

**Washington State University**  
**Clean Technology Laboratory Building**  
**Application for Project Approval**  
**Design-Build Alternative Contracting Procedure**

1. Identification of Applicant

- (a) Applicant: **Washington State University**
- (b) Address: **110 Commons P.O. Box 643611 Pullman WA 99164-3611**
- (c) Contact Person: **Jeff Lannigan** Title: **Project Manager**
- (d) Phone Number: **(509) 355-7221** Fax: **(509) 335-6875** E-mail: [lannigan@wsu.edu](mailto:lannigan@wsu.edu)

2. Brief Description of Proposed Project

Please describe the project in no more than two short paragraphs.

**The Clean Technology Laboratory Building (CTLB) is a new interdisciplinary facility that will boost the state of Washington's high-demand research and education priorities in "Clean Technology:" the developing industries in energy management, renewable energy, biofuels, and the environment. The facility will house science and engineering programs advancing new technologies that reduce the state's reliance on foreign oil, minimize greenhouse gas emissions, and improve air and water quality. The 85,000 gross square foot CTLB will support the efforts of Power Engineering, the Center of Environmental Research, Education and Outreach (CEREO), the Laboratory for Atmospheric Research (LAR), the Center for Biofuels and Bioproducts (CBB), and the Advanced Renewable Energy researchers developing nanomaterials for use in catalysis for renewable energy and carbon capture.**

**The project is currently engaged in a programming effort to clearly define the project scope and create bridging documents for utilization by the Design-Build teams. Those involved in programming will be precluded from involvement in Design-Build teams.**

3. Projected Total Cost for the Project:

A. Project Budget

Costs for Professional Services (A/E, Legal etc.)	\$ 1,138,827
Estimated project construction costs (including construction contingencies)	\$ 42,458,837
Equipment and furnishing costs	\$ 3,366,840
Off-site costs	\$ 0
Contract administration costs (owner, CM, etc.)	\$ 2,346,741
Contingencies (design & owner)	\$ 3,301,162
Other related project costs (facility replacement, artwork, builder's risk, etc.)	\$ 1,060,128
Sales Tax	\$ 3,827,465
<b>Total</b>	<b>\$ 57,500,000</b>

B. Funding Status

**A total of \$5.8M was requested for the 2011-2013 biennium for design, of which \$2.5M was allocated by the state. The next known opportunity for funding is at the supplementary biennium budget cycle in mid-2012.**

4. Anticipated Project Design and Construction Schedule

**September 15, 2011      November 15, 2011      Programming**

January 15, 2012	April 15, 2012	Design Build Meetings
April 15, 2012	April 30, 2012	Select DB Team (at 50% SD)
April 30, 2012	May 31, 2012	Finalize Team / Award DB Contract
May 31, 2012	July 31, 2012	Complete Schematic Design (pending funding)
July 31, 2012	October 15, 2012	Design Development (pending funding)
October 15, 2012	July 1, 2013	Construction Documents (pending funding)
July 1, 2013	June 30, 2015	Construction (pending funding)
July 1, 2015		Occupancy (pending funding)

5. Why the D-B Contracting Procedure is Appropriate for this Project

Please provide a detailed explanation of why use of the contracting procedure is appropriate for the proposed project. Please address the following, as appropriate:

- If the design and construction activities, technologies, or schedule to be used are highly specialized and a D-B approach is critical in developing the construction methodology or implementing the proposed technology, (1) What are these highly specialized activities, technologies or schedule, and (2) Why is D-B critical in the development of the methodology or the implementation of the proposed technology?
- If the project design is repetitive in nature and an incidental part of the installation or construction, why is the design repetitive and incidental to the installation or construction?
- If regular interaction with and feedback from facilities users and operators during design is not critical to an effective facility design, why is regular interaction and feedback not critical?

