

**Request for Qualifications (RFQ)
For
Design/Build Services
Relating to
DEMAND SIDE MANAGEMENT**

**Submittal Date
June 26, 2006**

**City of Houston
Building Services Department
Design & Construction Division**

**REQUEST FOR QUALIFICATIONS (RFQ)
FOR
DESIGN/BUILD SERVICES
DEMAND SIDE MANAGEMENT
(LIGHTING UPGRADES)**

I. PURPOSE

The City's Building Services Department (BSD) invites the submittal of Statements of Qualification (SOQs) from design/build teams interested in providing professional services for the design and construction of Demand Side Management Services (lighting upgrades in various facilities).

Design/Build Firm will provide all services necessary to assess and verify existing conditions; review and verify Building Services Department's design standard requirements; program and develop a needs assessment; provide specifications for, fixtures and equipment; provide computer-aided design and drafting (CADD) documentation; prepare bidding documents; provide permitting services; estimate construction costs; provide value engineering; assist with bidding and award activities; arrange and conduct meetings; carry on normal construction administration and perform all construction activities; coordinate commissioning activities; and assist in the warranty review.

II. PRE-SUBMITTAL MEETING

A pre-submittal meeting will be held at 10:00 AM on Thursday June 8, 2006, at City Hall Annex, 900 Bagby Street, Second Floor Conference/Training Room, to discuss this solicitation. Attendance at the meeting is not mandatory.

Before the pre-submittal meeting date, the City will welcome any **written** questions submitted, faxed or e-mailed to:

Phil Golembiewski, P.E.
City Engineer
Building Services Department
900 Bagby, Second Floor
Houston, Texas 77002
Fax: 713-437-6859
Philip.Golembiewski@cityofhouston.net

The City will not be bound by any information conveyed verbally. The City will provide, in writing, any clarifications, changes and/or other information, deemed to be necessary, as addenda to this RFQ. Addenda will only be provided to pre-submittal meeting attendees and known RFQ holders registered with BSD.

III. OBJECTIVE

BSD proposes to retain a highly qualified Design/Build Firm with extensive experience in lighting retrofits of similar type to provide the services described herein. Those firms or joint ventures that participate in this RFQ process will be referred to as "Respondents." And "Team" refers to a collection of Construction Contractor, Designer and its subconsultants. The successful "Respondent" will be referred to, in the RFQ, as the "Design/Build Firm".

IV. DESIGN CRITERIA PACKAGE

The retrofit of the existing fluorescent and incandescent lighting systems is in order to improve lighting level and or efficiency. The following facilities and retrofits have been chosen by BSD:

1. The Riesner Complex – overall facility lighting retrofit
2. Fifty-six (56) Fire Stations – overall facility lighting retrofit
3. The Fire Logistics Complex - overall facility lighting retrofit
4. The Police Academy - overall facility lighting retrofit
5. The Southeast Police Command Building – overall facility lighting retrofit
6. The City Hall Annex – lighting retrofit/re-circuiting of exterior lighting
7. The Houston Police Department Property Division - overall facility lighting retrofit

Existing Lighting Systems –

The majority of the facilities use older, inefficient lighting technologies, with the predominant technologies utilized being:

T-12 fluorescent Lighting
Incandescent Lighting
High Intensity Discharge Lighting (HID)

Predominant fixture types being utilized include:

Recessed troffers
Recessed cans (incandescent and mercury vapor)
Various fluorescent

Special codes and ordinances that may affect this project – Compliance with any code, ordinance, or law required to receive a building permit. The Contract Documents must comply with the City of Houston minimum standards.

A. PROJECT DESCRIPTION

Generally, all existing T12 4-foot linear fluorescent fixtures in the above-mentioned facilities should be retrofitted with T8 lamps and electronic ballast technologies in respect to minimum lighting levels specified by the Illuminating Engineering Society (IES) for the task specified. In certain cases when the existing fixture is incompatible with 4-foot length sockets, conversion kits or new fixtures will have to be used in order to perform the necessary lighting retrofit.

With respect to the mercury vapor recessed down lights, these highly inefficient systems should be retrofitted with compact fluorescent kits or a pulse-start metal halide system. For these retrofits the existing fixture aperture will be reused. These high color-rendering lamps will provide a much better lighting environment than the existing system at a fraction of the energy usage.

