

**“ANNEX A”**  
**TECHNICAL SPECIFICATIONS FOR**  
**SUPPLY OF LABOR, MATERIALS, AND EQUIPMENT FOR THE**  
**FIT-OUT AND REPAIR OF SUBIC-CLARK RAILWAY PROJECT**  
**MANAGEMENT OFFICE**  
**(LOT A)**

**TERMS OF REFERENCE**  
**SUPPLY OF LABOR, MATERIALS, AND EQUIPMENT FOR THE**  
**FIT-OUT AND REPAIR OF**  
**SUBIC-CLARK RAILWAY PROJECT MANAGEMENT OFFICE**  
**(LOT A)**

**I. Background Information**

Pursuant to Republic Act No. 7227, the Bases Conversion and Development Authority (BCDA) was created to carry out the declared policies of the Government to accelerate the sound and balance conversion into alternative productive civilian uses of the Clark and Subic military reservations and their extensions, and to enhance the benefits to be derived from said properties in order to promote the economic and social development of Central Luzon in particular and the country in general.

Subic-Clark Railway Project (SCRP) forms part of the supporting infrastructure of BCDA's programs. It is a joint undertaking between BCDA and the Department of Transportation (DOTr). SCRP is a component of PNR Luzon System Development Framework. It is a 71-km freight railway connecting Subic Bay Freeport Zone (SBFZ) and Clark Freeport Zone (CFZ), providing a railway link between the Port of Subic Bay (PSB) and Clark International Airport (CRK). The project will result in increased economic activity due to: faster flow of goods and services; increase Subic Port Utilization, and; compliment airport operation in Clark.

To ensure that the Subic-Clark Railway Project is properly managed and implemented, a BCDA Project Management Office shall be established in Clark.

**II. Objective**

The Terms of Reference aims to secure the highest quality of service that will supply, deliver, and install the office fit-out and repair to put up the Subic-Clark Railway Project Management Office in Clark.

**III. Scope of Work**

The scope of work shall be provided in the Technical Specification, where the instructions for the supply, delivery and installation of the materials and goods involved are described in detail. The Technical Specifications are attached as *Annex A*.

The Contractor shall review the basic design parameters, space distribution matrix, affected facilities and detailed scope of work.

The information provided by BCDA for the contractor may not be as detail as complete and as desired hence, therefore that it's contractors responsibility to secure any information that maybe lacking. These are readily available from BCDA, such shall be used to define project design criteria and shall serve as basis for any revised establish detail project cost estimates.

**IV. Location of BCDA Office in Clark**

The location of the BCDA PMO in Clark is at Bldg 7458 J. Topacio St., Claro M. Recto Hiway, Manual L. Quezon Ave, Clark Freeport Economic Zone, Pampanga.

- a. The Contractor shall conduct the preliminary survey, mapping of existing Site conditions and meeting with BCDA representative on the proposed fit-out/repair methodology of the project.

**V. Bidding Process**

The Bidding shall be in one lot, partial bid is not allowed.

**VI. Approved Budget for the Contract**

The Approved Budget for the Contract (ABC) in the amount of **PESOS: TWO MILLION EIGHT HUNDRE FIFTY THOUSAND PESOS (Php2,850,000.00)** inclusive of VAT and all other applicable government taxes, fees and other charges. Bids received in excess of the ABC shall be automatically rejected on bid opening.

**VII. Duration of Service**

The Project must be completed in sixty (60) calendar days upon award of issuance of Notice To Proceed.

**VIII. Mode of Payment**

The contract price shall be paid to the Supplier within thirty days (30) after the date of submission of the acceptance and inspection certificate for the respective delivery issued by the Procuring Entity's authorized representative.

**IX. Obligations of Supplier (Awardee)**

- a. Cause the signing of the approved Purchase Order (PO) by the authorized representative of the company

- b. Deliver the Goods within the agreed date of delivery, reckoned from the date Notice to Proceed was signed in “Conforme” by the authorized representative of the supplier.
- c. Submit the original copy of the PO supported by Delivery Receipt and Sales Invoice (in triplicate) for the processing of payment.
- d. Provide product service warranty as required in the Technical Specifications.

**X. Obligations of BCDA**

- a. Acknowledge receipt of Goods delivered, if found in accordance with the technical specifications.
- b. Pay the supplier according to the terms of payment indicated in the PO.
- c. Facilitate the issuance of gate pass, if necessary.

**XI. Liquidated Damages**

- a. A liquidated damage in the amount of one tenth (1/10) of one percent (1%) of the total value of the contract shall be deducted for each day of delay for failure of the contractor /supplier to make the delivery within the specified date of delivery.
- b. In case, of partial performance of obligations, a liquidated damage in the amount of one tenth (1/10) of one percent (1%) of the total value of the undelivered portion of the contract shall be deducted for each day of delay for failure of the contractor/supplier to perform the same within the specified date.

**XII. Contract Termination**

BCDA may terminate the contract for reason of default in any of the following conditions:

- a. Failure by the winning supplier to accept the award or refusal to sign the PO in “Conforme” by the authorized representative.
- b. Outside of force majeure, failure of the Supplier to deliver or perform any or all of the Goods within the period(s) specified in the contract, or within any extension thereof granted by the BCDA pursuant to a request made by the supplier prior to the delay, and such failure amounts to at least ten percent (10%) of the contract price (Section IIIA.1.a, Annex I of the revised IRR)
- c. As a result of force majeure, failure of the Supplier to deliver or perform any or all of the Goods, amounting to at least ten percent (10%) of the contract price, for a period of not less than sixty (60) calendar days after receipt of the notice from the BCDA stating that the circumstance of force majeure is deemed to have ceased (Section IIIA.1.b Annex I of the revised IRR)
- d. Failure of the Supplier to perform any other obligation under the Contract (Annex I, Section IIIA.a.c., of the 2016 revised IRR)

### XIII. Blacklisting of Supplier

For refusal to accept an award, or enter into contract or perform the obligation as agreed, without justifiable cause after it has been adjudged as having the Lowest Calculated and Responsive Bid (LCRB), BCDA shall include the winning supplier in the list of BCDA Blacklisted Suppliers for a period of one (1) year.

