

WRITING THE GREEN RFP: Sustainable Design Language for Consultant Requests

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OVERVIEW

This is a tool for clients—educational and cultural institutions, companies, agencies, non-profit organizations, and others—who are writing requests for proposals or qualifications from architects and other design professionals, as well as development, construction, and construction management services. Each project and site is different and each RFP or RFQ should also be unique, including the aspects of sustainable design and planning that are appropriate to the project, site, and region. This document touches on the basic elements of an RFP for design services for a sustainable project, as well as some of the issues to be considered. Some of the language cited is fairly ambitious, and clients should take care to thoroughly understand the cost and schedule implications of such requirements, should they include those in their project requests.

The AIA Committee on the Environment hopes to expand this tool considerably in the future. To that end, we encourage your feedback (contact Kira Gould at kira.gould@gouldevans.com, or 617-867-0032).

WHAT KIND OF REQUEST DO YOU NEED?

There are two primary types of requests for building design (and development, construction, and construction management) services, though there are variations on these and other types as well. Requests for Qualifications (RFQs) are the more basic requests, asking in large part for much of the information that would typically appear on the federal government's Standard Forms 254 and 255, with some additional information. Requests for Proposals (RFPs) also ask for information about firm approach, process, experience, as well as requests for project specific information such as team organization, schedule approach, and fee schedules.

Less important than what the request is called is that it elicit responses complete enough for the client, the issuing organization, to make distinctions between competing firms and determine that one or another team is the right fit for the project.

A strong, well-written RFP will engage the interests of the teams who receive it and inspire creative responses to the problems presented. It will also accurately convey the full scope of the work desired, permitting the consultant teams respond realistically and specifically to the rest. The language should allow consultants to assess their firm's ability to compete effectively for the work (preventing them the expense of a useless proposal and the client its time to review one).

SUSTAINABLE DESIGN BASICS

"[A]n exciting new field is emerging. It is called 'sustainable design' or 'green development.' Although this new architecture is difficult to describe in a sentence or two, its overall goal is to produce buildings that take less from the earth and give more to people. Note that sustainable design is not a new building style. Instead, it represents a revolution in how we think about, design, construct, and operate buildings. The primary goal of sustainable design is to lessen the harm poorly designed buildings cause by using the best of ancient building approaches in logical combination with the best of new technological advances. Its ultimate goal is to make possible offices, homes, even entire subdivisions, that are net producers of energy, food, clean water and air, beauty, and healthy human and biological communities. ... As an architect, builder, or developer, you can use the principles of sustainable design to capitalize on this trend, to distinguish your projects in the marketplace, to save money, and to waste fewer resources, all the while doing your share to preserve the environment. Applying that idea to construction yields a checklist of criteria that a sustainable building should meet. Ideally, such a building would:

- make appropriate use of the land
- use water, energy, lumber, and other resources efficiently
- enhance human health
- strengthen local economies and communities.
- conserve plants, animals, endangered species, and natural habitats.
- protect agricultural, cultural, and archaeological resources.
- be nice to live in.
- be economical to build and operate."

—*A Primer on Sustainable Building*, Rocky Mountain Institute

CORE ELEMENTS OF REQUESTS

Project Introduction

The request should include a short introduction, which will state clearly and succinctly the scope of the project, the organization's vision for the project including sustainable design benchmarks desired, and the nature of services needed. If the client is a partnership, the nature of that relationship should be stated.

It is also appropriate for the request to state the client's core mission, identify how sustainable design relates to that mission, and reference other relevant statements about the motive for pursuing a sustainable design project. The client should do internal goal setting prior to the writing of the request, and those goals can provide the framework for the project introduction.

Sample language:

... the Museum has defined its mission as "to inspire wonder, discovery and responsibility for our natural and cultural worlds." Our vision statement describes an active, outward looking institution: To fully realize our mission and vision, the Natural History Museum must reinvent itself within a structure that both inspires and enables its staff and visitors to become stewards of their natural and cultural worlds. I hope you will participate in this process as we define a team dedicated to creating a New Museum for a new century.

—RFQ: Natural History Museum of Los Angeles County,
Los Angeles, CA (2001)

* * *

Because the new SALA facility will not only accommodate learning but also serve as an enduring lesson in design and maintenance, it should embody the highest possible architectural and environmental design excellence. The project should be convivial, beautiful, and sustainable, humane and functional, and responsive to the identity of Penn State University and the cultural and natural forces in the region.