It is estimated there are a total of 17,365 total existing fixtures that will be retrofitted.

B. SCOPE OF WORK

Project Name: **DEMAND SIDE MANAGEMENT (LIGHTING UPGRADES)**

Existing fluorescent lighting systems provide the greatest opportunity for fixture retrofit. The typical retrofit involves providing more efficient lamps and ballasts as well as reducing the quantity of lamps (de-lamping). Existing lighting systems are upgraded with more efficient light sources and a reduction in light level is achieved in over illuminated areas. T12 fluorescent lamps and magnetic ballasts are retrofit with low-power electronic ballasts and energy-efficient T8 800- series lamps. Where feasible, four lamp troffers will be retrofit with reflectors, normal-power electronic ballasts, and de-lamped to two energy-efficient T8 800-series lamps.

Also identified as an effective lighting retrofit is the removal of all F40T12/CW fluorescent lamps and magnetic ballasts. The plastic diffusers associated with these fixtures shall be cleaned. Any damaged lamp sockets will be replaced. Lamp sockets will be moved as necessary to maintain or improve optical efficiency. Existing T-12 lamps will be replaced with energy efficient T8 800-series lamps. Electronic ballasts will be installed in place of the magnetic ballasts. Fixtures will be tandem-wired (1 ballast operating multiple fixtures) where feasible.

All existing linear T-12 lamps will be replaced with Sylvania T8 800/XP-series lamps (4-foot lamps will have XP technology). T8 800/XP series lamp technology offers several advantages over standard T-12 lamps. With respect to the quality of light, all light is rated on a scale from 1 to 100 (100 is best, e.g. incandescent and sunlight). This is known as the Color Rendering Index (CRI). 800-series XP T-8 lamps have an 85 CRI versus the 62 CRI of the existing T-12 cool white lamps. At 3,000 initial lumens, 800-series T-8 lamps produce a greater quantity of light than the 34-watt T-

12 lamps (2,650 lumens). All T-8 lamps use less energy than existing T-12 lamps (32 watts versus 34 watts for a 4-foot lamp).

Electronic ballasts consume less energy compared with their magnetic counterparts. In addition, electronic ballasts produce very little waste heat, have no visible flicker, and are virtually inaudible. Quality electronic ballasts have a high power factor (0.95 min.) and low harmonic distortion (less than 20% Total Harmonic Distortion [THD]).

Manufacturers use a ratio referred to as Ballast Factor (BF) to rate the light output of electronic ballasts. Ballast Factors range from ~0.77 (low-power) to ~0.88 (normal-power) to ~1.14 (high-power). Existing lighting power density, fixture configuration, customer requirements, and area usage will determine which type of ballast is specified. Since electronic ballasts have the ability to operate up to four lamps (versus only two lamps with magnetic ballasts), adjacent fixtures aligned end-to-end can be tandem-wired where feasible. Tandem wiring allows one electronic ballast to operate multiple fixtures.

1) Scope of Work – Retrofit/Replacement of Existing Exit Signs

Existing exit signs typically house two incandescent lamps to illuminate the sign. Although initial costs are low, the high maintenance requirement (replacing lamps several times a year), high-energy usage (usually 40 watts per sign), and excessive heat generation make these signs inefficient and are considered obsolete as compared to newer technologies.

New LED exit signs use state-of-the-art LED's as the main light source for the sign. This exit sign technology uses less than 2 watts per sign, is rated at 100,000 hours (more than 11 years @ 24 hours per day), and contribute virtually no heat to the system. With exit signs being energized 24 hours a day, all year, LED exits signs pay for themselves very quickly and greatly minimize operation and maintenance issues. The replacement of existing incandescent exit signs with new LED exit signs has been included in the scope of the lighting retrofit project.

2) Scope of Work – Retrofit of Existing Incandescent Fixtures

New compact fluorescent (CF) technology replaces many existing incandescent fixture lighting applications. Lamp life is increased to 10,000 hours of operation versus 750 to 2,000 achieved for most incandescent lamps. New fixtures insure an efficient fixture designed for modified bulb shapes and deter theft due to the hardwired nature of the product.