**The science of Clean Technology is emerging and will continue to evolve in the coming years, thus the specific needs of the facility will change over the project's duration. Anticipating funding in several distributions and what could potentially be a protracted project schedule, a phased delivery is expected, with the building core and shell designed and constructed separately from later interior improvements specifically tailored to the most current research needs. A degree of repetition is expected; a typical lab module will be incorporated into the building design, and modular construction options will be explored. Thus the building core infrastructure will be highly repetitive, using standard module dimensions and typical utilities both to control cost and maintain future flexibility of the facility.**

**Given these unique qualities, the CTLB project will require a specialized and flexible team to maximize the effectiveness of the project and streamline its delivery. The project team must be able to continuously manage varying budgets and the associated risk. By utilizing a Design-Build delivery method, project costs will be continually evaluated, and a coordinated analysis of the budget will be performed throughout the project. This will increase the overall efficiency of the delivery process, and minimize disruption should project budgets be revised mid-project.**

6. Public Benefit

In addition to the above information, please provide information on how use of the D-B contracting procedure will serve the public interest. For example, your description must address, but is not limited to:

- How this contracting method provides a substantial fiscal benefit; or
- How the use of the traditional method of awarding contracts in a lump sum (the "design-bid-build method") is not practical for meeting desired quality standards or delivery schedules.

The CTLB project may experience a varying schedule and budget, and must maximize flexibility to address an emerging science, a phased project delivery, and to maintain project momentum. Utilizing Design-Build will minimize the risk of inefficiency and help assure a successful project completion without adding cost or schedule duration. It is also anticipated that by utilizing the D-B process, the partial project funding allotment will carry the project further into the design (and perhaps construction) than if it were divided into the distinct design and construction phases utilized by other delivery methods.

7. Public Body Qualifications

Please provide:

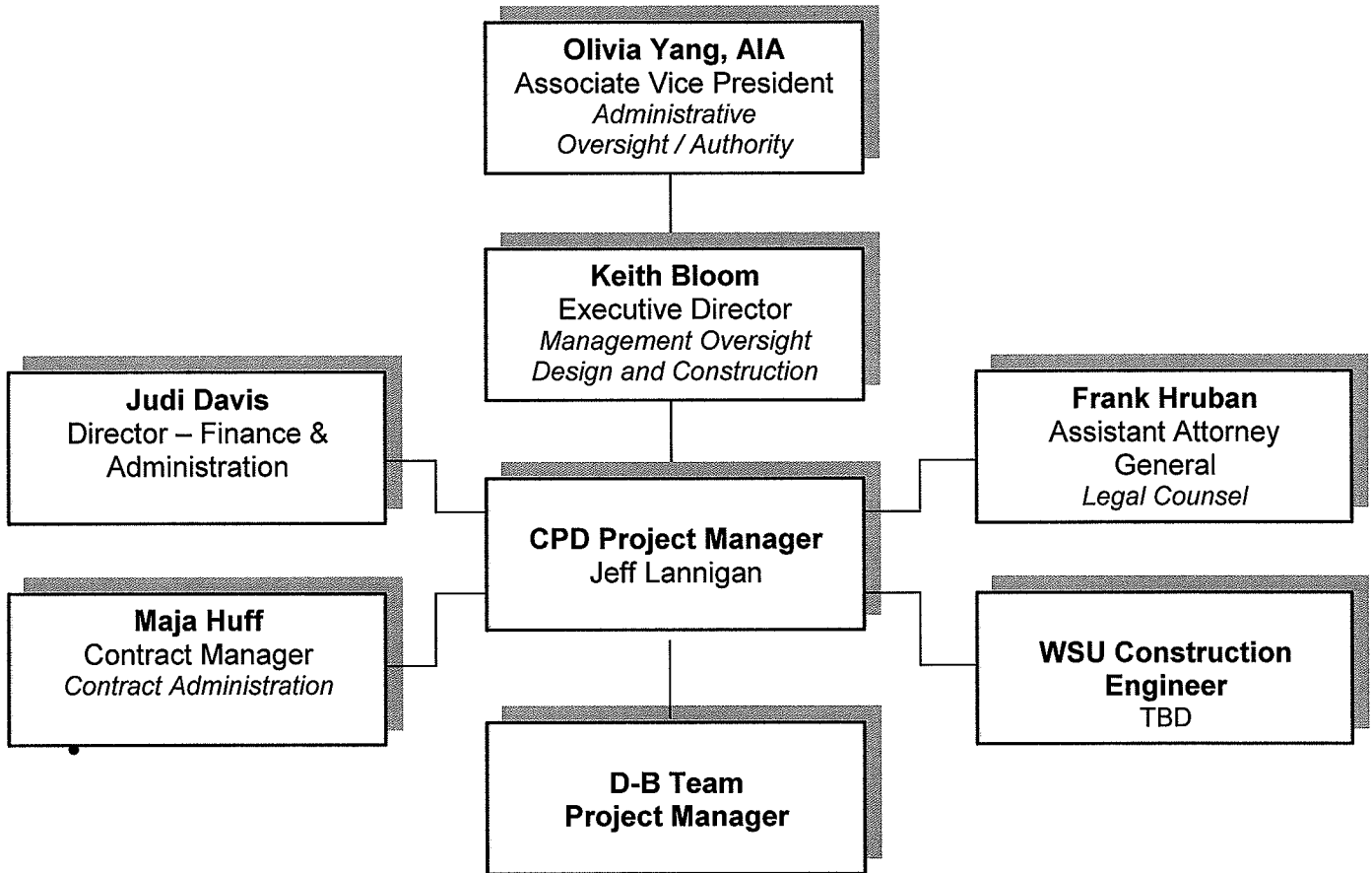
- A description of your organization's qualifications to use the D-B contracting procedure.

