SOLICITATION, OFFER, AND AWARD *(Construction, Alteration, or Repair)*	1. SOLICITATION NO. **NNK14518671R**	2. TYPE OF SOLICITATION [ ] SEALED BID *(IFB)* [X] NEGOTIATED *(RFP)*	3. DATE ISSUED **July 22, 2014**	PAGE OF PAGES **1 of 122**

IMPORTANT — The "offer" section on the reverse must be fully competed by offeror.

4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST NO.	6. PROJECT NO.
TBD	**4200518671**	**PCN 98984, IOP/SS Post-Liftoff Bypass Valve, LC 39B**

7. ISSUED BY: CODE OP-ES	8. ADDRESS OFFER TO:
JOHN F. KENNEDY SPACE CENTER, NASA **PROCUREMENT OFFICE CODE: OP-ES** **KENNEDY SPACE CENTER, FL 32899**	**JOHN F. KENNEDY SPACE CENTER, NASA** **PROCUREMENT OFFICE CODE: OP-ES** **Bldg N6-1009 (CIAO), Attn: Randall A. Gumke** **KENNEDY SPACE CENTER, FL 32899**

9. FOR INFORMATION CALL:	A. NAME	B. TELEPHONE NO. *(Include area code) (NO COLLECT CALLS)*
	Randall Gumke, Contracting Officer	(321) 867-3322

SOLICITATION

NOTE: In sealed solicitations "offer" and "offeror" mean "bid" and "bidder".

10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS *(Title, Identifying no., date):*

The contractor shall furnish all labor, equipment, materials and related activities necessary for the installation of new post-liftoff bypass for the Ignition Over Pressure and Suppression Systems, Launch Complex 39B at the Kennedy Space Center, Florida.

11. The Contractor shall begin performance within (*) calendar days and complete it within (*) calendar days after receiving [ ] award, [X] notice to proceed. This performance period is [X] mandatory, [ ] negotiable (See *See Article F.1b.)

12A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS. *(If "YES," indicate within how many calendar days after award in item 12B.)*	12B. CALENDAR DAYS
YES	10 calendar days

13. ADDITIONAL SOLICITATION REQUIREMENTS:

A. Sealed offers in original and 1 copies to perform the work required are due at the place specified in Item 8 by **3:00PM** local time **August 21, 2014**. If this is a sealed bid solicitation, offers will be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.

B. An offer guarantee [X] is required.

C. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.

D. Offers providing less than 60 calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

OFFER ***(Must be fully completed by offeror)***

14. NAME AND ADDRESS OF OFFEROR *(Include ZIP Code)*	15. TELEPHONE NO. *(Include area code)*
	16. REMITTANCE ADDRESS *(Include only if different than item 14)*
CODE FACILITY CODE	

17. The offeror agrees to perform the work required at the prices below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing within _____ calendar days after the date offers are due . *(Insert any number equal to or greater than the minimum requirement stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.*

AMOUNTS	**TASK 1 (Base Bid)** Replacement IOP/SS Post Liftoff Bypass $ _____

18. The offeror agrees to furnish any required performance and payment bonds.

19. ACKNOWLEDGEMENT OF AMENDMENTS

(The offeror acknowledges receipt of amendments to the solicitation - give number and date of each)

AMENDMENT NO.										
DATE										

20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER *(Type or Print)*	20 B. SIGNATURE	20C. OFFER DATE

AWARD ***(To be completed by Government)***

21. ITEMS ACCEPTED:

CLIN	DESCRIPTION	UNIT	UNIT PRICE
0001	**TASK 1 (Base Bid)** Replacement IOP/SS Post Liftoff Bypass	1 JOB	$_____

TOTAL AWARD $ _____

22. AMOUNT **(TOTAL AWARD)**	23. ACCOUNTING AND APPROPRIATION DATA
$ _____	**4200518671**

24. SUBMIT INVOICE TO ADDRESS SHOWN IN *(4 copies unless otherwise specified)*	ITEM 27	25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO [ ] 10 U.S.C. 2304(c) ( ) [ ] 41 U.S.C. 253(c) ( )

26. ADMINISTERED BY CODE OP-ES	27. PAYMENT WILL BE MADE BY
JOHN F. KENNEDY SPACE CENTER, NASA **PROCUREMENT OFFICE CODE: OP-ES** **KENNEDY SPACE CENTER, FL 32899**	**NASA Shared Services Center (NSSC)** **Financial Management Division (FMD) – Accounts Payable** **Bldg 1111, C. Road** **Stennis Space Center, MS 39529**

CONTRACTING OFFICER WILL COMPLET ITEM 28 OR 29 AS APPLICABLE

[ ] 28. NEGOTIATED AGREEMENT *Contractor is required to sign this document and return _____ copies to issuing office.)* Contractor agrees to furnish and deliver all items or perform all work requirements identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, (c) the clauses, representations, certifications, and specifications incorporated by reference in or attached to this contract.	[ ] 29. AWARD *(Contractor is not required to sign this document.)* Your offer on this solicitation is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document necessary.
30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN *(Type or Print)*	31A. NAME OF CONTRACTING OFFICER *(Type or Print)*

30B. SIGNATURE	30C. DATE	31B. UNITED STATES OF AMERICA BY	31C. AWARD DATE

NASA/KSC SOLICITATION NNK14518671R
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NASA/KSC SOLICITATION NNK14518671R
SECTION B – SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 CONSTRUCTION SERVICES AND PRICES

Line Item	Description	Unit	Total
0001	Task 1 – Replacement IOP/SS Post Liftoff Bypass	Job	$ TBD

TOTAL $ TBD

B. 2 NFS 1852.216-78 FIRM FIXED PRICE (DEC 1988)

The total firm fixed price of this contract is **TBD**.

B.3 PROJECT DELIVERABLES (MAY 2014)

Incidental deliverables (manuals, reports, plans, and other written documentation) to be provided under this contract are identified in Section J, Attachment J-A, Project Deliverables. The costs associated with providing the data in Attachment J-A is included in the firm-fixed price of the awarded contract. Nothing contained in Attachment J-A shall relieve the Contractor from furnishing data called for by, or under the authority of, other provisions of this contract, which are not identified and described in Attachment J-A.

C. 1 SCOPE OF WORK (MAY 2014)

The Contractor shall furnish all management, supervision, labor, transportation, facilities, materials, tools, disposal, coordination of subcontractors, documentation, and equipment (except any property including utilities as may be specified in the Schedule to be Government-Furnished) and perform all work for the Task(s) named below, and as defined in the Technical Documentation listed below entitled "Contract Drawings, Maps and Specifications," and in accordance with the terms and conditions of this Contract, and within the performance schedule set forth in FAR clause 52.211-10 entitled "Commencement, Prosecution, and Completion of Work."

Line Item	Description
0001	Task 1 – Replacement IOP/SS Post Liftoff Bypass

C. 2 CONTRACT DRAWINGS, MAPS, SPECIFICATIONS, AND/OR STATEMENTS OF WORK (MAY 2014)

(a) Five sets of full scale contract drawings, maps, specifications, and/or statements of work (excluding applicable publications incorporated into the technical provisions by reference), plus one CD or DVD containing electronic, portable document format (PDF) versions, will be furnished at award to the Contractor without charge. The work shall conform to the following contract drawings, maps, specifications, and/or statements of work, attached hereto and made a part hereof:

Specification 79K39834, titled "Design of IOP/SS Post-Liftoff Bypass, LC39B", dated June 18, 2014, pages 1 through 118

Drawing/Map 79K39833, titled "IOP/SS Post-Liftoff Bypass", dated June 18, 2014, sheets 1 through 28

(b) Addenda to Specifications, Drawings, Maps, and/or Statements of Work: "**N/A**"

(c) "Or Equal" Items"

Throughout the Technical Specifications and on the drawings of this contract, where certain manufacturers' trade names and model numbers are specified and followed by the term "or equal," the manufacturer's name and data as specified shall represent the minimum standard type, quality, and capacity acceptable for incorporation into the work covered by this contract. The products of other manufacturers will be considered as being acceptable, provided that such products fully meet or exceed all minimum structural or use and operational features of the particular manufacturers' items as specified, and provided that the other manufacturers' items is easily interchangeable and can be adequately incorporated within the allocated space in the building or structure. In all cases, the acceptability of "or equal" items shall be at the Contracting Officer's discretion, based upon approval data submitted by the Contractor in accordance with the requirements under Shop

Drawings herein.

(d) Omissions from the drawings or specifications, or the omission or misdescription of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or which are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work but they shall be performed as if fully and correctly set forth and described in the drawings and specifications.

(e) The Contractor shall check all drawings furnished him immediately upon their receipt and shall promptly notify the Contracting Officer of any discrepancies. Figures marked on drawings shall in general be followed in preference to scale measurements. Large scale drawings shall in general govern small scale drawings. The Contractor shall compare all drawings and verify the figures before laying out the work and will be responsible for any errors which might have been avoided thereby.

C. 3 REQUEST FOR INFORMATION/CLARIFICATION (RFIC) (MAY 2014)

The Contractor shall promptly report to the Contracting Officer all problems or conflicting technical information encountered during the contract performance so that the Government may provide solutions or appropriate direction. Such problems shall be reported on KSC Form No. 8-268, "Request for Information/Clarification," to be provided by the Government. A copy of each RFIC will be provided to the Contracting Officer's Representative (COR) concurrently with the transmittal to the Contracting Officer. The Contractor shall log and control each Request for Information/Clarification (RFIC), including those generated by subcontractors.

C. 4 DEVIATIONS AND WAIVERS (MAY 2014)

(a) When the Contractor proposes to perform work which does not conform to the requirements of the applicable contract drawings and specifications, the Contractor shall submit to the Contracting Officer for approval, a written request for deviation or request for waiver on the nonconforming work.

(b) All requests by the Contractor shall be submitted on KSC Form 8-69 (Contractor Request to Use Nonconforming Parts or Material) fully executed including an offer of consideration to the Government. The request must be technically supported by justification, rationale, design considerations, calculations and other data which permits ready and conclusive evaluation by the Government as to acceptability or nonacceptability.

(c) Where a requested deviation or waiver on a particular aspect of the work has a relation to, or affects, other aspects of the work, those other aspects of the work shall be clearly identified and referenced. And, if the requested deviation or waiver necessitates a deviation or waiver on other aspects, requests for all such deviations and waivers must be submitted concurrently.

(d) Any request not submitted in strict accordance with this provision will not be considered.

SECTION D – PACKAGING AND MARKING

NOT APPLICABLE TO THIS SOLICITATION/CONTRACT

SECTION E - INSPECTION AND ACCEPTANCE

E. 1 LISTING OF FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES INCORPORATED BY REFERENCE

FAR 52.246-12 INSPECTION OF CONSTRUCTION (AUG 1996)

E. 2 NASA FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 18) CLAUSES INCORPORATED BY REFERENCE

NFS 1852.246-72 MATERIAL INSPECTION AND RECEIVING REPORT (AUG 2003)

Fill in: (a) At the time of each delivery to the Government under this contract, the Contractor shall furnish a Material Inspection and Receiving Report (DD Form 250 series) prepared in three copies, an original and two copies.

E. 3 BASIC INSPECTION SYSTEM (MAY 2014)

Pursuant to FAR Clause 52.246-12, entitled "Inspection of Construction," the Contractor shall maintain and implement a basic inspection system as identified below:

(a) Definitions:

"Inspection" means examining and testing supplies or services (including, when appropriate, raw materials, components, and intermediate assemblies) to determine whether they conform to contract requirements.

"Testing" means that element of inspection that determines the properties or elements, including functional operation of supplies or their components, by the application of established scientific principles and procedures.

"Independent Testing Laboratory" means an independent organization, accepted by the Contracting Officer, engaged to perform specific inspections or tests of the work, either at the site or elsewhere, and report the results of these inspections or tests.

(b) The inspection system shall be documented to ensure and provide objective evidence of quality control in the form of records of inspections and test results. The system shall also ensure that nonconforming articles or materials are discovered, documented, and controlled through effective remedial and preventive actions.

The Contractor may use, at his option, in whole or in part, his existing higher level inspection system or quality assurance program provided such system is revised and identified to the requirements below.

(c) The Contractor shall provide a narrative description of an inspection system which provides for compliance with the quality requirements and technical criteria of the

contract.

(1) The description shall be submitted for review by the Contracting Officer not later than 7 days after contract award.

(2) The description shall address each of the Basic Inspection System Requirements identified in paragraph (d) below. This submittal shall address both the general inspection system that will be used during the performance of all work under the contract, including but not limited to those items identified under paragraphs d(1), d(2)(iv), d(2)(v), and d(2)(vi) below.

(d) Basic Inspection System Requirements: The Contractor shall describe how each of the following requirements is to be satisfied and what records will be maintained, both on-site and offsite.

(1) The Contractor shall identify the individual responsible for on-site contact and communication relative to implementation and operation of the inspection system. The name of this individual shall be provided, in writing, to the Contracting Officer's Representative (COR).

(2) Standard requirements:

(i) A purchasing control system which ensures that all purchasing documents, including those of subcontractors and suppliers, are traceable to the drawings, specifications, and approved submittal requirements.

(ii) A receiving inspection system with documented evidence of Contractor inspection traceable to the procurement documents.

(iii) A system of controls and records for handling, recording, identification and disposition of nonconforming articles and materials.

(iv) A system of identification of inspections required by each specific section of the specifications and drawings and what records will be maintained.

(v) Identification of tests to be performed, including test procedures, test records, and the independent testing organization(s) be utilized.

(vi) Additional requirements (if included in the drawings, specifications, or contract provisions):

(A) Certification or recertification of personnel and qualification of procedures.

(B) Management and accountability of Government furnished equipment, components, or materials.

(C) Calibration of inspection test gages, tools, measuring instruments, and independent laboratories to be utilized.

E. 4 SYSTEMS ACCEPTANCE AND TESTING (MAY 2014)

Pursuant to FAR 52.246-12 "Inspection of Construction"; systems tests shall be performed as described below.

(a) SYSTEMS

Systems tests shall be performed on fire protection, fire suppression, HVAC, compressed air and all other assemblies of components which must be tested as an inter-related whole to verify proper functioning.

(b) SYSTEM TEST PROCEDURES

A test procedure and a recording form which documents every step of the system test shall be submitted for approval under the terms of the "Shop Drawings" clause of this contract. Test procedures must be approved prior to requesting a date for testing. Each step in the test procedure shall be witnessed by the Contracting Officer's Representative who shall then date and sign the approved recording form for each step witnessed.

The procedure shall consist of step by step instructions for testing all specified system parameters, system components, and proper overall functioning of the system.

(c) SYSTEM TESTING AND ACCEPTANCE

The following tests shall be performed by the Contractor in strict accordance to the approved test procedure described above.

(1) Functional Test -- This shall be an "in house" test to verify proper installation and functioning of the system and its components. This functional test shall be performed in the presence of Government inspectors and shall be repeated until the Contractor can perform one full test without device or system malfunction.

(2) System Acceptance Test -- After successful completion of the functional testing the system shall be tested formally with full documentation using the previously approved recording form. The Contractor shall notify the Contracting Officer, in writing, forty eight (48) hours prior to system acceptance testing. The appointed Contracting Officer Representative will witness, date and stamp each

test in the procedure. Acceptance of the system will be based upon the written approval of the Contracting Officer's Representative.

E. 5 FINAL INSPECTION AND ACCEPTANCE (MAY 2014)

Final inspection and acceptance of all work under this contract will be conducted by the Contracting Officer's Representative (COR). Upon satisfactory completion of the contract, the Contractor shall be paid the fixed-price value of the contract, less the amount of any progress payments made under FAR Clause 52.232.5, Payments Under Fixed-Price Construction Contracts.

NOTE: The contractor shall include a line item in the schedule of values and progress schedule for completion of punch-list items, site clean-up, demobilization and final construction (as-built) drawings. The amount of this line item shall be equal to 10% of the contract value or $100,000, whichever is less. The Government will not pay final invoices for this amount until all punch-list, site clean-up, and demobilization activities are complete; final construction drawings are delivered; and final acceptance is made on DD Form 250, Material Inspection and Receiving Report.

F. 1 LISTING OF FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES INCORPORATED BY REFERENCE

FAR 52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)

Fill ins:

(a) The Contractor shall be required to (a) commence work under this contract within five calendar days after the date the Contractor receives the notice to proceed.

(c) complete the entire work ready for use not later than **330 calendar days** after the date the contractor receives the notice to proceed for the Base Bid

FAR 52.242-14 SUSPENSION OF WORK (APR 1984)

F. 2 KSC 52.211-92 WORK PERIOD (MAR 2002)

Contractor's work day will be limited to first shift 7:00 A.M. to 3:30 P.M., on Monday through Friday only. Any other work period will require special / written approval from the Contracting Officer seven (7) days in advance of proposed change in work periods.

F. 3 PLACE OF PERFORMANCE (MAY 2014)

This is a firm-fixed price construction contract for IOP/SS Post-Liftoff Bypass Valves at LC39B.

F. 4 DOWNTIME AND EXCAVATION HOLDS (MAY 2014)

For the purposes of this contract, the Contractor shall allow in his bid for a maximum of **30** days during which all construction activities will be prohibited. In addition the Contractor shall allow for a maximum of **5** days during which all excavation and other subsurface activities will be prohibited but other construction activities will be allowed. The Government will provide twenty-four hour notice each time these restrictions are invoked.

G. 1 NASA FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 18) CLAUSES INCORPORATED BY REFERENCE

NFS 1852.242-70 TECHNICAL DIRECTION (SEP 1993)

NFS 1852.245-71 INSTALLATION – ACCOUNTABLE GOVERNMENT PROPERTY (JAN 2011)

Fill-In (c)(1): "**None**".

Fill-In (c)(3): "**Not applicable**"

Fill-In (c)(7): "**None**"

NFS 1852.245-75 PROPERTY MANAGEMENT CHANGES (JAN 2011)

NFS 1852.245-82 OCCUPANCY MANAGEMENT REQUIREMENTS (JAN 2011)

NFS 1852.245-83 REAL PROPERTY MANAGEMENT REQUIREMENTS (JAN 2011)

H. 1 NASA FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 18) CLAUSES INCORPORATED BY REFERENCE

NFS 1852.223-70 **SAFETY AND HEALTH (APR 2002)**

NFS 1852.223-75 **MAJOR BREACH OF SAFETY OR SECURITY (FEB 2002)**

NFS 1852.225-70 **EXPORT LICENSES (FEB 2000)**

Fill-in: "**NASA's Kennedy Space Center**"

NFS 1852.242-72 **OBSERVANCE OF LEGAL HOLIDAYS (AUG 1992)**

H.2 KSC 52.223-121 REPORTING OF INCIDENTS INVOLVING WORKPLACE VIOLENCE (JUL 2008)

The contractor shall conduct training on and develop procedures for recognizing, managing and responding to incidents and threats of workplace violence as defined in NASA Policy Directive (NPD) 1600.3. Contractors shall also promptly report all incidents involving workplace violence to the Protective Services Office. If the NASA Workplace Violence Prevention and Response (WVPR) Team Chair and Co Chair determine it is appropriate for the contractor to participate in a WVPR Team meeting, the contractor shall comply with the WVPR Team request. The contractor is also responsible for reporting disposition of the incident reported to the NASA WVPR Team.

This requirement shall flow down to the subcontractors, however the subcontractors shall report up through the prime contractor.

(End of clause)

H.3 KSC 52.242-90 CONTROLS APPLICABLE TO CONTRACTORS' ACTIVITIES (SEP 2012)

The Contractor shall comply with the publications below, and subsequent revision thereof, that the Contracting Officer has indicated as being incorporated in this contract by reference. These publications prescribe regulatory and procedural criteria which are applicable to this contract. The contractor shall promptly take corrective action upon notice of noncompliance from the Contracting Officer or his/her authorized representative(s) with any provision of the publications listed below.

The following compliance documents may be found at:
http://tdglobal.ksc.nasa.gov/ReferencedDocuments/

Publication	Title
KNPR 8715.2	Comprehensive Emergency Management Plan
KNPR 1600.1	KSC Security Procedural Requirements
KNPR 8500.1	KSC Environmental Requirements
KNPR 8715.3-1	KSC Safety Procedural Requirements Volume 1, Safety Procedural Requirements for Civil Servants/NASA Contractors

Check if Applicable	Publication	Title
X	KNPD 1810.1	KSC Occupational Medicine Program
X	KNPR 1860.1	KSC Ionizing Radiation Protection Program
X	KNPR 1860.2	KSC Nonionizing Radiation Protection Program
X	KNPR 1820.3	KSC Hearing Loss Prevention Program
X	KNPR 1820.4	KSC Respiratory Protection Program
X	KNPR 1840.19	KSC Industrial Hygiene Programs
	45SWI40-201	45th Space Wing Instruction 40-201 Radiation Protection Program
	KNPD 1800.2	KSC Hazard Communication Program
	KNPR 1870.1	KSC Sanitation Program
	KNPR 2570.1	KSC Radio Frequency Spectrum Management Procedural Requirements
	KNPR 4000.1	Supply and Equipment System Manual
	KNPR 6000.1	Transportation Support System
X	KNPR 8715.7	KSC Construction Contractor Safety and Health Practices Procedural Requirements
X	KNPR 8830.1	Facilities and Real Property Management Procedural Requirements

H.4 KSC 52.242-93 CONTRACTOR WORKFORCE REPORT – ONSITE CONTRACTORS AND SUBCONTRACTORS (OCT 2006) (ALT 1) (JUL 2011)

The Contractor shall submit, on a quarterly basis, a manpower report delineating information about its workforce. The report shall include: the contract number, the contractor's total on-site workforce, total on-site union represented employees by bargaining unit; total on-site non-union represented employees, and total off-site workforce performing on the contract. The Contractor

shall provide this information no later than 10 days after the close of each reporting period which end March 31st, June 30th, September 30th, and December 31st. The report shall be submitted to the Contracting Officer with copies to Workforce Planning and Analysis Office, (Code BA-D) and Industrial Labor Relations Office (Code OP).

The Contractor is required to maintain information on specific Points of Contact (POC) for the contracted effort in a NASA managed database. The database contains POC information for specific Contractor functions to include: Local Contractor Manager and Deputy (senior on-site contract management POCs for top level NASA KSC contact), Contracting Manager (this is the interface on contract matters with the NASA Contracting Officer), HR Manager, Security Manager, Emergency Planning Manager (or identification/contact information for the Contractor manager performing this role), and the person responsible for input of this Contractor information into the database. Within three weeks of contract award the Contractor shall provide the name of the person who will enter the POC information into the NASA database to the Contracting Officer and to NASA Procurement Policy and Review Office, OP-AM, 867-7217. This person must be able to access (or be scheduled to gain access to) KSC systems. Access to the database and instruction will be provided to the Contractor by OP-AM. Upon commencement of the contract the Contractor will be responsible for keeping the POC information pertaining to the specific contract accurate and up to date. Changes to the person responsible for input of this Contractor POC information must be immediately brought to the attention of OP-AM.

(End of clause)

H.5 SAFETY AND HEALTH (MAY 2014)

Pursuant to NFS 1852.223-70, Safety and Health:

(a) Safety is the freedom from those conditions that can cause death, injury, occupational illness, damage to or loss of equipment or property, or damage to the environment. NASA's safety priority is to protect: the public, astronauts and pilots, the NASA workforce (including contractor employees working on NASA contracts), and high-value equipment and property.

(b) The Contractor shall take all reasonable safety and occupational health measures in performing this contract. The Contractor shall comply with all Federal, State, and local laws applicable to safety and occupational health and with the safety and occupational health standards, specifications, reporting requirements, and any other relevant requirements of this contract.

(c) Kennedy Space Center Voluntary Protection Program (VPP)

Kennedy Space Center has implemented a comprehensive safety and health management system, and has demonstrated its commitment to providing and maintaining a safe workplace by successfully completing a rigorous evaluation

process to achieve recognition by the Occupational Health and Safety Administration (OSHA) as a "Voluntary Protection Program (VPP) Star Worksite." The VPP program promotes effective worksite-based safety and health, encourages employers and employees to reduce the number of occupational safety and health hazards at their places of employment, establishes cooperative relationships between management, labor, and OSHA, and serves to augment limited OSHA resources.

(d) Reporting Procedures for Close Calls and Mishaps

(Also reference NFS 1852.223-70, Safety and Health)

The contractor shall submit a NASA Direct Construction Contractor Mishap Report Form (KDP-F-3645) to the Contracting Officer to document close calls or mishaps and associated corrective actions. In addition, the Contracting Officer will issue a "Notice of Violation" to document safety violations under this contract. The Contractor shall use the form provided to communicate actions taken to correct or mitigate safety/health non-conformance at the job-site, as well as any corrective actions taken to prevent recurrence. This report must be posted on the job site until all corrective actions have been completed.

In the event the non-compliance poses imminent danger, the Contracting Officer may invoke the stop-work order clause in this contract until such time as the immediate hazard has been mitigated. If the Contractor fails or refuses to institute prompt corrective action, the Contracting Officer may invoke the stop-work order clause or any other remedy available to the Government in the event of such failure or refusal.

The Contractor (or subcontractor or supplier) shall insert the "Reporting Procedures for Close Calls and Mishaps" section of this clause, including this paragraph and any applicable Schedule provisions and clauses, with appropriate changes of designations of the parties, in all solicitations and subcontracts of every tier, when the work will be conducted completely or partly on premises owned or controlled by the Government.

I. 1 CLAUSES INCORPORATED BY REFERENCE (52.252-2) (FEB 1998)

This document incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at these addresses:

http://prod.nais.nasa.gov/cgi-bin/nais/index.cgi
http://ec.msfc.nasa.gov/hq/library/v-reg.htm.

