PERFORMANCE BOND *(See instructions on reverse)*	DATE BOND EXECUTED *(Must be same or later than date of contract)*	OMB Number: **9000-0045** Expiration Date: **6/30/2016**

PAPERWORK REDUCTION ACT STATEMENT: Public reporting burden for this collection of information is estimated to average 60 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspects of this collection of information, including suggestions for reducing this burden, to U.S. General Services Administration, Regulatory Secretariat (MVCB)/IC 9000-0045, Office of Governmentwide Acquisition Policy,1800 F Street, NW, Washington, DC 20405.

PRINCIPAL *(Legal name and business address)*	TYPE OF ORGANIZATION ("X" one) ☐ INDIVIDUAL ☐ PARTNERSHIP ☐ JOINT VENTURE ☐ CORPORATION STATE OF INCORPORATION
SURETY(IES) *(Name(s) and business address(es)*	PENAL SUM OF BOND *(whole numbers only)* MILLION(S) | THOUSANDS | HUNDRED(S) | CENTS CONTRACT DATE | CONTRACT NO.

OBLIGATION

We, the Principal and Surety(ies), are firmly bound to the United States of America (hereinafter called the Government) in the above penal sum. For payment of the penal sum, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally. However, where the Sureties are corporations acting as co-sureties, we the sureties bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us. For all other purposes, each Surety binds itself, jointly and severally with the Principal, for the payment of the sum shown opposite the name of the Surety. If no limit of liability is indicated, the limit of liability is the full amount of the penal sum.

CONDITIONS

The Principal has entered into the contract identified above.

THEREFORE

The above obligation is void if the Principal-

(a)(1) Performs and fulfills all the undertaking, covenants, terms, conditions, and agreements of the contract during the original term of the contract and any extensions thereof that are granted by the Government, with or without notice of the Surety(ies) and during the life of any guaranty required under the contract, and (2) performs and fulfills all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of the contract that hereafter are made. Notice of those modifications to the Surety(ies) are waived.

(b) Pays to the Government the full amount of the taxes imposed by the Government, if the said contract is subject to 41 U.S.C. Chapter 31, Subchapter III, Bonds, which are collected, deducted, or withheld from wages paid by the Principal in carrying out the construction contract with respect to which this bond is furnished.

WITNESS

The Principal and Surety(ies) executed this performance bond and affixed their seals on the above date.

PRINCIPAL

SIGNATURE(S)	1. (Seal)	2. (Seal)	3. (Seal)	Corporate Seal
NAME(S) & TITLE(S) *(Typed)*	1.	2.	3.	

INDIVIDUAL SURETY(IES)

SIGNATURE(S)	1. (Seal)	2. (Seal)
NAME(S) *(Typed)*	1.	2.

CORPORATE SURETY(IES)

SURETY A	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT ($)
	SIGNATURE(S)	1.	2.	Corporate Seal
	NAME(S) & TITLE(S *(Typed)*	1.	2.	

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Previous edition not usable

STANDARD FORM 25 (REV. 8/2014)
Prescribed by GSA-FAR (48 CFR) 53.228 (b)

CORPORATE SURETY(IES) *(Continued)*

SURETY B	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT ($)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		
SURETY C	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT ($)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		
SURETY D	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT ($)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		
SURETY E	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT ($)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		
SURETY F	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT ($)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		
SURETY G	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT ($)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		

BOND PREMIUM ▶	RATE PER THOUSAND ($)	TOTAL ($)

INSTRUCTIONS

1. This form is authorized for use in connection with Government contracts. Any deviation from this form will require the written approval of the Administrator of General Services.

2. Insert the full legal name and business address of the Principal in the space designated "Principal" on the face of the form. An authorized person shall sign the bond. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.

3. (a) Corporations executing the bond as sureties must appear on the Department of the Treasury's list of approved sureties and must act within the limitation listed therein. Where more than one corporate surety is involved, their names and addresses shall appear in the spaces (Surety A, Surety B, etc.) headed "CORPORATE SURETY(IES)." In the space designated "SURETY(IES)" on the face of the form, insert only the letter identification of the sureties.

(b) Where individual sureties are involved, a completed Affidavit of Individual Surety (Standard Form 28) for each individual surety, shall accompany the bond. The Government may require the surety to furnish additional substantiating information concerning their financial capability.

4. Corporations executing the bond shall affix their corporate seals. Individuals shall execute the bond opposite the words "Corporate Seal", and shall affix an adhesive seal if executed in Maine, New Hampshire, or any other jurisdiction requiring adhesive seals.

5. Type the name and title of each person signing this bond in the space provided.

PAYMENT BOND ***(See instructions on reverse)***	DATE BOND EXECUTED *(Must be same or later than date of contract)*	OMB No.: **9000-0045**

PRINCIPAL *(Legal name and business address)*	TYPE OF ORGANIZATION *("X" one)* ☐ INDIVIDUAL ☐ PARTNERSHIP ☐ JOINT VENTURE ☐ CORPORATION STATE OF INCORPORATION
SURETY(IES) *(Name(s) and business address(es))*	PENAL SUM OF BOND MILLION(S) / THOUSAND(S) / HUNDRED(S) / CENTS CONTRACT DATE / CONTRACT NO.

OBLIGATION:

We, the Principal and Surety(ies), are firmly bound to the United States of America (hereinafter called the Government) in the above penal sum. For payment of the penal sum, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally. However, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us. For all other purposes, each Surety binds itself, jointly and severally with the Principal, for the payment of the sum shown opposite the name of the Surety. If no limit of liability is indicated, the limit of liability is the full amount of the penal sum.

CONDITIONS:

The above obligation is void if the Principal promptly makes payment to all persons having a direct relationship with the Principal or a subcontractor of the Principal for furnishing labor, material or both in the prosecution of the work provided for in the contract identified above, and any authorized modifications of the contract that subsequently are made. Notice of those modifications to the Surety(ies) are waived.

WITNESS:

The Principal and Surety(ies) executed this payment bond and affixed their seals on the above date.

PRINCIPAL

	1.	2.	3.	
SIGNATURE(S)	(Seal)	(Seal)	(Seal)	Corporate Seal
NAME(S) & TITLE(S) *(Typed)*	1.	2.	3.	

INDIVIDUAL SURETY(IES)

	1.	2.
SIGNATURE(S)	(Seal)	(Seal)
NAME(S) *(Typed)*	1.	2.

CORPORATE SURETY(IES)

SURETY A	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT **$**	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		

CORPORATE SURETY(IES) *(Continued)*

SURETY B	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT **$**	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		
SURETY C	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT **$**	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		
SURETY D	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT **$**	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		
SURETY E	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT **$**	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		
SURETY F	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT **$**	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		
SURETY G	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT **$**	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		

INSTRUCTIONS

1. This form, for the protection of persons supplying labor and material, is used when a payment bond is required under the Act of August 24, 1935, 49 Stat. 793 (40 U.S.C. 270a-270e). Any deviation from this form will require the written approval of the Administrator of General Services.

2. Insert the full legal name and business address of the Principal in the space designated "Principal" on the face of the form. An authorized person shall sign the bond. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.

3. (a) Corporations executing the bond as sureties must appear on the Department of the Treasury's list of approved sureties and must act within the limitation listed therein. Where more than one corporate surety is involved, their names and addresses shall appear in the spaces (Surety A, Surety B, etc.) headed "CORPORATE SURETY(IES)." In the space designated "SURETY(IES)" on the face of the form, insert only the letter identification of the sureties.

(b) Where individual sureties are involved, a completed Affidavit of Individual Surety (Standard Form 28) for each individual surety, shall accompany the bond. The Government may require the surety to furnish additional substantiating information concerning their financial capability.

4. Corporations executing the bond shall affix their corporate seals. Individuals shall execute the bond opposite the word "Corporate Seal", and shall affix an adhesive seal if executed in Maine, New Hampshire, or any other jurisdiction requiring adhesive seals.

5. Type the name and title of each person signing this bond in the space provided.

ATTACHMENT 10 - SAMPLE LETTER OF BANK GUARANTY

Place [ ]
Date [ ]

Contracting Officer
U.S. Embassy, Lima Peru
Av. Lima Polo cdra. 2
Monterrico, Surco

Letter of Guaranty No. _____

SUBJECT: Performance and Guaranty

The Undersigned, acting as the duly authorized representative of the bank, declares that the bank hereby guarantees to make payment to the Contracting Officer by check made payable to the Treasurer of the United States, immediately upon notice, after receipt of a simple written request from the Contracting Officer, immediately and entirely without any need for the Contracting Officer to protest or take any legal action or obtain the prior consent of the Contractor to show any other proof, action, or decision by an other authority, up to the sum of **[*amount equal to 20% of the contract price in U.S. dollars during the period ending with the date of final acceptance and 10% of the contract price during contract guaranty period*]**, which represents the deposit required of the Contractor to guarantee fulfillment of his obligations for the satisfactory, complete, and timely performance of the said contract **[*contract number*]** for **[*description of work*]** at **[*location of work*]** in strict compliance with the terms, conditions and specifications of said contract, entered into between the Government and **[*name of contractor*]** of **[*address of contractor*]** on **[*contract date*],** plus legal charges of 10% per annum on the amount called due, calculated on the sixth day following receipt of the Contracting Officer's written request until the date of payment.

The undersigned agrees and consents that said contract may be modified by Change Order or Supplemental Agreement affecting the validity of the guaranty provided, however, that the amount of this guaranty shall remain unchanged.

The undersigned agrees and consents that the Contracting Officer may make repeated partial demands on the guaranty up to the total amount of this guaranty, and the bank will promptly honor each individual demand.

This letter of guaranty shall remain in effect until 3 months after completion of the guaranty period of Contract requirement.

Depository Institution: **[*name*]**
Address:
Representatives:

Location:
State of Inc.:
Corporate Seal:

Certificate of Authority is attached evidencing authority of the signer to bind the bank to this

document.

REPLACE COOLING TOWERS CT 3 & 4

ATTACHMENT 4 - Breakdown of Proposal Price by Division of Specifications

ITEM	DESCRIPTION	Unit	Qty	EACH US $	SUB-TOTAL US $
1.00	**EQUIPMENT**				
1.01	Provide new cooling towers CT 3 & 4, 160 GPM 95 - 85 F, 76 FWB, BAC PFI-0412N-2D4DZ-G2 or equiv.	each	2		
1.02	In Land Freight	glb	1		
1.03	Ocean Shipping & Custom expenses	glb	1		
	Sub- total				
2.00	**INSTALLATION**				
2.01	Mobilization	glb	1		
2.02	Existing CT unit disassembly	each	2		
2.03	Drop off the existing CT unit with a telescopic crane, from the Chancery Roof	each	2		
2.04	Modification of the existing steel structure for the new cooling tower, steel surface treatment and painting	each	2		
2.05	Lifting of the new CT with a telescopic crane, to the Chancery Roof	each	2		
2.06	Installation of the new CT and connection to the existing water, power and control lines	each	2		
2.07	Start up and log tests	glb	1		
2.08	Supervision	glb	1		
2.09	Demobilization	glb	1		
	Total Installation Expenses				
	Contingency 20% (roundup)				
	Overhead & Profit 20% (roundup)				
	Partial				
	IGV (18%) (roundup)				
	Sub-Total				

TOTAL

U.S. Department of State
Bureau of Overseas Buildings Operations

STATEMENT OF WORK
FOR

Cooling Tower Replacement

U.S. Embassy
Lima, Peru

April 22, 2016

TABLE OF CONTENTS:

U.S. DEPARTMENT OF STATE
U.S. Embassy
Lima, Peru

1.0 INTRODUCTION

1.1 The United States Department of State (DOS) requires construction services to replace two (2) Closed Circuit Cooling Towers at the U.S Embassy Located in Lima, Peru. The two (2) existing cooling towers shall be replaced with equipment of the same capacity and similar footprint dimensions and weight to reuse existing supports. Existing equipment specifications and a new basis of design (BOD) selection has been provided with this Statement of Work (SOW). The replacement of the cooling towers shall be phased. One (1) cooling tower shall remain in service at all times. Temporary/short-term shut downs may be allowed if approved in advance by the Project Director / Contracting Officer's Representative (PD/COR) and Facility Manager (FM).

1.2 Point of contact for matters related to this SOW is as follows:

Richard P. Marrs | Facility Manager
US Embassy | Lima | Peru
T (+ 511) 618 2637 | M (+ 511) 99900 7973
marrsrp@state.gov

2.0 GENERAL REQUIREMENTS

2.1 *Basic Work Summary.* The Contractor shall provide workers, equipment, and materials necessary to:

2.1.1 Remove the existing BAC F2743-K closed circuit cooling towers. The towers shall be removed in phases to maintain central plant operation at all times. The contractor shall remove and dispose of all unused equipment/materials. The contractor shall install cooling towers and associated equipment/materials as required to deliver a complete functioning system. The new cooling towers shall be the same approximate foot print as existing and shall utilize the existing supports without modification.

2.1.2 In addition to the new equipment, items such as rigging, piping, piping accessories disconnect switches, electrical conductors, and controls wiring are also included. Mechanical and electrical trades are involved. Test, Adjust, and Balance (TAB), Start-up and basic adjustments of the new equipment are part of the Work.

2.2 *Schedule Expectations.* The new equipment shall be procured within one (1) month of the contract award. Equipment lead time is expected to be three (3) months. All new equipment shall be installed and fully commissioned within one (1) month of arrival at post. The contractor shall provide an expected project schedule to the PD/COR. See Exhibit D (Div. 1 Specifications) for related scheduling requirements.

2.3 *Building Codes.* Work is governed by the latest version of the International Building Code (IBC) and the OBO Supplements, which includes the International Mechanical

Code, International Plumbing Code, and National Electric Code. Work shall comply with OBO standards and local jurisdictional requirements. Work not in compliance with the IBC and NEC shall be deemed not in compliance with the Contract.

2.4 *Additional Info*. Included with the this Statement of Work narrative are attached exhibits including (Exhibit A) photos of existing conditions/equipment, (Exhibit B) existing cooling tower engineering data, (Exhibit C) basis of design equipment selections, and (Exhibit D) construction specifications.

2.4.1 *Project Orientation Photos*. See Exhibit A for orientation photos of existing equipment/systems.

2.4.2 *Engineering Data - Existing Cooling Tower*. See Exhibit B for original engineering data for the existing to be removed cooling towers.

2.4.3 *Engineering Data - Basis of Design Equipment.* See Exhibit C for basis of design equipment selections.

2.4.4 *Specifications.* Refer to Specifications (Exhibit D) for detailed requirements regarding project processes and construction security requirements.

2.5 *Location.* U.S. Embassy Lima, Peru. Avenida La Encalada Cdra 17- Monterrico, Lima, Peru

2.6 *Shipping*. The Contractor is responsible for shipping, delivery, and storage of all tools, materials, and equipment to the Work site.