Over the past twelve years, Washington State University has a demonstrated track record of successfully managing design and construction of quality projects utilizing the traditional Design-Bid-Build project delivery method as well as the alternative General Contractor/Construction Manager and Design-Build methods. WSU is one of the public agencies originally authorized to utilize alternative contracting procedures. Since 1997, WSU Facilities Services has successfully delivered nearly fifty projects, including 17 projects utilizing alternative project delivery methods, with a total value in excess of \$380 million.

The Facilities Services department has consistently delivered high quality projects that meet functional needs while consistently meeting the demands of both schedule and budget. As outlined in Exhibit B, the management and staff of the department include professional architects and engineers with significant experience managing public works projects.

Washington State University has managed the design and construction of technically complex projects ranging from agricultural and biomedical research laboratories to new energy plants and athletic facilities. The staff and management of WSU Facilities Services have successfully balanced the schedule, budget, and scope demands of these complex projects. Over the past several years, Washington State University has continued to refine procedures, contracts, and agreements to specifically address the alternative contracting methods. These refined processes establish a strong framework that promotes partnerships throughout the design and construction of quality facilities and infrastructure.

- A project organizational chart, showing all existing or planned staff and consultant roles. Note: The organizational chart must show the level of involvement and main responsibilities anticipated for each position throughout the project (for example, full-time project manager). If acronyms are used, a key should be provided. (See Attachment C for an example.)



**Associate Vice President: Administrative Oversight and Final Project Authority**  
Campus Architect and Campus Planner

**Executive Director & Capital Project Services Director: Management & Oversight during Planning, Design, and Construction – Design Resource for Project Managers.**

**CPD Project Manager: Project Lead and Point of Contact for all project-related issues and activities.**  
Responsible for Project schedule, budget, program, design, documentation

**Director – Finance & Administration: Oversight of funding and budget; Project Liaison with OFM**

**Contract Manager: Administers all A/E and GC, GCCM, and DB proposals and contracts**

**Legal Counsel: Review of all legal documents and contracts**

**Construction Engineer: On-site observation of all construction-related activities**

- Staff and consultant short biographies that demonstrate experience with D/B contracting and projects (not complete résumés).

**Please refer to Exhibit A – Staff Biographies**

- Provide the experience and role on previous D-B projects delivered under RCW 39.10 or equivalent experience for each staff member or consultant in key positions on the proposed project. (See Attachment D for an example. The applicant shall use the abbreviations as identified in the example in the attachment.)

**Please refer to Exhibit B – Personnel Experience**

- The qualifications of the existing or planned project manager and consultants. Note: For design-build projects, you must have personnel who are independent of the design-build team, knowledgeable in the design-build process, and able to oversee and administer the contract.

**Washington State University is proud of its history of delivering technically complex and challenging projects. In addition to the strong leadership and seasoned experience of the department's management, the Facilities Services staff is mostly made up of licensed professionals. Over the past ten years, WSU has successfully recruited architects, mechanical engineers, electrical engineers, structural engineers, civil engineers, and code specialists. This internal expertise has proven to be of significant value to both the University and the State of Washington. A significant number of these professionals have experience in delivering projects with alternative contracting methods including the design-build methodology.**

**With the depth in experience combined with open communication between the management team and project managers, Facilities Services will have the ability to provide both a Project Manager and a Construction Engineer in addition to internal resources with the qualifications, knowledge, and experience to effectively execute a design-build project.**

- If the project manager is interim until your organization has employed staff or hired a consultant as the project manager indicate whether sufficient funds are available for this purpose and how long it is anticipated the interim project manager will serve.