I. 2 LISTING OF FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES INCORPORATED BY REFERENCE

CLAUSE NO.	TITLE
FAR 52.202-1	**DEFINITIONS (JAN 2012)**
FAR 52.203-3	**GRATUITIES (APR 1984)**
FAR 52.203-5	**COVENANT AGAINST CONTINGENT FEES (APR 1984)**
FAR 52.203-6	**RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (SEP 2006)**
FAR 52.203-7	**ANTI-KICKBACK PROCEDURES (OCT 2010)**
FAR 52.203-8	**CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)**
FAR 52.203-10	**PRICE OR FEE ADJUSTMENTS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)**
FAR 52.203-12	**LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (OCT 2010)**
FAR 52.204-4	**PRINTED OR COPIED DOUBLE-SIDED ON POSTCONSUMER FIBER CONTENT PAPER (MAY 2011)**
FAR 52.204-9	**PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL (JAN 2011)**
FAR 52.204-13	**SYSTEM FOR AWARD MANAGEMENT MAINTENANCE (JUL 2013)**
FAR 52.204-10	**REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS (JUL 2013)**
FAR 52.209-6	**PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED SUSPENDED, OR PROPOSED FOR DEBARMENT (AUG 2013)**
FAR 52.209-9	**UPDATES OF PUBLICLY AVAILABLE INFORMATION REGARDING RESPONSIBILITY MATTERS (JUL 2013)**

FAR 52.215-2 AUDIT AND RECORDS – NEGOTIATION (OCT 2010)

FAR 52.215-8 ORDER OF PRECEDENCE – UNIFORM CONTRACT FORMAT (OCT 1997)

FAR 52.215-10 PRICE REDUCTION FOR DEFECTIVE CERTIFIED COST OR PRICING DATA (AUG 2011)

FAR 52.215-12 SUBCONTRACTOR CERTIFIED COST OR PRICING DATA (AUG 2011)

FAR 52.215-21 REQUIREMENTS FOR CERTIFIED COST OR PRICING DATA AND DATA OTHER THAN CERTIFIED COST OR PRICING DATA – MODIFICATIONS (OCT 2010) (ALTERNATE III)(OCT 1997)

Fill-In: (c) Submit the cost portion of the proposal via the following electronic media: submit via e-mail in MS Excel format

FAR 52.215-21 REQUIREMENTS FOR CERTIFIED COST OR PRICING DATA AND DATA OTHER THAN CERTIFIED COST OR PRICING DATA – MODIFICATIONS (OCT 2010) (ALTERNATE IV)(OCT 2010)

Fill-In: (b) Cost data (e.g., established catalog or market prices, vendor quotes, sales to governmental and non-governmental entities, etc) to the extent necessary for the Contracting Officer to determine a fair and reasonable price. All cost/pricing data shall be submitted in MS Excel format. Access to records necessary to permit an adequate evaluation of the proposed price shall be provided the Contracting Officer.

FAR 52.219-4 NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (JAN 2011)

FAR 52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (JUL 2013)

FAR 52.219-28 POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION (JUL 2013)

FAR 52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)

FAR 52.222-3 CONVICT LABOR (JUN 2003)

FAR 52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT—OVERTIME COMPENSATION (JUL 2005)

FAR 52.222-6 DAVIS-BACON ACT (JUL 2005)

FAR 52.222-7 WITHHOLDING OF FUNDS (FEB 1988)

FAR 52.222-8 PAYROLLS AND BASIC RECORDS (JUN 2010)

FAR 52.222-9 APPRENTICES AND TRAINEES (JUL 2005)

FAR 52.222-10 COMPLIANCE WITH COPELAND ACT REQUIREMENTS (FEB 1988)

FAR 52.222-11 SUBCONTRACTS (LABOR STANDARDS) (JUL 2005)

FAR 52.222-12 CONTRACT TERMINATION--DEBARMENT (FEB 1988)

FAR 52.222-13	**COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS (FEB 1988)**
FAR 52.222-14	**DISPUTES CONCERNING LABOR STANDARDS (FEB 1988)**
FAR 52.222-15	**CERTIFICATION OF ELIGIBILITY (FEB 1988)**
FAR 52.222-21	**PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)**
FAR 52.222-26	**EQUAL OPPORTUNITY (MAR 2007)**
FAR 52.222-27	**AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION (FEB 1999)**
FAR 52.222-35	**EQUAL OPPORTUNITY FOR VETERANS (SEP 2010)**
FAR 52.222-36	**AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (OCT 2010)**
FAR 52.222-37	**EMPLOYMENT REPORTS ON VETERANS (SEP 2010)**
FAR 52.222-40	**NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT (DEC 2010)**
FAR 52.222-50	**COMBATING TRAFFICKING IN PERSONS (FEB 2009)**
FAR 52.222-54	**EMPLOYMENT ELIGIBILITY VERIFICATION (SEP 2013)**
FAR 52.223-2	**AFFIRMATIVE PROCUREMENT OF BIOBASED PRODUCTS UNDER SERVICE AND CONSTRUCTION CONTRACTS (SEP 2013)**
FAR 52.223-5	**POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (MAY 2011)**
FAR 52.223-6	**DRUG-FREE WORKPLACE (MAY 2001)**
FAR 52.223-15	**ENERGY EFFICIENCY IN ENERGY-CONSUMING PRODUCTS (DEC 2007)**
FAR 52.223-17	**AFFIRMATIVE PROCUREMENT OF EPA-DESIGNATED ITEMS IN SERVICE AND CONSTRUCTION CONTRACTS (MAY 2008)**
FAR 52.223-18	**ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING (AUG 2011)**
FAR 52.225-13	**RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUN 2008)**
FAR 52.227-1	**AUTHORIZATION AND CONSENT (DEC 2007)**
FAR 52.227-2	**NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (DEC 2007)**
FAR 52.227-4	**PATENT INDEMNITY - CONSTRUCTION CONTRACTS (DEC 2007)**
FAR 52.228-2	**ADDITIONAL BOND SECURITY (OCT 1997)**
FAR 52.228-5	**INSURANCE - WORK ON A GOVERNMENT INSTALLATION (JAN 1997)**
FAR 52.228-11	**PLEDGES OF ASSETS (JAN 2012)**
FAR 52.228-12	**PROSPECTIVE SUBCONTRACTOR REQUESTS FOR BONDS (OCT 1995)**

FAR 52.228-14 IRREVOCABLE LETTER OF CREDIT (DEC 1999)

FAR 52.228-15 PERFORMANCE AND PAYMENT BONDS – CONSTRUCTION (OCT 2010)

FAR 52.229-3 FEDERAL, STATE AND LOCAL TAXES (FEB 2013)

FAR 52.232-5 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (SEP 2002)

FAR 52.232-17 INTEREST (OCT 2010)

FAR 52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986)

FAR 52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (JUL 2013)

Submit Invoices To:	
1 - Original	NASA Shared Services Center (NSSC) Financial Management Division (FMD) – Accounts Payable Bldg 1111, C. Road Stennis Space Center, MS 39529 FAX: 866-209-5415 Email: NSSC-AccountsPayable@nasa.gov
1 - Copy	NASA John F. Kennedy Space Center Procurement Office, Code OP-ES-B Kennedy Space Center, FL 32899

FAR 52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER – SYSTEM FOR AWARD MANAGEMENT (JUL 2013)

Any questions related to payment via Electronic Funds Transfer (EFT) should be directed to:

Designated Paying Office
NASA Shared Services Center (NSSC)
Financial Management Division (FMD) - Accounts Payable
Bldg 1111, C. Road
Stennis Space Center, MS 39529
Email: NSSC-AccountsPayable@nasa.gov
Fax: 866-209-5415

FAR 52.233-1 DISPUTES (JUL 2002)

FAR 52.233-1 DISPUTES (JUL 2002) (ALTERNATE 1)(DEC 1991)

FAR 52.233-3 PROTEST AFTER AWARD (AUG 1996)

FAR 52.233-4 APPLICABLE LAW FOR BREACH OF CONTRACT CLAIMS (OCT 2004)

FAR 52.236-2 DIFFERING SITE CONDITIONS (APR 1984)

FAR 52.236-3 SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK (APR 1984)

FAR 52.236-5	**MATERIAL AND WORKMANSHIP (APR 1984)**
FAR 52.236-6	**SUPERINTENDENCE BY THE CONTRACTOR (APR 1984)**
FAR 52.236-7	**PERMITS AND RESPONSIBILITIES (NOV 1991)**
FAR 52.236-8	**OTHER CONTRACTS (APR 1984)**
FAR 52.236-9	**PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS (APR 1984)**
FAR 52.236-10	**OPERATIONS AND STORAGE AREAS (APR 1984)**
FAR 52.236-11	**USE AND POSSESSION PRIOR TO COMPLETION (APR 1984)**
FAR 52.236-12	**CLEANING UP (APR 1984)**
FAR 52.236-13	**ACCIDENT PREVENTION (NOV 1991) (ALTERNATE 1) (NOV 1991)**
FAR 52.236-15	**SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984)**
FAR 52.236-17	**LAYOUT OF WORK (APR 1984)**
FAR 52.236-21	**SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FEB 1997) ALTERNATE I (APR 1984)**
FAR 52.236-26	**PRECONSTRUCTION CONFERENCE (FEB 1995)**
FAR 52.242-13	**BANKRUPTCY (JUL 1995)**
FAR 52.243-4	**CHANGES (JUN 2007)**
FAR 52.243-6	**CHANGE ORDER ACCOUNTING (APR 1984)**
FAR 52.244-6	**SUBCONTRACTS FOR COMMERCIAL ITEMS (JUL 2013)**
FAR 52.246-21	**WARRANTY OF CONSTRUCTION (MAR 1994)**
FAR 52.246-21	**WARRANTY OF CONSTRUCTION (MAR 1994)(ALTERNATE 1) (APR 1984)**
FAR 52.248-3	**VALUE ENGINEERING – CONSTRUCTION (OCT 2010)**
FAR 52.249-2	**TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (APR 2012) - ALTERNATE I (SEP 1996)**
FAR 52.249-10	**DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984)**
FAR 52.253-1	**COMPUTER GENERATED FORMS (JAN 1991)**

I. 3 NASA FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 18) CLAUSES INCORPORATED BY REFERENCE

NFS 1852.204-76	**SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES (JAN 2011)**
NFS 1852.209-72	**COMPOSITION OF THE CONTRACTOR (DEC 1988)**

NFS 1852.215-84 OMBUDSMAN (NOV 2011)

NFS 1852.219-74 USE OF RURAL AREA SMALL BUSINESSES (SEP 1990)

NFS 1852.219-76 NASA 8 PERCENT GOAL (JUL 1997)

NFS 1852.228-75 MINIMUM INSURANCE COVERAGE (OCT 1988)

NFS 1852.236-73 HURRICANE PLAN (DEC 1988)

NFS 1852.237-70 EMERGENCY EVACUATION PROCEDURES (DEC 1988)

NFS 1852.237-72 ACCESS TO SENSITIVE INFORMATION (JUN 2005)

NFS 1852.237-73 RELEASE OF SENSITIVE INFORMATION (JUN 2005)

NFS 1852.243-70 ENGINEERING CHANGE PROPOSALS (OCT 2001)

NFS 1852.243-71 SHARED SAVINGS (MAR 1997)

I. 4 FAR 52.222-99 ESTABLISHING A MINIMUM WAGE FOR CONTRACTORS (DEVIATION 2014-O0017) (JUNE 2014)

This clause implements Executive Order 13658, Establishing a Minimum Wage for Contractors, dated February 12, 2014, and OMB Policy Memorandum M-14-09, dated June 12, 2014.

(a) Each service employee, laborer, or mechanic employed in the United States (the 50 States and the District of Columbia) in the performance of this contract by the prime Contractor or any subcontractor, regardless of any contractual relationship which may be alleged to exist between the Contractor and service employee, laborer, or mechanic, shall be paid not less than the applicable minimum wage under Executive Order 13658. The minimum wage required to be paid to each service employee, laborer, or mechanic performing work on this contract between January 1, 2015, and December 31, 2015, shall be $10.10 per hour.

(b) The Contractor shall adjust the minimum wage paid under this contract each time the Secretary of Labor's annual determination of the applicable minimum wage under section 2(a)(ii) of Executive Order 13658 results in a higher minimum wage. Adjustments to the Executive Order minimum wage under section 2(a)(ii) of Executive Order 13658 will be effective for all service employees, laborers, or mechanics subject to the Executive Order beginning January 1 of the following year. The Secretary of Labor will publish annual determinations in the Federal Register no later than 90 days before such new wage is to take effect. The Secretary will also publish the applicable minimum wage on www.wdol.gov (or any successor website). The applicable published minimum wage is incorporated by reference into this contract.

(c) The Contracting Officer will adjust the contract price or contract unit price under this clause only for the increase in labor costs resulting from the annual inflation increases in the Executive Order 13658 minimum wage beginning on January 1, 2016. The Contracting Officer shall consider documentation as to the specific costs and workers impacted in determining the amount of the adjustment.

(d) The Contracting Officer will not adjust the contract price under this clause for any costs other than those identified in paragraph (c) of this clause, and will not provide price adjustments under this clause that result in duplicate price adjustments with the respective clause of this contract implementing the Service Contract Labor Standards statute (formerly known as the Service Contract Act) or the Wage Rate Requirements (Construction) statute (formerly known as the Davis Bacon Act).

(e) The Contractor shall include the substance of this clause, including this paragraph (e) in all subcontracts.

(End of clause)

I. 5 FAR 52.223-9 ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA-DESIGNATED ITEMS (MAY 2008) ALTERNATE I (MAY 2008)

(a) *Definitions*. As used in this clause—

"Postconsumer material" means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material."

"Recovered material" means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

(b) The Contractor shall execute the following certification required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6962(i)(2)(C)):

CERTIFICATION

I, _____ (name of certifier), am an officer or employee responsible for the performance of this contract and hereby certify that the percentage of recovered material content for EPA-designated items met the applicable contract specifications or other contractual requirements.

_____
[*Signature of the Officer or Employee*]

_____
[*Typed Name of the Officer or Employee*]

_____
[*Title*]

_____
[*Name of Company, Firm, or Organization*]

_____
[*Date*]

(END OF CERTIFICATION)

(c) The Contractor, on completion of this contract, shall—

(1) Estimate the percentage of the total recovered material content for EPA-designated item(s) delivered and/or used in contract performance, including, if applicable, the percentage of post-consumer material content; and

(2) Submit this estimate to the Contracting Officer.

(End of clause)

I. 6 FAR 52.225-9 BUY AMERICAN ACT-CONSTRUCTION MATERIALS (SEP 2010)

(a) *Definitions*. As used in this clause--

"Commercially available off-the-shelf (COTS) item"—

(1) Means any item of supply (including construction material) that is—

(i) A commercial item (as defined in paragraph (1) of the definition at FAR 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702), such as agricultural products and petroleum products.

"Component" means an article, material, or supply incorporated directly into a construction material.

"Construction material" means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

"Cost of components" means--

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

"Domestic construction material" means—

(1) An unmanufactured construction material mined or produced in the United States;

(2) A construction material manufactured in the United States, if—

(i) The cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic; or

(ii) The construction material is a COTS item.

"Foreign construction material" means a construction material other than a domestic construction material.

"United States" means the 50 States, the District of Columbia, and outlying areas.

(b) *Domestic preference.*

(1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. In accordance with 41 U.S.C. 431, the

component test of the Buy American Act is waived for construction material that is a COTS item. (See FAR 12.505(a)(2)). The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to information technology that is a commercial item or to the construction materials or components listed by the Government as follows: **None**

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

(ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) *Request for determination of inapplicability of the Buy American Act*.

(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including--

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.

(d) *Data*. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction material description	**Unit of measure**	**Quantity**	**Price (dollars) ***
Item 1			
Foreign construction material			
Domestic construction material			
Item 2			
Foreign construction material			
Domestic construction material			

[*List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.*]

[*Include other applicable supporting information.*]

[**Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]*

(End of clause)

I. 7 FAR 52.232-99 PROVIDING ACCELERATED PAYMENT TO SMALL BUSINESS SUBCONTRACTORS (AUG 2012) (DEVIATION)

This clause implements the temporary policy provided by OMB Policy Memorandum M-12-16, Providing Prompt Payment to Small Business Subcontractors, dated July 11, 2012.

(a) Upon receipt of accelerated payments from the Government, the contractor is required to make accelerated payments to small business subcontractors to the maximum extent practicable after receipt of a proper invoice and all proper documentation from the small business subcontractor.

(b) Include the substance of this clause, including this paragraph (b), in all subcontracts with small business concerns.

(c) The acceleration of payments under this clause does not provide any new rights under the Prompt Payment Act.

I. 8 FAR 52.236-4 PHYSICAL DATA (APR 1984)

Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

(a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations by benchmarks for vertical control, elevations, and dimensions from existing features. The Contractor shall be responsible for any surveys, augers, borings, core borings, test pits, probings, or other investigations necessary or incidental to performance of the work.

(b) Weather conditions: The climate of the Cape Canaveral-Kennedy Space Center, Florida area is subtropical with short, mild winters and hot, humid summers. Summer extends from the middle of May to the middle of October with the highest mean temperatures in July and August and the extreme highest temperatures in June. Area thunderstorms occurring during the summer months can be violent with cloud to ground lightning, heavy rain and strong gusty winds. The hurricane season begins in June and ends in December with the highest frequency in August, September, and October. Winter temperatures range from the probability of an 80 degree high during each month to at least one occasion (per winter) of below freezing conditions. Mean average maximum-minimum temperatures and mean average rainfall is 78.6 degrees – 64.0 degrees and 48.53 inches for Cape Canaveral and 79.4 degrees – 65.4 degrees and 53.21 inches for Kennedy Space Center. Detailed climatological data may be obtained from the Patrick Air Force Base Weather Services, 321-853-8485, Patrick Air Force Base, Florida.

(c) Transportation facilities:

(1) ROAD: The Cape Canaveral-Kennedy Space Center area is accessible via Florida State Highways 3, 401, 405, 520, and 528 and U.S. Highways 1 and A1A. Perimeter gates to Kennedy Space Center and Cape Canaveral Air Force Station are located at Highway 401 (Gate 1), South Highway 3 (Gate 2), Highway 405 (Gate 3), and North Highway 3 (Gate 4). All gates are normally operational during first shift hours. Off shift hours may vary, and additional schedule or access limitations will be in place during critical launch processing operations.

(2) RAIL: Government trackage connects with the Florida East Coast Railway Company (FEC) at Jay-Jay, Florida, approximately 3 miles north of Titusville, Florida. Shipping destination should be shown as “Titusville, Florida for Kennedy Space Center, Florida.” NASA locomotives move cars between Jay-Jay and various locations on Kennedy Space Center. Side and end ramps are available in the KSC Industrial Area.

(3) WATER (OCEAN): United States Air Force and Navy and commercial dock facilities are available at Port Canaveral, Florida.

(4) WATER (OTHER): The Kennedy Space Center Vehicle Assembly Building (VAB) Marine Terminal and Cape Canaveral Air Force Station barge facilities are accessible via the inland waterway through the Banana River.

(5) AIR (COMMERCIAL): Facilities serving the area are located at Melbourne (approximately 42 miles) and Orlando (approximately 55 miles) Florida. Pickup and delivery of air shipments is available.

Detailed information on availability and limitation of facilities, shipping and billing may be obtained from the Supply, Equipment, Transportation and Center Support Branch, Code TA-E1, John F. Kennedy Space Center, NASA, Kennedy Space Center, Florida 32899.

(d) Other: "**None**"

(End of clause)

I. 9 FAR 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any NASA Federal Acquisition Regulation (48 CFR Chapter 18) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of clause)

I. 10 NFS 1852.225-71 RESTRICTION ON FUNDING ACTIVITY WITH CHINA (FEB 2012)

(a) Definition - "China" or "Chinese-owned company" means the People's Republic of China, any company owned by the People's Republic of China or any company incorporated under the laws of the People's Republic of China.

(b) Public Laws 112-10, Section 1340(a) and 112-55, Section 539, restrict NASA from contracting to participate, collaborate, coordinate bilaterally in any way with China or a Chinese-owned company using funds appropriated on or after April 25, 2011. Contracts for commercial and non developmental items are exempted from the prohibition because they constitute purchase of goods or services that would not involve participation, collaboration, or coordination between the parties.

(c) This contract may use restricted funding that was appropriated on or after April 25, 2011. The contractor shall not contract with China or Chinese-owned companies for any effort related to this contract except for acquisition of commercial and non-developmental items. If the contractor anticipates making an award to China or Chinese-owned companies, the contractor must contact the contracting officer to determine if funding on this contract can be used for that purpose.

(d) Subcontracts - The contractor shall include the substance of this clause in all subcontracts made hereunder.

(End of clause)

I. 11 KSC 52.204-96 SECURITY CONTROLS FOR KSC AND CCAFS (APR 2010)

A. Identification of Employees

1. Badging

i. Kennedy Space Center (KSC) badging is mandatory for all Contractor personnel who require access to KSC and National Aeronautics and Space Administration (NASA) facilities located on Cape Canaveral Air Force Station (CCAFS). Badging Requirements are in accordance with KNPR 1600.1, KSC Security Procedural Requirements, located at this public website: http://tdglobal.ksc.nasa.gov/ReferencedDocuments/. Badges must be obtained before personnel may access the work site and the contractor is responsible for submitting complete, accurate, and timely security investigation and badge request information. The government is not liable for any project delays resulting from the contractor's failure to provide required information or the contractor's inability to achieve favorable investigative results.

ii. Prior to performance, the contractor shall submit the following information to the Contracting Officer, who will certify and pass the information to the KSC Badging Office.

a. Contract number and location of work site(s);

b. Contract commencement and completion dates;

c. Status as prime or subcontractor; and,

d. Name of the contractor designated security/badging official.

e. A KSC Form 28-1222V2, (KSC Visitor Badge Request) and/or KSC Form 28-889 (KSC Visitor Badge/Multiple) for all employees requiring access to KSC or CCAFS.

Note: This is the minimum paperwork required for issuance of identification badges.

iii. Security forms for employee investigations under this clause (Paragraph 2) shall be submitted by the contractor as soon as possible but in no case more than thirty days from initial badging.

iv. During performance of this contract, issued badges shall be worn by contractor employees and prominently displayed above the waist at all times while on KSC or CCAFS property, unless an exception is granted for safety considerations. Upon termination of an employee, or completion/termination of the contract, the contractor shall immediately return such employee's identification and area permit badge(s) to the KSC Badging Office. NASA identification badges are the property of NASA and the Government reserves the right to invalidate/confiscate such badges at any time.

v. Contractor security/badging officials shall ensure that badges are authorized for official purposes only and in accordance with the requirements of this clause and referenced directives. Abuse or misuse of badging authority may result in a loss of this authority. Employees that fail to comply with NASA regulations may be denied access to KSC.

2. Investigations

i. All persons requiring ongoing access to Federal facilities, to include KSC and CCAFS, are required to complete security forms and submit to a Government investigation. Exceptions may be made for short term visitors (15 days or less). Persons needing access for a period greater than 180 days will require an investigation as described in paragraph 2ii below. Contractors should note that the 180 day period is for an individual's aggregate access across all contracts. If you believe your employee will require <u>ongoing</u> access (current contract and follow on projects) to KSC and/or require unescorted access to facilities under the KSC Area Permit System, you should submit the employee for the investigation described in paragraph A2ii below at the time of initial badging.

ii. All persons requiring ongoing access to NASA installations are required to have a favorably completed National Agency Check with Written Inquiries (NACI). The following forms must be submitted to the Contracting Officer's Technical Representative (COTR), or the COTR's designee:

a. FD Form 258, Fingerprint Card (Electronic submission at KSC Badging Office)

b. Standard Form 85, Questionnaire for Non-Sensitive Positions;

c. Optional Form 306, Declaration for Federal Position Employment; and,

d. Three (3) copies of KSC Form 20-87, Request for Investigation (Signed by COTR or COTR's designee)

B. <u>Badging Restrictions/Categories</u>

Access to Areas Requiring a KSC Area Permit. Access to certain areas on KSC and CCAFS requires the contractor to have a KSC Area Permit and contractors may be granted "escorted" or "unescorted" access to these areas in accordance with KNPR 1600.1. Unescorted access requires a favorable determination in accordance with the investigative requirements detailed in paragraph A2ii

above as well as the completion of mandated safety training.

i. The NASA Protective Services Office, or its designee, PSSO, will determine whether the person is eligible for unescorted access within 14 business days after the receipt of the properly completed forms.

ii. One or more on-site training classes will be required for admittance to the controlled access areas. The total training will not exceed four hours. Contractors may schedule any required training for their employees by contacting the COTR or designee. The contractor shall maintain a record of employees receiving the training.

I. 12 KSC ON-SITE FACILITIES AND SERVICES (APR 2005)

(a) UTILITIES

☒ There are no utility services available in the work area. All utilities required for performance of the contract work shall be provided by the Contractor.

(b) FACILITIES

☒ There are no Government restroom facilities available for use by the Contractor's employees at the work site. The Contractor shall provide all sanitary facilities for the needs of Contractor personnel.

I. 13 LISTING OF KENNEDY SPACE CENTER REQUIREMENTS SUPPORTING CONTRACT SECTION I (MAY 2014)

The Kennedy Space Center requirements supporting Contract Section I are listed in Section J, Attachment J-B, KSC Project Specific Requirements.

I. 14 PERSONAL IDENTITY VERIFICATION CARD ISSUANCE PROCEDURES (MAY 2014)

The following procedures implement the Federal Information Processing Standards Publication (FIPS PUB) Number 201, Personal Identity Verification (PIV) of Federal Employees and Contractors (Reference FAR Clause 52.204-9, Personal Identity Verification of Contractor Personnel).

FIPS 201 Appendix A graphically displays the following procedure for the issuance of a PIV credential.