2.7 *Safety*. The Contractor is responsible for the safety of for his/her employees, and for conduct of the work in a manner that prioritizes the safety of Post residents, employees, and visitors.

2.8 *Damage.* Protect exterior elements, roofing, furniture, furnishings, carpets, and interior finishes from damage. Damage caused by the Contractor to the site will be the returned to original condition at the expense and responsibility of the contractor.

2.9 *Interruptions of Service*. The Contractor shall maintain existing systems in service to the maximum extent possible and coordinate interruptions of any utility services in advance with the Facility Manager.

2.10 *Drawing/AutoCAD Files.* Available existing construction documentation shall be provided by the PD/COR if requested by the contractor. Availability and accuracy of existing files cannot be guaranteed.

3.0 SCOPE OF WORK

3.1 Provide workers, equipment, and materials necessary to:

3.1.1 Cooling Towers: Replace two (2) existing Baltimore Air Coil closed circuit cooling towers with new. New equipment shall meet the following criteria. Additional basis of design information can be found in Exhibit C.

a. The contractor shall replace one (1) cooling tower at a time. A cooling tower shall always remain in operation. The contractor shall provide all necessary materials to connect new cooling towers to existing supply/return, bypass, overflow, sweeper, and drain piping. Contractor shall provide new piping and associated supports as required. New piping shall match existing piping in size and material unless otherwise noted and approved by the PD/COR.

b. If the any roof deck/materials are altered, the contractor is responsible for repair/modifying the roof components to meet or exceed OBO construction standards.

c. New cooling towers shall be the same approximate footprint dimensions of the existing cooling towers and weight shall not exceed 105% of existing unit weight. Dimensions and weight information can be found in Exhibit B.

d. New cooling towers shall be installed on the existing supports. Existing vibration isolators shall be replaced with new vibration isolators furnished and installed by Contractor that have been selected for distribution weights of new cooling towers.

e. Seismic restraints shall be applied to new cooling towers and piping. Seismic restraints shall be designed to meet Zone 4 classification (S_S=1.50 and S_1=0.6) design to restrict horizontal seismic forces in two directions, transverse and longitudinal directions.

f. New cooling towers shall be installed in the same orientation as the existing equipment. New cooling tower supply and return water inlet/outlets shall be on the same sides, elevations, and in the same general location of the existing cooling tower water inlets/outlets to limit piping modifications. Overflow and make up piping connections shall be modified to match new units. Contractor shall match inlet/outlet pipe sizing with existing. The contactor shall field verify all existing measurements/conditions prior to new equipment procurement.

g. Basis of Design:
(See Exhibit C for additional Basis of Design Selection Criteria and Shop Drawings)

1. Two (2) Baltimore Air Coil (BAC) VFL-036-031K Forced Draft, Counterflow Closed Circuit Cooling Towers
2. Quality Assurance – ISO 9001 Certified
3. Unit Energy Efficiency per ASHRAE Standard 90.1
4. CTI Certified Thermal Performance
5. Certified Capacity:
160 gpm of 10% Ethylene Glycol per unit, from 93 °F to 85 °F at

76 °F wet bulb entering air temperature and 1.52 PSIG coil fluid pressure drop.

6. Fan Motors: One (1) 10 HP pump motor per unit: Totally enclosed, Fan Cooled (TEFC), 1 Speed, Premium Efficiency (Inverter Duty), for 460V/60HZ/3Ph electrical service.
7. Spray Water Pumps: One (1) 1 HP pump motor per unit: 1 Speed, Standard Efficiency, for 460V/60Hz/3Ph electrical service.
8. Polyvinyl Chloride (PVC) Drift Eliminators
9. Close-Coupled Centrifugal Spray Water Pump, located on coil connection end of each unit
10. PVC Spray branches
11. Float Operated Mechanical Makeup Water Valve Assembly per Unit
12. Full stainless steel unit constructions with stainless steel spray water basins in water contact areas.
13. Five year motor and drive warranty.

3.1.2 Electrical: All existing disconnects may be reused. The contractor is responsible for providing the new conduit/conductors/fittings as required to make new connections between the existing disconnects to the motors on the new units. Existing conduits may be reused if they are buried in concrete. Conductors must be new from existing disconnects to the new fan and pump motors. The reuse of electrical infrastructure is based on the fact that the new basis of design cooling towers have similar horsepower fan motors as existing. New fan motors shall be equal to or lesser horsepower than existing.

3.1.3 Painting/Marking: The contractor shall paint all new and existing condenser water piping, on the roof in the cooling tower yard. The contractor shall provide flow-arrow indications on supply and return piping. The Facility Manager will review and approve paint type and color. The contractor is responsible for submitting paint options for Facility Manager review/approval.

3.1.4 Rigging: Cooling Towers will be installed on the roof of a six-story building, requiring the use of a crane to remove the existing cooling towers and lift the new ones into place. Refer to Exhibit C for a building section and estimated crane arm requirements. Due to internal traffic considerations, the use of a crane will only be available on Saturdays and Sundays.

3.2 In addition to the providing the new mechanical/electrical equipment and tasks listed in section 3.1; all required piping, piping connections, valves, misc. piping accessories, controls wiring, and other miscellaneous materials are part of the Work. Contractor shall furnish and install all valves, gauges, sensors and other peripheral components to match the existing installation. Details in Exhibit C are provided for general configuration reference and location for point of connection. Main isolation valve replacement requires advanced notification, approval by FM and close coordination with Post for shut down and use of Post provided portable coolers. Use of portable coolers and downtime with isolation valve replacement shall be minimized. Any replaced components that were previously connected to the existing BAS shall be integrated with existing BAS.

3.3 All used equipment, debris, trash and hazardous materials will be removed from the property and disposed of properly. The Contractor is responsible for ensuring that

disposal of equipment, debris, and hazardous material complies with the laws and regulations of Lima, Peru.

3.4 Start-up and commissioning of the new units is part of the Work. All mechanical and electrical functions at the mechanical equipment and at the Building Automation System (BAS) will be verified in all modes, which shall include, (1) towers off, (2) tower #1 only energized, (3) tower #2 only energized, and (4) both towers operating simultaneously. The contractor shall simulate failure/alarm conditions to ensure annunciation at the BAS. Start-up and commissioning shall be completed with the FM or designated technical staff in attendance. Coordinate with PD/COR and FM.

3.5 Training: The contractor shall provide training for all new equipment/systems to the facility maintenance staff. Coordinate with PD/COR and FM. Eight (8) hours minimum training required.

4.0 ATTACHMENTS

Exhibit A: Project Orientation Photos – Existing Equipment

Exhibit B: Engineering Data - Existing Cooling Tower

Exhibit C: Engineering Data - Basis of Design Cooling Tower

Exhibit D: Specifications

EXHIBIT A

Project Orientation Photos –

Existing Equipment

EXHIBIT B

Engineering Data –

Existing Cooling Tower

BALTIMORE AIRCOIL
ONE OF THE
Amsted
INDUSTRIES

SUBMITTAL DATA FORM

CUSTOMER	J.A. JONES CONSTRUCTION CO DRAWER A ATTN: TRAFFIC DEPT CHARLOTTE, NC 28287	DATE P.O. NO. B.A.C. NO. MODEL NO.	12/4/92 ¶2094150252 E93600185 THRU 93600186 (2) F2743-K
PROJECT: ENGINEER: B.A.C. REP:	NEW OFFICE BLDG - SOUTH AMERICA, 1A GENE HEWITT ASSOC./CHARLOTTE - CHARLOTTE, NC		

INDUSTRIAL FLUID COOLER
EACH UNIT

CERTIFIED CAPACITY: 160 USGPM OF 10% ETHYLENE GLYCOL FROM 93 F TO 85 F AT 76 F ENT. WET BULB AND 3.1 PSI FLUID PRESSURE DROP.

FAN MOTOR(S): (1) 10 HP, 1800 RPM, 3 PHASE, 60 HERTZ, 460 SUIT 480 VOLTS, PREMIUM EFFICIENCY ODP ENCLOSURE. FAN DRIVES BASED ON 0 " ESP.

PUMP MOTOR(S): (1) 1 HP, 3450 RPM, 3 PHASE, 60 HERTZ, 460 SUIT 480 VOLTS, ODP ENCLOSURE.

NOTE: Two speed fan motors and/or Energy Miser Fan Systems require a starter that incorporates a 15 second time delay when switching from high to low speed.

10 COPIES OF SUBMITTAL DATA FOR APPROVAL

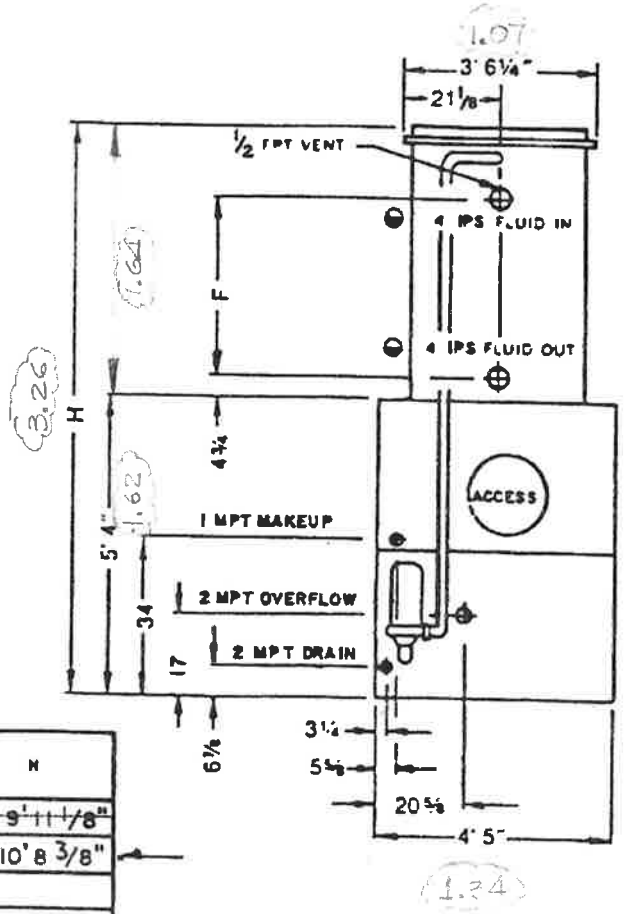
FEATURE	FEATURE

THANK YOU FOR YOUR ORDER ACCEPTED AT THE B.A.C. PAXTON, IL PLANT ON: DECEMBER 3, 1992.

FURTHER PROCESSING OF THIS ORDER IS CONTINGENT UPON RECEIPT OF APPROVED SUBMITTALS. AT THIS TIME, SHIPMENTS ARE RUNNING APPROXIMATELY 10-12 WEEKS FROM RECEIPT OF A FIRM RELEASE.

CC: INGENIERIA TERMODINAMICA SA - LIMA PERU

P.O. BOX 7322, BALTIMORE, MARYLAND 21227 / TELE: (301) 799-6200 / FAX: 301-799-6416
P.O. BOX 960, MADERA, CALIFORNIA 93639 / TELE: (209) 673-9231 / FAX: 209-673-5095
P.O. BOX 317, PAXTON, ILLINOIS 60957 / TELE: (217) 379-2311 / FAX: 217-379-3522
P.O. BOX 402, MILFORD, DELAWARE 19963 / TELE: (302) 422-3061 / FAX: 302-422-9269

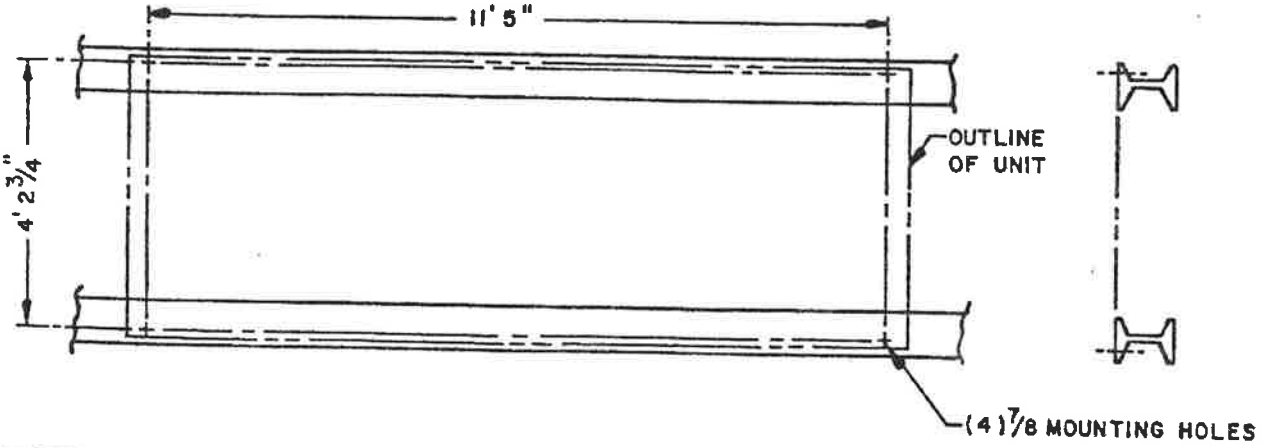


● · I.P.S. BEVELLELD FOR WELDING

Ⓜ FAN MOTOR LOCATION.