Prepared by:



Leonor M. Rivera  
Procurement Officer

Reviewed by:



REY S. LIM  
Project Manager, SCRP

Recommending Approval:

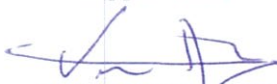


JOSHUA M. BINGCANG  
Vice President, BDOG



AILEEN AN. R. ZOSA  
Executive Vice President


Approved by:



VIVENCIO B. DIZON  
President and CEO

**“ANNEX B”**  
**TECHNICAL SPECIFICATIONS FOR**  
**SUPPLY AND DELIVERY OF VARIOUS OFFICE FURNITURE**  
**(LOT B)**

**TERMS OF REFERENCE**  
**(TECHNICAL SPECIFICATIONS**  
**FOR SUPPLY AND DELIVERY OF VARIOUS OFFICE FURNITURE**  
**(LOT B)**

LOT NO.	SPECIFICATIONS
<b>B</b>	<p><b>1. OFFICE DESK with Mobile Pedestal Cabinet (MPC), 1.4M (W) (12 unit)</b></p> <ul style="list-style-type: none"> <li>• Materials: 30mm MFC (Melamine Faced Chipboard) worktop finish with modesty panel in camphor PVC laminate finish, with edgeband</li> <li>• Legs: 2 x 2 inch U-Leg Tubular Metal Silver In Power Coated Finish, adjustable for uneven floors</li> <li>• Two cable access ports (grommet), both ends of the table</li> <li>• <b>Dimension: W1400 x D800 x H750 MM</b></li> <li>• Mobile Pedestal: All steel, gauge #20, with file divider and pencil tray, centralized lock, recessed handle, Silvercolor Dim: W560 x L400 x H660 MM</li> <li>• Warranty: one year</li> </ul>
	
	<p><b>2. OFFICE DESK with Mobile Pedestal Cabinet (MPC), 1.2M (W) (31 unit)</b></p> <ul style="list-style-type: none"> <li>• Materials: 30mm MFC (Melamine Faced Chipboard) worktops finish with modesty panel in camphor PVC laminate finish, with edgeband</li> <li>• Legs: 2 x 2 inch U-Leg Tubular Metal Silver In Power Coated Finish, adjustable for uneven floors</li> <li>• Two cable access ports (grommet), both ends of the table</li> <li>• <b>Dimension: W1200 x D700 x H750 MM</b></li> <li>• Mobile Pedestal : All steel, gauge #20, with file divider and pencil tray, centralized lock, recessed handle, Silver color Dim: W560 x L400 x H660 MM</li> <li>• Warranty: one year</li> </ul> <p><i>(same picture from item no. 1)</i></p>
	<p><b>3. TABLE, CIRCULAR (5 piece)</b></p> <ul style="list-style-type: none"> <li>• Materials: 30mm MFC (Melamine Faced Chipboard) worktops finish with edgeband</li> <li>• Stainless steel leg and base (round)</li> </ul>

	<ul style="list-style-type: none"> <li>• Dimension: 900 diam x H750 MM</li> </ul>
	<ul style="list-style-type: none"> <li>• Warranty: one year</li> </ul>
	
	<p><b>4. TABLE, CONFERENCE (2 piece)</b></p>
	<ul style="list-style-type: none"> <li>• Rectangular, 10-seating</li> </ul>
	<ul style="list-style-type: none"> <li>• Materials: 50mm Melamine Faced Chipboard (MFC) table top finish with edgeband</li> </ul>
	<ul style="list-style-type: none"> <li>• Legs: 2 x 2 inch U-Leg Tubular Metal Silver In Power Coated Finish, adjustable for uneven floors</li> </ul>
	<ul style="list-style-type: none"> <li>• Dimension: W1200 x D3000 x H750 MM</li> </ul>
	<ul style="list-style-type: none"> <li>• Aluminium/wooden wire box for cable management (under)</li> </ul>
	<ul style="list-style-type: none"> <li>• Warranty: one year</li> </ul>
	
	<p><b>5. OFFICE CHAIR, High-Back (6 piece)</b></p>
	<ul style="list-style-type: none"> <li>• Materials: Commercial grade breathable mesh backrest</li> </ul>
	<ul style="list-style-type: none"> <li>• Upholstered thick moulded comfort form seat in commercial grade black fabric</li> </ul>
	<ul style="list-style-type: none"> <li>• Durable base with wheels, self-adaptable tilt tension control, gas lift seat for adjustable height</li> </ul>
	<ul style="list-style-type: none"> <li>• With leather head rest</li> </ul>
	<ul style="list-style-type: none"> <li>• With fixed nylon armrests</li> </ul>
	<ul style="list-style-type: none"> <li>• Warranty: one year</li> </ul>





**6. OFFICE CHAIR, Mid-Back  
(57 piece)**

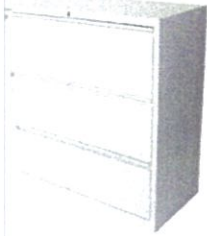
- Materials: Commercial grade breathable mesh backrest
- Upholstered thick moulded comfort form seat in commercial grade black fabric
- Durable base with wheels, self-adaptable tilt tension control, gas lift seat for adjustable height
- With fixed nylon armrests
- Warranty: one year