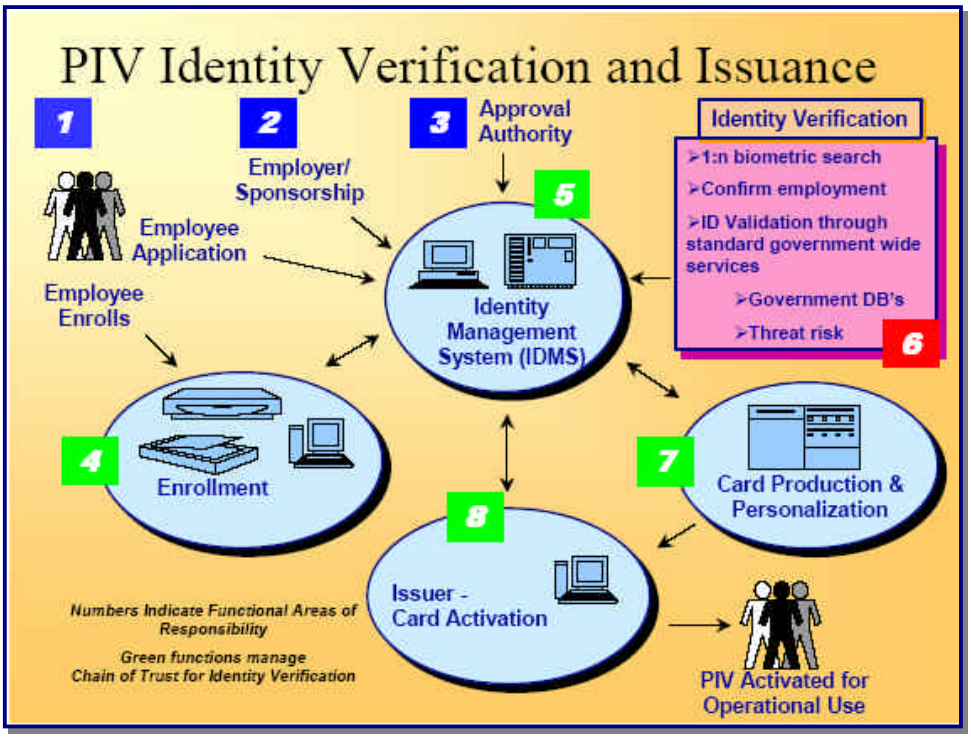


Figure A-1, FIPS 201, Appendix A

The following steps describe the procedures for the NASA Personal Identity Verification Card Issuance (PCI) of a PIV credential:

<u>Step 1</u>:

The Contractor's Corporate Security Officer (CSO), Program Manager (PM), or Facility Security Officer (FSO) submits a formal letter that provides a list of contract employees (applicant) names requesting access to the NASA Contracting Officer's Technical Representative (COTR). In the case of a foreign national applicant, approval through the NASA Foreign National Management System (NFNMS) must be obtained for the visit or assignment before any processing for a PIV credential can take place. Further, if the foreign national is not under a contract where a COTR has been officially designated, the foreign national will provide the information directly to their visit/assignment host, and the host sponsor will fulfill the duties of the COTR mentioned herein. In each case, the letter shall provide notification of the contract or foreign national employee's (hereafter the "applicant") full name (first, middle and last), social security number (SSN) or NASA Foreign National Management System Visitor Number if the foreign national does not have a SSN, and date of birth. If the contract employee has a current satisfactorily completed National Agency Check with Inquiries (NACI) or an equivalent or higher degree of background investigation, the letter shall indicate the type of investigation, the agency completing the investigation, and date the investigation was completed. Also, the letter must specify the risk/sensitivity level associated with the position in which each applicant will be working (NPR 1600.1, §4.5 is germane) Further, the letter shall also acknowledge that contract employees may be denied access to

NASA information or information systems based on an unsatisfactory background investigation/adjudication.

After reviewing the letter for completeness and concurring with the risk/sensitivity levels, the COTR/host must forward the letter to the Center Chief of Security (CCS). The CCS shall review the OPM databases (e.g., DCII, PIP, et al.), and take appropriate steps to validate the applicant's investigation status. Requirements for a NACI or other investigation shall be initiated only if necessary.

Applicants who do not currently possess the required level of background investigation shall be directed to the e-QIP web site to complete the necessary background investigation forms online. The CCS shall provide to the COTR/host information and instructions on how to access the e-QIP for each contract or foreign national employee requiring access

Step 2:

Upon acceptance of the letter/background information, the applicant will be advised that in order to complete the investigative process, he or she must appear in-person before the authorized PIV registrar and submit two forms of identity source documents in original form. The identity source documents must come from the list of acceptable documents included in Form I-9, Employment Eligibility Verification, one which must be a Federal[i] or State issued picture identification. Fingerprints will be taken at this time. The applicant must appear **no later than** the entry on duty date.

When the applicant appears, the registrar will electronically scan the submitted documents; any document that appears invalid will be rejected by the registrar. The registrar will capture electronically both a facial image and fingerprints of the applicant. The information submitted by the applicant will be used to create or update the applicant identity record in the Identity Management System (IDMS).

Step 3:

Upon the applicant's completion of the investigative document, the CCS reviews the information, and resolves discrepancies with the applicant as necessary. When the applicant has appeared in person and completed fingerprints, the package is electronically submitted to initiate the NACI. The CCS includes a request for feedback on the NAC portion of the NACI at the time the request is submitted.

[i] A non-PIV government identification badge, including the NASA Photo Identification Badge, MAY NOT BE USED for the original issuance of a PIV vetted credential

Step 4:

Prior to authorizing physical access of a contractor employee to a federally-controlled facility or access to a Federal information system, the CCS will a National Crime Information Center (NCIC) with an Interstate Identification Index check is/has been performed. In the case of a foreign national, a national check of the Bureau of Immigration and Customs Enforcement (BICE) database will be performed for each applicant. If this process yields negative information, the CCS will immediately notify the COTR/host of the determination regarding access made by the CCS.

Step 5:

Upon receipt of the completed NAC, the CCS will update IDMS from the NAC portion of the NACI and indicate the result of the suitability determination. If an unsatisfactory suitability determination is rendered, the COTR will advise the contractor that the employee is being denied physical access to all federally-controlled facilities and Federal information systems.

Based on a favorable NAC and NCIC/III or BICE check, the CCS will authorize the issuance of a PIV federal credential in the Physical Access Control System (PACS) database. The CCS, based on information provided by the COTR/host, will determine what physical access the applicant should be granted once the PIV issues the credential.

Step 6:

Using the information provided by the applicant during his or her in-person appearance, the PIV card production facility creates and instantiates the approved PIV card for the applicant with an activation date commensurate with the applicant's start date.

Step 7:

The applicant proceeds to the credential issuance facility to begin processing for receipt of his/her federal credential. The applicant provides to the credential issuing operator proof of identity with documentation that meets the requirements of FIPS 201 (DHS Employment Eligibility Verification (Form I-9) documents. These documents **must** be the same documents submitted for registration. The credential issuing operator will verify that the facial image, and optionally reference finger print, matches the enrollment data used to produce the card. Upon verification of identity, the operator will locate the employee's record in the PACS database, and modify the record to indicate the PIV card has been issued. The applicant will select a PIN for use with his or her new PIV card. Although root data is inaccessible to the operator, certain fields (hair color, eye color, et al.) may be modified to more accurately record the employee's information. The applicant proceeds to a kiosk or other workstation to complete activation of the PIV card using the initial PIN entered at card issuance.

ALTERNATIVE FOR APPLICANTS WHO DO NOT HAVE A COMPLETED AND ADJUDICATED NAC AT THE TIME OF ENTRANCE ON DUTY

Steps 1 through 4 shall be accomplished for all applicants in accordance with the process described above. If the applicant is unable to appear in person until the time of entry on duty, or does not, for any other reason, have a completed and adjudicated NAC portion of the NACI at the time of entrance on duty, the following interim procedures shall apply.

1. If the documents required to submit the NACI have not been completed prior to EOD, the applicant will be instructed to complete all remaining requirements for submission of the investigation request. This includes presentation of I-9 documents and completion of fingerprints, if not already accomplished. If the applicant fails to complete these activities as prescribed in NPR 1600.1 (Chapters 3 & 4), it may be considered as failure to meet the conditions required for physical access to a federally-controlled facility or access to a Federal information system, and result in denial of such access.

2. Based on favorable results of the NCIC, the applicant shall be issued a temporary NASA identification card for a period not-to-exceed six months. If at the end of the six month period the NAC results have not been returned, the agency will at that time make a determination if an additional extension will be granted for the temporary identification card.

3. Upon return of the completed NAC, the process will continue from Step 5.

NASA/KSC SOLICITATION NNK14518671R
SECTION J – LIST OF ATTACHMENTS

J. 1 LIST OF ATTACHMENTS

A. The following documents are attached hereto and made a part of this contract:

Attachment	Title	Date	# Pages
J-A	Project Deliverables	07/2014	18
J-B	KSC Project Specific Requirements	07/2014	23
J-C	Department of Labor Wage Determination Number FL 140001 07/04/2014	07/04/2014	7
J-D	Technical Specifications 79K39834, titled "Design of IOP/SS Post-Liftoff Bypass, LC39B"	06/18/2014	118
J-E	Drawings 79K39833, titled "IOP/SS Post-Liftoff Bypass"	06/18/2014	28
J-F	Brand Name JOFOC – TopWorx	07/2014	3
J-G	Brand Name JOFOC – Jamesbury	07/2014	3
J-H	Brand Name JOFOC – Bettis	07/2014	3
J-I	Brand Name JOFOC – Pneumatics Panel	07/2014	2
J-J	KSC Visitor Badge Request Form	N/A	1
J-K	Safety and Occupational Health Plan	**TBD**	**TBD**
J-L	Site Specific Safety Plan	**TBD**	**TBD**
J-M	Project Execution Plan	**TBD**	**TBD**

B. Per FAR 15.204-1(b), Section K will be incorporated by reference as part of this contract.

K.1 FAR 52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (JAN 2014)

(a) (1) The North American Industry Classification System (NAICS) code for this acquisition is **238220, Plumbing, Heating, and Air-Conditioning Contractors**.

(2) The small business size standard is **$14M**.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b) (1) If the provision at 52.204-7, System for Award Management, is included in this solicitation, paragraph (d) of this provision applies.

(1) If the provision at 52.204-7 is not included in this solicitation, and the offeror is currently registered in the System for Award Management (SAM), and has completed the Representations and Certifications section of SAM electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

[ ] (i) Paragraph (d) applies.

[ ] (ii) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c) (1) The following representations or certifications in SAM are applicable to this solicitation as indicated:

(h) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—

(A) The acquisition is to be made under the simplified acquisition procedures in Part 13;

(B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or

(C) The solicitation is for utility services for which rates are set by law or regulation.

(ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed $150,000.

(iii) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the provision at 52.204-7, System for Award Management.

(iv) 52.204-5, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—

(A) Are not set aside for small business concerns;

(B) Exceed the simplified acquisition threshold; and

(C) Are for contracts that will be performed in the United States or its outlying areas.

(v) 52.209-2, Prohibition on Contracting with Inverted Domestic Corporations—Representation. This provision applies to solicitations using funds appropriated in fiscal years 2008, 2009, 2010, or 2012.

(vi) 52.209-5, Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.

(vii) 52.214-14, Place of Performance—Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.

(viii) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.

(ix) 52.219-1, Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.

(A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.

(B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.

(x) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.

(xi) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.

(xii) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.

(xiii) 52.222-38, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.

(xiv) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA–designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.

(xv) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA–designated items.

(xvi) 52.225-2, Buy American Act Certificate. This provision applies to solicitations containing the clause at 52.225-1.

(xvii) 52.225-4, Buy American Act—Free Trade Agreements—Israeli Trade Act Certificate. (Basic, Alternates I, II, and III.) This provision applies to solicitations containing the clause at 52.225-3.

(A) If the acquisition value is less than $25,000, the basic provision applies.

(B) If the acquisition value is $25,000 or more but is less than $50,000, the provision with its Alternate I applies.

(C) If the acquisition value is $50,000 or more but is less than $79,507, the provision with its Alternate II applies.

(D) If the acquisition value is $79,507 or more but is less than $100,000, the provision with its Alternate III applies.

(xviii) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.

(xix) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan—Certification. This provision applies to all solicitations.

(xx) 52.225-25, Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran-Representation and Certifications. This provision applies to all solicitations.

(xxi) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to—

(A) Solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions; and

(B) For DoD, NASA, and Coast Guard acquisitions, solicitations that contain the clause at 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns.

(2) The following certifications are applicable as indicated by the Contracting Officer:

__ (i) 52.219-22, Small Disadvantaged Business Status.

__ (A) Basic.

__ (B) Alternate I.

__ (ii) 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products.

__ (iii) 52.222-48, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment Certification.

__ (iv) 52.222-52, Exemption from Application of the Service Contract Act to Contracts for Certain Services–Certification.

_X_ (v) 52.223-9, with its Alternate I, Estimate of Percentage of Recovered Material Content for EPA–Designated Products (Alternate I only).

__ (vi) 52.227-6, Royalty Information.

__ (A) Basic.

__(B) Alternate I.

__ (vii) 52.227-15, Representation of Limited Rights Data and Restricted Computer Software.

(b) The offeror has completed the annual representations and certifications electronically via the SAM website accessed through https://www.acquisition.gov. After reviewing the SAM database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [*offeror to insert changes, identifying change by clause number, title, date*]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR CLAUSE #	TITLE	DATE	CHANGE
_____	_____	_____	_____

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on SAM.

(End of provision)

K.2 FAR 52.209-7 INFORMATION REGARDING RESPONSIBILITY MATTERS (JUL 2013)

(a) *Definitions*. As used in this provision—

"Administrative proceeding" means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (*e.g.*, Securities and Exchange Commission Administrative Proceedings, Civilian Board of Contract Appeals Proceedings, and Armed Services Board of Contract Appeals Proceedings). This includes administrative proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include agency actions such as contract audits, site visits, corrective plans, or inspection of deliverables.

"Federal contracts and grants with total value greater than $10,000,000" means—

(1) The total value of all current, active contracts and grants, including all priced options; and

(2) The total value of all current, active orders including all priced options under indefinite-delivery, indefinite-quantity, 8(a), or requirements contracts (including task and delivery and multiple-award Schedules).

"Principal" means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (*e.g.*, general manager; plant manager; head of a division or business segment; and similar positions).

(b) The offeror [ ] has [ ] does not have current active Federal contracts and grants with total value greater than $10,000,000.

(c) If the offeror checked "has" in paragraph (b) of this provision, the offeror represents, by submission of this offer, that the information it has entered in the Federal Awardee Performance and Integrity Information System (FAPIIS) is current, accurate, and complete as of the date of submission of this offer with regard to the following information:

(1) Whether the offeror, and/or any of its principals, has or has not, within the last five years, in connection with the award to or performance by the offeror of a Federal contract or grant, been the subject of a proceeding, at the Federal or State level that resulted in any of the following dispositions:

(i) In a criminal proceeding, a conviction.

(ii) In a civil proceeding, a finding of fault and liability that results in the payment of a monetary fine, penalty, reimbursement, restitution, or damages of $5,000 or more.

(iii) In an administrative proceeding, a finding of fault and liability that results in—

(A) The payment of a monetary fine or penalty of $5,000 or more; or
(B) The payment of a reimbursement, restitution, or damages in excess of $100,000.

(iv) In a criminal, civil, or administrative proceeding, a disposition of the matter by consent or compromise with an acknowledgment of fault by the Contractor if the proceeding could have led to any of the outcomes specified in paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this provision.

(2) If the offeror has been involved in the last five years in any of the occurrences listed in (c)(1) of this provision, whether the offeror has provided the requested information with regard to each occurrence.

(d) The offeror shall post the information in paragraphs (c)(1)(i) through (c)(1)(iv) of this provision in FAPIIS as required through maintaining an active registration in the System for Award Management database via https://www.acquisition.gov (see 52.204-7).

(End of provision)

K.3 NFS 1852.225-72 RESTRICTION ON FUNDING ACTIVITY WITH CHINA – REPRESENTATION (FEB 2012)

(a) Definition - “China” or “Chinese-owned” means the People’s Republic of China, any company owned by the People’s Republic of China or any company incorporated under the laws of the People’s Republic of China.

(b) Public Laws 112-10, Section 1340(a) and 112-55, Section 536, restrict NASA from contracting to participate, collaborate, or coordinate bilaterally in any way with China or a Chinese-owned company with funds appropriated on or after April 25, 2011. Contracts for commercial and non-developmental items are excepted from the prohibition as they constitute purchase of goods or services that would not involve participation, collaboration, or coordination between the parties.

(c) Representation. By submission of its offer, the offeror represents that the offeror is not China or a Chinese-owned company.

(End of provision)

SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR RESPONDENTS

L. 1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FAR 52.252-1) (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at these addresses:

http://prod.nais.nasa.gov/cgi-bin/nais/index.cgi
http://ec.msfc.nasa.gov/hq/library/v-reg.htm.

(End of provision)

L. 2 LISTING OF FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) PROVISIONS INCORPORATED BY REFERENCE

PROVISION	TITLE
FAR 52.204-7	**SYSTEM FOR AWARD MANAGEMENT (JUL 2013)**
FAR 52.204-13	**SYSTEM FOR AWARD MANAGEMENT MAINTENANCE (JUL 2013)**
FAR 52.211-6	**BRAND NAME OR EQUAL (AUG 1999)**
FAR 52.215-1	**INSTRUCTIONS TO OFFERORS - COMPETITIVE ACQUISITION (JAN 2004)**
FAR 52.222-23	**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)**

Fill-In: (b) Minority participation goal: 10.7%
Female participation goal: 6.9%

Fill-In: (e) Kennedy Space Center and Cape Canaveral Air Force Station, Brevard County, Florida

FAR 52.228-1 BID GUARANTEE (SEP 1996)

Fill-In: para (c) The amount of the bid guarantee shall be 20% of the bid price or $3M, whichever is less.

FAR 52.236-28 PREPARATION OF PROPOSALS – CONSTRUCTION (OCT 1997)

L. 3 LISTING OF FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) PROVISIONS INCORPORATED IN FULL TEXT

FAR 52.211-1 AVAILABILITY OF SPECIFICATIONS LISTED IN THE GSA INDEX OF FEDERAL SPECIFICATIONS, STANDARDS AND COMMERCIAL ITEMS DESCRIPTIONS, FPMR Part 101-29 (AUG 1998)

(a) The GSA Index of Federal Specifications, Standards and Commercial Item Descriptions, FPMR Part 101-29, and copies of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained for a fee by submitting a request to—

GSA Federal Supply Service
Specifications Section, Suite 8100
470 East L'Enfant Plaza, SW
Washington, DC 20407
Telephone (202) 619-8925
Facsimile (202) 619-8978.

(b) If the General Services Administration, Department of Agriculture, or Department of Veterans Affairs issued this solicitation, a single copy of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained free of charge by submitting a request to the addressee in paragraph (a) of this provision. Additional copies will be issued for a fee.

(End of provision)

FAR 52.211-3 AVAILABILITY OF SPECIFICATIONS NOT LISTED IN THE GSA INDEX OF FEDERAL SPECIFICATIONS, STANDARDS AND COMMERCIAL ITEM DESCRIPTIONS (JUN 1988)

The specifications cited in this solicitation may be obtained from:

(a) KSC specifications and standards may be obtained at:

https://standards.nasa.gov/documents/ksc

(b) NASA specifications are available at https://standards.nasa.gov/. This website requires Public Access registration (Logon Required).

(c) The Acquisition Streamlining and Standardization Information System (ASSIST) is a web based system for military and federal specifications and standards. Managed by the DoD Single Stock Point (DoDSSP), Philadelphia, ASSIST-Online provides public access to standardization documents over the Internet. These documents are available at http://assist.daps.dla.mil; or by submitting a request to the-

Department of Defense Single Stock Point (DoDSSP)
Building 4, Section D
700 Robbins Avenue
Philadelphia, PA 19111-5094
Telephone (215) 697-2179
Facsimile (215) 697-1462

(d) Other Government Standards, Specifications, and other Technical Documents incorporated by reference in this solicitation may be obtained from the Contracting Officer or, if applicable, https://www.fbo.gov.

The request should identify the solicitation number and the specification requested by date, title, and number, as cited in the solicitation.

(e) Voluntary standards, such as industrial, manufacturing, independent laboratory, society, and institutional associations (non-Government organizations) codes, standards, specifications, and technical documents incorporated by reference in this solicitation must be obtained, at the bidder's expense, from the organization that develops, establishes and/or publishes those documents.

(End of provision)

FAR 52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a Firm Fixed Price contract resulting from this solicitation.

(End of provision)

FAR 52.222-5 DAVIS BACON ACT-SECONDARY SITE OF THE WORK (JUL 2005)

(a) (1) The offeror shall notify the Government if the offeror intends to perform work at any secondary site of the work, as defined in paragraph (a)(1)(ii) of the FAR clause at 52.222-6, Davis-Bacon Act, of this solicitation.

(2) If the offeror is unsure if a planned work site satisfies the criteria for a secondary site of the work, the offeror shall request a determination from the Contracting Officer.

(b) (1) If the wage determination provided by the Government for work at the primary site of the work is not applicable to the secondary site of the work, the offeror shall request a wage determination from the Contracting Officer.

(2) The due date for receipt of offers will not be extended as a result of an offeror's request for a wage determination for a secondary site of the work.

(End of provision)

FAR 52.225-10 NOTICE OF BUY AMERICAN ACT REQUIREMENT – CONSTRUCTION MATERIALS (FEB 2009)

(a) *Definitions*. "Commercially available off-the-shelf (COTS) item," "construction material," "domestic construction material," and "foreign construction material," as used in this provision, are defined in the clause of this solicitation entitled "Buy American Act--Construction Materials" (Federal Acquisition Regulation (FAR) clause 52.225-9).

(b) Requests for determinations of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American Act should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of the clause at FAR 52.225-9 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American Act before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.

(c) Evaluation of offers.

(1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act, based on claimed unreasonable cost of domestic construction material, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(3)(i) of the clause at FAR 52.225-9.

(2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.

(d) Alternate offers.

(1) When an offer includes foreign construction material not listed by the Government in this solicitation in paragraph (b)(2) of the clause at FAR 52.225-9, the offeror also may submit an alternate offer based on use of equivalent domestic construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of the clause at FAR 52.225-9 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of the clause at FAR 52.225-9 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic construction material, and the offeror shall be required to furnish such domestic construction material. An offer based on use of the foreign construction material for which an exception was requested—

(i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or

(ii) May be accepted if revised during negotiations.

(End of provision)

FAR 52.233-2 SERVICE OF PROTEST (SEP 2006)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are

filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from:

Contracting Officer
OP-ES, Room 2488
Headquarters Building,
Kennedy Space Center, Florida 32899

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

FAR 52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995) - ALTERNATE I (FEB 1995)

(a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.

(b) An organized site visit has been scheduled for: **July 29, 2014 at 9:00 AM**

(c) Participants will meet at:

Pad B Operation Building J7-0689, Conference Room 1023

(d) Attendance is limited to three representatives from each prospective prime offeror. To attend the site visit, each representative must fill out (**TYPED**) and submit (in advance of the site visit) the following badge request form:

KSC Form 28-889V2, KSC Visitor Badge Request (See attached J-J)

(e) Submit the badge request form(s), via e-mail, to: **Jessica.L.Smith@NASA.GOV**

(f) Badge Request Form Due Date: **3PM on July 25, 2014**

(g) Badge requests received after the due date will not be considered (Be advised that badge requests may be rejected for failure to fill in all the required information: names, titles, SSNs, citizenship, etc). **BADGES WILL BE PROVIDED TO U.S.**

CITIZENS ONLY. RESIDENT ALIENS AND FOREIGN NATIONALS WILL NOT BE BADGED FOR ACCESS TO KSC.

(h) Site visit participants will be responsible for:

- Providing their own transportation

- Bringing two (2) forms of identification with them. **See Section L, Appendix 3**

- Picking up badges BEFORE THE SITE VISIT at the KSC Badging Office (take S.R. 405 east from U.S. 1, past the KSC Visitor Complex, located on the right before KSC Gate 3). KSC Badging Office hours are Monday through Friday, 6:00A.M. to 4:00P.M. **It is recommended you arrive at least 90 minutes prior to the site visit to obtain badges**.

- Reporting to the site visit

- Providing a hard hat, closed toed safety shoes, hearing protection, and long pants.

- Optional: Area is inundated with mosquitoes, recommend bringing/wearing bug spray.

(i) Visitors on KSC are allowed to possess and use photographic equipment and materials EXCEPT IN CONTROLLED AREAS. At the site visit meeting you will be notified as to the current status of the area.

(j) The site visit is expected to last 2-3 hours.

(End of provision)

L. 4 LISTING OF NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) PROVISIONS INCORPORATED BY REFERENCE

PROVISION NO.	TITLE
NFS 1852.228-73	BID BOND (OCT 1998)
NFS 1852.233-70	PROTESTS TO NASA (OCT 2002)

L. 5 LISTING OF NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) PROVISIONS INCORPORATED IN FULL TEXT

NFS 1852.215-81 PROPOSAL PAGE LIMITATIONS (FEB 1998)

(a) The following page limitations are established for each portion of the proposal submitted in response to this solicitation.

Proposal Section	Page Limit
Project Execution Plan	Limited to four (4) pages
Technical Experience Summary	Limited to two (2) pages per each project identified in the Technical Experience Summary
Past Performance Data From Prior Customers (Optional)	Limited to three (3) pages of information for each project identified in the Technical Experience Summary
Page 1 of Past Performance Questionnaires	Limited to page 1 of each Past Performance Questionnaire mailed to each customer
Safety and Occupational Health Plan	No page limit. (The Plan shall be divided into two sections: Safety Past Performance Information and Safety and Health Plan)

(b) A page is defined as one side of a sheet, 8 1/2" x 11", with at least one inch margins on all sides, using not smaller than 12 point type. Foldouts count as an equivalent number of 8 1/2" x 11" pages. The metric standard format most closely approximating the described standard 8 1/2" x 11" size may also be used.

(c) Title pages and tables of contents are excluded from the page counts specified in paragraph (a) of this provision. In addition, the Cost section of your proposal is not page limited. However, this section is to be strictly limited to cost and price information. Information that can be construed as belonging in one of the other sections of the proposal will be so construed and counted against that section's page limitation.

(d) If final revisions are requested, separate page limitations will be specified in the Government's request for that submission.

(e) Pages submitted in excess of the limitations specified in this provision will not be evaluated by the Government and will be returned to the offeror.

NFS 1852.223-73 SAFETY AND HEALTH PLAN (NOV 2004) (Modified)

The offeror shall submit a detailed safety and occupational health plan as part of its proposal. Failure to submit an acceptable plan shall make the offeror ineligible for the award of a contract.

The plan shall describe in detail the policies, procedures, and techniques that will be used to ensure the safety and occupational health of contractor employees and to ensure safe working conditions throughout the performance of the contract.

The plan shall describe in detail the policies, procedures, and techniques that will be used to ensure the safety and occupational health of the public, astronauts and pilots, the NASA workforce (including contractor employees working on NASA contracts). The plan shall also address the protection of the environment, high-valued equipment, and property.

The Safety and Occupational Health Plan shall be divided into two sections: Safety Past Performance and Safety and Health Plan.

a. Safety Past Performance Information

1. Contractor's Corporate Safety Program objectives to include safety policy statement.

2. A copy of the Contractor's Annual Summary of Occupational Injuries and Illnesses (OSHA Form 300A) or equivalent for the previous three (3) years as described in Title 29, Code of Federal Regulations, Subpart 1904.5. If the contractor is exempt by regulation from maintaining and publishing such logs, equivalent data in contractor's format is acceptable (such as loss runs from insurance carrier) which contains the data required. Data shall be compiled and reported by calendar year.

3. Documented evidence of Experience Modification Rate (EMR) for the previous three (3) years.

4. Days Away, Restricted or Transferred Rate (DART) for the previous three (3) years under **NAICS Code 238220 - Plumbing, Heating, and Air-Conditioning Contractors**. The data shall include incidence rates of days away from work, job transfer, or restriction cases, occupational injuries and illnesses, by quartile distribution and employment size group, private industry as most recently published by the Bureau of Labor Statistics.

