



Embassy of the United States of America

United States Embassy Tbilisi
Date: February 9, 2015

Dear Prospective Offeror/Quoter:

The American Embassy Tbilisi in Georgia has a requirement for a contractor to provide Installation of Duct Systems for Roof Top Units. You are invited to submit a quotation. The Request for Quotations (RFQ) consists of the following sections:

1. Standard Form SF-1442
2. Attachments

The Embassy plans to award a purchase order. You are encouraged to make your quotation competitive. You are also cautioned against any collusion with other potential offerors with regard to price quotations to be submitted. The RFQ does not commit the American Embassy to make any award. The Embassy may cancel this RFQ or any part of it.

Please read the RFQ carefully, and if you are interested, submit your quotation. Return the completed SF-1442 to either the address shown in Block 7 of the SF-1442 or send by e-mail at BregvadzeN@state.gov no later than **5pm February 19, 2015**. Oral quotations will not be accepted.

Sincerely,

/Signed

Mirena Hine
Contracting Officer

Enclosure:
As Stated.

SOLICITATION, OFFER, AND AWARD <i>(Construction, Alteration, or Repair)</i>	1. SOLICITATION NO.	2. TYPE OF SOLICITATION	3. DATE ISSUED	PAGE OF PAGES
	SGG80015Q0246	<input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> RFQ	2/9/2015	1

IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.

4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST NO.	6. PROJECT NO.
	<u>PR3967232</u>	
7. ISSUED BY	CODE	8. ADDRESS OFFER TO
GSO Procurement Section US Embassy Tbilisi 11 George Balanchine Street, 0131, Tbilisi, Georgia Att: Nana Bregvadze	0131	See Item 7
9. FOR INFORMATION CALL:	A. NAME	B. TELEPHONE NO.
	Nana Bregvadze	995 32 227 72 01

SOLICITATION

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

10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS:

- SF1442 cover sheet – request for quotation
- Price
- Scope of Work
- Packaging and Marking
- Inspection and Acceptance
- Deliveries/Performance
- Administrative Data
- Special Requirements
- Clauses
- List of Attachments
- Quotation Information
- Evaluation Criteria
- Representations, Certifications and other Statements of Quoters

11. The Contractor shall begin performance within **5** calendar days and complete it within **30** business days after receiving award, notice to proceed. This performance period is ~~X~~ mandatory, negotiable. (See _____.)

12A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? <i>(If "YES," indicate within how many calendar days after award in Item 12B.)</i>	12B. CALENDAR DAYS
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	

13. ADDITIONAL SOLICITATION REQUIREMENTS:

- A. Sealed offers in original and **2** copies to perform the work required are due at the place specified in Item 8 by **5pm** local time no later than **February 19, 2015**. If this is a sealed bid solicitation, offers must 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 is, is not 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 **90** 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 at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government 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 →

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

19. ACKNOWLEDGMENT 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 <i>(Type or print)</i>	20B. SIGNATURE	20C. OFFER DATE
--	----------------	-----------------

AWARD (To be completed by Government)

21. ITEMS ACCEPTED:

22. AMOUNT	23. ACCOUNTING AND APPROPRIATION DATA
------------	---------------------------------------

24. SUBMIT INVOICES TO ADDRESS SHOWN IN <i>2 copies</i>	ITEM F	25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO <input type="checkbox"/> 10 U.S.C. 2304(c)() <input type="checkbox"/> 41 U.S.C. 253(c)()
--	------------------	--

26. ADMINISTERED BY Block 31	CODE	27. PAYMENT WILL BE MADE BY
---------------------------------	------	-----------------------------

CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE

<input type="checkbox"/> 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, requisitions identified on this form and any continuation sheets for the consideration slated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications or incorporated by reference in or attached to this	<input type="checkbox"/> 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 is 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	31C. AWARD DATE
		BY	

TABLE OF CONTENTS

SF-1442 COVER SHEET

A. PRICE

B. SCOPE OF WORK

C. PACKAGING AND MARKING

D. INSPECTION AND ACCEPTANCE

E. DELIVERIES OR PERFORMANCE

F. ADMINISTRATIVE DATA

G. SPECIAL REQUIREMENTS

H. CLAUSES

I. LIST OF ATTACHMENTS

J. QUOTATION INFORMATION

K. EVALUATION CRITERIA

L. REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS
OF OFFERORS OR QUOTERS

ATTACHMENTS:

Attachment 1: Standard Form 25, "Performance and Guaranty Bond" – N/A

Attachment 2: Standard Form 25A, "Payment Bond" – N/A

Attachment 3: Sample Letter of Bank Guaranty

Attachment 4: Breakdown of Price by Divisions of Specifications

Attachment 5: Drawings

Attachment 6: Specifications/Scope of Work

REQUEST FOR QUOTATIONS - CONSTRUCTION

A. PRICE

The Contractor shall complete all work, including furnishing all labor, material, equipment and services required under this purchase order for the following firm fixed price and within the time specified. This price shall include all labor, materials, all insurances, overhead and profit.

Total Price (including all labor, materials, overhead and profit)	
---	--

A.1 VALUE ADDED TAX

VALUE ADDED TAX (VAT). The Government will not reimburse the Contractor for VAT under this contract. The Contractor shall not include a line for VAT on Invoices as the U.S. Embassy has a tax exemption certificate with the host government.

B. SCOPE OF WORK

The character and scope of the work are set forth in the contract. The Contractor shall furnish and install all materials required by this contract.

In case of differences between small and large-scale drawings, the latter will govern. Where a portion of the work is drawn in detail and the remainder of the work is indicated in outline, the parts drawn in detail shall apply also to all other portions of the work.

C. PACKAGING AND MARKING

Mark materials delivered to the site as follows:

**US Embassy Tbilisi/SGG80015M0246
11 George Balanchine Street
0131, Tbilisi, Georgia**

D. INSPECTION AND ACCEPTANCE

The COR, or his/her authorized representatives, will inspect from time to time the services being performed and the supplies furnished to determine whether work is being performed in a satisfactory manner, and that all supplies are of acceptable quality and standards.

The Contractor shall be responsible for any countermeasures or corrective action, within the scope of this contract, which may be required by the Contracting Officer as a result of such inspection.

D.1 SUBSTANTIAL COMPLETION

(a) "*Substantial Completion*" means the stage in the progress of the work as determined and certified by the Contracting Officer in writing to the Contractor, on which the work (or a portion designated by the Government) is sufficiently complete and satisfactory. Substantial completion means that the property may be occupied or used for the purpose for which it is intended, and only minor items such as touch-up, adjustments, and minor replacements or installations remain to be completed or corrected which:

- (1) do not interfere with the intended occupancy or utilization of the work, and
- (2) can be completed or corrected within the time period required for final completion.

(b) The "date of substantial completion" means the date determined by the Contracting Officer or authorized Government representative as of which substantial completion of the work has been achieved.

Use and Possession upon Substantial Completion - The Government shall have the right to take possession of and use the work upon substantial completion. Upon notice by the Contractor that the work is substantially complete (a Request for Substantial Completion) and an inspection by the Contracting Officer or an authorized Government representative (including any required tests), the Contracting Officer shall furnish the Contractor a Certificate of Substantial Completion. The certificate will be accompanied by a Schedule of Defects listing items of work remaining to be performed, completed or corrected before final completion and acceptance. Failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The Government's possession or use upon substantial completion shall not be deemed an acceptance of any work under the contract.

D.2 FINAL COMPLETION AND ACCEPTANCE

D.2.1 "Final completion and acceptance" means the stage in the progress of the work as determined by the Contracting Officer and confirmed in writing to the Contractor, at which all work required under the contract has been completed in a satisfactory manner, subject to the discovery of defects after final completion, and except for items specifically excluded in the notice of final acceptance.

D.2.2 The "*date of final completion and acceptance*" means the date determined by the Contracting Officer when final completion of the work has been achieved, as indicated by written notice to the Contractor.

D.2.3 FINAL INSPECTION AND TESTS. The Contractor shall give the Contracting Officer at least five (5) days advance written notice of the date when the work will be fully completed and ready for final inspection and tests. Final inspection and tests will be started not later than the date specified in the notice unless the Contracting Officer determines that the work is not ready for final inspection and so informs the Contractor.

D.2.4 FINAL ACCEPTANCE. If the Contracting Officer is satisfied that the work under the contract is complete (with the exception of continuing obligations), the Contracting Officer shall issue to the Contractor a notice of final acceptance and make final payment upon:

- Satisfactory completion of all required tests,
- A final inspection that all items by the Contracting Officer listed in the Schedule of Defects have been completed or corrected and that the work is finally complete (subject to the discovery of defects after final completion), and
- Submittal by the Contractor of all documents and other items required upon completion of the work, including a final request for payment (Request for Final Acceptance).

E. DELIVERIES OR PERFORMANCE

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

The Contractor shall be required to:

- (a) commence work under this contract within **5** calendar days after the date the Contractor receives the notice to proceed,
- (b) prosecute the work diligently, and,
- (c) complete the entire work ready for use not later than 30 business days after NTP.

The time stated for completion shall include final cleanup of the premises.

52.211-12 LIQUIDATED DAMAGES - CONSTRUCTION (SEPT 2000) N/A

CONTRACTOR'S SUBMISSION OF CONSTRUCTION SCHEDULES

(a) The time for submission of the schedules referenced in FAR 52.236-15, "Schedules for Construction Contracts", paragraph (a), is hereby modified to reflect the due date for submission as 5 calendar days after receipt of an executed contract".

(b) These schedules shall include the time by which shop drawings, product data, samples and other submittals required by the contract will be submitted for approval.

(c) The Contractor shall revise such schedules (1) to account for the actual progress of the work, (2) to reflect approved adjustments in the performance schedule, and (3) as required by the Contracting Officer to achieve coordination with work by the Government and any separate contractors used by the Government. The Contractor shall submit a schedule, which sequences work so as to minimize disruption at the job site.

(d) All deliverables shall be in the English language and any system of dimensions (English or metric) shown shall be consistent with that used in the contract. No extension of time shall be allowed due to delay by the Government in approving such deliverables if the Contractor has failed to act promptly and responsively in submitting its deliverables. The Contractor shall identify each deliverable as required by the contract.