**7. OFFICE CHAIR, Visitor  
(12 piece)**

- Materials: Commercial grade breathable mesh backrest
- Upholstered thick moulded comfort form seat in commercial grade black fabric
- Square tube heavy duty sled base in black powder coat finish
- With fixed armrests
- Warranty: one year

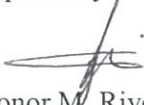


<b>8. LATERAL CABINET</b>	
<b>(20 piece)</b>	
• All steel, Gauge#20, 3-layer drawer pull-out type	
• Recessed handle	
• Powder coated finish, Silver/Offwhite color	
• Centralized lock	
• Dimension: L902 x W452 x H1032 MM	
• Warranty: one year	
	

Notes:

1. All specifications are minimum requirements. Proponents may propose equivalent or higher specifications.
2. Dimensions (Length, Width and Height) may vary, as long as the total space occupied is equal to or smaller than those indicated in the technical specifications.
3. Full replacement of defective unit/s should be **30 working days** from receipt of notice. If full replacement is not yet possible, a service unit shall be provided by the supplier within 48 hours from receipt of notice of defective unit
4. The obligation for the warranty shall be covered by Retention money in an amount equivalent to at least one percent (1%) of every progress payment.  
The said amounts shall only be released after the lapse of the warranty period indicated per item of the TOR.

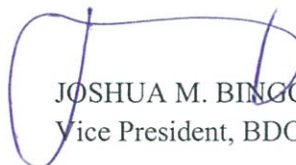
Prepared by:

  
 Leonor M. Rivera  
 Procurement Officer

Reviewed by:

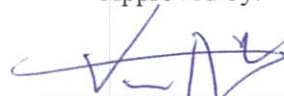
  
 REYS S. LIM  
 Project Manager, SCRP

Recommending Approval:

  
 JOSHUA M. BINGCANG  
 Vice President, BDOG

  
 AILEEN AN. R. ZOSA  
 Executive Vice President

Approved by:

  
 VIVENCIO B. DIZON  
 President and CEO

**“ANNEX C”**

**TECHNICAL SPECIFICATIONS FOR SUPPLY OF DELIVERY OF  
VARIOUS IT EQUIPMENT AND SOFTWARE  
(LOT C TO G)**

**TERMS OF REFERENCE**  
**(TECHNICAL SPECIFICATIONS FOR VARIOUS IT EQUIPMENT**  
**AND SOFTWARE)**  
**LOT C TO G**

LOT NO.	SPECIFICATIONS
<b>C</b>	<p><b>a. DESKTOP PC, i7 (2 units)</b></p> <ul style="list-style-type: none"> <li>• Form Factor: Workstation, Tower</li> <li>• Intel Core i7-9th Gen or Intel Xeon CPU</li> <li>• 16GB 2666 MHz DDR4 Non-ECC</li> <li>• 1 TB SSD</li> <li>• 4GB 3100 Graphics</li> <li>• Slim DVD Writer</li> <li>• 10/100/1000, Integrated Gigabit Ethernet</li> <li>• Ports: USB 3.0, Audio In/Out, Card Reader</li> <li>• Integrated Intel SATA Controller</li> <li>• Intel Wireless 2 x 2 ac card, Bluetooth version 5</li> <li>• 2 x 23" Full-HD Monitor</li> <li>• USB Keyboard and Optical Mouse (same brand)</li> <li>• Genuine Microsoft Windows 10 Pro 64 bit</li> <li>• Branded (Globally Known Brand)</li> <li>• Warranty: 3 years parts and labor and service (3/3/3)</li> <li>• 650 VA UPS</li> <li>• Warranty for the UPS: 2 years, battery: 1 year</li> <li>• Complete documentation of all the components</li> </ul> <p><b>b. DESKTOP PC, i5 (4 units)</b></p> <ul style="list-style-type: none"> <li>• Form Factor: All-in-One Configuration or Mini-Desktop (w/ Vesa Mount)</li> <li>• Intel Core i5 9th Gen</li> <li>• 16GB DDR4, 2666 MHz</li> <li>• 1TB SSD NVMe</li> <li>• Wireless LAN 802.11 ac + BT 4.0</li> <li>• Ports: LAN port, USB 3.0, Audio jack(s), Card reader, Video ports</li> <li>• 23.8" Non-Touch LED Monitor</li> <li>• Integrated HD Graphics</li> <li>• Optical drive</li> <li>• Genuine Microsoft Windows 10 Pro 64 bit</li> <li>• USB Keyboard and Optical Mouse (same brand)</li> <li>• Branded (Globally Known Brand)</li> <li>• Warranty: 3 years Parts and Labor</li> <li>• 650 VA UPS</li> <li>• Warranty for the UPS: 2 years, battery: 1 year</li> </ul>