5. Total Case Incident Rate (TCIR) for the previous three (3) years under **NAICS Code 238220 - Plumbing, Heating, and Air-Conditioning Contractors**. The data shall include incidence rates of total recordable cases of occupational injuries and illnesses, by quartile distribution and employment size group, private industry as most recently published by the Bureau of Labor Statistics.

6. Results of any investigations of violations or pending Occupational Safety and Health Administration (OSHA) violations from the past three years.

b. Safety and Health Plan

1. A discussion on how the Contractor intends to comply with 29 CFR 1926 Safety & Health Regulations for Construction, NPR 8715.3 (NASA Safety Manual & Appendices), KNPR 8715.3 (KSC Safety Practices Procedural Requirements), and KNPR 8715.7 (KSC Construction Contractor Safety & Health Practices Procedural Requirements Rev A) with regard to all safety issues that will be encountered on this project. [KNPR 8715.3, KNPR 8715.7, and KSC-UG-2814, Rev A-1 (KSC Construction Contractors Safety and Health Practices Users Guide) can be accessed at http://tdglobal.ksc.nasa.gov/ReferencedDocuments/.]

   NOTE: KSC-UG-2814 contains a Safety and Occupational Health Plan template (Pages 56-100) that should be used for the Safety and Occupational Health Plan.

2. Hazard Analysis: The contractor shall describe the process to be used to analyze worksite hazards or Job Hazard Analysis (JHA) prior to the start of work to ensure that all hazards are abated. These analyses may address facilities, systems/subsystems, operations, processes, materials (including waste), and specific tasks or jobs.

3. Emergency Procedures: Procedures for emergency actions to be taken to secure dangerous conditions, to protect personnel, and secure work areas in the event of accident or an act of nature.

4. The plan shall describe the contractor's training program including identification of responsibility for training employees to assure understanding of safe work practices, hazard recognition, and appropriate responses including protective and/or emergency countermeasures. The Plan shall include a discussion on how the contractor will validate that training requirements have been conducted and satisfied (i.e., physical examination, testing, on-the-job performance, etc). The Plan shall state all training materials and training records will be provided for NASA review on request.

5. The plan shall similarly address subcontractor employee safety and occupational health for those subcontractors who will be performing work under the contract when one or more of the following conditions apply: (Note: Contractors may not delegate overall site safety responsibility or authority for any personnel working under the provisions of this section to any subcontractor.)

   (i) The work will be conducted completely or partly on premises owned or controlled by the government.

   (ii) The work includes construction, alteration, or repair of facilities in excess of the simplified acquisition threshold.

   (iii) The work, regardless of place of performance, involves hazards that could endanger the public, astronauts and pilots, the NASA workforce (including Contractor employees working on NASA contracts), or high value equipment or property, and the hazards are not adequately addressed by Occupational

Safety and Health Administration (OSHA) or Department of Transportation (DOT) regulations (if applicable).

(iv) When the assessed risk and consequences of a failure to properly manage and control the hazards warrants use of the clause.

This plan, as approved by the Contracting Officer, will be incorporated into the contract.

NFS 1852.236-74 MAGNITUDE OF REQUIREMENT (DEC 1988)

The Government estimated price range of this project is **between $1,000,000 and $5,000,000**.

L. 6 KSC 52.214-90 DELIVERY INSTRUCTIONS FOR BIDS/PROPOSALS (AUG 2005)

a. Delivery Address:

All offers (bids or proposals) shall be delivered to the Central Industry Assistance Office (CIAO), 7110 N. Courtenay Parkway, Merritt Island, FL, 32953 on or before the date and time set for receipt of proposals or bids. The CIAO is located on state Road 3, approximately 2 miles south of Gate 2 to KSC. Access to KSC is not required.

b. Hand-Delivered Offers:

Offerors are responsible for assuring that hand-carried bids are either received by NASA Government employees at the CIAO or dropped in the CIAO mail box located outside of the building.

c. Late Delivery of Offers/Bids:

Late offers/bids will be processed in accordance with FAR 214-7, “Late Submissions, Modifications and Withdrawals of Bids, “FAR 52.215-1, “Instructions to Offerors - Competitive Acquisition,” FAR 52.212-1, “Instructions to Offerors – Commercial Items,” or FAR 52.214-23, “Late Submission, Modifications, and Withdrawals of Technical Proposals Under Two-Step Sealed Bidding,” included in this solicitation.

(End of Provision)

L. 7 PROPOSAL IDENTIFICATION (MAY 2014)

Sealed packages containing proposals shall be marked to show the offeror’s name and address and be addressed as follows:

Attn: **RANDALL A. GUMKE**
NASA CONTRACTING OFFICER, OP-ES
SOLICITATION: NNK14518671R
TITLE OF PROJECT: IOP/SS POST-LIFTOFF BYPASS VALVES, LC 39B

UNSEALED PROPOSAL PACKAGES DELIVERED TO THE CIAO WILL NOT BE ACCEPTED.

L. 8 COMMUNICATIONS REGARDING THIS SOLICITATION (MAY 2014)

(a) Questions or comments regarding this solicitation must be submitted via email, cite the solicitation number, and be directed to the following Government representative:

Name: **Randall A. Gumke**
Email: **Randall.A.Gumke@NASA.gov**
Address: **NASA John F. Kennedy Space Center,**
Mail Stop: OP-ES
Kennedy Space Center, Florida 32899

(b) Questions should be submitted on the attached Question/Comment Form, in MS Word or equivalent (no PDF or read only) format or in the body of the e-mail message (in the same format as listed on the Question/Comment Form, Appendix 1 to Section L of this solicitation). Questions shall be sent to the Contracting Officer identified above by **August 07, 2014** to allow for analysis and dissemination of responses in advance of the proposal due date. Questions received after this date will be considered but may be answered. **Oral questions will not be accepted.**

(c) Questions or comments shall not be directed to the technical activity personnel.

(End of provision)

L. 9 GENERAL PROPOSAL PREPARATION INSTRUCTIONS (MAY 2014)

The solicitation, drawings, and specifications are available only through the Federal Business Opportunities website, (FedBizOpps) (http://www.fbo.gov). No hard copies, CD's or other media will be provided by the Government. It is the responsibility of the potential offerors to download the documents posted on FedBizOpps.

(a) The Government intends to make award without holding discussions with offerors. By

submitting an offer in response to this solicitation, offerors are agreeing to comply with all terms and conditions contained in the solicitation. Offerors are cautioned to carefully follow the instructions set forth herein.

(b) This solicitation DOES NOT invite offerors to submit alternate proposals. The Contracting Officer may reject any offer containing exceptions. Therefore, offerors are encouraged to include their best terms and conditions in the initial offer. If, despite the warning given in this paragraph, the offeror elects to include exceptions, they must be specifically and clearly identified on a separate page. In this solicitation, the words "offer" and "proposal" are used interchangeably. (See definition of "offer" at FAR 2.101.)

(c) A PROPERLY SUBMITTED OFFER SHALL CONSIST OF THE FOLLOWING:

(1) One original and two copies of the SF 1442, Solicitation Offer and Award, with Blocks 14 through 20c completed and signed by an authorized representative of the offeror. The person signing the offer must initial each erasure or change appending the offer.

(2) Three copies of page 1 of all amendments issued, signed by an authorized representative of the offeror. (This requirement only applies if amendment receipts are not acknowledged on the signed SF 1442 submitted).

(3) Completion of Section K representations and certifications on-line at the System for Award Management (SAM) website as required by FAR Provision 52.204-8, Annual Representations and Certifications, incorporated in full text in Section K of this solicitation.

(4) Two (2) copies of offeror's Project Execution Plan in accordance with Article L. 10.

(5) Two (2) copies of offeror's Technical Experience Summary in accordance with Article L.10.

(6) Two (2) copies of Past Performance Data From Customers in accordance with Article L. 10. (Optional requirement)

(7) Two (2) copies of Page 1 of the Past Performance Questionnaires that the offeror provided to each past performance point of contact in accordance with Article L. 10. (The past performance questionnaire is provided as Appendix 2 to Section L. of this solicitation)

(8) Two (2) copies of offeror's Safety and Occupational Health Plan in accordance with NFS 1852.223-73 and Article L. 10.

(9) One (1) properly executed bid bond in accordance with NFS 1852.228-73. A copy of Standard Form 24, Bid Bond, may be downloaded at:

http://www.gsa.gov/Portal/gsa/ep/formslibrary.do?formType=SF

(10) Contractors working in either a Joint Venture or a Teaming Agreement shall provide a copy of their agreement and specifically identify who the controlling entity will be for this contract.

Incomplete proposals may be a basis for determination of unacceptability of the proposal and removal of the proposal from consideration.

By submitting an offer in response to this solicitation, the offeror is agreeing to comply with all terms and conditions contained in the solicitation. The terms and conditions of the solicitation, including any amendments, shall take precedence over the offeror's proposal unless the proposal is incorporated into the contract by specific reference.

(End of provision)

L. 10 NON-PRICE FACTORS (MAY 2014)

The government will evaluate the non-price factors of Project Execution Plan, Technical Experience, Past Performance, and Safety and Occupational Health Plan. Each offeror shall provide the following Non-Price Factors documentation as part of its proposal:

a. **PROJECT EXECUTION PLAN**

1. Offerors shall provide a Project Execution Plan identifying their ability to meet the project's strict period of performance. This project execution plan shall include two major sections as follows:

   a) Section one (1) shall include a high level summary schedule showing all critical milestones including, but not limited to 1) notice to proceed, 2) partial demolition of existing post lift off system bypass lines, 3) installation of new, large diameter (30" diameter) bypass lines, 4) fabrication and installation of pneumatics panel, 5) routing of pneumatics tubing, 6) modifications to the support systems to accommodate the change in bypass lines and 5) testing complete.

   b) Section two (2) shall include written discussion on the following:

      1) Brief discussion on the offeror's proposed methodology for providing quality workmanship and meeting this contract's required schedule.

      2) Brief discussion of the offeror's proposed plan to accomplish demolition, fabrication, installation, modification, and testing activities. Plan should describe, but not be limited to, handling of large diameter (30" diameter) piping, welding, inspection and liquid penetrant and radiographic testing,

cleaning of pneumatic system components, and hydrostatic/pneumatic and leak testing of pneumatic system compenents. Subcontractors that would be involved in these activities should be identified.

2. The Successful Offeror's Project Execution Plan will be incorporated in the resultant contract.

b. TECHNICAL EXPERIENCE

1. Offerors shall provide a Technical Experience Summary identifying three (3) contracts being performed or successfully completed within seven (7) years of the date of issuance of this solicitation (**July 22, 2014**) (including federal, state, local government, and private projects) similar in size, content, and complexity to the instant Government acquisition.

2. Offerors proposing contractor teaming arrangements shall identify the scope of work that will be performed by the prime contractor and the scope of work that will be performed by the other team member(s). In addition to the three (3) contracts performed by the prime contractor, offerors shall identify in the Technical Experience Summary three (3) contracts being performed or successfully completed by the other team member(s) within the past seven (7) years of the date of issuance of this solicitation (**July 22, 2014**) (including federal, state, local Government and private jobs) similar in size, content, and complexity to this Government acquisition.

3. The Technical Experience Summary shall be limited to two pages of information for each completed contract and include the following information for each referenced contract or project:

   Name of project and contract/order number

   North American Industry Classification System (NAICS) code project was performed under (if applicable)

   Type of contract/order (fixed-price or cost reimbursable)

   Dates of the contract performance period as initially awarded

   Dates of the actual completed performance period

   Place of contract performance

   Name and address of customer or Government Agency

   Name, telephone number and e-mail address of Contracting Officer or equivalent customer contact

Dollar value of contract/order as initially awarded; break out major subcontract values

Dollar value of contract/order at completion

Discussions on why the selected contract demonstrates relevant technical experience needed to meet the complex technical performance requirements of this project. For a list of the technical performance requirements see Section M.1.(2) Factor 2 – Technical Experience.

Discussions on problems encountered (if applicable) during contract performance to include, but not limited to, challenges to successfully completing the project on schedule; safety violations/discrepancies; Department of Labor violations/discrepancies; non-payment of employees, subcontractors, and/or suppliers; and terminations. Offerors shall also discuss the offeror's corrective actions relative to identified problems.

Discussions on contract changes resulting in large dollar value and/or schedule increases.

A discussion on contract requirements concerning subcontracting plan goals for small disadvantaged business concerns, monetary targets for small disadvantaged business participation and notifications submitted under FAR 19.1202-4(b). (Applicable only to offerors who are large businesses)

c. PAST PERFORMANCE

1. Offerors shall provide the Past Performance Questionnaire (Appendix 2 to Section L of this solicitation) to each past performance Contracting Officer or customer contact equivalent identified in its Technical Experience Summary. Offerors shall request these customers to submit the completed questionnaires via e-mail to the address below prior to **August 14, 2014.** *Past Performance Questionnaires will not be accepted directly from offerors*. Questionnaires shall be returned directly from the offeror's past performance source to the Contract Specialist listed below:

Name:	**Randall A. Gumke**
Email:	**Randall.A.Gumke@NASA.gov**
Address:	**NASA John F. Kennedy Space Center,** **Mail Stop: OP-ES** **Kennedy Space Center, Florida 32899**

2. Offerors shall submit, with their proposals, copies of the first page of each past performance questionnaire that the offeror sends to each customer contact identified in its Technical Experience Summary. NOTE: The offeror is required to complete the "THIS

SECTION TO BE COMPLETED BY THE OFFEROR" area prior to sending the questionnaire to its customer.

3. Offerors may provide statements, letters, reports or evaluations from prior customers indicating the level and quality of past performance on the contracts/projects listed in the Technical Experience Summary. This supplemental information shall not exceed three (3) pages of information for each contract/project reference in your Technical Experience Summary. This is an optional requirement.

d. SAFETY AND OCCUPATIONAL HEALTH PLAN

Offerors shall submit two copies of their Safety and Occupational Health Plan with their proposal. The Plan shall consist of two parts: Safety Past Performance Information and Safety and Health Plan. NFS 1852.223-73, Safety and Health Plan (NOV 2004), incorporated in full text in Section L.5 of this solicitation details what shall be included in the Safety and Occupational Health Plan.

L. 11 APPENDICES TO SECTION L

This Section L is supplemented with the following appendices:

Appendix 1	Question & Comment Form
Appendix 2	Past Performance Questionnaire
Appendix 3	Two (2) Forms of Identity Guide

NASA/KSC SOLICITATION NNK14518671R
SECTION L/APPENDIX 1
QUESTION/COMMENT FORM

Questions or comments regarding this solicitation must be submitted via email to the Contracting Officer identified below.

Name:	**Randall A. Gumke**
Email:	**Randall.A.Gumke@NASA.gov**
Address:	**NASA John F. Kennedy Space Center,** **Mail Stop: OP-ES** **Kennedy Space Center, Florida 32899**

Questions shall be submitted on this form in MS Word or equivalent (no PDF or read only formats). Questions also may be submitted in the body of an e-mail message following this form's foremat. Late questions or comments will be considered by the Government but may not be answered. Responses to questions will be issued as amendments to the solicitation. The cutoff date and time for receipt of questions is **August 07, 2014**.

Offerors are cautioned that technical activity personnel are not authorized to answer solicitation questions or comments and that any responses from them may not accurately represent the Government's official position.

PLEASE CITE THE REFERENCE NUMBER SUCH AS PAGE NUMBER OF THE RFP, SPEC, DWGS, ETC, IF APPLICABLE.

1. REFERENCE:
_____

QUESTION:
_____
_____

2. REFERENCE:
_____

QUESTION:
_____
_____

Submitted by (name):_____
Company: _____
E-mail Address: _____

NASA/KSC SOLICITATION NNK14518671R
SECTION L/APPENDIX 2
PAST PERFORMANCE QUESTIONNAIRE

IOP/SS Post-Liftoff Bypass Valves, LC 39B

NASA Kennedy Space Center's solicitation requires offerors to provide this Past Performance Questionnaire to customers to complete and return to NASA. Past performance raters are requested to submit the completed questionnaires to the contracting officer identified below via e-mail, to arrive not later than the proposal submission date.

Completed questionnaires should be sent to:

Name:	**Randall A. Gumke**
Email:	**Randall.A.Gumke@NASA.gov**
Address:	**NASA John F. Kennedy Space Center**
	Mail Stop: OP-ES
	Kennedy Space Center, Florida 32899

Raters are requested to complete the questionnaire forms as written since altered or substituted questionnaires may not adequately address the information NASA will be evaluating.

SECTION I. THIS SECTION TO BE COMPLETED BY THE OFFEROR

Name of Contractor Being Evaluated: _____

Name of Project and Contract/Order Number: _____

Period of Contract Performance (dates): _____

Place of Contract Performance: _____

Contract Value at Award: _____

Contract Value at Completion or Current Contract Amount: _____

Contract Status (Prime or Subcontract?): _____

Point of Contact: (Rater) Name/Address/Office Phone Number/E-Mail Address:

_____
_____
_____
_____
_____

NASA/KSC SOLICITATION NNK14518671R
SECTION L/APPENDIX 2
PAST PERFORMANCE QUESTIONNAIRE

THIS SECTION TO BE COMPLETED BY THE RATER

(THIS QUESTIONNAIRE, WHEN COMPLETED, SHALL NOT BE DISCLOSED TO ANYONE OUTSIDE THE GOVERNMENT**)**

Name of Contractor Being Evaluated: _____

Name of Project and Contract/Order Number: _____

Period of Contract Performance (dates): _____

Place of Contract Performance: _____

Contract Value at Award: _____

Contract Value at Completion or Current Contract Amount: _____

Contractor's Status (Prime or Subcontractor?): _____

Percentage and Dollar Value of Work Performed by the Contractor:
_____

Dates of Rater's Involvement in Program/Contract: _____

Brief Description of Work Performed:
_____
_____
_____
_____
_____
_____
_____

Point of Contact: (Rater) Name/Address/Office Phone Number/E-Mail Address:
_____
_____
_____
_____
_____

RATING DEFINITIONS:

On a scale of 1 to 5, with 1 being unsatisfactory and 5 being exceptional, please rate the contractor on the past performance areas included in this questionnaire. A rating of N/A should be used if the question is not applicable or the answer is unknown. Space is provided for any additional comments raters may want to provide. The definitions associated with the 1 to 5 ratings are provided below:

1. **UNSATISFACTORY:** Performance does (did) not meet most contractual requirements and recovery is not likely (did not occur). The contractual performance contains (contained) serious problem(s) for which the contractor's corrective actions appear ineffective (were ineffective).

2. **MARGINAL:** Performance does (did) not meet some contractual requirements. The contractual performance reflects (reflected) serious problem(s) for which the contractor has not yet identified acceptable corrective actions (did not provide acceptable corrective actions).

3. **SATISFACTORY:** Performance meets (met) contractual requirements. The contractual performance reflects (reflected) some minor problems. Corrective actions being taken by the contractor appear to be effective (Corrective actions taken were effective).

4. **VERY GOOD:** Performance meets (met) contractual requirements and exceeds (exceeded) some of the Government's expectations. The contractual performance reflects (reflected) some minor problems and corrective actions being taken by the contractor appear to be effective (Corrective actions taken were effective).

5. **EXCEPTIONAL:** Performance meets (met) contractual requirements and exceeds (exceeded) many of the Government's expectations. The contractual performance reflects (reflected) few minor problems and corrective actions taken by the contractor appear to be highly effective (corrective actions taken were effective).

   N/A: Not applicable or rater has not observed performance in this area.

NASA/KSC SOLICITATION NNK14518671R
SECTION L/APPENDIX 2
PAST PERFORMANCE QUESTIONNAIRE

CONTRACTOR'S TECHNICAL PERFORMANCE QUESTIONS

1. The effectiveness of the Contractor's overall project management ability (including but not limited to project managers, quality control managers, safety managers, and superintendents); labor (skilled and unskilled workers); equipment; supplies; tools; and financial resources to successfully perform, provide contract deliverables and complete work in a safe and timely manner.

1	2	3	4	5	NA

Comments: _____

2. The Contractor's ability to provide immediate and effective contractor management attention at the job site and partner with the owner to resolve technical problems and schedule problems. Contractor's ability to provide and adhere to a detailed 2, 3, or 4 week look ahead schedule throughout project for increased team coordination.

1	2	3	4	5	NA

Comments: _____

3. The Contractor's ability to provide professional, clean, high quality computer aided drafting (CAD) based shop drawings including but not limited to dimensioned coordination, fabrication, installation and as-builts drawings.

1	2	3	4	5	NA

Comments: _____

4. The Contractor's ability to provide project completion within ten percent (10%) of original contract cost and schedule. Please provide comments on any changes greater than 10% that were not customer driven.

1	2	3	4	5	NA

Comments: _____

5. The Contractor's ability to provide fully marked-up product data cut sheets; highlighting the particular model # / part #s, sizes, options and other applicable data to allow for concise detailing of components to be installed.

1	2	3	4	5	NA

Comments:

6. The contractor's ability to coordinate, communicate, and team with the owner and other on-site personnel in shared work locations.

1	2	3	4	5	NA

Comments:

CONTRACTOR'S SAFETY PERFORMANCE QUESTIONS

7. The Contractor's ability to maintain a safety and health program with visible management control and involvement.

1	2	3	4	5	NA

Comments:

8. The Contractor's ability to maintain a safety program ensuring subcontractors' safety performance was consistent with the prime contractor's safety program.

1	2	3	4	5	NA

Comments:

9. The Contractor's ability to analyze worksite hazards prior to the start of work to ensure that all hazards were abated.

1	2	3	4	5	NA

Comments:

10. The Contractor's ability to understand and comply with safety requirements.

1	2	3	4	5	NA

Comments:

11. The Contractor's ability to maintain a safety program that ensured the customer's critical resources were adequately protected with emergency procedures for securing dangerous conditions and protecting personnel during contract performance.

1	2	3	4	5	NA

Comments:

12. The Contractor's ability to resolve safety discrepancies in a timely and effective manner and the ability to report, investigate, and take corrective actions on safety accidents/incidents in a timely and effective manner

1	2	3	4	5	NA

Comments:

CONTRACTOR'S CONTRACT ADMINISTRATION PERFORMANCE QUESTIONS

13. The contractor's ability to provide prompt payment of employees, subcontractors, and suppliers for services and supplies performed/delivered under the contract.

1	2	3	4	5	NA

Comments:

14. The contractor's compliance with Davis-Bacon Act and other labor requirements and resolution of reported violations/discrepancies.

1	2	3	4	5	NA

Comments:

15. The contractor's compliance with small business subcontracting plans and targets. (Applicable only to Large Businesses.)

1	2	3	4	5	NA

Comments:

16. Has the contractor's performance required the issuance of any cure notices, show cause letters, or terminations for cause/default? (Please circle Yes or No)

Yes	No				

Comments:

CONTRACTOR'S OVERALL CONTRACT PERFORMANCE

17. Would you select this contractor again? (Please circle Yes or No)

Yes	No				

Comments:

THIS COMPLETED QUESTIONNAIRE WILL NOT BE DISCLOSED TO ANYONE OUTSIDE THE GOVERNMENT. THANK YOU FOR TAKING THE TIME TO COMPLETE THIS QUESTIONNAIRE.

The below listing details the Office of Management and Budget's (OMB) approved documentation required to obtain a

NASA Federal Credential / Photo Identification Badge

Two (2) identity sources are required

One must be a valid Federal or State government issued picture identification. The other identity source must be one of the following documents:

List of Acceptable Documents to Accompany a Federal or State Photo Identification

1. **U.S. Passport (*unexpired*)**
2. **Permanent Resident Card or Alien Registration Receipt card (Form I-551)**
3. **An Unexpired Foreign Passport with a Temporary I-551 Stamp**
4. **An Unexpired Employment Authorization Document that contains a Photograph (Form I-766)**
5. **An Unexpired Foreign Passport with an Unexpired Arrival-Departure Record, (Form I-94 or I-94A), bearing the same name as the passport and containing an endorsement of the alien's nonimmigrant status, if that status authorizes the alien to work for the employer**
6. **Unexpired Driver's License** or ID Card issued by a state or outlying possession of the United States provided it contains a photograph or information such as name, date of birth, gender, height, eye color and address**
7. **Unexpired ID card issued by United States federal, state or local government agencies or entities, provided it contains a photograph, or information such as name, date of birth, gender, height, eye color and address**
8. **U.S. School ID card with a photograph**
9. **U.S. Voter's Registration Card**
10. **U.S. Military Dependent's ID Card**
11. **U.S. Military card or draft record**
12. **U.S. Coast Guard Merchant Mariner Card**
13. **Native American Tribal Document**
14. **Unexpired Driver's License Issued by a Canadian government authority**
15. **U.S. Citizen ID Card (Form I-197)**
16. **ID Card for use of Resident Citizens of the United States (Form I-179)**

17. **<u>Unexpired</u> Passport from the Federated States of Micronesia (FSM) or the Republic of the Marshall Islands (RMI) with Form I-94 or I-94A indicating nonimmigrant admission under the Compact of Free Association Between the U.S. and the FSM or RMI**

18. **U.S. Social Security Card issued by the Social Security Administration (*other than a card stating it is not valid for employment*)**

19. **Certification of Birth or Birth Abroad issued by the Department of State (Form FS-545 or Form DS-1350)**

20. **Original or Certified copy of birth certificate issued by a state, county, municipal authority or outlying possessions of the United States bearing an official seal**

21. **<u>Unexpired</u> employment authorization document issued by DHS**

U.S. CITIZENS <u>UNDER 18 YEARS</u> OF AGE MAY PROVIDE:

22. **School Record or report card**

23. **Clinic, Doctor, or Hospital Record**

24. **Day-care of Nursery School Record**

****** The NASA Office of Protective Services (OPS) is implementing enforcement of the REAL ID Act agency wide effective July 21, 2014. This Act was passed by Congress and implemented for the Federal government by the Department of Homeland Security (DHS). The basic premise for the Real ID Act is to require individual states to enhance the security of their driver's license and identity card issuance processes. **<u>There are still 11 non-compliant states and 1 territory which are: Alaska, American Samoa, Arizona, Kentucky, Louisiana, Maine, Massachusetts, Minnesota, Montana, New York, Oklahoma, and Washington.</u>** As a caveat, Minnesota, New York, and Washington offer an Enhanced Driver's License (EDL), which will be acceptable. EDLs are identifiable by the American Flag on the face of the card.

As a result of this requirement, **<u>effective July 21, 2014 the KSC Badging Office will no longer accept driver's licenses or identity cards from the states listed above</u>**. If you possess a license from one of the above listed states, please ensure that you have an alternate form of identification with a photograph such as a passport, military ID, or federal employee badge. Visitors without acceptable identification will require an escort at all times while on Center.