**Facilities Services does not anticipate the need to employ the services of an interim project manager at this time.**

- A brief summary of the construction experience of your organization's project management team that is relevant to the project.

**Please refer to Exhibit C – Personnel Construction Experience and Exhibit E – Public Body Construction History**

- A description of the controls your organization will have in place to ensure that the project is adequately managed.

**Facilities Services is structured so that the Associate Vice President and Executive Director are integrated into the planning, design, and execution of each and every project. In addition to weekly manager meetings, bi-weekly staff meetings are held where ideas and knowledge are shared within the department. Over the past ten years, WSU has also implemented "Lessons Learned" staff meetings where issues are discussed and the positive results of open communication are realized.**

Quarterly Project Manager Review Meetings have also been a consistent avenue for PM's to share the details of their projects with management of the department. WSU has also developed a strong quality control program that includes detailed reviews at each phase of a project.

In addition to these internal reviews, WSU consistently implements value-added strategies into each project including constructability reviews, VE studies and peer reviews. WSU FS has a Code Specialist with ICC certification as a Building Official as a key member of the staff. The Code Specialist works with the WSU Fire Marshall and FS staff to confirm that life-safety issues remain the highest priority.

To augment the above practices, FS will conduct outreach activities to the Design- Build community for briefings and training on state-of- the art practices to reinforce our current understanding of this alternative delivery method.

- A brief description of your planned D-B procurement process.

**Please refer to Exhibit D – Design-Build Process Diagram**

- Verification that your organization has already developed (or provide your plan to develop) specific D-B contract terms.

Facilities Services has already developed and is utilizing standard agreements/contracts for alternative construction delivery methodologies, including design-build. The standard contracts were developed internally with oversight and review by senior WSU management. Additional reviews and oversight were conducted in conjunction with the WSU Attorney General's Office. This contract was successfully used by WSU in the design-build process for the Northside Housing (Waller II) project. WSU continues to review the current form of the agreement and conducts outreach to the other public owners that have successfully used the DB methodology to verify that the agreement is congruent with current design-build practices. This same agreement language will be utilized for the Clean Technology Laboratory Building.

**8. Public Body (your organization) Construction History:**

Provide a matrix summary of your organization's construction activity for the past six years outlining project data in content and format per the attached sample provided: (See Attachment E. The applicant shall use the abbreviations as identified in the example in the attachment.)

- Project Number, Name, and Description
- Contracting method used
- Planned start and finish dates
- Actual start and finish dates
- Planned and actual budget amounts
- Reasons for budget or schedule overruns

**Please refer to Exhibit E – Public Body Construction History**

**9. Preliminary Concepts, sketches or plans depicting the project**

To assist the PRC with understanding your proposed project, please provide a combination of up to six concepts, drawings, sketches, diagrams, or plan/section documents which best depict your project. In electronic submissions these documents must be provided in a PDF or JPEG format for easy distribution. Some examples are included in attachments E1 thru E6. At a minimum, please try to include the following:

- An overview site plan (indicating existing structure and new structures)

- Plan or section views which show existing vs. renovation plans particularly for areas that will remain occupied during construction.

*Note: applicant may utilize photos to further depict project issues during their presentation to the PRC.*

**Please refer to Exhibit F – Preliminary Sketches**

**10. Resolution of Audit Findings On Previous Public Works Projects**

If your organization had audit findings on any project identified in your response to Question 8, please specify the project, briefly state those findings, and describe how your organization resolved them.

**Washington State University has been audited on multiple occasions by the Washington State Auditor's Office. Consistently there have been no findings.**

**Caution to Applicants**


The definition of the project is at the applicant's discretion. The entire project, including all components, must meet the criteria to be approved.

**Signature of Authorized Representative**

In submitting this application, you, as the authorized representative of your organization, understand that: (1) the PRC may request additional information about your organization, its construction history, and the proposed project; and (2) your organization is required to submit the information requested by the PRC. You agree to submit this information in a timely manner and understand that failure to do so shall render your application incomplete.

Should the PRC approve your request to use the D-B contracting procedure, you also understand that: (1) your organization is required to participate in brief, state-sponsored surveys at the beginning and the end of your approved project; and (2) the data collected in these surveys will be used in a study by the state to evaluate the effectiveness of the D-B process. You also agree that your organization will complete these surveys within the time required by CPARB

I have carefully reviewed the information provided and attest that this is a complete, correct and true application.