<ul style="list-style-type: none"> <li>• Complete documentation of all the components.</li> </ul>
<b>c. LAPTOP PC, i7 (3 units)</b>
<ul style="list-style-type: none"> <li>• Intel Core i7 -9th Generation</li> </ul>
<ul style="list-style-type: none"> <li>• 15.6 inch LED, FHD (1920x1080), IPS Touch</li> </ul>
<ul style="list-style-type: none"> <li>• 16GB DDR4 2400 SDRAM</li> </ul>
<ul style="list-style-type: none"> <li>• 512 GB SSD</li> </ul>
<ul style="list-style-type: none"> <li>• 4GB 3100 Graphics</li> </ul>
<ul style="list-style-type: none"> <li>• Ports: 3.1 USB, USB-C, VGA/HDMI, RJ45, Audio combo jack (separate adaptors accepted)</li> </ul>
<ul style="list-style-type: none"> <li>• 3 cell 44WHr Battery</li> </ul>
<ul style="list-style-type: none"> <li>• HD Webcam</li> </ul>
<ul style="list-style-type: none"> <li>• WLAN ac 2x2 + BT</li> </ul>
<ul style="list-style-type: none"> <li>• Genuine Microsoft Windows 10 Pro 64 bit</li> </ul>
<ul style="list-style-type: none"> <li>• Optical Wireless Mouse (same brand)</li> </ul>
<ul style="list-style-type: none"> <li>• Branded (Globally Known Brand)</li> </ul>
<ul style="list-style-type: none"> <li>• Warranty: 3 years Parts and Labor</li> </ul>
<ul style="list-style-type: none"> <li>• With Carrying Case (Backpack type)</li> </ul>
<b>d. LAPTOP PC, i5 (34 units)</b>
<ul style="list-style-type: none"> <li>• Intel Core i7 -8th Generation</li> </ul>
<ul style="list-style-type: none"> <li>• 15.6 inch LED Anti-glare</li> </ul>
<ul style="list-style-type: none"> <li>• 16GB DDR4 2400 SDRAM</li> </ul>
<ul style="list-style-type: none"> <li>• 1TB SSD NVMe</li> </ul>
<ul style="list-style-type: none"> <li>• Ports: 3.1 USB, USB-C, Micro-sim, VGA/HDMI, RJ45, Audio combo jack (separate adaptors accepted)</li> </ul>
<ul style="list-style-type: none"> <li>• 3 cell Li-Polymer Battery</li> </ul>
<ul style="list-style-type: none"> <li>• HD Webcam</li> </ul>
<ul style="list-style-type: none"> <li>• WLAN ac 2x2 + BT 5.0</li> </ul>
<ul style="list-style-type: none"> <li>• Genuine Microsoft Windows 10 Pro 64 bit</li> </ul>
<ul style="list-style-type: none"> <li>• Optical Wireless Mouse (same brand)</li> </ul>
<ul style="list-style-type: none"> <li>• Branded (Globally Known Brand)</li> </ul>
<ul style="list-style-type: none"> <li>• Warranty: 3 years Parts and Labor</li> </ul>
<ul style="list-style-type: none"> <li>• With Carrying Case (Backpack type)</li> </ul>
<b>e. PRINTER, INKJET (1 unit)</b>
<ul style="list-style-type: none"> <li>• Printer Type: Print, Scan, Copy with ADF</li> </ul>
<ul style="list-style-type: none"> <li>• Compact integrated tank design</li> </ul>
<ul style="list-style-type: none"> <li>• Minimum Ink Droplet Volume: 2.8 pl</li> </ul>
<ul style="list-style-type: none"> <li>• Print Direction: Bi-directional printing, Uni-directional printing</li> </ul>
<ul style="list-style-type: none"> <li>• Nozzle Configuration: 400x2 nozzles Black, 128 x2 nozzles per colour (Cyan, Magenta, Yellow)</li> </ul>
<ul style="list-style-type: none"> <li>• Maximum Resolution: 4800 x 1200 dpi (with Variable-Sized Droplet Technology)</li> </ul>
<ul style="list-style-type: none"> <li>• Print speed: Draft, A4 (Black / Colour): Up to 32 ppm / 20 ppm,</li> </ul>
<ul style="list-style-type: none"> <li>ISO 24734, A4 (Black / Colour): Simplex: Up to 18 ipm / 10.0 ipm, Duplex: 8.7 ipm / 6.0 ipm</li> </ul>
<ul style="list-style-type: none"> <li>ISO 24734.2, A3 (Black/Colour): Simplex: Up to 10 ipm/ 5.0ip, Duplex: 6.0 ipm / 3.7 ipm</li> </ul>
<ul style="list-style-type: none"> <li>• Automatic 2-sided printing up to A3</li> </ul>
<ul style="list-style-type: none"> <li>• ADF capability with 35-sheet duplex up to A3</li> </ul>