M. 1 BASIS FOR CONTRACT AWARD (MAY 2014)

a. EVALUATION FACTORS AND SELECTION OF THE SUCCESSFUL OFFEROR

The Contracting Officer will utilize a Lowest Price Technically Acceptable (LPTA) source selection process to make an award decision. Only one award will be made as a result of this solicitation. Award will be made to the offeror who is deemed responsible in accordance with the Federal Acquisition Regulation (FAR); and whose proposal, judged by an overall assessment of the evaluation criteria and other considerations specified in this solicitation, meets the technically acceptable standard for the non-price factors and provides the lowest evaluated price.

In accordance with the Instructions to Offerors – Competitive Acquisition provision of this solicitation (FAR 52.215-1), the Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a).) Therefore, the offeror's initial proposal should contain the offeror's best terms. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary.

b. EVALUATION OF NON-PRICE FACTORS

Offerors will be evaluated on the non-price factors of Project Execution Plan, Technical Experience, Past Performance, and Safety and Occupational Health Plan.

(1) FACTOR 1 – PROJECT EXECUTION PLAN

The execution plan is an important indicator of an offeror's ability to perform the contract successfully. The Government will assess the provided execution plan for completeness. Offerors shall address all of the Execution Plan requirements identified under Article L. 10. The Project Execution Plan will be evaluated as follows:

- Section one (1) will be evaluated to ensure:
    - The high level performance schedule includes all critical milestones and ensures all work is accomplished within the stated contract performance period.
- Section two (2) will be evaluated to ensure:
    - The contractor's proposed methodology for providing quality workmanship and meeting the contract's required schedule represents a sound approach.
    - The offeror's proposed plan for demolition, fabrication, installation, modification, handling/storing of large diameter (30" diameter) carbon steel piping, welding, inspecting, liquid penetrant and radiographic testing, cleaning stainless steel

pneumatic system components, and hydrostatic/pneumatic leak testing represent a sound approach.

Failure to provide a sound Project Execution Plan ensuring successful completion of the project on schedule will result in an 'UNACCEPTABLE" rating and elimination from further consideration for contract award.

(2) FACTOR 2 – TECHNICAL EXPERIENCE

Offerors must provide evidence that they have the technical experience needed to meet the technical performance requirements of this project. The Government will assess the technical experience of the offeror on projects identified in the offeror's Technical Experience Summary. Offerors must meet all of the following standards to receive an "Acceptable" rating on this factor:

All projects listed in the Technical Experience Summary must be in progress or have been successfully completed within seven (7) years of the date of issuance of this solicitation **July 22, 2014**.

All projects listed in the Technical Experience Summary must have been performed by the prime contractor or other team member(s) and involved the installation, modification and/or repair of a large diameter (24" diameter or larger) carbon steel piping systems.

Two of the three projects listed in the Technical Experience Summary must have been individually valued at or over $1M.

Two of the three projects listed in the Technical Experience Summary must have involved pneumatic systems using stainless steel piping.

Combined, the three projects listed in the Technical Experience Summary must have involved welding, inspection and liquid penetrant and radiographic testing, cleaning of pneumatic system components, and hydrostatic/pneumatic and leak testing of pneumatic system components.

Failure to meet all of the requirements under this factor will result in an "UNACCEPTABLE" rating and elimination from further consideration for contract award.

(3) FACTOR 3 – PAST PERFORMANCE

The Government will assess the past performance of the offeror on all of the projects identified in the offeror's Technical Experience Summary. (This assessment of past performance information is separate from the contractor responsibility determination required under FAR Subpart 9.1.)

The completed past performance questionnaires submitted by the offerors' Contracting Officers or customer contact equivalents identified in the Technical Experience Summary will be evaluated. The Government shall consider this information, as well as information obtained from other sources (to include interviews with previous customers), when evaluating each offeror's past performance. The currency and relevance of the information, source of the information, context of the data, and general trends in the offerors' past performance shall be considered. The evaluation shall take into account past performance information regarding predecessor companies, key personnel who have relevant experience, and/or subcontractors who will perform major or critical aspects of the requirement when such information is relevant to this acquisition. The Government will not disclose the names of persons/companies who provide performance information. If, during the course of the evaluation, the Government obtains adverse information to which the offeror has not previously had an opportunity to respond, the Government will afford the offeror an opportunity to clarify the adverse information.

(a) Past Performance Evaluation Areas. The government will evaluate the offeror's past performance in:

(i) Providing prompt payment of employees, subcontractors, and suppliers for services and supplies performed/delivered under the contract.

(ii) Complying with Davis-Bacon Act and other labor requirements and resolution of reported labor violations/discrepancies.

(iii) Complying with contract subcontracting plan goals for small disadvantaged business concerns (see FAR 19.7), monetary targets for SDB participation(see FAR 19.1202), and notifications submitted under FAR 19.1202-4(b) **(Applicable only to offerors who are large businesses).**

(iv) Providing immediate and effective contractor management attention at the job site for resolution of contract problems.

(v) Overall project management ability (including but not limited to project managers, quality control managers, trade integrators, safety managers, and superintendents); labor (skilled and unskilled workers); equipment; supplies; tools; and financial resources to successfully perform, provide contract deliverables and complete work in a quality, safe and timely manner.

(vi) Providing quality engineering shop drawings and accurate and complete as-built documentation.

(vii) Providing fully marked-up product data cut sheets; highlighting the particular model # / part #s, sizes, options and other applicable data for the products to be provided and installed.

(viii) Providing coordination, communication, and teaming between owner and any other on-site contractors or personnel as applicable.

(ix) Providing project deliverables within ten percent (10%) of original contract cost and schedule unless customer required changes caused the cost or schedule deviation.

(x) Providing and adhering to a detailed 2, 3, or 4-week look ahead schedule throughout project for increased team coordination

(xi) Maintaining an acceptable Safety Program:

i. Maintaining acceptable Days Away Restricted or Transferred (DART), Total Case Incident Rate (TCIR), OSHA 300 Log and Experience Modification Rating (EMR) rates for the previous three (3) years under NAICS Code 238220.

ii. Maintaining a safety and health program with visible management control and involvement

iii. Maintaining a safety program ensuring subcontractors' safety performances was consistent with the prime contractor's safety program

iv. Ability to analyze worksite hazards prior to the start of work to ensure that all hazards were abated

v. Maintaining a safety program with emergency procedures for securing dangerous conditions and protecting personnel during contract performance

vi. Ability to understand and comply with safety requirements.

vii. Maintaining a safety program that ensured the customer's critical resources were adequately protected

viii. Ability to resolve safety discrepancies in a timely and effective manner

ix. Ability to report, investigate, and take corrective actions on safety accidents/incidents in a timely and effective manner

(b) Past Performance Confidence Ratings:

The Offeror's relevant experience and past performance will be reviewed and an assessment made that reflects the Government's judgment of the probability of each offeror successfully accomplishing the proposed effort based on that offeror's

demonstrated performance. Past performance shall be evaluated for each offeror using the following levels of confidence ratings:

Very High Level of Confidence
The offeror's relevant past performance is of exceptional merit and is very highly pertinent to this acquisition, indicates exemplary performance in a timely, efficient, and economical manner and very minor (if any) problems with no adverse effect on overall performance. Based on the offeror's performance record, there is a very high level of confidence that the offeror will successfully perform the required effort. (One or more significant strengths exist. No significant weaknesses exist.)

High Level of Confidence
The offeror's relevant past performance is highly pertinent to this acquisition; demonstrating very effective performance that would be fully responsive to contract requirements. Offeror's past performance indicates that contract requirements were accomplished in a timely, efficient, and economical manner for the most part, with only minor problems that had little identifiable effect on overall performance. Based on the offeror's performance record, there is a high level of confidence that the offeror will successfully perform the required effort. (One or more significant strengths exist. Strengths outbalance any weakness.)

Moderate Level of Confidence
The offeror's relevant past performance is pertinent to this acquisition, and it demonstrates effective performance. Performance was fully responsive to contract requirements; there may have been reportable problems, but with little identifiable effect on overall performance. Based on the offeror's performance record, there is a moderate level of confidence that the offeror will successfully perform the required effort. (There may be strengths or weaknesses, or both.)

Low Level of Confidence
The offeror's relevant past performance is at least somewhat pertinent to this acquisition, and it meets or slightly exceeds minimum acceptable standards. Offeror achieved adequate results; there may have been reportable problems with identifiable, but not substantial, effects on overall performance. Based on the offeror's performance record, there is a low level of confidence that the offeror will successfully perform the required effort. Changes to the offeror's existing processes may be necessary in order to achieve contract requirements. (One or more weaknesses exist. Weaknesses outbalance strengths.)

Very Low Level of Confidence
The offeror's relevant past performance does not meet minimum acceptable standards in one or more areas; remedial action was required in one or more areas. Performance problems occurred in one or more areas which, adversely affected overall performance. Based on the offeror's performance record, there is a very low

level of confidence that the offeror will successfully perform the required effort. (One or more deficiencies or significant weaknesses exist.)

Neutral
In the case of an offeror without a record of relevant past performance or for whom information on past performance is not available, the offeror may not be evaluated favorably or unfavorably on past performance [see FAR 15.305(a) (2) (ii) and (iv)].

To receive an "Acceptable" rating for past performance, the offeror must receive an overall Past Performance Confidence Rating of Very High or High.

(4) FACTOR 4 – SAFETY AND OCCUPATIONAL HEALTH PLAN

The offeror's Safety and Occupational Health Plan will be reviewed to determine:

(a) The offeror's understanding of and ability to comply with 29 CFR 1926 Safety & Health Regulations for Construction, NPR 8715.3 (NASA Safety Manual & Appendices), KNPR 8715.3 (KSC Safety Practices Procedural Requirements), 8715.7 (KSC Construction Contractor Safety & Health Practices Procedural Requirements)

(b) The offeror's ability to ensure the safety and occupational health of the project contractor employees (to include subcontractors) and to ensure safe working conditions throughout the performance of the contract.

(c) The offeror's ability to ensure the safety and occupational health of the public, astronauts and pilots, the NASA workforce (including Contractor employees working on NASA contracts) and the protection of the environment, high-valued equipment, and property.

To receive an "Acceptable" rating, the Safety and Occupational Health Plan must represent a reasonable initial effort to address the essential requirements of NFS 1852.223-73, Safety and Health Plan, demonstrates the offeror understands NASA's safety requirements, and contains no major deficiencies or omissions which, if corrected, would not require a major rewrite of the Plan.

c. EVALUATION OF PRICE PROPOSALS

The proposed prices will be evaluated by comparison against the Government estimate and prices submitted by other offerors.

d. EVALUATION PROCESS

The following describes the general methodology that will be used for proposal evaluation:

(1) Offerors will be checked against the List of Parties Excluded From Federal Procurement and Non-procurement Programs. Offerors who appear on the List will be eliminated without further consideration. Proposals will also be checked for minor informalities or irregularities. The Contracting Officer will follow guidance at FAR 15.306 for resolving minor informalities or irregularities.

(2) The Contracting Officer will conduct a price analysis on each offeror's submitted price. The ten (10) percent HUBZone price evaluation preference provided in FAR 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns, will be applied, if applicable.

(3) The technical (non-price) volume of the offeror with the lowest evaluated reasonable price will be given to the technical evaluators for review. If the technical (non-price) proposal is determined to be technically "Acceptable", award shall be made to that offeror, subject to a positive responsibility determination in accordance with FAR Part 9. In order for a technical proposal to be determined technically "Acceptable", all of the non-price factors in the technical proposal must be individually and collectively evaluated as "Acceptable".

(4) If the technical proposal is determined to be technically "Unacceptable" the technical (non-price) volume of the offeror with the next lowest evaluated reasonable price will be given to the technical evaluators for review. If the technical (non-price) proposal of the offeror with the next lowest evaluated reasonable price is determined to be technically "Acceptable" award shall be made to that offeror subject to a positive responsibility determination in accordance with FAR Part 9.

(5) If the technical proposal is determined to be technically "Unacceptable" the process described will be conducted again, as many times as necessary, until such time as the Government identifies a technically "Acceptable" proposal.

M. 2 SOURCE SELECTION DECISION (MAY 2014)

Selection for contract award will be made based on a Lowest Price Technically Acceptable (LPTA) source selection process. The proposal that provides the lowest fair and reasonable price and is otherwise technically acceptable in all non-price factors will be selected for award. The selection will be made subject to an affirmative determination of contractor responsibility in accordance with FAR Subpart 9.1.

PROJECT DELIVERABLES

Incidental deliverables (manuals, reports, plans, and other written documentation) to be provided under this contract are identified in this Attachment J-A. Nothing contained in this Attachment J-A shall relieve the Contractor from furnishing data called for by, or under the authority of, other provisions of this contract which are not identified and described in this Attachment J-A. The costs for data to be furnished in response to Attachment J-A is included in the firm-fixed price of this contract.

J-A-1 SUBMITTAL SCHEDULES (MAR 2014)

(a) At the Pre-work Conference, the Contractor shall provide, for approval by the Contracting Officer, the following schedules of submittals:

(1) A schedule of all shop drawings and technical submittals required by the specifications and drawings. The schedule will indicate the specification or drawing reference requiring the submittal; the material, item or process for which the submittal is required; the "SD" number and identifying title of the submittal; the Contractor's anticipated submission date and the approval need date.

(2) A separate schedule of all other submittals required under the contract but not listed in the specifications or drawings. The schedule will indicate the contract requirement reference; the type or title of the submittal; the Contractor's anticipated submission date and the approval need date (if approval is required).

(b) All submittals called for by the contract documents will be listed on one of the above schedules. If a submittal is called for but does not pertain to the contract work, the Contractor will include it in the applicable schedule and annotate it "N/A" with a brief explanation. Approval of the schedules by the Contracting Officer does not relieve the Contractor of supplying submittals required by the contract documents but which have been omitted from the schedules or marked "N/A".

(c) Copies of both schedules will be re-submitted monthly annotated by the Contractor with actual submission and approval dates. When all items on a schedule have been finally approved, no further re-submittal of the schedule is required.

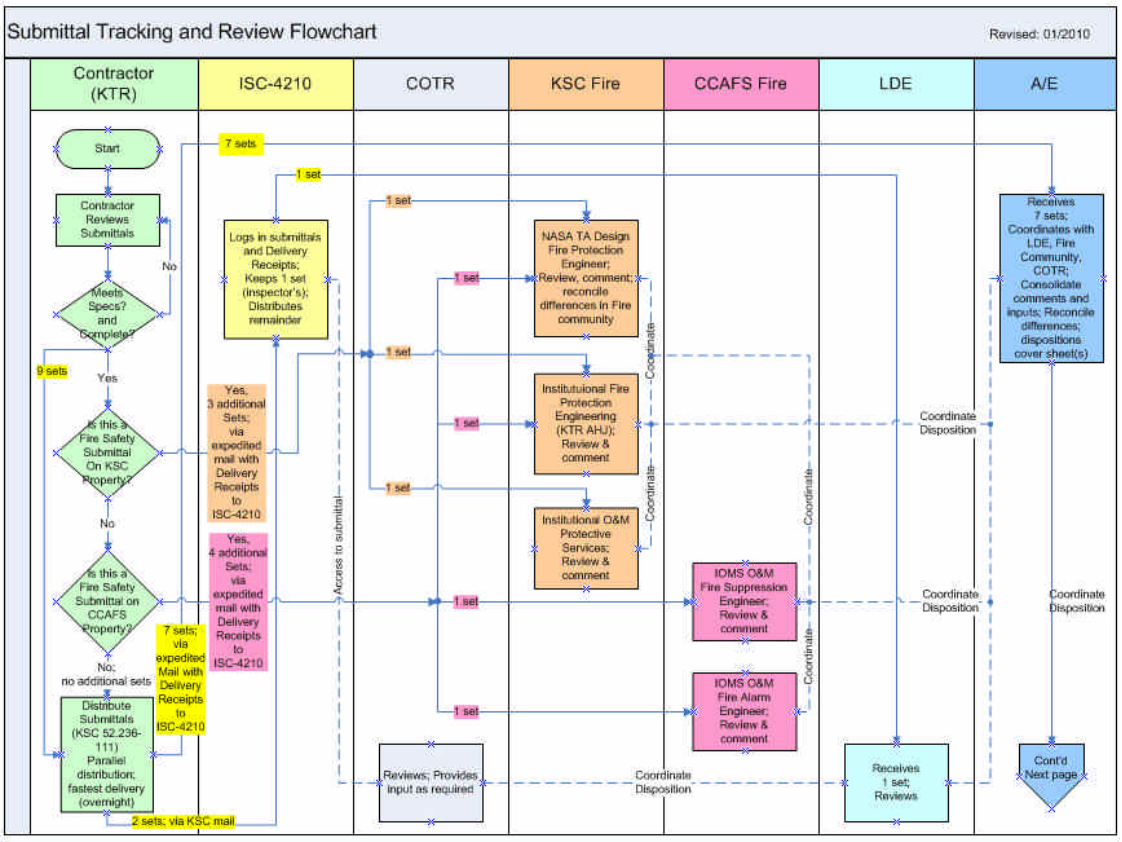
J-A-2 SHOP DRAWINGS (MAR 2014)

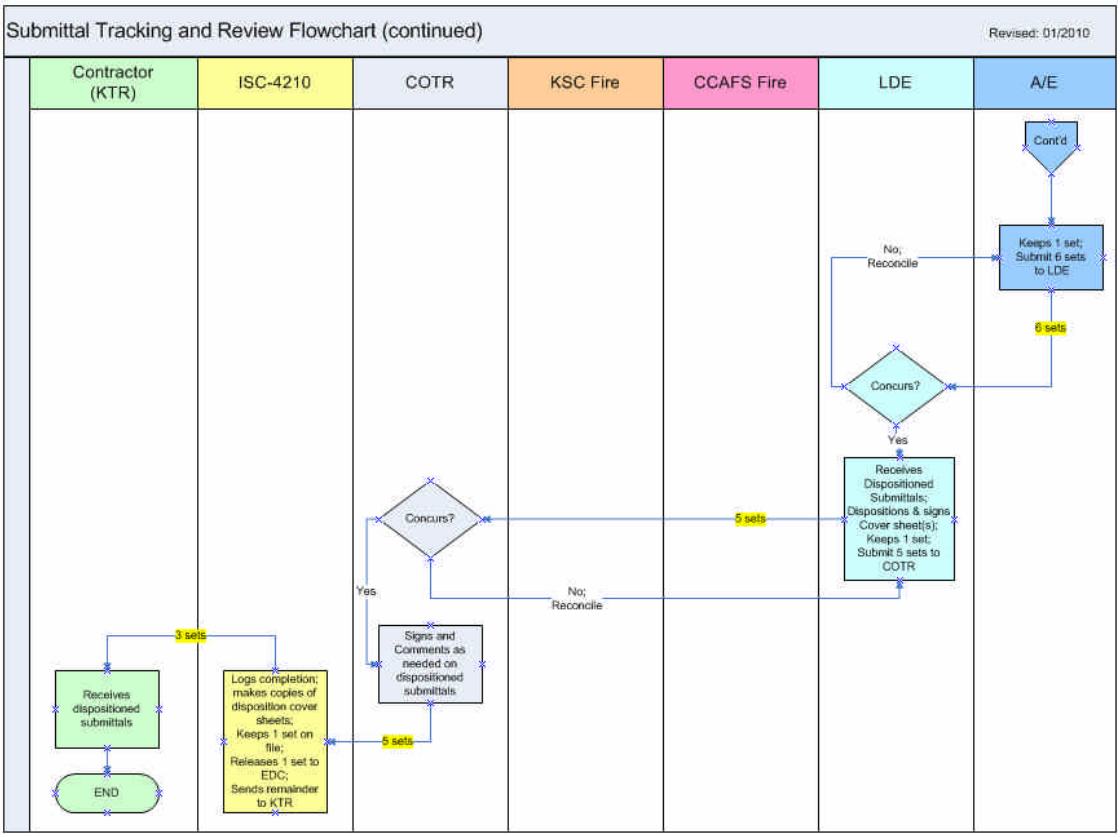
Pursuant to FAR clause 52.236-21 entitled "Specifications and Drawings for Construction"; the Contractor shall submit Shop Drawings as detailed below. For purposes of this clause, the term “Shop Drawings” shall be construed to include all “Submittal Descriptions” (Type SD-01, SD-02, SD-03, etc., as required by project technical specifications) that are necessary to

fully describe contractor supplied materials and installation methods and demonstrate their compliance with the technical and performance requirements of the contract. Submittal Descriptions include drawings, design data, catalog cuts, descriptive literature, illustrations, schedules, performance and test data, and similar materials to be furnished by the contractor. The preparation and distribution requirements described herein apply to all such SD submittals except as noted in technical specifications or otherwise directed by the Contracting Officer.

(a) For Shop Drawing submittals provide complete sets to KSC functional organizations and to the Architect/Engineer as shown on the "Submittal Tracking and Review Flowchart." Names, mail codes and addresses will be provided at the Pre-work Conference.

(b) The Shop Drawing submittals shall be transmitted to the Contracting Officer and the A/E on the same day. Delivery to the A/E and other KSC functional organizations shall be by the equivalent of "next day" delivery service with delivery receipts or other proof of delivery that show traceability to the delivery destination and receipt of the delivery. The timestamp recorded by the Contracting Officer upon receipt from the Contractor shall be the record date. Delivery receipts and other proof of delivery shall be submitted to the Contracting officer or delegated organization as shown on the "Submittal Tracking and Review Flowchart" provided below:


Submittal Tracking and Review Flowchart
Revised: 01/2010
Contractor (KTR)
ISC-4210
COTR
KSC Fire
CCAFS Fire
LDE
A/E
Start
Contractor Reviews Submittals
Meets Specs? and Complete?
No
Yes
9 sets
Is this a Fire Safety Submittal On KSC Property?
No
Is this a Fire Safety Submittal on CCAFS Property?
No; no additional sets
Distribute Submittals (KSC 52.236-111) Parallel distribution; fastest delivery (overnight)
7 sets
1 set
Logs in submittals and Delivery Receipts; Keeps 1 set (inspector's); Distributes remainder
Yes, 3 additional Sets; via expedited mail with Delivery Receipts to ISC-4210
Yes, 4 additional Sets; via expedited mail with Delivery Receipts to ISC-4210
7 sets; via expedited Mail with Delivery Receipts to ISC-4210
2 sets; via KSC mail
Access to submittal
NASA TA Design Fire Protection Engineer; Review, comment; reconcile differences in Fire community
Institutuional Fire Protection Engineering (KTR AHJ); Review & comment
Institutional O&M Protective Services; Review & comment
IOMS O&M Fire Suppression Engineer; Review & comment
IOMS O&M Fire Alarm Engineer; Review & comment
Coordinate
Coordinate Disposition
Reviews; Provides input as required
Receives 1 set; Reviews
Receives 7 sets; Coordinates with LDE, Fire Community, COTR; Consolidate comments and inputs; Reconcile differences; dispositions cover sheet(s)
Cont'd Next page


Submittal Tracking and Review Flowchart (continued)
Revised: 01/2010
Contractor (KTR)
ISC-4210
COTR
KSC Fire
CCAFS Fire
LDE
A/E
Cont'd
Keeps 1 set; Submit 6 sets to LDE
6 sets
No; Reconcile
Concurs?
Yes
Receives Dispositioned Submittals; Dispositions & signs Cover sheet(s); Keeps 1 set; Submit 5 sets to COTR
5 sets
Concurs?
Yes
No; Reconcile
Signs and Comments as needed on dispositioned submittals
5 sets
Logs completion; makes copies of disposition cover sheets; Keeps 1 set on file; Releases 1 set to EDC; Sends remainder to KTR
3 sets
Receives dispositioned submittals
END

(d) Three (3) sets shop drawings will be returned to the Contractor. These sets will be returned to the Contractor within 21 calendar days of the record date with appropriate review and approval notations as described below.

On or before completion date of the contract, the Contractor shall submit to the Contracting Officer two complete sets of shop drawings, which incorporate all comments, annotations, conditions of approval and corrections. Both drawing sets are to be made from the same original

(e) The shop drawings shall be complete and detailed and shall contain all information required for checking without reference to material contained in other shop drawing transmittals. Partial submittals will not be accepted unless specifically approved by the Contracting Officer. Any partial submittals shall be so indicated and any outstanding submittal required to complete the package shall be identified.

(f) Shop drawings shall be submitted in a logical sequence that is duly coordinated with long lead-time procurements and with fabrication and construction schedules. Each set of shop drawings shall be accompanied by a completed KSC shop drawing submittal form listing the specification or drawing reference requiring the shop drawing; the material, item or process for which the shop drawing is required and the "SD" number and identifying title of the shop drawing. The Shop Drawing form will be supplied by the Government.

(g) Shop drawings for certain systems (e.g. fire detection/suppression) must be submitted as soon as 30 days following contractor's Notice to Proceed, and associated as built drawings, software, programs and test procedures must be submitted up to 30 days prior to acceptance testing. See Shop Drawing and submittal references in project technical specifications for affected submittals and their respective deadlines.

(h) "Drawings" as opposed to "Shop Drawings" shall mean actual drawings, diagrams, layouts and schematics. "Drawings" fall under the more general term "Shop Drawings" which include other required materials.

(1) Drawings shall be uniform in size, nominally 24 by 36 inches, with a maximum size of 28 by 40 inches. All drawings shall have dark lines on a white background.

(2) Drawings shall be numbered in logical sequence. The Contractor may use his own numbering system. Each drawing shall bear the number of the submittal (e.g. First Submittal, Second Submittal, etc.) in a uniform location adjacent to the title block. The NASA contract number shall appear in the margin, immediately below the title block, for each drawing.

(3) A blank space, no smaller than 4 by 5 inches shall be reserved on the right hand half of each sheet for the Government disposition stamp.

(i) Review and approval notation will be as follows:

(1) Shop drawings marked "approved" authorize the Contractor to proceed with work covered by such drawings.

(2) Shop drawings marked "approved as noted" authorize the Contractor to proceed with the work covered provided he takes no exception to the corrections. The notes shall be incorporated on the shop drawings prior to submission of the final shop drawings.

(3) Shop drawings marked "returned for correction" require the Contractor to make the necessary corrections and revisions on the drawings and re-submit them for approval in the same routine as before, prior to proceedings with any of the work depicted on the drawings.

(4) Shop drawings marked "not approved" or "disapproved" indicate noncompliance with the contract requirements and the shop drawings shall be re-submitted with appropriate changes. No item of work requiring a shop drawing shall be accomplished until the drawings are approved or approved as noted.