Signature:  \_\_\_\_\_

Name: (please print) : **Olivia O. Yang**

Title: **Associate Vice President – Facilities Services**

Date: **August 31, 2011**

## **Exhibit A – Staff Biographies**

### **Olivia O. Yang, AIA**

29 Years Experience

Associate Vice President, Facilities Services – Washington State University (1 Year)

Director – Special Projects, - University of Washington (9 Years)

Project Manager , University of Washington (11 Years)

Current CPARB Member representing Higher Education (6 Years)

Masters of Architecture – University of Washington

### **Keith Bloom**

28 Years Experience

Executive Director, Facilities Services – Washington State University (6 Years)

Director – Facilities Services – WSU (8 Years)

Bachelor of Science –Construction Management, Boise State University

### **Michael L. Leonas, P.E (IL, GA)**

30 Years Experience

Director – Facilities Services – WSU (1 Year)

Senior Project Manager – Major Capital, Facilities Services – WSU (3 Years)

Bachelor of Science – Civil Engineering, North Carolina State University

### **Jeff Lannigan, PE**

14 Years Experience

Project Manager, Facilities Services – Washington State University (7 years)

Construction Engineer, Facilities Services – Washington State University (4 years)

Bachelor of Science - Mechanical Engineering, Washington State University

**Exhibit B – Personnel Experience – Design-Build Projects**

Name	Summary of Experience	Project Names	Project Size	Project Type	Role during Project Phases			Role Start	Role Finish
					Planning	Design	Construction		
1 Olivia Yang, AIA	Associate Vice President 29 years experience	Benjamin Hall Research Building	\$150.0M	DB	PM	PM	PM	2002	2005
		Education Outreach	\$17.2M	DB	PM	PM	NA		
		Rainer Vista Pedestrian Landbridge	\$18.7M	DB	PM	PM	PM		
2 Keith L. Bloom, LEED @ AP	Executive Director 32 years experience	Post Family Housing (708 Units) Ft Drum, NY	\$48.0M	DB	QCM	QCM	QCM	1988	1990
		Post Family Housing (208 Units) Aberdeen, MD	\$24.0M	DB	QCM	QCM	QCM	1986	1988
		Post Family Housing (50 Units) Forsyth, MT	\$5.0M	DB	QCM	QCM	QCM	1984	1985
4 Michael L. Leonas	Director - Capital Project 30 years experience	Maintenance Facility - Ft. Gordon, GA	\$6.0M	DB	AE	AE	AE	1995	1997
		F-16 Maintenance Hanger - McIntyre AGB, SC	\$15.0M	DB	AE	AE	AE	1997	1999
		East Chiller Plant & Utility Upgrades - WSU	\$12.0M	DB/ESCO	PM	PM	PM	2007	2009
		Regional Postal Center-Dekalb Co., GA	\$1.5M	DB	AE	PM	PM	1999	2000

KEY	
AE	Architect/Engineer
PM	Project Manager
QCM	Quality Control Manager

**Exhibit C – Personnel Construction Experience**

<i>Name</i>	<i>Summary of Experience</i>	<i>Project Names</i>	<i>Project Size</i>	<i>Project Type</i>
1 Keith L. Bloom, LEED® AP	Director - Construction Services 32 years experience	Student Recreation Center	\$39.00 M	GCCM
		Teaching and Learning Center (Smith)	\$40.60 M	GCCM
		Engineering Life Sciences Building - Vancouver	\$29.90 M	GCCM
		Multimedia Classroom Building - Vancouver	\$17.50 M	GCCM
		Student Services Facility - Vancouver	\$14.63 M	GCCM
		School of Communication Addition	\$11.71 M	GCCM
		Plant Biosciences Building (REC1)	\$39.00 M	GCCM
		Steam Plant Redevelopment	\$41.00 M	GCCM
		Health Sciences Building - Spokane	\$39.00 M	GCCM
		Academic Center - Spokane	\$33.90 M	GCCM
		WSU Nursing Center - Spokane	\$34.60 M	GCCM
		Biotechnology/Life Sciences Facility	\$72.60 M	GCCM
		Martin Stadium Renovation	\$24.00 M	GCCM
		Compton Union Building Renovation	\$86.00 M	GCCM
		Indoor Practice Facility	\$6.20 M	GCCM
Bioproducts, Science and Engineering Lab	\$24.75 M	GCCM		
2 Larry C. Harris, RA, LEED® AP	Project Manager 38 years experience	Bioproducts, Science and Engineering Lab	\$24.75 M	GCCM
		School of Communication Addition	\$11.71 M	DBB/GCCM
		Martin Stadium Phase III	\$40.0 M	DB
3 Michael L. Leonas	Project Manager 30 years experience	East Chilled Water Plant & Utility Upgrades	\$12.0M	DB/ESCO
9 Jeff Lannigan, PE, LEED® AP	Project Manager 14 years experience	White Hall Renovation	\$15.0M	GCCM
		Steam Plant Redevelopment	\$41.0M	GCCM
		Compton Union Building Renovation	\$86.0M	GCCM
		Global Animal Health	\$42.3M	GCCM