(e) Acceptance of Schedule: When the Government has accepted any time schedule; it shall be binding upon the Contractor. The completion date is fixed and may be extended only by a written contract modification signed by the Contracting Officer. Acceptance or approval of any schedule or revision thereof by the Government shall not:

- (1) Extend the completion date or obligate the Government to do so,
- (2) Constitute acceptance or approval of any delay, or
- (3) Excuse the Contractor from or relieve the Contractor of its obligation to maintain the progress of the work and achieve final completion by the established completion date.

NOTICE OF DELAY

If the Contractor receives a notice of any change in the work, or if any other conditions arise which are likely to cause or are actually causing delays which the Contractor believes may result in late completion of the project, the Contractor shall notify the Contracting Officer. The Contractor's notice shall state the effect, if any, of such change or other conditions upon the approved schedule, and shall state in what respects, if any, the relevant schedule or the completion date should be revised. The Contractor shall give such notice promptly, not more than ten (10) days after the first event giving rise to the delay or prospective delay. Only the Contracting Officer may make revisions to the approved time schedule.

NOTICE TO PROCEED

(a) After receiving and accepting any bonds or evidence of insurance, the Contracting Officer will provide the Contractor a Notice to Proceed. The Contractor must then prosecute the work, commencing and completing performance not later than the time period established in the contract.

(b) It is possible that the Contracting Officer may elect to issue the Notice to Proceed before receipt and acceptance of any bonds or evidence of insurance. Issuance of a Notice to Proceed by the Government before receipt of the required bonds or insurance certificates or policies shall not be a waiver of the requirement to furnish these documents.

WORKING HOURS

All work shall be performed during business days from 9:00 am to 6:00pm. Other hours, if requested by the Contractor, may be approved by the Contracting Officer's Representative (COR). The Contractor shall give 24 hours in advance to COR who will consider any deviation from the hours identified above. Changes in work hours, initiated by the Contractor, will not be a cause for a price increase.

PRECONSTRUCTION CONFERENCE

A preconstruction conference will be held 5 days after contract award at US Embassy Tbilisi, 11 George Balanchine Street to discuss the schedule, submittals, notice to proceed, mobilization and other important issues that effect construction progress. See FAR 52.236-26, Preconstruction Conference.

<u>DELIVERABLES - The following items shall be delivered under this contract:</u>			
<u>Description</u>	<u>Quantity</u>	<u>Deliver Date</u>	<u>Deliver To</u>
Section G. Securities/Insurance	1	5days after award	CO
Section E. Construction Schedule	1	5 days after award	COR
Section E. Preconstruction Conference	1	5 days after award	COR
Section G. Personnel Biographies	1	3 days after award	COR
Section F. Payment Request	1	Last calendar day of each month	COR
Section D. Request for Substantial Completion	1	15 days before inspection	COR
Section D. Request for Final Acceptance	1	5 days before inspection	COR

F. ADMINISTRATIVE DATA

652.242-70 CONTRACTING OFFICER'S REPRESENTATIVE (COR) (AUG 1999)

(a) The Contracting Officer may designate in writing one or more Government employees, by name or position title, to take action for the Contracting Officer under this contract. Each designee shall be identified as a Contracting Officer's Representative (COR). Such designation(s) shall specify the scope and limitations of the authority so delegated; provided, that the designee shall not change the terms or conditions of the contract, unless the COR is a warranted Contracting Officer and this authority is delegated in the designation.

(b) The COR for this contract is Zaza Abramia, A/Maintenance Supervisor.

Payment: The Contractor's attention is directed to Section H, 52.232-5, "Payments Under Fixed-Price Construction Contracts". The following elaborates on the information contained in that clause.

Requests for payment, may be made no more frequently than monthly. Payment requests shall cover the value of labor and materials completed and in place, including a prorated portion of overhead and profit.

After receipt of the Contractor's request for payment, and on the basis of an inspection of the work, the Contracting Officer shall make a determination as to the amount, which is then due. If the Contracting Officer does not approve payment of the full amount applied for, less the retainage allowed by in 52.232-5, the Contracting Officer shall advise the Contractor as to the reasons.

Under the authority of 52.232-27(a), the 14 day period identified in FAR 52.232-27(a)(1)(i)(A) is hereby changed to 30 days.

American Embassy Tbilisi/Financial Management Office
11 George Balanchine Street, 0131, Tbilisi, Georgia

The Contractor shall show prices without VAT (Value Added Tax) on invoices submitted for payment.

G. SPECIAL REQUIREMENTS

G.1.0 PERFORMANCE/PAYMENT PROTECTION - The Contractor shall furnish some form of payment protection as described in 52.228-13 in the amount of 50% of the contract price.

G.1.1 The Contractor shall provide the information required by the paragraph above within 5 (5) calendar days after award. Failure to timely submit the required security may result in rescinding or termination of the contract by the Government. If the contract is terminated, the Contractor will be liable for those costs as described in FAR 52.249-10, Default (Fixed-Price Construction), which is included in this purchase order.

G.1.2 The bonds or alternate performance security shall guarantee the Contractor's execution and completion of the work within the contract time. This security shall also guarantee the correction of any defects after completion, the payment of all wages and other amounts payable by the Contractor under its subcontracts or for labor and materials, and the satisfaction or removal of any liens or encumbrances placed on the work.

G.1.3 The required securities shall remain in effect in the full amount required until final acceptance of the project by the Government. Upon final acceptance, the penal sum of the performance security shall be reduced to 10% of the contract price. The security shall remain in effect for one year after the date of final completion and acceptance, and the Contractor shall pay any premium required for the entire period of coverage.

G.2.0 INSURANCE - The Contractor is required by FAR 52.228-5, "Insurance - Work on a Government Installation" to provide whatever insurance is legally necessary. The Contractor shall at its own expense provide and maintain during the entire performance period the following insurance amounts:

G.2.1 GENERAL LIABILITY (includes premises/operations, collapse hazard, products, completed operations, contractual, independent contractors, broad form property damage, personal injury):

(1) BODILY INJURY, ON OR OFF THE SITE, IN U.S. DOLLARS	
Per Occurrence	5,000 USD
Cumulative	20,000 USD
(2) PROPERTY DAMAGE, ON OR OFF THE SITE, IN U.S. DOLLARS	
Per Occurrence	10,000 USD
Cumulative	30,000 USD

G.2.2 The foregoing types and amounts of insurance are the minimums required. The Contractor shall obtain any other types of insurance required by local law or that are ordinarily or customarily obtained in the location of the work. The limit of such insurance shall be as

provided by law or sufficient to meet normal and customary claims.

G.2.3 The Contractor agrees that the Government shall not be responsible for personal injuries or for damages to any property of the Contractor, its officers, agents, servants, and employees, or any other person, arising from and incident to the Contractor's performance of this contract. The Contractor shall hold harmless and indemnify the Government from any and all claims arising therefrom, except in the instance of gross negligence on the part of the Government.

G.2.4 The Contractor shall obtain adequate insurance for damage to, or theft of, materials and equipment in insurance coverage for loose transit to the site or in storage on or off the site.

G.2.5 The general liability policy required of the Contractor shall name "the United States of America, acting by and through the Department of State", as an additional insured with respect to operations performed under this contract.

G.3.0 DOCUMENT DESCRIPTIONS

G.3.1 SUPPLEMENTAL DOCUMENTS: The Contracting Officer shall furnish from time to time such detailed drawings and other information as is considered necessary, in the opinion of the Contracting Officer, to interpret, clarify, supplement, or correct inconsistencies, errors or omissions in the Contract documents, or to describe minor changes in the work not involving an increase in the contract price or extension of the contract time. The Contractor shall comply with the requirements of the supplemental documents, and unless prompt objection is made by the Contractor within 20 days, their issuance shall not provide for any claim for an increase in the Contract price or an extension of contract time.

G.3.1.1. RECORD DOCUMENTS. The Contractor shall maintain at the project site:

- (1) a current marked set of Contract drawings and specifications indicating all interpretations and clarification, contract modifications, change orders, or any other departure from the contract requirements approved by the Contracting Officer; and,
- (2) a complete set of record shop drawings, product data, samples and other submittals as approved by the Contracting Officer.

G.3.1.2. "As-Built" Documents: After final completion of the work, but before final acceptance thereof, the Contractor shall provide:

- (1) a complete set of "as-built" drawings, based upon the record set of drawings, marked to show the details of construction as actually accomplished; and,
- (2) record shop drawings and other submittals, in the number and form as required by the specifications.

G.4.0 LAWS AND REGULATIONS - The Contractor shall, without additional expense to the Government, be responsible for complying with all laws, codes, ordinances, and regulations applicable to the performance of the work, including those of the host country, and with the lawful orders of any governmental authority having jurisdiction. Host country authorities may not enter the construction site without the permission of the Contracting Officer. Unless otherwise directed by the Contracting Officer, the Contractor shall comply with the more stringent of the requirements of such laws, regulations and orders and of the contract. In the event of a conflict between the contract and such laws, regulations and orders, the Contractor shall promptly advise the Contracting Officer of the conflict and of the Contractor's proposed course of action for resolution by the Contracting Officer.

G.4.1 The Contractor shall comply with all local labor laws, regulations, customs and practices pertaining to labor, safety, and similar matters, to the extent that such compliance is not inconsistent with the requirements of this contract.

G.4.2 The Contractor shall give written assurance to the Contracting Officer that all subcontractors and others performing work on or for the project have obtained all requisite licenses and permits.

G.4.3 The Contractor shall submit proper documentation and evidence satisfactory to the Contracting Officer of compliance with this clause.

G.5.0 CONSTRUCTION PERSONNEL - The Contractor shall maintain discipline at the site and at all times take all reasonable precautions to prevent any unlawful, riotous, or disorderly conduct by or among those employed at the site. The Contractor shall ensure the preservation of peace and protection of persons and property in the neighborhood of the project against such action. The Contracting Officer may require, in writing that the Contractor remove from the work any employee that the Contracting Officer deems incompetent, careless, insubordinate or otherwise objectionable, or whose continued employment on the project is deemed by the Contracting Officer to be contrary to the Government's interests.

