

# University of Colorado Boulder

## Request for Qualifications Notice 11 - 22 INFORMATION PACKET August 15, 2011

### Sustainability Consultant Services for Multiple CU-Boulder Campus Projects

The University of Colorado Boulder proposes to plan, design, and construct new buildings, renovations, and additions to the multiple buildings on the CU-Boulder campus using the Leadership in Energy and Environmental Design (LEED) criteria established by the U.S. Green Building Council (USGBC). An accredited consultant is desired to assist the university in planning documenting and implementing the LEED certification process. This packet provides information and procedures regarding:

- I. PURPOSE / BACKGROUND
- II. SCOPE OF SERVICES
- III. SCHEDULE
- IV. SELECTION CRITERIA
- V. RESPONSE FORMAT
- VI. OTHER INFORMATION

This RFQ is for the purpose of selecting a consultant to assist in various sustainability initiatives of the University of Colorado Boulder campus. **All consultants should carefully examine the materials contained in this packet prior to submitting their response to this RFQ.**

**Contact Person:** Moe Tabrizi, Campus Sustainability Director  
Phone: (303) 492-1425  
E-Mail: [tabrizi@colorado.edu](mailto:tabrizi@colorado.edu)

**Date of Issue:** Monday, August 15, 2011

**Pre-Submittal Meeting:** Monday, August 29, 9:30 a.m. to 10:30 a.m.  
Research Laboratory 2  
1540 30<sup>th</sup> Street, Boulder, CO 80309

**Due Date:** Friday, September 9, 2011, 4:00 p.m.

**Submittals to:** Paul M. Leef, AIA  
Department of Facilities Management  
University of Colorado Boulder  
RL-2, 1540 30th Street, 3rd Floor Reception Desk  
Campus Box 453 UCB  
Boulder, CO 80309-0453


## I. PURPOSE / BACKGROUND

### A. Program Description

Campuses have a significant impact on the built and natural environment and are under increased pressure from governments, students, and community members to carefully mitigate their environmental footprint. CU-Boulder is no exception. Nationally, campus development initiatives are factoring in the economic and social needs of surrounding neighborhoods and incorporating design elements that contribute to environmental health as well as architectural aesthetics. New approaches are propelled by a valuable insight: what is good for the community is good for the campus.

For more than half a century, the University of Colorado Boulder has been a leader in pursuing world-class climate and energy research, providing interdisciplinary environmental studies and implementing “green” practices throughout campus. For decades, CU-Boulder students, faculty, staff and administrators have carried on a commitment to knowledge, innovation, solutions and everyday actions for environmental stewardship.

The University of Colorado at Boulder uses Leadership in Energy and Environmental Design (LEED) criteria to design, construct, and renovate campus buildings. LEED was created by the U.S. Green Building Council to provide a third party verification framework for a whole-building approach to sustainability by recognizing performance in Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, and Indoor Environmental Quality. LEED rewards levels of achievement by designating each project with Certified, Silver, Gold, or Platinum.

Currently on CU-Boulder’s campus, we have: (view [map](#) )

- Pending LEED *Platinum*:
  - Coors Event Center – Basketball/Volleyball Practice Facility
  - Williams Village North
  - Systems Biotechnology
- Pending LEED *Gold*:
  - Visual Arts Complex
  - Center for Community
  - Institute of Behavioral Science
  - Buckingham Hall
  - Smith Hall
  - JILA Addition
- LEED *Gold*:
  - ATLAS
  - Koelbel
  - Wolf Law
  - Andrews Hall
  - Arnett Hall
- LEED *Silver*:
  - UMC Addition

## B. Program and Facilities Goals

In keeping with the university's policy and commitment to energy efficiency and sustainability, including participation in the American College & University Presidents Climate Commitment, and in keeping with the Design and Construction Standards, the university is committed to achieving high levels of energy and water efficiency and sustainability in all new and renovated facilities. A primary reason for the university's actions is to do its part to significantly reduce or eliminate greenhouse gas emissions from university facility operations. The University of Colorado Boulder Sustainability Office is responsible for coordinating the planning and implementation of an integrated set of activities that will result in the achievement of the university's energy and water efficiency and overall sustainability goals.

Identified goals for the sustainability program include:

- All new buildings and major renovations are built to a LEED Gold Standard plus extra attention is focused on energy and water credits (CU-Boulder's term of LEED Gold "Plus"). This helps ensure that buildings are as energy and water conserving as possible and provide the greatest long-term payback for the investment made. Each project is to **achieve energy performance at a minimum level of 45 percent better than the ASHRAE standards** in place at the time of the project's construction.
- Target all new and renovated facilities underway be near net-zero carbon facilities. A net-zero energy facility collects as much energy from renewable sources as the facility uses on an annual basis while maintaining an acceptable level of service and functionality. Buildings can exchange energy with the power grid as long as the net energy balance is zero on an annual basis.
- Install visible energy monitoring devices on buildings and make information available to inform and help occupants track conservation behaviors.
- As appropriate, plan and construct facilities that intertwine indoor space with nature to capitalize on the benefits of biophilic design—the term is derived from biophilia, coined in 1984 by a Harvard biologist, Edward O. Wilson, to describe what he considered the innate human attraction to nature—that incorporates real or simulated natural elements in an effort to promote well-being. Building design should consider views from indoor spaces of the outdoor landscape particularly from common areas, circulation zones and living spaces.

## C. Proposed Projects

There are currently four major capital construction projects funded and in the early stages of the design process: Kittredge West Residence Hall renovation, Kittredge Central Residence Hall and Commons, Recreation Facilities Improvements and the Campus Utilities System. These projects are in various stages of planning and design. The selected consultant will be expected to assist the design teams to achieve a LEED Gold Plus certification or better from the present point of design.

Rather than having each project select an accredited sustainability consultant, the university desires to have one consultant provide services for multiple projects. It is

hoped that by combining sustainability services, a more cohesive strategy can be achieved for these and future campus facilities. Further information on these and other recent projects can be found at the Facilities Planning Web site: <http://fm.colorado.edu/planning/projects/>.

#### **D. Projected Scope, Size, Cost, and Schedule**

The projects listed vary in scope, scale, budget, and program requirements. Meeting the schedule for each project is critical to the success of the project as well as meeting expectations of the students and other campus constituents.

#### **E. Relationship to Institutional and Facilities Master Plans**

The '[Conceptual Plan for Carbon Neutrality](#)' and the '[Greening of the State Government Executive Orders](#)' are consistent with university long-range plans and supports the [Flagship 2030 Vision](#) and the [Campus Master Plan](#). Key operation considerations and relationships to other facilities and future projects will play an important role in the design and success of sustainability efforts.

#### **F. Sustainable Design**

Sustainable design is the systematic consideration, during design, of a project's life-cycle impact on environmental and energy resources. Perhaps the best way to understand the principles of sustainable design is not by defining the process, but rather by looking at the results of the process. The ideal characteristics of development based on the principles of sustainable design are when development minimizes the impact on the environment both during the initial construction and over the long life span of the facility. The campus is a long term owner and operator of the facility, which looks to control initial development cost in balance with control of long term operations and maintenance cost.

CU-Boulder is committed to being a responsible steward of our natural resources and believes that public institutions should provide leadership in developing an ethic of sustainability in all of its practices. By engaging in sustainable design, CU Boulder hopes to build higher performance facilities that:

- harmonize with the campus context,
- consume less energy and water,
- provide higher quality daylighting and lighting,
- conserve materials and natural resources,
- enhance indoor environmental quality, and
- teach and promote principles of sustainable design.

**Your understanding of the principles and practices of sustainable design along with energy modeling and daylight modeling will be important factors in the final selection of a design team.**

## **G. Sustainable Design Concepts**

Sustainable design is not usually achieved by implementing one catch all strategy. Instead, it is the understanding of how all of the parts of a building's design and use affect the building's performance, and then successfully integrating and implementing these components. Building orientation, mass, site planning, storm water management, envelope design, HVAC systems, electrical systems and day lighting, impact each other and must be coordinated with the owner's needs and goals, building user behavior, and operations and maintenance personnel practices.

Your understanding of the comprehensive nature of sustainable and high performance building principles will be an important factor in the final selection of a consulting firm.

Familiarity and experience with the following high performance design features and strategies is desired:

- Net-Zero carbon footprint,
- Geo-exchange,
- Displacement Ventilation,
- High performance building envelopes,
- Day-lighting,
- Building renovation and adaptive re-use, and
- Storm water quality innovation.

## **H. Integrated Design**

The University of Colorado Boulder believes an integrated design approach can greatly increase the chance of success in meeting project goals. Traditional design approaches to the construction of facilities often are linear processes. Linear processes generate as the architect progresses from conceptual/schematic design to construction documents and contract administration while pulling in technical consultants along the way. Integrated design employs a multi-disciplinary approach where all project stakeholders are involved in the design process from start to finish on a collaborative basis. The latter process recognizes that non-inclusive and compartmentalized design decisions made unilaterally may have adverse impacts on achieving project design goals. The LEED Consultant is to be selected and contracted directly with the university, working closely with the project design and construction teams but as an independent contractor focusing on sustainability.

## **II. SCOPE OF SERVICES**

### **A. General**

The university desires complete consulting services necessary for securing LEED gold certification or better on the projects listed above. To that end, the consultants may be required to provide services beyond those listed in the description below.

### **B. Condition Precedent Requirements**

This solicitation is only being made for the first four buildings being planned: the Kittredge West Residence Hall Renovation, Kittredge Central Residence Hall and Commons, Recreation Facilities Improvements, and the Geosciences Lab Building. Other projects may be added to the contract based on successful performance of these projects at the university's discretion.

### **C. University Services**

The university will provide surveys, maps, and all base data available on the proposed site(s), including existing building plans, utilities, and related work completed to date.

The program plans for capital projects reference in this document can be viewed on-line at: <http://fm.Colorado.EDU/planning/projects/>.

The latest university standards for design, construction and materials, which have been revised to support LEED and sustainability requirements, can be viewed on-line at: <http://www.colorado.edu/facilitiesmanagement/pdc/construction/standards/index.html>

Building plans for the existing facilities, utilities and other adjacent structures that may be impacted by this project may be obtained from the CU-Boulder, Department of Facilities Management CAD Office.

### **D. Consultant Services**

The list of services that are designated by the university may include but are not limited to:

- Review of architectural and engineering designs for compliance with LEED criteria (site, water, energy, materials, and indoor air quality).
- Provide timely building energy modeling, including building systems alternatives analysis to assist the university and their design consultants in assessing building performance and selecting appropriate building systems.
- Provide timely building daylight modeling, including impact to energy modeling, to assist the university and their design consultants in assessing occupant comfort and selecting appropriate fenestration and glazing systems.
- Development of strategies to maximize sustainable design and construction practices with a cost payback analysis of alternatives.
- Communication with the architect, design engineers, construction management team and general contractors to obtain the required LEED documentation.

- Collection and organization of all pertinent design and construction documentation in support of the LEED applications and certification.
- Leading design review teams required to achieve LEED certification. Documentation and distribution of results and decisions made to design team members, including the CU-Boulder Campus Architect and Campus Sustainability Director.
- Participation in the university's technical review process and response to all comments made during the review.
- Provision of energy and life cycle cost analysis as required by State statute (C.R.S. 24-30-1304 and C.R.S. 24-30-1305) and LEED certification.
- Work with diligence and in good faith with a Construction Management/General Contractor (CMGC) or General Contractor selected or to be selected under a separate process. The LEED consultant will work with the contracting firm to establish procedures and process to maximize LEED points obtained during building construction.
- Review of the university's selections of furnishings and moveable equipment for LEED compliance points and document decisions and purchases.
- Provision of project close-out services including reviewing commissioning reports to be performed by campus engineering staff and record documents, and other necessary materials required for LEED certification.
- Review the university's building automation systems and work order system and recommending where processes could be enhanced for the maximum number of LEED points.
- Provide support and guidance to the team in the application phase of LEED and actual site visits and follow up questions from the US Green Building Council.
- Review the latest university design, construction and material standards for LEED compliance. Review and report gaps and areas for improvement to the design teams, Campus Architect, and Campus Sustainability Director.
- Evaluate and critique the success and failures of the complete submissions for modification on future building projects.

### III. SCHEDULE

The new streamlined capital construction process dictates the following schedule. The selected consultant must demonstrate that they have sufficient resources to meet this tentative schedule.

- Issue RFQ for Architectural Services Monday, August 15, 2011
- Pre-Submittal Meeting (9:30-10:30 a.m.) Monday, August 29, 2011  
Research Laboratory No. 2 – Room 158 - 1540 30<sup>th</sup> Street, Boulder, CO 80309
- Deadline for Submittals (4:00 p.m.) Friday, September 9, 2011
- Committee Screening of Submittals Monday, September 12, 2011
- Consultant Interviews Tuesday, September 20, 2011  
Research Laboratory No. 2 – Room 321 - 1540 30<sup>th</sup> Street, Boulder, CO 80309

- Conclude Contract Negotiations October, 2011
- Initiate Design Involvement in Projects October 2011
- Construction Start of First Project January 2012
- Project Completion Summer / Fall 2013

#### **IV. SELECTION CRITERIA**

Consultant responses shall furnish credentials to be evaluated according to selection criteria established by the Board of Regents. These criteria include:

##### **A. Project Team**

- Location within Colorado of the team's principal office, and availability and appropriateness of and need for special consultants.
- Specific leadership staff from each member firm that will be assigned to the project including their roles and responsibilities.
- Evidence of experience and qualifications of staff that will be assigned to this project, listing prior experience on projects of a similar type, size and complexity.

##### **B. Firm Capabilities**

- Size and location of each firm that is a team member.
- Information technology techniques used to manage projects including but not limited to BIM software.
- Energy modeling and daylight modeling and simulation capabilities.
- Qualified for Xcel Energy design assistant rebate or able to partner with qualified firms to capture rebates.
- Familiarity with institutional projects and availability of adequate resources (staff and facilities) to appropriately handle a project of this size and complexity (e.g. work load projections for firm and staff).

##### **C. Prior Experience with projects of a similar scope and budget**

- Demonstrated firm design expertise, qualifications, and experience with similar projects. In particular, the submittal shall describe sustainability consulting for collegiate facilities of the proposed team and results.

- Evidence of experience and qualifications for providing sustainability consulting services to a public entity.
- Experience with designing to a program and budget.
- Experience working with student and other stakeholder groups to understand user requirements while controlling expectations to meet project constraints.

**D. Project approach to planning, scheduling, and managing this project or one of similar scope and budget**

- Commitment to projects of this size, scope and magnitude.
- Ability to collect, organize, synthesize, and communicate complex information from several university administrative and student groups in a timely manner.
- Description of the firms' cost estimating procedures and methodologies.

**E. Sustainability, Design and Understanding of the project and University goals**

- Demonstrated interest and understanding of this particular project (a collegiate recreation, sports and student-life facility), by this organization (a major public university), in this specific location (Boulder, Colorado).
- Sensitivity to the goals and objectives of the mission of university and the goals, objectives and other requirements as reflected in the project specific Program Plans.
- Approach to meeting the sustainability goals outlined in this Information Packet.

**D. Demonstrated understanding of the financial responsibilities in achieving this project**

- Ability to scale work performed to fall within the client's limited budget.
- Maintaining the proposed project schedule incorporating the scope of work and the dates listed in this information packet.
- Anticipated percentages of the effort and the fee devoted to the consulting effort for the major components of this project.

**E. Commitment to the University of Colorado Boulder Design Guidelines**

- Recognition of the importance of the role of the campus architecture in defining CU-Boulder as a unique place.

- Certification of having read the Boulder Campus Design Guidelines available at <http://www.colorado.edu/facilitiesmanagement/pdc/architect/documents/CU-DesignGuidelinesFINAL3-14.pdf>  
This should include a discussion of the consultant's vision or process for accomplishing this project within the Design Guidelines.
- Understanding of the University of Colorado's design process, and responses consistent with the Boulder campus requirements.

To maximize the university's understanding of the consultant's credentials and qualifications, the university reserves the right to request of any consultant further clarification of its position or to supply additional information deemed necessary to further assess the consultant's qualifications, or to reject any or all responses received.

A screening committee, chaired by the Campus Sustainability Director and composed of representatives from the Campus Architect's office, Facilities Management staff, and any other members of the university community deemed appropriate by the university will review the submittals, conduct oral interviews, and provide a ranked recommendation of three applicants to the university Administration for approval.

## V. RESPONSE FORMAT / SUBMITTAL OF QUALIFICATIONS

- Respondents will provide two (2) copies of their response packets plus one copy in electronic (.PDF) format. Material should be bound-in and consist only of material in direct response to the selection criteria. Each packet must be in the following format or the university may deem the submittal to be non-responsive.
  - (1) **Cover Letter** – one page, bound-in, summarizing the overall qualifications of the team – **in particular the member responsible for leading the design team** – and including address, phone, e-mail, and fax numbers for **one (1)** primary contact person.
  - (2) **Table of Contents** – identifying page numbers for criteria requested below.
  - (3) **Project Team** – Summary of proposed team members including their roles and responsibilities on projects listed in the Summary of Experience.
  - (4) **Firm Capabilities** – Summarize each firms' capability and projected workload.
  - (5) **Summary of Experience** – similar projects or experiences with the scope of services requested. Provide dates of service and name of principal project person involved.
  - (6) **Project Approach** – consultants' methods of achieving the university's goals and objectives including, but not limited to, processes, and integrated design participation.

- (7) **Understanding of the University's Goals** – consultants' understanding of the sustainability and design goals and objectives of this project and the consultant's role in fulfilling each.
  - (8) **Financial Constraints:** Consultants' understanding of the financial and schedule constraints of the project.
  - (9) **Commitment to Campus Design Guidelines:** Consultants' commitment to maintaining the architectural heritage of the Boulder Campus.
  - (10) **Appendices** – other materials the consultant wishes to submit **not to exceed 10 pages**.
- Submittals will be received by the university at the following address no later than **4:00 p.m. on Friday, September 9, 2011**. **The university will not accept submittals received after this noted time and date.**

**Moe Tabrizi, Campus Sustainability Director**  
**University of Colorado Boulder**  
**RL-2, 1540 30th Street, 3rd Floor Reception Desk** (FEDEX, UPS or hand)  
**453 UCB** (US postal Service – allow an extra day for delivery)  
**Boulder, CO 80309-0453**

***NOTE: Submittals through U.S. Postal Mail should use the campus box number, 453 UCB, rather than the street address. Allow an extra day for delivery for U.S. Postal Mail.***

- All materials submitted in response to this RFQ become the property of the university. The university will return materials from unsuccessful submittals upon request when received within 10 working days of the close of submittals.
- The university is not responsible for any submittal preparation expenses, submission costs, or any expenses incurred in negotiations or site visits.

## **VI. OTHER INFORMATION**

### **A. Questions and Inquiries**

- After receipt of this Information Packet, and prior to the Pre-Submittal Meeting, applicants may submit questions to Moe Tabrizi, Campus Sustainability Director by e-mail to [tabrizi@colorado.edu](mailto:tabrizi@colorado.edu). Please place "RFQ – Sustainability Consultant Services" in the subject line of your e-mail questions. Questions will be compiled, and every effort will be made to answer the questions at the time of the Pre-Submittal Meeting and on the project web page (see section D. below).

## **B. Pre-Submittal Meeting**

- A Non-Mandatory Pre-submittal Meeting will be held on the date noted under III. SCHEDULE. The non-mandatory Pre-Submittal Meeting will be held on **Monday, August 29, 2011, at 9:30 AM MDT** in Room 321 of Research Laboratory 2, on the CU Boulder campus. A map of the area can be viewed at: <http://www.colorado.edu/campusmap/map.html?bldg=RL2>

Parking is available in Lot 569 along Marine Street and Lots 565 and 561 off of 30th Street.

While attendance at the Pre-Submittal Meeting is not mandatory, information presented may be very informative; therefore, all interested applicants are encouraged to attend or send their representative in order to be better able to prepare viable submittals.

## **C. Addenda**

- The university reserves the right to issue addenda to the RFQ at any time as a result of questions, a change in schedule, or other matters. Such information will be posted on the Consultant Selection Information web page listed in Section VI.-D. below and on the State of Colorado Bids page. The university also reserves the right to cancel or reissue the RFQ.

## **D. Project Web Page**

- CU-Boulder maintains a project information web page to assist in communicating with potential consultants. Information on questions received, addenda, meeting notices, background information and links to other important information is available on this site. Consultants interested in this project should **frequently** visit <http://www.colorado.edu/facilitiesmanagement/pdc/construction/open.htm> for up-to-date information about this project.

The university reserves the right to clarify, modify, waive or withdraw any or all of the requirements or information contained in this solicitation. Notice of any such change will be posted on the project web site listed above.

## **E. Selection of Firms for Interviews – “Short-listing”**

- Upon receipt of submittals by those interested firms, the Screening Committee will review and determine those firms best qualified to be interviewed. This determination will be based on the seven criteria as set forth by the Regents, discussed previously in section entitled IV. SELECTION CRITERIA. Those

firms deemed best qualified for interviews will be notified by telephone and U.S. mail immediately after screening is completed.

## F. Interviews

- An oral presentation will be required after the university screens written submittals and selects those firms best qualified to be interviewed for this project.
- The scheduled date for oral interviews by the screening committee will be **Tuesday, September 20, 2011**; each short-listed firm shall have 45 minutes for presentation and 30 minutes for questions and answers from the selection committee.
- Each firm should be prepared to discuss and substantiate any of the areas of the RFQ it has submitted, its own qualifications for the services required, and any other area of interest relative to this RFQ. Interviewees should focus their presentations on relevance of their qualifications to this specific project, rather than repeating information contained within the submittal.

*The University of Colorado Boulder strongly supports the principle of diversity in all its forms. We are interested in receiving applications from women, ethnic minorities, persons with disabilities, and veterans.*

END