

JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION

This document is a justification for other than full and open competition (JOFOC) prepared by the NASA, John F. Kennedy Space Center.

Contracting Activity:

National Aeronautics and Space Administration (NASA)
Kennedy Space Center (KSC)
OP-ES
Kennedy Space Center, FL 32899

Description of the Action – This justification provides the rationale for contracting by other than full and open competition for additional design, engineering, and other professional services currently being performed by Johnson, Levinson, Ragan, and Davila, Inc. (JLRD) under indefinite-delivery indefinite-quantity (IDIQ) contract NNK10CA20B.

Description of Services Required to Meet the Agency's Needs – Contract NNK10CA20B was awarded on May 13, 2010 to JLRD for design, engineering, and other professional services for the rehabilitation and modernization of existing facilities and systems and construction of new facilities and systems at the Kennedy Space Center (KSC), Cape Canaveral Air Force Station (CCAFS), Vandenberg Air Force Base (VAFB), and overseas Shuttle landing site facilities. The scope of work includes conducting field investigations, surveys, testing and analysis of existing and planned mechanical support systems; preparing engineering reports, studies, designs, and cost estimates; and providing engineering services during the construction of facilities and systems. The work includes designs of fire protection systems, all types and sizes of heating, ventilating, and air conditioning (HVAC) systems, high temperature hot water boilers, piping, fluid systems, chilled water, compressed gas systems, clean rooms, elevators, hoists and cranes, specialized mechanical equipment and controls (including programmable logic controllers and direct digital controls), and facilities to house mechanical equipment. Work also includes site development, storm water management, building envelope, interior finishes, industrial and institutional type electrical systems, grounding, lighting, lightning protection, fire alarm and detection systems, mechanical system testing, analysis and preparation of operating and maintenance documentation, and development of commissioning plans and on-site commissioning services. Professional engineering licenses in the state of Florida are required.

Statutory Authority Permitting Other Than Full and Open Competition – The statutory authority permitting other than full and open competition is 10 U.S.C. 2304(c)(1) as cited in FAR 6.302-1, “Only one responsible source and no other supplies or services will satisfy agency requirements.”

Nature of Acquisition Requiring Other Than Full and Open Competition - Contract NNK10CA20B has a five year ordering period ending May 12, 2015 and a not to exceed dollar value of \$6M. The \$6M value was based on projected engineering services for non-

programmatic institutional designs and engineering services during construction over a five year period.

KSC was heavily involved in supporting architect-engineering and construction efforts for the Constellation Program during the solicitation phase of the mechanical architect and engineer (A&E) contract acquisition. After the May 2010 contract award, the President signed the October 2010 NASA Authorization Act which cancelled the Constellation program.

A year later, the Space Launch System (SLS) program materialized, requiring a new and different architecture than the Constellation Program. The new SLS design requirements were too numerous for the existing Constellation/SLS Program mechanical A&E contractor to effectively manage. As the new requirements were within the scope of the JLRD contract many of them were given to JLRD to more evenly distribute KSC's mechanical engineering workload. JLRD has been awarded, to date, four studies, seven designs, and four construction engineering services task orders, totaling approximately \$5,900,000. The unforeseen SLS Program support and immediate need to upgrade the Industrial Area Chiller Plant (IACP) is resulting in the JLRD contract reaching its not to exceed dollar value of \$6M before the end of its five year ordering period.

KSC has approximately \$3.2M of work to be ordered during the remainder of the five year ordering period which is a logical follow-on to work JLRD is currently working on. The additional work includes six task orders for engineering services during construction valued at approximately \$2.35M; three of the construction projects are scheduled for award in FY2013 and the other three are scheduled for award in FY 2014. The remaining dollars are associated with a design to modify the existing Communication, Distribution, and Switching Center (CD&SC) valued at \$800K and potential changes to JLRD on-going designs.

Engineering services during construction includes responding to questions concerning the specifications and drawings, to include initiating design changes. Hiring another firm, other than JLRD, to handle design clarifications, corrections, and revisions on JLRD designs creates A&E liability accountability issues between the design and construction A&E firms. The Federal Acquisition Regulation (FAR) holds the design A&E firm, also known as the Engineer of Record, responsible for the professional quality, technical accuracy, and coordination of all designs, drawings, specifications, and other services it provides and requires the original design A&E firm, without additional compensation, to correct or revise any errors or deficiencies in its designs, drawings, specifications, and other services it provides. When design errors are encountered during construction and the A&E firm performing the engineering services during the construction effort is not the A&E firm who designed the project, the construction A&E firm will waive responsibility for addressing design issues and the Government will seek resolution of the design issues from the original design A&E firm. If the construction A&E firm responds to questions and initiates design changes, the original design A&E firm will claim its original designs were modified and waive accountability for any design issues that may arise. This A&E liability conflict will result in untimely responses to construction contractor questions, untimely reviews and approvals of equipment and material submittals, and untimely approvals of the construction contractor's installation methodologies, culminating in unacceptable construction contract schedule delays and non-value added payments to the construction contractor for delay costs to include unabsorbed extended overhead. The six

construction projects needing engineering services during construction, referenced in this JOFOC, are large complex projects totaling approximately \$25M to \$40M: Repair fire suppression water supply system in the Vehicle Assembly Building (VAB)/Launch Control Center (LCC)/Utility Annex (UA); Chiller and air handling unit replacement in the Booster Fabrication Facility (BFF); UA Air Compressors/Structural; Upgrade systems in the Industrial Area Chiller Plant (IACP); and Chilled water and hot water piping in the VAB. A&E accountability issues on construction projects of this magnitude will adversely impact KSC's ability to provide timely support to the SLS program.