G.5.1 If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice, including all relevant information, to the Contracting Officer.

G.5.2 After award, the Contractor has 5 calendar days to submit to the Contracting Officer a list of workers and supervisors assigned to this project for the Government to conduct all necessary security checks. It is anticipated that security checks will take 4 days to perform. For each individual the list shall include:

- Full Name
- Place and Date of Birth
- Current Address
- Identification number

Failure to provide any of the above information may be considered grounds for rejection and/or resubmittal of the application. Once the Government has completed the security screening and approved the applicants a badge will be provided to the individual for access to the site. This badge may be revoked at any time due to the falsification of data, or misconduct on site.

G.5.3 The Contractor shall provide an English speaking supervisor on site at all times. This position is considered as key personnel under this purchase order.

G.6.0 Materials and Equipment - All materials and equipment incorporated into the work shall be new and for the purpose intended, unless otherwise specified. All workmanship shall be of good quality and performed in a skillful manner that will withstand inspection by the Contracting Officer.

G.7.0 SPECIAL WARRANTIES

G.7.1 Any special warranties that may be required under the contract shall be subject to the stipulations set forth in 52.246-21, "Warranty of Construction", as long as they are not in conflict.

G.7.2 The Contractor shall obtain and furnish to the Government all information required to make any subcontractor's, manufacturer's, or supplier's guarantee or warranty legally binding and effective. The Contractor shall submit both the information and the guarantee or warranty to the Government in sufficient time to permit the Government to meet any time limit specified in the guarantee or warranty, but not later than completion and acceptance of all work under this contract.

G.8.0 EQUITABLE ADJUSTMENTS

Any circumstance for which the contract provides an equitable adjustment that causes a change within the meaning of paragraph (a) of the "Changes" clause shall be treated as a change under that clause; provided, that the Contractor gives the Contracting Officer prompt written notice (within 20 days) stating:

- (a) the date, circumstances, and applicable contract clause authorizing an equitable adjustment and
- (b) that the Contractor regards the event as a changed condition for which an equitable adjustment is allowed under the contract

The Contractor shall provide written notice of a differing site condition within 10 calendar days of occurrence following FAR 52.236-2, Differing Site Conditions.

G.9.0 ZONING APPROVALS AND PERMITS

The Government shall be responsible for:

- obtaining proper zoning or other land use control approval for the project
- obtaining the approval of the Contracting Drawings and Specifications
- paying fees due for the foregoing; and,
- for obtaining and paying for the initial building permits.

H. CLAUSES

This contract 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 this/these address(es): <http://www.acquisition.gov/far/> or <http://farsite.hill.af.mil/vffara.htm>. Please note these addresses are subject to change.

If the Federal Acquisition Regulation (FAR) is not available at the locations indicated above, use the Department of State Acquisition website at <http://www.statebuy.state.gov/> to access links to the FAR. You may also use an internet “search engine” (for example, Google, Yahoo, Excite) to obtain the latest location of the most current FAR.

The following Federal Acquisition Regulation clause(s) is/are incorporated by reference (48 CFR CH. 1):

<u>CLAUSE</u>	<u>TITLE AND DATE</u>
52.202-1	DEFINITIONS (NOV 2013)
52.204-9	PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL (JAN 2011)
52.204-10	REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS (JULY 2013)
52.204-12	DATA UNIVERSAL NUMBERING SYSTEM NUMBER MAINTENANCE (DEC 2012)
52.204-13	SYSTEM FOR AWARD MANAGEMENT MAINTENANCE (JULY 2013)
52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED OR PROPOSED FOR DEBARMENT (AUG 2013)
52.209-9	UPDATES OF INFORMATION REGARDING RESPONSIBILITY MATTERS (JULY 2013)
52.213-4	TERMS AND CONDITIONS –SIMPLIFIED ACQUISITIONS (OTHER THAN COMMERCIAL ITEMS) (OCT 2014)
52.216-7	ALLOWABLE COST AND PAYMENT (JUN 2013)
52.222-1	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)

- 52.222-19 CHILD LABOR – COOPERATION WITH AUTHORITIES AND REMEDIES (JAN 2014)
- 52.222-50 COMBATING TRAFFICKING IN PERSONS (FEB 2009)
- 52.223-18 ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING (AUG 2011)
- 52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUNE 2008)
- 52.225-14 INCONSISTENCY BETWEEN ENGLISH VERSION AND TRANSLATION OF CONTRACT (FEB 2000)

- 52.228-4 WORKERS’ COMPENSATION AND WAR-HAZARD INSURANCE OVERSEAS (APR 1984)
- 52.228-5 INSURANCE - WORK ON A GOVERNMENT INSTALLATION (JAN 1997)
- 52.228-11 PLEDGES OF ASSETS (JAN 2012)
- 52.228-13 ALTERNATIVE PAYMENT PROTECTION (JULY 2000)
- 52.228-14 IRREVOCABLE LETTER OF CREDIT (NOV 2014)
- 52.229-6 TAXES - FOREIGN FIXED-PRICE CONTRACTS (FEB 2013)
- 52.229-7 TAXES- FIXED PRICE CONTRACTS WITH FOREIGN GOVERNMENTS (FEB 2013)
- 52.232-5 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (MAY 2014)
- 52.232-8 DISCOUNTS FOR PROMPT PAYMENT (FEB 2002)
- 52.232-11 EXTRAS (APR 1984)
- 52.232-18 AVAILABILITY OF FUNDS (APR 1984)
- 52.232-22 LIMITATION OF FUNDS (APR 1984)
- 52.232-25 PROMPT PAYMENT (JULY 2013)
- 52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (MAY 2014)

- 52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER - SYSTEM FOR AWARD MANAGEMENT (JULY 2013)
- 52.232-34 PAYMENT BY ELECTRONIC FUNDS TRANSFER – OTHER THAN SYSTEM FOR AWARD MANAGEMENT (JULY 2013)
- 52.233-1 DISPUTES (MAY 2014) *Alternate I (DEC 1991)*
- 52.233-3 PROTEST AFTER AWARD (AUG 1996)
- 52.236-2 DIFFERING SITE CONDITIONS (APR 1984)
- 52.236-3 SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK (APR 1984)
- 52.236-5 MATERIAL AND WORKMANSHIP (APR 1984)
- 52.236-6 SUPERINTENDENCE BY THE CONTRACTOR (APR 1984)
- 52.236-7 PERMITS AND RESPONSIBILITIES (NOV 1991)
- 52.236-8 OTHER CONTRACTS (APR 1984)
- 52.236-9 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS (APR 1984)
- 52.236-10 OPERATIONS AND STORAGE AREAS (APR 1984)
- 52.236-11 USE AND POSSESSION PRIOR TO COMPLETION (APR 1984)
- 52.236-12 CLEANING UP (APR 1984)
- 52.236-14 AVAILABILITY AND USE OF UTILITY SERVICES (APR 1984)
- 52.236-15 SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984)
- 52.236-21 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FEB 1997)
- 52.236-26 PRECONSTRUCTION CONFERENCE (FEB 1995)
- 52.242-14 SUSPENSION OF WORK (APR 1984)
- 52.243-4 CHANGES (JUN 2007)
- 52.243-5 CHANGES AND CHANGED CONDITIONS (APR 1984)

- 52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS (JULY 2014)
- 52.245-2 GOVERNMENT PROPERTY INSTALLATION OPERATION SERVICES (APR 2012)
- 52.245-9 USE AND CHARGES (APR 2012)
- 52.246-12 INSPECTION OF CONSTRUCTION (AUG 1996)
- 52.246-17 WARRANTY OF SUPPLIES OF A NONCOMPLEX NATURE (JUN 2003)
- 52.246-21 WARRANTY OF CONSTRUCTION (MAR 1994)
- 52.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (APR 2012) *Alternate I (SEPT 1996)*
- 52.249-10 DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984)
- 52.249-14 EXCUSABLE DELAYS (APR 1984)

The following Department of State Acquisition Regulation (DOSAR) clause(s) is/are set forth in full text:

652.204-70 DEPARTMENT OF STATE PERSONAL IDENTIFICATION CARD ISSUANCE PROCEDURES (MAY 2011)

(a) The Contractor shall comply with the Department of State (DOS) Personal Identification Card Issuance Procedures for all employees performing under this contract who require frequent and continuing access to DOS facilities, or information systems. The Contractor shall insert this clause in all subcontracts when the subcontractor's employees will require frequent and continuing access to DOS facilities, or information systems.

(b) The DOS Personal Identification Card Issuance Procedures may be accessed at <http://www.state.gov/m/ds/rls/rpt/c21664.htm>.

(End of clause)

652.229-71 PERSONAL PROPERTY DISPOSITION AT POSTS ABROAD (AUG 1999)

Regulations at 22 CFR Part 136 require that U.S. Government employees and their families do not profit personally from sales or other transactions with persons who are not themselves entitled to exemption from import restrictions, duties, or taxes. Should the Contractor experience importation or tax privileges in a foreign country because of its contractual relationship to the United States Government, the Contractor shall observe the requirements of 22 CFR Part 136 and all policies, rules, and procedures issued by the chief of mission in that foreign country.

(End of clause)

CONTRACTOR IDENTIFICATION (JULY 2008)

Contract performance may require contractor personnel to attend meetings with government personnel and the public, work within government offices, and/or utilize government email.

Contractor personnel must take the following actions to identify themselves as non-federal employees:

- 1) Use an e-mail signature block that shows name, the office being supported and company affiliation (e.g. "John Smith, Office of Human Resources, ACME Corporation Support Contractor");
- 2) Clearly identify themselves and their contractor affiliation in meetings;
- 3) Identify their contractor affiliation in Departmental e-mail and phone listings whenever contractor personnel are included in those listings; and
- 4) Contractor personnel may not utilize Department of State logos or indicia on business cards.