(5) The Contractor shall make any corrections required by the Contracting Officer. If the Contractor considers any correction or notation indicated on the returned shop drawings to constitute a change to the contract drawings or specifications; notice as required under the clause entitled "Changes" shall be given to the Contracting Officer.

(6) The Government's engineering review of Contractor's shop drawing submittal(s) is for general conformance with the design concept of the project and the information given in the contract documents. As such, approval of the shop drawings by the Contracting Officer shall not be construed as a complete check, but will indicate only that the general method of construction and detailing is satisfactory. The Contractor is solely responsible for the dimensions and design of adequate connection details; confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating the work with that of other trades and performing the work in a safe and satisfactory manner, and certifying that proposed products meet all technical specifications and all contractual provisions, especially those relating to the 'Buy American Act'. Corrections or comments made as part of the Government review do not relieve the Contractor from compliance with the requirements of the contract documents. Likewise, any approval of a Shop Drawing Submittal containing an unidentified deviation from the technical requirements of the applicable contract drawings, maps and specifications, shall not relieve the contractor from compliance with the technical requirements.

(j) If changes are necessary to approved shop drawings whether as a result of a contract

change or for any other reasons, the Contractor shall make such revisions and resubmit the shop drawings in accordance with the procedures in paragraphs a. through c. above. No item of work requiring a shop drawings change shall be accomplished until the changed shop drawings are approved.

(k) Progress payments will not be made on materials and equipment that have been delivered to the job site but not approved on shop drawings.

J-A-3 RECORD DRAWINGS (MAR 2014)

(a) After completion of all construction and before final payment is made, the Contractor shall submit one complete set of full size blue line contract drawings with fully dimensioned changes shown in red pencil to the Contracting Officer.

(b) The Contractor shall verify all dimensions and Geographical Information System (GIS) data shown on the contract drawings. Civil discipline systems, such as site dimensions and elevations, underground utilities, manholes, access points, paving, etc. and systems requiring state certifications, such as stormwater systems, shall require verification by a registered land surveyor. As-built dimensions and GIS data shall be at the same level of detail as the contract drawings.

(c) All dimensional changes shall be reflected as corrected dimensions by striking through the dimension value with a single line and circling this change. A leader shall point from the actual, as-built dimension to the circled change. All utility routing and interface changes shall be reflected on the drawings to scale and defined with sufficient dimensions to be able to locate. Indicating by reference alone, for example to a change order number, will not be acceptable.

(d) These record drawings shall be maintained by the Contractor at the work site and shall be updated based on job progress to reflect all changes and deviations and actual routing of all field-routed utilities and services. All lines, letters, and details shall be sharp, clear, and fully legible. All additions to the drawings shall be precisely drawn to scale of the original drawing and their locations shall be dimensioned.

(e) **Final Systems Drawings for Wiring/Devices/Control Systems:**

(1) Final system drawings for wiring and control systems shall be prepared and submitted as described below, and in accordance with additional requirements as described in technical specifications.

(2) Record drawings shall be made available for Government review on a monthly basis at the job site. This monthly review of record drawings will be part of the monthly monetary progress review.

(3) Drawings for installation of wiring, devices and/or controls that require field

routing must be red- lined, reproduced, verified for accuracy, and submitted for approval per the requirements set forth under the section entitled Shop Drawings herein a minimum of two weeks before requesting a final walkdown of the following systems. These drawings shall be labeled "FINAL SHOP DRAWINGS". In addition to hardcopy reproductions, the final drawings submittals shall include electronic files in Intergraph or Microstation format or in a Computer Aided Design (CAD) format compatible with Intergraph or Microstation.

(4) Final Systems Drawings are required for:

(i) HVAC

(ii) Paging/Area Warning

(iii) Premise Wiring

(iv) Electrical control schematics and connection diagrams

(v) Elevators

(vi) Fire detection/suppression systems

(vii) Any other system involving wiring and controls, with the exception of facility lighting

(f) **Sewer System Certification:**

For all work involving sewer system installations or modifications, the Contractor shall provide to the Contracting Officer three (3) sets of drawings in the form of an As-Built Survey signed and sealed by a State of Florida Registered Land Surveyor for the sewer system. The as-built survey shall show all locations and invert elevations of the sewer system to verify that its placement is per contract drawings. The submittal shall be complete and sufficient for the Engineer's of Record certification to the Florida Department of Environmental Protection. The as-built survey level of detail shall be the same as shown in the contract drawings. If significant differences exist between the contract requirements and as-built conditions as evidenced by the survey, the differences shall be corrected and a new as-built survey made and submitted as before. Drawings shall be provided prior to the final inspection.

(g) Record drawings shall be made available for Government review on a monthly basis at the job site. This monthly review of record drawings will be part of the monthly monetary progress review.

J-A-4 MISCELLANEOUS DOCUMENTATION (MAR 2014

(a) Documentation submitted under this clause shall not be submitted as shop drawings.

(b) The Contractor shall submit an original and one copy of all correspondence, delivery tickets, soil compaction reports, contractor daily reports, concrete test reports, and welding certifications or other worker qualification certifications, to the Contracting Officer.

(c) The Contractor shall submit an original and four copies of all other documentation (except shop drawings) pertaining to this contract, including asbestos abatement plans, to the Contracting Officer.

(d) In the event of a conflict within this contract, the provisions of this requirement shall take precedence over any other contractual requirement pertaining to the number of copies to be submitted except for shop drawings which shall be submitted in accordance with Article J-A-2, Shop Drawings, set forth under this Attachment J-A.

J-A-5 PROGRESS SCHEDULES (MAR 2014)

Pursuant to FAR 52.236-15, entitled "Schedules for Construction Contracts," the Contractor shall:

(a) If, in the opinion of the Contracting Officer, the Contractor falls behind the approved baseline schedule, the Contractor shall take such steps as may be necessary to improve his progress, including those measures as directed by the Contracting Officer, without additional cost to the Government. The Contracting Officer may require the Contractor to start overtime operations and/or increase the number of shifts, or days of work. The Contractor will be required to submit for approval a recovery schedule or schedules as necessary to demonstrate the manner in which the agreed rate of progress will be regained, all without additional cost to the Government

(b) Prepare the Progress Schedule using standard commercially available scheduling software or comparable format such as a bar chart approved by the Contracting Officer.

(c) Submit the Progress Schedule, for approval by the Contracting Officer, at the Pre-Work Conference in four (4) copies. Include a copy of the electronic file using scheduling software. The approved initial progress schedule will be the baseline schedule for the project.

(d) Include no less than the following information on the Progress Schedule:

(1) Major headings for primary project scope broken out in accordance with the Divisions and/or Sections of the project specifications.

(2) Line item break-downs under each major heading sufficient to track the progress of the work.

(3) A line item showing contract finalization tasks which includes Punch List, Clean-up and Demobilization, and Final Construction Drawings.

(4) Appropriate level of detail under each line item or activity (compatible with the schedule of values) sufficient to track the cost and schedule performance, including scheduled vs. actual percentage complete for any given day within the contract performance period. (Progress schedules prepared using scheduling software shall include resource loaded activities [labor, material, and other resources), major deliveries, project milestones, etc.]. Bar Charts shall include, as a minimum, a materials bar and a separate labor bar for each line item.) Each element shall include the estimated cost and percentage weight of total contract cost. The labor element shall also show the number of workers expected to be working on any given date within the Contract Performance Period.

(5) For projects involving the installation or modification of Fire Alarm systems, include at a minimum the following line items on the schedule of values:

a. Fire Alarm Rough-In Material

b. Fire Alarm Rough-In Labor

c. Fire Alarm Trim Material

d. Fire Alarm Trim Labor

e. Fire Alarm Preliminary Testing

f. Fire Alarm Final Testing

(6) For projects involving the installation or modification of Building Controls (i.e. HVAC, Lighting, etc…) systems, include at a minimum the following line items on the schedule of values:

a. Controls Rough-In Material

b. Controls Rough-In Labor

c. Controls Trim Material

d. Controls Trim Labor

e. Controls Testing

(7) Separate line items for Mobilization and Shop Drawing submittal and approval (these items are to show no associated costs).

(8) The progress schedule or bar chart shall indicate the file date and status date (data date).

(e) Update the progress schedule every 30 calendar days (unless specified otherwise*) throughout the contract performance period. All work that has not been completed in accordance with the previously approved schedule shall be rescheduled to reflect actual or planned progress based on the current status date. Submit four copies (and electronic file as applicable) to the Contracting Officer for approval. Progress schedule updates shall be submitted concurrently with progress payment requests.

*The progress schedule update requirement can modified, via a change order, to reflect a different timeframe.

(f) Scheduling software shall be compatible with the latest version of Primavera Project Manager (such as Primavera P6, Microsoft Project or approved equal).

(g) The progress schedule shall contain clearly defined and labeled relationships of the conventional type (i.e. Finish-to-Start (FS), Start-to-Start (SS) or Finish-to-Finish (FF)). Negative lags will not be permitted nor will positive lags inserted for the purpose of sequestering float. The schedule shall contain only two open ends, one predecessor open end prior to NTP or Project Start and one successor open end following Project Complete. Activity date constraints shall be kept to a minimum, limited primarily to project and/or contractual milestones. Contract downtime shall be shown in the schedule as “downtime activities” or shall be specifically defined in project calendars. Downtime shall not be incorporated into activity durations.

(h) Narrative description of construction operations: The initial network submittal shall be accompanied by a narrative description of critical construction operations and major items of construction equipment to be used in the construction. The narrative shall explain the derivation of the durations of critical activities and shall show planned hours per shift, shifts per trade, and work days per week. It shall also identify major items of construction equipment by types, capacities and numbers and shall indicate the critical activities on which they will be used. In addition, the narrative shall identify all holidays and any other non-work days which will occur during the course of construction and provide an explanation concerning the incorporation of contract downtime. All schedule updates shall also be accompanied by a detailed narrative identifying critical activities completed, upcoming month’s activity, additions and/or deletions from the network, changes to logic, change order time impact proposals incorporated, government and contractor impacts to interim and project milestones and corrective actions taken.

J-A-6 SCHEDULING (MAR 2014)

The Contractor will be required to provide detailed scheduling information regarding planned operations to the Contracting Officer's designated representative for input to the LC 39 area 72 hour/11-day operations schedule (a total of 14 days). This schedule input must be provided on a daily basis prior to 1:00 P.M. The schedule must show the Contractor's planned operations in detail for the next 3 days in hourly increments and in shift increments for the following 11 days.

All Contractor operations requiring support from KSC, such as outages or fire and safety standby, for hazardous operations, shall be identified.

J-A-7 NFS 1852.223-73 SAFETY AND HEALTH PLAN (NOV 2004) (MODIFIED)

The contractor, upon request by the Contracting Officer, shall submit a detailed site specific safety and occupational health plan in accordance with NPR 8715.3, NASA General Safety Program Requirements, Appendices and KNPR 8715.7 KSC Construction Contractor Safety and Health Practices Procedural Requirements. KSC-UG-2814, KSC Construction Contractor's Safety and Health Practices Users Guide, has a template the contractor should follow when preparing the site specific safety and occupational health plan. **Notice to Proceed with on-site work will be withheld pending approval of the site specific safety and health plan.**

The plan shall include detailed policies, procedures, and techniques that will be used to ensure the safety and occupational health of Contractor employees and to ensure safe working conditions throughout the performance of the contract.

The plan shall address the policies, procedures, and techniques that will be used to ensure the safety and occupational health of the public, astronauts and pilots, the NASA workforce, safety and occupational health of the public, astronauts and pilots, the NASA workforce (including Contractor employees working on NASA contracts) and high-valued equipment and property.

The plan shall take into account all work to be performed on the awarded contract This plan shall address how the Contractor intends to comply with 29 CFR 1926 Safety and Health Regulations for Construction, applicable sections 29 CFR 1910 Safety and Health Regulations for General Industry, applicable national consensus standards, NASA and KSC Safety and Health Regulations and requirements with regard to all safety and health issues that will be encountered on this project.

The plan shall similarly address subcontractor employee safety and occupational health for those subcontractors who will be performing work under the contract when one or more of the following condition apply: (Note: Contractors may not delegate overall site safety responsibility or authority for any personnel working under the provisions of this section to any subcontractor).

(1) The work will be conducted completely or partly on premises owned or controlled by the government.

(2) The work includes construction, alteration, or repair of facilities in excess of the simplified acquisition threshold.

(3) The work, regardless of place of performance, involves hazards that could endanger the public, astronauts and pilots, the NASA workforce (including Contractor employees working on NASA contracts), or high value equipment or property, and the hazards are not adequately addressed by Occupational Safety and Health Administration (OSHA) or Department of Transportation (DOT) regulations (if applicable).

(4) When the assessed risk and consequences of a failure to properly manage and control the hazards warrants use of the clause.

The contractor shall submit a copy of their Log of Occupational Injuries and Illnesses that includes an annual summary of occupational injuries and illnesses (or equivalent) as described in Title 29, Code of Federal Regulations, Subpart 1904.5. If the Contractor is exempt by regulation from maintaining and publishing such logs, equivalent data in contractor's format is acceptable (such as loss runs from insurance carrier) which contains the data required. Data shall be compiled and reported by calendar year and the most recent summary shall be provided at the same time as the site specific safety and health plan.

The contractor shall also submit documentation containing the company's Experience Modification Rate (EMR), Days Away, Restricted or Transferred rate (DART), and Total Case Incident Rate for injury and illnesses (TCIR) for the past 3 years.

This site specific safety and health plan, as approved by the Contracting Officer, will be incorporated into the contract.

(End of clause)

J-A-8 TOXIC METALS SAFETY AND HEALTH PLAN (MAR 2014

The use of paints containing heavy metals and polychlorinated biphenyls PCB) has been commonplace at the Kennedy Space Center. The Contractor shall assume that all existing painted surfaces encountered in the performance of work contain heavy metals and PCB when developing the Toxic Metals Safety and Health Plan and performing work. The Contractor may, at his discretion, test any painted surfaces, in accordance with appropriate regulatory standards, to determine the absence of heavy metals and PCB in the paint.

In addition to and separate from the Safety and Health Plan required under this solicitation/contract, the Contractor shall submit a detailed Toxic Metals Safety and Health Plan. The Toxic Metals Safety and Health Plan shall disclose how the Contractor intends to protect NASA and contractor employees as well as the environment from toxic metals during

the ongoing activities of this contract. The contractor shall submit a minimum of five (5) copies of the Toxic Metals Safety and Health Plan for review and approval by the Contracting Officer. The Contracting Officer will forward one copy each to TA-B1 for review.

The Toxic Metals Safety and Health Plan shall provide a description of the Contractor's approach to contain and control dusts, fumes and other airborne or waterborne emissions from the work site for the protection of other personnel at the work location and the environment. This part of the plan shall also discuss monitoring activities during the work in progress to assure the effectiveness of the Contractor's emission control measures.

The Toxic Metals Safety and Health Plan shall also provide written policies, plans, and procedures detailing how the contractor intends to comply with the Occupational Safety and Health Administration (OSHA) Construction Industry Standards (29 CFR 1926) and applicable General Industry Standards (29 CFR 1910). As a minimum, the Toxic Metals Safety and Health Plan shall address how compliance with the following regulations will be achieved:

19 CFR, Part 1926, Safety and Health Regulations for Construction,
Subpart D, Occupational Safety & Health Environmental Controls

1926.55, Gases, Vapors, Fumes, Mists, and Dusts

1926.59, Hazard Communication

1926.62, Lead

1926.1127, Cadmium, Subpart E, Personal Protective and Life Saving Equipment

1926.103, Respiratory Protection

1926.353, Ventilation and Protection in welding cutting, and heating

1926.154, Welding, cutting, and heating in way of preservative coatings.

KHB 1840.1 (Latest Edition), KSC Industrial Hygiene Handbook, as applicable

KHB 1820.4 (Latest Edition), KSC Respiratory Protection Program, as applicable

The regulations require strict contractor adherence but are not limited to items such as employee training, respiratory protection, protective clothing and equipment, employee medical surveillance, hygiene facilities, warning signs, record keeping, air monitoring, and housekeeping.

J-A-9 LIFTING PLAN AND RIGGING PLAN (MAR 2014)

A detailed Lifting and Rigging Plan shall be submitted by the Contractor 14 days prior to lifting

operations. Lifting operations include work performed within LC 39 that requires the use of cranes or lifting equipment to include chokers, slings, and shackles used to move material, personnel, and equipment to/from heights in excess of 25 feet. One lifting and rigging plan may be submitted for multiple lifts using the same equipment by utilizing the most stringent applicable conditions. Four (4) copies of a detailed Lifting and Rigging Plan shall be submitted for approval to the Contracting Office using the attached form. The lifting plan shall address:

1. The specific crane(s) lifting and rigging equipment that will be on site
2. The maximum swing radius to be used and the degrees in relation to the crane, such as 360 degrees over the counterweight, etc.
3. A sketch of where the crane will be located in relation to where the loads will be situated
4. The estimated maximum load weights
5. The type and weight of rigging to be used and how it will be configured
6. A copy of the crane capacity chart to be used
7. A copy of all crane deductions
8. Maximum crane boom to be used
9. Counterweight configurations
10. Certifications of the crane, operator, and rigging
11. Certifications of rigging personnel
12. General narrative description of lift operations, plan of approach, and safety measures to be implemented during the lifting operations

Kennedy Space Center Lift Plan for Construction Contractors

This document is for use by construction contractors performing work for Kennedy Space Center. It is recommended for all lifts and will satisfy the lift planning requirements in accordance with OSHA and NASA regulations and contract requirements. A lift plan is mandatory when: 1) lifting personnel with a crane, 2) the load exceeds 75% of the crane's capacity in a given configuration, 3) the lift requires more than one crane, 4) during demolition when the actual weight or structural integrity of the load are in doubt, 5) when the operation is within a boom length of power lines, 6) when lifting over active work areas, occupied buildings, or public roadways, or 7) lifts of submerged or partially submerged objects. For further assistance, please contact the KSC Institutional Safety Office at 867-SAFE.

1. Company Name	Name and Signature of Person Preparing this Lift Plan	2. Date
3. Project Name and Job Location		
4. Load Description		
5. Crane Description - Type, Manufacturer, Model # *(multiple crane lifts require separate plan for each crane)*		
6. Lift Description *(attach diagram of lift and load placement)*		

LOAD			**CRANE** (continued)		
7. Load Condition *(describe)*			27. Radius at Set-down		ft
8. Known Center of Gravity? *(Attach diagram)*			28. Capacity at minimum boom angle / maximum radius (Attach copy of actual load chart used)		lbs
9. Source of Load Weight *(attach a copy of drawings, calculations, bill of lading, etc.)*			29. Maximum load on crane for this lift (Gross Load from Block 20)		lbs
10. Load Weight Empty		lbs	30. Percentage of the crane's rated capacity in this configuration		%
11. Weight of Load Contents / Fluids		lbs	**JIB/FLY**		
12. Weight of Auxillary Block		lbs	31. Erected _____ Stowed _____ Stored _____		
13. Weight of Main Block		lbs	32. If jib / fly is used: Length = _____ Angle = _____		
14. Weight of Lifting Beam (See Block 50)		lbs	33. Rated capacity of jib / fly from chart = _____		
15. Weight of Slings / Shackles / Other Rigging (See Blocks 42 thru 52)		lbs	34. Weight of Jib if installed but not in use		lbs
16. Deduction for Jib / Fly (if applicable) (See Block 34)		lbs	**CRANE SETUP/OTHER CONSIDERATIONS**		
17. Weight of Hoist Rope (if applicable)		lbs	35. Soil conditions / level / underground hazards / Crane mat required?		
18. Weight of Auxillary Head/Rope (if applicable)		lbs	36. Outriggers (full / partial) / pads / matting / on rubber? ☐ Yes ☐ No		
19. Additional Deductions (list if applicable)		lbs	37. Buildings, equipment, or structure to lift / swing over?		
20. Gross Load (Add Block 10 thru 19)		**lbs**	38. Travel required? ☐ Yes ☐ No		
CRANE			39. Working quadrants / swing restrictions?		
21. Boom Configuration			40. High voltage / electrical hazards/other hazards?		
22. Boom Length		ft	41. Other Considerations? (Head room, winds, taglines, traffic, etc.) Add to Block 6		
23. Counterweight		lbs	**RIGGING**		
24. Boom angle at Pick-up		o	42. Slings (number, size, type)		
25. Radius at Pick-up		ft	43. Slings rated capacity per configuration (See Block 45)		
26. Boom angle at Set-down		o	44. Total Weight of slings		lbs

RIGGING (continued)			REQUIRED ATTACHMENTS	
45. Hitch (vertical, basket, choker) Sling Configuration Angle _____ ° deg			53. Load placement diagram showing location of pick & final place points	❑
46. Shackles (number, size)			54. Rigging diagram with sling angles, expected loads, & load CG	❑
47. Shackles rated capacity			55. Photocopy of actual load charts used to calculate crane capacity	❑
48. Total Weight of Shackles		lbs	56. Rigging certifications	❑
49. Spreader Beam/Other rigging required? (Type, Size, Capacity)			57. Rigging load limit charts (Safe Working Load Limit)	❑
50. Weight of Spreader Beam/other rigging		lbs	58. Crane certification (Annual/Daily Checklist)	❑
51. Connection to Load capacity each (lugs, bollards, pad eyes, none)			59. Operators certification	❑
52. Total Weight of all rigging (Add lines 44, 48, 50 and 51		lbs	60. Rigger qualification document(s)	❑
			61. Narrative of lift procedures (See item 6)	❑
			62. Source of load weight (See Items 8 & 9)	❑
			63. Others _____	

I certify that all information contained herein has been reviewed for accuracy and correctness.

Submitting Official Signature	Name & Title	Date

FOR NASA USE ONLY (please initial)			
Institutional Safety:	Accept:	Accept with Changes:	Not Accepted:
Lifting Device's Equipment Manager:	Accept:	Accept with Changes:	Not Accepted:
Contracting Officer:	Approve:	Disapprove:	

Instructions for Kennedy Space Center Lift Plan for Construction Contractors

1. Name of contractor performing the lift. Include name of person preparing this lift plan.
2. Date lift plan was prepared.
3. Project name and actual location of lift.
4. Describe the load and any special considerations.
5. Self-explanatory.
6. Brief description of pickup and placement of load. Attach diagrams as necessary.
7. Describe the load and any special considerations (e.g., dry, solid, filled with liquid, empty, stable, unstable, etc.).
8. Is the load's center of gravity known? If so where is it documented? Attach diagram. **(On Lift Plan Worksheet)**
9. Document the source of load weight (e.g., drawings, calculations, bill of lading, etc.).

10. - 18. Self-explanatory. **(On Lift Plan Worksheet)**

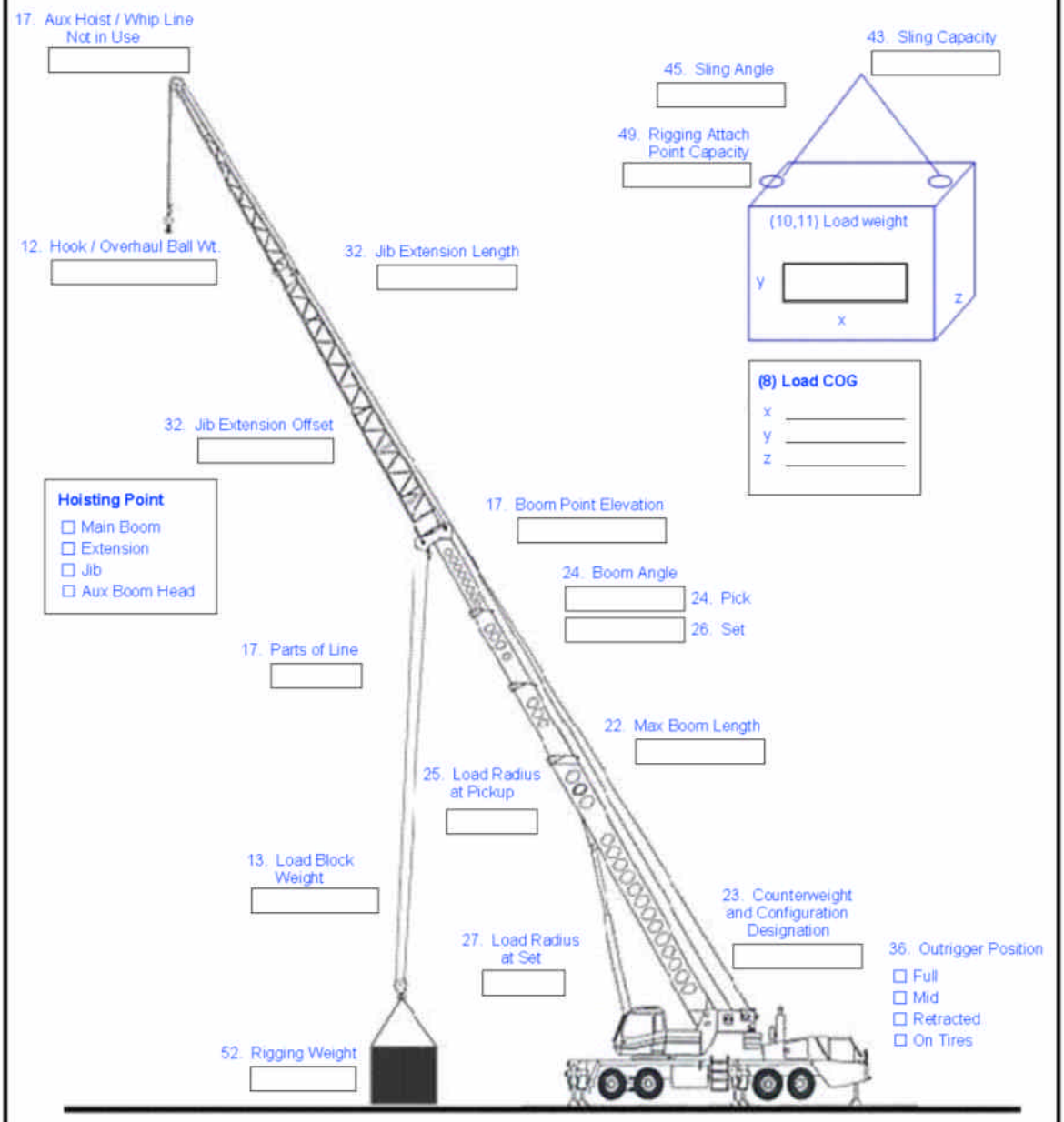
19. List all additional deductions and weights.
20. Add Block 10 through Block 19. **(On Lift Plan Worksheet)**
21. Describe boom configuration. Refer to manufacturer's terminology.