Screw-in lamps, compact fluorescent lamps, were created in order to provide an energy efficient direct one-for-one replacement of incandescent lamps. Self-ballasted compact fluorescent (CF) screw-ins provide an economical solution for many incandescent applications. Low wattage CF's use approximately $\frac{1}{4}$ of the wattage of a standard incandescent lamp yielding similar light levels and last more than 10 times longer.

3) Scope of Work – Installation of Occupancy Sensors

Based on the hours of operation and building use, the following buildings demonstrated outstanding candidacy for the application of occupancy sensors:

- Riesner- Police Administration Building
- Riesner- Gerson Building
- Riesner- Police Communication Building
- Police- Southeast Command Building

Four-foot linear fluorescent type fixtures should be analyzed to be controlled with occupancy sensors in areas that are economically feasible. Most occupancy sensor installations will occur in open office areas, private offices, storage areas, work areas, and some restrooms. Switch-mounted sensors will be specified in all areas that permit practical usage. Ceiling-mounted sensors will be used only in areas that would gain significant benefit from the use of sensors but that cannot accommodate use a switch-mounted sensor. Dual technology occupancy sensors, which employ both infrared and ultrasonic sensing capability, will be utilized.

It is estimated that 3,047 total existing lighting fixtures should be controlled through the use of occupancy sensors.

4) Scope of Work – Existing Lighting Fixture Lens Replacement

Of the existing fluorescent fixtures, there are 9,445 fluorescent fixtures equipped with either a wrap around lens or a flat lens. Fixtures other than fluorescent types that are to be affected by a scope of work on this project include: strip fixtures, industrial fixtures, incandescent fixtures, or HID fixtures. The retrofit of only fluorescent lighting fixtures will incorporate the replacement of the fixture lens as a part of the retrofit scope. As mentioned earlier, there are 9,445 fluorescent fixtures. For purposes of defining this scope of work, fluorescent fixtures will be differentiated by the type of lens it possesses: either a flat prismatic or a wrap around style lens. Of the 9,445 fluorescent fixtures, there are 7,882 equipped with a flat prismatic lens and 1,563 equipped with a wrap around lens. The scope of work includes identifying which lenses need replacement, taking measurements of each said lens, custom ordering lens type required, installation of the new lens, and disposal of the old lens.

- Flat Prismatic Lens: total replacement quantity of 1,577
- Wrap Around Prismatic Lens: total replacement quantity of 313

5) Scope of Work – General Exclusions

The following items are excluded from the scope of work included with this proposal

- Existing compact fluorescent systems

- Existing T8 lamp and electronic ballast fixtures (including all newly renovated indirect lighting)
- Task lighting and under-cabinet lighting
- Existing exit signs with linear fluorescent T5 lamps
- All existing decorative and neon lighting
- Exterior lighting
- All incandescent lighting on dimmers (i.e. recessed cans, track lighting, etc...) including MR16 lamps and all low-voltage systems

Those items listed above shall not be retrofitted or modified in any way.

In addition to those items listed above. The following measures are excluded:

- Existing energy efficient lighting will not be changed.
- Exterior lighting not attached to the building will not be changed.

Hazardous Waste

Ensure the safe removal, recycling, transport and disposal of all retrofit generated hazardous wastes.

PCB ballasts will be separated from non-PCB ballasts and the PCB containing ballasts will be stored in a 55 gallon DOT approved drum for safe transport to the recycling facility. The non-PCB ballasts will be considered normal waste and be disposed of as such. All fluorescent lamps will be boxed for removal to the recycling facility. All fixtures removed from the site will be transported for recycling. All other waste generated by the lighting project will be disposed of in an on site dumpster.

The following services will be required:

1. Assessment of Existing Conditions. Initially, the Design/Build Firm will need to gather any existing records (e.g. environmental assessments) or documents (e.g. Record Drawings, site surveys, etc.) that indicate existing conditions. The extent of this effort shall be as in-depth and as extensive as is required and necessary to support the design effort.
2. Planning. Phase I design services include Schematic Design, and Design Development. Phase II services involve the development of Contract Documents (CDs). All permit and other discrepancies must be resolved and changes incorporated into the CDs before submitting 100% complete CDs to the City for final approval. Design/Build Firm will prepare an initial schedule showing the activities of the City, Design/Build Firm, and others, during the design and construction process. Schedule to be done in Microsoft Project or compatible program. Design/Build Firm will update

the schedule at each submittal point and recommend corrective actions to meet scheduled completion dates.