Hiring an A&E firm other than JLRD to handle design clarifications, corrections, and revisions on the six projects referenced above also involves duplicated A&E costs that would not be expected to be recovered during another competition. The Government anticipates it would incur duplicated/additional engineering hours due to another A&E firm's lack of familiarity with the original JLRD designs. The additional estimated hours are for the following:

- Development of project management documentation and files – 88 labor hours for a project Engineer and project administrator
- Field investigations and additional meetings – 288 labor hours for a project manager, senior mechanical engineer, senior electrical engineer, and senior civil engineer (plus travel costs)
- Review of existing design – 720 labor hours for a senior mechanical engineer, senior electrical engineer, and senior civil engineer
- Revalidation of analysis and calculations supporting existing design – 240 labor hours for a senior mechanical engineer, senior electrical engineer, and senior civil engineer
- Correspondence with the Engineer of Record - 120 labor hours for a Project Engineer, senior mechanical engineer, senior electrical engineer, and senior civil engineer
- Updating drawings and other documentation – 200 labor hours for a senior designer and drafter

Applying current negotiated fully burdened A&E labor rates and adding estimated travel expenses, these duplicated/additional and unnecessary costs total approximately \$284K.

Based on these facts it is determined to be in the Government's best interest to increase the not to exceed dollar value of contract NNK10CA20B by \$4M to \$10M through a bi-lateral contract modification.

Efforts Made to Ensure That Offers are Solicited From as Many Potential Sources as Practicable – The solicitation/synopsis resulting in the award of Contract NNK10CA02B to JLRD was posted on the NASA Internet Acquisition Service (NAIS) and Federal Business Opportunities (FBO) websites on September 14, 2009. The project was advertised as a full and open competition, allowing firms of all types to submit proposals. As this action increases the

dollar value of the existing JLRD contract, it will be synopsisized on the NAIS and the FBO websites.

Determination of Fair and Reasonable Cost – It is determined that the prices of the additional task orders placed with JLRD will be fair and reasonable. A forward pricing rate agreement (FPRA) was negotiated with JLRD on May 12, 2010 for the five year ordering period and includes agreed upon labor rates, overhead rates, and escalation factors. Audit assistance was provided the Contracting Officer by the Defense Contract Audit Office during the negotiations of the FPRA and all task order proposal rates are evaluated against the rates in the FPRA.

Market Research – A search of the Central Contractor Registration (CCR) database for 8 (a), HUBzone, and Service Disabled Veteran Owned Small Business Architectural and Engineering (A&E) firms located within one hour of the Kennedy Space Center was conducted in August, 2009. The list of firms was reviewed by the technical office to determine if the listed firms had specialized experience and technical competence in the type of work required at KSC; past performance with NASA or other Government agencies and private industry on projects of similar size and complexity as KSC's aerospace related work requirements; and capacity to perform a broad range of concurrent design and construction engineering services for multiple projects with construction values as low as \$500K and as high as \$6M with varying degrees of technical complexity. In total, 89 businesses were evaluated. Approximately 98% of the firms did not meet the basic qualifications of being an engineering firm with mechanical engineering experience capable of providing studies, reports, and design packages. It was found each of these businesses had specific engineering disciplines in which they focused (i.e. acoustical; hydrology; or site development, etc.). The other 2% or 2 companies demonstrated experience in mechanical engineering, but appeared to lack the capacity to be responsive to KSC's multi-disciplined, complex, and time sensitive requirements and performance expectations. Based on this review, concurrence was received from the Small Business Administration to procure the mechanical engineering services as a full and open competition.

Other Facts Supporting the Use of Other than Full and Open Competition – The acquisition for the contract awarded to JLRD was conducted in accordance with the procedures set forth in FAR Part 36.6, Architect-Engineer Services. All offerors were evaluated against the mandated FAR evaluation criteria of professional qualifications, specialized experience and technical competence, capacity to accomplish the work in the required time, past performance, and location in the general geographical area of the work and knowledge of the locality of the work. JLRD was selected as the most highly qualified firm. Since JLRD has performed admirably under its existing contract, it is highly likely that JLRD, based on the evaluation criteria in FAR Part 36, would be selected as the most highly qualified firm to perform the additional work identified in this justification for other than full and open competition if a separate and new acquisition were to be conducted for this work.

Listing of Sources, if any, that Expressed Interest in the Acquisition – No sources have expressed, in writing, an interest in this acquisition.

Statement of Actions to Remove/Overcome any Barriers to Competition – The ordering period of the current JLRD contract expires in May 2015. A recompetition of all of the requirements will be initiated during the 2014 calendar year.

Contracting Officer's

Technical Representative: I certify that the supporting data presented in this justification are accurate and complete.

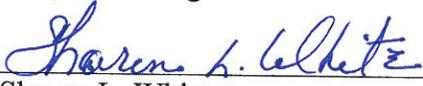


 John P. Davies

5-21-13
 Date

Contracting Officer:

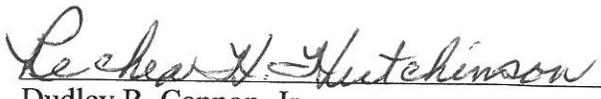
I certify that this justification is accurate and complete to the best of my knowledge and belief.



 Sharon L. White

05-21-13
 Date

Concurrence:

for 

 Dudley R. Cannon, Jr.
 Procurement Officer

5/23/13
 Date

Approved:



 Kelvin Manning
 Center Competition Advocate

5/23/13
 Date