22. - 27. Self explanatory. **(On Lift Plan Worksheet)**

28. Crane's rated capacity at minimum boom angle / maximum radius. Figure worst case between pick and place.
29. Copy Gross Load from Block #20.
30. Block #29 divided by Block #28.
31. Check to indicate jib / fly erected, stowed, or stored off the crane.
32. If the Jib is used, enter the length of the boom in feet and the angle in degrees. **(On Lift Plan Worksheet)**
33. List the Jib capacity from the Fly from chart.
34. The weight of the jib if it is installed on the boom but is not being used during the lift. **(On Lift Plan Worksheet)**
35. Describe site, soil, stability conditions and any underground hazards or concerns.
36. Describe outrigger setup and required matting if applicable. **(On Lift Plan Worksheet)**
37. Describe considerations for buildings, structures, or equipment which will be under the load during the lift.
38. Describe crane travel with load on the hook if required.
39. Describe planned crane working quadrant(s) and any swing restrictions.
40. Describe any electrical hazards or concerns in close proximity to the crane.
41. Describe other considerations of note such as restricted head room, use of taglines, reduced wind limitations, traffic control, etc.
42. Describe slings to be used.
43. In the planned configuration, list the maximum rated capacity the sling can lift in lbs. **(On Lift Plan Worksheet)**
44. The weight of the sling to be used.
45. The type of hitch to be used and its sling configuration angle (choker, vertical, basket). **(On Lift Plan Worksheet)**
46. Describe shackles to be used, number and size.
47. The maximum rated capacity each shackle can lift in lbs.
48. The total weight of all shackles used.
49. List Spreader beam / other rigging used. State type, size, and capacity.
50. Self explanatory.
51. Self explanatory. **(On Lift Plan Worksheet)**
52. The total weight of all rigging that will be used.

53. - 63. Self explanatory.

Lift Planning Worksheet



Refer to operator's manual and all notes and warnings for crane-specific information

Load Weight Field Verification

Lift	Equipment Item	Weight	Crane Operator's Verification (Name & Initials)
1			
	Total Weight:		
	Maximum Radius:		
2			
	Total Weight:		
	Maximum Radius:		
3			
	Total Weight:		
	Maximum Radius:		
4			
	Total Weight:		
	Maximum Radius:		
5			
	Total Weight:		
	Maximum Radius:		

KENNEDY SPACE CENTER PROJECT SPECIFIC REQUIREMENTS APPLICABLE TO ALL WORK PERFORMED UNDER THIS CONTRACT

The Kennedy Space Center project specific requirements supporting Contract Section I are identified in this Attachment J-B. Nothing contained in this Attachment J-B shall relieve the Contractor from complying with other requirements of this contract, which are not identified and described in this Attachment J-B. All costs associated with the requirements of this Attachment J-B are included in the firm-fixed price of this contract.

J-B-1 UTILITY OUTAGE, ENERGIZED ELECTRICAL WORK, ELECTRICAL HAZARD ANALYSIS, AND EXCAVATION PERMITS (MAR 2014)

(a) Utility Outage Requests and Electrical Work Permits

(1) Utility Outage Requests: All outages required during the prosecution of work which affects utility systems, such as electrical, water, fire detection and protection systems and air handling systems will require permits. Work shall be scheduled to hold outages to a minimum. Request for utility outage permits shall be made in writing to the Contracting Officer at least fourteen (14) working days in advance of the time required. The request shall state the system involved, area involved, approximate time of outage, and the nature of the work involved. The fact that the Contractor requests an outage for a specific time period does not necessarily mean that the outage will take place. Due to the nature of the operations at Kennedy Space Center, the Contractor probably will not know until the day before the requested date if the outage will take place as scheduled. All outages will take place outside regular working hours. The Contractor will not be entitled to additional payment for working irregular hours due to outages.

(2) Electrical Work Permits: Prior to beginning work on an electrical system under an approved outage, the Contractor shall obtain an executed Work Permit (form number KSC-26-400NS) from the Institutional Services Contractor, and then execute complex lockout/tag-out procedures for all Work Permit related work as follows:

a. The Contractor's employee in charge of the required lockout/tag-out shall be present at the time the Government switches high-, medium-, or low-voltage circuits under Government access control which are to be locked and tagged out by the Contractor. The Contractor shall coordinate with the Contracting Officer's Representative (COR) for the required switching period time and date. Due to KSC operational considerations the switching period time and date may be at any time, and outside of normal working hours or work days.

b. Once Government switching is complete the Contractor's employee in charge of the lockout/tag-out shall sign the Work Permit and immediately install the required OSHA compliant lockout / tag-out on the required switching device(s). Once installed the Contractor's employee in charge of the lockout/tag-out shall individually note the locations of the locks and tags on the Work Permit form.

c. A lockout/tag-out lock box shall be used for all such lockout / tag-outs. The key(s) from the lock(s) installed by the Contractor's employee in charge of the lockout/tag-out shall be placed in the box and the employee in charge shall place an additional personal lock on the lock box to secure the keys inside. Lock box shall be kept at the work site and all other Contractor employees shall attach their personal lockout/tag-out on this box at any time they are working on the applicable equipment.

d. At the start of the first standard work period following the lockout/tag-out of a Government switched circuit for which a Work Permit is issued, the Contractor's employee in charge of the lockout/tag-out shall complete the required lockout/tag-out (lock box) procedures. Immediately upon completing the lockout/tag-out, the Contractor shall verify no voltage is present on all circuit conductors using suitable testing equipment, safe work practices, and all required personal protective equipment. All other circuit safeguards such as grounding shall occur immediately after the voltage test and each safeguard shall be individually recorded on the Work Permit.

(b) Energized Electrical Work and Hazard Analysis

(1) Live parts to which an employee might be exposed shall be put into an electrically safe work condition before an employee works on or near them, unless the employer can demonstrate that de-energizing introduces additional or increased hazards or is infeasible due to equipment design or operational limitations. If live parts are not placed in an electrically safe work condition (i.e., due to increased or additional hazards or infeasibility), work to be performed shall be considered energized electrical work. Safety plans, job hazard analysis, and work practices for work on or in proximity to energized parts shall be in accordance with KNPR 8715.7, KSC Construction Contractor Safety and Health Practices Procedural Requirements.

(2) Electrical Hazard Analysis:

Arc-flash and shock prevention personal protective equipment (PPE) is required for all energized electrical, work and where energized or exposed live parts may not be present, but a potential hazard exists including: manhole or cable vault/tray insulated cable inspections, circuit breaker or switch operation, and de-energized voltage checks to electrically safe equipment.

The Contractor shall provide a qualified electrical safety professional to perform an arc-flash and shock hazard analysis in accordance with NFPA 70E for all such electrical work. The analysis shall be submitted with the Contractor's Site Specific Safety Plan (SSSP) and referenced in any applicable Job Hazard Analysis (JHA). The safety professional shall perform and review a power system analysis using computer software specifically designed for the purpose to determine short circuit levels and arc flash hazard incident energy at all locations to be worked on by the Contractor. Table 130.7(C)(9) in NFPA 70E may be used in lieu of calculations when all applicable general notes for the table apply.

The Government will provide source short circuit levels and clearing times for Government operated electrical source equipment as well as any applicable design information. The analysis shall include a table summarizing the results of the analysis with the following information for each location or piece of equipment:

i. Protective Device Name

ii. Protective Device Clearing Time

iii. Maximum Voltage

iv. Calculated Bolted Three Phase Fault Level

v. Calculated Bolted Ground Fault Level

vi. Calculated Minimum Arcing Fault Level

vii. Arc-Distance if applicable for the calculation

viii. Employee Working Distance

ix. Calculated Arc-Flash Boundary

x. Calculated Maximum Arc-Flash Incident Energy

xi. Arc-Flash PPE Category

xii. Shock Prevention PPE Insulating Class

xiii. Limited Approach Boundary

xiv. Restricted Approach Boundary

xv. Prohibited Approach Boundary

(3) Electrical Manhole / Vault Confined Space Requirements: Reference KNPR 8715.7, KSC Construction Contractor Safety and Health Practices Procedural Requirements. During the site specific safety plan submittal phase, the Contractor shall complete a hazard evaluation of confined space(s) ensuring all hazards associated with the space or that may be introduced to the space have been identified and mitigated. The Contractor's designated safety professional shall coordinate with the Contracting Officer’s Representative (COR) to complete a confined space hazard assessment (KSC Form 28-750NS) in accordance with KNPR 1840.19 for each confined space, and to schedule a job-site inspection meeting with KSC Environmental Health and Safety personnel. Within 35 calendar days after this meeting, the COR will provide a confined space hazard assessment to the Contractor. This

assessment must be complete prior to any manhole entry and will be used in generating the confined space entry permit(s) required for the project.

The contractor shall provide supplementary lighting for all manhole work.

(c) Excavation Permits:

The Contractor shall request and obtain excavation permit(s) prior to performing any excavation. KSC Form 26-312V3 NS, Utility Locate/Excavation Permit Request, shall be prepared by the Contractor and submitted to the Government for approval at least 15 working days prior to the planned excavation date. The Contractor shall comply with the requirements of the Institutional Base Support Contractor's "Utility Locate / Excavation Permit Procedure" ENG-I-MP07 (latest revision), in the preparation, submission and use of the permit(s).

J-B-2 FIRE PROTECTION AND REQUIRED PERMITS (MAR 2014)

The KSC Fire Department will provide fire suppression, inspection and rescue services to the Contractor as necessary. The Contractor shall:

(a) Provide approved fire extinguishers of appropriate type for hazards involved.

(b) Report all fires to the Fire Service at 867-7911 or 867-1911.

(c) Comply with all requirements of KHB 1710.2C Section 504 (Heat Producing Devices) and NSS 1740.11 "NASA Safety Standard for Fire Protection" Section 702 and Chapter 8 for work performed at the Kennedy Space Center.

(d) Provide a fire watch in accordance with Federal OSHA Safety and Health Standards 29 CFR 1926.352/1910.252 when required by the welding and burning permitting official.

(e) Prevent false fire alarms by providing 24-hour advance notice to the Contracting Officer's Representative (COR) when construction activities in areas protected by fire alarm and/or detection systems may produce airborne particulates (smoke or dust) caused by construction activities such as painting, stripping, cutting drywall or concrete, sandblasting, and/or removing raised floor panels.

(f) Request permits for all welding and burning operations. Requests for these permits shall be made in writing to the Government at least seven (7) working days in advance of the time required.

(g) Report in the Contractor's Safety and Health Plan in accordance with NFS 1852.223-73 how it intends to comply with the above requirements.

J-B-3 PERMANENTLY INSTALLED SAFETY SYSTEMS (MAR 2014)

(a) The Contractor shall protect and in no way interrupt the service of any installed safety systems or personnel safety devices.

(b) In the event that the Contractor requires entrance into systems serving safety devices, the Contractor shall obtain prior approval from the Contracting Officer. In the event the Contractor determines that it is necessary to temporarily remove or render inoperable any personnel safety devices in order to accomplish contract requirements, the Contractor shall provide alternate means of protection prior to removing or rendering inoperable any permanently installed safety devices or equipment and shall obtain prior approval of the Contracting Officer.

J-B-4 BREATHING AIR COMPATIBILITY (MAR 2014)

(a) The contractor shall take precautions to assure that connectors used in contractor-supplied breathing air systems are incompatible with connectors present on either KSC gas systems or on contractor supplied systems that are used to supply non-respirable gases. KSC-STD-Z0008, 'Standard for Design of Ground Life Support Systems and Equipment', establishes requirements for connectors to be used in KSC facility breathing air and non-respirable gas systems. Facility breathing air systems located at KSC/CCAFS are to use a Hansen 3/8 inch quick disconnect as a breathing air distribution interface. KSC facility non-respirable gas systems are to use ¼ inch quick disconnects for gas distribution interfaces. Although most facility systems were designed in accordance with this standard, there are nonconforming locations at KSC/CCAFS.

(b) The Contractor may use KSC facility breathing air systems, if available at the work location. The contractor shall perform a pre-work site inspection to identify coupling types in use at the work location before mobilizing or using any breathing air equipment. The contractor shall also submit a written certification to show the contractor's breathing air system has been recently inspected and meets Grade D breathing air standards. Alternately, the contractor may arrange for on-site testing of contractor-supplied breathing air by the Government at least five days prior to start of work. In addition, the contractor shall also provide a work site evaluation for the NASA Safety Office to review before using any breathing air system. The breathing air test and the safety inspection can be coordinated through the Contracting Officer, and will be at no cost to the contractor.

(c) The contractor shall tag or label connector ends of all lines and flexible hoses of contractor-provided breathing air or non-respirable gas distribution systems. The tags or labels will clearly identify the contents of the lines or hoses.

(d) The contractor shall provide a description of the steps taken to comply with the requirements of this clause in their safety plan submittal.

J-B-5 TRAFFIC RESTRICTIONS (MAR 2014)

(a) The Contractor will not move oversized loads and/or slow moving vehicles on established roads within the Kennedy Space Center from 6:30 A.M. to 8:30 A.M. and 3:30 P.M. to 5:30 P.M. on week days. Other than the above restricted hours, the Contractor may move oversize and/or slow moving vehicles to the work site provided all requirements of the Florida State Highway Department have been met.

(b) Movement of any Contractor vehicle in excess of maximum width, height and length specified by Florida Statues Chapter 316 shall be accompanied by the Contractor's designated Convoy Commander. The Contractor's Convoy Commander shall be totally responsible for the oversized vehicular movement to include making a physical inspection for possible obstructions along the intended route and obtaining all required special permits.

J-B-6 STORAGE AND PROTECTION OF MATERIAL TO BE RE-USED (MAR 2014)

All items of material to be removed and re-installed by the Contractor shall be protected during removal and stored in a manner such that the material will not be damaged during removal or storage. Any material designated for re-use, which is not suitable due to the Contractor's damage, will be replaced by the Contractor at no additional cost to the Government.

J-B-7 MAINTENANCE OF GOVERNMENT EQUIPMENT (MAR 2014)

(a) Government systems and equipment in the Contractor's work area may require servicing, maintenance, or modification by Government support contractors during the contract performance period. This maintenance activity may include work on systems, including underground utilities, that connect with Contractor installed systems and equipment. The Contractor shall allow the Government support contractors into his work area to perform the maintenance work.

(b) Existing systems and equipment require periodic maintenance that cannot be readily defined in terms of frequency and duration. This maintenance will be coordinated with the Contractor through the Contracting Officer, and will be performed on a non-interference basis as much as possible. The Contractor shall notify the Contracting Officer regarding any uncoordinated maintenance activity.

(c) The Contractor shall arrange and conduct a joint pre-operations briefing with Government support contractor personnel on each occasion that the support contractor requires access to the contractor’s work area. The Contractor shall take the following steps as required to prevent collateral damage to, or interference with, Contractor installed systems and equipment.

(1) Verify the scope and limits of the support contractor’s planned maintenance activity.

(2) Advise the support contractor regarding the scope of the Contractor’s work that may be

affected by the maintenance activity, including specific locations and dimensions of planned or installed facilities, systems and equipment. Notify the Contracting Officer immediately regarding any resulting conflicts or interferences.

(3) Ensure that temporary barriers or protective measures are provided as needed to protect Contractor installed work and preserve job-site safety.

The Contractor shall notify the Contracting Officer immediately regarding any issues that cannot be resolved with the support contractor.

J-B-8 AVIATION OBSTRUCTION LIGHTS (MAR 2014)

The Contractor will provide at least two Aviation Red Obstruction Lights or two High Intensity White Obstruction Lights on all structures over 100 feet above ground level. All construction cranes/booms shall be lighted regardless of height. Lights must be constructed and installed in accordance with U.S. Department of Transportation, Federal Aviation Administration publication AC 70/7460-1F (as revised), Chapter 4, paragraph 15, subparagraph e. Lights will be operated during all periods of reduced visibility, between sunset and sunrise, and as directed by the Contracting Officer.

J-B-9 INTERFERENCES AND COORDINATION OF WORK (MAR 2014)

(a) The Contractor shall coordinate construction layout, systems configuration and work scheduling to avoid interference's between the various construction trades and their installations. Interferences and obstructions resulting from lack of Contractor coordination shall be corrected by the Contractor as approved by the Contracting Officer. All components, fittings and reworking necessary for such corrections shall be provided by the Contractor at no additional cost to the government. Dimensions shown for existing work, and all dimensions required for work that is to connect to existing work, shall be verified by the Contractor by actual field measurement of the existing work. Any work at variance with that specified or shown in the drawings shall not be performed by the Contractor until approved in writing by the Contracting Officer.

(b) To the extent possible, the as-built dimensions of all new work shall be verified by actual field measurement prior to ordering or fabricating mechanical, electrical, or specialty equipment and materials to be installed. If such field measurement is not possible, then the contract drawings and applicable shop drawings shall be checked by the contractor for dimensional accuracy prior to ordering or fabricating equipment and materials to ensure proper fit for field installation.

(c) The Contractor shall be responsible for correction of all field fitup problems and interferences which could have been avoided by field measurement or drawing checks prior to equipment fabrication.

J-B-10 RESTORATION OF GRASSED AREAS DISTURBED BY CONSTRUCTION (MAR 2014)

The Contractor shall, prior to completion of the contract, grass all areas disturbed by construction activities by seeding and mulching or, when erosion may occur, by sodding, except where specifically directed otherwise in the drawings and specifications.

J-B-11 TEMPORARY CONSTRUCTION TRAILERS (MAR 2014)

(a) The Government will provide a location for temporary office and/or storage facilities if needed for performance of on-site work under this contract. Specific location(s) at or reasonably close to the work site will be identified at the pre-work conference. The contractor is responsible for providing his own telephone service and for making his own connections to KSC utility services, if provided for under Article I.11, KSC On-Site Facilities and Services.

(b) All temporary facilities must be structurally sound, in roadworthy condition, and shall be installed and anchored in accordance with KSC-PLN-1904, Trailer/Equipment Tie Down Plan for the John F. Kennedy Space Center; or Rules of Department of Highway Safety and Motor Vehicles, Division of Motor Vehicles Chapter 15C-1, whichever is more stringent. Copies of the standards will be made available to the contractor at the pre-work conference. The contractor shall provide written certification of compliance for all temporary facilities to the Contracting Officer within three days of installation. Any facilities that fail to meet these requirements shall be immediately removed from Government property.

(c) All temporary facilities shall be removed from government property within two weeks following final acceptance of work performed under this contract.

J-B-12 CONFINED SPACE WORK REQUIREMENTS (MAR 2014)

(a) Special requirements, coordination, and precautions will apply to any contract work taking place in confined spaces. Each contractor contracted to perform work in confined spaces is required to provide a written program for such work as part of its health and safety plan which is consistent with the requirements of 29 CFR 1910.146. For work in telecommunications manholes, provisions of 29 CFR 1910.268(o) are also applicable. The contractor shall coordinate any such work in confined spaces with the KSC Environmental Health Support Contractor, KSC Fire Services Support Contractor, and any other resident government or contractor organization whose employees may have access to the work location. The provision of Environmental Health services by the government does not prohibit the contractor from providing their own atmospheric testing. Government provided services include environmental health monitoring and consultation support for testing of atmospheres in confined spaces as well as fire rescue and emergency medical services.

(b) Entry into and work in confined spaces shall be in accordance with the requirements of KNPR 1820.4, “KSC Respiratory Protection Program,” KNPR 1840.19, “KSC Industrial Hygiene Handbook,” and all other applicable clauses of this contract.

(c) Confined spaces, which contain water, shall be pumped out by the contractor prior to scheduling a confined space entry check.

(d) In addition to the requirements set forth above, the Contractor shall notify and obtain approval from the Power Coordinator, telephone 321-867-7300, and/or from Communications Control, telephone 321-867-4141, respectively, prior to performing work in electrical and/or communications manholes.

J-B-13 TESTING OF CONSTRUCTION MATERIALS (MAR 2014)

Tests of construction materials indicated to be performed by the Contractor shall be accomplished by the Contractor utilizing the services of an acceptable independent testing laboratory.

J-B-14 AFFIRMATIVE PROCUREMENT (MAR 2014)

Affirmative Procurement (AP) is the purchase of environmentally friendly products and services (i.e. products made from recycled or recovered materials). Federal agencies, their Contractors and subcontractors are required to maximize the purchase materials on the list of "EPA Designated Guideline Items" with the minimum recycled or recovered materials content whenever practicable according to RCRA 6002 and EO 13101. The requirements of RCRA 6002 include the following:

"The decision not to procure such items shall be based on a determination that such procurement items:

(A) are not reasonably available within a reasonable period of time;

(B) fail to meet the performance standards set forth in the applicable specifications or fail to meet the reasonable performance standards of the procuring agencies and/or;

(C) are only available at an unreasonable price.

Any determination under subparagraph (B) shall be made on the basis of the guidelines of the National Institute of Standards and Technology in any case in which such material is covered by such guidelines."

The Contractor shall provide AP approved items as specified within the contract documents. Submittals for AP items shall be provided for approval in accordance with Shop Drawing provisions. If the Contractor proposes to substitute an item that does not conform with AP requirements, the applicable Shop Drawing shall be accompanied by KSC Form 8-69, Contractor Request to Use Nonconforming Parts or Material *(Deviation/Waiver Request)* identifying the reason for the proposed substitution.

Non-conforming items without approved D/W's will be rejected and the contractor shall be responsible for any costs and schedule impacts associated with replacing such non-conforming

items at no additional cost to the Government.

At the conclusion of the project, the Contractor shall provide the Contracting Officer (CO) with a report itemizing all AP items used.

Detailed information on the EPA AP specified/approved products and manufacturers providing these products is available at www.epa.gov/cpg/products.htm.

J-B-15 SPILLS (MAR 2014)

The Contractor shall make all reasonable and safe efforts to contain and control any spills or releases that may occur. The Contractor shall immediately report (by phone) any occurrence of a pollution incident or spill, first to the Emergency 911 (321-867-7911 from a non 867/861 exchange), then to the Contracting Officer (CO). The Contractor shall document the incident or spill on KSC Form 21-555, "Pollution Incident Report," and submit it to the CO and NASA Environmental Assurance Branch (EAB), TA-B1B, within 24 hours of the incident.

The Contractor shall provide spill response materials to contain and control spills including, but not limited to, containers, absorbent material, shovels, and personal protective equipment. Spill response materials shall be available at all times in which materials/wastes are being handled or transported. Spill response materials shall be compatible with the type of material being handled.

The KSC Spill Cleanup Team will be responsible for the final cleanup and validation of a spill or release.

The Contractor’s prompt action to minimize the impacted area and to timely report any occurrence will increase the Spill Cleanup Team’s ability to complete the spill cleanup and therefore reduce the Contractor’s liability for a larger cleanup.

J-B-16 WEEKLY STATUS MEETING (MAR 2014)

The Contractor shall attend a weekly progress/status meeting to be scheduled by the Contracting Officer for the purpose of determining progress status, delaying factors, material delivery schedules, and status of shop drawing submittals. In addition, a representative of each first tier subcontractor may be required to be present for the conference.

J-B-17 SUPERINTENDENT ASSIGNMENT (MAR 2014)

Full time Superintendent: Pursuant to clause 52.236-6, entitled "Superintendence by the Contractor," the contractor shall assign a superintendent, on the contractor’s payroll, who will be 100 percent committed to superintending the work required by this contract. The superintendent shall not fill any other positions in performance of this contract or any other concurrent contract. One or more alternate superintendents, each with full authority to supervise the work, shall be designated in writing and approved by the Contracting Officer. The superintendent or an alternate shall be physically present at each work site at all times during performance of the contract and

until the work is completed and accepted.

The individual(s) appointed as superintendent(s) shall complete the OSHA 10 hour Construction Course prior to starting any field work on the project. The class shall be taught by an authorized provider of the course (e.g., United Safety Council, Florida Safety Council) and be attended in person. The appointed superintendent(s) shall provide the course completion certificate to the government stating the required training and testing was satisfactorily completed and the date of completion. The course completion date shall not be greater than 5 years from the start of the contract.

J-B-18 MATERIAL SAFETY DATA SHEETS (MSDS) SUBMITTAL/CHEMICAL INVENTORY REPORTING AND MANAGEMENT (MAR 2014)

The Contractor shall provide a complete and accurate list, accompanied by the applicable Material Safety Data Sheets (MSDS), of all materials and chemicals listed on the Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-To-Know Act (EPCRA) and Section 112(r) of the Clean Air Act that will be stored onsite and/or used in the execution of this contract, regardless of the quantity. This information shall be provided to the Contracting Officer (CO) prior to the time of delivery of the materials and chemicals to the site. This inventory is to be updated and resubmitted to the CO on a monthly basis. All inventory reporting is to be completed on the Chemical Inventory for Construction Projects at Kennedy Space Center Form (8-313NS). Appropriate labels and MSDS shall be provided for all chemical shipments.

J-B-19 WASTE CHARACTERIZATION (MAR 2014)

KSC Form 26-551 "Process Waste Questionnaire" (PWQ) shall be prepared and processed for all waste streams generated during the execution of this project in accordance with article entitled "**Hazardous Wastes**".

J-B-20 PERMIT REQUIREMENTS (MAR 2014)

No on-site work will be allowed until the appropriate State and Federal issuing agencies issue all required permits. The government is responsible for obtaining and providing all required permits except as specified below. Permits required may include, but are not limited to, air construction, dewatering, borrow pit, potable water, sanitary sewer, stormwater, National Pollutant Discharge Elimination System (NPDES) and wetlands. The following permits are known to be required for this project:

KSC Excavation Permit

The Contractor is responsible for obtaining the following permits, if required, before beginning work on the subject systems:

- FDEP/Brevard County Onsite Sewage Treatment and Disposal System Construction/Permit Abandonment

- FDEP/Brevard County Well Construction/Abandonment Permit.

The Contractor shall comply with the terms and conditions of these permits. The Contractor shall provide copies of these permits as well as copies of all documentation submitted as part of the application process to the NASA Environmental Assurance Branch (EAB), TA-B1B through the Contracting Officer (CO) as delineated in contract documents or as directed by the CO.

The Contractor shall not begin construction before receiving all Federal, State, and local construction permits as indicated in this section. Included in adherence thereto is compliance with all conditions of the permit as well as requirements given in the laws, ordinances, and regulations. The Contractor shall be responsible for payment of any fines from government agencies resulting from the Contractor's failure to adhere to all identified permit conditions and agency regulations. These shall include, but are not limited to, material and construction standards, environmental protection, certifications, notifications, and monitoring requirements.

Upon issuance of the Notice to Proceed, the CO shall make copies of all Government provided permits with conditions related thereto available to the Contractor. The Contractor shall keep copies of the permits and related materials such as drawings.