(End of clause)

652.236-70 ACCIDENT PREVENTION (APR 2004)

(a) *General.* The Contractor shall provide and maintain work environments and procedures which will safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to contractor operations and activities; avoid interruptions of Government operations and delays in project completion dates; and, control costs in the performance of this contract. For these purposes, the Contractor shall:

- (1) Provide appropriate safety barricades, signs and signal lights;
- (2) Comply with the standards issued by any local government authority having jurisdiction over occupational health and safety issues; and,
- (3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for this purpose are taken.
- (4) For overseas construction projects, the Contracting Officer shall specify in writing additional requirements regarding safety if the work involves:
 - (i) Scaffolding;
 - (ii) Work at heights above two (2) meters;
 - (iii) Trenching or other excavation greater than one (1) meter in depth;
 - (iv) Earth moving equipment;
 - (v) Temporary wiring, use of portable electric tools, or other recognized electrical hazards. Temporary wiring and portable electric tools require the use of a ground fault circuit interrupter (GFCI) in the affected circuits; other electrical hazards may also require the use of a GFCI;
 - (vi) Work in confined spaces (limited exits, potential for oxygen less than 19.5 percent or combustible atmosphere, potential for solid or liquid engulfment, or other hazards considered to be immediately dangerous to life or health such as water tanks, transformer vaults, sewers, cisterns, etc.);
 - (vii) Hazardous materials – a material with a physical or health hazard including but not limited to, flammable, explosive, corrosive, toxic, reactive or unstable, or any

operations which creates any kind of contamination inside an occupied building such as dust from demolition activities, paints, solvents, etc.; or
(viii) Hazardous noise levels.

(b) *Records.* The Contractor shall maintain an accurate record of exposure data on all accidents incident to work performed under this contract resulting in death, traumatic injury, occupational disease, or damage to or theft of property, materials, supplies, or equipment. The Contractor shall report this data in the manner prescribed by the Contracting Officer.

(c) *Subcontracts.* The Contractor shall be responsible for its subcontractors' compliance with this clause.

(d) *Written program.* Before commencing work, the Contractor shall:

(1) Submit a written plan to the Contracting Officer for implementing this clause. The plan shall include specific management or technical procedures for effectively controlling hazards associated with the project; and,

(2) Meet with the Contracting Officer to discuss and develop a mutual understanding relative to administration of the overall safety program.

(e) *Notification.* The Contracting Officer shall notify the Contractor of any non-compliance with these requirements and the corrective actions required. This notice, when delivered to the Contractor or the Contractor's representative on site, shall be deemed sufficient notice of the non-compliance and corrective action required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order suspending all or part of the work until satisfactory corrective action has been taken. The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any suspension of work order issued under this clause.

(End of clause)

652.242-73 AUTHORIZATION AND PERFORMANCE (AUG 1999)

(a) The Contractor warrants the following:

(1) That it has obtained authorization to operate and do business in the country or countries in which this contract will be performed;

(2) That it has obtained all necessary licenses and permits required to perform this contract; and,

(3) That it shall comply fully with all laws, decrees, labor standards, and regulations of said country or countries during the performance of this contract.

(b) If the party actually performing the work will be a subcontractor or joint venture partner, then such subcontractor or joint venture partner agrees to the requirements of paragraph (a) of this clause.

(End of clause)

652.243-70 NOTICES (AUG 1999)

Any notice or request relating to this contract given by either party to the other shall be in writing. Said notice or request shall be mailed or delivered by hand to the other party at the address provided in the schedule of the contract. All modifications to the contract must be made in writing by the Contracting Officer.

(End of clause)

I. LIST OF ATTACHMENTS

ATTACHMENT NUMBER	DESCRIPTION OF ATTACHMENT	NUMBER OF PAGES
Attachment 1	Standard Form 25, "Performance and Guaranty Bond"	N/A
Attachment 2	Standard Form 25A, "Payment Bond"	N/A
Attachment 3	Sample Bank Letter of Guaranty	1
Attachment 4	Breakdown of Price by Divisions of Specifications	1
Attachment 5	Drawings	2
Attachment 6	Specifications/ Scope of Work	2

J. QUOTATION INFORMATION

A. QUALIFICATIONS OF OFFERORS

Offerors/quoters must be technically qualified and financially responsible to perform the work described in this solicitation. At a minimum, each Offeror/Quoter must meet the following requirements:

- (1) Be able to understand written and spoken English;
- (2) Have an established business with a permanent address and telephone listing;
- (3) Be able to demonstrate prior construction experience with suitable references;
- (4) Have the necessary personnel, equipment and financial resources available to perform the work;
- (5) Have all licenses and permits required by local law;
- (6) Meet all local insurance requirements;
- (7) Have the ability to obtain or to post adequate performance security, such as bonds, irrevocable letters of credit or guarantees issued by a reputable financial institution;
- (8) Have no adverse criminal record; and
- (9) Have no political or business affiliation which could be considered contrary to the interests of the United States.

B. SUBMISSION OF QUOTATIONS

This solicitation is for the performance of the construction services described in SCOPE OF WORK, and the Attachments which are a part of this request for quotation.

Each quotation must consist of the following:		
VOLUME	TITLE	NUMBER OF COPIES*
I	Standard Form 1442 including a completed Attachment 4, "BREAKDOWN OF PROPOSAL PRICE BY DIVISIONS OF SPECIFICATIONS	2
II	Performance schedule in the form of a "bar chart" and Business Management/Technical Proposal	2

Submit the complete quotation to the address indicated. If mailed, on Standard Form 1442 , or if hand-delivered, use the address set forth below:

The Offeror/Quoter shall identify and explain/justify any deviations, exceptions, or conditional assumptions taken with respect to any of the instructions or requirements of this request for quotation in the appropriate volume of the offer.

Volume II: Performance schedule and Business Management/Technical Proposal.

(a) Present the performance schedule in the form of a "bar chart" indicating when the various portions of the work will be commenced and completed within the required schedule. This bar chart shall be in sufficient detail to clearly show each segregable portion of work and its planned commencement and completion date.

(b) The Business Management/Technical Proposal shall be in two parts, including the following information:

Proposed Work Information - Provide the following:

- (1) A list of the names, addresses and telephone numbers of the owners, partners, and principal officers of the Offeror;
- (2) The name and address of the Offeror's field superintendent for this project;
- (3) A list of the names, addresses, and telephone numbers of subcontractors and principal materials suppliers to be used on the project, indicating what portions of the work will be performed by them; and,

Experience and Past Performance - List all contracts and subcontracts your company has held over the past three years for the same or similar work. Provide the following information for each contract and subcontract:

- (1) Customer's name, address, and telephone numbers of customer's lead contract and technical personnel;
- (2) Contract number and type;
- (3) Date of the contract award place(s) of performance, and completion dates; Contract dollar value;
- (4) Brief description of the work, including responsibilities; and
- (5) Any litigation currently in process or occurring within last 5 years.

C. 52.236-27 SITE VISIT (CONSTRUCTION) (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) A site visit has been scheduled for **11:00am on February 13, 2015**. (c) Participants will meet at US Embassy Tbilisi (Entrance from the warehouse)

D. MAGNITUDE OF CONSTRUCTION PROJECT

It is anticipated that the range in price of this contract will be: 20,000 USD.

E. LATE QUOTATIONS. Late quotations shall be handled in accordance with FAR.

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

This contract incorporates the following 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: <http://acquisition.gov/far/index.html/> or <http://farsite.hill.af.mil/vffara.htm>. Please note these addresses are subject to change.

If the Federal Acquisition Regulation (FAR) is not available at the locations indicated above, use the Department of State Acquisition website at <http://www.statebuy.state.gov> to access the link to the FAR, or use of an Internet "search engine" (for example, Google, Yahoo or Excite) is suggested to obtain the latest location of the most current FAR.

The following Federal Acquisition Regulation provisions are incorporated by reference (48 CFR CH. 1):

<u>PROVISION</u>	<u>TITLE AND DATE</u>
52.204-6	DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER (JULY 2013)
52.204-7	SYSTEM FOR AWARD MANAGEMENT (JULY 2013)
52.204-16	COMMERCIAL AND GOVERNMENT ENTITY CODE REPORTING (NOV 2014)

52.214-34

SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE (APR
1991)

52.215-1

INSTRUCTIONS TO OFFERORS--COMPETITIVE ACQUISITION
(JAN 2004)

K. EVALUATION CRITERIA

Award will be made to the lowest priced, acceptable, responsible quoter. The Government reserves the right to reject quotations that are unreasonably low or high in price.

The Government will determine acceptability by assessing the offeror's compliance with the terms of the RFQ. The Government will determine responsibility by analyzing whether the apparent successful quoter complies with the requirements of FAR 9.1, including:

- ability to comply with the required performance period, taking into consideration all existing commercial and governmental business commitments;
- satisfactory record of integrity and business ethics;
- necessary organization, experience, and skills or the ability to obtain them;
- necessary equipment and facilities or the ability to obtain them; and
- otherwise, qualified and eligible to receive an award under applicable laws and regulations.

The following DOSAR is provided in full text:

652.209-79 REPRESENTATION BY CORPORATION REGARDING AN UNPAID DELINQUENT TAX LIABILITY OR A FELONY CRIMINAL CONVICTION UNDER ANY FEDERAL LAW (SEPT 2014) (DEVIATION per PIB 2014-21)

(a) In accordance with section 7073 of Division K of the Consolidated Appropriations Act, 2014 (Public Law 113-76) none of the funds made available by that Act may be used to enter into a contract with any corporation that –

(1) Was convicted of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency has direct knowledge of the conviction, unless the agency has considered, in accordance with its procedures, that this further action is not necessary to protect the interests of the Government; or

(2) Has any unpaid Federal tax liability that has been assessed for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency has direct knowledge of the unpaid tax liability, unless the Federal agency has considered, in accordance with its procedures, that this further action is not necessary to protect the interests of the Government.

For the purposes of section 7073, it is the Department of State's policy that no award may be made to any corporation covered by (1) or (2) above, unless the Procurement Executive has made a written determination that suspension or debarment is not necessary to protect the interests of the Government.

(b) Offeror represents that—

(1) It is not [X] a corporation that was convicted of a felony criminal violation under a Federal law within the preceding 24 months.