3. Initial Cost Estimates. When sufficient Project information is available, the Design/Build Firm will prepare an initial Construction Cost Estimate for the City's approval. Cost estimate to be done in Microsoft Excel or compatible program. Design/Build Firm will update the Cost Estimate at each stage of the design, and recommend revisions to the scope of work, if the Cost Estimate indicates the Construction Cost will exceed the designated budget.
4. Design and Construction Administration Phase Services. Engineering services will include, but are not limited to, construction drawings using CADD and the Uniform Drawing System (UDS) distributed by the Construction Specifications Institute (CSI) with layering standards developed by the American Institute of Architects (AIA); CSI-style specifications; construction administration services; and post-construction services which covers items, such as warranties, for a period following the completion of construction.
5. Guaranteed Maximum Price (GMP). When drawings and specifications are 100% complete, and all required building permits are approved, the Design/Build Firm will propose a Guaranteed Maximum Price for City's review and approval. The GMP shall be the sum of the cost of the construction work.
6. Construction Services. Design/Build Firm will perform all construction services necessary to complete the scope of work described in the Contract Documents.

C. REQUIRED QUALIFICATIONS AND SELECTION CRITERIA

The City is seeking a highly qualified Design/Build Demand Side Management (Lighting) Contractor experienced in providing the professional programming, planning, design, and construction services outlined in the Scope of Work. The required qualifications are to be demonstrated in the experience of the proposed Team. A Selection Committee composed of representatives from BSD will review the SOQs. The criteria used to evaluate the RFQ responses will include the following:

1. Completeness of submittal response: SOQ follows the prescribed format and contains all information requested in RFQ (maximum 5 points).
2. Strong, established, and proven working relationships among Team members, as indicated in Item 6 on Form 255 and described further in Section 3 Narrative (maximum 10 points).

3. Experience in similar or relevant projects by team members, as shown in Forms 254 and 255 and Project Briefs (maximum 10 points).
4. Experience in similar or relevant projects by individuals who would be assigned to this project, as shown in Forms 254 and 255 (maximum 10 points).
5. Experience by firms and individuals with design-build construction, as shown in Forms 254 and 255 and Project Briefs (maximum 10 points).
6. Project experience by firms and individuals with the City or other governmental agencies or institution, as shown in Forms 254 and 255 and Project Briefs (maximum 5 points).
7. A suitably sized staff to meet the peak phases of work, as shown in Item 4 on Form 255 (maximum 5 points).
8. Track record of meeting deadlines and working within a budget, as described in Section 3 narrative and as shown on Project Briefs (maximum 10 points).
9. Demonstrable systems and processes in-house by Construction Contractor and Designer for insuring quality and timely performance on projects, as explained in Section 3 Narrative (maximum 10 points).
10. Understanding of City's needs and appropriateness of Team's approach to this project, as described in Section 3 Narrative (maximum 15 points).
11. Applicability and quality of references, as provided in Section 4 Testimonials (maximum 5 points).

V. SUBMITTALS

Nine copies of sealed submittals are required. **Submittals shall be delivered to City Secretary** of the City of Houston, in the City Hall Annex, Public Level, 900 Bagby Street, Houston, TX 77002, at or before 2:00 p.m., local time, **Monday, June 26, 2006**. Late submittals will not be accepted for any reason. All submittals must be labeled on the outside with the Respondent's name and the name of the project, and Building Services Department

To enable the City to efficiently evaluate SOQs, Respondents are urged to strictly follow the required format in preparing their SOQ.

Each copy of the SOQ shall be bound using GBC or other semi-permanent binding method, to ensure that pages are not lost. Each copy shall be no more than one-half inch thick. Pages shall be no larger than letter-size 8 ½" x 11" or, if folded to that dimension, twice letter size 11" x 17". Each section, as defined below, shall be

separated by a tabbed divider. Elaborate covers, binding, dividers, and the like, are not required nor wanted. **NOTE:** One of the submittals shall be labeled "ORIGINAL" on the outside cover and shall contain original documents where specified below.