MODEL NO.	APPROX. SHIPPING WEIGHT	APPROX. OPERATING WEIGHT	HEAVIEST SECTION (COIL)	F	H
~~F2742-J~~	~~4680~~	~~7010~~	~~3140~~	~~33¼~~	~~9'11⅛"~~
F2743-K	5310	7820	3720	42 1/2	10'8 3/8"

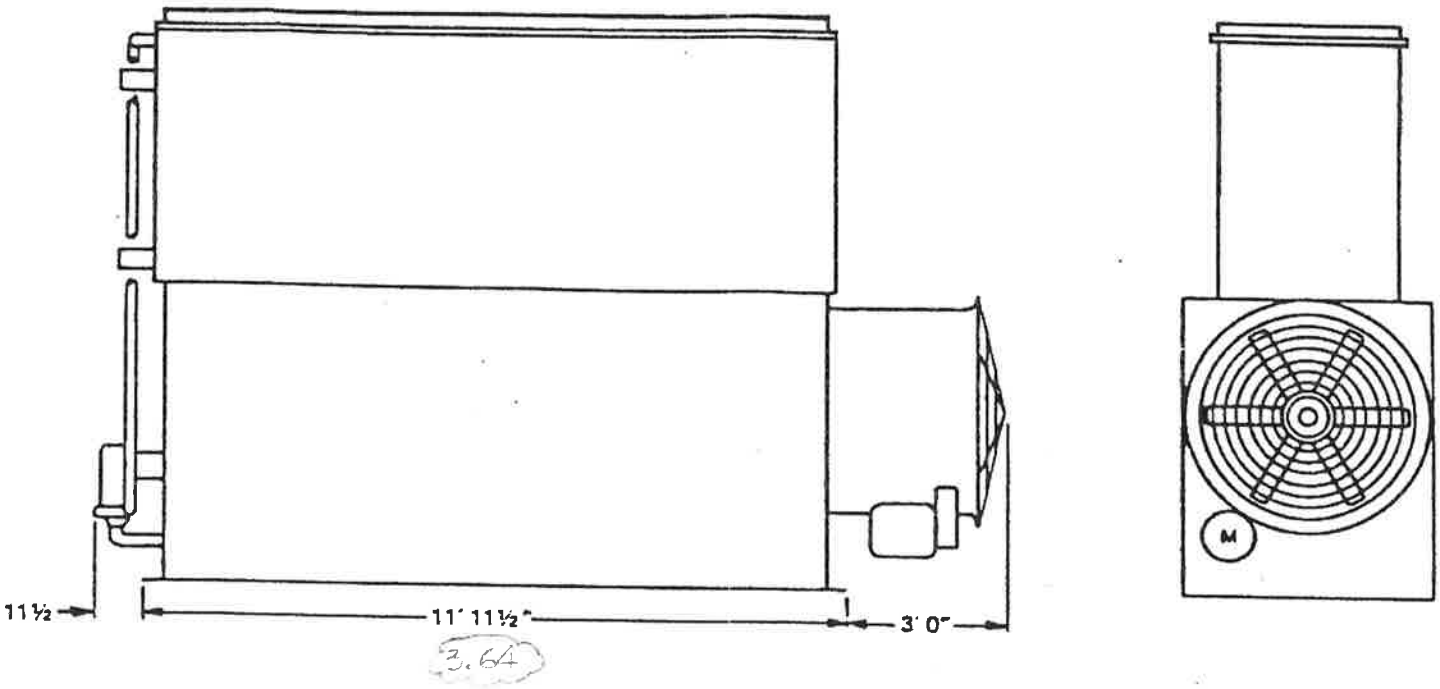
SUGGESTED SUPPORT DETAILS



NOTES:

1. THE RECOMMENDED SUPPORT ARRANGEMENT FOR F2000 UNITS CONSISTS OF TWO PARALLEL I-BEAMS EXTENDING THE FULL LENGTH OF THE UNIT. SUPPORTS AND ANCHOR BOLTS ARE TO BE DESIGNED AND FURNISHED BY OTHERS.
2. ALL SUPPORTING BEAMS ARE TO BE FLUSH AND LEVEL AT TOP AND MUST BE ORIENTED RELATIVE TO GAGE LINE AS SHOWN.
3. RECOMMENDED DESIGN LOADS FOR EACH BEAM SHOULD BE 70% OF THE TOTAL UNIT OPERATING WEIGHT APPLIED AS A UNIFORM LOAD TO EACH BEAM. BEAMS SHOULD BE DESIGNED IN ACCORDANCE WITH STANDARD STRUCTURAL PRACTICE. THE MAXIMUM ALLOWABLE DEFLECTION OF BEAMS UNDER THE UNIT SHALL BE ⅜ OF AN INCH.
4. ALL MOUNTING HOLES ARE ⅞ INCH DIAMETER AT THE LOCATIONS SHOWN.
5. IF VIBRATION ISOLATORS ARE USED, A RAIL OR CHANNEL MUST BE PROVIDED BETWEEN THE UNIT AND THE ISOLATORS TO PROVIDE CONTINUOUS UNIT SUPPORT. ADDITIONALLY, THE SUPPORT BEAMS MUST BE DESIGNED TO ACCOMMODATE THE OVERALL LENGTH AND MOUNTING HOLE LOCATION OF THE ISOLATORS WHICH MAY DIFFER FROM THOSE OF THE UNIT. REFER TO VIBRATION ISOLATOR DRAWINGS FOR THIS DATA.

BAC-7205 B



3.64

Due to manufacturing tolerances, all dimensions are approximate.
Prefabrication of piping & mounting holes not recommended.

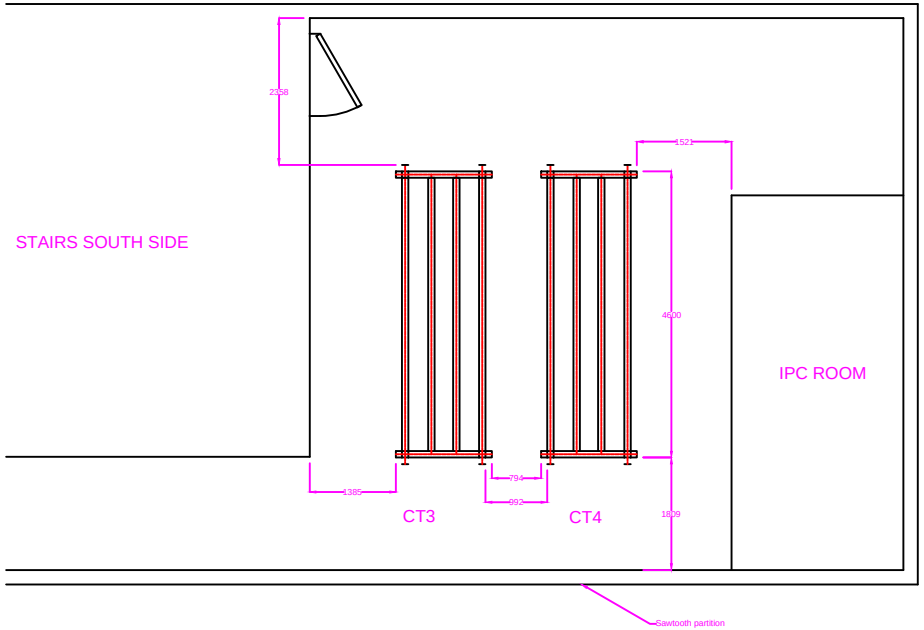
21 M²
5.2 M²

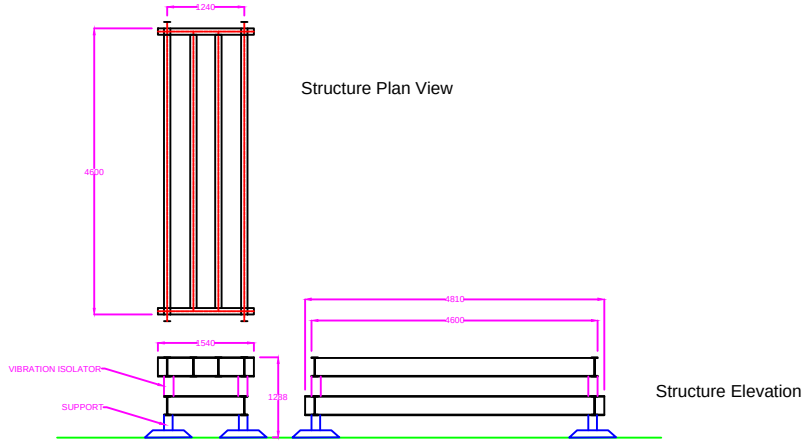
NOTES:

1. ALL DIMENSIONS ARE IN FEET AND INCHES. WEIGHTS ARE IN POUNDS.
2. UNLESS OTHERWISE INDICATED, ALL CONNECTIONS 6 INCHES AND SMALLER ARE MPT AND CONNECTIONS 8 INCHES AND LARGER ARE BEVELLED FOR WELDING.
3. DIMENSIONS SHOWING LOCATION OF COIL CONNECTIONS ARE APPROXIATE AND SHOULD NOT BE USED FOR PREFABRICATION OF CONNECTING PIPING.

B.A.C. ORDER NO. E93600185/6	BALTIMORE AIRCOIL	INDUSTRIAL FLUID COOLER
DATE 12/4/92		DWG. NO. BAC-7205 B

CHANCERY EXTERIOR 4' PARAPET WALL





ROOF LEVEL

CHANCERY EXTERIOR 4' PARAPET WALL

EXHIBIT C

Engineering Data –

Basis of Design Cooling Tower

Baltimore Aircoil Company, Inc.

Closed Circuit Cooling Tower Selection Program

Version: 7.2.22 NA
Product data correct as of: February 05, 2016

Project Name: USA EMBASSY
Selection Name: RETROFIT FV1
Project State/Province: SU
Project Country: Peru
Date: February 26, 2016

Model Information

Product Line:	Low Profile Series VFL
Model:	VFL-036-31K
Number of Units:	1
Coil Type:	Standard Coil
Coil Finning:	None
Fan Type:	Standard Fan
Fan Motor:	(1) 10.00 = 10.00 HP/Unit
Total Standard Fan Power:	Full Speed, 10.00 BHP/Unit
Total Pump Motor Power:	(1) 1.00 = 1.00 HP/Unit
Intake Option:	None
Internal Option:	None
Discharge Option:	None
External Static Pressure:	0.00 in. of H2O

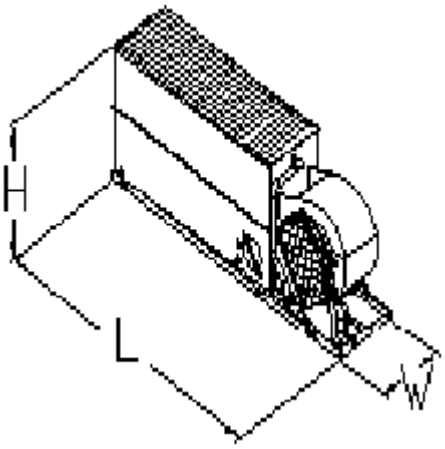
Design Conditions

Fluid:	EG, 10% by Vol.
Fluid Freeze Point:	26.00 °F
Flow Rate:	160.00 USGPM
Entering Fluid Temp.:	93.00 °F
Leaving Fluid Temp.:	85.00 °F
Wet Bulb Temp.:	76.00 °F
Fluid Pressure Drop:	1.52 psi
Reserve Capability:	2.22%

Thermal performance at design conditions and standard total fan motor power is certified by the Cooling Technology Institute (CTI).

Engineering Data, per Unit

Unit Length:	14' 11.56"	(Total)
Unit Width:	04' 01.25"	
Unit Height:	07' 01.00"	
Approximate Shipping Weight:	5,350	lbs
Heaviest Section:	5,350	lbs
Approximate Operating Weight:	7,970	lbs
Approximate Remote Sump Operating Weight:	7,860	lbs
Air Flow:	23,290	CFM
Spray Water Flow:	142	USGPM
Coil Volume:	128	U.S. gallons



Coil Connections:

(1) 4" Coil Inlet and Outlet, Based on 160.00 USGPM Flow per Unit

Remote Sump Connections: (1) 4"

Heater kW Data (Optional)

0°F (-17.8°C) Ambient Heaters:	(1) 4	kW
-20°F (-28.9°C) Ambient Heaters:	(1) 5	kW

Minimum Distance Required:

From Solid Wall:	3.5	ft
From 50% Open Wall:	3	ft

Energy Rating:

17.09 per ASHRAE 90.1, ASHRAE 189 and CA Title 24.

Note: These unit dimensions account for the selected fan type for the standard cataloged drive configuration, but they do not account for other options/accessories. Please contact your local BAC sales representative for dimensions of units with other options/accessories.

Baltimore Aircoil Company, Inc.

Closed Circuit Cooling Tower Selection Program

Version: 7.2.22 NA
Product data correct as of: February 05, 2016

Project Name: USA EMBASSY
Selection Name: RETROFIT FV1
Project State/Province: SU
Project Country: Peru
Date: February 26, 2016

Model Information

Product Line:	Low Profile Series VFL
Model:	VFL-036-31K
Number of Units:	1
Coil Type:	Standard Coil
Coil Finning:	None
Fan Type:	Standard Fan
Fan Motor:	(1) 10.00 = 10.00 HP/Unit
Total Standard Fan Power:	Full Speed, 10.00 BHP/Unit
Total Pump Motor Power:	(1) 1.00 = 1.00 HP/Unit
Intake Option:	None
Internal Option:	None
Discharge Option:	None
External Static Pressure:	0.00 in. of H2O

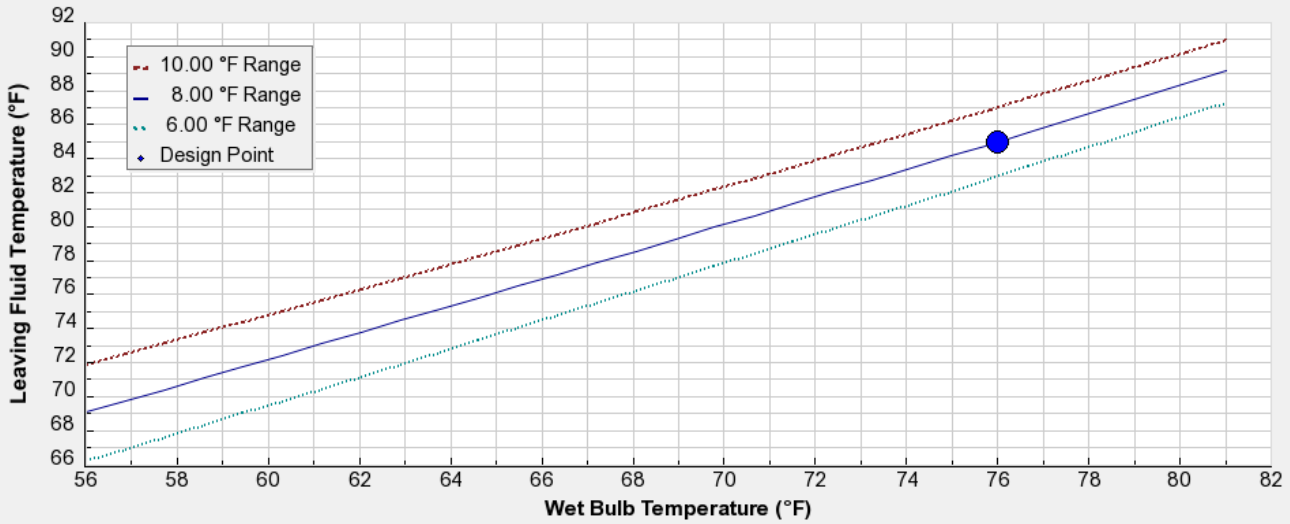
Design Conditions

Fluid:	EG, 10% by Vol.
Fluid Freeze Point:	26.00 °F
Flow Rate:	160.00 USGPM
Entering Fluid Temp.:	93.00 °F
Leaving Fluid Temp.:	85.00 °F
Wet Bulb Temp.:	76.00 °F
Fluid Pressure Drop:	1.52 psi

Design Conditions @ Standard Total Fan Motor Power per Unit (10.00 HP)

Thermal performance at design conditions and standard total fan motor power is certified by the Cooling Technology Institute (CTI).