—RFP: SALA Building, Penn State University,
University Park, PA (2000)

Project Objectives

Environmental sensitivity or high performance characteristics should be part of the project objectives if the client places a high priority on those aspects of the project. If the client has technical expertise, it may be able to develop the objectives in detail. If not, broader objectives may be suggested here, with the assumption that articulating these specifically will be part of the early project work by the consultants.

Sample language of specific objectives (referencing design strategies):

While any type of environmentally sound innovative building technology may be proposed, the City is particularly interested in technologies that address the following:

- Ecological site design; on-site erosion control, water purification/pollution reduction, and stormwater management (bioswales, ecoroofs, stormwater filtration, etc.).
- Transportation: promoting bicycle, pedestrian, and transit use.
- Waste reduction: building reuse, job site recycling, and efficient use of materials.
- On-site management of sewage and organic wastes, such as graywater systems and biological wastewater treatment.
- Energy efficiency: efficient thermal envelopes, efficient space and water heating, lighting, controls and monitoring, and appliances.
- Renewable energy: photovoltaics, geothermal pumps, wind turbines, micro-turbines, and fuel cells.
- Water efficiency, both domestic and irrigation, including rainwater harvesting for irrigation and toilet flushing.
- Materials and resources:
 - Durable building envelopes and long-lived materials or assemblies
 - Recycled-content materials
 - FSC-certified woods
 - Safer, less toxic materials, such as alternatives to CCA-treated wood
 - Innovative application of natural materials (characterized by low embodied energy, local availability, good performance, biodegradable, safe, esthetic) such as straw, earth, and other composites.

- Indoor environmental quality, pollution reduction, worker and occupant safety, air cleaning, humidity control, and thermal comfort.

- Operations and maintenance:
 - Monitoring of energy, water, waste, air quality and transportation use

 - Resource-efficient building operations practices

—RFP: City of Portland Green Investment Fund, Grants for Affordable Housing,
Portland, OR (2002)

Qualifications and Experience

A detailed explanation of the consultant personnel qualifications should be a part of the submittal, and this should include resumes, certification issues, and other relevant background.

Sample language requesting integrative, multi-disciplinary team:

The Poudre School District believes that an integrated design approach can greatly increase the chance of success of meeting sustainable design goals without getting indigestion. Traditional design approaches to the construction of facilities has largely been a linear process. The architect progresses from conceptual/schematic design to design development to construction documents to 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 process recognizes that a design decision made unilaterally may have a major impact on achieving sustainable design goals.

—RFP: Poudre School District Prototype Elementary School,
Fort Collins, CO (2000)

Sample language for specific qualifications desired:

An important goal of the Authority is to develop an environmentally responsible building on the Site that can serve as a model for high-rise residential construction in this region and elsewhere. The Authority's policy is to implement financially feasible, technologically sound strategies to conserve energy and to surpass current norms for water conservation, waste management/ recycling and the quality of the indoor environment (including quality of indoor air, light, acoustics and personal controllability of building systems). The Authority will require that such strategies be fully explored in the development of the Site. Specifically, the Authority will require schematic designs for the building to be analyzed by an experienced consultant using energy use computer simulation model such as DOE-2. The

results of this analysis will be used to determine whether alternative design choices could increase the energy efficiency of the building, and what the incremental cost/benefit of these alternatives would be over the life of the building. The DOE-2 analysis would be repeated during the design process at design development phase and upon preparation of construction drawings. The Authority is prepared to assist the Developer in applying for any available funding from the New York State Energy Research and Development Authority to help defray the cost of this analysis as well as the incremental cost of incorporating energy efficiency measures in the building design.

—RFP: Site 18A, Battery Park City Authority Residential Development and Design,
New York, NY (2000)

Clients may invite respondents to include a list of environmental conferences, seminars, workshops, and professional meetings attended by team members in recent months or years, a list of firm members actively involved in the local, state, or national level of the American Institute of Architects' (AIA) Committee on the Environment (COTE) or similar efforts such as the U.S. Green Building Council.

Requests that get too specific with past examples, such as "provide three examples of medium-sized conference centers," open the door to specialist or very large firms only; "similar in scope and scale" is more appropriate wording.