(2) It is not [X] a corporation that has any unpaid Federal tax liability that has been assessed for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

(End of provision)

SECTION L - REPRESENTATIONS, CERTIFICATIONS AND
OTHER STATEMENTS OF OFFERORS OR QUOTERS

L.1 52.204-3 TAXPAYER IDENTIFICATION (OCT 1998)

(a) Definitions.

"Common parent", as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

"Taxpayer Identification Number (TIN)", as used in this provision, means the number required by the IRS to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

(b) All offerors must submit the information required in paragraphs (d) through (f) of this provision in order to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325 (d), reporting requirements of 26 USC 6041, 6041A, and 6050M and implementing regulations issued by the Internal Revenue Service (IRS). If the resulting contract is subject to the reporting requirements described in FAR 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments

(c) otherwise due under the contract.

(d) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 USC 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(e) Taxpayer Identification Number (TIN).

TIN: _____

- TIN has been applied for.
- TIN is not required because:
 - Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the U.S. and does not have an office or place of business or a fiscal paying agent in the U.S.;
 - Offeror is an agency or instrumentality of a foreign government;
 - Offeror is an agency or instrumentality of the Federal Government.

(e) Type of Organization.

- Sole Proprietorship;
- Partnership;
- Corporate Entity (not tax exempt);
- Corporate Entity (tax exempt);
- Government Entity (Federal, State or local);
- Foreign Government;

- International organization per 26 CFR 1.6049-4;
- Other _____.

(f) Common Parent.

- Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this clause.
- Name and TIN of common parent:
 Name _____
 TIN _____

(End of provision)

L.2 52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (NOV 2014)

(a)(1) The North American Industry Classification System (NAICS) code(s) for this acquisition is/are:

- 236118 - Construction Management, residential remodeling**
- 236220 - Construction Management, commercial and institutional building or Warehouse construction**
- 237110 - Construction Management, water and sewage line and related structures**
- 237310 - Construction Management, highway road, street or bridge**
- 237990 - Construction Management, outdoor recreation facility**

(2) The small business size standard is **\$36.5 Million USD**.

(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.

(2) 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:

(i) 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 Certificate. This provision applies to solicitations containing the clause at [52.225-1](#).
- (xvii) [52.225-4](#), Buy American—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 solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions.

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

___ (i) 52.204-17, Ownership or Control of Offeror.

___ (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 Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment- Certification.

___ (iv) 52.222-52, Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services-Certification.

___ (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.

(d) 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)

L.3. 52.225-18 PLACE OF MANUFACTURE (SEPT 2006)

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

“Manufactured end product” means any end product in Federal Supply Classes (FSC) 1000-9999, except—

- (1) FSC 5510, Lumber and Related Basic Wood Materials;
- (2) Federal Supply Group (FSG) 87, Agricultural Supplies;
- (3) FSG 88, Live Animals;
- (4) FSG 89, Food and Related Consumables;
- (5) FSC 9410, Crude Grades of Plant Materials;
- (6) FSC 9430, Miscellaneous Crude Animal Products, Inedible;
- (7) FSC 9440, Miscellaneous Crude Agricultural and Forestry Products;
- (8) FSC 9610, Ores;
- (9) FSC 9620, Minerals, Natural and Synthetic; and
- (10) FSC 9630, Additive Metal Materials.

“Place of manufacture” means the place where an end product is assembled out of components, or otherwise made or processed from raw materials into the finished product that is to be provided to the Government. If a product is disassembled and reassembled, the place of reassembly is not the place of manufacture.

(b) For statistical purposes only, the offeror shall indicate whether the place of manufacture of the end products it expects to provide in response to this solicitation is predominantly—

- (1) In the United States (Check this box if the total anticipated price of offered end products manufactured in the United States exceeds the total anticipated price of offered end products manufactured outside the United States); or
- (2) Outside the United States.

(End of provision)

L.4 AUTHORIZED CONTRACTOR ADMINISTRATOR

If the offeror does not fill-in the blanks below, the official who signed the offer will be deemed to be the offeror's representative for Contract Administration, which includes all matters pertaining to payments.

Name:
Telephone Number:
Address:

--

[Proposal Note: If the bidder/offeror has indicated “yes” in blocks (a)(1), (2), or (3) of the following provision, the bidder/offeror shall include Defense Base Act insurance costs covering those employees in their proposed prices. The bidder/offeror may obtain DBA insurance directly from any Department of Labor approved providers at the DOL website at <http://www.dol.gov/owcp/dlhwc/lscarrier.htm>.]

L.5 652.228-70 DEFENSE BASE ACT – COVERED CONTRACTOR EMPLOYEES (JUN 2006)

(a) Bidders/offerors shall indicate below whether or not any of the following categories of employees will be employed on the resultant contract, and, if so, the number of such employees:

<u>Category</u>	<u>Yes/No</u>	<u>Number</u>	
(1) United States citizens or residents			
(2) Individuals hired in the United States, regardless of citizenship			
(3) Local nationals or third country nationals where contract performance takes place in a country where there are no local workers’ compensation laws		local nationals:	
		third-country nationals:	
(4) Local nationals or third country nationals where contract performance takes place in a country where there are local workers’ compensation laws		local nationals:	
		third-country nationals:	

(b) The Contracting Officer has determined that for performance in the country of—

Workers’ compensation laws exist that will cover local nationals and third country nationals.

✓ Workers’ compensation laws do not exist that will cover local nationals and third country nationals.

(c) If the bidder/offeror has indicated “yes” in block (a)(4) of this provision, the bidder/offeror shall not purchase Defense Base Act insurance for those employees. However, the bidder/offeror shall assume liability toward the employees and their beneficiaries for war-hazard injury, death, capture, or detention, in accordance with the clause at FAR 52.228-4.

(d) RESERVED

(End of provision)

ATTACHMENT #1

STANDARD FORM 25, "PERFORMANCE AND GUARANTY BOND"

N/A

ATTACHMENT #2

STANDARD FORM 25A, "PAYMENT BOND"

N/A

ATTACHMENT #4 - UNITED STATES DEPARTMENT OF STATE
BREAKDOWN OF PRICE BY DIVISIONS OF SPECIFICATIONS

(1) DIVISION/DESCRIPTION (2) LABOR (3) MATERIALS (4) OVERHEAD
(5) PROFIT (6) TOTAL

1. General Requirements
2. Site Work

3. Concrete
4. Masonry

5. Metals
6. Wood and Plastic

7. Thermal and Moisture
8. Doors and Windows

9. Finishes
10. Specialties

11. Equipment
12. Furnishings

13. Special Construction
14. Conveying Systems

15. Mechanical
16. Electrical

TOTAL
in GEL: _____

Allowance Items:

PROPOSAL PRICE: _____

TOTAL:
in GEL

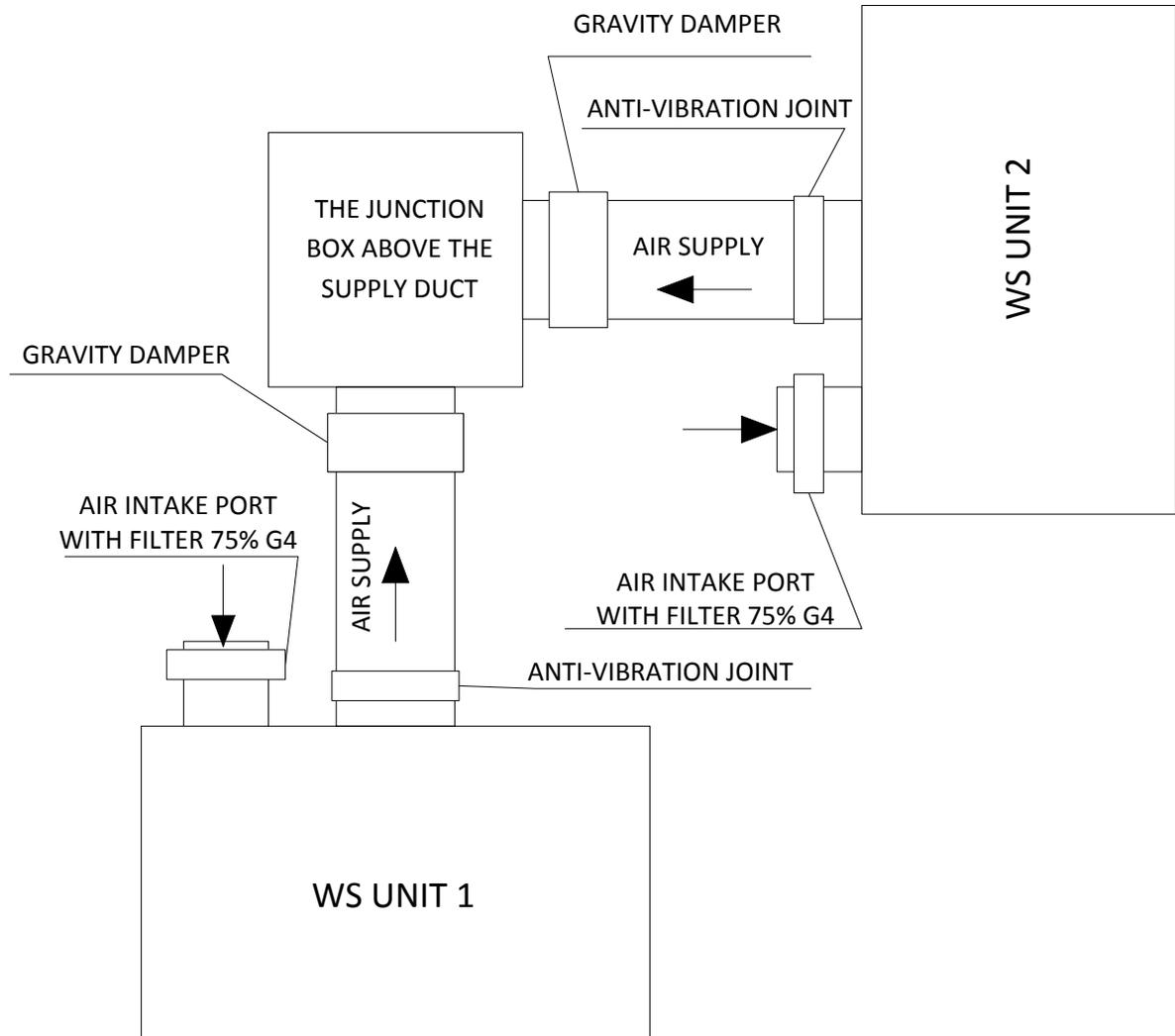
Alternates (list separately; do not total):