Each SOQ shall be organized in the following order:

- A. **Outside Cover and/or first page:** Shall contain the name of the SOQ ("Statement of Qualifications for Design/Build Services Relating to Demand Side Management (Lighting Upgrades)), the name of the Respondent, and the submittal date. Remember to label the cover of one copy, with original documents in it, "ORIGINAL" on the cover.
- B. **Table of Contents:** The next page shall be a table of contents.
- C. **Section 1 Divider (Letters and Forms)**
 1. *Transmittal Letter:* The first page following the divider shall be a one-page letter transmitting the SOQ to Phil Golembiewski, P.E., City Engineer, Building Services Department. The transmittal letter shall say that the submittal is valid for 120 days, and that the signer of the document is authorized by the Respondent to sign the document. The transmittal letter shall contain the names of all firms proposed for the Team, and the Respondent **must certify to the City that each member of the Team was selected based on demonstrated competence and qualifications**. At least one copy of the transmittal letter shall contain the original signature of a partner, principal, or officer of Respondent. **NOTE:** Acknowledge receipt of all Addenda, if any, in this Transmittal Letter.
 2. *MWBE Letter (s):* Following the transmittal letter shall be a one-page letter from each City-certified MWBE firm included on the Team, indicating that firm's desire to be included on the Team and indicating a general statement of the scope of services that firm will perform if Respondent is selected. **NOTE:** The scope of services proposed by the firm must match the service for which that firm is certified by the City. At least one copy of each of these letters shall contain the original signature of a partner, principal or officer of the MWBE firm.
 3. *Copy of Conflict of Interest Questionnaire* (Texas Ethics Commission Form CIQ found at www.ethics.state.tx.us/forms/CIQ.pdf): Per House Bill 914, effective 1/1/06, original form shall be filed with City of Houston's Records Administrator (Ms. Anna Russell, City Secretary, 900 Bagby, Public Level, Houston, Texas 77002). Respondents shall include a copy of the form that was submitted to the City Secretary as part of the SOQ package. Any questions about filling out this form should be directed to Respondent's attorney.

D. Section 2 Divider (Team Organization & Experience)

1. *List of Team Members:* On one page, list the Team member firms along with the primary responsibilities (e.g. Structural Engineer, MEP Engineer, etc.) they will have on the Team. Please indicate the lead firm. It is a requirement of the City that all SOQs will indicate the lead firm proposed for the project and that firm must agree to maintain a Houston office for the duration of the Contract.
2. *Organizational Chart:* The next page shall be a simple organizational chart of the Team, showing the reporting structure between the team members designated to perform the work.
3. *SF-255, Architect-Engineer and Related Services Questionnaire for Specific Project:* Include a completed SF-255 for the proposed Team. Include all Team members under Block 6 and a completed SF-254 (A-E and Related Services Questionnaire) for each team member. Under Block 9, list all work performed for any government agency.
4. *Project Brief:* The Respondent shall select three projects from Block 8 of the SF-255, to highlight, as best representing the Team's project experience, and provide a briefing sheet for each. Each briefing sheet shall be one-page and should contain information, which shows the capability of the proposed Team to provide the range of services that are required by this project. The work described must have been performed within the past eight years. At least one of the projects shall be for \$3 million, or more, in construction cost and for a governmental entity. No more than two of the projects may be for the same client. Minimally, each brief shall contain:
 - a. Project Name and Location
 - b. Year Project Completed (or "In Design" or "Under Construction") and brief explanation regarding steps Respondent's team member took to maintain project schedule
 - c. Short Description of Services Provided
 - d. How this project experience relates to this RFQ project
 - e. Name of Lead Design Firm and current telephone number and/or e-mail address
 - f. Name of Client and/or Owner/Operator and current telephone number and/or e-mail address

- g. Name of General Contractor and current telephone number and/or e-mail address
 - h. Final Construction Cost, and whether or not it was within the project's original budget
 - i. Total Construction Time, and whether or not the project was completed on time
5. *Graphic Information:* If the Respondent includes photographs, drawings or other graphical information about any of the three projects, the back of the project brief, the facing page or a separate page may be utilized for this purpose. Photographs or other graphical information used to illustrate these projects may also be incorporated into the one-page brief sheet itself.