Predicted Performance
Fan Motor Alternative = Full Speed, 10.00 BHP
Flow Rate = 160.00 USGPM (100.00% of Design)



These performance curves are based on constant fan power.

Baltimore Aircoil Company, Inc.

Closed Circuit Cooling Tower Selection Program

Version: 7.2.22 NA
Product data correct as of: February 05, 2016

Project Name: USA EMBASSY
Selection Name: RETROFIT FV1
Project State/Province: SU
Project Country: Peru
Date: February 26, 2016

Model Information

Product Line: Low Profile Series VFL
Model: VFL-036-31K
Number of Units: 1
Coil Type: Standard Coil
Coil Finning: None
Intake Option: None
Internal Option: None
Discharge Option: None
External Static Pressure: 0.00 in. of H2O

Fan Type: Standard Fan
Fan Motor: (1) 10.00 = 10.00 HP/Unit
Total Standard Fan Power: Full Speed, 10.00 BHP/Unit
Total Pump Motor Power: (1) 1.00 = 1.00 HP/Unit

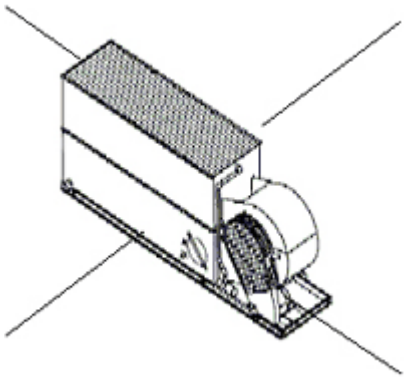
Octave band and A-weighted sound pressure levels (Lp) are expressed in decibels (dB) reference 0.0002 microbar. Sound power levels (Lw) are expressed in decibels (dB) reference one picowatt. Octave band 1 has a center frequency of 63 Hertz.

Top Lp
Sound Pressure (dB)

Octave Band	Distance 5 ft.	Distance 50 ft.
1	75	68
2	75	66
3	75	63
4	74	63
5	73	61
6	73	60
7	70	59
8	70	51
A-wgtd	**79**	**67**

Back Lp
Sound Pressure (dB)

Octave Band	Distance 5 ft.	Distance 50 ft.
1	70	64
2	68	61
3	69	60
4	67	64
5	65	60
6	58	51
7	51	44
8	45	37
A-wgtd	**69**	**64**



End Lp
Sound Pressure (dB)

Octave Band	Distance 5 ft.	Distance 50 ft.
1	72	63
2	67	61
3	69	58
4	71	58
5	71	56
6	70	55
7	67	54
8	61	46
A-wgtd	**76**	**62**

End Lp
Sound Pressure (dB)

Octave Band	Distance 5 ft.	Distance 50 ft.
1	72	63
2	67	61
3	69	58
4	71	58
5	71	56
6	70	55
7	67	54
8	61	46
A-wgtd	**76**	**62**

Fan Side Lp
Sound Pressure (dB)

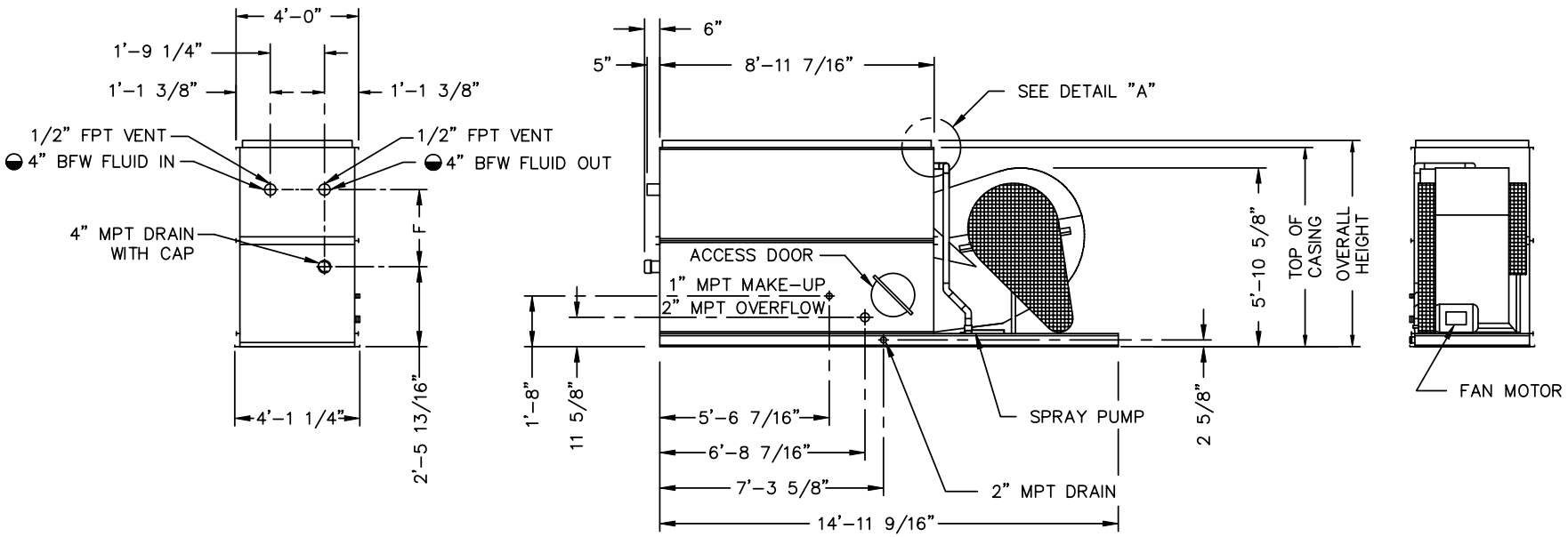
Octave Band	Distance 5 ft.	Distance 50 ft.
1	74	63
2	67	60
3	68	58
4	69	55
5	66	55
6	64	53
7	61	48
8	54	41
A-wgtd	**71**	**60**

Sound Power (dB)

Octave Band	Center Frequency (Hertz)	Lw
1	63	97
2	125	94
3	250	92
4	500	93
5	1000	90
6	2000	88
7	4000	86
8	8000	79

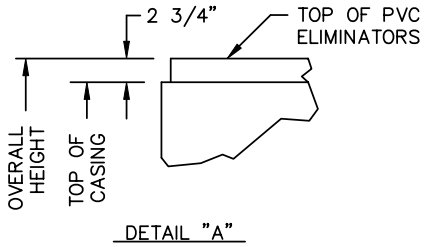
Note: The use of frequency inverters (variable frequency drives) can increase sound levels.

BAC–15864A



◒ BFW BEVELED FOR WELDING

MODEL NO.	APPROX. SHIPPING WEIGHT (LBS)	APPROX. OPERATING WEIGHT (LBS)	F	TOP OF CASING	OVERALL HEIGHT
VFL–036–22J	4690	7070	2'–9 1/4"	6'–10 1/4"	6'–10 1/4"
VFL–036–22K	4690	7070	2'–9 1/4"	6'–10 1/4"	6'–10 1/4"
VFL–036–22L	4690	7070	2'–9 1/4"	6'–10 1/4"	7'–0"
VFL–036–22M	4690	7070	2'–9 1/4"	6'–10 1/4"	7'–0"
VFL–036–32K	5330	7950	3'–6 1/2"	7'–8 3/4"	7'–8 3/4"
VFL–036–32L	5330	7950	3'–6 1/2"	7'–8 3/4"	7'–11 1/2"
VFL–036–32M	5330	7950	3'–6 1/2"	7'–8 3/4"	7'–11 1/2"

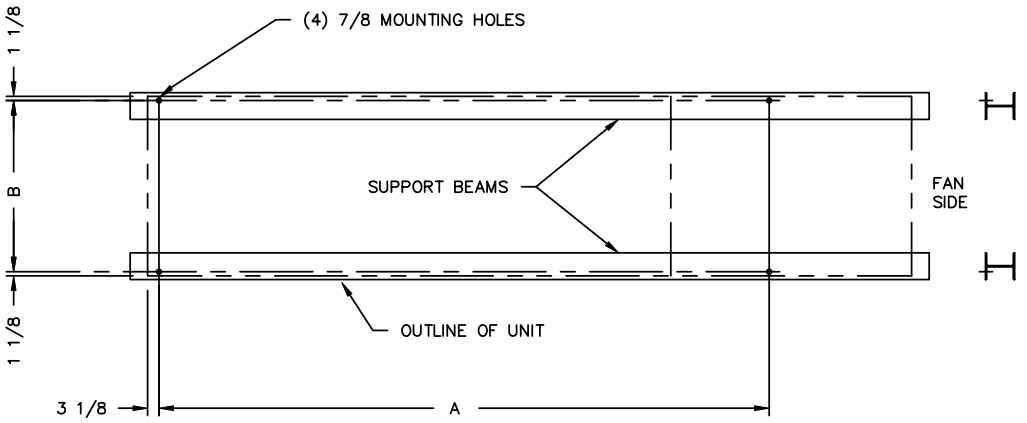


TYPICAL ONLY WHERE OVERALL HEIGHT EXCEEDS TOP OF CASING

NOTES:
1. ALL DIMENSIONS ARE IN FEET AND INCHES. WEIGHTS ARE IN POUNDS.
2. UNLESS OTHERWISE INDICATED, ALL CONNECTIONS 6 INCHES AND SMALLER ARE MPT AND CONNECTIONS 8 INCHES AND LARGER ARE BEVELED FOR WELDING.
3. DIMENSIONS SHOWING LOCATION OF COIL CONNECTIONS ARE APPROXIMATE AND SHOULD NOT BE USED FOR PREFABRICATION OF CONNECTING PIPING.
4. FOR SUPPORT REQUIREMENTS, REFER TO THE SUGGESTED STEEL SUPPORT DRAWING.

B.A.C. ORDER NO.	BALTIMORE AIRCOIL	RIGHT HAND UNIT STANDARD OUTLET WITH PUMP	
DATE		DWG NO. BAC–15864A	A

BAC–15814B

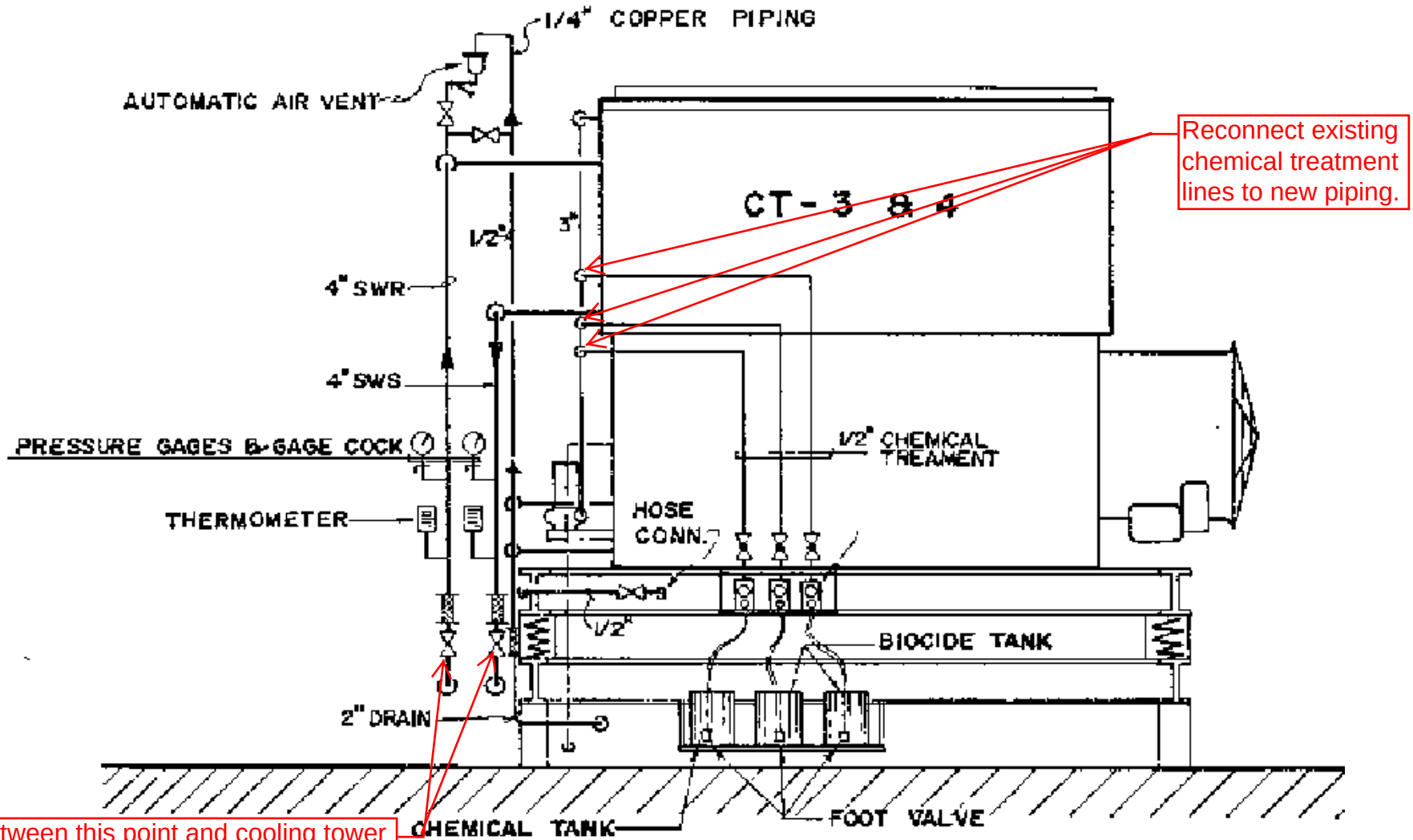


VTL COOLING TOWER MODEL NO.	VFL INDUSTRIAL COOLER MODEL NO.	VCL EVAPORATIVE CONDENSER MODEL NO.	A	B	MAXIMUM ALLOWABLE BEAM DEFLECTION
VTL016–E THRU VTL039–H	VFL–012–02F THRU VFL–012–32H	VCL016–D THRU VCL035–G	4'–6"	3'–11"	1/4"
VTL045–H THRU VTL079–K	VFL–024–12H THRU VFL–024–32J	VCL038–G THRU VCL079–J	7'–11 1/2"	3'–11"	3/8"
VTL082–K THRU VTL095–K	VFL–036–22J THRU VFL–036–32M	VCL087–H THRU VCL120–K	10'–11 1/4"	3'–11"	1/2"
VTL103–K THRU VTL137–M	VFL–048–22K THRU VFL–048–42M	VCL134–K THRU VCL155–L	13'–11 1/2"	3'–11"	1/2"
VTL152–M THRU VTL227–0	VFL–072–22M THRU VFL–072–42P	VCL167–K THRU VCL234–M	10'–11 1/4"	7'–8 1/4"	1/2"
VTL245–P VTL272–P	VFL–096–41N THRU VFL–096–42P	VCL257–M THRU VCL299–0	13'–11 1/2"	7'–8 1/4"	1/2"