Offeror: _____ *Date* _____

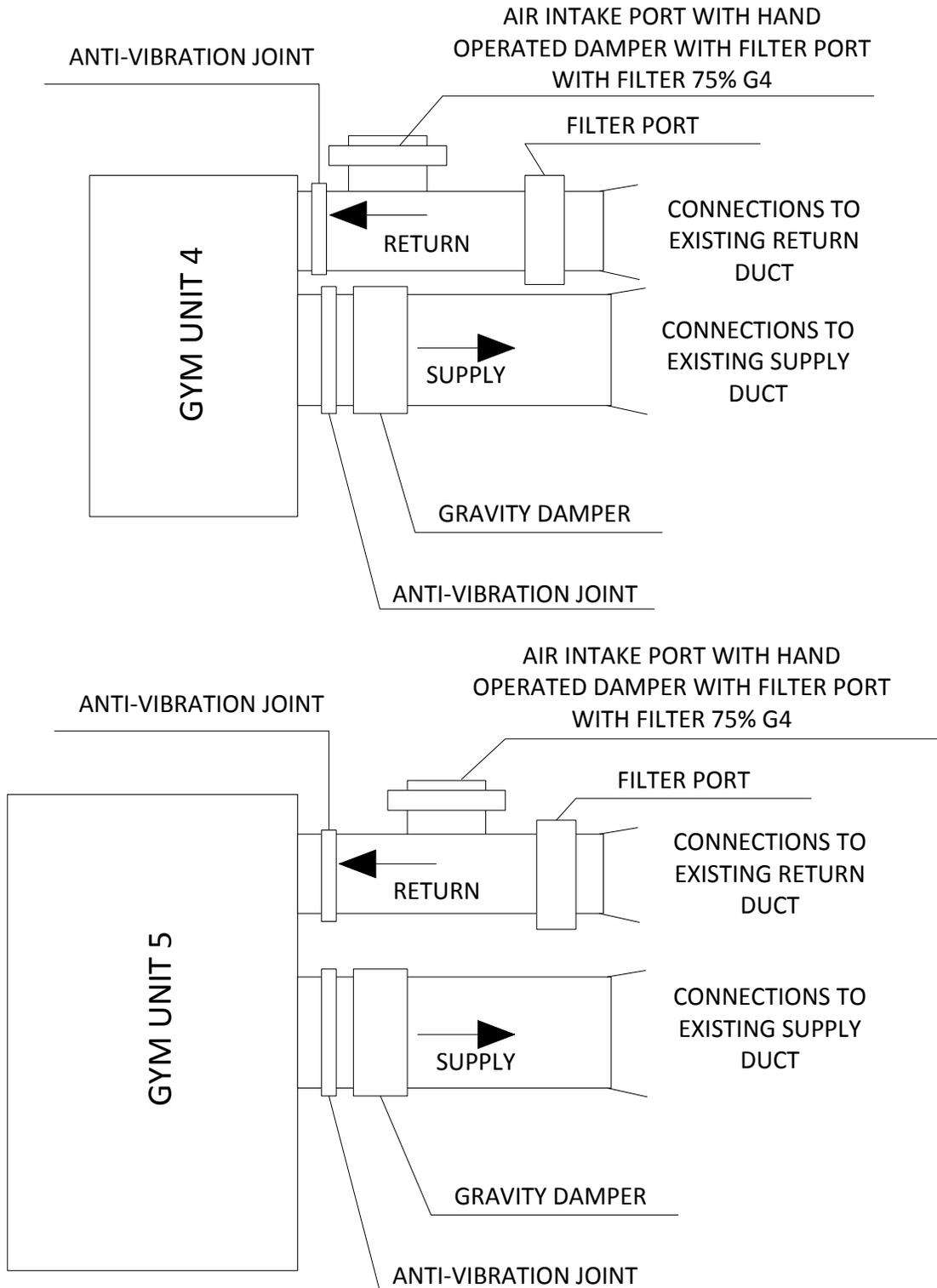
PRICE BREAKDOWN BY DIVISION OF SPECIFICATION ITEMS

ATTACHMENT #5 – DRAWINGS

WORKSHOP ROOF TOP UNITS
PLAN



GYM ROOF TOP UNITS



ATTACHMENT #6 – SPECIFICATIONS/SCOPE OF WORK

SOW FOR INSTALLATION OF DUCT SYSTEMS FOR WS AND GYM ROOF TOP UNITS

(see schematic drawings)

WORKSHOP roof top units WS UNIT 1 and WS UNIT 2;

1. Make the double wall (with insulation) ducts approximately 23 m² (estimated) for air supply, with two gravity dampers (one for each unit), with approximate sizes 700x400mm, to prevent the air backflow in to the supply duct for non-working unit;
2. Make the air intake duct port with the 10x10mm Stainless steel screen on entry and with standard filter slide port.
3. The filter size should be 29"x16"x2", minimum 75% filtration efficiency, and washable;
4. Make the duct jointing box (double wall, with insulation) and make all necessary connections. The jointing box shall be constructed out of 0.7mm zinc plated sheet metal, and enclosure shall be constructed out of 0.5mm zinc plated sheet metal;
5. Contractor should properly seal the area around the supply duct and roof slab against the rain water, according to National building Codes-Chapter 15, section 1503.
6. Install Anti-vibration flexible joining sections between unit and ductwork on supply side, on both units;

GYM Roof top units GYM UNIT 4 and GYM UNIT 5

1. Redo the existing supply and return ducts for GYM Roof top units GYM UNIT 4 and GYM UNIT 5, to adapt to the new installed roof top unit GYM UNIT 5;
2. Make the double wall (with insulation) ducts approximately 15 m² for air supply, with two gravity dampers (one for each unit), one with approximate dimensions of 700x400mm and one with approximate dimensions of 600x350mm, to prevent the air backflow in to the supply duct for non-working unit;
3. Install fresh air intake ports with the hand operating dampers (in future for installation of motorized actuator) at the side of return duct, with standard filter slide port;
4. The intake air filter size should be 29"x16"x2", minimum 75% filtration efficiency, and washable;
5. Install the air filter ports on the returning duct on both units. The size should meet the existing duct size and will be different for each unit. The filter should be minimum 75% filtration efficiency, and washable. If there is possibility to standardize the filter size and make ports for 29"x16"x2" filters will be better;
6. Install Anti-vibration flexible joining sections between units and ductwork on supply side, on both units;
7. The contractor should connect the new ducts to the existing duct system with flanged duct connections and sealed properly;

NOTES:

- All measurements given are estimates only, and it is the contractor's responsibility to confirm.
- All duct connections should be flange designed with bolts or clips connected;
- The air filters should be washable and sliding in to the filter ports smoothly, from the accessible side, covered and locked inside the port;
- The contractor should provide the additional filters any time with extra pay if requested (now is not requested);
- All ductwork shall be double wall, with 2 cm thick self-gluing synthetic rubber insulation between walls and done in high quality level. The ductwork should be done according to US or European building codes and standards. (Construction Codes & Inspection handbook, Chapter 12, Ductwork, which will be attached to the contract);
- All ductwork shall be done out of 0.7mm thick zinc plated sheet metal;
- All duct enclosures shall be constructed out of 0.5mm thick zinc plated sheet metal;
- The second wall of the ducts should be water resistant and properly sealed to prevent the wetting of insulation.
- The ducts should be properly mounted to the base and should be equipped with anti-vibration jointing section between roof top units and duct system.
- The Anti-vibration flexible connection sections should be flange mounted and done with high quality flex material;
- Dampers, filters, elbows or any other components of system shouldn't create the noise or vibration.
- During the installation the contractor should wear appropriate PPE. Will be provided brief training by POSHO assistant.
- The contractor should clean all work area after day finish and leave the tools and materials on proper shape;
- The contractor shall remove and dispose of all debris in reasonable time, and at the end of project.
- The problems appearing During the installation should be solved with COR;

CHAPTER 15

ROOF ASSEMBLIES AND ROOFTOP STRUCTURES

SECTION 1501 GENERAL

1501.1 Scope. The provisions of this chapter shall govern the design, materials, construction and quality of roof assemblies, and rooftop structures.

SECTION 1502 DEFINITIONS

1502.1 General. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

BUILT-UP ROOF COVERING. Two or more layers of felt cemented together and surfaced with a cap sheet, mineral aggregate, smooth coating or similar surfacing material.

INTERLAYMENT. A layer of felt or nonbituminous saturated felt not less than 18 inches (457 mm) wide, shingled between each course of a wood-shake roof covering.

MECHANICAL EQUIPMENT SCREEN. A partially enclosed rooftop structure used to aesthetically conceal heating, ventilating and air conditioning (HVAC) electrical or mechanical equipment from view.

METAL ROOF PANEL. An interlocking metal sheet having a minimum installed weather exposure of 3 square feet (0.279 m²) per sheet.

METAL ROOF SHINGLE. An interlocking metal sheet having an installed weather exposure less than 3 square feet (0.279 m²) per sheet.

MODIFIED BITUMEN ROOF COVERING. One or more layers of polymer-modified asphalt sheets. The sheet materials shall be fully adhered or mechanically attached to the substrate or held in place with an approved ballast layer.

PENTHOUSE. An enclosed, unoccupied structure above the roof of a building, other than a tank, tower, spire, dome cupola or bulkhead, occupying not more than one-third of the roof area.

POSITIVE ROOF DRAINAGE. The drainage condition in which consideration has been made for all loading deflections of the roof deck, and additional slope has been provided to ensure drainage of the roof within 48 hours of precipitation.

REROOFING. The process of recovering or replacing an existing roof covering. See "Roof recover" and "Roof replacement."