	<ul style="list-style-type: none"> <li>• Dual 250 sheets Input trays</li> </ul>
	<ul style="list-style-type: none"> <li>• Touchscreen TFT colour LCD</li> </ul>
	<ul style="list-style-type: none"> <li>• Ethernet &amp; Wi-Fi Direct and Hi-speed USB 2.0</li> </ul>
	<ul style="list-style-type: none"> <li>• With SD card and memory stick slots and USB port</li> </ul>
	<ul style="list-style-type: none"> <li>• Warranty: 2 years or 80,000 pages, whichever comes first</li> </ul>
	<b>f. PROJECTOR</b>
	<b>(3 units)</b>
	<ul style="list-style-type: none"> <li>• Projection System: 3LCD Technology, RGB Liquid Crystal Shutter</li> </ul>
	<ul style="list-style-type: none"> <li>• Resolution: Full HD 1080p, 1920x1080, 16:9</li> </ul>
	<ul style="list-style-type: none"> <li>• Brightness: White Light Output (Normal/Eco) 3,200lm / 1,900lm</li> </ul>
	<ul style="list-style-type: none"> <li>• : Colour Light Output: 3,200lm / 1,900lm</li> </ul>
	<ul style="list-style-type: none"> <li>• Contrast Ratio: 10,000:1</li> </ul>
	<ul style="list-style-type: none"> <li>• Image size: 30 inch – 300 inch</li> </ul>
	<ul style="list-style-type: none"> <li>• Screen Size (Projected Distance): Zoom: Wide: 0.7m – 6.8m</li> </ul>
	<ul style="list-style-type: none"> <li>• Zoom: Tele: 0.8m - 8.23m</li> </ul>
	<ul style="list-style-type: none"> <li>• Zoom Ratio: 1 - 1.2</li> </ul>
	<ul style="list-style-type: none"> <li>• Throw Ratio: 1.35m – 1.62 (Wide - Tele)</li> </ul>
	<ul style="list-style-type: none"> <li>• Input interface: USB 2.0 Type A, USB 2.0 Type B, VGA in, HDMI in, Composite in, Stereo mini jack audio in, Miracast, MHL, Near Field Communication (NFC), Wireless LAN IEEE 802.11b/g/n (WiFi 4), Wireless LAN b/g/n (2.4GHz)</li> </ul>
	<ul style="list-style-type: none"> <li>• Light Source: Lamp (214W, 4000H durability/7,000H durability (eco-mode))</li> </ul>
	<ul style="list-style-type: none"> <li>• Supply Voltage: AC 100 V - 240 V, 50 Hz - 60 Hz</li> </ul>
	<ul style="list-style-type: none"> <li>• Positioning: Ceiling mounted, Desktop</li> </ul>
	<ul style="list-style-type: none"> <li>• Warranty: Two (2) years on Main parts (NBDO)</li> </ul>
	<ul style="list-style-type: none"> <li>• 1 Year warranty on bulb or 1000 hours</li> </ul>
	<ul style="list-style-type: none"> <li>• With soft carrying case</li> </ul>
	<ul style="list-style-type: none"> <li>• With Screen, 100inch, Full HD, 16:9, folding, with stand and case</li> </ul>
	<ul style="list-style-type: none"> <li>• Complete with VGA and HDMI cables, manuals and documentations</li> </ul>
	Xxxxx
<b>D</b>	<b>a. NETWORK SWITCH, DATA RACK with UPS</b>
	<b>(2 units)</b>
	<b>NETWORK SWITCH</b>
	<ul style="list-style-type: none"> <li>• Device type: Switch- 48 ports –L3- Managed – stackable</li> </ul>
	<ul style="list-style-type: none"> <li>• Enclosure type : Rack-mountable 1U</li> </ul>
	<ul style="list-style-type: none"> <li>• Ports: 48 x 10/100/1000 + 4 x SFP • Subtype: Gigabit Ethernet • Features: ARP support, trunking, VLAN support, IGMP snooping, Rapid Spanning Tree Protocol (RSTP) support, Multiple Spanning Tree Protocol (MSTP) support, DHCP snooping, Port Aggregation Protocol (PAgP) support, Access Control List (ACL) support, Quality of Service</li> </ul>
	<ul style="list-style-type: none"> <li>• Interfaces: 48 x 1000Base-T – RJ-45   1 x USB- Type A   1 x serial (console) – RJ-45 – management   1 x management (Gigabit LAN) – RJ-45 – management   1 x management (mini-USB) – Type B – management   4 x 1000Base-X –SFP - uplink</li> </ul>
	<ul style="list-style-type: none"> <li>• Performance: Switching capacity: 176 Gbps   Forwarding performance: 130.96 Mbps</li> </ul>
	<ul style="list-style-type: none"> <li>• RAM: 4GB</li> </ul>
	<ul style="list-style-type: none"> <li>• Remote Management Protocol: SNMP 1, RMON 1, RMON 2, RMON 3, RMON 9, Telnet, SNMP 3, SNMP 2c, SSH, CLI</li> </ul>
	<ul style="list-style-type: none"> <li>• Power Features: ARP support, trunking, VLAN support, IGMP snooping, Rapid Spanning Tree Protocol</li> </ul>

(RSTP) support, Multiple Spanning Tree Protocol (MSTP) support, DHCP snooping, Port Aggregation Protocol (PAgP) support, Access Control List (ACL) support, Quality of Service
• Warranty: Limited Lifetime Warranty
• Rack mounting kit included
• Installation and Configuration
<b>DATA RACK:</b>
• U Height: 18U
• Frame Type: STEEL
• Front Door Type: Steel with plexiglass window
• Side Panel Type: Steel
• Back Door Type: Steel
• Key Lock: YES
• Color: Black
• Roof-mounted exhaust system: Fans: 3 – 120mm
• 16-outlet power distribution unit with surge protection
• Mounting rails that adjust in depth
• Adjustable levellers.
<b>UNINTERRUPTIBLE POWER SUPPLY (UPS)</b>
• Output power capacity: 4.0kWatts / 5.0kVA
• Nominal Output Voltage: 230V
• Output Voltage Note: Configurable for 220 : 230 or 240 nominal output voltage
• Efficiency at Full load: 96.0%
• Output Voltage Distortion: Less than 5% at full load
• Output Frequency (sync to mains): 47 – 53 Hz for 50 Hz nominal
• Topology: Line Interactive
• Waveform type: Sine wave
• Output Connections: (4) IEC Jumpers (Battery Backup) (2) IEC 320 C19 (Battery Backup) (8) IEC 320 C13 (Battery Backup)
• Topology: Line Interactive
• Waveform type: Sine wave
• Output Frequency (sync to mains): 47 – 53 Hz for 50 Hz nominal
• Topology: Line Interactive
• Waveform type: Sine wave
• Warranty: two (2) years
<b>b. SERVER for AD/DHCP/AntiVirus/ArcGIS (2 units)</b>
• Processor: 2xGen10 Intel Xeon-Gold 5115 (2.4GHz/10-core/85W)
• Cache Memory: 13.75 MB L# Cache
• Memory: 64GB (4x16 or 2x32)
• Network Controller: 1Gb Ethernet 4-Port
• Hard Drive: (2) 300GB; (3) 1.2TB
• PCI-Express Slots: 2 PCIe slots
• Power Supply: 500W
• Form Factor: 1U or 2U Rack

