

**University of California,  
Santa Barbara**



Request  
for  
Proposal  
for the:

**Campus Hot Water Loop**

Project Number:  
988880/ 118-91

Campus Design and  
Facilities

Office of Design and  
Construction Services

August 2010



**University of California, Santa Barbara  
Campus Hot Water Loop**

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Statement of Qualifications Form	(See Separate PDF File)
<a href="#">Campus Landscape and Long Range Development Plan</a>	
<a href="#">Executive Professional Design Agreement, ver B, (EDPA)</a>	
<a href="#">Certificate of Insurance</a>	(Also included as an Exhibit to the Agreement)



## **Advertisement**

### **Project Description**

Qualifications are hereby solicited from design professionals interested in providing services for the design and construction of the Campus Hot Water Loop which will utilize the available energy from a new heat pump, with 600 ton cooling capacity and 10 million BTU/HR of 155 degF heating water. The loop will connect 8 to 12 campus building's hot water systems with underground pipe. Heat pump and back-up boiler will be located in a new building approximately 3,000 SF adjacent to the proposed BioEngineering Building. This project's intent is to be funded with energy savings. The consultant will be required at all times to provide the University with energy savings data for all of the project's construction. The current projected construction budget is approximately \$4,000,000 with a possible increase of \$2,000,000 depending on additional funding. The planned date for completion of construction is December 2012.

### **Scope of Services**

The scope of professional services will be as noted below:

The first phase of the project will be a programming and planning effort that will seek to identify the final location for the proposed buildings that will contain the equipment as well as the best route for the underground piping and integration into each of the building's hot water system's underground pipe routing will require landscape modifications. The consultant will need to identify the cost for each of the connected buildings to assist the campus in determining which buildings are appropriate for the project at this time.

The first phase will conclude with schematic design documents which include a detailed cost estimate as well as an analysis of the energy savings. At the conclusion of the first phase the campus will determine the complete scope of work for the project based on the cost estimates and energy saving's, assist UCSB with energy related applications required for funding.

Authorization to proceed with the second stage of services will be contingent on satisfactory completion of the initial stage, external project approvals and appropriation of funding.

During the second stage, the scope of services will include architectural and engineering design of the project, preparation of construction documents, support services during the

project administrative and environmental approval process, bidding assistance and construction phase administrative services, surveys and utility verification will be required.

The consultant will be asked at each phase of the project to update the project costs and energy savings.

Funding of the above project is contingent upon receipt of funding from a variety of sources. While it is anticipated that funding will be obtained, there is no assurance that funds will be received for the project noted. Selection of the design professional will follow standard University procedures.

**Instructions for Application**

Design teams with qualifications that include experience in the design of projects similar in scale and scope are encouraged to respond. A copy of the Statement of Qualifications (SOQ) form will be available on our home page: <http://facilities.ucsb.edu> click on Requests for Proposals or call Anne-Marie Nething (805) 893-6987

Six (6) sets of the proposal must be returned to the attention of:  
Paul Gawronik, Contracting Services – Facilities Management Bldg. 439, Office of Design and Construction, University of California, Santa Barbara, CA 93106-1030 no later than 4:00 PM, August 30, 2010

• **Affirmative Action Statement**

Each candidate firm will be required to show evidence of its equal employment opportunity policy. Every effort will be made to ensure that all persons, regardless of race, religion, sex, color, ethnicity and national origin have equal access to contracts and other business opportunities with the University.



## Program Statement

### Background

The Campus is presently working on a number of energy savings projects under a University of California program titled the Statewide Energy Partnership Program (SEP). The Campus Hot Water Loop is included in the SEP program. Each project in the SEP program is funded with energy savings.

This project will address a number of important campus issues:

- Reduce the overall emissions from the campus boilers.
- Significant energy savings from this project will be realized using a water to water heat pump.
- Energy saving will be realized as the boilers in each of the buildings connected to the campus loop will no longer be required. Converting building heating systems to primary/secondary pumping with variable flows.
- Reduced maintenance as fewer building boilers will be operational.
- Opportunity to partner with new buildings that are presently being designed. This project could incorporate portions of these new building's heating and cooling systems.

### Project Summary

The project's heat pump energy plant will produce chilled water for the campus chilled water loop and simultaneously produce heating water for the campus hot water loop.

At full load the energy plant will:

- Produce 600 tons of cooling for the campus chilled water loop.
- Produce 10 million BTU/HR of 155 degF heating water. This is enough heat to meet the "average" heating demands of 8 to 12 campus buildings.
- The heat pump will be the first heating source for each connected building, the building heating boilers will stage on during colder weather.

The Campus Hot Water loop will consist of:

- Building of approximately 3000 square feet.
- Heat Pump with 600 ton cooling output and 10 million BTU/HR of 155 degF heating water.
- Approximately 8,000,000 BTUH heating boiler that will produce heating water when the main heat pump is down for maintenance and will act as a booster boiler to delay the use of building heating boilers.
- Chilled water and heating water pumps
- Chilled water piping, 200-400 ft of double insulated pipe with connection to campus chilled water loop.
- Heating water piping, approximately 5,000 linear feet of double insulated pipe and corresponding landscape modifications.
- Connections to the heating systems at 8 to 12 lab buildings depending on available funding.
- Controls upgrade
- Electrical service as required for the energy plant.



## Scope of Services

Projects at the UCSB campus involve participation by faculty and staff. Reviews and approvals of campus projects may extend to public interest groups and public agencies in the surrounding area and the California Coastal Commission. The scope of services anticipates full support during the approval process.

The professional scope of services will include phases for programming, site planning, architectural and engineering design of the project, including cost estimating, code analysis, value engineering, project scheduling, and coordination with regulatory agencies, culminating in completed construction documents issued for competitive bids. Construction phase services will include submittal reviews and field representation.

The first phase of the project will be a programming and planning effort that will identify the final location for the proposed building that will contain the equipment as well as the best route for the underground piping and its integration into each of the building's hot water system. The consultant will need to identify the cost for each of the connected buildings to assist the campus to determine which buildings are appropriate for the project at this time.

The first phase will conclude with schematic design documents which include a detailed cost estimate as well as an analysis of the energy savings. At the conclusion of the first phase the campus will determine the complete scope of work for the project based on the cost estimates and energy savings.

Authorization to proceed with the second stage of services will be contingent on satisfactory completion of the initial stage, external project approvals and appropriation of funding.

During the second stage, the scope of services will include engineering and architectural design of the project, preparation of construction documents, support services during the project administrative and environmental approval process, bidding assistance and construction phase administrative services. The consultant will be asked at each phase of the project to confirm the project costs and energy savings.

Funding of the above project is contingent upon receipt of funding from a variety of sources. While it is anticipated that funding will be obtained, there is no assurance that funds will be received for the project noted. Selection of the design professional will follow standard University procedures



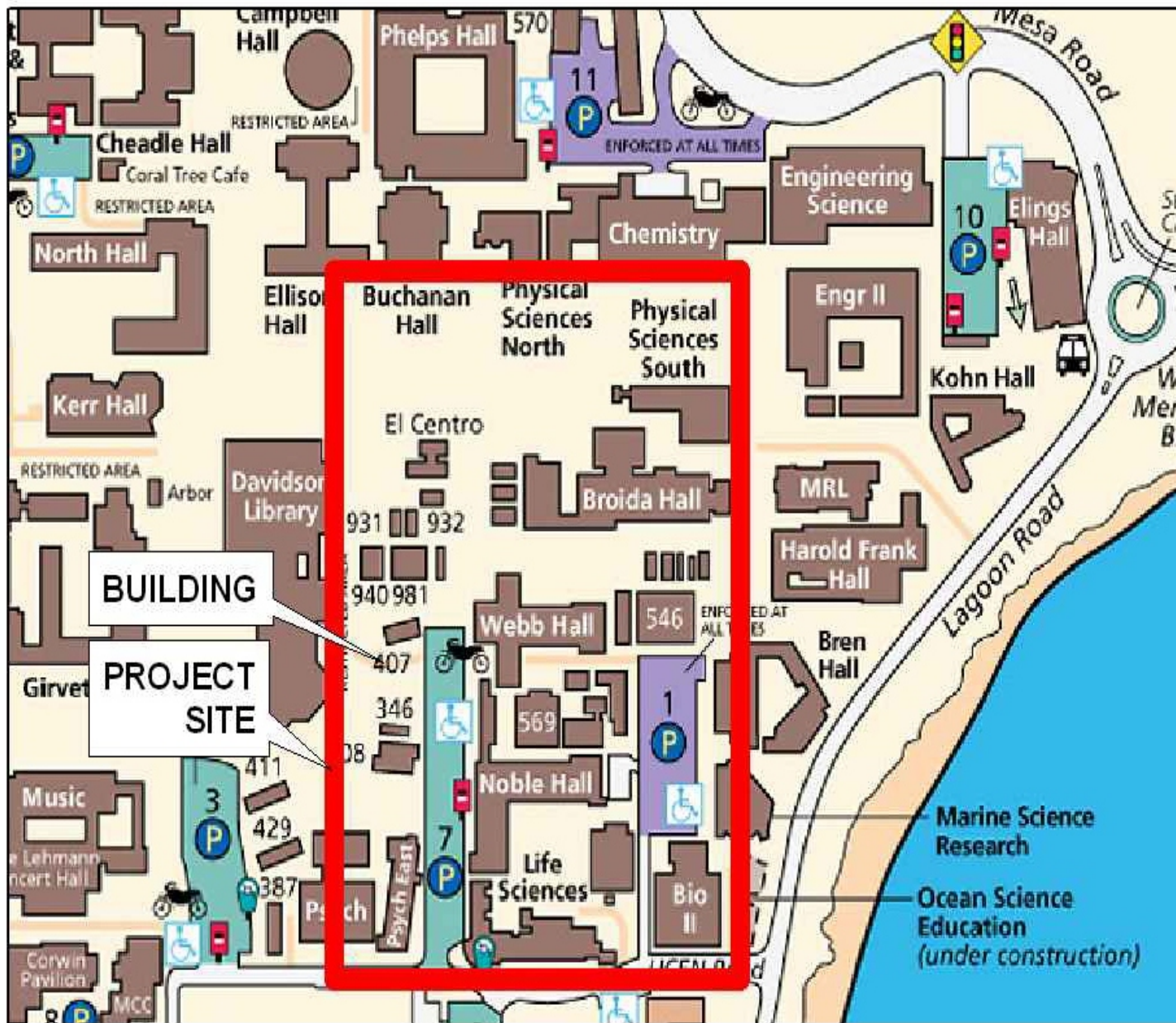
**Services Provided by UCSB**

1. Site alternatives and construction budget
2. Topographic map including below-grade utilities. Critical information contained in these documents will be verified by the campus when requested by the Engineer.
3. On-site construction phase management and inspection.
4. Environmental Analysis (CEQA) and Coastal Commission approval.
5. Delineation of cultural resource sites, wetlands and other planning constraints specific to the site.





Project Site Plan





## **Project Schedule**

RFP's Due at UCSB	August 30, 2010
Screening Committee	August 31, 2010

*The resultant selected short-listed firms will be posted on the UCSB Design, Construction, & Physical Facilities website, click on Notices The anticipated schedule is tentative. The exact dates will be set forth in a Notification letter to the selected Consultant.*

Notify Selected Consultants	Early September 2010
Consultant Interviews	Mid September 2010
Chancellor Approval	Late September 2010
Successful Candidate Notified	Late September 2010
Fee Negotiations –	October 2010
Contract Award	November 2010
Preliminary Design Start	October 2010
Construction Documents Start	February 2011
Bids	June 2011
Construction Start	September 2011
Project Complete	December 2012



## Instructions to Applicants

1. Respond concisely to the Selection Criteria and complete the Statement of Qualifications Form. The Statement of Qualifications must be signed by a responsible member of the firm applying for the project.
2. Provide a list of projects of similar scope and complexity along with team member's roles, project construction budgets, bid amounts, and final change order amounts related to errors and omissions. Please also address the scheduled duration of construction and total of delays attributable to errors and omissions.
3. Your Proposal shall also address the following:

Design Issues – How will the team approach developing a project that responds to the existing facilities? What will be the team's approach to dealing with issues of sustainability, use of energy resources, affordability and prioritization of design goals within the project budget? How can the site be used to achieve its full potential? How can the project improve the campus in general? How will the team maximize the use of the heat pump to reduce campus energy and maintenance costs? How will the project's building be integrated into this section of the campus?

Cost Control -- What mechanism or procedures will the team implement during the design and construction document phases to control costs?

Executive Design Professional Agreement – Note any exceptions to the enclosed Agreement that would prevent your firm from executing the Agreement. We cannot accept any request to include language to limit liability with regards to insurance and/or modify the indemnification clauses. Proposal submittals shall include a separate letter affirming the intent of the proposer's acceptance of terms and conditions contained in the Agreement (see enclosed Agreement). Provide a copy of your current billing rate schedule and proposed consultants.

Certificate of Insurance – Note any exception to the Certificate requirements and provisions that would prevent your firm from executing an Agreement. Proposal submittals shall include a separate letter affirming the intent of the proposer's acceptance of terms and conditions contained in the Certificate of Insurance (see enclosed certificate). Minimum Insurance limits are as follows:

General Liability: Comprehensive or Commercial Form	Amount
Each Occurrence	\$1,000,000
Products/Completed Operations Aggregate	\$1,000,000
Personal and Advertising Injury	\$1,000,000
General Aggregate	\$2,000,000
Business Automobile Liability	Amount
Each Occurrence	\$1,000,000
Workers' Compensation	as required under California State Law
Professional Liability	Amount
Each Occurrence	\$1,000,000
Project Aggregate	\$2,000,000

Malpractice Claims – List malpractice claims adjudicated within the last 5 years or currently pending. Identify the projects. Provide the same information for your Associate Architect if one is proposed, and your Mechanical and Structural Engineers. List any lawsuits pending with the Regents of the University of California. List past lawsuits with the Regents of the University of California and indicate if a settlement was paid to the University. List all current and past UC projects, name of UC project manager and telephone number.

Individual Experience – Submit resumes of the responsible Partner, the Project Manager, the Principal Designer and technical consultants focusing on relevant experience of those individuals.

Work Location – Identify any portions of the Engineer's scope of work that will be performed outside of the office responding to the RFP and the individuals responsible for that work. If an associate engineer is involved, explain their role and the planned division of responsibilities.

4. Include supplementary information supporting qualifications (8 ½ x 11 format). Organization and brevity will be appreciated. Work submitted as an example of the design team's qualifications will be considered only to the extent it is similar to the proposed project. Additional information may be submitted demonstrating experience in programming, planning and design on university campuses. Identify the engineering team and consultants for all projects listed as examples of your firm's work. Provide information on proposed engineering staff and consultants for

this project and an organization chart. Provide a list of previous projects the proposed team has participated in together.

5. Return to: Paul Gawronik  
Contracting Services, Facilities Management, Building 439  
Office of Design & Construction Services  
University of California  
Santa Barbara, CA 93106-1030
6. Submit 6 (six) copies of all material bound into single documents.
7. Due Date: August 30, 2010, no later than 4:00 p.m.
8. Design teams with qualifications considered appropriate by the Screening Committee would be asked to interview with the Selection Committee.



## Selection Criteria

1. ***Design ability.*** Ability as it can be evaluated by examination of the functional, technical, economic, and aesthetic qualities of projects done for the University or other clients.
2. ***Research potential.*** Capability to undertake appropriate research to resolve design problems specific to the needs of the program or project under consideration.
3. ***Program responsiveness.*** Previous experience that demonstrates success in completing projects consistent with program schedule, budget, and technical requirements, and that indicates the ability to complete the proposed project in a manner that is responsive to the specifics of the program.
4. ***Evaluation of consultants proposed to be employed.*** Previous experience with special engineering requirements appropriate to the project under consideration with evidence or expression that appropriate consulting advice can be obtained as required.
5. ***Production capability.*** Evidence of ability to perform all design phases of the work, to produce construction documents of superior quality and to meet the completion schedule for each phase.
6. ***Coordination and supervision.*** Evidence of ability to provide experienced staff and timely support during the construction phase of the project.
7. ***Proximity.*** to the project location, willingness to establish a local office or an association with a local consulting firm.
8. ***Client relationships.*** Recognition of the consultative processes associated with work on a University Campus.
9. ***Equal Opportunity.*** The commitment of the University to equal opportunity applies to the selection of design professionals.



## **Privacy Notification**

The state of California Information Practices Act of 1977 requires the University to provide the following information to individuals who are asked to supply information about them:

The principal purpose for requesting the information on this form is for use in the selection process for Design Professionals commissioned by the University. University Policy authorizes maintenance of this information.

Furnishing all information requested on this form is mandatory - failure to provide such information will delay or may even prevent completion of the action for which the form is being filled out. Information furnished on this form will be used by the Office of Design & Construction, Facilities Management, University of California at Santa Barbara in consideration of commissions to Design Professionals.

Individuals have the right to access to this record as it pertains to them.

The official responsible for maintaining the information contained on this form:

Contracting Services  
Office of Design & Construction Services and  
Physical Facilities  
University of California, Santa Barbara  
Building 439  
Santa Barbara, California 93106-1030