ROOF ASSEMBLY. A system designed to provide weather protection and resistance to design loads. The system consists of a roof covering and roof deck or a single component serving as both the roof covering and the roof deck. A roof assembly includes the roof deck, vapor retarder, substrate or thermal barrier, insulation, vapor retarder and roof covering.

ROOF COVERING. The covering applied to the roof deck for weather resistance, fire classification or appearance.

ROOF COVERING SYSTEM. See "Roof assembly."

ROOF DECK. The flat or sloped surface not including its supporting members or vertical supports.

ROOF RECOVER. The process of installing an additional roof covering over a prepared existing roof covering without removing the existing roof covering.

ROOF REPAIR. Reconstruction or renewal of any part of an existing roof for the purposes of its maintenance.

ROOF REPLACEMENT. The process of removing the existing roof covering, repairing any damaged substrate and installing a new roof covering.

ROOF VENTILATION. The natural or mechanical process of supplying conditioned or unconditioned air to, or removing such air from, attics, cathedral ceilings or other enclosed spaces over which a roof assembly is installed.

ROOFTOP STRUCTURE. An enclosed structure on or above the roof of any part of a building.

SCUPPER. An opening in a wall or parapet that allows water to drain from a roof.

SINGLE-PLY MEMBRANE. A roofing membrane that is field applied using one layer of membrane material (either homogeneous or composite) rather than multiple layers.

UNDERLAYMENT. One or more layers of felt, sheathing paper, nonbituminous saturated felt or other approved material over which a steep-slope roof covering is applied.

SECTION 1503 WEATHER PROTECTION

1503.1 General. Roof decks shall be covered with approved roof coverings secured to the building or structure in accordance with the provisions of this chapter. Roof coverings shall be designed, installed and maintained in accordance with this code and the approved manufacturer's instructions such that the roof covering shall serve to protect the building or structure.

1503.2 Flashing. Flashing shall be installed in such a manner so as to prevent moisture entering the wall and roof through joints in copings, through moisture-permeable materials and at intersections with parapet walls and other penetrations through the roof plane.

1503.2.1 Locations. Flashing shall be installed at wall and roof intersections, at gutters, wherever there is a change in roof slope or direction and around roof openings. Where flashing is of metal, the metal shall be corrosion resistant with a thickness of not less than 0.019 inch (0.483 mm) (No. 26 galvanized sheet).

GENERAL

This chapter covers ductwork for air conditioning, heating, ventilating, exhaust systems, and energy conservation systems as it pertains to the codes. It is important that the Inspector have a thorough knowledge of the job plans, specifications, and potential obstructions in the area in which the ductwork is to be installed, including locations of fire-rated walls that the duct must penetrate. Check the following:

1. That all equipment has identification nameplates, and the unit is as specified.
2. That approved vibration isolators and flexible connections are furnished and installed if required. (Check seismic zones in the Appendix.)
3. That using building equipment for temporary heat is understood and/or approved.
4. That provisions are made for proper mounting and anchorage of equipment pads, hangers, etc. (special for seismic zone areas).
5. That equipment operates as intended.

SHOP DRAWINGS

1. It is the Project Architect/Engineer's responsibility to determine that all ductwork is approved well in advance so that it will not delay the progress of the job.
2. Check ductwork delivered to the site for conformance with approved shop drawings.
3. Make sure delivered and stored items are properly stored with tags, so that they will not be installed in a wrong location.

DUCTWORK Fabrication

See SMACNA duct manual appropriate to material and service requirements.

1. Inspect for type, thickness, and shape of sheet material; check fiberglass boards used for ductwork.
2. Check workmanship and observe lock seams and breaks in ductwork for cracks of sheet metal ducts. Check fiberglass ducts for broken or damaged edges, joints, and seams.
3. Inspect all joint connections for correct type and adequate sealing to prevent movement and air loss.
4. Make sure that the joints are neatly finished and that the duct is smooth on the inside. Any laps should be made in the directions of the flow of air. Internal

insulation will be securely fastened and coated as specified.

5. Provide adequate bracing and reinforcement of the larger ducts.
6. Compare the radius of curved duct with the specification requirements.
7. Check the slope ratio of all transitions. Provide turning vanes and extractors to eliminate abrupt turns of air which cause noticeable turbulence.
8. Check the need for and construction of splitter dampers. Make sure the operating mechanism is accessible; if exposed in a room, the mechanism is to be finished.
9. Make sure that fire and/or smoke dampers are provided in ducts as required by NEPA and SMACNA fire damper guide and codes. Check for fire-safety switch on return air ducts of circulation system.
10. Check duct for the required test holes and covers. Are they accessible?
11. Make sure that the ducts are sealed and protected during the construction period.
12. Check the fabrication of flexible connections.
13. All equipment serviced by the ductwork is required to be fully accessible for maintenance, repairs, oiling, cleaning, and for filter changing.

Ductwork Code Requirements

- Plastic duct may not exceed 150°.
- Metal ducts to be supported by 1-in. straps of 18- or 12-gage galvanized metal wire.
- Supports not to exceed 10-ft intervals.
- All ductwork in nonconditioned areas need to be insulated.
- Cooling ducts passing through nonconditioned areas also need a vapor retarder.
- No gas or plumbing waste cleanouts can be located at or pass through plenums.

Erection

1. Examine all fabricated ducts, rejecting any which are not smooth or any which are damaged.
2. Examine duct hangers for specified material, thickness, and spacing.
3. Check specification requirements for the need for stiffeners for wide ducts. Also check for need of trapeze hangers under wide ducts.
4. Provide approved flexible connections between ducts and for fan units.

Table 12-1 ASHRAE Recommended Design Criteria

Area		Inside Design Conditions		Air Movement	Air Changes (per hr)
		Winter	Summer		
Dining and entertainment	Cafeterias	70–74°F 20–30% rh	78°F 50% rh	50 fpm at 6 ft above floor	12–15
	Restaurants	70–74°F 20–30% rh	74–78°F 33–60% rh	25–30 fpm	8–12
	Bars	70–74°F 20–30% rh	74–78°F 30–60% rh	30 fpm at 6 ft above floor	15–20
	Nightclubs	70–74°F 20–30% rh	74–78°F 30–60% rh	Below 23 fpm at 3 ft above floor	20–30
	Kitchen	70–74°F	85–88°F	30–50 fpm	12–15
Office building		70–74°F 20–30% rh	74–78°F 50–60 rh	25–45 fpm	4–10
Libraries and museums	Average		61–72°F 30–33% rh	Below 23 fpm	8–12
	Archival	Special considerations		Below 23 fpm	8–12
Bowling		70–74°F 20–30% rh	73–78°F 30–33% rh	50 fpm at 6 ft above floor	10–13
Communication centers	Telephone terminal rooms	72–78°F 20–30% rh	72–78°F 20–30% rh	25–30 fpm	8–20
	Teletype centers	70–74°F 20–30% rh	74–78°F 20–30% rh	25–30 fpm	8–20
	Radio and television stations	74–78°F 30–40% rh	74–78°F 30–33% rh	Below 23 fpm at 12 ft above floor	15–40
Transportation centers	Airport terminals	70–74°F 20–30% rh	74–78°F 30–60% rh	25–30 fpm at 6 ft above floor	8–12
	Ship docks	70–74°F 20–30% rh	74–78°F 30–60% rh	23–30 fpm 6 ft above floor	8–12
	Bus terminal	70–74°F 20–30% rh	74–78°F 30–60% rh	25–30 fpm at 6 ft above floor	8–12
	Garages	20–33°F	80–100°F	30–75 fpm	4–6 (NFPA)
Warehouses		Inside designs often depend on the materials stored.			1–4

rh = relative humidity.

5. Check rigidity and tightness of field installed items as dampers and deflectors.
 6. Provide access doors at all fire dampers, automatic dampers, coils, filters, heaters, thermostats, or at any item that requires servicing. Doors are to be airtight, securely fastened, accessible, and able to be fully opened. Refer to SMACNA and specifications for size of access doors required.
 7. Inspect goose necks and rain hoods for method of fastening, flashing, and bracing. Goose necks are to be turned away from the prevailing wind. Check specifications for screens on open end of goose necks.
 8. Provide proper size sleeves where insulated duct passes through wall openings. Future requirements?
 9. When obstructions cannot be avoided, the duct area should never be decreased more than 10%, and then a streamlined collar should be used. Larger obstructions require an increase in the duct size in order to maintain as nearly uniform velocity as possible. Notify the Project Manager.
 10. Have contractor test metal duct for air tightness before insulating.
 11. All ducts, plenums, and casings must be thoroughly cleaned of debris and blown free of small particles and dust before supply outlets are installed.
3. Joint connections are of required type. Check seams and breaks for cracks. Joint provides a smooth surface on interior of duct, and laps are in direction of air flow.
 4. Slope ratio of transitions, radius of curved duct, air turns, and deflectors are provided as required.
 5. Bracing, reinforcement, stiffeners, hangers, etc. are provided and ductwork is installed as plans and specifications.
 6. Verify that all volume dampers, branch duct dampers, register or diffuser dampers, and splitter dampers are provided as required and an operating mechanism is accessible.
 7. Fire dampers and smoke dampers of type required are furnished and installed as required by NFPA. Verify that access is provided to dampers.
 8. Flexible connectors are fabricated and provided where required.
 9. Access doors and/or access space is provided at all items requiring servicing, such as fire dampers, automatic dampers, manual dampers, coils, heaters, filters, and thermostats. Size is sufficient for access and maintenance.
 10. Proper sleeves and openings through walls and floors are provided as required and are sealed as required. Allow no cutting of structural members without approval.
 11. Ductwork is properly taped or sealed as required by the codes and the contract specifications.

Diffusers, Registers, and Grilles

1. Ensure that the contractor furnishes a schedule showing all air inlets and outlets.
2. Inspect diffusers and registers for accessible volume control operator.
3. Examine specification and installation for integral anti-smudge rings for diffusers.
4. Check for loose or bent vanes.
5. Inspect each item for fit, and see that gaskets are provided when required.
6. Inspect for the proper operation of registers, dampers, and grille vent controls.