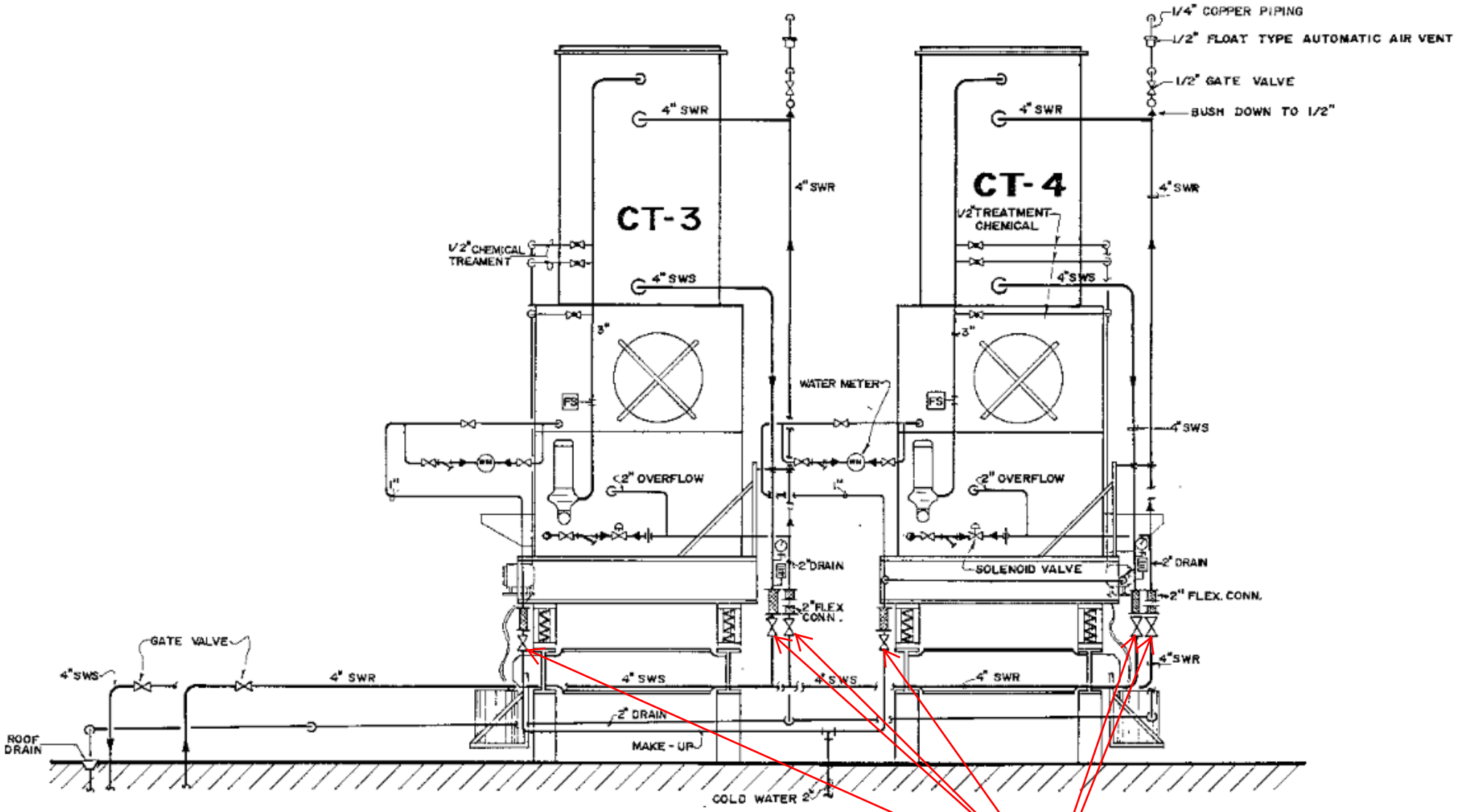
NOTES:

1. THE RECOMMENDED SUPPORT ARRANGEMENT CONSISTS OF TWO PARALLEL I–BEAMS EXTENDING THE FULL LENGTH OF THE UNIT. SUPPORTS AND ANCHOR BOLTS ARE TO BE DESIGNED AND FURNISHED BY OTHERS.
2. ALL SUPPORTING BEAMS ARE TO BE FLUSH AND LEVEL AT TOP AND MUST BE ORIENTED RELATIVE TO GAGE LINE AS SHOWN.
3. RECOMMENDED DESIGN LOADS FOR EACH BEAM SHOULD BE 70% OF THE TOTAL UNIT OPERATING WEIGHT APPLIED AS A UNIFORM LOAD TO EACH BEAM. BEAMS SHOULD BE DESIGNED IN ACCORDANCE WITH STANDARD STRUCTURAL PRACTICE. THE MAXIMUM ALLOWABLE DEFLECTION OF BEAMS UNDER THE UNIT SHALL BE AS SHOWN IN THE TABLE.
4. ALL MOUNTING HOLES ARE 7/8 INCH DIAMETER AT THE LOCATIONS SHOWN.
5. IF VIBRATION ISOLATORS ARE USED, A RAIL OR CHANNEL MUST BE PROVIDED BETWEEN THE UNIT AND THE ISOLATORS TO PROVIDE CONTINUOUS UNIT SUPPORT. ADDITIONALLY, THE SUPPORT BEAMS MUST BE DESIGNED TO ACCOMODATE THE OVERALL LENGTH AND MOUNTING HOLE LOCATION OF THE ISOLATORS WHICH MAY DIFFER FROM THOSE OF THE UNIT. REFER TO VIBRATION ISOLATOR DRAWINGS FOR THIS DATA.

B.A.C. ORDER NO:	BALTIMORE AIRCOIL COMPANY	SUGGESTED STEEL SUPPORT
DATE:		DRAWING NUMBER: BAC–15814B –



RIGHT ELEVATION VIEW OF TOWER

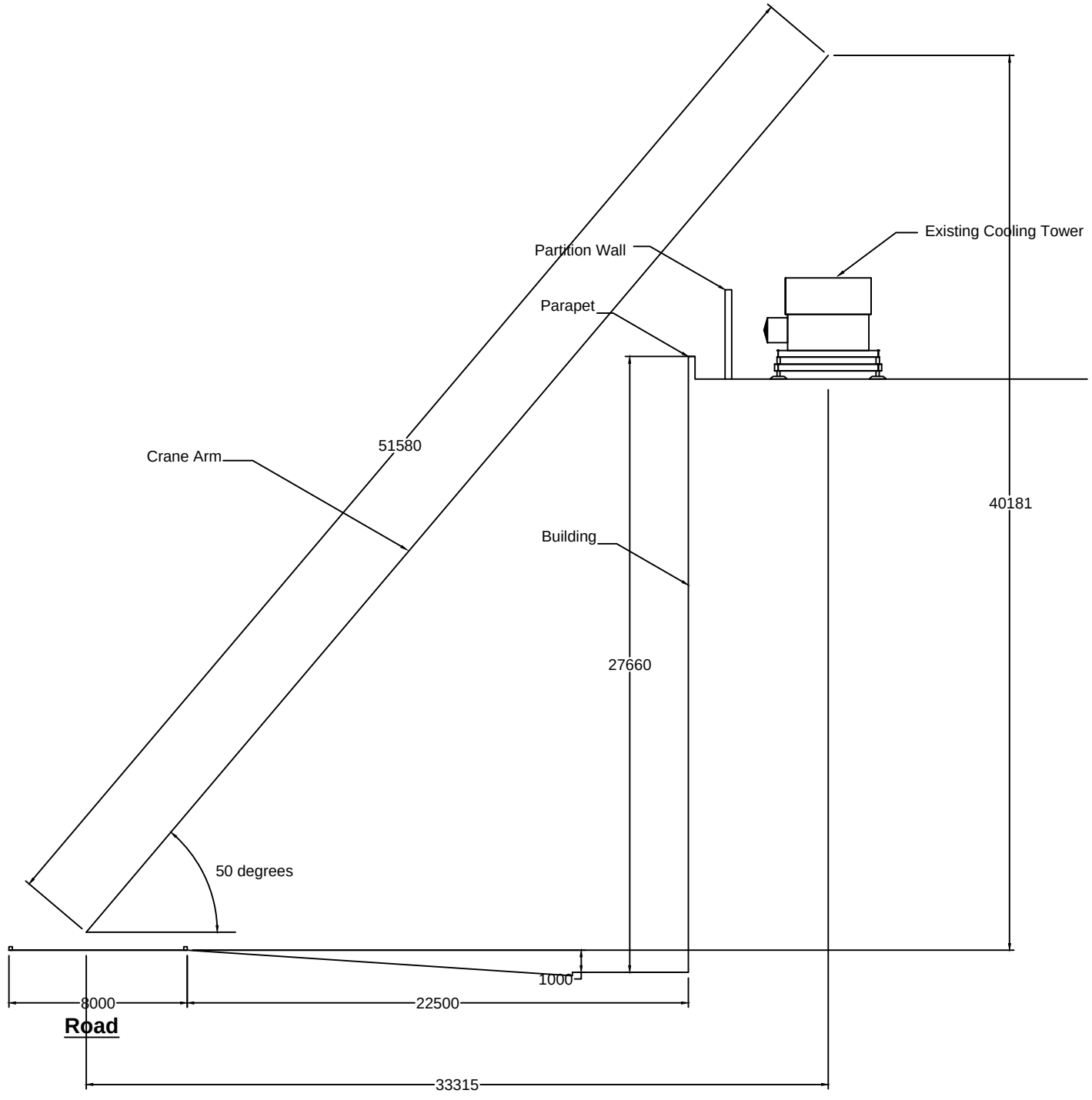


RIGHT ELEVATION VIEW OF TOWER

MD 20

CLOSED-CELL COOLING TOWER AND PIPING DETAIL

Between this point and cooling tower connection, contractor shall replace all piping, valves and peripheral accessories as currently installed. Detail provided from original design for reference only.



PROJECT: COOLING TOWER INSTALLATION	A1
CRANE DISPOSITION	
DATE: APRIL/2016 — DONE: EDUARDO RAMIREZ	
SCALE: N/A — REV: 0	

EXHIBIT D

Specifications

DIVISION 1 – GENERAL REQUIREMENTS

TABLE OF CONTENTS

RELATED DOCUMENTS: Other general provisions of the Contract, including FAR clauses by reference or as amended in Contract Sections B through J of these Contract Specifications apply to requirements of this Division 1 specification. This specification in turn applies to the Contract Drawings and Technical Specifications.

SECTION 011005
CONSTRUCTION EXECUTION AND COORDINATION

1.01 SUBMITTALS

A. The Contractor shall submit, in accordance with Section 013305, *Construction Submittals*, the following:

1. Organization Chart: Thirty (30) days prior to Site mobilization, submit Project organization charts to the Project Director/COR.

2. Project Execution Schedule – See Section 013205 Project Scheduling

1.02 ON-SITE STAFF REQUIREMENTS

A. The Contractor shall assign an English speaking Project Manager to be on-site full time.

B. The Contractor shall provide an adequate professional administrative and supervisory staff on-site for all aspects of the work. This key staff shall be fully coordinated and provide a professional level of Project execution management

C. From the issuance of the Notice to Proceed for Construction through Substantial Completion, the Contractor shall always have the following personnel at the Site: the Project Manager, the Superintendent, the QC Manager and the Safety Manager. Subject to satisfactory performance, some of these functions may be combined and performed by a single individual.

D. Project Organization Chart: The Contractor shall depict principal staff assignments and contact information on a Project Organization Chart. This chart shall include key administrative and supervisory staff and, as applicable; indicate where multiple functions shall be performed by the same individual. The Contractor shall depict how management, supervisory, and administrative functions shall be performed, to include lines of communication and supervisory responsibility for sub-contractors.

E. Each trades-person shall be skilled, experienced, and properly equipped to produce the required quality of work.

1.03 USE OF PROJECT SITE

A. Project Site boundaries and any requirements/restrictions pertaining to the access and utilization of the site will be discussed with the potential contractors on site, prior to the submittal of Bid/Proposal. Minutes of these discussions will become part of the contract.

B. The Contractor shall perform work in accordance with applicable security requirements specified by the Project Director/COR.

C. The Contractor shall ensure that surplus, waste, and rejected material is promptly removed from the Project Site and disposed of according to local law.

D. Protection of Adjacent Properties: The Contractor shall prevent and repair any damage to surrounding and adjacent properties arising from performance of the work.

E. The Government reserves the right to place and install equipment as necessary in completed areas of the building and to occupy such completed areas prior to Substantial Completion.

1.04 PROJECT SITE HOURS OF OPERATIONS

A. Unless otherwise agreed upon in writing, work shall be performed only during the days and hours specified below.

1. The Contractor shall plan execution of the work based on a 6-day workweek excluding local holidays. Work hours shall be 7:00 AM to 6:00 PM.
   a. Working hours shall be a maximum of 10 hours per day, exclusive of screening time, unless restricted by local custom for one or more given days of the week. In each case, the Contractor shall become familiar with local customs and ensure all Project execution actions are in accordance.
   b. The building is occupied by other tenants. Deviating work hours are to be used for demolition or other disruptive work. Disruptive work may be defined as 85 decibels or above. Deviating work hours are 6:00 PM to 5:00 AM.
   c. Unless otherwise modified in writing by local permit, the working hours for this Project are as specified above.
2. Deliveries - Deliveries of materials to the project are restricted. The Contractor shall refer and abide by local regulations for delivery restrictions.
3. Local Holidays - The Contractor shall observe, independently validate, and plan the work around local national holidays during the construction period. Should any of the holidays fall on a local non-workday, or local custom weekend day, the Contractor shall exercise due diligence to ensure local customs and appropriate compensation issues are addressed.
4. U.S. Holidays – Refer to Contract Section H.2, *Observance of Legal Holidays and Administrative Leave.*
5. In accordance with Paragraph 1.04 B.1 below, working on a U.S Holiday or a Local Holiday is considered Excepted Operations. As such, the Government's approval of the contractors request to work on Local or US Holidays will be dependent upon the Contractor's written agreement to compensate the government for all of its additional costs.

B. Excepted Operations:

1. The only work permitted outside of work hours or days specified above will be due to special circumstances. The Contractor shall provide written request to the Project Director/COR at least one business day in advance of such operations and obtain the written acceptance of the Project Director/COR prior to scheduling any such work.