E. Section 3 Divider (Narrative)

1. *Narrative:* The Respondent shall provide no more than three pages of narrative that describes:
 - Team's understanding of the City's needs and Team's approach to this project;
 - Team's knowledge of the elements involved in this project, and approach to be taken for the services requested. Elements of the project such as assessment of existing conditions, timely scheduling, cost effectiveness, energy efficiency and environmental issues, quality control, agency regulations, operation, maintenance, and security may be included.
 - Team's systems and processes for insuring quality and timely performance on projects;
 - Team's track record of meeting deadlines and working within a budget;
 - Team's working relationship.

F. Section 4 Divider (Quality of Service)

1. *Testimonials:* Respondents may include no more than three one-page letters from clients and/or general contractors that they have worked with on previous projects. At least one copy of these letters shall contain the original signature of the person writing the letter. Letters should comment on budget and scheduling experiences, plus qualitative matters related to services received from the Respondent or Team members.

2. *Remarks:* Respondent may address issues that do not fall into any of the above categories or expand on their previous answers; however, these additional remarks are limited to a maximum of two pages.

VII ADDITIONAL INSTRUCTIONS, NOTIFICATIONS AND INFORMATION

- A. Respondents shall not offer any gratuities, favors, or anything of monetary value to any official or employee of the City for the purposes of influencing this selection. Any attempt by the Respondent to influence the selection process by any means, other than disclosure of qualifications and credentials through the proper channels, shall be grounds for exclusion from the selection process.
- B. Respondents who provide false or misleading information, whether intentional or not, in any documents presented to the City for consideration in the selection process shall be excluded. Any false or misleading information in these documents would, in effect, render the entire document suspect and therefore useless.
- C. **INTERVIEWS** – After the screening of SOQs, Respondents will be notified, in writing, of their status in the selection process. If interviews are needed, short-listed Respondents may be given additional information for interviews. These interviews will relate less to the past experience and qualifications already detailed in the submittal and relate more to identification of the Respondent's program approach and to an appraisal of the people who would be directly involved in the project.
- D. **INQUIRIES** – Please do not contact the City during the selection process to make inquiries about the progress of this selection process. Respondents will be contacted when it is appropriate to do so.
- E. **COST OF SOQS** – The City will not be responsible for costs incurred by anyone in the submittal of qualifications or for any costs incurred prior to the execution of a formal contract.
- F. **CONTRACT NEGOTIATIONS** – This RFQ is not to be construed as a contract or as a commitment of any kind. If this RFQ results in a contract offer by the City, a specific scope of work, fees, insurance coverages, and other contractual matters will be determined during contract negotiations. To ensure that the appropriate staff is assigned to the project, the City may make the inclusion of a "key persons clause" a part of the contract negotiations.
- G. **CONFIDENTIAL INFORMATION** – All responses shall be held confidential from other parties by the City to the extent allowable by law until after the selection process is completed. Respondents should be aware that at the completion of the selection process the contents of their SOQs are subject to

the provisions of the Texas Open Records Act and may be made public. CONFIDENTIAL or SENSITIVE information should not be included in the SOQ.

- H. CITY POLICIES & ORDINANCES – Respondents should be aware of and therefore, familiar with all pertinent City of Houston Ordinances and policies which relate to contracting with the City. More detailed guidance is available on request. The following is a partial list of relevant subjects:
1. Equal Employment Opportunity
 2. MWBE Participation Goal of 18%
 3. City of Houston Fair Campaign Ordinance
 4. Mayor’s Drug Detection and Deterrence Policy and Procedures
 5. City Contracts and Indebtedness to Taxing Authorities
 6. Insurance requirements
- I. The City of Houston reserves the sole right to (1) evaluate the qualifications submitted; (2) waive any irregularities therein; (3) select Respondents for the submittal of more detailed qualification; (4) accept any submittal or portion of a submittal; and/or (5) reject any or all Respondents submitting qualifications, should it be deemed in the City’s best interest.

Phil Golembiewski, P.E.
City Engineer
Building Services Department