Installation

1. Ductwork layout is coordinated with other trades to avoid congestion and interference. A ductwork drawing coordinating plumbing, electrical, sprinklers, etc. is recommended on complex work.
2. Type, material, thickness, and shape are as required. Field changes are approved before installation.

Duct Insulation

1. Ducts are tested for air tightness, if required, before installation of insulation.
2. Type, thickness, material, extent, and method of fastening and installation are as required.
3. Sound deadening and vapor barrier are provided as required.
4. Insulation subject to damage is protected as required.
5. Materials are fire retardant or incombustible as required.
6. Vapor barrier integrity is maintained.

Diffusers, Registers, and Grilles

1. All ducts, plenums, and equipment are thoroughly cleaned of all debris before supply outlets are installed.
2. All items are furnished and installed as required, and approved. Finishes in areas match as required.

3. Volume control devices are provided as required and are accessible.
4. Gaskets are provided and installed as required.
5. Items are securely attached and supported as required.

Note: Insulation for metal ductwork is covered in the section "Mechanical Insulation."

Balancing and Testing

- Balancing and testing air supplies is covered in "Ventilating, Air Supply, and Distribution Systems."

MECHANICAL INSULATION

General

This section covers field-applied insulation. Factory-applied insulation is specified under the equipment, duct, or piping to be installed, or as detailed in the specifications and plans.

Identification of Material

All packages or standard containers of insulation, jacket material, cements, adhesives, and coatings delivered for use, and all samples have a manufacturer's stamp or label attached giving the name of the manufacturer, brand, and a description of the material.

Shop Drawings

1. It is the inspector's responsibility to determine that all insulation-related materials are approved well in advance of their actual need on the job.
2. After approval of materials and prior to insulating any pipe, the contractor will submit for approval sample insulation boards or approved standards showing his proposed methods of mechanical insulation, including cut-a-way sections, insulation, coverings, and finish of completed work. Approved sample boards will be maintained by the contractor at the job site for the duration of the work.

Ductwork Insulation

1. Distinguish between areas requiring flexible type insulation and those requiring rigid or semirigid type insulation.
2. Check the type and thickness of insulation and requirements for vapor barrier.
3. Check the method of fastening insulation to exterior or interior of duct.

- a. If metal pins are used, check the type and spacing.
- b. If wire is used, see that corners of insulation are protected from possible damage.
- c. Verify that adhesive materials are correct, and that the area specified receives proper coverage.
4. Make a careful check for breaks in insulation and vapor barriers.
5. See that materials are fire-retardant or noncombustible as required by the specifications.
6. When equipment casings are required to be insulated, check for proper application. See that application is firm.
7. Where insulation is subject to mechanical damage, check for protection requirements.
8. Check for continuity of insulation through walls and floor, if required.
9. Check for proper sealing of insulation to diffusers, grills, and fire dampers.

Pipe Insulation

1. Determine whether the material on the job has been approved for the particular piping being installed. Make sure insulations, vapor barriers, adhesives, and sealers are noncombustible or fire retardant as specified.
2. Note that heated water piping is insulated differently from chilled water piping and from combined chilled and heated water piping.
3. Check thickness of insulation and of vapor barrier.
4. Determine if insulation jackets which are exposed to view are required to be painted.
5. Examine the requirements for the insulation of flanges, fittings, and valves, and ensure compliance with the requirements and specifications of the project.
6. Check the lap and the sealing at joints.
7. Be very careful to see that there are no breaks in the vapor barrier. Watch for later damages during construction.
8. Check specification requirements for extending through sleeves in walls, floors, and ceilings; chilled water lines.
9. Inside cabinets of fan coil units should be covered as required to prevent condensate dripping on floor.
10. Make sure that pipe hangers are installed over insulation. Metal shields to be provided between hanger ring and insulation. High-density insulation

inserts shall be installed with a length equal to length of metal shield.

11. Check for the neat termination and seal of insulation at the end of insulation.
12. Know the special requirements for insulation and jacketing of piping exposed to weather.
13. Check the installation, the width, and the spacing of the bands used on pipe jacketing.
14. In chilled-water and hot-water combination piping, check for vapor seal requirement on boiler piping.

Ducts Generally Not Requiring Insulation

- Site-erected casings and plenums constructed of factory-insulated sheet metal panels.
- Ducts shown to be acoustically lined, provided sufficient thickness of liner is specified.
- Supply and return ducts in air conditioned or heated spaces, unless otherwise shown.
- Return ducts in ceiling spaces when roofing is insulated. Ceiling space shall be defined as those spaces between the ceiling and bottom of floor deck or roof deck inside the heated space insulated envelope.
- Supply and return ducts made out of faced fiberglass insulating board. Check on sealing joints between individual duct sections, thickness, and connections.

Insulation for Rectangular and Round Ducts

1. Check flexible-type insulation used on concealed ducts for specified minimum density, usually $\frac{1}{4}$ pcf for rectangular ducts.
2. Check rigid-type insulation used on exposed ducts for specified minimum density, usually 3 pcf for rectangular ducts.
3. Check for flexible-type insulation specified for round duct, usually a minimum density $\frac{1}{4}$ pcf.
4. Check for specified vapor barrier jacket on exposed insulation, either factory applied or field applied.
5. Check specification for requirement for factory applied or field-applied vapor barrier on insulation on concealed duct.
6. Check rigid fiberglass duct installation method to ensure accessibility for maintenance of coils, vanes, and fan motors used in the HVAC duct system.

Insulation for Hot Equipment

1. Check specification to determine if insulation is required to be rigid block or semi-rigid board.
2. Check for specified type of material and thickness of insulation being installed.
3. Form or fabricate insulation to fit equipment.
4. On round equipment insulation, edges will be beveled to ensure tight joints.
5. Check joints for being tightly butted and for being filled with mineral fiber or insulation cement.
6. Check specifications and manufacturer's recommendation on spacing of bands. Spacing will not be less than 12 in. on centers.
7. Check for excessive use of wires in lieu of bands. Check for insulation corner protectors under wires.
8. Check hot ducts and equipment for specified finish.
9. Check for continuity of insulation through walls and floors.

Insulation for Cold Equipment

1. Check dual temperature equipment, which operates at 60°F or below at any time, for insulation as specified for cold equipment. Check specification for pump insulation. It may vary from flexible-, rigid-, or semirigid-type insulation. Check all other equipment for specified insulation.
2. Check insulation for thickness specified.
3. Check installation of vapor barrier.
4. Check drain pans under pumps for insulation underneath.
5. Check cold duct and equipment insulation and finish, in accordance with specifications.

Aboveground Pipe Insulation

1. Check contract specifications to determine type of insulation required on pipelines within the structure.
 - a. Normally, domestic hot water, steam, condensate, hot water heating, heated oil, and water defrost lines are insulated as hot pipelines.
 - b. Normally, domestic cold water, interior roof drains, refrigerant suction lines, chilled water and dual temperature water lines, air-conditioner condensate drain pipelines, exposed-to-weather drainage piping, and piping which operates at 60°F or below at any time are insulated as cold pipelines.

2. Check exterior piping for being insulated as required by specifications for piping exposed to weather.
3. Check specifications for areas which are to receive factory-applied vapor barrier jackets, field-applied aluminum jackets, and field-applied vapor barrier.

Piping Exposed to Weather

1. Check to see that pipe is insulated and jacketed for applicable service. Note that the vapor barrier is not normally specified for hot pipelines.
2. Check to see if specified jacket is aluminum.
3. Check to see if jacket is required to be factory applied or field applied.
 - a. Check to see if aluminum jacket laps not less than 2 in. at all joints.
 - b. Check banding requirements for the jacket.
 - c. Check to see that horizontal joints are lapped downward to shed water, and that vertical joints are sealed with a waterproof coating.
4. Check specifications for special treatment of flanges, couplings, unions, valves, fittings, and anchors.

Underground Pipe Insulation

- Check all belowground domestic hot water heating, heating hot water to 200°F, dual temperature water, and chilled water piping for specified insulation. Generally the insulation is 1½-in. thick cellular glass.

Cellular Glass Insulation

1. Check to see that bore surfaces of insulation are coated with a thin application of high-strength gypsum cement, as recommended by manufacturer.
2. Check to see that insulation joints are:
 - a. Staggered, one-half overlapping the next opposite half section.
 - b. All joints are tightly butted and seated with bedding compound.
 - c. Insulation secured with two stainless steel bands per section of insulation.
 - d. Insulation terminates at anchor blocks.
 - e. Insulation is continuous through sleeves and manhole.
 - f. Backfill around and 3 in. above the insulation to be free of stones larger than ¼ in. in any dimension.
 - g. Insulation extends 2 in. inside of building interior and tightly butted, sealed, and vapor barrier coated to interior piping.

- h. Check for special insulation requirements for flanges, couplings, unions, valves, and fittings.
 - i. Check finish of insulation for two coats of mastic with glass cloth or tape embedded between coats. Check for proper overlap at all joints.
3. Check that wet film thickness of both coats of mastic meets specification requirements.
4. Check termination points to see that mastic and cloth or tape covers the end of the insulation and extends along the base pipe as required by the specifications.

HEATING SYSTEMS

General

- This section covers material, equipment, and good workmanship practices for the installation of heating systems.

Materials and Equipment

General

1. Make sure that each piece of material and each item of equipment has been approved well in advance of its need. When the material and equipment arrive on the job, inspect them very carefully, comparing them with the approved shop drawing and samples. Check and record nameplate data on all equipment.
2. Determine that there is adequate space in the room for proper functioning and maintenance of all the equipment.
3. Reject all damaged materials and equipment and have them removed from the site.
4. Check the electrical features of equipment and coordinate with the mechanical features.
5. Determine that provisions have been made for access panels.
6. Check specification provisions for necessary spare parts and tools for all of the equipment.
7. Require proper storage and protection of all materials and equipment.
8. Check the required controls and valves for compliance with contract requirements.
9. Check the noise level of all equipment.
10. Verify requirements for the installation of flexible pipe connections and vibration eliminators for equipment.
11. Check the installation of all equipment for compliance with manufacturer's recommendations.