1.05 GENERAL

A. The Contractor shall remove and replace workmanship that is found non-compliant at no additional cost to the Government.

B. Except as otherwise indicated, the Contractor shall comply with the following general requirements for the installation and coordination of work:

1. Require each installer to inspect substrates and report unsatisfactory installation conditions.
2. Inspect delivered materials, fabrications, and equipment prior to installation and reject damaged or defective items.
3. Comply with manufacturer's instructions for each installation.

1.06 COORDINATION MEETINGS

A. Pre-Construction Conference: The Project Director/COR will conduct a pre-construction conference on or near the date of NTP Construction and thirty (30) calendar days prior to the Contractor’s mobilization to the Project Site. Agenda items will include a review of the general plans, conditions, procedures, and requirements as necessary for the effective scheduling and prosecution of the construction work. Parties will review security and material delivery requirements, personnel assigned, and Contract communication procedures as established for the Project.

B. Construction Coordination Meetings: The Contractor and Project Director/COR will hold frequent construction coordination meetings to discuss schedule and status of outstanding issues.

1. The weekly construction coordination meeting shall have an agenda as follows:

a) Security
b) Safety
c) Quality Control
d) Project Execution Schedule
e) Submittal Register
f) Requests For Information (RFI)
g) Change Orders
h) Correspondence
i) Material Tracking Schedule and Procurement Log

1.07 GOVERNMENT-FURNISHED ITEMS

A. As delineated in Contract Section C, the Government may provide equipment or material for either Government installation or Contractor installation, designated as Government Furnished Government Installed and Government Furnished Contractor Installed, respectively.

B. The Contractor shall support the infrastructure for Government-furnished items. For example, prior to substantial completion, the Government will provide and install TSS and telecom systems. The Contractor shall provide and install conduits, raceways, cables, terminal boxes, and source power per the contract documents.

C. Additionally, the Contractor shall coordinate and integrate with the Government for the effective installation, termination, overall testing, modification and adjustment to the telecom and TSS systems.

D. The Contractor shall advice the USG in writing, a minimum of 45 days in advance of the installation start of all USG furnished items.

END OF SECTION

SECTION 013205
PROJECT SCHEDULING

1.01 PURPOSES of the Project Execution Schedule

A. To provide a complete information and reference plan of execution for project administration, materials submittal preparation, USG submittal review, procurement, shipping, construction and close-out requirements.

B. To assure coordination of the Contract Work between the Contractor and the subcontractors, material suppliers, and all other parties associated with the project.

C. To record and report actual performance progress

D. To be the basis for evaluation of the Work completed and the preparation of the Contractor's monthly payment application.

1.02 SUBMITTALS

A. Submit the following as prescribed above:

1. **Baseline Project Execution Schedule Update (BPES)**
   a. To PD/COR 15 days after contract award.
   b. Acceptance of the BPES is a prerequisite to the CO issuing the NTP for construction.
2. **Project Execution Schedule (PES) Updates**
   a. Submit to the PD/COR monthly--with the Payment Request.
   b. Weekly 14 day look ahead plan

B. If the Contractor does not submit acceptable schedules within the times prescribed above, the CO may withhold funds from progress payments in accordance with FAR Section 52.232.

1.03 GOVERNMENT REVIEW PROCESS

A. For all submittals identified in this section, the USG shall review the schedule and supporting documentation for contract compliance. Formal submittal disposition will be issued within 15 calendar days after receipt of all required information.

B. The PD/COR will review the updated PES to verify the accuracy of the on-site work progress – activities started, completed, and on-going and their respective completion percentages and process pay application accordingly.

1.04 SCHEDULING SOFTWARE

A. The scheduling software shall be Microsoft Project, Primavera P3 or P6, or equivalent approved in advance by PD/COR.

1.05 SCHEDULE DEVELOPMENT

A. The detailed Project Execution Schedule (PES) will include tasks and milestones representing the entire Contract Scope of Work.

B. The PES shall be cost-loaded. The Total Baseline Cost of the PES shall coincide with the Total Contract Amount excluding VATs.

C. Required Milestones – those below must appear; additional milestones by Contractor or PD/COR may be added
   1. Contract Award
   2. NTP-Construction
   3. Required Dates for delivery of USG furnished items (GFCI).
   4. Project Substantial Completion
   5. Final Acceptance

D. Provide sufficient detail to show a logical Critical Path beginning with the first schedule activity and ending with the final schedule activity.

E. All activities except first and last, shall have at least one predecessor and once successor relationship link.

1.06 PAYMENT APPLICATION

A. Approval is dependent on

   1. Percent complete verification of all progressed activities
   2. Determination of the Actual Cost from the approved PES Update for the current month.

END OF SECTION

SECTION 013305
CONSTRUCTION SUBMITTALS

1.01 GENERAL

A. The Contractor shall transmit in English all construction submittals to the Project Director/COR.

B. The Contractor shall review all Contract documents and Project requirements and generate a complete list of deliverables for submittal. The Contractor shall ensure all deliverables are considered in the Project Execution Plan.

C. Submittal Register: The Contractor shall develop a submittal register encompassing Division 1 and the Contract Technical Specifications and submit it within 21 days after the NTP. Submittals to include:

1. Construction Submittals:
   a. Product Data:
   b. Shop Drawings:
   c. Field Samples:
   d. Administrative Submittals
   e. Closeout Submittals

D. Sample Transmittal Form. A sample Transmittal Form is provided as an attachment to this Section.

E. Substitutions for Materials or Products:

1. Proposals for substitutions of materials or products required by the Contract construction specifications and drawings shall include a specific description of each substitution in writing and provide justification.
2. Any submittals requesting a substitution shall be clearly marked.

1.02 GOVERNMENT SUBMITTAL REVIEW

A. General:

1. The Government's review period for submittals is 30 calendar days following the Government's receipt of a submittal.

2. Submittals will be reviewed only for general compliance with intent of Contract Documents and with information given therein. Government acceptance will not:

   a. Relieve the Contractor of the responsibility for patent or latent errors and omissions, including details, dimensions, material, etc.
   b. Authorize a departure from the details appearing on accepted construction specifications and drawings.

3. The Government will have unlimited rights to all drawings, specifications, notes and other work developed in the execution of the works, upon acceptance of each submittal, and upon receipt of “For Information Only” submittals.

B. Submittal Disposition: Pursuant to the submittal review, Project Director/COR will mark submittals as follows:

7. ACCEPTED AS SUBMITTED (AS): Authorizes the contractor to proceed with the work covered.
8. ACCEPTED AS NOTED (AN): Authorizes the contractor to proceed with the work covered provided he takes no exception to the corrections noted.
9. FOR INFORMATION ONLY (IO): Indicates the submittal is for information only.
10. REJECTED: RESUBMIT (RR):
    a. Indicates the submittal does not meet the Contract’s intent or corrections are required of the proposed work’s defects or deficiencies as represented by the submittal.
    b. The Contractor shall not proceed with the purchase, fabrication, delivery, or other related execution of the work until acceptance is granted.
    c. The Contractor shall not allow the use of rejected submittals and materials.
    d. Correction of noted defects or deficiencies shall be resubmitted for the Government’s acceptance.
    e. The Contractor shall bear all risk in the submittal-rejection-re-submittal cycle. Submittal rejection will not justify extension of Contract duration.

C. Failure of the USG to identify any deficiency does not relieve the contractor from fulfilling their contractual obligation.

MATERIAL/PRODUCT SUBSTITUTION REQUEST FORM

Date: _____

Project:

_____

Contractor:

_____

Within 30 days after the construction NTP, this formal request will be considered for substitution of products specified as minimum standard. After the end of this period, substitution requests will be considered only if the specified product or material is no longer available or deemed unsatisfactory for the intended function.

Specified Material/Product_____

Specification Division – Section _____

Specified Manufacturer/Origin _____

Proposed Substitution _____

Proposed Manufacturer/Origin _____

Proposed Supplier/Source _____

Attached hereto are the specification, data, performance documents and standard laboratory test results supporting the product substitution.

The following criteria has been taken into consideration

- The use of this material/product is applicable to this product in the prescribed location and will be warranted in the same manner as the specified product for a period of ___ years, when applied and used as per the manufacturers guidelines.
- The substitution of this product will not affect the dimensions shown on the drawing in any way.
- This product substitution will not affect the work of other trades working on this product.
- This product will not affect the expected Commissioning Functional Performance Test results.

The advantages of incorporating the proposed substitution into this Project are as follows: _____

_____

_____

Submitted By: _____**of**_____

T**his completed form is to be sent to Project Director/COR with the required submittal.**

SUBMITTAL REGISTER/LOG/SCHEDULE	**PROJECT, LOCATION, NUMBER:** New Office Building Compound Capital Big City, ABC Land XJ-AA1234	**CONTRACT NUMBER** S-OBO AD 02 – G-12345 Mods 001 - 010
		REPORT DATE: 01 January 2013 — Page 1 of 1

SUBMITTAL NUMBER	SPECIFICATION		SUBMITTAL		CONTRACTOR DATES				GOVERNMENT DATES, ACTIONS						
	SECTION NUMBER	PARAGRAPH NUMBER	TYPE	DESCRIPTION	SCHEDULED SUBMISSION	ACTUAL SUBMISSION	ACCEPTANCE NEEDED BY:	MFGR WARRNTY EXPIRATION	CONTRACTOR. WARRANTY EXPIRATION	SUBMITTAL REVIEW AGENT		RECEIVED BY REVIEW AGENT	RETURNED TO PROJECT DIRECTOR/ COR	RETURNED TO CONTRACTOR	STATUS CODE
										ON SITE	OTHER				
			DPS	Detailed Project Schedule											
			SD4	Trenching, Backfilling and Compacting for Utilities											
			AD1	Hot-Mixed Asphalt Paving											
			AD3	Aggregate gradations											
			AD3	Asphalt cement											
			SA3	Exposed Aggregate Concrete Paving											
			PD3	Mix Design											
			PD3	Material List and Source											
			SA1	Admixtures and Accessories											
			SA1	Aggregate											
			SA5	Reinforcement											
			SA1	Joint Fillers											
			SD5	Concrete											

NOTE: Sample is provided as a suggested format only; generate actual using automated project execution control system and modify as needed to create the most effective management tool possible.

TYPE LEGEND SD = SHOP DRAWING, AD = ADMINISTRATIVE DATA, PD = PRODUCT DATA, AND SA = SAMPLE

TRANSMITTAL	DATE: 31 December 2099	NEW:		INFORMATION:		ORIGINAL SUBMITTAL DATE: (31 December 2099) (N/A)
		RESUBMITTAL:				

TO:	FROM:	PROJECT NAME, LOCATION, NUMBER:	CONTRACT NUMBER:
US Department of State Overseas Building Operations	ABC Contractors, Inc. Field Address Line 1 Field Address Line 2	New Office Building Compound Capital Big City, XYZ Land XJ-AA1234	S-OBO AD 03 – G-12345 Modifications: 001 - ???

ITEM NO.	SUBMITTAL NUMBER	SPECIFICATION		SUBMITTAL						
		SECTION NUMBER	PARAGRAPH NUMBER	DESCRIPTION	TYPE	NUMBER OF COPIES	DRAWING SHEET NUMBER	SUBSTITUTION	STATUS CODE	
1										
2										
3										
4										
5										
6										

I certify that the submitted items listed in this transmittal have been prepared in strict conformance with the Contract Documents. When submittals propose substitutions or deviations, these are identified on this transmittal form and clearly annotated in the material presented.

Bill/Bertha B. Bubba **Date**
Project Manager,
ABC CONTRACTORS, INC.

ACCEPTANCE:

Alex/Amy A. Able Date
OBO Project Director/COR

REMARKS:

1)	Remarks
2)	Remarks
3)	Remarks
4)	Remarks

TYPE CODES:

ADx	Administrative/Other
PDx	Product Data
SDx	Shop Drawings
COx	Closeout
SAx	Field Sample

STATUS CODES:

AS	Accepted as submitted
AN	Accepted as noted
IO	Accepted for Information Only
RR	Rejected; Resubmission Required

NOTE: Sample is suggested format; Contractor may modify to improve as management tool; see text for code explanation.

END OF SECTION

SECTION 013525
CONSTRUCTION SAFETY AND OCCUPATIONAL HEALTH

1.01 RELATED DOCUMENTS

A. Latest edition, U.S. Army Corps of Engineers (USACE) Safety and Health Requirements Manual, EM 385-1-1 dated 30 November 2014. This document is available at the U.S. Government Printing Office, Washington D.C.
B. NFPA Code 241, Standard for Safeguarding Construction, Alteration, and Demolition Operations.
C. ANSI A10 Series Standards for Safety Requirements for Construction and Demolition.
D. NFPA Code 51B, Standard for Fire Prevention during Welding, Cutting, and Other Hot Work.
E. NFPA 10, Standard for Portable Fire Extinguishers.
F. NFPA 70, National Electrical Code
G. Department of State, Office of the Procurement Executive, PIB # 2015-05, Combating Trafficking in Persons.

1.02 SUBMITTALS

A. The Contractor shall submit the following:

1. A Construction Accident Prevention Plan (CAPP) prior to the beginning of any construction activity at the Project Site.
2. Hazardous Work Permit Requests.
3. Material Safety Data Sheets (MSDS).
4. Accident Investigation Report: A report within 24 hours of each accident or mishap, except as otherwise indicated by requirements or governing regulations.

1.03 GENERAL

A. The contractor shall have a Safety & Health Program Manager on-site when any construction activity is ongoing.

B. For the duration of construction, the Contractor shall implement and manage a comprehensive safety and health program.

C. The Project Director/COR, as the Government Contracting Officer’s Representative, reserves the right to suspend work when and where the Contractor's safety and health program is operating in an inadequate manner, has severe shortcomings, or is not in compliance with contractual requirements.

D. Acceptance by the Project Director/COR will not relieve the Contractor of overall responsibility for compliance with the strict interpretation of all safety and health requirements of the Contract.

E. Accident Investigation:

1. The Contractor shall investigate and prepare a separate accident report for each accident resulting in lost time, disabling or fatal injuries, or damage to vehicles, property, materials, supplies, furniture, fixtures, and equipment.
   In each report, the Contractor shall include a statement of Contractor actions taken to prevent recurrence of accident.

F. Hazardous Materials: The Contractor shall test any material encountered suspected to contain hazardous substances and bring to the immediate attention of the Project Director/COR.

G. Protective Clothing and Equipment: The Contractor shall issue personal protective clothing and equipment as required by EM 385-1-1.

H. Welding Safety Plan: The contractor shall submit a Welding Safety Plan for all welding work to the PD before the start of any welding activities.