Services Required and Approach

This section should articulate what the client wants the consultant to do. In most cases, it is recommended that clients ask respondents to describe their own approaches and processes, rather than ask them to follow the issuing client's process. Such descriptions can be useful when comparing consultants. Plus, respondents with expertise in sustainable design, may suggest a sophisticated or tailored approach the client might not have considered.

Sample language of specialized services required:

Demonstrated ability to provide green building consulting and design services for public and commercial buildings. These services can be provided by the proposed by the proposed firm or individual, as well as through the use of specialized subcontractors. Firms and individuals responding to this RFQ will be required to submit information specifying in which of the following areas they can provide expert services:

- Recycled-content and sustainable building product selection, specification, and procurement
- Waste reduction strategies, such as construction & demolition waste management plans and specifications, deconstruction plans and

specifications, storage and collection of recyclables, and other reuse opportunities.

- Use of the U.S. Green Building Council's LEED Green Building Rating System to guide project design.
- Design charrettes for projects using the US Green Building Council's LEED Green Building Rating System
- Development of Design Guidelines and Master Specifications for public agencies
- Partnering opportunities in building projects with organizations such as DOE and PG&E
- Use of creative financing for green buildings
- Green operating and maintenance plans
- Commissioning a green building
- Energy modeling and analysis
- Monitoring and tracking of final projects once they are operational (tracking back to original models)

—RFQ: Green Building Assistance, Alameda County Waste Management Authority,
San Leandro, CA (2002)

Scope of the Project

This section should outline the key phases of work, critical deliverables, and other tasks that will need to be completed as part of the project work. These could include:

- project vision articulation
- site and resource analysis

- project programming
- contract documents
- schematic (or concept) design
- design development
- construction management
- building commissioning and close-out

For more information, see *The Architect's Handbook of Professional Practice* (John Wiley & Sons, 2001). (Order at www.aia.org/books or use a copy in AIA offices around the country. To find the AIA office near you, visit www.aia.org/institute/chapters/chapter_search.asp.)

Budget

Inclusion of construction budget information, even if just a range, will result in responses far more valuable to the organization. Without any budget parameters, consultants will be forced to speculate (low and high), which can lead to a less-focused response.

Green buildings typically require some additional services and result in additional deliverables. In most cases, additional costs are paid for within a few years based on energy savings and other factors. Aggressive efforts may require longer-term payback analyses.

Submission Requirements

The request should include a list of the submittal components as well specific directions for submission and clear rules about deadlines. The submittal could include (but may not be limited to) some or all of the following:

- cover letter
- introduction to the firm and team

- explanation of approach, philosophy
- explanation of work to be performed
- project schedule (based on some dates provided)
- resumes of key personnel
- list of green design "tools" that the team would use (and why they are appropriate)
- lists of subconsultants and their qualifications
- statement of qualifications
- compensation (broken down by phase) or fee structure
- sample projects and other relevant experience
- references

Evaluation Methodology

The request should include the evaluation criteria that will be used to select the consultant as well as who will be doing that evaluating. If the client plans to weight certain criteria more heavily than others, that weighting system should be spelled out in detail for respondents.

LEED, the USGBC's green building rating system, is growing in use, but there are still only a sprinkling of LEED-certified buildings throughout the country. Requiring firms to show LEED certified buildings of the same type or scale as the project in question may result in a low number of responses. But there are other ways that LEED can be useful. Project team members may include LEED-accredited professionals (and the RFP could require this). The RFP could also ask that the team be familiar with the use of LEED as a tool to help guide the project. This approach, regardless of whether the project become LEED registered or eventually certified, can help ensure that some of the many issues involved with sustainable design are considered and addressed.

The client may also want to compare team based on what other tools they have experience with, such as DOE-2 software to create energy profiles, Green Building Advisor, Energy 10, Energy Plus, and more.

Contractual Information

See the *AIA Handbook* for guidelines on contractual information that should be included. (Order at www.aia.org/books or use a copy in AIA offices around the country. To find the AIA office near you, visit www.aia.org/institute/chapters/chapter_search.asp.) The client may choose to identify whether its team plans to use current AIA Owner-Architect agreements or its own contracts.