J-B-21 BIOLOGICAL SURVEYS (MAR 2014)

The Contractor shall notify the Contracting Officer (CO) to request that NASA **EAB** perform a biological survey, fourteen (14) days prior to start of work. The Contractor shall not begin land clearing or site disturbance activities, including exterior lighting and roof work, before receiving written approval from the CO stating that the biological survey is completed and all mitigation action (e.g. Threatened and Endangered (T&E) species relocation/protection, identification and protection of plant species of special concern) to be performed by the Government or Contractor has been completed.

J-B-22 CONCRETE WASTEWATER (MAR 2014)

The following checked paragraphs are applicable to this acquisition:

☒ <u>CONCRETE WASHOUT</u>

The Contractor shall not allow wastewater from standard concrete construction activities (such as on-site material processing, concrete curing, foundation and concrete clean-up, water used in concrete trucks, forms, directional drilling, etc.) to enter waterways or to be discharged before being treated to remove pollutants.

The Contractor shall dispose of the construction-related concrete wastewater and concrete excess by collecting and placing it in a contractor constructed settling pond where suspended material can be settled out and/or the water can evaporate to separate solids from the water. The location of the settling pond shall be coordinated with and approved by the Contracting Officer (CO). The Contractor

shall remove and dispose of the residue left in the pond and restore site to original condition. Disposal of solidified concrete shall be performed in accordance with the solid waste article.

J-B-23 TOXIC METALS (MAR 2014)

Representative samples of painted surfaces within the project area have been identified to contain toxic metals. The Contractor shall assess hazards and brief government of their proposed methods of removal and disposal of building materials identified as having toxic coatings and hazardous materials. The Contractor's hazard assessment shall be conducted by a competent health and safety professional. The Contractor shall notify the Contracting Officer of hazard mitigation activities and abatement procedures 14 days prior to disruption to any suspected area.

J-B-24 PCB MANAGEMENT (MAR 2014)

Polychlorinated Biphenyls (PCB) wastes may include, but are not limited to, oil-filled transformers, Oil-contaminated transformer concrete pads, light ballasts, capacitors, electric motors, pumps and paint coatings. PCB wastes shall be managed in accordance with 40 CFR 761. PCB waste management and disposal shall be coordinated through the Contracting Officer (CO), a KSC Form 26-551 "Process Waste Questionnaire" (PWQ) and Technical Response Package (TRP) shall be prepared and processed in accordance with article entitled "**Hazardous Wastes**".

Government Assistance – KSC has established procedures for the handling, storage and disposal of PCB contaminated waste streams generated on the Center. To aide with proper compliance of site-specific requirements, the Government will assign a NASA Environmental Point of Contact (EPOC) for each project. The establishment of the NASA provided EPOC in no way relieves the contractor for compliance with requirements defined in 40 CFR 761.

LIQUIDS CONTAMINATED WITH PCBs

PCB containers storing liquid PCBs at concentrations of 50 parts per million (ppm) or greater shall be removed from the generator accumulation site within **24 hours** from the date the PCB item was removed from service. This support shall be coordinated through the Contracting Officer for waste pickup scheduling **before** removal from service. The Contractor shall contact the Contracting Officer for pick-up and removal of all PCB related waste. The Contractor shall not remove any oil filled transformers from KSC. Unless analysis results determine PCB content in oil less than 2 ppm, the contractor shall coordinate any disposal of liquid PCBs through the Contracting officer.

For Equipment containing PCB concentration in OIL >= 500 ppm

LIQUIDS: Drained oil must be stored in a DOT approved container and marked with a PCB label (with the date the equipment was removed from service). Containerized liquid PCB waste must be moved to PCB storage facility **immediately (within 24 hrs).** Coordinate effort through EPOC - 5 day notice prior to removal from service is required.

CARCASS or CONTAINER: Drained equipment must be marked with a PCB label (with the date the equipment was removed from service), stored on an impervious surface, covered from rain, and moved offsite within 30 calendar days.

For Equipment containing PCB concentration in OIL >50 ppm but < 500 ppm

LIQUIDS: Drained oil must be stored in an adequate container on an impervious surface, covered from rain, labeled, and moved offsite within 14 calendar days.

CARCASS or CONTAINER: Drained equipment must be stored on an impervious surface, covered from rain, labeled with PCB mark , dated and moved offsite as soon as practicable (not to 180 exceed days). If carcass paint is analyzed for PCBs and results < 50 ppm - No storage, marking, or dating requirement are required under TSCA regulations. Provide analysis results to RRMF along with KSC 7-49 form to recycle.

PCB BULK PRODUCT WASTE (SOLIDs)

PCB Bulk Product Waste is defined in 40 CFR 761.3 as waste derived from manufactured products containing PCBs in a non-liquid state at any concentration, where the concentration of PCBs at the time of designation for disposal is greater than or equal to (≥)50 ppm. The contractor shall dispose of all coated waste with a PCB concentration over the 50 ppm limit in the Schwartz Road landfill (see Schwartz Road Landfill Article). NASA requires all contractors generating metal-based waste containing PCB contaminated coatings with PCBs ≤50 ppm to recycle this material (see Recycling and Salvaging Article). If these materials cannot be recycled due to excessive cost in segregation or handling, the contractor shall dispose of this waste in the same manner as PCB Bulk Product Waste.

All protective coatings that contain PCB shall be handled in accordance with the requirements of this section. Where Material Safety Data Sheets for protective coatings are available and indicate the presence of PCBs, sampling is not required. Where the presence of PCBs is not determined before work begins, PCBs shall be assumed to be present.

The following waste generator standards will be used for the accumulation and storage of PCB waste materials:

a. PCB wastes listed below may be stored temporarily at a waste generator accumulation site for up to thirty (30) days from the date removed from service. The container and labeling shall comply with the TRP. The date the PCB item was removed from service shall be marked on the container label per the TRP.

(1) Non-leaking articles and equipment. PCB articles are manufactured articles containing PCBs whose surfaces have been in direct contact with PCBs. These articles include capacitors, transformers, electric motors, and pumps.

(2) Leaking articles and equipment placed in non-leaking PCB containers with sufficient materials to absorb any liquid PCBs remaining in the item. PCB containers are any devices used to contain PCBs or PCB articles whose surfaces have been in direct contact with PCBs.

(3) PCB containers storing non-liquid PCB wastes such as contaminated soil and debris.

b. PCB containers storing liquid PCBs at concentrations of 50 parts per million (ppm) or greater shall be removed from the generator accumulation site to the PCB Storage Building (K7-115) within 24 hours from the date the PCB item was removed from service. Support shall be coordinated through designated KSC Waste Management personnel for waste pickup before removal from service date to allow for waste pickup scheduling and to avoid regulatory violations. The Contractor shall contact KSC Waste Management for pick-up and removal of hazardous/PCB waste. Documentation including the waste type, quantity, locations, and organization responsible for the waste shall be provided on KSC Form 28-809 "Waste Support Request" to KSC Waste Management when requesting waste disposal. The Contractor shall fax the waste support request to KSC Waste Management at fax 867-9466.

The Contractor shall not remove any oil filled transformers from KSC. The Contractor shall only take drained transformers to the Reutilization, Recycling and Marketing Facility (RRMF) (M6-1671) at Ransom Road. Within the six (6) month period prior to delivery to RRMF, transformers shall have an oil analysis showing PCB content. At the request of the Contractor, the CO will arrange for all sampling and testing to determine the proper handling and disposal of the transformers. If the oil sample is greater than 500 ppm, the transformer shall be removed as a hazardous/PCB waste. Within 48 hours of having the transformer ready for disposal, the Contractor shall contact the EPOC assigned to the project to coordinate with KSC Waste Management for pick-up and removal of hazardous/PCB waste. Documentation including the waste type, quantity, locations, and organization responsible for the waste shall be provided on KSC Form 28-809 "Waste Support Request" to KSC Waste Management when requesting waste disposal. The EPOC shall fax the waste support request to KSC Waste Management at fax 867-9466. At the request of the Contractor, the EPOC will arrange for all sampling and testing to determine the proper handling and disposal of the stained or painted concrete. Lab analysis that is older than 6 months will not be considered valid analysis and re-sampling must be completed.

J-B-25 HAZARDOUS WASTES (MAR 2014)

Hazardous and controlled waste shall be managed in accordance with all applicable statutes, rules, orders, and regulations which may include but are not limited to 40 CFR Parts 260 - 268, 273, 279, 761 and KNPR 8500.1 KSC Environmental Requirements. All hazardous waste generated during the execution of this contract shall be disposed of by the Government. Unless directed by the Contracting officer, in no case shall the Contractor or the Contractor's representative transport hazardous waste from KSC.

The Contractor shall be responsible for identifying processes and operations and the location and nature of all potentially hazardous and controlled waste and their containers, as defined in 40 CFR Parts 261, 273, 279, or 761. KSC has established policies and procedures in place to assist the contractor for characterization, handling and storage of wastes generated on KSC. Any request for assistance shall be in writing and submitted to the Contracting officer.

Contractor personnel generating and managing the waste shall have hazardous waste training per 40 CFR 265.16. The Contracting Officer may at any time during the course of the contract performance period require the Contractor to provide individual training records for any employee involved in the performance of this contract, and the contents of the course or courses completed to satisfy the training requirements. Attendance at KSC Training Course QG-211 "Hazardous Waste Management" will satisfy the above training requirements.

The Contractor shall prepare copies of Material Safety Data Sheets (MSDS) for each material utilized on the project and provide copies to the Contracting Officer (CO) thirty (30) days before the start of the waste generation process. No substances shall be delivered to KSC without the appropriate Material Safety Data Sheets.

GOVERNMENT ASSISTANCE

KSC has established procedures for the handling, storage and disposal of hazardous waste. To aide with proper compliance of site-specific requirements, the Government will assign a NASA Environmental Point of Contact (EPOC) for each project. The EPOC shall, upon request, assist with waste hazard determination, packaging, labeling, and disposal requirements for waste generated on KSC. The establishment of the NASA EPOC in no way relieves the contractor for compliance with requirements defined in 40 CFR Parts 261, 273, 279, or 761.

WASTE CONTAINERS

The Government will provide DOT compliant storage containers and labels upon request. The Contractor shall request the storage containers, by providing quantity and type needed, in writing to the Contracting Officer a minimum of one week before the required need date. The containers will be available for pickup by the Contractor at a location designated by the Contracting Officer. For projects that will be generating large quantities of waste (>500 gallon or 75 cu ft), a two week notice must be provided to the CO to ensure availability of waste containers. The Contractor shall be responsible for transporting the containers from storage location to the project site.

SATELLITE WASTE ACCUMULATION AREA (SAA)

The Contractor shall establish an on-site Satellite Waste Accumulation Area within 50 feet (ft) of and within sight of any point where hazardous or controlled wastes may be generated. If a Satellite Waste Accumulation Area must be more than 50 ft from the point

of generation, or out of sight of the generator, the Contractor shall provide a written request to the CO fourteen (14) days before the start of the waste generating process. The CO will send a notification to the NASA Environmental Assurance Branch (EAB), TA-B1B, for their review and concurrence. The EAB will then request approval for a non-routine Satellite Waste Accumulation Area from Florida Department of Environmental Protection. The Contractor shall not place the Satellite Waste Accumulation Area in service before receiving written approval of the variance from the CO. The Contractor shall store potential or identified hazardous and/or controlled wastes in the appropriate properly labeled containers inside the Satellite Waste Accumulation Area in accordance with KNPR 8500.1 (as revised).

UNKNOWN WASTES

If during the course of the project unidentified waste is discovered by the contractor or subcontractors, the contractor shall immediately contact the Contracting Officer and handle the waste as hazardous. The contractor shall not attempt to move, open or test any unknown commodities.

If a hazardous/nonhazardous waste determination cannot be made by process knowledge and no MSDS is available for the waste stream, the container of waste shall be marked with a Hazardous Waste Determination In Progress (HWDIP) label until chemical analysis is completed. At the request of the Contractor, the CO and EPOC will provide any analytical support required by the TRP. The EPOC will arrange for all sampling and testing of potentially hazardous or controlled waste.

If the material is hazardous, the analysis completion date serves as the accumulation start date (ASD). Waste streams labeled with HWDIP labels are a potentially hazardous waste stream; therefore they must be managed as a hazardous waste. In order to fulfill this requirement, the generator shall manage those containers in a Satellite Waste Accumulation Area or 90-day storage area. HWDIP waste generated in amounts less than 55 gallons may be managed as a satellite container. If HWDIP waste is generated in amounts greater than 55 gallons, the additional volume must be moved within 72 hours to a 90-day storage site.

UNIVERSAL WASTES (UW)

For items meeting the definition of UW, the Contractor shall handle, collect and manage in accordance with 40 CFR 273 and Chapters 62-730 and 62-737 FAC. The EPA established Universal Waste regulations to ease the requirements for managing hazardous wastes that can be recycled. Waste streams currently adopted by the State for management as UW are rechargeable batteries, mercury-containing lamps and devices, capacitors, and certain pesticides.

The Contractor's representative or "Handler" of UW shall be trained for the proper waste handling and emergency response procedures. Attendance at the KSC training course QG-299 "Universal Waste Rule" will satisfy the above. The Contractor shall provide to the CO

training records of any "handler" of UW upon request of the CO.

J-B-26 RECYCLING AND SALVAGING MATERIALS (MAR 2014)

The Contractor shall divert all of the following Construction and Demolition (C&D) waste items from the list below from disposal at landfills and incinerators to facilitate their recycling or reuse. The Contractor shall require all subcontractors, vendors, and suppliers to participate in this effort.

GOVERNMENT PROPERTY

All items or materials designated below to be salvaged shall remain the property of the Government and will be cleaned of non-salvable debris, segregated, itemized, delivered, and off-loaded by the Contractor at the disposal area. Scrap metal will be treated as salvage. The Contractor shall maintain adequate property control records for all materials or equipment specified by the contract to be salvaged. These records may be in accordance with the Contractor's system of property control if approved by the CO. The Contractor shall be responsible for adequate storage and protection of salvaged materials and equipment pending delivery to the disposal area. All materials and real property items identified below shall remain property of the Government unless excluded by the contracting documents. The contractor shall utilize on-site recycling and salvaging procedures for the following checked items:

☒ METALS: ALUMINUM, BRASS, COPPER, REBAR, STAINLESS STEEL, STEEL, OTHER FERROUS, OTHER NON-FERROUS, SCRAP METAL
All metals coated with non-liquid PCB paints with levels below 50 parts per million shall be recycled by the contractor. Any metals coated with non-liquid PCB paints with levels above 50 ppm shall utilize the Schwartz Road Landfill after Government approval.

REPORTING REQUIREMENT

The Contractor shall record C&D waste materials on the "Construction & Demolition Projects Report", KSC Form 7-648 NS (02/07) and submit the form on a monthly basis and keep log on site per direction of the Contracting Officer (CO).

J-B-27 SOLID WASTE (MAR 2014)

The Contractor shall be responsible for the proper management of all solid waste generated at the Kennedy Space Center from the execution of this contract. The Contractor shall segregate and transport all solid waste to disposal locations designated in the Contract Documents. The Contractor shall police work areas daily for loose trash and debris. The Contractor shall collect and properly dispose of wind-blown debris daily to prevent migration of debris/trash offsite.

Trash items not requiring special handling, or which cannot be resold or recycled, shall be disposed

of in receptacles slated for disposal in either the KSC Landfill or the Brevard County Landfill. The Kennedy Space Center has numerous policies and processes in place to properly categorize, handle, store and dispose of waste streams generated during the project. It is the contractor's responsibility to make every effort to reduce the impact of the project on the environment. This includes utilizing all practical means to reduce the amount of waste that is landfilled or incinerated.

J-B-28 DIVERTED SOLID WASTE (MAR 2014)

The Contractor shall dispose of the following solid wastes at onsite KSC disposal facilities: Soils, Trees / tree remains, Vegetative material, Non-pressure treated wood, Dimensional non-pressure treated lumber, Pallets (Unserviceable Wood), Blast Media (non-hazardous), and **clean non-coated concrete.** The contractor shall segregate clean, unpainted concrete from other Construction and Demolition Debris and deliver it to the Kennedy Space Center's Diverted Aggregate Recycling and Collection Yard (DARCY). The DARCY is located west of the Schwartz Road Landfill entrance. The Government shall retain ownership of all material delivered to the DARCY. EPOC shall provide DARCY operating plan upon request.

J-B-29 SCHWARTZ ROAD LANDFILL OPERATIONS (MAR 2014)

The KSC Landfill is an unlined Class III landfill. Any waste permitted by DEP regulations for disposal in a Class III landfill as defined in Rule 62-701.200(14), FAC can be accepted at the landfill (**excluding friable asbestos**). For the purpose of meeting recycling, waste diversion and reuse goals, KSC has restricted certain solid waste from landfill disposal (See **Article J-B-26, Recycling and Salvaging Materials**) Landfilling of waste shall be the Contractor's last option for disposal.

The physical dimensions of the waste shall be within the handling capabilities of the landfill disposal equipment. The physical dimensions for the landfill handling capabilities are 8 feet in length x 8 feet in width. Only the following items listed will be accepted at the landfill:

(1) Asphalt: Asphalt removed from parking lots, driveways, and roadways.

(2) Blast Media: The blast media must be as free from debris as possible and determined nonhazardous for acceptance into the KSC Landfill. The Spent Sandblast Media Disposal Form must accompany the blast media to the landfill and will be reviewed by the landfill operator. Blasting media determined to be a hazardous waste must be managed as hazardous waste.

(3) Carpeting

(4) Construction and Demolition Debris: Materials considered not water soluble and non-hazardous in nature, including but not limited to steel, brick, glass, concrete, asphalt, pipe, gypsum wallboard and non-pressure treated or unpainted lumber. This also includes rocks, soils, tree remains and other vegetative matter, which normally result from land clearing or development. Scrap metal from demolition projects

should be managed according to guidance provided under article entitled "Recycling and Salvaging Materials". The landfill may not accept any painted materials that test above the lower Toxicity Characteristic Leaching Procedure (TCLP) detection limits for barium, cadmium, chromium, lead, and mercury. If TCLP results are above the lower TCLP detection limits, the Contractor shall submit a PWQ for evaluation per article entitled "Hazardous Wastes."

(5) Fiberglass

(6) Glass (except light bulbs or lamps).

(7) Non-Friable Asbestos: Non-friable asbestos, also referred to as Non-Regulated Asbestos Containing Materials (NRACM) is handled on a case-by-case basis. KSC policy allows for the disposal of NRACM only. In order to dispose of non-friable asbestos, the Contractor shall complete and submit the KSC/Schwartz Road Landfill Non-Friable Asbestos form (KSC 28-1084 NS), which can be obtained from the Contracting Officer (CO) or the CO's designee. The form shall be sent to NASA EAB, TA-B1B. The following scheduling procedures shall be followed before NRACM wastes are accepted at the landfill:

a. The waste generator/hauler shall make arrangements with the landfill operator a minimum of 24 hours before disposal of NRACM waste and shall inform the operator of the quantity of the waste and the scheduled date the shipment will arrive at the landfill.

b. NRACM will be accepted at the landfill with prior arrangement with the scale house attendant (minimum of 24 hours notification) Tuesday and Thursday, excluding holidays, from 0700 hours to 1100 hours and from 1300 hours to 1500 hours.

(8) Pallets (Unserviceable Wood and Plastics): Pallets that are not reusable or recyclable are accepted.

(9) PCB Bulk Product Waste: Refer to Clause "PCB Management."

(10) Wood: Miscellaneous non-pressure treated wood items are accepted.

(11) Yard Waste (Vegetation): Vegetation from maintenance and land clearing activities is accepted.

J-B-30 ASBESTOS-CONTAINING BUILDING MATERIALS (MAR 2014)

Asbestos Containing Materials (ACM) are known to be present in facilities and or structures assigned under the scope of this contract. The Government will provide information regarding the location and quantity of known ACM in the facilities under this contract to the Contractor through

the Contract Documents.

The contractor shall employee asbestos abatement contractors licensed by the State of Florida in accordance with Florida Statute 469 Asbestos Abatement. This documentation must be available onsite and shall be provided to the Government or Government representative upon request.

The Contractor shall abate all RACM as shown or specified in the contract documents and shall notify the Contracting Officer if any undocumented ACM or suspected ACM is encountered. The Contractor shall provide a written Asbestos Management and Abatement Implementation Plan which is consistent with the requirements of Federal and State regulations. These regulations include the Occupational Health and Safety Administration (OSHA) regulation 29 CFR 1926.1101, the Code of Federal Regulations (CFR) National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 61 Subpart M, the Florida Administrative Code (FAC) requirements FAC 62-257, and the Florida Statute (F.S.) 469 Asbestos Abatement and F.S. 376.60 Asbestos Removal Program Inspection and Notification Fee.

If more than 260 linear feet, 60 square feet or 1 cubic meter of RACM is to be removed, or any load-bearing structure is to be demolished regardless of whether or not asbestos is present, the Contractor shall submit to the Florida Department of Environmental Protection (FDEP) a "Notice of Asbestos Renovation and Demolition Form" (DEP Form 62-257.900(1). This notice shall be submitted two (2) weeks before demolition. A copy of the notification shall be provided to the Contracting Officer (CO) and the NASA Environmental Assurance Branch (EAB), TA-B1B. This notice shall be submitted for asbestos abatement and/or demolition of any load-supporting structural member. The State asbestos removal program requirements of F.S. 376.60 and the renovation or demolition notice requirements of the NESHAP 40 CFR Part 61, Subpart M, as embodied in FAC 62-257 are included on this form. If a project will disrupt construction materials in any way, the Contractor shall complete an asbestos survey. If it is unknown if ACM exist, the Contractor shall contact the COTR to complete a Support Request (KSC Form 19-15) to have KSC Environmental Health provide an asbestos survey.

Asbestos materials must be handled, packaged, labeled and disposed of per EPA 40 CFR 61 and OSHA Construction Standards 29 CFR 1926.1101. All regulated asbestos waste shall be disposed of at the Brevard County Landfill located on Adamson Road in Cocoa, Florida. Non-friable asbestos can be disposed of at the KSC Schwartz Road Landfill in accordance with Environmental Procurement Clause "Schwartz Road Landfill Operations."

J-B-31 NOISE AND DUST CONTAINMENT (MAR 2014)

Special measures (water suppression) shall be taken by the Contractor to limit the noise and dust migration during demolition and construction activities.

J-B-32 OCCUPANCY DURING CONSTRUCTION (MAR 2014)

Facilities adjacent to the work site will be fully occupied during the construction. Care must be taken as to not disturb or interfere with existing Government operations or employees.

J-B-33 PAD B - ADDITIONAL INFORMATION: REFERENCE I.12 (KSC ON-SITE FACILITIES AND SERVICES)

If the contractor requests a location for a field office trailer, 120/208 Volt power will be available in the vicinity of the office location. The contractor will be responsible for extending and connecting power to the field office trailer from the closest available connection point.

J-B-34 PAD B - ADDITIONAL INFORMATION: REFERENCE I. 11 KSC 52.204-96 SECURITY CONTROLS FOR KSC AND CCAFS (JAN 2007) PARAGRAPH B

LC-39B is considered a Construction Controlled Area within KSC. The following procedure applies instead of the procedure described in Paragraph B for LC-39B access:

The contractor shall request a personal orange safety badge at the badging station when receiving the White Temporary Badge. If previously badged, the employee shall request a personal orange safety badge from the badging station located in SR 405.

Entrance to LC-39B will be controlled by a Pad B overlay to the Contractor's White Temporary Badge. The contractor shall request from the Contracting Officer the number of Pad B overlays required for employees requiring daily access to the work area. As additional personnel need daily access, the contractor may request additional Pad B overlays. The contractor will also be issued five (5) additional Pad B overlays for checking out to contractor personnel not requiring daily access to the construction area.

Upon arrival to the Pad B gate, an access monitor will verify the possession of the Pad B overlay and the personal orange safety badge. The access monitor will exchange the personal orange safety badge for a Pad B control badge and authorize entry. Upon departure, the Pad B control badge shall be exchanged for the personal orange safety badge at the Pad B gate.

At the end of the contract the contractor shall return the Pad B overlays to the Contracting Officer.

J-B-35 FIELD COORDINATION

The contractor shall participate in a daily field coordination meeting and provide information regarding planned operations, locations, major material deliveries and other activities relevant for the overall performance of the work in joint occupancy conditions. Detailed information shall be provided for the following three days. Field work interference with other contractors working in the same areas will be resolved real time at the daily meeting to eliminate conflicts. The contractor shall also provide general activity information for the next two weeks for planning purposes. All contractor operations requiring support from KSC, such as outages or fire and safety standbys for contractor operations shall be identified.

J-B-36 PAD B - ADDITIONAL INFORMATION – CONFINED SPACES

Completion of work under this contract may include work in confined spaces. Depending on the contractor's means and methods, special requirements, coordination, and precautions will apply to any contract work taking place in confined spaces. Prior to beginning work, the contractor shall complete a Confined Space Hazard Assessment (CSHA) in coordination with NASA. The contractor shall use the CSHA as the basis for preparation of Confined Space Entry Permit/Authorization (KSC Form 13-287) when required. Work in confined spaces requires the contractor to provide a written program for such work as part of its health and safety plan, which implements the requirements of 29CFR 1910.146. For work in telecommunications manholes, provisions of 29 CFR 1910.268 are also applicable. The contractor shall coordinate any such work in confined spaces with NASA Environmental Health, Fire Services, and any other resident government or contractor organization whose employees may have access to the work location.

The contractor shall include in his bid the resources to provide for worker's safety and health to comply with Federal, state and local regulations as necessary and as affected by the choice of means and methods to execute the contracted work. The change from a non-permitted confined area to a permitted confined area, as affected by contractor operations, will not be considered by the Government to be a differing site condition.

J-B-37 ELECTRONIC SUBMITTALS AND DOCUMENTATION

This project will utilize an electronic submittal and documentation system for contract administration through KSC's SharePoint service. Contractor shall submit all shop drawings, request for information (RFIs), deviation waivers (D/Ws) and other contract documentation in Adobe PDF format utilizing this system. The Government will provide fillable Adobe PDF format cover sheets for RFI's, Shop Drawings, and Deviation Waivers. Contractor shall be able to sign in digital form compatible with Adobe Acrobat and Microsoft Software.

All transmittals typically requiring 11x17 inch paper or larger (fabrication, installation, coordination, control drawings, etc) shall be submitted in 6 hard copies to the COR in addition to the electronic Adobe PDF submittal.

Access to the system will require coordination with the COR or Alt-COR. It is recommended that two personnel be appointed as the administrators from the Contractor's team as they will require a RSA SecurID token which will be provided by the Government along with Cisco VPN software that is required to be installed and operated to log into the system.