I. Safety and Health Training: Tool Box Meetings: The Contractor shall conduct weekly safety meetings. The Contractor shall require attendance by all tradespersons, laborers, foremen, and supervisors at the Project Site, including those of separate contractors. The Contractor shall discuss current construction operations, analyze hazards, and communicate solutions.

J. Rolling Scaffolding: All rolling scaffolding needs to be part of a complete system from a single manufacturer.

K. Ladders: All ladders used on the construction site shall be fiberglass. No metal, aluminum or wood ladders are permitted on this project.

L. Signs shall be provided to give adequate warning and caution of hazards. All signs shall be visible at all times when the hazard or problem exists and shall be removed when the hazard or problem no longer exists. All employees shall be informed as to the meaning of the various signs used throughout the workplace and any special precautions that may be required.

1.04 CONSTRUCTION ACCIDENT PREVENTION PLAN (CAPP)

A. Prior to beginning work at the Project Site, the Contractor shall prepare and submit to the Project Director/COR, a site-specific CAPP covering all activities for the Contractor and all subcontractors. The CAPP shall contain, at a minimum, the Contractor's understanding of:

1. Management and Corporate Commitment: The Contractor shall include a certified statement in the introduction, executed by a senior officer of the construction firm having broad corporate authority, indicating full commitment to the accepted CAPP and the level of authority in assignment of responsibilities at the Project Site.
2. Name, qualifications, and duties of Safety & Health Program Manager.
3. The CAPP shall incorporate the requirements contained in the U.S. Army Corps of Engineers (USACE) Safety and Health Requirements Manual, EM 385-1-1.
4. Submit the Fall Protection and Prevention Plan with the CAPP, and update every six (6) months

5. Hazardous Work Permits: The procedure for preparation and approval prior to proceeding with work deemed hazardous.
6. Safety and Health Training: The procedures for implementing training and orientation.
7. Location of facilities and procedures for emergency medical situations.
8. Emergency Plan to include: Escape procedures and routes, method of accounting for employees following emergency evacuation, means of reporting emergencies, and persons to be contacted for information or clarification.
9. Emergency Resources--Establish jointly with the Government, a list of telephone numbers and locations of ambulance, physician, hospital, fire, police and other sources of emergency assistance. The list shall be posted in several locations on the Project site.

1.05 SITE MAINTENANCE, PROTECTION, AND SANITATION

A. The Contractor shall maintain the site facilities in clean, sanitary, and safe operating conditions to the satisfaction of the Project Director/COR.

B. The PD/COR will conduct periodic site inspections to verify that the Contractor is maintaining good housekeeping practices

C. Fire Protection:

1. The Contractor shall provide temporary portable fire extinguishers..
2. The Contractor shall prohibit smoking and beetlenut chewing in the building.
3. During welding, cutting, and burning, the Contractor shall comply with NFPA 51B in areas of fire-hazard exposure. The Contractor shall provide stand-by fire-protection personnel and adequate supervision of operations.

D. First Aid Medical Facility Requirements:

1. The Contractor shall provide a first aid kit. A health care professional or competent first aid person shall evaluate and determine the fill contents of each kit.
2. The Contractor shall provide, place, and test periodically one (1) Automatic External Defibrillator (AED) in the Contractor's Project Site office. A CPR/AED training program shall be given to two (2) persons at each location who shall receive certification in first aid and CPR from the American Red Cross, the American Heart Association, or from an organization whose training adheres to the standards of the International Liaison Committee on Resuscitation. CPR/AED training shall contain a hands-on component. A certificate shall state the date of issue and length of validity.

E. Construction Site Sanitation and Health Facilities:

1. Facilities for workers shall be completed and ready to use prior to the start of construction.
2. The Contractor is encouraged to utilize semi-permanent or portable facilities where possible in compliance with the requirements of this Section.
3. The Contractor shall provide temporary facilities for workers: toilets and lunch area.
4. Toilets Facilities and Restrooms:
    a. Design the number of toilet fixtures around the anticipated maximum number of workers at the Project Site and allow accessibility to all employees.

b. The construction and installation of toilet facilities shall be acceptable to the Project Director/COR and shall be in compliance with applicable jurisdictional codes.
c. Provide hand-washing lavatories in close proximity to all toilet facilities
d. Maintain an adequate supply of toilet paper and paper towels at all times.
e. Comply with the requirements of the authority having jurisdiction for sewage disposal. Where non-sewer waste disposal systems are permitted, they shall be of a type accepted by the local health authorities having jurisdiction. Maintain all disposal systems in a sanitary condition.

END OF SECTION

SECTION 014010
CONTRACTOR QUALITY CONTROL

1.01 Quality Control

A. The Quality Control system used during the project construction phase must ensure that the facility meets the contract design, quality and functional standards. To this end the Contractor is required to establish, implement and maintain an effective Construction Quality Control (CQC) Plan. The CQC Plan shall cover all constructions operations both onsite and offsite, and shall be keyed to the proposed construction sequence (definable features of work).

B. The Construction Quality Control Plan shall include, as a minimum, all quality processes performed by the contractor, subcontractors, fabricators, suppliers, and purchasing agents. ISO 9001:2008 shall be used as a base line for developing the control processes identified in Part 3 (Execution) of this specification.

C. The Contractor is responsible for quality control and shall establish and maintain an effective quality control system. The quality control system shall be defined by the CQC Plan, which defines the Contractor's quality policy, lines of authority and responsibility, QC personnel qualifications, and the procedures and organization necessary to produce a finished product that complies with the contract requirements.

D. The project manager and superintendents will be held accountable for the quality of work and are subject to removal at the direction of the PD/COR for failure to comply with quality requirements specified in the contract. The Contractor's project manager and superintendents in this context shall mean the individuals with responsibility for the overall supervision of field activities for the project.

E. The Government will schedule performance audits during the construction phase to assess the Contractor's performance against contract requirements and CQC Plan implementation. The Project Director/COR shall use the audit results to evaluate the completed work and progress made against the contract documents and project schedule when reviewing Contractor requests for progress payments.

1.02 Referenced/Related Documents

A. ISO 9000:2008 Quality Management Systems requirements is a quality program document that the Contractor shall use to develop the CQC.

1.03 Submittals: The Contractor shall submit, in accordance with Section 013305, *Construction Submittals* the following:

A. Contractor's Quality Control Plan (CQC Plan): The CQC Plan shall be submitted within thirty (30) calendar days after Contract Award. No work shall be undertaken before CQC Plan acceptance.

B. The name, qualifications (in resume format), duties, responsibilities and authorities of each person assigned to a Quality Control (QC) function shall be submitted to the Government for review. The Government will reject personnel who are not qualified for the positions for which they have been proposed. Changes to QC organization staffing shall only be made after acceptance by the Government of the proposed changes.

C. The Contract shall submit a Quality Control Report (QCR) to the Government daily. Reporting shall begin on the first day the contractor's forces arrive on site and shall continue until the contractor's forces have completely demobilized. Daily reports shall be submitted by 8:00 the following morning and shall include, at a minimum, the information discussed in this section. The report format shall be accepted by the Government prior to use

END OF SECTION

SECTION 015005
TEMPORARY FACILITIES AND CONTROLS

1.01 TEMPORARY CONSTRUCTION FACILITIES

A. GENERAL:

1. The Contractor is encouraged to utilize semi-permanent or portable facilities where possible in compliance with the requirements of this Section.
2. The Contractor shall comply with the latest version of the US Army Corps of Engineers, Safety and Health Requirements Manual EM385-1-1 with respect to all temporary facilities.
3. The Contractor shall provide temporary enclosures for weather and dust protection, security, visual, and acoustical separation, conservation of energy, comfort and efficiency of tradespersons, and effective separation of work by separate contractors and the Government.
4. The Contractor shall provide temporary enclosures for the protection of fabricated, installed, or cured work from weather. The enclosures shall secure the Site from possible loss and restricted (classified) access and other reasons as indicated.
5. The Contractor shall provide separate storage for flammable and combustible liquids. Refer to the most updated edition of the US Army Corps of Engineers, Safety and Health Requirements Manual EM 385-1-1 for additional requirements and information.
6. Materials:
   a. The Contractor shall provide new materials of suitable grade for the intended purpose. Where applicable, the Contractor shall comply with related requirements for permanent work of this project.
   b. The Contractor shall provide UL-labeled tarpaulins with a flame-spread rating of fifteen (15) or less and translucent, nylon-reinforced, laminations of polyethylene or PVC films, with similar fire-retardant ratings.
   c. The Contractor shall provide UL-labeled, fire-treated lumber and plywood wherever wooden construction is not otherwise protected or covered to effectively reduce flammability. This shall apply to offices, tool sheds, storage rooms, scaffolds, walkways, fences, sidewalk bridges, other enclosures and barriers, and where contiguous wood exposure exceeds ten (10) square meters.
   d. Roofing: The Contractor shall provide either UL Class "A" standard weight asphalt shingles (ASTM D 3018) or UL Class "C" mineral-surfaced roll roofing (ASTM D 249) on temporary offices, sheds, and enclosures.
   e. Where appropriate, the Contractor shall provide a translucent-type enclosure to avoid the restriction of daylight.

B. Contractor's Field Office:

1. If Contractor requires field office space at the Project Site, Contractor shall provide it and shall include furnishings, fixtures and equipment, and be sized to accommodate the incidental field office needs of the supervision and administrative

functions of the Contractor, subcontractors, suppliers, consultants, testing agencies, officials, separate contractors, and others engaged in Project work.

2. The entry/exit doors and server room doors shall be either solid core wood or hollow metal doors.
3. The Contractor shall provide, design, and install temporary technical security systems (TSS) to include:
   a. Door contact on the entry/exit doors and server room doors,
   b. PIR motion detectors
4. The field office, furniture and equipment shall remain the property of the Contractor.

1.02 PHYSICAL SECURITY REQUIREMENTS FOR TEMPORARY CONSTRUCTION FACILITIES

A. Locate office facilities away from vehicle CACs, perimeters accessible to unauthorized vehicles, and maximize setback from the perimeter's anti-ram barriers.

B. Office facilities for construction support personnel must be of substantial construction defined as follows:
   1. Exterior walls and ceilings covered with wood stud construction.
   2. Plywood substrate (20mm), with drywall (12mm).
   3. Window glazing of laminated glass or treated with an application of eight (8) mil shatter resistant window film.
   4. Grilles providing 5-minute FE protection on all exterior windows
   5. Reverse bevel exterior doors of solid core wood or hollow metal with metal frames, equipped with non-removable hinges, simplex mechanical pushbutton combination locks, dead bolt locks, and door viewers

C. The contractor must provide and install duress buttons and door contacts at the entrance doors to office facilities for monitoring by the Post One.

1.03 TEMPORARY UTILITIES

A. General:

   1. The Contractor shall connect to existing utilities for required services, where reasonably possible.

B. Temporary Electricity:

   1. The Contractor shall design, install, maintain, and remove temporary electrical service and distribution systems. The Contractor shall comply with the requirements of NFPA 70, National Electrical Code.

C. Temporary Lighting:

   1. The Contractor shall provide a combination of sufficient day lighting, general electrical lighting, and plug-in task lighting in every construction area to ensure the proper and adequate performance of work, reading of signs, inspection, testing, and other need-to-see requirements.

END OF SECTION

SECTION 017705
CLOSEOUT PROCEDURES.

1.01 SUBMITTALS

A. The Contractor shall submit, in accordance with Section 013305, *Construction Submittals*, the following:

1. Request for Certification of Substantial Completion.
2. Request for Final Inspection and Testing.
3. Final Record Documents. The Contractor shall submit final documents marked "As-Built" to the Project Director/COR with a request for inspection and Substantial Completion.
4. Warranty Management Plan

1.02 WARRANTY MANAGEMENT AGENT

A. The Contractor shall designate a qualified representative, knowledgeable in the operation and maintenance of the various building systems as installed in the works, for a period of one year.

1.03 GENERAL

The Contractor shall comply with the instructions of the Contracting Officer and the Project Director/COR for procedures, sequence, timing, and similar considerations regarding the turnover of facilities to Government personnel.

1.04 SUBSTANTIAL COMPLETION

A. General: Before requesting the Certificate of Substantial Completion from the Project Director/COR for all work or a defined portion thereof, the Contractor shall complete the following, as applicable:

1. Progress Payment Request: Submit no earlier than the date claimed for Substantial Completion.
2. Reflect a 100 percent complete status or list non-substantial items that remain incomplete.
3. Submit Operation and Maintenance Data.
4. Submit Record Documents.
5. Deliver extra materials in the manner requested by the Project Director/COR. to include:
   a. Surplus Government-furnished materials.
   b. Spare parts.
   c. Extra stock of materials.
   d. Keys to locks.
6. Make physical adjustments, correct minor defects, touch-up finishes, and lubricate operating parts.

B. Request for Certification of Substantial Completion:

1. Following the inspection, the Contractor's QC Manager shall provide the Project Director/COR with a schedule of defects. Defects deemed to be substantially out of compliance with contract quality or performance standards shall be corrected prior to issuance of the Certificate of Substantial Completion.

1.05 FINAL ACCEPTANCE

A. General:

1. The Contractor shall notify the Project Director/COR at least fifteen (15) calendar days prior to the time when the Contractor believes all work included in the contract will be ready for Final Acceptance.

B. Request for Final Inspection:

1. The Contractor shall submit the following when requesting Final Acceptance of the work:
   a. Schedule of Defects.
   b. Final Application for Payment.
   c. Upon the Contractor's satisfactory completion and correction of work items, the Project Director/COR will recommend issuing the Certificate of Final Acceptance by the Contracting Officer.

1.06 RECORD DOCUMENT SUBMITTALS

A. The Contractor shall develop and maintain an original mark-up set of Contract Documents and Submittals.
   1. Indicate each change by change order number when related to a Contract Modification
B. Final Record Documents:
   1. Record As-Built Drawings
      a. Indicate "As-Built" conditions as documented from actual installation.
      b. Maintain the As-Built documents and make available for USG review at any time.
      c. Provide two (2) sets of DVD-ROMs, two (2) sets of full size drawings, and one (1) set of half size drawings to PD at Final Acceptance.
   2. Record Shop Drawings.
   3. Operation and Maintenance Data.

1.07 WARRANTY

The General Contractor's Warranty Management commences early in the start-up phase and ends at a period normally one year (12 months) from the issuance of substantial completion, unless otherwise agreed upon.

END OF SECTION

SECTION 017825
OPERATION AND MAINTENANCE DATA

1.01 SUBMITTALS

A. Schedule
1. O&M Library:
a. The Contractor shall submit two (2) draft hard copies and one (1) CD/DVD version of the complete Maintenance Library fourteen (14) calendar days prior to Substantial Completion.
b. The Government review period will be fourteen (14) calendar days.