SAMPLE REQUESTS

Several institutions and organizations have agreed to let us post their requests. They appear here in PDF format. (Adobe Acrobat Reader is required to view PDF files, and is available to download free of charge.)

Educational

- [RFP, RFQ, and Pre-qualification: Poudre School District Prototype Elementary School, Fort Collins, CO \(2000\)](#)
- [Request for LEED Consultant: Northern Arizona University, Flagstaff, AZ \(2001\)](#)
- [RFP: New Laboratory Complex, Department of Global Energy, Carnegie Institution of Washington, Stanford, CA \(2001\)](#)
- [RFP: SALA Building, Penn State University, University Park, PA \(2000\)](#)
- [RFP: Environmental Studies Center, Oberlin College, Oberlin, OH \(1995\)](#)
- [Prequalification: Kasson-Mantorville High School Competition, Kasson, MN \(2002\)](#)

Cultural/Civic/Municipal

- [Specific Requirements request: Brooklyn Children's Museum, New York Department of Design and Construction, New York, NY \(2000\)](#)

- [RFQ: City of Highland City Shop and Public Works](#), Highland, UT (2000)
- [RFP: Environmental Education Center](#), Township of Upper St. Clair, PA (2000)
- [RFQ: David L. Lawrence Convention Center Expansion, Public Auditorium Authority of Pittsburgh, Allegheny County, and the Southwestern Pennsylvania Convention Center Design Commission](#), Pittsburgh, PA (1998)
- [RFP: Dan Ryan Woods Nature Preserve, City of Chicago Department of Environment](#), Chicago, IL (2002)
- [RFQ: Green Building Assistance, Alameda County Waste Management Authority](#), San Leandro, CA (2002)
- [RFQ: Natural History Museum of Los Angeles County](#), Los Angeles, CA (2001)

Residential

- [RFP: Site 18A, Battery Park City Authority Residential Development and Design](#), New York, NY (2000)
- [RFP: City of Portland Green Investment Fund, Grants for Affordable Housing](#), Portland, OR (2002)

Federal

- [Sustainable Design Language for RFPs, Department of the Navy \(multiple projects\)](#) (2000)

We intend to add RFPs and RFQs over time. If you know about a request we should consider for inclusion, please let us know (email Kira Gould at kira.gould@gouldevans.com or call 617-867-0032).

VOICES OF EXPERIENCE

Stephanie Gelb, Battery Park City Authority (architect/client):

With Site 18A, we added green criteria to our selection process. Previously, a developer had been chosen solely on the basis of having made a better financial offer than the competition. On 18A, submissions were also judged on responsiveness to the design guidelines and the green guidelines. The selected developer did not have the greenest submission, or the best financial offer, but was best on an average of all three components. The developer was required to make submissions at schematic design, design development, and construction document phases, enumerating how he was meeting the more than 60 requirements of the guidelines. This got more and more specific with each submission. Guidelines that were not met were negotiated. The biggest success is that the developer has become a green convert.

Bob Harris, Lake/Flato Architects (architect):

Often RFPs simply make a vague request for 'green' solutions without any real understanding of what that means. Greater specificity in terms of real goals and means to measure success would help greatly in this process. A commitment to achieve a specific minimum LEED rating, for instance, is one way that can help all parties better understand what was desired, what it takes to get there, how to stay on track, and how to effectively measure results.

Joyce Lee, Office of Management and Budget, City of New York (architect/client):

Commitment on the client's side is critical. I have seen projects "propel" as well as "deflate" along the way. Architects may want to assess the clients as much as the clients are evaluating the architects. The thoughtfulness in the RFP language is a good gauge, and do make use of the interview process. A willingness to "think and walk" out of the box is important.

Lisa Fay Matthiessen, AIA, consultant, formerly with the Los Angeles County Natural History Museum (architect/client):

The RFQ worked for us, I think, because we made it very thorough. We had 70 submittals, including many internationally known firms, and we selected Steven Holl, who will work with a local architect. A sustainable design consultant and all other consultants who are being selected for demonstrated commitment to sustainability. I heard back from many architects who submitted that they found the explanation of the design goals to be unusually good. They told me that they were able to get a good idea of what exactly the museum was looking for. Apparently, many architects find themselves still wondering what the client's goals are even after reading the RFP or RFQ.

