CITY COUNCIL STAFF REPORT

DATE: November 19, 2008

SUBJECT: LEED Commissioning Consultant Services – Animal Shelter Project

FROM: David H. Ready, City Manager

BY: City Manager

SUMMARY

This action would result in the hiring of a consultant to perform LEED Commissioning responsibilities for the Animal Shelter Project.

RECOMMENDATION:

1. That City Council waive sections 7.03.030 and 7.04.050 of the Procurement Ordinance that require a competitive process to select a LEED Commissioning Consultant.
2. That City Council approve a short form Consulting Services Agreement with KEMA Services, Inc. for LEED Commissioning Services in conjunction with the Palm Springs Animal Shelter Project in an amount not to exceed $75,000.

STAFF ANALYSIS:

At the time of the approval of a design contract for the Animal Shelter project the City Council established a goal of achieving GOLD LEED certification for the project. The LEED certification process requires that a LEED consultant be part of the design team and George Miers and Associates has included KEMA Services, Inc. on their team. The process further requires that the building owner independently hire a LEED Commissioning Consultant to actually start-up the building and document that start-up for the certification process.

The Commissioning consultant may actually be the same consultant that is on the design so long as they directly contract with the owner for the services. Actually there is the potential for savings by utilizing the same consultant as they will already be completely familiar with the project by the time there is a need to actually start it up; a different consultant would need to be paid to become familiar with the plans and the project.

ITEM NO. 2H

KEMA Services, Inc. was included on the design team because of their extensive experience and expertise. It is for that same reason that staff recommends contracting directly with them for the Commissioning services. The total cost of Commissioning plus some energy modeling which may help qualify the project for grants from the utilities, is $75,000.

A short form Consulting Services agreement is proposed for this project and is attached to this report. Staff recommends City Council approval of the contract and waiving of the Procurement Ordinance requirement for competitive proposals to select the consultant due to their knowledge and expertise related to the specific project.

FISCAL IMPACT:

Funding for these services will come from the Project budget set aside.

Allen F. Smoot, Owner's Representative

David H. Ready, City Manager

Attachment(s)

1. Proposal

492 Ninth Street; Suite 220 • Oakland, CA 94607 • TEL 510-891-0446 • FAX 510-891-0410

PROPOSAL FOR
BUILDING COMMISSIONING AND ENERGY MODELING SERVICES FOR THE CITY OF PALM SPRINGS ANIMAL SHELTER

KEMA is very pleased to provide our proposal for Building Commissioning services for the City of Palm Springs Animal Shelter. The building will be approximately 22,000 square feet of space designed to be energy-efficient. This proposal is based on the assumption that the team is committed to pursuing a Gold rating from the USGBC's LEED NC v2.2 rating system.

Our proposed role is to provide building commissioning services to satisfy the LEED EA prerequisite 1- Fundamental Commissioning and EA credit 3- Enhanced Commissioning and energy modeling to be used as a design tool and to satisfy the documentation requirements of LEED EAc1. We have described fully the scope of work in the body of this proposal. Please review to insure that this level of commissioning and modeling is consistent with the owner's goal.

The cost of our proposed work is shown below. We will provide these services on a fixed fee basis.

Fee Proposal—Building Commissioning Services

Scope	Fee
LEED Fundamental and Enhanced Commissioning.....	$65,000
Energy Modeling and completion of LEED EAc1 documentation.....	$10,000

LEED FUNDAMENTAL AND ENHANCED COMMISSIONING

KEMA will provide commissioning services and documentation as required by LEED for New Construction v2.2 to meet the Fundamental Commissioning prerequisite and the Enhanced Commissioning credit towards achievement of LEED Certification.

New building commissioning has proven be a cost effective practice that provides a working building upon occupancy. Commissioning reduces energy costs, maintenance costs, and occupant discomfort. The cost of commissioning is recovered in less than 5 years on average based on energy savings alone. Many of the more significant benefits are less quantifiable, such as occupant comfort, reduced construction costs, and reduced maintenance costs. The commissioning process establishes accountability, changes the way people perform, allows designers and contractors to measure success as well as deficiency. One of the consistent values of commissioning is the validation that the design and construction meets the owner's intent. By selecting KEMA to perform the commissioning tasks described in the scope of work, the project will meet the specific requirements of LEED.

Scope of Work

Commissioning is a team effort requiring significant coordination between the A&E team, general contractor, and their subcontractors this proposal is based on the proposed team of a single general

contractor, one HVAC firm, and one lighting design firm, and one MEP construction team. Additional general contractor, HVAC, or lighting firms may require the fees to be adjusted. Construction will begin in 2009 and be completed in 36 months. Significant delays in the completion of the project may also require fee adjustments.

Please note that commissioning requires the support of the MEP for tasks such as functional testing that are typically not included in their bids. It is important that MEP team recognizes that the project will undergo a formal third party commissioning effort and allocates such in their budgets.