<ul style="list-style-type: none"> <li>• Rail Kit: Tool less Rail Kit</li> </ul>
<ul style="list-style-type: none"> <li>• (2) Windows Server 2019 with Hyper-V</li> </ul>
<ul style="list-style-type: none"> <li>• Warranty: 3-3-3 Parts/Labor/Onsite Support</li> </ul>
<ul style="list-style-type: none"> <li>• With installation and configuration</li> </ul>
<b>c. NEXT GENERATION FIREWALL (2 units)</b>
<b>Appliance Features:</b>
<ul style="list-style-type: none"> <li>• Interfaces: (6) 10/100/1000 Copper Gigabit Ports, 1 Console Interface, 2 USB</li> </ul>
<ul style="list-style-type: none"> <li>• Site-to-Site VPN Tunnels: 20</li> </ul>
<ul style="list-style-type: none"> <li>• Bundled Global VPN Client Licenses (Max): 50 (1,000)</li> </ul>
<ul style="list-style-type: none"> <li>• Bundled SSL VPN Licenses (Max): 2 (30)</li> </ul>
<ul style="list-style-type: none"> <li>• VLAN Interfaces: 50</li> </ul>
<ul style="list-style-type: none"> <li>• High Availability: Active /Passive with Optional StateSync</li> </ul>
<ul style="list-style-type: none"> <li>• Zone Security</li> </ul>
<ul style="list-style-type: none"> <li>• Object-based Management</li> </ul>
<ul style="list-style-type: none"> <li>• Policy-based NAT</li> </ul>
<ul style="list-style-type: none"> <li>• Multi-WAN failover</li> </ul>
<ul style="list-style-type: none"> <li>• Load Balancing</li> </ul>
<ul style="list-style-type: none"> <li>• Integrated Wireless Switch and Controller</li> </ul>
<ul style="list-style-type: none"> <li>• Spam Blocking (RBL Filtering)</li> </ul>
<ul style="list-style-type: none"> <li>• Voice over IP (VoIP)</li> </ul>
<ul style="list-style-type: none"> <li>• IKEv2 VPN</li> </ul>
<ul style="list-style-type: none"> <li>• Secure Remote Management (SSHv2 Support)</li> </ul>
<ul style="list-style-type: none"> <li>• SSL VPN and IPSec VPN Remote Access Clients</li> </ul>
<ul style="list-style-type: none"> <li>• Multiple SSIDs using VAP</li> </ul>
<ul style="list-style-type: none"> <li>• Dynamic Address Objects</li> </ul>
<ul style="list-style-type: none"> <li>• Layer 2 Bridge Mode</li> </ul>
<ul style="list-style-type: none"> <li>• 802.1q VLANs</li> </ul>
<ul style="list-style-type: none"> <li>• RIPv2 and OSPF Routing</li> </ul>
<ul style="list-style-type: none"> <li>• Single Sign On (SSO)</li> </ul>
<ul style="list-style-type: none"> <li>• Application Firewall: Optional</li> </ul>
<ul style="list-style-type: none"> <li>• SSL Control</li> </ul>
<ul style="list-style-type: none"> <li>• IPV6 Ready</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Bandwidth Management</b></li> </ul>
<ul style="list-style-type: none"> <li>• Gateway Anti-Virus, Anti-Spyware and Intrusion Prevention Service (1 year)</li> </ul>
<ul style="list-style-type: none"> <li>• Content Filtering Service Premium Edition (1 year)</li> </ul>
<ul style="list-style-type: none"> <li>• Reporting Software (1 year)</li> </ul>
<ul style="list-style-type: none"> <li>• Dynamic Support 24x7 includes: (1 year)</li> </ul>
<ul style="list-style-type: none"> <li>• Annual subscription to software and firmware updates and upgrades</li> </ul>
<ul style="list-style-type: none"> <li>• Access to telephone and Web-based support for installation, configuration and troubleshooting help</li> </ul>
<ul style="list-style-type: none"> <li>• Exchange hardware replacement in the event of failure</li> </ul>
<ul style="list-style-type: none"> <li>• Annual subscription to Service Bulletins and access to electronic support tools</li> </ul>
<ul style="list-style-type: none"> <li>• Includes: 30 days GAV, Anti-Spyware, IPS and Application Firewall, 30 Days Reporting Software 30 Days CFS Premium, 30 Days 25-user Client/Server Anti-Virus Suite</li> </ul>
<ul style="list-style-type: none"> <li>• Firewall/VPN Performance</li> </ul>