1.02 OPERATIONS AND MAINTENANCE LIBRARY

A. Hardcopy Format:
1. All documents shall be prepared in English.
2. All documents shall be included within 3-ring binders:
3. The Library shall be sub-divided using CSI numbers per project Specifications.

B. Electronic Format on CD/DVD
1. An electronic copy of all submitted O&M library documents shall be created in PDF format.
a. Electronic copies must be readable by Adobe Acrobat Reader 8.0.
b. All PDF documents shall be word searchable.
c. The electronic format of the indices described above shall be hyperlinked to the O&M product data described below.
d. All sections and subsections shall be bookmarked to further facilitate the search functionality.
1) Each CSI numbered section shall be bookmarked separately within the PDF file. Include the CSI number and the section title in the bookmark name.
2) Include additional bookmarks for critical documents including Maintenance Plan, etc. within each section.
e. Labeling:
1) Discs shall be labeled and include Post name, and month and year of Substantial Completion.
f. CD/DVD Instructions:
1) A brief guide for installing and viewing the library documents shall be located in the CD/DVD root directory. This file shall be named “readme.txt.”
2) A hard copy of readme.txt shall be inserted as the back cover of the CD/DVD jewel case.

1.03 O&M LIBRARY REQUIRED DOCUMENTS

A. A complete listing of all equipment and systems. Specify manufacturer, make, model, size, capacity, serial number, facility name and location on Project Site, and identifying labels consistent with contract documents.

B. As-built Drawings. One complete set of drawings and one set of hard discs with all drawings in AutoCAD format.

C. O&M Manuals

1. Manuals shall be subdivided by specification section. The first document in each section shall be the Specification text followed by a list of all equipment covered under that section.
2. The Contractor shall locate documents for each piece of maintained equipment from the list above as follows:
   a. Product Description to include:
      1) Manufacturer name.
      2) Model name and number.
      3) Component serial numbers.
      4) Name, Address, and contact information for Installation subcontractor.
   b. Preventive Maintenance Schedule:
      1) Maintenance tasks, inspections, and tests by required frequencies equally balanced throughout the calendar year for each PM requirement identifying the designated skill trade, with estimated maintenance labor duration.
      2) Safety and emergency instructions.
      3) Detailed procedures for detecting faults during scheduled or unscheduled servicing.
      4) Information on seasonal adjustments, emergency or partial operating procedures, start-up and shut-down detail, and other operationally significant information.
      5) Maintenance approach.
      6) Precautions against improper use and maintenance.
   c. Manufacturer’s Product Data and Technical Literature:
      1) Detailed operating procedures, parameters, and tolerances.
      2) Troubleshooting guides..
   d. Manufacturer’s Warranty information, (those extending more than one year) including copies of warranties, forms, and expiration dates.
   e. Shop drawings, wiring diagrams, flow charts, and equipment sequence of operations.
   f. Material Safety Data Sheets (MSDS), as required.
   g. List of Materials for Operation and Maintenance (Manufacturer's Spare Parts). Contractor shall provide a detailed list of materials and spare parts required to operate, maintain, and repair all building systems and installed equipment.

1.04 POSTED INSTRUCTIONS

A. Operation and Maintenance Instructions:

1. Unless otherwise indicated the Contractor shall post O&M instructions at principal units of operational equipment, components, and building systems. They shall include instructions for safety, security, and mandatory protective devices. Instructions shall include, but not be limited to:
   a. Start-up and shut-down procedures.
   b. Control sequences.
   c. Wiring diagrams and layouts.
   d. System piping diagrams, valve locations, etc
2. Emergency info. shall be posted in English and host country language.
3. Instructions Mounting and Location:
   a. Attach to or near each piece of equipment.
   b. Frame in Plexiglas or similar material.
   c. Illuminate, as necessary, to ensure readability.
   d. Provide permanent, protected, tamper-resistant signage, appropriate to the exposure conditions.
   e. Locate for convenience of O&M personnel, but concealed from others, except in the case of general-usage and emergency facilities.

B. Equipment Dataplates:

1. The Contractor shall provide permanent information plate on each item of operating equipment which is connected with services, has operating parts, or is likely to require servicing, parts replacements, control, testing, or similar care and maintenance.
2. Appropriate information shall be provided on dataplates in each case, including the following minimum data as applicable:
   a. Name of manufacturer and product.
   b. Model designation and serial number.
   c. Capacity, speed, service rating, weight, and operational data.

END OF SECTION

SECTION 013550
CONSTRUCTION SECURITY

PART 1 GENERAL

1.01 SUMMARY

A. This Section and its attachments provide explanation to the Contractor regarding labor requirements and the security. The requirements of this Section involve interface with a number of security-related Government entities. These entities are coordinated through the Overseas Buildings Operations (OBO) Contracting Officer's Representative (COR) in coordination with Regional Security Officer (RSO). The requirements include, but are not limited to:

1. General security procedures.
2. Information security.
3. Personnel procedures.
4. Materials security and logistics.
5. Labor requirements for specific activities.
6. Site access procedures.
7. Inspections by the Government.
8. Prohibited and restricted items and activities.

1.02 RELATED DOCUMENTS

A. Other General provisions of the Contract, including FAR clauses by reference or as amended in Contract Sections B through J, and other Division 1 Sections of these Contract Specifications apply to requirements of this Section. This Section in turn applies to the Contract Drawings and to Technical Specifications.

1.03 DEFINITIONS

A. For all terms not understood, request immediate clarification.

1.04 PERFORMANCE REQUIREMENTS:

A. The Contractor shall comply with the Government's requirements for participating in the Project security procedures as specified in this and subsequent Contract Sections, and Public Law #100-204 (as amended). The Contractor shall also comply with requirements requested subsequent to issuance of the Notice to Proceed (NTP). The Contractor shall afford unrestricted access to work, allow surveillance and inspection by any Government personnel as authorized by the COR, and perform required security work when directed by COR. The Contractor shall maintain security, avoid the compromise of classified information and materials caused by unauthorized disclosures, and obtain appropriate security clearances.

B. As noted in the Prohibited Countries List Matrix below, the following restrictions apply:

1. Citizens/Firms from the countries listed will not be allowed or used on this Project in any capacity.

2. Non-US or US firms owned or operated by citizens/firms from the countries listed will not be allowed or used on this Project in any capacity.

Prohibited Countries List Matrix	
Country	**Citizens/Firms**
Belarus	No
Cuba	No
Iran	No
North Korea	No
Peoples Republic of China	No
Russia	No
Venezuela	No
Vietnam	No

General Policy: The use of host country workers, materials, ports of call, and transshipment points from or within the countries listed is permitted for projects in that country. Refer to the FAR for additional information concerning prohibited countries.
List Revised: October 16, 2015

C. The Department of State (DOS) reserves the right, in its sole discretion, to determine suitability of Contractor personnel at the Project Site or otherwise involved in work related to this Project.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.01 GENERAL SECURITY PROCEDURES

A. All security requirements of the Contractor shall apply to all personnel on the project site (to include sub-contractor personnel).

3.02 INFORMATION SECURITY

A. Project Information Handling: See Contract Section H.6, Safeguarding of Information

3.03 PERSONNEL PROCEDURES

A. Uncleared Personnel: Use of uncleared persons is limited to the areas and tasks described in Section 3.05.

1. Uncleared Labor: Uncleared labor will submit to a background investigation and obtain approval of the COR and RSO before access is granted to Project Site or applicable Support Sites. The Contractor shall submit an Employment Application form, in sufficient time to permit processing prior to the anticipated date of employment. The estimated investigation processing time is 30 days. Uncleared labor is not authorized on the project site prior to a favorably adjudicated background investigation. If the background investigations have

exceeded 30 days, the Contractor can provide a priority list with justification of workers needed and the COR may approve temporary I.D. badges for temporary uncleared labor.

2. The COR and RSO reserve the right to allow or deny access of persons and firms proposed to perform work or be present at the Project Site.
3. The RSO must approve Site access for temporary uncleared.

B. Uncleared Local/Third Country National Subcontractors: Contractor selection of host and third country national subcontractors must be approved by COR/RSO. See Contract Section H.6.16 for requirements.

C. U.S. Citizens without clearances: When the contractor wishes to assign U.S. citizens at the project site who do not possess security clearances, the contractor shall meet the requirements of Contract Section H.36.3.1. U.S. citizens with unfavorable National Criminal Indices Checks (NCICs) may not be allowed access to the site, subject to determination of RSO.

D. Special DS Investigation: As determined by the Government's security managers, and as requested through the COR, the Contractor shall accommodate additional special investigations as required for foreign nationals and certain categories of other personnel.

E. All U.S. citizen Contractor employees are required to adhere to reporting requirements IAW Contract Section H.6.13., as well as any adverse information relating to firms or individual personnel which reflects unfavorably on the trustworthiness or reliability of the firm or individual, suggests that the firm or individual's ability to safeguard classified information may be impaired, or that firm or individual may be subject to exploitation.

F. Briefings: The Government reserves the right to conduct briefings and debriefings for all persons performing work. Required briefings and debriefings include, but are not limited to, the following:

1. Management personnel are required to attend special security briefings and debriefings concerning reporting requirements on unusual incidents, activities, or information related to Project security as directed by the COR or RSO.
2. Visitors to the Project Site will be required to attend an appropriate security briefing by the RSO or other Post security management personnel.

3.04 SECURITY REQUIREMENTS AND LABOR FOR SPECIFIC ACTIVITIES

A. All work shall be performed by uncleared Contractor provided labor.

B. As determined by Post RSO, work in areas may require Government provided escorts.

3.05 SITE ACCESS PROCEDURES

A. The Contractor shall comply with Post's access operations and procedures.

B. The Government may issue identification badges. All personnel, to include sub-contractor personnel, are required to leave their badges upon leaving the

Project Site. RSO will provide final direction and guidance on badging requirements.

C. Search Procedures: The Government reserves the right to conduct searches of all personal belongings at the point of entering and leaving the Embassy Compound.

D. Visitor Notification: The COR must be notified in advance of proposed Contractor visits. Visitors will be authorized on a demonstrated need-to-know basis. The COR will approve, disapprove, or qualify each Contractor request in advance of each visit. Contractor Country Clearance Request procedures are detailed in Contract Section H.6.2. If Contractor Country Clearance Request has not been received prior to arrival IAW H.6.2.2, visitors will be treated and escorted by their sponsor as if they are uncleared. In addition, the COR may refuse access to the Site until a Contractor Country Clearance Request has been received.

3.10 INSPECTIONS BY THE GOVERNMENT

A. The Government reserves the unqualified and unlimited right at any time to conduct security-related inspections of the Contractor's work, material, equipment, personnel, and temporary facilities at the Project Site and any off-site support facilities, to include subcontractor offices, or temporary and off-site contractor offices, to include subcontractor offices, or temporary and off-site contractor offices. Contract Section H.6.21 requires the contractor to provide written notification to COR of any off-site locations at which project information will be stored.

1. In instances where authorized work must be disassembled, uncovered, or demolished then reassembled, recovered, or rebuilt to accommodate inspection in compliance with construction specifications and security requirements, resultant costs of such actions will be borne by the Government. The Contractor shall be responsible for resultant costs where inspected work is found to be non-compliant with Project specifications or where work was performed without Government authorization. The Government reserves the right to suspend operations where unauthorized work has been performed and where introduction or attempted introduction of unauthorized material has taken place.
2. Reported Violations: Where an indication, report, or observation of unauthorized access or performance of unauthorized work has occurred, the Government reserves the right to suspend operations and deny access until circumstance and work can be investigated, inspected, tested, and resolved. All costs of such stoppages and resolutions shall be borne by the Contractor, except when alleged violations, after investigation, are determined not to be in violation of security requirements.

3.11 PROHIBITED AND RESTRICTED ITEMS AND ACTIVITIES

A. Prohibited/Restricted Items and Activities on Project Site include, but are not limited to, the following:

1. Firearms and other weapons, except as specifically authorized by the COR.

2. Electronic media devices, including radios, recorders, transmitters, receivers, cell phones, cell phones with camera, video or audio recording capabilities, laptop computers, personal digital assistants (CORAs), smart phones (i.e. BlackBerrys, iPhones, etc.), media storage devices (i.e. thumb drives, jump drives), and similar items, except for authorized uses as approved by the COR, in accordance with site procedural documentation, and as allowed by Contract Section H.
3. Contract Section H.6.17 and H.6.18.
4. Drugs, including narcotics, barbiturates, marijuana, alcoholic beverages, and similar substances, except for use with a valid medical prescription.
5. Explosives, except for use in specifically limited amounts and under controlled circumstances for work specified to be performed through use of explosives. Such use requires written prior authorization from the COR. As a hazardous material, the Contractor shall treat the use of explosives in accordance with guidance provided under Section 013525, Construction Safety and Occupational Health.
6. Cameras, except in accordance with 3.11.B below.

B. Photography

1. General: The use of photographic equipment and taking of photographs is restricted on and nearby the Project Site, as determined by the COR. Written requests for approval of photography must be submitted well in advance of time intended for such activity, stating reasons, uses and disposition of imaging media. The COR must review photographs and imaging media prior to removal from the site. The Government reserves the right to deny such use and release and limit to authorized purposes and distribution IAW Contract Sections H.6.10, H.8 and H.9.

3.12 SUPPLEMENTS

A. The Supplements listed below, following “End of Section,” are a part of this Specification:

1. Attachment A – Department of State (DOS) Security Personnel (By U.S. GOVERNMENT).

END OF SECTION

SECTION 013550
CONSTRUCTION SECURITY
ATTACHMENT A – DEPARTMENT OF STATE (DOS) SECURITY PERSONNEL (BY U.S. GOVERNMENT)

1.01 INTRODUCTION

The information provided below complements, but does not replace, information provided in Chapter 2 of the OBO International Codes Supplement (OBO-ICS) IBC. Aside from the COR, who is ultimately responsible for ensuring that construction activities are accomplished in a manner that complies fully with applicable statues and security regulations, the following types of Government security personnel may be further assigned at the Construction Site to support this Project:

A. REGIONAL SECURITY OFFICER (RSO)

The RSO is the senior security officer for the Post. The RSO provides liaison with local authorities for security outside the Construction Site. If required, the RSO will conduct records checks and appropriate investigations on any local nationals and firms associated with the Project.

B. LOCAL GUARD FORCE

Local Guards may be used at the perimeter and other locations at the construction Site and may be provided through existing Post local guard contracts. The RSO is responsible for the acquisition, supervision, and qualifications of Local Guard Services.

C. MARINE SECURITY GUARDS (MSGs)

If the Construction Site is also the existing Chancery Site under 24-hour MSG control, CAGs may not be required to control access to the Site, work areas, or the SSA, provided the existing MSG Post resources are sufficient to accomplish the security requirements for the duration of the Project.

NOTE: This Project may or may not require all categories of security personnel.

END OF ATTACHMENT A