## Exhibit E- Public Body Construction History

### Washington State University - Construction History

All Projects Located at the Pullman Campus Unless Noted Otherwise

Project #	Project Name	Project Description	Total Project Cost	Contracting Method	Lead Design Firm	General Contractor or GC/CM	Planned Start	Planned Finish	Actual Start	Actual Finish	Planned Construction Budget	Actual Budget	Reason for Budget or Schedule overrun
1	Biotechnology/Life Sciences Facility (REC2)	128,000 GSF Higher Education Facility Research/Teaching Lab	\$ 72,650,000	GCCM	LMN Architects	Lydig Construction	May-06	May-09	Jul-06	N/A	\$ 45,949,820	N/A	
2	Compton Union Building Renovation	230,000 GSF Higher Education Facility Student Union	\$ 86,000,000	GCCM	Integrus Architecture	Hoffman Construction	May-06	Aug-08	May-06	N/A	\$ 51,000,000	N/A	
3	WSU Nursing Center - Spokane	85,000 GSF Higher Education Facility Research/Teaching Lab	\$ 34,600,000	GCCM	Integrus Architecture	Graham Construction	Oct-05	Oct-07	Oct-06	N/A	\$ 25,271,000	N/A	Program Revisions
4	Bioproducts Science and Engineering Lab - Tri-Cities	57,000 GSF Higher Education Facility Research/Teaching Lab	\$ 24,750,000	GCCM	SRG Partnership	Boutin Construction	Mar-06	Sep-07	Apr-06	N/A	\$ 17,776,678	N/A	Availability of Funding
5	Martin Stadium Renovation	Higher Education Facility Athletic Facility	\$ 24,000,000	GCCM	Madsen Mitchell Evenson & Conrad	Graham Construction	Dec-06	Sep-08	Dec-06	N/A	\$ 17,000,000	N/A	
6	Student Services Facility - Vancouver	18,000 GSF Higher Education Facility Student Service	\$ 14,626,000	GCCM	ZGF Architects	Hoffman Construction	Mar-06	Mar-07	Feb-04	Jul-07	\$ 8,723,539	\$ 8,723,539	
7	Rotunda Dining Hall Renovation	30,000 GSF Higher Education Facility Dining Hall Renovation	\$ 10,200,000	DBB	URS Corporation	Lydig Construction	May-06	Apr-07	Jan-07	N/A	\$ 6,985,000	N/A	
8	Golf Course Expansion	18 hole Golf Course Expansion	\$ 8,400,000	DBB	John Harbottle Design	Olyphant Golf Construction	Jun-06	May-08	Jun-06	N/A	\$ 6,500,000	N/A	
9	Regents Dining Hall Renovation	19,000 GSF Higher Education Facility Dining Hall Renovation	\$ 8,200,000	DBB	URS Corporation	Lydig Construction	Aug-04	Jul-05	Aug-04	Aug-05	\$ 5,800,000	\$ 5,650,102	
10	Multimedia Classroom Building - Vancouver	49,200 GSF Higher Education Facility Research/Teaching Lab	\$ 17,500,000	GCCM	ZGF Architects	Baugh Construction	Jun-01	Jan-03	Jun-01	Jan-03	\$ 12,285,729	\$ 12,224,155	
11	Academic Center - Spokane	106,000 GSF Higher Education Facility General University Classroom	\$ 33,900,000	GCCM	NAC Architecture	Graham Construction	Jun-04	Sep-06	Jun-04	N/A	\$ 20,251,024	N/A	
12	Education Addition	27,700 GSF Higher Education Facility General University Classroom	\$ 12,700,000	DBB	Thomas Hacker Architects	Graham Construction	May-04	Apr-05	May-04	May-05	\$ 6,528,101	\$ 7,285,202	Additional Project Scope