	<ul style="list-style-type: none"> <li>• Firewall Inspection throughput 1:1,300Mbps</li> </ul>
	<ul style="list-style-type: none"> <li>• Threat Prevention throughput2 (Max Security): 300Mbps</li> </ul>
	<ul style="list-style-type: none"> <li>• Threat Prevention throughput2,6 (Performance Optimized): 600 Mbps</li> </ul>
	<ul style="list-style-type: none"> <li>• Application inspection throughput 2:900 Mbps</li> </ul>
	<ul style="list-style-type: none"> <li>• IPS throughput 2:900Mbps</li> </ul>
	<ul style="list-style-type: none"> <li>• Anti-malware inspection throughput 2:300 Mbps</li> </ul>
	<ul style="list-style-type: none"> <li>• IMIX throughput 3:500 Mbps</li> </ul>
	<ul style="list-style-type: none"> <li>• TSL/SSL Inspection and decryption throughput (DPI SSL)2: 100Mbps</li> </ul>
	<ul style="list-style-type: none"> <li>• IPSec VPN throughput 3:900 Mbps</li> </ul>
	<ul style="list-style-type: none"> <li>• Connections per second: 6,000</li> </ul>
	<ul style="list-style-type: none"> <li>• Maximum connections (SPI): 100,000</li> </ul>
	<ul style="list-style-type: none"> <li>• Maximum connections (DPI): 90,000</li> </ul>
	<ul style="list-style-type: none"> <li>• Maximum connection (DPI SSL): 500</li> </ul>
	<ul style="list-style-type: none"> <li>• With (3) Built-in Antenna for 802.11ac WIFI</li> </ul>
	<ul style="list-style-type: none"> <li>• Scope of Service: Installation, Configuration, Monitoring, Commissioning, Knowledge Transfer and Documentations</li> </ul>
<b>E</b>	<b>AutoCAD (2 licenses)</b>
	Features
	2D Drafting , drawing , and Annotation
	<ul style="list-style-type: none"> <li>· Can create single or multiline text (mtext) as a single text object.</li> </ul>
	<ul style="list-style-type: none"> <li>· Can create tables with data and symbols in rows and columns, apply formulas, and link to a Microsoft Excel Spreadsheets</li> </ul>
	<ul style="list-style-type: none"> <li>· Can create dimensions automatically,</li> </ul>
	<ul style="list-style-type: none"> <li>· Can draw revision clouds around new changes in a drawing to quickly identify updates,</li> </ul>
	<ul style="list-style-type: none"> <li>· Can specify the size of drawing sheet, add title block, and display multiple views,</li> </ul>
	<ul style="list-style-type: none"> <li>· Can apply geometric and dimensional constraints to maintain relationships between drawing geometry,</li> </ul>
	<ul style="list-style-type: none"> <li>· Can save views by name to easily return to a specific view for quick reference or for applying to layout viewports,</li> </ul>
	3D Modelling and Visualization
	<ul style="list-style-type: none"> <li>· Can create realistic 3D models of design using a combination of solid, surface, and mesh modelling tools,</li> </ul>
	<ul style="list-style-type: none"> <li>· Can apply lighting and materials to give 3D models a realistic appearance and to help communicate designs,</li> </ul>
	<ul style="list-style-type: none"> <li>· Create section planes to display cross-sectional views through solids, surfaces, meshes, or regions.,</li> </ul>
	<ul style="list-style-type: none"> <li>· Can generate 2D drawings including base, projected, section, and detail views from 3D models.</li> </ul>
	<ul style="list-style-type: none"> <li>· Can apply visual styles to control the display of edges, lighting, and shading of your 3D model.</li> </ul>
	Technical Support
	<ul style="list-style-type: none"> <li>· Site visit by a qualified /certified application engineer when needed,</li> </ul>
	<ul style="list-style-type: none"> <li>· Quarterly site visit for maintenance.</li> </ul>
	<ul style="list-style-type: none"> <li>• One (1) year subscription</li> </ul>
<b>F</b>	<b>ENDPOINT SECURITY (43 License)</b>
	<b>ENDPOINT PROTECTION:</b>
	<ul style="list-style-type: none"> <li>• With a high-fidelity machine learning (pre-execution and runtime) technology;</li> </ul>

	<ul style="list-style-type: none"> <li>Behavioral analysis protection against scripts, injection, ransomware, memory, and browser attacks;</li> </ul>
	<ul style="list-style-type: none"> <li>File reputation, Web reputation, Exploit preventions, Command and control monitoring with vulnerability protection;</li> </ul>
	<ul style="list-style-type: none"> <li>Integrated Data Loss Prevention and Configurable Device Control.</li> </ul>
	<ul style="list-style-type: none"> <li><b>Functions:</b></li> </ul>
	1. Must be able to run on the 32 and 64-bit Microsoft's Windows 7,8,10 and Windows Server, 2008, and 2012; 2016; MAC OS;
	2. Must support client web installation from the internet;
	3. Must be able to perform proactive policy based enforcement to control outbreaks;
	4. Must provide full visibility and control of mobile devices, apps, and data through a single built-in console;
	5. Must be able to uninstall existing desktop antivirus software;
	6. Must be able to perform pre-scan before installation;
	7. With integrated firewall which is fully compatible with Microsoft Windows 7 or higher;
	8. Must be able to provide network layer scanning;
	9. Must be able to provide a multiple scan options that can automatically take action for detected threats;
	10. Must be able to clean computers of file-based and network viruses, and virus and worm remnants (Trojans, registry entries, and viral files);
	11. Must be able to protect Security Agents and servers on the network using stateful inspection and high performance network virus scanning. Through a central management console, can create rules to filter connections by application, IP address, port number, or protocol, and then apply the rules to different groups of users;
	12. Must be able to defend endpoints against malware, ransomware, malicious scripts, and more. With advanced protections capabilities that adapts to protect against unknown and stealthy new threats;
	13. Must be able to allow or prevent users from changing scan settings, unloading and uninstalling the program;
	14. Must have device control that can detect and block removable media such as USB storage devices, optical media, memory cards, and network shares;
	15. Must allow administration to set a block and allow policy for different groups of computers for device control and must have levels of permission such as "Disabled", "Read and Write" and "Full Access";
	16. Must be able to regulate access to external storage devices and network resources connected to computers, to prevent data loss and leakage and, combined with file scanning, helps guard against security risks;
	17. Must be capable of data loss prevention;
	18. Must automatically detect, take action, and send outbreak notifications on any unknown Command and Control server;
	19. Must be able to protect the network from new, previously unidentified, or unknown threats through advanced file feature analysis and heuristic process monitoring and protection against 0-day malware attacks;
	20. Must detect widespread and prevalent malware in the wild;
	21. Must have the ability to scan compressed files;
	22. Must require less memory resources to run live update and;
	23. Must have configurable port for communication between agents and management applications;
	24. Must have capability to detect advance persistent threats, lateral movements, and zero-day attacks;
	25. Must block processes associated with ransomware;
	26. Must be able to perform network level isolation to make sure that compromised executables or

	endpoints can no longer affect others on the network; Must provide a predictive machine learning;
	27. Must be compatible with the existing Endpoints security system of BCDA.