Fundamental Commissioning:

1. Develop the Owner's Requirements (Design Intent) document, with Design Team
2. Review the Basis of Design and document for the Commissioning (Cx) requirements
3. Provide sample Cx specifications for Construction Documents
4. Review A/E specifications for inclusion of Cx tasks and responsibilities
5. Review one set of Construction Documents drawings and specifications (Requests for additional reviews will be charged on a time plus materials basis)
6. Write a Cx Plan, a document which provides a roadmap to the Cx process
7. Initiate a Cx Kick-off Meeting to explain the Cx process and assign responsibilities
8. Site visits during construction to ensure Owner's Requirement are met for Cx systems
9. Review and approve Contractor's Startup Plans
10. Provide Cx system Prefunctional Tests (PFT) to contractors
11. Site visits during Prefunctional Tests and TAB work; approve PFT completion
12. Write, witness, & approve Functional Tests (Retests may result in contractor charges)
13. Review and approve Operations and Maintenance Manuals provided by Contractors
14. Write and submit Cx Report per LEED requirements

Enhanced Commissioning:

1. Review one set of Design Development documents
2. Review and comment on submittals related to Cx systems
3. Provide sample Training Agendas and Training Logs
4. Advise and approve Training Agenda for all Cx systems
5. Assist in scheduling training to Owner, building users, and maintenance staff
6. Provide an operational building review within the warranty period
7. Review Building Operations with maintenance during Warranty Review
8. Provide an Owner's System Manual, listing Cx equipment, operations, and O&M
9. Provide a manual for the Recommissioning of the Building

Systems to be commissioned:

To achieve the desired LEED credits for Fundamental and Enhanced Commissioning the following energy systems must be commissioned and are in the scope of our proposal:

1. All HVAC systems and associated controls
2. Exhaust systems and controls
3. Interior and exterior lighting and associated controls
4. Domestic hot water system and controls
5. PV systems

Some common services not included:

1. Tasks associated with LEED Credit documentation and coordination other than completing and signing letter templates for EAp1 and EAc3.

2. Specification language, drawings, or other design work (outside of samples noted in proposal).
3. USGBC fees for project registration, certification and Credit Interpretation Requests
4. Building envelope commissioning.
5. Complete plumbing system commissioning (the DHW system is included).
6. Special systems commissioning such as laboratory systems, kitchen hoods, etc. not shown in the schematic design.
7. IAQ testing; verification of materials (e.g., recycled content)
8. Hands-on testing or repair of equipment or controls. Note that the commissioning agent is responsible for documenting that the proper tests are performed by the installers and that any transgressions or needed repairs are reported to the owner.
9. ASHRAE 55 & 62 calculations in defense of LEED credits. Proof of thermal comfort and correct airflow calculations should be performed by the mechanical engineer.
10. Energy modeling. Modeling can be provided by KEMA as a design tool and to document LEED EAc1 as an option. Our experience with LEED projects is that an experienced energy modeler should be retained by the owner.
11. Mechanical or electrical system drawings or design work. The commissioning authority does not design systems or directly make changes to the engineer's drawings.
12. Should the owner decide to pursue LEED NC EAc5- Measurement and Verification additional fees will be required to insure that the design, M&V Plan, and reporting systems meet the requirements of the credit and the as built system operates as designed.

Energy Modeling

Energy modeling is required by LEED to document EAc1 and by SCE's Savings by Design rebate program. In mid-2007 the USGBC mandated that projects achieve a minimum of 2 points in EAc1 to be certified. Given that an energy model must be developed for LEED projects and Savings by Design, we strongly urge design teams to develop this model early in the design and use the model as a design tool to evaluate energy measures and to insure that the design will achieve the energy performance required to achieve 2 points in EAc1. If the model is created late in the design or after the design is set and the project does not meet the energy performance required will result in costly redesign.

Many mechanical designers and Title-24 compliance consultants struggle with the USGBC's requirements for modeling. KEMA's experience and knowledge of the USGBC's modeling requirements for EAc1 can provide a valuable asset to the team. KEMA can provide energy modeling and consultation throughout the design process. Modeling costs are many times recovered through the design team incentive available from the Savings by Design program.

Deliverables for Fundamental Commissioning:

1. Design Intent and Basis of Design
2. Report of Construction Documents (Plans and Specs) review
3. Commissioning Plan
4. Sample Specifications for Commissioning and Cx systems
5. Pre-functional Tests
6. Functional Tests
7. Cx Report, including O&M manuals, training, Functional Test results, Issues Log

Deliverables for Enhanced Commissioning:

1. Report of Design Development documents review

2. Review of Contractor's submittals
3. Report of training topics covered and list of attendees
4. Owner's System Manual
5. Re-commissioning Manual

Deliverables for Energy Modeling:

1. Memo of preliminary results of schematic design energy model
2. Report detailing energy and life cycle cost implications of design options
3. Completion of LEED EAc1 letter template and supporting documentation

Fee Proposal

This work will be completed on a fixed-price basis. Invoices will be issued in accordance with project progress.

Phase	Cx	Energy Modeling
Complete Schematic Design	$4,740	$2,000
Design Development	$4,740	$3,000
Construction Documents	$13,590	$5,000
Bidding	$0	$0
Construction Administration	$41,930	$0
Total Fee	$65,000	$10,000

This proposal remains effective if executed by December 1, 2008.