Bill Reed, Natural Logic (architect, consultant):

The attitude of the firm is often as important, or more so, than its specific experience. It is about the firm's willingness to engage in this activity. Not just the architect and engineer are responsible; the owner has to be engaged and have a decision-maker at the workshops. Without this corollary commitment, success will be elusive.

Another thing to remember is that construction partnering is important. You need to let the firm know that they need to do more than construction observation. They need to be there when the tradespeople walk on for the first time because these are not the same people who were at the workshops. You have to be willing to walk through the project specifications line by line.

Paul Sterbentz, Facilities Manager, Goba! Ecology Department, Carnegie Institute, Stanford University (client)

We decided early on that we wanted to focus on practical, cost effective plan that was tailored to our own site and culture. We felt that designing to the LEED set of parameters would have hindered that approach somewhat. The RFP stated the philosophy, tone, and expectations for the project. The architect has taken it to heart and continues to cite it during our discussions. I feel that it covered all the bases and continues to serve us well.

We brought the mechanical engineer and electrical engineer on board at the same time as the architect. In the early meetings, they ran a lot of ideas by us. After we provided feedback, they chose key strategies, all proven concepts, to design around. Cost has been a deciding factor for us in the final months, but the original key choices have held up well. An important element will be system commissioning and subsequent monitoring. Even though we are not going through the LEED process, we are very interested in ensuring that the resulting product operate as designed perform within expected energy-saving parameters.

Rebecca Flora, executive director, Pittsburgh Green Building Alliance (client)

The RFQ incorporated green objectives and this was critical to our process because it was declared up front that this was important to us. The green requirement was firmly a part of our selection process. We received 25 responses to the RFQ, interviewed seven, and selected four to participate in a design competition. All four teams took the green criteria very seriously and we felt that our winner, Rafael Vinoly, integrated it most seamlessly into a beautiful design. I think that it was because our intentions were so clear in the initial RFQ that sustainability strategies were so deeply integrated into our project. In my view, this thorough integration made project implementation much easier than if the green part of our project had been treated as a separate component.

We intend to add voices over time. If you or someone you know has an experience that we should consider for inclusion, please contact Kira Gould (kira.gould@gouldevans.com or 617-867-0032).

FREQUENTLY ASKED QUESTIONS

Shouldn't a good firm provide a well daylit building anyway?

Daylighting is a given when there are windows. It is the optimization of daylighting benefits that green projects provide. Usually this is backed up by some level of computer modeling or thorough analysis.

At what scale a building is computer modeling worth the investment?

20,000 square feet is a reasonable threshold for considering modeling to be valuable, in the context of the construction costs and fees.

Can I use performance-based contracts for a green building?

Alternative contracting approaches, such as performance based fees, are not yet widely used and their value is a subject of some debate. But for some projects, this could be worth considering. For information about such contracts for a school project, visit www.rmi.org/sitepages/art1153.php.

We intend to add FAQs over time. If you have a question that we should consider for inclusion, please contact Kira Gould (kira.gould@gouldevans.com or 617-867-0032).

RESOURCES AND ACKNOWLEDGEMENTS

American Planning Association. *Tips on Writing a Green RFP*. (www.newecology.org/newsletter/Model%20Green%20RFP.PDF)

Dianna Lopez Barnett and William D. Browning. *A Primer on Sustainable Building*. Rocky Mountain Institute, 1995. (www.rmi.org/store/pid385.php)

Center for Economic Conversion. *Green Base Conversion Strategies, Technical Brief #4: Design Services for Sustainable Buildings*, July 1998. (www.conversion.org)

Hugh C. Carey Battery Park City Authority Residential Environmental Guidelines. Hugh C. Carey Battery Park City Authority, 2002. (www.batteryparkcity.org/guidelines.htm)

Rocky Mountain Institute. *Green Developments 2.0 CD-ROM*. Rocky Mountain Institute. (www.rmi.org/store/pid385.php)

The U.S. Green Building Council. *LEED Reference Guide*. The U.S. Green Building Council, 2001 (www.usgbc.org)

Alex Wilson, Jenifer L. Uncapher, Lisa A. McManigal, L. Hunter Lovins, Maureen Cureton, and William D. Browning. *Green Development: Integrating Ecology and Real Estate*. John Wiley & Sons, 1998.

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