Notes:

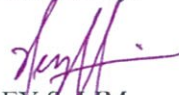
1. All specifications are minimum requirements. Proponents may propose equivalent or higher specifications.
2. Dimensions (Length, Width and Height) may vary, as long as the total space occupied is equal to or smaller than those indicated in the technical specifications.
3. Clones will not be accepted. Please propose globally-known brand.
4. Full replacement of defective unit/s should be **30 working days** from receipt of notice. If full replacement is not yet possible, a service unit shall be provided by the supplier within 48 hours from receipt of notice of defective unit
5. The obligation for the warranty shall be covered by Retention money in an amount equivalent to at least one percent (1%) of every progress payment.  
The said amounts shall only be released after the lapse of the warranty period indicated per item of the TOR.

Prepared by:



Leonor M. Rivera  
Procurement Officer

Reviewed by:



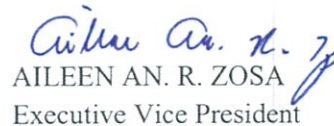
REY S. LIM  
Project Manager, SCRIP

OK

Recommending Approval:

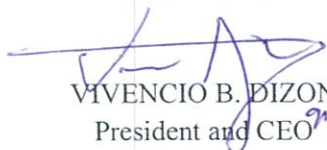


JOSHUA M. BINGCANG  
Vice President, BDOG



AILEEN AN. R. ZOSA  
Executive Vice President

Approved by:

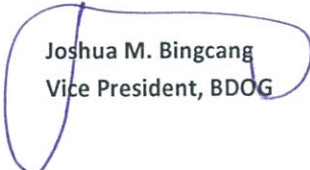


VIVENCIO B. DIZON  
President and CEO

## TECHNICAL SPECIFICATIONS FOR VIDEO CONFERENCE (Lot G1)

2	Video Conferencing System Description
	<ul style="list-style-type: none"> <li>• Schedule meetings with dozens of internal and external participants and up to 25 devices.</li> <li>• Real time, wireless sharing and collaboration</li> <li>• Updates roll out automatically</li> <li>• Can control and monitor devices remotely</li> <li>• Can join meetings from the web or mobile devices</li> <li>• <b>Technical Specifications:</b> <ul style="list-style-type: none"> <li>▪ OS: Google Chrome OS</li> <li>▪ Processor: 8<sup>th</sup> Generation Intel Core i7 8500U (4 Core, 1.80GHz up to 4GHz, 8MB)</li> <li>▪ Memory: 4GB DDR4</li> <li>▪ Storage: 32GB SSD</li> <li>▪ Graphics: Intel HD Graphics 620</li> <li>▪ Controller: 10.1" IPS multi-touch display panel (1280x800 res)</li> <li>▪ Camera: 4K UHD, 120° wide field of view, intelligent participant detection, auto zoom/cropping</li> <li>▪ Mic/speaker (2 units): 360° sound input/output, 20-foot range, active echo cancellation, background noise management</li> <li>▪ Ports: 3x USB 3.1, 1xUSB 3.1 type-C, gigabit Ethernet, HDMI, Display Port, 4-in-1 card reader; SD/SDHC/SDXC/MMC</li> <li>▪ Wireless: WiFi 802.11 a/b/g/n/ac, Bluetooth 4.2</li> <li>▪ Accessories: 2x USB to mini-USB cable, 1x USB to type-C cable, 1 x USB to micro-USB cable, 1x Ethernet cable, 1x HDMI cable, 1x AC adapter, 1x LCD stand, 1x VESA mount kit</li> <li>▪ 1 license Chrome Enterprise Device Management (1 year)</li> <li>▪ <b>License Coverage:</b> <ul style="list-style-type: none"> <li>▪ Includes ability to manage and configure more than 200 features and policies</li> <li>▪ Includes user policy management to remotely manage and deploy policies at a user level</li> <li>▪ Includes device policy management to remotely managed and deploy policies at a device level</li> <li>▪ Includes public session management to remotely allow users to share a device without needing to sign in</li> <li>▪ Includes network configuration management to remotely deploy network configurations through wireless and wired networks</li> <li>▪ Includes application deployment management to remotely deploy applications and application configurations to control user experience</li> <li>▪ Includes device access management to remotely allow use devices as a workstation, including access to web-based and virtualized desktop applications</li> <li>▪ Includes device management console to centrally manage all deployed devices</li> <li>▪ Includes 9x5 technical support for device management uptime and/or technical-related issues.</li> </ul> </li> <li>▪ <b>Services: 3-year warranty</b></li> </ul> </li> </ul>

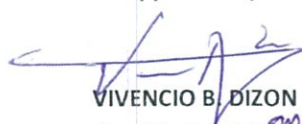
Prepared by:   
 Recommending Approval:

  
 Joshua M. Bingcang  
 Vice President, BDOG

Reviewed by: , PM-SCRIP

  
 Aileen Anunciacion R. Zosa  
 Executive Vice President

Approved by:

  
 VIVENCIO B. DIZON  
 President and CEO