| Maintenance Operation Support | | $300,000 | $300,000 |
| Building Completion Activity Subtotal | | **$7,688,000** | **$7,688,000** |
| **D. Owner Activities & Administrative Costs** | | | |
| Project Planning, Staff Support | | | |
| Project Management | | $4,312,120 | $4,312,120 |
| Misc. Expenses: Advertising, Printing, Supplies, Etc. | | $26,239 | $26,239 |
| Owner Activities & Administrative Costs Subtotal | | **$4,338,359** | **$4,338,359** |
| **E. Total Project Cost** | | **$123,200,000** | **$123,200,000** |
| ***Total Project Cost per GSF*** | | *$0* | *$0* |
| **F. Total Appropriation(s)** | | **$123,200,000** | **$123,200,000** |


SITE PLAN

NORTH


UAA
Engineering & Industry Building



SITE PLAN NORTH


UAA
Metal Panel Option 2

Metal Panel Option 2


UAA


UAA

F. Looking across intersection of UAA Drive & Alumni Drive