13	Plant Biosciences Building (REC1)	92,380 GSF Higher Education Facility Research/Teaching Lab	\$ 39,000,000	GCCM	ZGF Partnership	Skanska Construction (Baugh)	Jul-03	Apr-05	Jul-03	May-05	\$ 28,417,669	\$ 28,538,226	Final MACC Negotiation
14	Steam Plant Redevelopment Project	26,000 GSF Higher Education Facility Operational Support	\$ 41,000,000	GCCM	Harris Group / Wood-Harbinger	Hoffman Construction	Apr-03	Oct-03	Apr-03	Oct-03	\$ 33,341,000	\$ 31,981,717	
15	School of Communication Addition	26,000 GSF Higher Education Facility Research/Teaching Lab	\$ 11,713,000	GCCM	NAC Architecture	Baugh Construction	Oct-02	Nov-03	Oct-02	Nov-03	\$ 7,828,130	\$ 7,500,656	
16	Health Sciences Building - Spokane	145,000 GSF Higher Education Facility Research/Teaching Lab	\$ 39,000,000	GCCM	Integrus Architecture	Shea-Graham Construction	Sep-99	Aug-01	Sep-99	Sep-01	\$ 26,562,463	\$ 25,610,195	
17	Shock Physics Building	33,330 GSF Higher Education Facility Research/Teaching Lab	\$ 12,665,000	DBB	Miller Hull Partnership	Lydig Construction	Sep-02	Feb-03	Sep-02	Feb-03	\$ 8,920,500	\$ 9,766,469	Additional work and unforeseen conditions
18	Smith Center for Undergraduate Education (Teaching & Learning Center)	95,000 GSF Higher Education Facility Multipurpose Building	\$ 40,600,000	GCCM	YGH Architecture	Lydig Construction	Jul-99	Aug-01	Jul-99	Oct-01	\$ 24,275,224	\$ 24,275,224	Added Scope
19	Engineering Life Sciences Building - Vancouver	60,000 GSF Higher Education Facility Research/Teaching Lab	\$ 29,900,000	GCCM	ZGF Architects	Baugh Construction	Oct-99	Jul-01	Jul-97	Dec-00	\$ 19,183,789	\$ 17,670,705	
20	Student Recreation Center	165,513 GSF Higher Education Facility Athletic Facility	\$ 39,000,000	GCCM	YGH Architecture	Gilbane Building Co.	Mar-99	Dec-00	Jul-97	Jan-01	\$ 29,930,293	\$ 30,068,170	Contractor Performance
21	Bohler Gym Addition	127,000 GSF Higher Education Facility Athletic Facility	\$ 20,663,465	DBB	Sasaki Associates	Garco Construction	Oct-98	Jul-00	Oct-98	Nov-00	\$ 16,815,920	\$ 16,801,286	Unforeseen site conditions
22	White Hall Renovation (Honors Hall)	57,700 GSF Higher Education Facility Multipurpose	\$ 15,300,000	GCCM	Kovalenko Hale	Baugh Construction	Jun-00	Jul-01	Jun-00	Jul-01	\$ 10,706,389	\$ 10,321,726	
23	McCroskey Hall Renovation	30,832 GSF Higher Education Facility Multipurpose	\$ 5,000,000	DBB	Kovalenko Hale	Garco Construction	Dec-00	Dec-00	Dec-00	Jan-01	\$ 3,838,200	\$ 3,482,538	
24	Kimbrough Hall Addition/Remodel	47,825 GSF Higher Education Facility Classroom Building	\$ 11,733,000	DBB	Thompson Vairoda	Shea Construction	May-98	Dec-99	May-98	May-00	\$ 8,760,500	\$ 8,843,360	Contractor Performance
25	Mount Vernon Ag Research and Technology Building	19,000 GSF Higher Education Facility Research/Teaching Lab	\$ 8,000,000	DBB	ARC Architects	Impero Contracting	May-05	Sep-06	Aug-05	Feb-07	\$ 6,346,000	\$ 6,489,000	

**Exhibit F – Preliminary Sketches**

Preliminary Site Location:

