### Annex V-A1 (Page 1 of 17)

**SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF BRAND NEW LINEAR ACCELERATOR WITH STEREOTACTIC RADIO SURGERY (SRS) AND STEREOTACTIC BODY RADIOTHERAPY (SBRT) CAPABILITY AND WITH RELATED SPECIALTY WORKS FOR THE UNIVERSITY OF THE PHILIPPINES (MANILA) – PHILIPPINE GENERAL HOSPITAL (UPM-PGH)**

Bid Reference No. GPG-B1-2019-141  
Approved Budget for the Contract: ₱300,000,000.00

**BIDDER’S STATEMENT OF REFERENCE OF TECHNICAL SPECIFICATIONS**  
(Note: In case of inconsistencies in the technical specifications/requirements between the terms of reference and the bidder’s statement of reference of technical specifications, bidders must copy/encode the correct specifications based on the terms of reference)

| **REFERENCE** |  
| (Indicate where the particular technical specification can be validated, i.e. Page number of brochure/data sheet, manual or can be proven through actual presentation of equipment) |
| **A. Technical Specifications of the Linear Accelerator** |
| 1 Tight isocenter alignment  
1.1 At least 1 mm isocenter accuracy for the following:  
a. Gantry isocenter accuracy  
b. Collimator isocenter accuracy  
c. Couch isocenter accuracy  
d. Radiation beam axis with the rotation of the head and gantry  
2 Collision detectors with touch guard/stop sensors for the following:  
2.1 kV imaging panel  
2.2 kV imaging source  
2.3 MV imaging panel  
2.4 Electron applicator  
3 Fully/Completely digitally-controlled system  
4 Waveguide and filter design allow five (5) flattened photon energies  
5 Allows for online remote diagnostic monitoring of the LINAC machine and treatment planning system during the warranty period; post warranty remote diagnostic monitoring will be the option of the procuring entity  
6 Beam Energies  
6.1 Dual Photon Energies – 6 and 10 MV  
6.2 Five Electron Energies – 6, 9, 12, 15, and 18 MeV  
7 Power Source  
7.1 Magnetron or Klystron as power source  
7.2 Guaranteed lifespan of power source of at least three (3) years; or if with a lifespan of less than three (3) years, the power source should be replaced without additional cost to the institution in case of failure  
8 Back-up Power Supply  
8.1 Uninterrupted Power Supply (UPS) to support the Linear Accelerator Machine and all its accessories for at least 15 minutes in case of power failure (as provided by a third-party supplier) |

---

The table above outlines the technical specifications of the linear accelerator, including details on isocenter alignment, collision detectors, digital control, beam energies, power source, and back-up power supply. Each specification is referenced to ensure correct validation and adherence to the procurement terms.
### Annex V-A1 (Page 2 of 17)

<table>
<thead>
<tr>
<th>9 Dose Rate and Beam Stability</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9.1 6 MV Photon:</strong></td>
<td></td>
</tr>
<tr>
<td>a. Flattening Filter Free/High Intensity Mode: maximum dose rate of at least 1400 MU/min</td>
<td></td>
</tr>
<tr>
<td>b. Flattened Beam: maximum dose rate of at least 600 MU/min for flattened beam</td>
<td></td>
</tr>
<tr>
<td><strong>9.2 10 MV Photon:</strong></td>
<td></td>
</tr>
<tr>
<td>a. Electron Energies (6, 9, 12, 15, and 18 MeV): maximum dose rate of at least 500 MU/min</td>
<td></td>
</tr>
<tr>
<td><strong>10. Gantry</strong></td>
<td></td>
</tr>
<tr>
<td>10.1 Gantry Rotation Range: minimum of 0 ±182.5°</td>
<td></td>
</tr>
<tr>
<td>10.2 Optical Distance Indicator: 75 cm to 150 cm with 0.5 cm resolution</td>
<td></td>
</tr>
<tr>
<td>10.3 Mechanical Front Pointer: Range of 85 to 110 cm</td>
<td></td>
</tr>
<tr>
<td>10.4 Gantry Display: Digital Display</td>
<td></td>
</tr>
<tr>
<td>10.5 Digital display must be visible inside the bunker and treatment console</td>
<td></td>
</tr>
<tr>
<td>10.6 Gantry Control: can be controlled using the hand- pendant and the control console</td>
<td></td>
</tr>
<tr>
<td>10.7 Compatible with SRS, SBRT, and SRT accessories</td>
<td></td>
</tr>
<tr>
<td>10.8 With Compatible Gantry head collision detector/collision prevention system/ gantry collision stopper</td>
<td></td>
</tr>
<tr>
<td><strong>11 Collimation System</strong></td>
<td></td>
</tr>
<tr>
<td>11.1 Collimator Rotation Range: 0 ±175°</td>
<td></td>
</tr>
<tr>
<td>11.2 Beam Field Size:</td>
<td></td>
</tr>
<tr>
<td>a. Minimum Field Size: not bigger than 0.5 X 0.5 cm2 at 100 cm SSD</td>
<td></td>
</tr>
<tr>
<td>b. Maximum Field Size: not smaller than 40 x 40 cm2 at 100 cm SSD</td>
<td></td>
</tr>
<tr>
<td>11.3 The collimators must be motorized.</td>
<td></td>
</tr>
<tr>
<td>11.4 Asymmetric Jaw Movement:</td>
<td></td>
</tr>
<tr>
<td>a. Collimators can move asymmetrically</td>
<td></td>
</tr>
<tr>
<td>b. At least one pair of jaws must be able to cross the central line by at least 10 cm</td>
<td></td>
</tr>
<tr>
<td>11.5 Collimator Display: Should have two (2) digital displays and must be visible inside the bunker and treatment console</td>
<td></td>
</tr>
<tr>
<td>11.6 Collimator Control: can be controlled using the hand- pendant and the control console</td>
<td></td>
</tr>
<tr>
<td><strong>12 Couch</strong></td>
<td></td>
</tr>
<tr>
<td>12.1 Six degrees of freedom (longitudinal/Y, lateral/X, vertical/Z, rotational/yaw, pitch, and roll couch movements)</td>
<td></td>
</tr>
<tr>
<td>12.2 Electrical and mechanical control of couch motion</td>
<td></td>
</tr>
<tr>
<td>12.3 Control of couch motion at the treatment console for:</td>
<td></td>
</tr>
<tr>
<td>a. Corrective motions: small translations (in x, y, and z)</td>
<td></td>
</tr>
<tr>
<td>b. Planned motions: large rotations of the couch to sequence between non-coplanar fields and arcs</td>
<td></td>
</tr>
<tr>
<td>12.4 Couch weight limit (supporting patient weight) up to 200 kilograms</td>
<td></td>
</tr>
<tr>
<td>12.5 Couch compatible with the following:</td>
<td>Annex V-A1 (Page 3 of 17)</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>a. Intensity Modulated Radiation Therapy (IMRT)</td>
<td></td>
</tr>
<tr>
<td>b. Image Guided Radiation Therapy (IGRT)</td>
<td></td>
</tr>
<tr>
<td>c. Volumetric Modulated Arc Therapy (VMAT)/RapidArc</td>
<td></td>
</tr>
<tr>
<td>d. Stereotactic Radiosurgery (SRS)</td>
<td></td>
</tr>
<tr>
<td>e. Stereotactic Radiation Therapy (SRT)</td>
<td></td>
</tr>
<tr>
<td>f. Stereotactic Body Radiation Therapy (SBRT)</td>
<td></td>
</tr>
</tbody>
</table>

| 12.6 With attachment compatible for accessories for SRS, SRT, and SBRT | |
| 12.7 Fully compatible with existing immobilization accessories of the Radiation Oncology Section of UP-PGH | |
| 12.8 With controls for manual motion and emergency off buttons on both sides of the couch | |
| 12.9 Head extension with interface for patient immobilization and positioning device | |
| 12.10 Carbon fiber material; free of metal and radiation-opaque materials | |
| 12.11 Two (2) lock bars (ordinary and MRI compatible); must be compatible with all immobilization devices purchased, treatment couch and CT simulator couch | |

| 13 Intensity Modulated Radiation Therapy | |
| 13.1 Able to do large field IMRT procedures (maximum of 40 cm x 40 cm field size) | |
| 13.2 Able to do sliding window/dynamic MLC, step & shoot/ static and dynamic arc | |

| 14 Volumetric Modulated Radiation Therapy (such as VMAT or RapidArc) | |
| 14.1 Able to do 360-degree rotation of gantry in single and multi-arc treatment | |

| 14.2 Able to do simultaneous modulation of MLC aperture shape, beam dose rate, and gantry rotation speed during beam delivery | |
| 14.3 Able to do gated-volumetric modulated radiation therapy | |

| 15 Fully Integrated Image-Guided Stereotactic Radiosurgery, Stereotactic Radiation Therapy, Stereotactic Body Radiation Therapy | |
| 15.1 Able to deliver stereotactic treatment at high dose rate: 6MV maximum dose rate of at least 1400 MU/min | |
| 15.2 Equipped with an integrated optical monitoring system. CBCT monitoring compatible with radiosurgery is also acceptable | |

| 15.3 CT/X-ray reference system for stereotactic target localization | |
| 15.3 Consisting of fiducials for CT localization and gantry tilt compensation | |
| 15.3 Removable fiducial arrays for X-ray/ Digital Subtraction Angiography localization | |
| 15.3 Patient immobilization board compatible to all CT couches and specified immobilization devices | |

| 15.4 Includes stereotactic reference box for stereotactic patient set-up | |
| 15.5 Includes couch mount for imaging | |
| 15.5 Adjustment for AP, lateral, and vertical movement for stereotactic treatment | |

| 15.5 Calibration of tilt to compensate for table declination for stereotactic treatment | |
| 15.5 Locks for adjustments to ensure stability | |
| 15.5 Compatible with the included couch top for stereotactic treatment | |
16 Control Console

16.1 The computerized control console, consisting of several workstations depending on the manufacturer, must be provided outside the treatment room.

| a. | All the functions and modes of the accelerator must be software controlled |
| b. | Console shall provide controls that must be activated in order for the accelerator to become operational in any of its various modes of operation |
| c. | All modes and functions of the accelerator must also be operated manually in case of any software malfunction |
| d. | UPS per computer system with at least 15-minute working time |

16.2 Able to do auto-field sequencing integrated with oncology information system

16.3 Integrated with oncology information system to display patient setup, treatment verification, and recording of treatment history into the OIS and file

16.4 Integrated with oncology information system for imaging of treated fields before, during, and after the treatment for verification requirements

16.5 Integrates use of the linear accelerator, MLC, MV imaging system, kV imaging system or separate workstations for MV imaging system and kV imaging system

B. Fully integrated MV Imaging System (Portal Imaging Device)

<p>| 1. | Active imaging area: must be at least 30 cm x 40 cm |
| 2. | With a detector made of amorphous silicon material |
| 3. | The robotic motorized arm must be integrated with the linear accelerator and can be remotely controlled. MV imaging system must be retractable when not in use. |
| 4. | Port Film/Hook &amp; Latch graticule and Las Vegas phantom for portal imaging QA |
| 5. | Full integration with Oncology Information system, network and database. Should also be compatible to other (3rd party) oncology information systems. |
| 6. | Includes application software and acquisition workspace |
| 6.1 | Online and offline matching and image evaluation |
| 6.2 | Match verification tools and image matching tools (blend, color blend, spyglass window, split window) |
| 7. | Able to do portal dosimetry to record intensity patterns of IMRT &amp; VMAT/RapidArc fields for pre-treatment quality assurance of IMRT &amp; VMAT/RapidArc planning and delivery |
| 7.1 | Able to do continuous imaging in single, multiple or movie-loop mode |
| 7.2 | Includes image analysis software for field fluence evaluation and analysis. |
| 7.3 | EPID-based in-vivo dosimetry for IMRT &amp; VMAT/RapidArc treatment is also acceptable |</p>
<table>
<thead>
<tr>
<th>C Fully integrated kV Imaging System</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Active imaging area: at least 39 cm x 29 cm</td>
</tr>
<tr>
<td>2. With a detector made of amorphous silicon material</td>
</tr>
<tr>
<td>3. Pixel resolution: must be at least 1024 x 1024 image matrix</td>
</tr>
<tr>
<td>4. Able to do the following imaging modes:</td>
</tr>
<tr>
<td>4.1. 2D radiographic acquisition</td>
</tr>
<tr>
<td>4.2. 2D fluoroscopic image acquisition</td>
</tr>
<tr>
<td>4.3. 3D cone beam computed tomography (CBCT) acquisition (Full-fan and Half-fan or Small, Medium and Large)</td>
</tr>
<tr>
<td>4.4. 4D imaging acquisition using respiratory gating or respiratory motion management</td>
</tr>
<tr>
<td>5. kV Source/X Ray tube: Fan cooled x ray tube</td>
</tr>
<tr>
<td>6. X Ray Collimation:</td>
</tr>
<tr>
<td>6.1. Comprised of a fixed primary beam definer and an adjustable system blade collimation</td>
</tr>
<tr>
<td>6.2. Symmetric and asymmetric field opening</td>
</tr>
<tr>
<td>6.3. Field size / Field of View</td>
</tr>
<tr>
<td>a. Minimum field size: not bigger than 2.5 x 2.5 cm²</td>
</tr>
<tr>
<td>b. Maximum field size: not smaller than 50 x 50 cm²</td>
</tr>
<tr>
<td>7. Mechanical specification of KV imaging system</td>
</tr>
<tr>
<td>7.1. Fully-motorized assemblies that support and position the kV source. Manual assemblies are also acceptable.</td>
</tr>
<tr>
<td>7.2. Fully-motorized, retractable robotic arm is used to position and support the holder. Manual retractable robotic arm is also acceptable.</td>
</tr>
<tr>
<td>7.3. Automated motion from either inside the treatment room or remotely from the control console to correct patient setups</td>
</tr>
<tr>
<td>7.4. Can be controlled using the hand-pendant and the control console</td>
</tr>
<tr>
<td>7.5. Collision detection capability: contact or non-contact layer of safety that stops the motion of the kV imaging source if the active area is encroached upon</td>
</tr>
<tr>
<td>7.6. Emergency features of KV imaging system:</td>
</tr>
<tr>
<td>a. Includes back-up motion control in case the imager and controller become defective or when communication with hand pendant cannot be established</td>
</tr>
<tr>
<td>8. Ability to export images via DICOM for image analysis</td>
</tr>
<tr>
<td>8.1. OIS integration and connectivity (2D, 3D, and 4D systems)</td>
</tr>
<tr>
<td>8.2. TPS configuration and connectivity (2D, 3D, and 4D systems)</td>
</tr>
<tr>
<td>9. Imported DICOM image analysis and evaluation software includes:</td>
</tr>
<tr>
<td>9.1. Auto-matching tools</td>
</tr>
<tr>
<td>9.2. Image match verification tools</td>
</tr>
<tr>
<td>9.3. Other tools that measure distance and angles</td>
</tr>
<tr>
<td>10. Images acquired from CBCT (cone beam computed tomography) can be used for adaptive treatment planning</td>
</tr>
<tr>
<td>11. Quality Assurance and calibration phantoms (as supplied by a third party)</td>
</tr>
<tr>
<td>11.1. Isocenter cube phantom</td>
</tr>
<tr>
<td>a. Composed of PMMA or material equivalent in density</td>
</tr>
<tr>
<td>b. At least 4 x 4 x 4 cm³ in size</td>
</tr>
</tbody>
</table>
11.2. Marker phantom to check for imaging-treatment isocenter coincidence for 2D and 3D imaging system or MV isocenter determination and kV system calibration (ball bearing, fiducial, or commercial device)

11.3. Phantom to quantify uniformity, spatial resolution and contrast:
   a. Contrast and spatial resolution 2D kV system: phantom with low-contrast and high contrast objects (such as Leeds phantom)
   b. Contrast 3D system: an appropriate volumetric image quality phantom (such as a CT phantom)
   c. Volumetric Image Quality Phantom with the following modules:
      i. geometry, sensitometry module
      ii. high resolution module with 1 to 30-line pairs per cm gauge
      iii. low contrast module with supra-slice and subslice contrast targets
      iv. wave ramp and bead module or wave insert
      v. image uniformity module
   d. Simulates respiratory motion for 4D System (such as CIRS Dynamic Thorax Phantom or Quasar Respiratory Motion Phantom)

11.4. CBCT Phantom for the evaluation of the image quality of 3D CBCT, includes various inserts and can be used to measure different aspects of CBCT image quality
   a. CBCT body normalization phantom (polyurethane foam)
   b. CBCT head normalization phantom (high density polyethylene foam)
   c. CBCT geometry calibration phantom
   d. CT image quality phantom

D Respiratory Gating

1. Able to do respiration-synchronized imaging or 3D real-time patient position monitoring

2. Includes all components and software required to implement gated treatment delivery/management of respiratory motion, simulation and image acquisition on the accelerator and CT scan machine (including CT software upgrade for 4D imaging on the existing 16-slice Discovery RT GE CT-Scan Machine (large bore)).

3. Includes the following components for the CT scan & LINAC machine:

   3.1. For Respiratory Gating or Management of Respiratory Motion (i.e., two sets of gating system)
      a. Able to do respiration synchronized imaging or 3D real time patient position monitoring
      b. Includes all components and software required to implement gated treatment delivery/management of respiratory motion, simulation and image acquisition on the accelerator and CT scan machine (including CT software upgrade for 4D imaging on the existing 16-slice Discovery RT GE CT-Scan Machine). body markers for breathing monitoring, transmitter/receiver
      c. flat panel patient monitor
      d. workstation computer with control software installed
      e. Isocenter calibration devices, camera calibration devices and all required components, QA software & tools, for respiratory gating or management of respiratory motion
      f. Supports prospective gated imaging and retrospective image acquisition for treatment planning imaging
      g. Supports pre-treatment verification using kV imaging system
### E Stereotactic Radiosurgery Planning System (Third Party)

1.1. Automatic fusion based on mutual information algorithm that supports CT, MR (T1, T2, MRA), PET, SPECT in combination with the corresponding transfer modules

1.2. With standard tools for image segmentation / contouring.

1.3. Capable of angiographic registration for AVM treatments using angiographic images

1.4. Includes planning third party software for SRS/FSRT using conformal beams and conformal arcs for micro-MLC

1.5. Software for stereotactic radiosurgery and radiotherapy treatment planning

  a. Capable of dose grid size 0.5 mm accuracy treatment planning system for single fraction cranial radiosurgery and extra-cranial radiosurgery

  b. 3D manipulation of beams and conformal arc planes in various displays including beams eye view

  c. Beam/Plan Library and Templates for planning of standard indications

  d. Supports different CT Couchtop settings

  e. Pencil Beam dose calculation from 4MV to 25MV (as defined by the British Journal of Radiology - BJR 25)

  f. 1.5 mm pencil beam grid size for accurate dose calculation

  g. Tissue inhomogeneity compensation with pencil beam path length correction

  h. Capable Mapping of entire treatment plan to phantoms for quality assurance

  i. Monte Carlo dose calculation algorithm

1.6. Software package for physician viewing, image fusion, contouring and volume definition that provides

  a. Supports the display and fusion of multiple image sets such as CT, MR, PET, Rotational Angio, Cone Beam CT, fMRI and DTI imaging

  b. Support for SUV (Standard Uptake Value) interaction with PET imaging

  c. Able to localize the CT localizer device on frame / mask or H&N System for stereotactic planning

  d. Manual Image Fusion of multiple diagnostic data sets

  e. Automatic Image Fusion of multiple data sets (CT, MRI, PET, Rotational Angio, etc.)

  f. Segmentation for blood vessels in angiograms, bones in CT and activation regions in functional imaging

  g. Supports automatic atlas segmentation including Cranial, Prostate, Spine and Head and Neck Lymph Level Automatic Segmentation

1.7. Enables export including one CT set with its corresponding outlined structures, LINAC parameters and setup DRRs for treatment and positioning.

1.8. Export of 3D objects, structures and image fusion data from the 3rd Party treatment planning system to the default treatment planning system with compatibility support.

1.9. Capable of exporting treatment plan parameters created to the default record and verify system.

1.10. Capable of exporting of DRR Images for verification of patient set-up
## Annex V-A1 (Page 8 of 17)

### F Immobilization Devices

Note: All immobilization devices and accessories should be compatible with the existing immobilization devices used by the Radiation Oncology Section of UP-PGH.

1. Head, neck and shoulder devices
   1.1. Baseplate
      a. Three (3) head and neck baseplates:
         i. Carbon fiber material
         ii. Two (2) standard and one (1) tilting
      b. Two (2) head, neck and shoulder baseplates: carbon fiber
      c. One (1) head, neck and shoulder MRI compatible baseplate
   1.2. Thermoplastic mask
      a. Thirty (30) head and neck masks
      b. Twenty (20) head, neck and shoulder masks
   1.3. Head rest:
      a. Six (6) head rests, with standard sizes of A-F with comprehensive range of neck angulations
      b. One (1) adult prone
      c. Pediatric sets: One (1) prone and (1) supine
   1.4. Bite Block:
      a. Twenty (20) pieces standard bite blocks
      b. Five (5) pieces standard bite blocks
   1.5. One (1) shoulder retractor

2. Chest and breast immobilizer
   2.1. One (1) breast board; carbon fiber material
   2.2. One (1) wing board: carbon fiber material
   2.3. Body immobilizer such as BodyFix or Vac Lok:
      a. Ten (10) whole/full body
      b. Ten (10) half body
      c. One (1) vacuum/compressor pump
   2.4. Twenty (20) pieces Breast Thermoplastic Mask compatible with the breast board and needed accessories as prescribed for use by the manufacturer

3. Abdomen and pelvis immobilizers
   3.1. One (1) belly board: carbon fiber material
   3.2. One (1) abdomen and pelvis immobilization system with abdomen and pelvis baseplate: carbon fiber material
   3.3. Twenty (20) reinforced thermoplastics compatible with the abdomen and pelvis baseplate

4. Complete set of SBRT immobilization and fixation system for indexed couch top
   4.1. Ten (10) T-shaped, total body and other activated cushion (patient mold integrity for six weeks or more)
   4.2. Two (2) carbon fiber platforms/base plates
   4.3. Two (2) sets of bridges (different types)
<table>
<thead>
<tr>
<th>Annex V-A1 (Page 9 of 17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.4. Two (2) respiratory plates/diaphragms control to assist in restricting respiratory movement</td>
</tr>
<tr>
<td>4.5. One (1) set of stereotactic localizer and target positioner</td>
</tr>
<tr>
<td>4.6. Two (2) pairs of lock bars/indexing adaptor compatible to the LINAC couch and CT flat couch</td>
</tr>
<tr>
<td>4.7. Two (2) sets of localizer fiducial set aluminium</td>
</tr>
<tr>
<td>4.8. One (1) vacuum pump</td>
</tr>
<tr>
<td>4.9. Two (2) knee support cushion</td>
</tr>
<tr>
<td>4.10. Two (2) forehead and shoulder restraints</td>
</tr>
<tr>
<td>5. Stereotactic immobilization components, for both frame and frameless stereotactic treatment</td>
</tr>
<tr>
<td>5.1. Complete set of CT/MRI compatible stereotactic head frame including headrings, masks, etc.</td>
</tr>
<tr>
<td>5.2. Complete set of CT/MRI compatible frameless stereotactic system including stereotactic fixation masks</td>
</tr>
<tr>
<td>5.3. Limits patient movement to less than or equal to 1 mm movement during intrafraction immobilization for framed immobilization</td>
</tr>
<tr>
<td>5.4. Limits patient movement to less than or equal to 3 mm movement during intrafraction immobilization for frameless immobilization</td>
</tr>
<tr>
<td>5.5. Including all the accessories prescribed by the manufacturer for use including options for low mask fixation for inferior lesions of the brain, pellets / strips for molding the impression of the nasal bridge, occipital and frontal and additional immobilization of the patient's face, clips, spacers, screws, and training materials.</td>
</tr>
<tr>
<td>6. Other devices</td>
</tr>
<tr>
<td>6.1. One (1) patient transfer board</td>
</tr>
<tr>
<td>6.2. Three (3) Tungsten eye shields: One (1) piece each of small, medium and large</td>
</tr>
<tr>
<td>6.3. Three (3) Testicle shields: One (1) piece each of small, medium and large</td>
</tr>
<tr>
<td>6.4. Two (2) patient restraint belts</td>
</tr>
<tr>
<td>6.5. Two (2) calipers: stainless steel with parallel arms and calibrated in cm</td>
</tr>
<tr>
<td>6.6. One (1) set of multipurpose support cushions and wedges</td>
</tr>
<tr>
<td>6.7. Six (6) Bolus/tissue equivalent build up material: Two (2) each of 0.5 cm, 1 cm, and 1.5cm thickness, at least 30 cm x 30 cm</td>
</tr>
<tr>
<td>G. Oncology Information System with Networking, Record and Verify System</td>
</tr>
<tr>
<td>1. Server</td>
</tr>
<tr>
<td>a. High storage capacity server that can store at least 10000 patients' data</td>
</tr>
<tr>
<td>b. All network cables should be at least CAT 6</td>
</tr>
<tr>
<td>c. Monitor: not smaller than 20&quot; LCD monitor</td>
</tr>
<tr>
<td>d. Uninterrupted power supply with at least 15 minutes working capacity</td>
</tr>
<tr>
<td>e. With appropriate port hubs and all necessary network connections as prescribed by the manufacturer</td>
</tr>
<tr>
<td>2. Workstations</td>
</tr>
<tr>
<td>Provision of three (3) computer workstations with monitors, OIS licenses and UPS with at least 15 minutes working time capacity for each unit</td>
</tr>
</tbody>
</table>
### Annex V-A1 (Page 10 of 17)

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.</td>
<td>Processor: Current generation of at least Intel i5</td>
</tr>
<tr>
<td>2.2.</td>
<td>Current generation chipset</td>
</tr>
<tr>
<td>2.3.</td>
<td>Memory: not smaller than 16GB, DDR4 RAM</td>
</tr>
<tr>
<td>2.4.</td>
<td>Has the current generation Intel HD graphics</td>
</tr>
<tr>
<td>2.5.</td>
<td>Has keyboard, USB, mouse</td>
</tr>
<tr>
<td>2.6.</td>
<td>Storage: not smaller than 1TB</td>
</tr>
<tr>
<td>2.7.</td>
<td>Optical drive DVD – writer</td>
</tr>
<tr>
<td>2.8.</td>
<td>Display 23” LED</td>
</tr>
<tr>
<td>2.9.</td>
<td>Has wifi card for wireless connectivity</td>
</tr>
<tr>
<td>3.</td>
<td>OIS Software includes the following:</td>
</tr>
<tr>
<td>3.1.</td>
<td>Patient data administration and electronic medical record</td>
</tr>
<tr>
<td>3.2.</td>
<td>Independent treatment verification</td>
</tr>
<tr>
<td>3.3.</td>
<td>Treatment and port image review</td>
</tr>
<tr>
<td>3.4.</td>
<td>Time planner/scheduler</td>
</tr>
<tr>
<td>3.5.</td>
<td>Electronic patient RT chart</td>
</tr>
<tr>
<td>3.6.</td>
<td>Chart audit and checking/assessment</td>
</tr>
<tr>
<td>3.7.</td>
<td>Capable to archive and restore Patient data</td>
</tr>
<tr>
<td>4.</td>
<td>OIS Connectivity:</td>
</tr>
<tr>
<td>4.1.</td>
<td>Should be connected to an IGRT device and to import MV, kV, and volumetric DICOM images</td>
</tr>
<tr>
<td>4.2.</td>
<td>Should be connected to the existing CT-simulation machine (16 Slice Discovery GE CT scan) and supports import of DICOM CT images</td>
</tr>
<tr>
<td>4.3.</td>
<td>Able to accept and read DICOM CT images from the existing 16 Slice Somatom Emotion of Radiation Oncology Section of UP-PGH from external devices (such as CD, DVD, or Flash Drive)</td>
</tr>
<tr>
<td>4.4.</td>
<td>Should be connected to the purchased linear accelerator (to verify that the machine is set up according to plan and automatically records actual set-up parameters)</td>
</tr>
<tr>
<td>4.5.</td>
<td>Should be connected the treatment planning system</td>
</tr>
<tr>
<td>5.</td>
<td>Provision for remote access to the distributor for remote service and diagnosis; including cabled high-speed internet connection during the warranty period</td>
</tr>
</tbody>
</table>

### H Treatment Planning System (Latest Version)

1. **Contouring**
   1.1. Supports contouring templates that list structures of interest
   1.2. Boolean operations (such as AND, OR, XOR, AND NOT) with structures to create complex structure definitions or equivalent contouring tools (margin, subtraction and addition)
   1.3. Advanced contouring tools with patient identity information should be available
   1.4. Automatic segmentation/contouring based on electron density values for different organs should be included

2. **Image Registration**
   2.1. Image registration support includes CT scan, MRI and PET via DICOM
   2.2. Able to do image fusion
   2.3. Patient data acquisition through DICOM import facility from CT Scan, CBCT, MRI and PET.
3. Planning and Dose Calculation

3.1. Treatment planning for photon and electron beam of all energies in the therapeutic range

3.2. Able to do treatment plans for conventional, 3D-conformal, IMRT, VMAT/RapidArc, SRS, SRT, and SBRT (licenses to compute included)
   a. IMRT Planning License: utilizing sliding window, large field, and step and shoot technique
   b. VMAT/RapidArc Planning License with multi-arc capabilities
   c. SRS, SRT & SBRT Planning License with MLC based planning

3.3. Includes advanced dose calculation algorithms for Monte Carlo equivalent photon calculation (such as Monte Carlo, AcurosXB) and Monte Carlo algorithm for electron.

3.4. Inverse planning software for IMRT and VMAT/RapidArc

3.5. Able to display target and critical structure motions using 4D tools for respiratory-gated treatment plans for IMRT, VMAT/RapidArc and SBRT
   a. 4D image series are displayed as movie loops and as blended or blinking images
   b. 4D image displays supports CT, PET/CT, PET and images from the kV imaging system attached to the machine

3.6. Able to do treatment planning based on CBCT images acquired from the LINAC CBCT to facilitate adaptive therapy

3.7. Support regular and irregular fields for all types of beam modifiers such as bolus, blocks, MLCs, tissue compensator, wedge, dynamic/motorized wedge, and asymmetric beam

3.8. Capable of making tissue inhomogeneity correction (as per electron density), irregular point dose calculation and auto contouring as per CT data

4. Plan Evaluation and Analysis

4.1. Side by side plan comparison

4.2. DVH for multiple plans in one plot, DVH for any multiple structure volumes in one plot

4.3. Differential or cumulative dose volume histogram

4.4. Absolute or relative scale for the structure volume axis of DVH plot

4.5. Plan summation/subtraction for external beam plans, can store summed plans

4.6. Electronic plan approval

5. Quality Assurance

5.1. Able to do portal dosimetry calculation for VMAT/RapidArc and IMRT fields on electronic portal imaging device/MV system

5.2. Able to do EPID-based in-vivo dosimetry software for IMRT & VMAT/RapidArc treatment. If not available for Philippine Market, manufacturer must provide a notarized certification.

6. Connectivity of TPS

6.1. Workstations integrated to the LINAC console through the OIS network/record and verify system

6.2. Able to import patient image and plan data

6.3. Supports DICOM-RT import/export of at least DICOM 3.0 images or higher and radiotherapy images, structures, plans, dose matrix, dose points, fluence, dMLC for IMRT, blocks, compensators, etc.
### Annex V-A1 (Page 12 of 17)

<table>
<thead>
<tr>
<th>Section VI. Bidding Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supply, Delivery, Installation, Testing and Commissioning of Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability and with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH)</strong></td>
</tr>
</tbody>
</table>

#### 6.4. Import filters include image transfer via LAN, CD-ROM, film scanner, digitizer for non-CT based patients (brachytherapy films and irregular images) and dosimetric beam data from all brand name water phantoms (Sun Nuclear, IBA, PTW, etc.)

#### 7. System administration utilities including back-up, archive, and restore

#### 8. Workstations

| 8.1. Two (2) calculation workstation/treatment planning system with physics license and UPS with at least 15 minutes working time capacity for every workstation with licenses. With medical grade display not smaller than 23”. |
| 8.2. Four (4) non calculation workstation/contouring station with contouring license and UPS with at least 15 minutes working time capacity for every workstation with licenses. With medical grade display not smaller than 23”. |

#### 9. Printers

| 9.1. One (1) heavy duty laser monochromatic printer with two additional sets of ink |
| 9.2. One (1) heavy duty laser colored printer with two additional sets of ink |

### LINAC Accessories

1. **Multileaf Collimator (MLC):**
   - 1.1. At least 120 MLC leaves
   - 1.2. Leaf width at isocenter: maximum of 5 mm
   - 1.3. MLC control must be fully integrated with the digital control system; if not, an interface between MLC and existing network system shall be provided

2. **Laser Alignment System for the LINAC Machine (Four Cross Laser System)**

3. **Dynamic or motorized wedge system for variable wedge angles**

4. **Four (4) Electron Applicators with different field sizes:**
   - 4.1 Minimum Field size: not bigger than 6 x 10 cm²
   - 4.2 Maximum Field size: not smaller than 20 x 20 cm²

5. **Electron beam shaping kit**

6. **Provide the following mounting accessories:**
   - 6.1. Shadow tray for shielding blocks
   - 6.2. Accessory mount / linear accelerator latch mounting system

7. **Twenty (20) units of shielding block trays**
   - 7.1. Tray material: PMMA or polycarbonate

### Other requirements of the LINAC Machine

1. **Leaded door (borated polyethylene) for the LINAC bunker - > scope of works**
2. **1 set of patient intercom system in the treatment room and control console**
3. **CCTV Camera system: High resolution three (3)-piece camera system (two cameras for the main treatment area and one for the maze) with three (3) views**
4. **Radiation warning lights above the LINAC room door connected to the treatment machine**
5. **Two (2) water chillers (one is backup); specifications as prescribed by the manufacturer**
6. One (1) air compressor if required by the manufacturer; specifications as prescribed by the manufacturer

7. Five (5) dehumidifiers (three for the treatment room, one for the treatment planning room, and one for the equipment dosimetry room)
   7.1. 20 Liter capacity
   7.2. Wheel-mounted
   7.3. Automatic adjustable humidistat
   7.4. Water tank full indicator with auto shut-off
   7.5. Ozone friendly refrigerant, frost-free
   7.6. 100% CFC
   7.7. At least ¼ hp, 220-240 V

K Technical Specifications of the Dosimetry System
Note: All chambers, diodes, and electrometer must be of the same connector design with the existing dosimetry system used by the Section of Radiation Oncology, UP-PGH.

1. Radiation Field Analyzer or Beam Scanner
   1.1. Advanced 3D computer-controlled radiation scanning system to measure dose distribution comprised of:
       a. 3D mechanics with scanning volume of not smaller than 45 cm x 45 cm x 40cm
       b. Calibrated high-precision mechanics with built-in leveling frame
       c. Water phantom carriage with electrically operated telescopic lift
       d. Water reservoir carriage with bi-directional pump (fill and drain water)
       e. Control unit with built in two channel electrometer and with TNC connector
       f. Hand-held control
       g. Detector holders for use of Farmer, parallel plate and field/reference Ionization Chambers (IC)
       h. Fast, accurate, simple and easy setup scanning system
       i. Storage case and dust cover
       j. Technical data and user manual in English
   1.2. Advanced acquisition and analysis software with desktop computer system
       a. Support of all international and industry protocol (such as IAEA, AAPM, etc)
       b. Compatible with all commercial radiation treatment planning systems
       c. License for installation of the software on up to (3) three additional workstations
       d. Can measure electron and photon profiles, depth dose curves and TMR/TPR
       e. Flexible ASCII tables including export to MS Excel
       f. Capability for radiation treatment planning software specific measurement queue creation and data conversion to the treatment planning system

2. Farmer Type Ion Chamber
   2.1. Farmer type ionization chamber 0.6 cc with plastic walls, Co-60 build-up cap, waterproof and fully guarded, calibrated in a standards laboratory in terms of absorbed dose to water
   2.2. Ionization chamber model must be included in IAEA TRS 277/382/398 protocols
### 2.3. With accompanying calibration certificate and chamber technical data and user manuals in English

### 2.4. With ion chamber holder or adapter for absolute measurements in water phantom (must be compatible with the existing phantoms) and existing check source

### 3. Plane Parallel Ion Chamber (PPC)

3.1. Plane parallel ionization chamber for electron beams, vented sensitive volume of at least 0.35 cc., waterproof and fully guarded, calibrated in a standards laboratory in terms of absorbed dose to water

3.2. Ionization chamber model must be included in IAEA TRS 277/382/398 protocols

3.3. With accompanying calibration certificate and chamber technical data and user manuals in English

3.4. With PPC holder or adapter for absolute measurements in water phantom (must be compatible with the existing phantoms) and existing check source

### 4. Ionization Chambers for Small Field Dosimetry

4.1. Ion chambers with the following volume, cylindrical, waterproof and fully guarded:
   
   a. One (1) not bigger than 0.015 cc Cavity Volume with graphite central electrode
   
   b. Two (2) not bigger than 0.125 cc Cavity Volume
   
   c. One (1) not bigger than 0.04 cc Cavity Volume

4.2. Ionization chamber model must be included in IAEA TRS 277/382/398 protocols

4.3. With accompanying calibration certificate and chamber technical data and user manuals in English

4.4. With ion chamber holder or adapter for absolute measurements in water phantom (must be compatible with the existing phantoms) and existing check source

### 5. Therapy Dose Meter (Electrometer)

5.1. Must be compatible with the delivered ionization chambers, calibrated in a standards laboratory
   
   a. Power supply is 220-240 V, stable and high accuracy in the measurements, with display of accumulated charge and dose, varying bias voltage with V1/V2 ratio equal or greater than 3, dose rate, exposure time, leakage and other important information that ensure validity of the instruments and with possibility of reverse polarity

5.1. With calibration certificate, electrometer technical and user manual

5.2. Complete with necessary accessories and carrying case

### 6. Reference Signal Chamber for small field dosimetry

6.1. Perturbation free transmission chamber

6.2. Reproducible reference signal chamber

### 7. Large Transmission ionization chamber designed for relative dosimetry

7.1. Used as reference signal chamber in relative dosimetry for clinical use in water phantom scanning system

7.2. Used for PDD and profiles of small fields since perturbation due to the presence of the chamber in the field is minimal and the chamber can be considered invincible to the beam

7.3. Air-vented ionization chamber and is fully guarded
<table>
<thead>
<tr>
<th>Annex V-A1 (Page 15 of 17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Detector Extension Cables</td>
</tr>
<tr>
<td>8.1. One (1) low noise triaxial cable on reel not shorter than 20 meters</td>
</tr>
<tr>
<td>8.2. Two (2) low noise triaxial cable on reel not shorter than 10 meters</td>
</tr>
<tr>
<td>8.3. Compatible with the purchased and existing IC &amp; electrometer of the Radiation Oncology Section of UP-PGH</td>
</tr>
<tr>
<td>8.4. Low radiation leakage cable and resistant against radiation damage</td>
</tr>
<tr>
<td>9. Barometer</td>
</tr>
<tr>
<td>9.1. Digital, with selectable unit of pressure, 1 hPa or 0.5 mm Hg minimum scale, calibrated in a standard laboratory, with calibration certificate, technical data and user manuals in English</td>
</tr>
<tr>
<td>10. Thermometer</td>
</tr>
<tr>
<td>10.1. Digital, with selectable unit of temperature, 0.5°C min scale calibrated in Standards Laboratory, with calibration certificate, technical data and user manual in English</td>
</tr>
<tr>
<td>11. Hygrometer</td>
</tr>
<tr>
<td>11.1. Digital calibrated in SI units in a Standards Laboratory, with calibration certificate, technical data and user manuals in English</td>
</tr>
<tr>
<td>12. Desiccator cabinet, at least 4 levels, with at least 114 Liters Capacity with humidity and temperature indicators and controls, calibrated to SI units, 220-240V</td>
</tr>
<tr>
<td>13. Radiotherapy Area Monitor</td>
</tr>
<tr>
<td>13.1. Two (2) units radiation area monitoring system installed inside the treatment room and at the control area</td>
</tr>
<tr>
<td>13.2. Flashing red lights alarm with 180° field of view, with aural alarm switch ON/OFF and with battery back-up for at least 24 hours</td>
</tr>
<tr>
<td>14. Two boxes of Ready Pack radiotherapy verification films, at least twenty (20) films per box</td>
</tr>
<tr>
<td>15. Digital level: magnetic horizontal, vertical and diagonal bubble level; durable</td>
</tr>
<tr>
<td>16. Phantom pointer for performing stereotactic QA tests/Winston Lutz Testing QA Tooling kit or Ball bearing</td>
</tr>
<tr>
<td>16.1. Includes two (2) boxes of gafchromic radiotherapy films with compatible scanner and isocenter (gantry, couch and collimator) image analysis; at least 25 sheets per box</td>
</tr>
<tr>
<td>16.2. Film holder</td>
</tr>
<tr>
<td>16.3. With attachment to the stereotactic couch mount adapter</td>
</tr>
<tr>
<td>16.4. Maximum freedom of gantry and couch rotation</td>
</tr>
<tr>
<td>16.5. Embossed lines for easy alignment with the laser isocenter</td>
</tr>
<tr>
<td>16.6. Integrated tungsten marker</td>
</tr>
<tr>
<td>17. Waterproof diode detector, high performance p-type Si diode for small field dosimetry</td>
</tr>
<tr>
<td>17.1. Sensitive volume: not bigger than 0.06 mm³</td>
</tr>
<tr>
<td>17.2. Relative dosimetry (beam profile: PDD/TMR, symmetry and flatness) for energy range from 60Co to 25 MV photon energy and electron energies.</td>
</tr>
<tr>
<td>17.3. For absolute dosimetry and patient specific QA and stereotactic beams</td>
</tr>
<tr>
<td>17.4. Must be compatible with the existing 3D water phantom system and software of the Radiation Oncology Section of UP-PGH</td>
</tr>
<tr>
<td>17.5. Includes holder and adaptors needed for the relative measurements in 3D water phantom</td>
</tr>
</tbody>
</table>
18. 4D Patient Plan Verification Dosimetry System

18.1. For stereotactic and volumetric modulated RT patient treatment plan verification

18.2. Matrix detector grid

18.3. Able to do the following analyses:

a. 2D dose analysis: compare data or absolute dose data using Distance to Agreement (DTA), Gamma (\(\gamma\)) and Gradient Compensation

b. Control point analysis (VMAT/RapidArc): individual control points and user-defined arc sections can be analyzed for a full arc or sub arc.

c. Equivalent VMAT/RapidArc Analysis system: verification of VMAT/RapidArc plans using densities of ROIs from a TPS to calculate SSD, geometric and effective depth automatically for VMAT/RapidArc and IMRT plans

d. MLC analysis: evaluate the difference between the planned and delivered MLC pattern

18.4. Include detector array, compatible phantom and software capable of DVH QA analysis

19. Chamber matrix for measurement of radiotherapy beam

19.1. Measure fields up to a size of 20 cm x 20 cm or better

19.2. Analysis parameters shall include flatness, symmetry, field size, light-radiation field coincidence, penumbra, dose rate and beam center

19.3. Include gantry holder for easy attachment to the gantry or to be provided if required by the system

20. Radiation Survey Meter

20.1. Battery-operated ionization radiation survey meter

20.2. Digital, accurate, auto ranging, zeroing with warm up of less than 2 minutes

20.3. Units of measurement are indicated at all times and capable of showing messages for unit operating conditions

20.4. Radiation detected: alpha, beta, gamma and x-ray, 0-2 Sv/hr

20.5. Calibrated in SI units

20.6. With calibration certificates and user manual

21. Stereotactic 3D QA Phantom (matched within ± 0.1 mm tolerance) / Lucy Phantom

21.1. Includes leveling plate or precision

21.2. Includes ionization chamber inserts

21.3. Interfaces with SRS frames and frameless system purchased

21.4. Compatible with CT and MRI imaging system

22. Independent Monitor Units (MU) Check Software

22.1. Software for accurate and independent verification of monitor units, dose, and overall validity of standard, IMRT, VMAT, and SRS

23. Water phantom for absolute dose measurement

23.1. One dimensional, stand-alone water phantom for absolute dose measurements according to IAEA TRS-398 dosimetry protocols

23.2. Minimum of 25cm x 35cm x 25cm volume, with PMMA wall

23.3. With Farmer ion chamber and plane parallel plate chamber adapters and holding device on a vertical beam measurement for water proof Farmer ion chamber and Parallel Plate Chamber
<table>
<thead>
<tr>
<th><strong>Section VI. Bidding Forms</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supply, Delivery, Installation, Testing and Commissioning of Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability and with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH)</strong></td>
</tr>
</tbody>
</table>

**Annex V-A1 (Page 17 of 17)**

<table>
<thead>
<tr>
<th>23.4. The measurement depth can be manually adjusted with 0.1mm steps and read out on the incremental encoder with integrated digital display</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>24. Electron Density Phantom</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.1. Evaluate CT scan data</td>
</tr>
<tr>
<td>24.2. Correct for inhomogeneities</td>
</tr>
<tr>
<td>24.3. Includes the following tissue equivalent interchangeable rod inserts:</td>
</tr>
<tr>
<td>a. Lung equivalent electron density plug (inhale and exhale)</td>
</tr>
<tr>
<td>b. Breast equivalent electron density plug</td>
</tr>
<tr>
<td>c. Solid trabecular bone equivalent electron density plug</td>
</tr>
<tr>
<td>d. Liver equivalent electron density plug</td>
</tr>
<tr>
<td>e. Muscle equivalent electron density plug</td>
</tr>
<tr>
<td>f. Adipose equivalent electron density plug</td>
</tr>
<tr>
<td>g. Solid dense bone equivalent electron density plug</td>
</tr>
<tr>
<td>h. Water-fillable equivalent electron density plug</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>25. IMRT Thorax Phantom for Film and Ion Chamber Dosimetry (for TPS QA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.1. Verify heterogeneity corrections</td>
</tr>
<tr>
<td>25.2. Correlate CTU to electron density</td>
</tr>
<tr>
<td>25.3. Includes the following tissue equivalent interchangeable rod inserts:</td>
</tr>
<tr>
<td>a. five (5) water equivalent solid rod insert</td>
</tr>
<tr>
<td>b. one (1) bone equivalent solid rod insert</td>
</tr>
<tr>
<td>c. four (4) lung equivalent solid rod insert</td>
</tr>
<tr>
<td>d. one (1) water equivalent rod insert with ion chamber cavity</td>
</tr>
<tr>
<td>e. one (1) bone equivalent rod insert with ion chamber cavity</td>
</tr>
</tbody>
</table>

**Certified By:**

__________________________________________
Authorized Representative Name and Signature
Date: ___________________________
## TERMS OF REFERENCE

### TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Part</th>
<th>Sub-Part</th>
<th>Heading</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART I</td>
<td>GENERAL PROJECT INFORMATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>PROJECT DESCRIPTION</td>
<td></td>
<td>I - 1 of 7</td>
</tr>
<tr>
<td>1.1</td>
<td>Project Title</td>
<td></td>
<td>I - 1 of 7</td>
</tr>
<tr>
<td>1.2</td>
<td>Definition of Terms</td>
<td></td>
<td>I - 1 of 7</td>
</tr>
<tr>
<td>1.3</td>
<td>General Description</td>
<td></td>
<td>I - 2 of 7</td>
</tr>
<tr>
<td>1.4</td>
<td>Project Components</td>
<td></td>
<td>I - 2 of 7</td>
</tr>
<tr>
<td>2.0</td>
<td>BACKGROUND</td>
<td></td>
<td>I - 3 of 7</td>
</tr>
<tr>
<td>3.0</td>
<td>PROCUREMENT OBJECTIVES</td>
<td></td>
<td>I - 4 of 7</td>
</tr>
<tr>
<td>4.0</td>
<td>SCOPE OF WORK</td>
<td></td>
<td>I - 5 of 7</td>
</tr>
<tr>
<td>4.1</td>
<td>Pre-Design Phase</td>
<td></td>
<td>I - 5 of 7</td>
</tr>
<tr>
<td>4.2</td>
<td>Design Phase</td>
<td></td>
<td>I - 5 of 7</td>
</tr>
<tr>
<td>4.3</td>
<td>Construction Phase</td>
<td></td>
<td>I - 6 of 7</td>
</tr>
</tbody>
</table>

| PART II | DETAILED PROJECT REFERENCE | | |
| 1.0 | ELIGIBILITY AND QUALIFICATION PROCESS | | II - 1 of 5 |
| 2.0 | CONCEPTUAL DESIGNS | | II - 1 of 5 |
| 2.1 | Main Requirements | | II - 1 of 5 |
| 2.2 | Other Services | | II - 1 of 5 |
| 2.3 | Other Physical Elements | | II - 1 of 5 |
| 3.0 | PROPOSAL STRUCTURE AND EVALUATION | | II - 1 of 5 |
| 3.1 | Technical Proposal | | II - 2 of 5 |
| 3.2 | Financial Proposal | | II - 4 of 5 |
| 4.0 | MODE OF PAYMENT | | II - 4 of 5 |

Conforme:

___________________________
Bidder's Company Name

___________________________
Name & Signature of Authorized Representative

___________________________
Designation

___________________________
Date
Supply, Delivery, Installation, Testing, and Commissioning of Brand New Linear Accelerator System with Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capabilities with Related Specialty Works for the Department of Radiology of the Philippine General Hospital (as of 19 November 2019)

PART I
GENERAL PROJECT INFORMATION

1.0 PROJECT DESCRIPTION

1.1 Project Title:

Supply, Delivery, Installation, Testing, and Commissioning of Brand New Linear Accelerator System with Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capabilities with Related Specialty Works for the Department of Radiology of the Philippine General Hospital (as of 19 November 2019)

1.2 Definition of Terms

(a) UNIVERSITY shall mean the University of the Philippines (UP).
(b) HOSPITAL shall mean the Philippine General Hospital (PGH).
(c) END-USER shall mean the Radiation Oncology Section of the Department of Radiology, UP-PGH.
(d) IMPLEMENTING AGENCY shall mean the University of the Philippines – Philippine General Hospital (UP-PGH).
(e) CONSULTING ARCHITECT/ARCHITECT CONSULTANT shall mean the architect proposing the project scope of work and conceptual design.
(f) CONTRACT shall mean the written agreement entered into between the UNIVERSITY and the CONTRACTOR engaged for the implementation of the PROJECT.
(g) CONTRACT DOCUMENTS shall mean the agreements or CONTRACTs, including General Conditions and Special Conditions, as well as any and all documents which are referred to in the CONTRACTs as CONTRACT DOCUMENTS, or any modifications, revisions or alterations authorized by the HOSPITAL and agreed to by the CONTRACTOR during negotiation.
(h) CONSTRUCTION shall mean the delivery of all necessary architectural and engineering designs, materials, labor and equipment in accordance with the HOSPITAL-approved design brief and specifications of the PROJECT, performed within a specified CONTRACT duration. This includes all the works/activities and scope of work to be performed and completed, as well as any revisions, alterations and any extra work ordered to be done by the HOSPITAL to the CONTRACTOR.
(i) CONSTRUCTION CONTRACT DOCUMENTS shall mean the duly-approved plans, specifications, estimates, bill of quantities and other documents that define the technical requirements of the PROJECT, as prepared by the DESIGN AND BUILD CONTRACTOR, which shall form part of the bid documents for the procurement of civil works and equipment of the PROJECT.
(j) CONTRACTOR shall mean the individual, sole proprietorship, partnership or corporation engaged by the HOSPITAL to execute the PROJECT through the delivery of architectural and engineering design, materials, labor and equipment in accordance with the

Read and accepted as part of the Contract:

Bidder/Contractor

Conforme:

___________________________
Bidder's Company Name

___________________________
Name & Signature of Authorized Representative

___________________________
Designation

___________________________
Date
SCOPE OF WORK

Annex V-B (Page 3 of 11)

Supply, Delivery, Installation, Testing, and Commissioning of Brand New Linear Accelerator System with Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capabilities with Related Speciality Works for the Department of Radiology of the Philippine General Hospital (as of 19 November 2019)

1.3 General Description

Supply, Delivery, Installation, Testing, and Commissioning of Brand New Linear Accelerator System with Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capabilities with Related Speciality Works for the Department of Radiology of the Philippine General Hospital

Project scope shall cover Architectural and Engineering Design and Construction of the proposed single storey LINAC bunker with support areas, as well as the supply, delivery, installation, acceptance testing, and commissioning of the LINAC system. The project location is in the Radiology Department at the ground floor of the PGH Central Block building, near the central elevator lobby. The area covers approximately 210 square meters. (Pocket Garden extension of chiller)

The Architectural and Engineering design and plans shall be in accordance with the HOSPITAL-approved Architectural Design Brief and the General Site Development and Building Design Specifications as prescribed in this Terms of Reference (TOR). The in-house medical physicists shall perform the acceptance testing and commissioning, aiming for accreditation of a CROM and for operational licensing by the DOH and FDA.

Read and accepted as part of the Contract:

Conforme:

___________________________
Bidder’s Company Name

___________________________
Name & Signature of Authorized Representative

___________________________
Designation

___________________________
Date
Supply, Delivery, Installation, Testing, and Commissioning of Brand-New Linear Accelerator System with Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capabilities with Related Specialty Works for the Department of Radiology of the Philippine General Hospital (as of 18 November 2019)

SCOPE OF WORK

Annex V-B (Page 4 of 11)

1.4 Project Components

The project shall have the following basic components:

(a) As-found plans for the area as basis for demolition plans. This shall include/indicate utility lines that will be affected by the project for proper and complete documentation. The Design Development (DD) and the Contract Documents (CD) phases of the design shall continue after the bid is awarded. It shall be subject to review and approval by the HOSPITAL, in compliance with relevant laws and design standards.

(b) Given the PGH Central Block building’s historical background, consultation and coordination with an Architectural Heritage Conservationist and the National Historical Commission of the Philippines (NHCP) is recommended. The approved design shall be submitted to the NHCP, following their Board Resolution No. 15, series of 2013, declaring the entire UP Manila and PGH Compound as a national historical landmark.

(c) Coordination with the Office of Engineering and Technical Services (OETS) of the PGH for utility requirements and permits.

(d) Coordination with the PGH police for access and other permits.

(e) Coordination with the Project Management Office (PMO) of the UP System as necessary.

(f) Complete Architectural and Engineering Designs including Structural, Plumbing and Sanitary, Electrical, Mechanical, and Data and Communications that will conform with the HOSPITAL-approved Architectural Design Brief included in the annexes of this TOR.

(g) Aside from the Architectural and Engineering professional design fees, other incidental expenses that are also to the account of the winning bidder shall include necessary site tests and surveys and other design and construction requirements.

(h) Compliance with all applicable permits/licensing and documentary requirements of the local government (LGU), the HOSPITAL and the UNIVERSITY.

(i) Dismantling and decommissioning of the existing COBALT Machine.

(j) Construction of the LINAC bunker with appropriate radiation shielding and support spaces.

(k) Supply, delivery, installation, acceptance testing, and commissioning of the Linear Accelerator equipment as per technical specifications supplied by the end-user. This shall include provision for overhead laser and lateral wall laser installations, beam-on and laser-on warning lights, emergency-off switches, appropriate base frame pit and framing support, cooling system, and console.

2.0 BACKGROUND

2.1 Legal Basis

Sec. 22 (Land Grants and Other Real Properties of the University) of Republic Act No. 9500, “An Act to Strengthen the University of the Philippines as the National University”, signed into law on 22 April 2008, provides that the UP Land Grants, or "parcels of land ceded by law, decree or presidential issuance to the University of the Philippines are...declared to be

Read and accepted as part of the Contract:

___________________________
Conforme:

___________________________
Bidder's Company Name

___________________________
Name & Signature of Authorized Representative

___________________________
Designation

___________________________
Date
SCOPE OF WORK  

Section VI. Bidding Forms  

Supply, Delivery, Installation, Testing, and Commissioning of Brand New Linear Accelerator System with Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capabilities with Related Specialty Works for the Department of Radiology of the Philippine General Hospital (as of 18 November 2019)  

Table of Contents  

Section VI. Bidding Forms  

Page 135 of 188  

The University of the Philippines requires the on-site presence of the CONSTRUCTION MANAGEMENT TEAM for the implementation of the PROJECT, to ensure that daily construction activities satisfy standards of quality, timeliness and budget.

3.0 PROCUREMENT OBJECTIVES

3.1 To prepare complete Architectural and Engineering Design and Plans and related studies/investigations that consider the following:

(a) HOSPITAL-approved Architectural Design Brief
(b) Relevant laws, design standards and legal procedures
(c) Relevant architectural heritage preservation, restoration, conservation guidelines
(d) DOH and FDA guidelines for therapeutic x-ray facility and equipment licensing

3.2 To properly document the built structure and utilities of the site/project location.

3.3 To dismantle and decommission the existing COBALT machine at the site.

3.4 To deliver, install, perform acceptance testing, and commission all required equipment and accessories.

3.5 To implement a turnover procedure in accordance with Part VIII Project Acceptance and Turnover.

4.0 SCOPE OF WORK

The UP-PGH shall provide the architectural schematic design for the infrastructure work for the LINAC facility, in terms of architectural plans and design brief. In compliance with this conceptual design and these Terms of Reference, the CONTRACTOR shall perform the professional services, as follows:

Read and accepted as part of the Contract:

Conforme:
__________
Bidder/Contractor

Bidder’s Company Name

Name & Signature of Authorized Representative

Designation

Date
SCOPE OF WORK

Annex V-B (Page 6 of 11)

4.1 Pre-Design Phase

The CONTRACTOR shall:
(a) Examine and review this TOR and the attached Design Brief.
(b) Investigate the site pursuant to the proposed scope of work. All utility tapping points shall be synchronized with the HOSPITAL and the OETS.
(c) Obtain all necessary documents pertaining to the existing conditions of the PROJECT SITE, such as, but not limited to, topographical surveys, surveys of existing structures and other information, to aid in the proper design of the PROJECT.
(d) Notify the IMPLEMENTING AGENCY of any issues, discrepancies, conflicts or other considerations that may prevent the DESIGN BRIEF from being incorporated in the Final Design and recommend necessary revisions/ refinements.
(e) Coordinate with the agencies concerned (e.g., MERALCO for power lines and MWCI for water and sewage lines and other utilities needed for the PROJECT, NHCP for the historical conservation guidelines).

4.2 Design Phase

The CONTRACTOR shall:
(a) Consult with the PROCURING ENTITY, END-USER and the IMPLEMENTING AGENCY as may be necessary to ensure the proper development of a responsive design.
(b) Coordinate with the National Historical Commission of the Philippines (NHCP) regarding the agency’s guidelines concerning historical landmarks.
(c) Continually coordinate with the PROCURING ENTITY, END-USER and the IMPLEMENTING AGENCY throughout the design phase.
(d) Prepare from the Design Development documents, consisting of detailed and scaled floor plans, elevations, sections and other drawings, to illustrate the size and character of the PROJECT, for submission to and approval by the IMPLEMENTING AGENCY.
(e) Prepare and submit an outline of specifications and fix and illustrate the size and character of the PROJECT showing the kind of materials intended to be used, the structural concept and type, the types of mechanical, electrical, sanitary and other utility systems and equipment to be installed, including other items of work that may be required by the IMPLEMENTING AGENCY and the END-USER.
(f) Prepare and submit all other pertinent data, such as geotechnical outputs, topographic surveys, design criteria and other information, related to the conditions of the PROJECT SITE, as well as to its design development documents for the PROJECT.

Read and accepted as part of the Contract

<table>
<thead>
<tr>
<th>Conforme:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bidder’s Company Name</td>
</tr>
<tr>
<td>Name &amp; Signature of Authorized Representative</td>
</tr>
<tr>
<td>Designation</td>
</tr>
<tr>
<td>Date</td>
</tr>
</tbody>
</table>

Bld Reference No. GPG-B1-2019-141
Supply, Delivery, Installation, Testing, and Commissioning of Brand-New Linear Accelerator System with Stereotactic Radiotherapy (SRT) and Stereotactic Body Radiotherapy (SBRT) Capabilities with Related Specialty Works for the Department of Radiology of the Philippine General Hospital (as of 19 November 2019)

TABLE OF CONTENTS.doc 11/19/19 Page 7 of 11

4.3 Construction Phase

The service of the CONTRACTOR under the Construction Phase of the PROJECT shall be as follows:

(a) Prepare supplemental drawings as may be required by actual site conditions.

(b) Check and approve samples, schedules, and other submissions for conformity with the plans, specifications, and other contract documents and written instructions issued, or those issued by the PROCURING ENTITY or its authorized representatives.

(c) Advise or give recommendations to the IMPLEMENTING AGENCY on matters relating to the execution and progress of the work or the interpretation of the CONTRACT DOCUMENTS.

(d) Conduct mandatory periodic visits, at least once a week at the PROJECT SITE for documentation of the progress and quality of the work, and ensure that it proceeds in accordance with the contract documents, plans and specifications. During such visits and on the basis of observations on the PROJECT SITE, the CONTRACTOR shall endeavor to guard and immediately inform the IMPLEMENTING AGENCY against defects and deficiencies in the work of the building contractor and condemn poor quality of work.

(e) The CONTRACTOR, the CONSULTING ARCHITECT and the authorized representatives of the PROCURING ENTITY shall conduct the necessary inspection to determine the date of substantial and final completion of the PROJECT and issue the final Certificate of Payment.

END OF PART I

Read and accepted as part of the Contract:

Conforme:

Bidder’s Company Name

Name & Signature of Authorized Representative

Designation

Date
PART II
DETAILED PROJECT REFERENCE

1.0 ELIGIBILITY AND QUALIFICATION PROCESS

All submittals and attendances required for this bidding and enumerated in the Invitation to Bid must be strictly complied with, without exemption to the place, date and time unless otherwise modified with proper notification through Bid Bulletin by the HOSPITAL.

2.0 CONCEPTUAL DESIGNS

The BIDDER shall abide by these criteria and parameters for the design and construction of the infrastructure for the LINAC 2 facility.

Classification

(a) Ownership : Philippine General Hospital
(b) Type : Institutional Unit Support Space and Office

2.1 Main Requirements

The BIDDER shall consider in their architectural and engineering design phase the requirements listed in the Project Design Brief in conformity with the issued HOSPITAL-approved Conceptual Design.

2.2 Other Service/s

(a) Radiation control system
(b) Power supply system
(c) Water supply and sanitary system
(d) Communication and information technology system (e.g. Wi-Fi connectivity, Electronic access with intercom system, etc.)
(e) Ventilation and A/C system
(f) Fire safety system
(g) Waste management system

2.3 Other Physical Elements

The BIDDER shall consider in their proposal the following supplemental physical requirements:

(a) Security
   i. Non-permanent Perimeter Fencing/Protective Barriers
   ii. Gates and Locking Systems
   iii. CCTV Security systems
   iv. Panic and emergency hardware

Read and accepted as part of the Contract:

Bidder/Contractor

Conforme:

___________________________
Bidder’s Company Name

___________________________
Name & Signature of Authorized Representative

___________________________
Designation

___________________________
Date
SCOPE OF WORK

Annex V-B (Page 9 of 11)

Supply, Delivery, Installation, Testing, and Commissioning of Brand New Linear Accelerator System with Stereotactic Radiotherapy (SRS) and Stereotactic Body Radiotherapy (SBRT) Capabilities with Related Specialty Works for the Department of Radiology of the Philippine General Hospital (as of 18 November 2019)

TABLE OF CONTENTS: dec. 11/19/19
Page 9 of 11

(b) Universal Design Access Systems
i. Ramps and railings
ii. Restroom grab bars and accessible fixtures
iii. Legible and appropriate signage

3.0 PROPOSAL STRUCTURE AND EVALUATION

Eligible bidders shall submit their bids through their authorized managing officer or their duly authorized representative (i) in the prescribed Bid Form, including its annexes, as specified in the bidding documents, (ii) in two (2) separate sealed bid envelopes, the first containing the technical component of the bid, and the second containing the financial component of the bid, with the name of the contract to be bid and the name of the bidder in capital letters, addressed to the BAC of the agency concerned. The bidder shall mark the two envelopes: “Do not open before [date and time of opening of bids].” Both envelopes shall then be sealed in an outer envelope which shall be addressed to the BAC and shall be marked as specified in the Instructions to Bidders.

3.1 The Technical Proposal

The first envelope, containing the Technical Proposal, shall be comprised of the following additional documents:

(a) Design and Construction Methods

The BIDDER shall submit a Schematic Architectural and Engineering Design Brief/Proposal based on the PGH-issued Architectural Design Brief. The Schematic Engineering Design Brief/Proposal shall include a presentation/diagram showing the proposed conceptual structural and construction system, an outline specification showing the types of mechanical, electrical, sanitary, and other utility systems and equipment to be used/installed, including other items of work that are indicated in the Terms of Reference and Design Brief.

They shall be submitted on ring-bound A4-sized sheets.

In case of discrepancies between sections of this TOR, these discrepancies shall be brought to the attention of the IMPLEMENTING AGENCY/CONSULTING ARCHITECT for clarification and final decision.

---

Conforme:

Bidder’s Company Name

Name & Signature of Authorized Representative

Designation

Date
Supply, Delivery, Installation, Testing, and Commissioning of Brand-New Linear Accelerator System with Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiation Therapy (SBRT) Capabilities with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH)

SCOPE OF WORK

Annex V-B (Page 10 of 11)

Conforme:

___________________________
Bidder’s Company Name

___________________________
Name & Signature of Authorized Representative

___________________________
Designation

___________________________
Date
Supply, Delivery, Installation, Testing, and Commissioning of Brand-New Linear Accelerator System with Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capabilities with Related Specialty Works for the Department of Radiology of the Philippine General Hospital (as of 19 November 2019)

SCOPE OF WORK

Annex V-B (Page 11 of 11)

CONTRACTOR. He shall ensure that the schedule of work and the plans and specifications are followed. He shall stay at the jobsite for the whole duration of the project.

i.b. ELECTRICAL ENGINEER

The Electrical Engineer must be duly-licensed with at least five (5) years’ experience in similar and comparable projects in the installation of lighting, power distribution, and building management systems.

i.c. SANITARY ENGINEER/MASTER PLUMBER

The Sanitary Engineer/Master Plumber must be duly-licensed with at least five (5) years’ experience in similar and comparable projects in the installation of building water supply and distribution, and plumbing.

i.d. FOREMAN

The Foreman must have at least five (5) years’ experience in similar and comparable projects and shall preferably be knowledgeable in the application of rapid construction technologies.

i.e. CERTIFIED INSTALLERS

The equipment installers must have training certification from the LINAC machine manufacturer.

The key professionals listed above are required. The CONTRACTOR may, as needed and at its own expense, add additional professionals and/or support personnel for the optimal performance of all Architectural and Engineering Design Services, as stipulated in these Terms of Reference, for the PROJECT. Prospective bidders shall attach each individual’s resume and PRC license of the (professional) staff.

END OF PART II

Requested by:

[Signature]
MIRIAM JOY C. CALAGUAS, MD
Professor and Chair
Department of Radiology

Prepared by:

[Signature]
RACEL IRENE LUIS C. QUEROL, MD
TWG Representative

Recommended by:

[Signature]
MA. MARGARITA LAT-LUNA, MD
Provisional Member

Approved by:

[Signature]
GENARDO D. LEGASPI, MD
Director

Read and accepted as part of the Contract:

___________________________
Conforme:

___________________________
Bidder’s Company Name

___________________________
Name & Signature of Authorized Representative

___________________________
Designation

___________________________
Date
Section VI. Bidding Forms

Supply, Delivery, Installation, Testing and Commissioning of Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability and with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH)
Supply, Delivery, Installation, Testing and Commissioning of Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability and with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH)
SPECIAL CONDITION OF THE CONTRACT FOR THE RELATED SPECIALTY WORKS

1. Definitions

1.2 Completion Date is within Three Hundred Thirty (330) calendar days after receipt of Notice to Proceed. Project Completion includes all Related Specialty Works and Supply, Delivery, Installation, Testing and Commissioning of Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability and with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH).

1.3 The Contract is the contract between the Procuring Entity and the Winning Bidder/Supplier to execute, complete, and maintain the Works.

1.4 The Contract Price is the price stated in the Letter of Acceptance and thereafter to be paid by the Procuring Entity to the Winning Bidder/Supplier for the execution of the Works in accordance with this Contract.

1.5 Contract Time Extension is the allowable period for the Winning Bidder/Supplier to complete the Works in addition to the original Completion Date stated in this Contract.

1.6 The Winning Bidder/Supplier is the juridical entity whose proposal has been accepted by the Procuring Entity and to whom the Contract to execute the Work was awarded.

1.7 The Winning Bidder/Supplier’s Bid is the signed offer or proposal submitted by the Winning Bidder/Supplier to the Procuring Entity in response to the Bidding Documents.

1.8 Days are calendar days; months are calendar months.

1.9 Dayworks are varied work inputs subject to payment on a time basis for the Winning Bidder/Supplier’s employees and Equipment, in addition to payments for associated Materials and Plant.

1.10 A Defect is any part of the Works not completed in accordance with the Contract.

1.11 The Defects Liability Certificate is the certificate issued by Procuring Entity’s Representative upon correction of defects by the Winning Bidder/Supplier.

1.12 The Defects Liability Period is the one year period between contract completion and final acceptance within which the Winning Bidder/Supplier assumes the responsibility to undertake the repair of any damage to the Works at his own expense.

Conforme:

Bidder’s Company Name

Name & Signature of Authorized Representative/Date
1.13 **Drawings** are graphical presentations of the Works. They include all supplementary details, shop drawings, calculations, and other information provided or approved for the execution of this Contract.

1.14 **Equipment** refers to all facilities, supplies, appliances, materials or things required for the execution and completion of the Work provided by the Winning Bidder/Supplier and which shall not form or are not intended to form part of the Permanent Works.

1.15 The **Intended Completion Date** is One Hundred Eighty (180) calendar days after receipt of Notice to Proceed or Opening of Letter of Credit whichever comes later. The Intended Completion Date may be revised only by the Procuring Entity’s Representative by issuing an extension of time or an acceleration order.

1.16 **Materials** are all supplies, including consumables, used by the Winning Bidder/Supplier for incorporation in the Works.

1.17 The **Notice to Proceed** is a written notice issued by the Procuring Entity or the Procuring Entity’s Representative to the Winning Bidder/Supplier requiring the latter to begin the commencement of the work not later than a specified or determinable date.

1.18 **Permanent Works** all permanent structures and all other project features and facilities required to be constructed and completed in accordance with this Contract which shall be delivered to the Procuring Entity and which shall remain at the Site after the removal of all Temporary Works.

1.19 **Plant** refers to the machinery, apparatus, and the like intended to form an integral part of the Permanent Works.

1.20 The **Procuring Entity** is the party who employs the Winning Bidder/Supplier to carry out the Works.

1.21 The **Procuring Entity’s Representative** refers to the Head of the Procuring Entity or his duly authorized representative, who shall be responsible for supervising the execution of the Works and administering this Contract.

1.22 The **Site** is at the UNIVERSITY OF THE PHILIPPINES (MANILA) – PHILIPPINE GENERAL HOSPITAL (UPM-PGH).

1.23 **Site Investigation Reports** are those that were included in the Bidding Documents and are factual and interpretative reports about the surface and subsurface conditions at the Site.

1.24 **Slippage** is a delay in work execution occurring when actual accomplishment falls below the target as measured by the difference between the scheduled and actual accomplishment of the Work by the Winning Bidder/Supplier as established from the work schedule. This is actually described as a percentage of the whole Works.

1.25 **Specifications** means the description of Works to be done and the qualities of materials to be used, the equipment to be installed and the mode of construction.
1.26 The **Start Date**, is from receipt of Notice to Proceed or Opening of Letter of Credit whichever comes later.

1.27 A **Subcontractor** is any person or organization to whom a part of the Works has been subcontracted by the Winning Bidder/Supplier, as allowed by the Procuring Entity, but not any assignee of such person.

1.28 **Temporary Works** are works designed, constructed, installed, and removed by the Winning Bidder/Supplier that are needed for construction or installation of the Permanent Works.

1.29 **Work(s)** refer to the Permanent Works and Temporary Works to be executed by the Winning Bidder/Supplier in accordance with this Contract, including (i) the furnishing of all labor, materials, equipment and others incidental, necessary or convenient to the complete execution of the Works; (ii) the passing of any tests before acceptance by the Procuring Entity’s Representative; (iii) and the carrying out of all duties and obligations of the Winning Bidder/Supplier imposed by this Contract as described in the **SCC**.

2. **Possession of Site**

2.1 Upon receipt of the Notice to Proceed, the Procuring Entity shall grant the Winning Bidder/Supplier possession of so much of the Site as may be required to enable it to proceed with the execution of the Works. If the Winning Bidder/Supplier suffers delay or incurs cost from failure on the part of the Procuring Entity to give possession in accordance with the terms of this clause, the Procuring Entity’s Representative shall give the Winning Bidder/Supplier a Contract Time Extension and certify such sum as fair to cover the cost incurred, which sum shall be paid by Procuring Entity.

2.2 The Winning Bidder/Supplier shall bear all costs and charges for special or temporary right-of-way required by it in connection with access to the Site. The Winning Bidder/Supplier shall also provide at his own cost any additional facilities outside the Site required by it for purposes of the Works.

2.3 The Winning Bidder/Supplier shall allow the Procuring Entity’s Representative and any person authorized by the Procuring Entity’s Representative access to the Site and to any place where work in connection with this Contract is being carried out or is intended to be carried out.

2.4 The Winning Bidder/Supplier shall allow the Procuring Entity’s Representative and any person authorized by the Procuring Entity’s Representative access to the Site and to any place where work in connection with this Contract is being carried out or is intended to be carried out.

3. **The Winning Bidder/Supplier’s Obligations**

3.1 The Winning Bidder/Supplier shall carry out the Works properly and in accordance with this Contract. The Winning Bidder/Supplier shall provide all supervision, labor, Materials, Plant and Winning Bidder/Supplier's Equipment, which may be required. All Materials and Plant on Site shall be deemed to be the property of the Procuring Entity.

<table>
<thead>
<tr>
<th>Conforme:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bidder’s Company Name</td>
</tr>
<tr>
<td>Name &amp; Signature of Authorized Representative/Date</td>
</tr>
</tbody>
</table>
3.2 The Winning Bidder/Supplier shall commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program of Work submitted by the Winning Bidder/Supplier, as updated with the approval of the Procuring Entity's Representative, and complete them by the Intended Completion Date.

3.3 The Winning Bidder/Supplier shall be responsible for the safety of all activities on the Site.

3.4 The Winning Bidder/Supplier shall carry out all instructions of the Procuring Entity's Representative that comply with the applicable laws where the Site is located.

3.5 The Winning Bidder/Supplier shall employ the key personnel named in the Schedule of Key Personnel, to carry out the supervision of the Works. The Procuring Entity will approve any proposed replacement of key personnel only if their relevant qualifications and abilities are equal to or better than those of the personnel listed in the Schedule.

3.6 If the Procuring Entity’s Representative asks the Winning Bidder/Supplier to remove a member of the Winning Bidder/Supplier's staff or work force, for justifiable cause, the Winning Bidder/Supplier shall ensure that the person leaves the Site within seven (7) days and has no further connection with the Work in this Contract.

3.7 During Contract implementation, the Winning Bidder/Supplier and his subcontractors shall abide at all times by all labor laws, including child labor related enactments, and other relevant rules.

3.8 The Winning Bidder/Supplier shall submit to the Procuring Entity for consent the name and particulars of the person authorized to receive instructions on behalf of the Winning Bidder/Supplier.

3.9 The Winning Bidder/Supplier shall cooperate and share the Site with other contractors, public authorities, utilities, and the Procuring Entity between the dates given in the schedule of other contractors particularly when they shall require access to the Site. The Winning Bidder/Supplier shall also provide facilities and services for them during this period. The Procuring Entity may modify the schedule of other contractors, and shall notify the Winning Bidder/Supplier of any such modification thereto.

3.10 Should anything of historical or other interest or of significant value be unexpectedly discovered on the Site, it shall be the property of the Procuring Entity. The Winning Bidder/Supplier shall notify the Procuring Entity’s Representative of such discoveries and carry out the Procuring Entity’s Representative’s instructions in dealing with them.

Conforme:

______________________________
Bidder’s Company Name

______________________________
Name & Signature of Authorized Representative/Date
4. Winning Bidder/Supplier’s Risk and Warranty Security

4.1 The Winning Bidder/Supplier shall assume full responsibility for the Works from the time project construction commenced up to final acceptance by the Procuring Entity and shall be held responsible for any damage or destruction of the Works except those occasioned by force majeure. The Winning Bidder/Supplier shall be fully responsible for the safety, protection, security, and convenience of his personnel, third parties, and the public at large, as well as the Works, Equipment, installation, and the like to be affected by his construction work.

4.2 The defects liability period for infrastructure projects shall be one year from contract completion up to final acceptance by the Procuring Entity. During this period, the Winning Bidder/Supplier shall undertake the repair works, at his own expense, of any damage to the Works on account of the use of materials of inferior quality within ninety (90) days from the time the Head of the Procuring Entity has issued an order to undertake repair. In case of failure or refusal to comply with this mandate, the Procuring Entity shall undertake such repair works and shall be entitled to full reimbursement of expenses incurred therein upon demand.

4.3 In case the Winning Bidder/Supplier fails to comply with the preceding paragraph, the Procuring Entity shall forfeit its performance security, subject its property(ies) to attachment or garnishment proceedings, and perpetually disqualify it from participating in any public bidding. All payables of the GOP in his favor shall be offset to recover the costs.

4.4 After final acceptance of the Works by the Procuring Entity, the Winning Bidder/Supplier shall be held responsible for “Structural Defects”, i.e., major faults/flaws/deficiencies in one or more key structural elements of the project which may lead to structural failure of the completed elements or structure, or “Structural Failures”, i.e., where one or more key structural elements in an infrastructure facility fails or collapses, thereby rendering the facility or part thereof incapable of withstanding the design loads, and/or endangering the safety of the users or the general public:

a) Winning Bidder/Supplier – Where Structural Defects/Failures arise due to faults attributable to improper construction, use of inferior quality/substandard materials, and any violation of the contract plans and specifications, the Winning Bidder/Supplier shall be held liable;

b) Consultants – Where Structural Defects/Failures arise due to faulty and/or inadequate design and specifications as well as construction supervision, then the consultant who prepared the design or undertook construction supervision for the project shall be held liable;

c) Procuring Entity’s Representatives/Project Manager/Construction Managers and Supervisors – The project owner’s representative(s), project manager, construction manager, and supervisor(s) shall be held liable in cases where the Structural Defects/Failures are due to his/their willful intervention in altering the designs and other specifications; negligence or omission in not approving or acting on proposed changes to noted defects or deficiencies in the design and/or specifications: and the use of substandard construction materials in the project;

Conforme:
__________________________
Bidder’s Company Name
__________________________
Name & Signature of Authorized Representative/Date
d) Third Parties - Third Parties shall be held liable in cases where Structural Defects/ Failures are caused by work undertaken by them such as leaking pipes, diggings or excavations, underground cables and electrical wires, underground tunnel, mining shaft and the like, in which case the applicable warranty to such structure should be levied to third parties for their construction or restoration works.

e) Users - In cases where Structural Defects/Failures are due to abuse/misuse by the end user of the constructed facility and/or non–compliance by a user with the technical design limits and/or intended purpose of the same, then the user concerned shall be held liable.

4.5 The warranty against Structural Defects/Failures, except those occasioned on force majeure, shall cover the period specified in the SCC reckoned from the date of issuance of the Certificate of Final Acceptance by the Procuring Entity.

<table>
<thead>
<tr>
<th>Form of Warranty</th>
<th>Minimum Amount in Percentage (%) of Total Contract Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Cash or letter of credit issued by Universal or Commercial bank: provided, however, that the letter of credit shall be confirmed or authenticated by a Universal or Commercial bank, if issued by a foreign bank.</td>
<td>Five Percent (5%)</td>
</tr>
<tr>
<td>b. Bank guarantee confirmed by Universal or Commercial bank.</td>
<td>Ten Percent (10%)</td>
</tr>
<tr>
<td>c. Surety bond callable upon demand issued by GSIS or a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security.</td>
<td>Thirty Percent (30%)</td>
</tr>
</tbody>
</table>

4.6 The warranty security shall be stated in Philippine Pesos and shall remain effective for one year from the date of issuance of the Certificate of Final Acceptance by the Procuring Entity, and returned only after the lapse of said one year period.

4.7 In case of structural defects/failure occurring during the applicable warranty period provided in GCC Clause 12.5, the Procuring Entity shall undertake the necessary restoration or reconstruction works and shall be entitled to full reimbursement by the parties found to be liable for expenses incurred therein upon demand, without prejudice to the filing of appropriate administrative, civil, and/or criminal charges against the responsible persons as well as the forfeiture of the warranty security posted in favor of the Procuring Entity.
5. Liability of the Winning Bidder/Supplier

The Winning Bidder/Supplier’s liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

6. Insurance

6.1 The Winning Bidder/Supplier shall, under his name and at his own expense, obtain and maintain, for the duration of this Contract, the following insurance coverage:

(a) Winning Bidder/Supplier’s All Risk Insurance;

(b) Transportation to the project Site of Equipment, Machinery, and Supplies owned by the Winning Bidder/Supplier;

(c) Personal injury or death of Winning Bidder/Supplier’s employees; and

(d) Comprehensive insurance for third party liability to Winning Bidder/Supplier’s direct or indirect act or omission causing damage to third persons.

6.2 The Winning Bidder/Supplier shall provide evidence to the Procuring Entity’s Representative that the insurances required under this Contract have been effected and shall, within a reasonable time, provide copies of the insurance policies to the Procuring Entity’s Representative. Such evidence and such policies shall be provided to the Procuring Entity’s through the Procuring Entity’s Representative.

6.3 The Winning Bidder/Supplier shall notify the insurers of changes in the nature, extent, or program for the execution of the Works and ensure the adequacy of the insurances at all times in accordance with the terms of this Contract and shall produce to the Procuring Entity’s Representative the insurance policies in force including the receipts for payment of the current premiums.

The above insurance policies shall be obtained from any reputable insurance company approved by the Procuring Entity’s Representative.

6.4 If the Winning Bidder/Supplier fails to obtain and keep in force the insurances referred to herein or any other insurance which he may be required to obtain under the terms of this Contract, the Procuring Entity may obtain and keep in force any such insurances and pay such premiums as may be necessary for the purpose. From time to time, the Procuring Entity may deduct the amount it shall pay for said premiums including twenty five percent (25%) therein from any monies due, or which may become due, to the Winning Bidder/Supplier, without prejudice to the Procuring Entity exercising its right to impose other sanctions against the Winning Bidder/Supplier pursuant to the provisions of this Contract.

Conforme:

_________________________________________________________
Bidder’s Company Name

__________________________
Name & Signature of Authorized Representative/Date
6.5 In the event the Winning Bidder/Supplier fails to observe the above safeguards, the Procuring Entity may, at the Winning Bidder/Supplier’s expense, take whatever measure is deemed necessary for its protection and that of the Winning Bidder/Supplier's personnel and third parties, and/or order the interruption of dangerous Works. In addition, the Procuring Entity may refuse to make the payments under clauses on Progress Payment until the Winning Bidder/Supplier complies with this Clause.

6.6 The Winning Bidder/Supplier shall immediately replace the insurance policy obtained as required in this Contract, without need of the Procuring Entity’s demand, with a new policy issued by a new insurance company acceptable to the Procuring Entity for any of the following grounds:

(a) The issuer of the insurance policy to be replaced has:

   (i) become bankrupt;

   (ii) been placed under receivership or under a management committee;

   (iii) been sued for suspension of payment; or

   (iv) been suspended by the Insurance Commission and its license to engage in business or its authority to issue insurance policies cancelled; or

   (v) Where reasonable grounds exist that the insurer may not be able, fully and promptly, to fulfill its obligation under the insurance policy.

7. Termination for Default of Winning Bidder/Supplier

7.1 The Procuring Entity shall terminate this Contract for default when any of the following conditions attend its implementation:

7.2 Due to the Winning Bidder/Supplier’s fault and while the project is on-going, it has incurred negative slippage of fifteen percent (15%) or more in accordance with Presidential Decree 1870, regardless of whether or not previous warnings and notices have been issued for the Winning Bidder/Supplier to improve his performance;

7.3 Due to its own fault and after this Contract time has expired, the Winning Bidder/Supplier incurs delay in the completion of the Work after this Contract has expired; or

7.4 The Winning Bidder/Supplier:

   (a) abandons the contract Works, refuses or fails to comply with a valid instruction of the Procuring Entity or fails to proceed expeditiously and without delay despite a written notice by the Procuring Entity;

   Conforme:

   __________________________
   Bidder’s Company Name

   __________________________
   Name & Signature of Authorized Representative/Date
(b) does not actually have on the project Site the minimum essential equipment listed on the Bid necessary to prosecute the Works in accordance with the approved Program of Work and equipment deployment schedule as required for the project;

(c) does not execute the Works in accordance with this Contract or persistently or flagrantly neglects to carry out its obligations under this Contract;

(d) neglects or refuses to remove materials or to perform a new Work that has been rejected as defective or unsuitable; or

(e) sub-lets any part of this Contract without approval by the Procuring Entity.

7.5 All materials on the Site, Plant, Equipment, and Works shall be deemed to be the property of the Procuring Entity if this Contract is rescinded because of the Winning Bidder/Supplier’s default.

8. Approval of Drawings and Temporary Works by the Procuring Entity’s Representative

8.1 All Drawings prepared by the Winning Bidder/Supplier for the execution of the Temporary Works, are subject to prior approval by the Procuring Entity’s Representative before its use.

8.2 The Winning Bidder/Supplier shall be responsible for design of Temporary Works.

8.3 The Procuring Entity’s Representative’s approval shall not alter the Winning Bidder/Supplier’s responsibility for design of the Temporary Works.

8.4 The Winning Bidder/Supplier shall obtain approval of third parties to the design of the Temporary Works, when required by the Procuring Entity.

9. Acceleration and Delays Ordered by the Procuring Entity’s Representative

9.1 When the Procuring Entity wants the Winning Bidder/Supplier to finish before the Intended Completion Date, the Procuring Entity’s Representative will obtain priced proposals for achieving the necessary acceleration from the Winning Bidder/Supplier. If the Procuring Entity accepts these proposals, the Intended Completion Date will be adjusted accordingly and confirmed by both the Procuring Entity and the Winning Bidder/Supplier.

9.2 If the Winning Bidder/Supplier’s Financial Proposals for an acceleration are accepted by the Procuring Entity, they are incorporated in the Contract Price and treated as a Variation.
10. Extension of the Intended Completion Date

10.1 The Procuring Entity's Representative shall extend the Intended Completion Date if a Variation is issued which makes it impossible for the Intended Completion Date to be achieved by the Winning Bidder/Supplier without taking steps to accelerate the remaining work, which would cause the Winning Bidder/Supplier to incur additional costs. No payment shall be made for any event which may warrant the extension of the Intended Completion Date.

10.2 The Procuring Entity’s Representative shall decide whether and by how much to extend the Intended Completion Date within twenty one (21) days of the Winning Bidder/Supplier asking the Procuring Entity’s Representative for a decision thereto after fully submitting all supporting information. If the Winning Bidder/Supplier has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

11. Right to Vary

11.1 The Procuring Entity’s Representative with the prior approval of the Procuring Entity may instruct Variations, up to a maximum cumulative amount of ten percent (10%) of the original contract cost.

11.2 Variations shall be valued as follows:

(a) At a lump sum price agreed between the parties;

(b) where appropriate, at rates in this Contract;

(c) in the absence of appropriate rates, the rates in this Contract shall be used as the basis for valuation; or failing which

(d) at appropriate new rates, equal to or lower than current industry rates and to be agreed upon by both parties and approved by the Head of the Procuring Entity.

12. Winning Bidder/Supplier's Right to Claim

If the Winning Bidder/Supplier incurs cost as a result of any of the events under clauses on Liability of the Winning Bidder/Supplier, the Winning Bidder/Supplier shall be entitled to the amount of such cost. If as a result of any of the said events, it is necessary to change the Works, this shall be dealt with as a Variation.

13. Dayworks

13.1 Subject to clauses on Variation Order, and if applicable as indicated in the SCC, the Dayworks rates in the Winning Bidder/Supplier’s Bid shall be used for small additional amounts of work only when the Procuring Entity’s Representative has given written instructions in advance for additional work to be paid for in that way.

Conforme:

______________________________
Bidder’s Company Name

______________________________
Name & Signature of Authorized Representative/Date
13.2 All work to be paid for as Dayworks shall be recorded by the Winning Bidder/Supplier on forms approved by the Procuring Entity’s Representative. Each completed form shall be verified and signed by the Procuring Entity’s Representative within two days of the work being done.

13.3 The Winning Bidder/Supplier shall be paid for Dayworks subject to obtaining signed Dayworks forms.

14. Early Warning

14.1 The Winning Bidder/Supplier shall warn the Procuring Entity’s Representative at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The Procuring Entity’s Representative may require the Winning Bidder/Supplier to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Winning Bidder/Supplier as soon as reasonably possible.

14.2 The Winning Bidder/Supplier shall cooperate with the Procuring Entity’s Representative in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Procuring Entity’s Representative.

15. Program of Work

15.1 Within the time stated in the Contract, the Winning Bidder/Supplier shall submit to the Procuring Entity’s Representative for approval a Program of Work showing the general methods, arrangements, order, and timing for all the activities in the Works.

15.2 An update of the Program of Work shall show the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.

15.3 The Winning Bidder/Supplier shall submit to the Procuring Entity’s Representative for approval an updated Program of Work at intervals no longer than the period stated in the Contract. If the Winning Bidder/Supplier does not submit an updated Program of Work within this period, the PROCUREMENT ENTITY’s Representative may withhold the amount stated in the Contract from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program of Work has been submitted.

15.4 The Procuring Entity’s Representative’s approval of the Program of Work shall not alter the Winning Bidder/Supplier’s obligations. The Winning Bidder/Supplier may revise the Program of Work and submit it to the Procuring Entity’s Representative again at any time. A revised Program of Work shall show the effect of any approved Variations.

---

Conforme:

______________________________
Bidder’s Company Name

______________________________
Name & Signature of Authorized Representative/Date
15.5 When the Program of Work is updated, the Winning Bidder/Supplier shall provide the Procuring Entity's Representative with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.

15.6 All Variations shall be included in updated Program of Work produced by the Winning Bidder/Supplier.

16. Bill of Quantities

16.1 The Bill of Quantities shall contain items of work for the construction, installation, testing, and commissioning of work to be done by the Winning Bidder/Supplier.

16.2 The Bill of Quantities is used to calculate the Contract Price. The Winning Bidder/Supplier is paid for the quantity of the work done at the rate in the Bill of Quantities for each item.

16.3 If the final quantity of any work done differs from the quantity in the Bill of Quantities for the particular item and is not more than twenty five percent (25%) of the original quantity, provided the aggregate changes for all items do not exceed ten percent (10%) of the Contract price, the Procuring Entity's Representative shall make the necessary adjustments to allow for the changes subject to applicable laws, rules, and regulations.

16.4 If requested by the Procuring Entity's Representative, the Winning Bidder/Supplier shall provide the Procuring Entity's Representative with a detailed cost breakdown of any rate in the Bill of Quantities.

17. Instructions, Inspections and Audits

17.1 The Procuring Entity's personnel shall at all reasonable times during construction of the Work be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of the construction.

17.2 If the Procuring Entity's Representative instructs the Winning Bidder/Supplier to carry out a test not specified in the Specification to check whether any work has a defect and the test shows that it does, the Winning Bidder/Supplier shall pay for the test and any samples. If there is no defect, the test shall be a Compensation Event.

17.3 The Winning Bidder/Supplier shall permit the Funding Source named in the Contract to inspect the Winning Bidder/Supplier's accounts and records relating to the performance of the Winning Bidder/Supplier and to have them audited by auditors appointed by the Funding Source, if so required by the Funding Source.
18. Identifying Defects

The Procuring Entity’s Representative shall check the Winning Bidder/Supplier’s work and notify the Winning Bidder/Supplier of any defects that are found. Such checking shall not affect the Winning Bidder/Supplier’s responsibilities. The Procuring Entity’s Representative may instruct the Winning Bidder/Supplier to search uncover defects and test any work that the Procuring Entity’s Representative considers below standards and defective.

19. Cost of Repairs

Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Liability Periods shall be remedied by the Winning Bidder/Supplier at the Winning Bidder/Supplier’s cost if the loss or damage arises from the Winning Bidder/Supplier’s acts or omissions.

20. Correction of Defects

20.1 The Procuring Entity’s Representative shall give notice to the Winning Bidder/Supplier of any defects before the end of the Defects Liability Period, which is One (1) year from project completion up to final acceptance by the Procuring Entity’s.

20.2 Every time notice of a defect is given, the Winning Bidder/Supplier shall correct the notified defect within the length of time specified in the Procuring Entity’s Representative’s notice.

20.3 The Winning Bidder/Supplier shall correct the defects which he notices himself before the end of the Defects Liability Period.

20.4 The Procuring Entity shall certify that all defects have been corrected. If the Procuring Entity considers that correction of a defect is not essential, he can request the Winning Bidder/Supplier to submit a quotation for the corresponding reduction in the Contract Price. If the Procuring Entity accepts the quotation, the corresponding change in the Contract is a Variation.

21. Uncorrected Defects

21.1 The Procuring Entity shall give the Winning Bidder/Supplier at least fourteen (14) day’s notice of his intention to use a third party to correct a Defect. If the Winning Bidder/Supplier does not correct the Defect himself within the period, the Procuring Entity may have the Defect corrected by the third party. The cost of the correction will be deducted from the Contract Price.

21.2 The use of a third party to correct defects that are uncorrected by the Winning Bidder/Supplier will in no way relieve the Winning Bidder/Supplier of its liabilities and warranties under the Contract.

Conforme:

__________________________________________
Bidder’s Company Name

__________________________________________
Name & Signature of Authorized Representative/Date
22. Variation Orders

22.1 Variation Orders may be issued by the Procuring Entity to cover any increase/decrease in quantities, including the introduction of new work items that are not included in the original contract or reclassification of work items that are either due to change of plans, design or alignment to suit actual field conditions resulting in disparity between the preconstruction plans used for purposes of bidding and the “as staked plans” or construction drawings prepared after a joint survey by the Winning Bidder/Supplier and the Procuring Entity after award of the contract, provided that the cumulative amount of the Variation Order does not exceed ten percent (10%) of the original project cost. The addition/deletion of Works should be within the general scope of the project as bid and awarded. The scope of works shall not be reduced so as to accommodate a positive Variation Order. A Variation Order may either be in the form of a Change Order or Extra Work Order.

22.2 A Change Order may be issued by the Procuring Entity to cover any increase/decrease in quantities of original Work items in the contract.

22.3 An Extra Work Order may be issued by the Procuring Entity to cover the introduction of new work necessary for the completion, improvement or protection of the project which were not included as items of Work in the original contract, such as, where there are subsurface or latent physical conditions at the site differing materially from those indicated in the contract, or where there are duly unknown physical conditions at the site of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the Work or character provided for in the contract.

22.4 Any cumulative Variation Order beyond ten percent (10%) shall be subject of another contract to be bid out if the works are separable from the original contract. In exceptional cases where it is urgently necessary to complete the original scope of work, the Head of the Procuring Entity may authorize a positive Variation Order go beyond ten percent (10%) but not more than twenty percent (20%) of the original contract price, subject to the guidelines to be determined by the GPPB: Provided, however, That appropriate sanctions shall be imposed on the designer, consultant or official responsible for the original detailed engineering design which failed to consider the Variation Order beyond ten percent (10%).

22.5 In claiming for any Variation Order, the Winning Bidder/Supplier shall, within seven (7) calendar days after such work has been commenced or after the circumstances leading to such condition(s) leading to the extra cost, and within twenty-eight (28) calendar days deliver a written communication giving full and detailed particulars of any extra cost in order that it may be investigated at that time. Failure to provide either of such notices in the time stipulated shall constitute a waiver by the Winning Bidder/Supplier for any claim. The preparation and submission of Variation Orders are as follows:

<table>
<thead>
<tr>
<th>Conforme:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bidder’s Company Name</td>
<td></td>
</tr>
<tr>
<td>Name &amp; Signature of Authorized Representative/Date</td>
<td></td>
</tr>
</tbody>
</table>
23.2 The Procuring Entity shall have the authority to suspend the work wholly or partly by written order for such period as may be deemed necessary, for force majeure or any fortuitous events or failure of the Winner Bidder/Supplier to correct the non-compliance with the contract or to adjust the plans to suit field conditions as found necessary during construction. The Winning Bidder/Supplier shall immediately comply with such order to suspend the work wholly or partly.

23.1 The Procuring Entity shall have the authority to suspend the work wholly or partly by written order for such period as may be deemed necessary, for force majeure or any fortuitous events or failure of the Winner Bidder/Supplier to correct the non-compliance with the contract or to adjust the plans to suit field conditions as found necessary during construction. The Winning Bidder/Supplier shall immediately comply with such order to suspend the work wholly or partly.

(e) The timeframe for the processing of Variation Orders from the preparation up to the approval by the Head of the Procuring Entity concerned shall not exceed thirty (30) calendar days.

(b) The Head of the Procuring Entity or his duly authorized representative, upon receipt of the proposed Change Order or Extra Work Order shall immediately instruct the technical staff of the Procuring Entity to conduct an on-the-spot investigation to verify the need for the Work to be prosecuted. A report of such verification shall be submitted directly to the Head of the Procuring Entity concerned.

(c) The Head of the Procuring Entity or his duly authorized representative, after being satisfied that such Change Order or Extra Work Order is justified and necessary, shall approve the proposal with the supporting documentation to the Head of Procuring Entity for consideration.

(d) If, after review of the plans, quantities and estimated unit cost of the items of work involved, the proper office of the procuring entity empowers the reviewing officer to recommend approval or rejection of the proposed Change Order or Extra Work Order, the Head of the Procuring Entity or his duly authorized representative, believing the Change Order or Extra Work Order to be in order, shall approve the same.

23.3 The timeframe for the processing of Variation Orders from the preparation up to the approval by the Head of the Procuring Entity concerned shall not exceed thirty (30) calendar days.

23.4 The Head of the Procuring Entity or his duly authorized representative, upon receipt of the proposed Change Order or Extra Work Order shall immediately instruct the technical staff of the Procuring Entity to conduct an on-the-spot investigation to verify the need for the Work to be prosecuted. A report of such verification shall be submitted directly to the Head of the Procuring Entity concerned.

23.5 The timeframe for the processing of Variation Orders from the preparation up to the approval by the Head of the Procuring Entity concerned shall not exceed thirty (30) calendar days.

23.6 The Head of the Procuring Entity or his duly authorized representative, after being satisfied that such Change Order or Extra Work Order is justified and necessary, shall approve the proposal with the supporting documentation to the Head of Procuring Entity for consideration.

(e) The timeframe for the processing of Variation Orders from the preparation up to the approval by the Head of the Procuring Entity concerned shall not exceed thirty (30) calendar days.

(b) The Head of the Procuring Entity or his duly authorized representative, upon receipt of the proposed Change Order or Extra Work Order shall immediately instruct the technical staff of the Procuring Entity to conduct an on-the-spot investigation to verify the need for the Work to be prosecuted. A report of such verification shall be submitted directly to the Head of the Procuring Entity concerned.

(c) The Head of the Procuring Entity or his duly authorized representative, after being satisfied that such Change Order or Extra Work Order is justified and necessary, shall review the estimated quantities and prices, and forward the proposal with the supporting documentation to the Head of Procuring Entity for consideration.

(d) If, after review of the plans, quantities and estimated unit cost of the items of work involved, the proper office of the procuring entity empowers the reviewing officer to recommend approval or rejection of the proposed Change Order or Extra Work Order, the Head of the Procuring Entity or his duly authorized representative, believing the Change Order or Extra Work Order to be in order, shall approve the same.

23.7 The timeframe for the processing of Variation Orders from the preparation up to the approval by the Head of the Procuring Entity concerned shall not exceed thirty (30) calendar days.

23.8 The Head of the Procuring Entity or his duly authorized representative, after being satisfied that such Change Order or Extra Work Order is justified and necessary, shall approve the proposal with the supporting documentation to the Head of Procuring Entity for consideration.

23.9 The timeframe for the processing of Variation Orders from the preparation up to the approval by the Head of the Procuring Entity concerned shall not exceed thirty (30) calendar days.

23.10 The Head of the Procuring Entity or his duly authorized representative, after being satisfied that such Change Order or Extra Work Order is justified and necessary, shall approve the proposal with the supporting documentation to the Head of Procuring Entity for consideration.
Section VI. Bidding Forms

Supply, Delivery, Installation, Testing and Commissioning of Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability and with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH)

(a) There exist right-of-way problems which prohibit the Winning Bidder/Supplier from performing work in accordance with the approved construction schedule.

(b) Requisite construction plans which must be owner-furnished are not issued to the Winning Bidder/Supplier precluding any work called for by such plans.

(c) Peace and order conditions make it extremely dangerous, if not possible, to work. However, this condition must be certified in writing by the Philippine National Police (PNP) station which has responsibility over the affected area and confirmed by the Department of Interior and Local Government (DILG) Regional Director.

(d) There is failure on the part of the Procuring Entity to deliver government-furnished materials and equipment as stipulated in the contract.

(e) Delay in the payment of Winning Bidder/Supplier’s claim for progress billing beyond forty-five (45) calendar days from the time the Winning Bidder/Supplier’s claim has been certified to by the procuring entity’s authorized representative that the documents are complete unless there are justifiable reasons thereof which shall be communicated in writing to the Winning Bidder/Supplier.

23.3 In case of total suspension, or suspension of activities along the critical path, which is not due to any fault of the Winning Bidder/Supplier, the elapsed time between the effective order of suspending operation and the order to resume work shall be allowed the Winning Bidder/Supplier by adjusting the contract time accordingly.

24. Extension of Contract Time

23.4 Should the amount of additional work of any kind or other special circumstances of any kind whatsoever occur such as to fairly entitle the Winning Bidder/Supplier to an extension of contract time, the Procuring Entity shall determine the amount of such extension; provided that the Procuring Entity is not bound to take into account any claim for an extension of time unless the Winning Bidder/Supplier has, prior to the expiration of the contract time and within thirty (30) calendar days after such work has been commenced or after the circumstances leading to such claim have arisen, delivered to the Procuring Entity notices in order that it could have investigated them at that time. Failure to provide such notice shall constitute a waiver by the Winning Bidder/Supplier of any claim. Upon receipt of full and detailed particulars, the Procuring Entity shall examine the facts and extent of the delay and shall extend the contract time completing the contract work when, in the Procuring Entity’s opinion, the findings of facts justify an extension.

23.5 No extension of contract time shall be granted the Winning Bidder/Supplier due to (a) ordinary unfavorable weather conditions and (b) inexcusable failure or negligence of Winning Bidder/Supplier to provide the required equipment, supplies or materials.

23.6 Extension of contract time may be granted only when the affected activities fall within the critical path of the PERT/CPM network.

Conforme:

Bidder’s Company Name

Name & Signature of Authorized Representative/Date
23.7 No extension of contract time shall be granted when the reason given to support the request for extension was already considered in the determination of the original contract time during the conduct of detailed engineering and in the preparation of the contract documents as agreed upon by the parties before contract perfection.

23.8 Extension of contract time shall be granted for rainy/unworkable days considered unfavorable for the prosecution of the works at the site, based on the actual conditions obtained at the site, in excess of the number of rainy/unworkable days pre-determined by the Procuring Entity in relation to the original contract time during the conduct of detailed engineering and in the preparation of the contract documents as agreed upon by the parties before contract perfection, and/or for equivalent period of delay due to major calamities such as exceptionally destructive typhoons, floods and earthquakes, and epidemics, and for causes such as non-delivery on time of materials, working drawings, or written information to be furnished by the Procuring Entity, non-acquisition of permit to enter private properties within the right-of-way resulting in complete paralysis of construction activities, and other meritorious causes as determined by the Procuring Entity’s Representative and approved by the Head of the Procuring Entity. Shortage of construction materials, general labor strikes, and peace and order problems that disrupt construction operations through no fault of the Winning Bidder/Supplier may be considered as additional grounds for extension of contract time provided they are publicly felt and certified by appropriate government agencies such as DTI, DOLE, DILG, and DND, among others. The written consent of bondsmen must be attached to any request of the Winning Bidder/Supplier for extension of contract time and submitted to the Procuring Entity for consideration and the validity of the Performance Security shall be correspondingly extended.

25. Price Adjustment

Except for extraordinary circumstances as determined by NEDA and approved by the GPPB, no price adjustment shall be allowed. Nevertheless, in cases where the cost of the awarded contract is affected by any applicable new laws, ordinances, regulations, or other acts of the GOP, promulgated after the date of bid opening, a contract price adjustment shall be made or appropriate relief shall be applied on a no loss-no gain basis.

Conforme:

_____________________________
Bidder’s Company Name

_____________________________
Name & Signature of Authorized Representative/Date
(MANUFACTURER’S LETTERHEAD)

SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF BRAND NEW LINEAR ACCELERATOR WITH STEREOTACTIC RADIO SURGERY (SRS) AND STEREOTACTIC BODY RADIOTHERAPY (SBRT) CAPABILITY AND WITH RELATED SPECIALTY WORKS FOR THE UNIVERSITY OF THE PHILIPPINES (MANILA) – PHILIPPINE GENERAL HOSPITAL (UPM-PGH)

Bid Reference No. GPG-B1-2019-141
Approved Budget for the Contract: ₱300,000,000.00

Certification as a Manufacturer

I/We __________________________ (Name) __________________________ (Title or Capacity) ____________, the duly authorized representative/s of __________________________ (Name of Company/Bidder) hereby certify that I/We are a legitimate and licensed manufacturer of ____________________________, with manufacturing facility located at ____________________________.

I/We certify that we are in the business of providing/manufacturing the equipment for at least ____________ years and We also certify the following as listed below:

a. That the manufacturer has been in the business of manufacturing catheterization laboratory for at least 20 years
b. That the manufacturer and the first tier distributor have been in business partnership for the past five (5) years
c. That supplies, parts and accessories of the equipment shall be available for at least ten (10) years after expiration of the warranty period;
d. That service engineers are factory trained on service and repair;
e. Guarantee /support to Warranty to be issued by the bidder/(first tier distributor);
f. That at least one service engineer is available locally to provide quick on-site support.
g. That the equipment to be delivered and to be supplied must be of the latest model. All software must be of the latest version
h. That at least one manufacturer technical specialist (Physicist) must be available for assistance for one (1) month during the commissioning
i. That free upgrades of all software (clinical / technical) shall be included in the preventive maintenance of the machine by the supplier

This Certification shall form part of the Technical Requirements for the aforesaid procurement project.

Issued this ________ day of __________ 2019 in _________, Philippines

Signature over printed name of Manufacturer’s Authorized Representative/Date

Email Address: __________________________
Contact Numbers: __________________________
Republic of the Philippines  
City/Municipality of ________  

S.S.

ANNEX VI

AFFIDAVIT OF SITE INSPECTION

I, ________________________________, of legal age, Filipino and residing at ________________________________, under oath, hereby depose and say:

1) That I am the, ____________________________ position/designation ____________________________ of the ____________________________ name of the bidder/company ____________________________, with office at ____________________________ address of the bidder/company ____________________________.

2) That I have inspected the site for the Supply, Delivery, Installation, Testing and Commissioning of Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability and with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH) on date of inspection.

3) That I am making this Statement as part of the requirements for the Technical Proposal of the ____________________________ name of bidder/company ____________________________, for the Supply, Delivery, Installation, Testing and Commissioning of Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability and with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH).

IN WITNESS WHEREOF, I hereby affix my signature this ___ day of ____________, ______ at ____________________________, Philippines.

____________________________
AFFIANT

SUBSCRIBED AND SWORN TO BEFORE ME, this ______ day of ____________, 20___ in the City of ____________________________. Affiant exhibiting to me his/her Competent Evidence of Identity (as defined by the 2004 Rules on Notarial Practice) ____________________________, issued on ____________________________ at ____________________________.

NOTARY PUBLIC

Doc No.  ______
Page No.  ______
Book No.  ______
Series of  ______
CERTIFICATE OF PERFORMANCE EVALUATION

[To be issued by the Bidder’s Client specified in Annex I-A (Single Largest Completed Contract) with a rating of at least Very Satisfactory on the performance of the product supplied / delivered by the prospective bidder]

This is to certify that (NAME OF BIDDER) has supplied our company/agency with (Name of Product/s). Based on our evaluation on timely delivery, compliance to specifications and performance, warranty and after sales service, we give (NAME OF BIDDER) a rating of:

☐ EXCELLENT
☐ VERY SATISFACTORY
☐ SATISFACTORY
☐ POOR

This Certification shall form part of the Technical Documentary Requirements in line with (Name of Bidder) participation in the bidding for the Supply, Delivery, Installation, Testing and Commissioning of Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability and with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH).

Issued this _______ day of __________ 2019 in __________, Philippines

Name of Company (Bidder’s Client) | Full Name of Authorized Representative
---|---
Address | Signature of Authorized Representative
Tel. No./Fax | E-mail Address
Annex VIII

SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF BRAND NEW LINEAR ACCELERATOR WITH STEREOTACTIC RADIO SURGERY (SRS) AND STEREOTACTIC BODY RADIOTHERAPY (SBRT) CAPABILITY AND WITH RELATED SPECIALTY WORKS FOR THE UNIVERSITY OF THE PHILIPPINES (MANILA) – PHILIPPINE GENERAL HOSPITAL (UPM-PGH)

Bid Reference No. GPG-B1-2019-141
Approved Budget for the Contract: ₱300,000,000.00

OMNIBUS SWORN STATEMENTS

REPUBLIC OF THE PHILIPPINES
CITY/MUNICIPALITY OF _______)
S.S.

AFFIDAVIT

I/We, ___________________________, of legal age, with residence at ________________________, after having been duly sworn to in accordance with law and in compliance with the bidding requirements as contained in the Instruction to Bidders /Bid Data Sheet for the bidding of the Supply, Delivery, Installation, Testing and Commissioning of Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability and with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH) per Bid Reference No. GPG-B1-2019-141 do hereby certify under oath as follows:

(a) AUTHORITY OF THE DESIGNATED REPRESENTATIVE
(Please check appropriate box and fill up blanks)

☐ Sole Proprietorship

That I am the sole proprietor of ___________________________ with business address at ___________________________; Telephone No. ________________________, with Fax No. ________________________ and e-mail address ______________________ as owner and sole proprietor, I have the full power and authority to do, execute and perform any and all acts necessary to represent it in the bidding.

Name: ___________________________
Title: ___________________________
Specimen Signature: __________________

- OR –

That I am the duly authorized representative of the owner/sole proprietor of ___________________________ with business address at ___________________________; Telephone No. ________________________, with Fax No. ________________________ and e-mail address ______________________ as shown in the attached Special Power of Attorney, and granted full power and authority to do, execute and perform any and all acts necessary to represent it in the bidding:

Name: ___________________________
Title: ___________________________
Specimen Signature: __________________

Note: Please attach a Special Power of Attorney, if not the Sole Proprietor/Owner.
Corporation, Partnership, Cooperative

That I/we am/are the duly authorized representative/s of <company name>, located at ________________________________________, with Telephone No. __________________; Fax No. __________________ and e-mail address, ____________________________________________, as shown in the attached Secretary’s Certificate issued by the corporation or the members of the joint venture, and granted full power and authority to execute and perform any and all acts necessary and/or to represent our company in the bidding, including signing all bidding documents and other related documents such as the contracts:

1) Name: _____________________________ 2) Name: _____________________________
   Title: ______________________________ 2) Name: _____________________________
   Specimen Signature: __________________ Specimen Signature: __________________

Note: Please attach duly executed Secretary’s Certificate.

NON-INCLUSION IN THE BLACKLIST NOR UNDER SUSPENSION STATUS BY ANY AGENCY OR GOVERNMENT INSTRUMENTALITY

That the firm I/We represent is not blacklisted or barred/suspended from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financial institution whose blacklisting rules have been recognized by the Government Procurement Policy Board.

AUTHENTICITY OF SUBMITTED DOCUMENTS

That each of the documents submitted by our company in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct.

AUTHORITY TO VALIDATE SUBMITTED DOCUMENTS

The undersigned duly authorized representative of the Applicant, for and in behalf of the Applicant, hereby submits this Letter of Authorization in relation with Application to apply for Eligibility and to Bid for the subject contract to be bid.

In connection thereat, all public official, engineer, architect, surety company, bank institution or other person, company or corporation named in the eligibility documents and statements are hereby requested and authorized to furnish the Chairman, PITC Bids & Awards Committee I or her duly authorized representative/s any information necessary to verify the correctness and authenticity of any item stated in the said documents and statements or regarding our competence and general reputation.

I/We hereby give consent and give authority to the Chairman of PITC Joint Bids and Awards Committee or her duly authorized representative, to verify the authenticity and correctness, of any or all of the documents and statements submitted herein; and that I/we hereby hold myself liable, criminally or civilly, for any misrepresentation or false statements made therein which shall be ground for outright disqualification and/or ineligibility, and inclusion of my/our company among the contractors blacklisted from participating in future biddings of Philippine International Trading Corporation.
(e) DISCLOSURE OF RELATIONS

That for and in behalf of the Bidder, I/We hereby declare that the sole proprietor or proprietress/all officers and members of the partnership or cooperative/all officers, directors, and controlling stockholders of the corporation/all partners and members of the Joint Venture are not related by consanguinity or affinity up to the third civil degree with the Head of the Procuring Entity, members of the Board of Directors, the President, Officers or Employees having direct access to information that may substantially affect the result of the bidding such as, but not limited to, the members of the PITC JBAC, the members of the TWG of PITC, the PITC JBAC Secretariat, the head of the end-user unit, and the project consultants. It is fully understood that the existence of the aforesaid relation by consanguinity or affinity of the Bidder with the aforementioned Officers of the Corporation shall automatically disqualify the Bid.

(f) COMPLIANCE WITH EXISTING LABOR LAWS AND STANDARDS

That our company diligently abides and complies with existing labor laws and standards.

(g) BIDDER’S RESPONSIBILITIES

1. That I/we have taken steps to carefully examine all of the bidding documents;
2. That I/we acknowledge all conditions, local or otherwise affecting the implementation of the contract;
3. That I/we made an estimate of the facilities available and needed for the contract to be bid, if any;
4. That I/we will inquire or secure Supplemental /Bid Bulletins issued for this project;
5. That the submission of all bidding requirements shall be regarded as acceptance of all conditions of bidding and all requirements of authorities responsible for certifying compliance of the contract;
6. That I have complied with our responsibility as provided for in the bidding documents and all Supplemental /Bid Bulletins;
7. That failure to observe any of the above responsibilities shall be at my own risk and
8. That I agree to be bound by the terms and conditions stated in the Conditions of the Contract for this project.

(h) DID NOT PAY ANY FORM OF CONSIDERATION

That I/we did not give or pay directly or indirectly, any commission, amount, fee or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government project or activity.
IN WITNESS WHEREOF, I have hereunto set my hand this ___ day of
___________________, 20__ at ________________________, Philippines.

____________________________________
Bidder’s Authorized Representative
Signature over Printed Name

SUBSCRIBED AND SWORN TO BEFORE ME this _________day of
___________________ at ________________________, Philippines. Affiant exhibited to me
his/her competent Evidence of Identity (as defined by the 2004 Rules on Notarial Practice)
_________________ issued ___________________________at ________________________,
Philippines.

Doc. No. _________
Page No. _________
Book No. _________
Series of _________

*mgcg/rev/07-11-2016
# Annex IX

## PHILIPPINE INTERNATIONAL TRADING CORPORATION

### Financial Bid Form

(PRICES MUST BE INCLUSIVE OF VAT)

**Supply, Delivery, Installation, Testing and Commissioning of Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability and with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH)**

Bid Reference No. GPG-B1-2019-141  
Approved Budget for the Contract: ₱300,000,000.00

## FINANCIAL BID FORM

(Prices must be VAT inclusive)

<table>
<thead>
<tr>
<th>Description</th>
<th>ABC (₱)</th>
<th>Bid Price (₱)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply, Delivery, Installation, Testing and Commissioning of Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability and with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH)</td>
<td></td>
<td>300,000,000.00</td>
</tr>
</tbody>
</table>

**TOTAL BID PRICE (Amount in Words):**

______

**BIDDER’S UNDERTAKING**

I/We, the undersigned bidder having examined the Bidding Documents including Bid Bulletins, as applicable, hereby BID to (supply/deliver/perform) the above described items.

I/We undertake, if our bid is accepted, to deliver the items in accordance with the terms and conditions contained in the bid documents, including the posting of the required performance security **within ten (10) calendar days** from receipt of the Notice of Award.

Until a formal contract/order confirmation is prepared and signed, this Bid is binding on us.

____________________________
Name of Company (in print)

____________________________
Signature of Company Authorized Representative

____________________________
Name & Designation (in print)

____________________________
Date
**Philippine International Trading Corporation**

**Bid Reference No. GPG-B1-2019-141**

**Section VI. Bidding Forms**

### DETAILED FINANCIAL BID FORM

(Prices must be VAT inclusive)

**SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF BRAND NEW LINEAR ACCELERATOR WITH STEREOTACTIC RADIO SURGERY (SRS) AND STEREOTACTIC BODY RADIOTHERAPY (SBRT) CAPABILITY AND WITH RELATED SPECIALTY WORKS FOR THE UNIVERSITY OF THE PHILIPPINES (MANILA) – PHILIPPINE GENERAL HOSPITAL (UPM-PGH)**

**INSTRUCTION TO THE BIDDER:** Indicate cost per line item. DO NOT LEAVE ANY BLANK. INDICATE “0” IF ITEM IS BEING OFFERED FOR FREE. “YES” OR “NO” ENTRY WILL NOT BE ACCEPTED. FAILURE TO CONFORM WILL RESULT IN A RATING OF “FAILED”

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>TOTAL BID PRICE (₱)</th>
</tr>
</thead>
</table>

#### Scope of Works

1. **Design**
   - 1 Lot

2. **Dismantling and Decommissioning of Existing Cobalt Machine**
   - 1 Lot

3. **Construction of Bunker**
   - 1 Lot

#### Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability

4. **Linear Accelerator Machine**
   - (page 4-7 of Terms of Reference)
   - 1 Lot

5. **Fully Integrated MV Imaging System**
   - (Portal Imaging Device)
   - (page 7-8 of Terms of Reference)
   - 1 Lot

6. **Fully Integrated kV Imaging System**
   - (page 8-9 of Terms of Reference)
   - 1 Lot

7. **Respiratory Gating**
   - (page 9-10 of Terms of Reference)
   - 1 Lot

8. **Stereotactic Radiosurgery Planning System**
   - (page 10-11 of Terms of Reference)
   - 1 Lot

9. **Immobilization Devices**
   - (page 11-13 of Terms of Reference)
   - 1 Lot

**SUB-TOTAL FOR THIS PAGE**

**BIDDER’S UNDERTAKING**

I/WE, the undersigned bidder, having examined the Bidding Documents including Bid Bulletins, as applicable, hereby OFFER to (supply/deliver/perform) the above-described items.

I/We undertake, if our bid is accepted, to deliver the items in accordance with the terms and conditions contained in the bid documents, including the posting of the required performance security within ten (10) calendar days from receipt of the Notice of Award.

Until a formal contract/order confirmation is prepared and signed, this Bid is binding on us.

____________________________________
Name of Company (in print)

____________________________________
Signature of Company Authorized Representative

____________________________________
Name & Designation (in print)

Date

---

Section VI. Bidding Forms  Page 171 of 188

Supply, Delivery, Installation, Testing and Commissioning of Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability and with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH)
**SECTION VI. BIDDING FORMS**

**ANNEX IX-A**

**PHILIPPINE INTERNATIONAL TRADING CORPORATION**

**DETAILED FINANCIAL BID FORM**

*(Prices must be VAT inclusive)*

**SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF BRAND NEW LINEAR ACCELERATOR WITH STEREOTACTIC RADIO SURGERY (SRS) AND STEREOTACTIC BODY RADIOTHERAPY (SBRT) CAPABILITY AND WITH RELATED SPECIALTY WORKS FOR THE UNIVERSITY OF THE PHILIPPINES (MANILA) – PHILIPPINE GENERAL HOSPITAL (UPM-PGH)**

Bid Reference No. GPG-B1-2019-141

**INSTRUCTION TO THE BIDDER:** Indicate cost per line item. DO NOT LEAVE ANY BLANK. INDICATE "0" IF ITEM IS BEING OFFERED FOR FREE. "YES" OR "NO" ENTRY WILL NOT BE ACCEPTED. FAILURE TO CONFORM WILL RESULT IN A RATING OF "FAILED"

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>TOTAL BID PRICE (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.</td>
<td>Oncology Information System with Networking, Record and Verify System</td>
<td>1</td>
<td>Lot</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(page 13-14 of Terms of Reference)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Treatment Planning System</td>
<td>1</td>
<td>Lot</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(page 14-16 of Terms of Reference)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>LINAC Accessories</td>
<td>1</td>
<td>Lot</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(page 16-17 of Terms of Reference)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Other requirements of the LINAC machine</td>
<td>1</td>
<td>Lot</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(page 17 of Terms of Reference)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Dosimetry System</td>
<td>1</td>
<td>Lot</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(page 17-22 of Terms of Reference)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Accessories and Supporting Equipment</td>
<td>1</td>
<td>Lot</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(page 22-25 of Terms of Reference)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUB-TOTAL FOR THIS PAGE**

**GRAND TOTAL (page 1 and 2)**

**BIDDER’S UNDERTAKING**

I/WE, the undersigned bidder, having examined the Bidding Documents including Bid Bulletins, as applicable, hereby OFFER to (supply/deliver/perform) the above-described items.

I/We undertake, if our bid is accepted, to deliver the items in accordance with the terms and conditions contained in the bid documents, including the posting of the required performance security within ten (10) calendar days from receipt of the Notice of Award.

Until a formal contract/order confirmation is prepared and signed, this Bid is binding on us.

__________________________________________

Name of Company (in print)

__________________________________________

Signature of Company Authorized Representative

__________________________________________

Name & Designation (in print)

__________________________________________

Date
Section VII.
Post Qualification Document
### Annex X

**SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF BRAND NEW LINEAR ACCELERATOR WITH STEREOTACTIC RADIO SURGERY (SRS) AND STEREOTACTIC BODY RADIOTHERAPY (SBRT) CAPABILITY AND WITH RELATED SPECIALTY WORKS FOR THE UNIVERSITY OF THE PHILIPPINES (MANILA) – PHILIPPINE GENERAL HOSPITAL (UPM-PGH)**

Bid Reference No. GPG-B1-2019-141  
Approved Budget for the Contract: ₱300,000,000.00

<table>
<thead>
<tr>
<th>COMPANY PROFILE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMPANY NAME</strong> :</td>
</tr>
<tr>
<td><strong>ADDRESS</strong></td>
</tr>
<tr>
<td><strong>HEAD OFFICE</strong> :</td>
</tr>
<tr>
<td><strong>BRANCH</strong> :</td>
</tr>
<tr>
<td><strong>TELEPHONE NUMBER/S</strong></td>
</tr>
<tr>
<td><strong>HEAD OFFICE</strong> :</td>
</tr>
<tr>
<td><strong>BRANCH</strong> :</td>
</tr>
<tr>
<td><strong>FAX NUMBER/S</strong></td>
</tr>
<tr>
<td><strong>HEAD OFFICE</strong> :</td>
</tr>
<tr>
<td><strong>BRANCH</strong> :</td>
</tr>
<tr>
<td><strong>E-mail Address/es</strong> :</td>
</tr>
<tr>
<td><strong>NUMBER OF YEARS IN BUSINESS</strong> :</td>
</tr>
<tr>
<td><strong>NUMBER OF EMPLOYEES</strong> :</td>
</tr>
<tr>
<td><strong>LIST OF MAJOR STOCKHOLDERS</strong> :</td>
</tr>
<tr>
<td><strong>LIST OF BOARD OF DIRECTORS</strong> :</td>
</tr>
<tr>
<td><strong>LIST OF KEY PERSONNEL (NAME &amp; DESIGNATION WITH SIGNATURE) AS AUTHORIZED CONTACT PERSONS FOR THIS PROJECT [at least THREE (3)]</strong> :</td>
</tr>
</tbody>
</table>

---

**CERTIFIED CORRECT:**

Name & Signature of Authorized Representative/

Position/Date
(Bidder's Company Letterhead)

UNDEARTAKING TO PURSUE COUNTERTRADE

SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF BRAND NEW LINEAR ACCELERATOR WITH STEREOTACTIC RADIO SURGERY (SRS) AND STEREOTACTIC BODY RADIOTHERAPY (SBRT) CAPABILITY AND WITH RELATED SPECIALTY WORKS FOR THE UNIVERSITY OF THE PHILIPPINES (MANILA) – PHILIPPINE GENERAL HOSPITAL (UPM-PGH)

Bid Reference No. GPG-B1-2019-141

Approved Budget for the Contract: ₱300,000,000.00

Pursuant to E.O. 120 s. 1993 relative to the adoption of COUNTERTRADE in foreign procurements or importations of the government valued at US$1 Million and above (or its equivalent in Philippine or other convertible currency), and as part of the bid requirements for the above project, the undersigned supplier hereby commits that should it be awarded Contract(s) by the Philippine International Trading Corporation ("PITC"), the aggregate value of which amounts to at least US$1 Million and above (or its equivalent in Pesos) over a period of one (1) year from date of award for the 1st project with PITC, it shall, directly or through a nominated third party, undertake countertrade/offset arrangements equivalent to at least fifty percent (50%) of the total aggregate value of the Contract(s) awarded, such as, but not limited to:

Offsets (investments, technology transfer arrangements, training and skills upgrade and related activities) that will benefit the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH) as may be agreed upon by the PITC and the Supplier.

The undersigned hereby further commits to sign a Countertrade Agreement with the PITC outlining the terms and conditions of this countertrade program within ninety (90) days from signing of the pertinent project contract(s)/purchase orders.

This Undertaking shall form part of the Post Qualification Requirement for the aforesaid procurement project.

Issued this _____ day of _______ 2019 ______ in __________________, Philippines.

Name of Company
(Supplier)

Full Name of Authorized Representative

Address

Signature of Authorized Representative

Tel. No./Fax

E-mail Address
Section VIII. Reference Documents
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Annex No.</th>
<th>Particulars</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annex XII</td>
<td>Special Bank Guarantee or Irrevocable Letter of Credit (for retention money, as applicable)</td>
<td>162</td>
</tr>
<tr>
<td>Annex XIII</td>
<td>Form of Performance Security (Bank Guarantee)</td>
<td>163</td>
</tr>
</tbody>
</table>
Annex XII

Special Bank Guarantee or Irrevocable Standby Letter of Credit
(For Retention Money, As Applicable)

To : ____________________________

Date : ____________________________

WHEREAS, ____________________________ with principal offices located at ____________________________ (hereinafter called “the Contractor/Supplier”) has undertaken, in pursuance of ____________________________ dated ____________________________ to execute supply of ____________________________ at ____________________________.

AND WHEREAS, it has been stipulated by you in the said Contract that the Contractor/Supplier shall furnish you with a Special Bank Guarantee / Irrevocable Standby Letter of Credit (as applicable) by an authorized bank for the sum specified therein as security for compliance with their obligations in accordance to with the contract, including a warranty that the GOODS supplied are free from patent and latent defects and performance of corrective work for any manufacturing defects will be undertaken as required and that all the conditions imposed under the contract shall been fully met;

AND WHEREAS, we have agreed to give the Contractor/Supplier such a Special Bank Guarantee/ Irrevocable Letter of Credit (as applicable);

NOW THEREFORE, we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of PhP ____________ proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon you first written demand and without cavil or argument, any sum or sums within the limits of PhP ____________ as aforesaid without you needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby further affirm that this bank guarantee/standby letter of credit (as applicable) is irrevocable and intended to answer for the performance of corrective work for any manufacturing defects, to warrant that the goods supplied are free from patent and latent defects and to warrant that all conditions imposed under the contract have been fully met by the Contractor/Supplier.

We hereby waive the necessity of your demanding the said debt from the Contractor/Supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until ____________________________ or a minimum of one (1) year, whichever comes later.

SIGNATURE AND SEAL OF THE GUARANTOR

_______________________________
NAME OF BANK

_______________________________
ADDDRESS
Form of Performance Security (Bank Guarantee)

To: PHILIPPINE INTERNATIONAL TRADING CORPORATION
National Development Company (NDC) Building
116 Tordesillas Street, Salcedo Village, 1227 Makati City

WHEREAS, [insert name and address of Supplier] (hereinafter called the “Supplier”) has undertaken, in pursuance of Contract No. [insert number] dated [insert date] to execute [insert name of contract and brief description] (hereinafter called the “Contract”);

AND WHEREAS, it has been stipulated by you in the said Contract that the Supplier shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS, we have agreed to give the Supplier such a Bank Guarantee;

NOW THEREFORE, we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Supplier, up to a total of [insert amount of guarantee] proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of [insert amount of guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract to be performed there under or of any of the Contract documents which may be made between you and the Supplier shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until the date of your issuance of the Notice of Final Acceptance.

SIGNATURE AND SEAL OF THE GUARANTOR ______________________________

NAME OF BANK _______________________________________________________

ADDRESS ___________________________________________________________
_____________________________________________________________________

DATE ________________________________________________________________

_________________________

1 An amount is to be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract.
Section IX.
Checklist of Requirements
### PITC BIDS AND AWARDS COMMITTEE I  
**CHECKLIST OF REQUIREMENTS FOR BIDDERS**

<table>
<thead>
<tr>
<th>Name of Company:</th>
<th>Supply, Delivery, Installation, Testing and Commissioning of Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability and with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project:</td>
<td></td>
</tr>
</tbody>
</table>

**APPROVED BUDGET FOR THE CONTRACT: ₱300,000,000.00**

**ENVELOPE 1: ELIGIBILITY AND TECHNICAL DOCUMENTS**

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Particulars</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.1 (a)</td>
<td><strong>ELIGIBILITY DOCUMENTS</strong></td>
</tr>
<tr>
<td>(i)</td>
<td>Registration Certificate from the Securities and Exchange Commission (SEC) for corporations, or from Department of Trade and Industry (DTI) for sole proprietorship, or from Cooperative Development Authority (CDA) for cooperatives;</td>
</tr>
<tr>
<td>(ii)</td>
<td>Valid and current Business/Mayor’s Permit issued by the city or municipality where the principal place of business of the prospective bidder is located OR the equivalent document for Exclusive Economic Zones or Areas;</td>
</tr>
<tr>
<td>(iii)</td>
<td>Valid and Current Tax Clearance per Executive Order 398 and Revenue Memorandum Order No. 46-2018 reviewed and approved by the BIR;</td>
</tr>
</tbody>
</table>
| (iv)     | Copy of Audited Financial Statements for 2018 and 2017 (in comparative form or separate reports):  
  (a) Independent Auditor’s Report;  
  (b) Balance Sheet (Statement of Financial Position); and  
  (c) Income Statement (Statement of Comprehensive Income).  
  Each of the above statements must have stamped “received” by the Bureau of Internal Revenue (BIR) or its duly accredited and authorized institutions. |

**OR**

Submission of valid and current PHILGEPS Certificate of Registration and Membership (Platinum Registration*) together with Annex A in lieu of items (i), (ii), (iii) and (iv) above

*Note: Bidder must ensure that all Class “A” Eligibility Documents are valid and current at the time of submission of PhilGEPS Certificate of Registration and Membership (Platinum Registration). In case any of the submitted Eligibility Documents are not valid and current at the time of submission of Platinum Registration, bidders are required to submit the valid and current documents including the Audited Financial Statements for 2018 and 2017 (stamped received by the BIR or its duly accredited and authorized institution) together with the Platinum Registration.

In case the bidder opts to submit their Class “A” Documents, the Certificate of PhilGEPS Registration (Platinum Registration) shall remain as a post-qualification requirement to be submitted in accordance with Section 34.2 of the 2016 Revised IRR of RA 9184. “GPPB Circular 07-2017 dated 31 July 2017”

---

Section IX. Checklist of Requirements  
Supply, Delivery, Installation, Testing and Commissioning of Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability and with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH)
| (v) | Statement of all ongoing government and private contracts (including contracts awarded but not yet started), if any whether similar or not in nature and complexity to the contract to be bid. (Annex I); |
| (vi) | Statement of Single Largest Completed Contract of similar nature within the last five (5) years from date of submission and receipt of bids equivalent to at least fifty percent (50%) of the total ABC of the item being bid (Annex I-A). |
| (vii) | “Similar” contract shall mean Radiographic Equipment. |
| (vii) | Any of the following documents must be submitted/attached corresponding to listed completed largest contracts per Annex I-A: |
| (vii) | (a) Copy of End User’s Acceptance; or |
| (vii) | (b) Copy of Official Receipt/s; or |
| (vii) | (c) Copy of Sales Invoice with Collection Receipt/s |
| (vii) | Duly signed Certificate of Net Financial Contracting Capacity (NFCC) per Annex II-A, in accordance with ITB Clause 5.5 OR Committed Line of Credit per Annex II-A. |
| (vii) | NFCC = [(Current assets minus current liabilities) \( \times 15 \)] minus the value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started, coinciding with the contract to be bid. |
| (vii) | Notes: |
| (vii) | 1. The phrase "the values of the bidder’s current assets and current liabilities” shall be based on the data submitted to the BIR, which refers to the values of the current assets and current liabilities reflected in the Audited Financial Statements. |
| (vii) | 2. The value of all outstanding or uncompleted contracts refers to those listed in Annex I. |
| (vii) | 3. The detailed computation must be shown using the required formula provided above. |
| (vii) | 4. The NFCC computation must at least be equal to the ABC of the project. |
| (vii) | OR |
| (vii) | Should the bidder opt to submit a committed Line of Credit, it must be at least equal to ten percent (10%) of the ABC of the project issued by a Local Universal or Local Commercial Bank. The amount of the committed Line of Credit MUST BE MACHINE VALIDATED. (Annex II-A) |
| (viii) | Sub-contractor must submit the following: |
| (viii) | 1. Registration certificate from the Securities and Exchange Commission (SEC) for corporations, Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives. |
| (viii) | 2. Business/Mayor’s permit for 2017 issued by the city or municipality where the principal place of business of the prospective bidder is located. |

(a.2) **ELIGIBILITY DOCUMENTS FOR FOREIGN MANUFACTURERS AND ITS PHILIPPINE BASED REPRESENTATIVE COMPANY**

Class "A" Documents:  

a.2.1 For Foreign Bidders  

(i) Valid and current PHILGEPS Certificate of Registration (Platinum Membership);  

**Note:** Bidder must ensure that all Class “A” Eligibility Documents of PHILGEPS Certificate of Registration and Membership (Platinum) are updated/valid. Otherwise, the updated document must be submitted together with the PhilGEPS Certificate of Platinum Membership including 2018 and 2017 Audited Financial Statements stamped received by the BIR and its duly accredited and authorized institutions.
(ii) Statement of the prospective bidder’s all ongoing government and private contracts (including contracts awarded but not yet started), if any whether similar or not in nature and complexity to the contract to be bid. (Annex I);

(iii) Statement of Single Largest Completed Contract of similar nature within the last five (5) years from date of submission and receipt of bids equivalent to at least fifty percent (50%) of the total ABC of the item being bid (Annex I-A).

**Similar contract shall mean “Radiographic Equipment”**.

Any of the following documents must be submitted/attached corresponding to the listed completed largest contracts per Annex I-A:

- Copy of End User’s Acceptance;
- Copy of Official Receipt/s;
- Sales Invoice and Collection Receipt

(iv) Duly signed Certificate of Net Financial Contracting Capacity (NFCC) per Annex II, in accordance with ITB Clause 5.5 OR Committed Line of Credit

(a) Should the bidder opt to submit NFCC, computation must be equal to the Total ABC of the project. The detailed computation using the required formula must be shown as provided for in Annex II.

\[
\text{NFCC} = [(\text{Current assets} - \text{current liabilities}) \times 15] - \text{value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started, coinciding with the contract to be bid.}
\]

**Notes:**

1. The values of the bidder's current assets and current liabilities shall be based on the latest Audited Financial Statements submitted to the BIR.
2. The value of all outstanding or uncompleted contracts refers to those listed in Annex I.
3. The detailed computation must be shown using the required formula provided above.
4. The NFCC computation must at least be equal to the ABC of the project.

**OR**

(b) Should the bidder opt to submit a committed Line of Credit, it must be at least equal to ten percent (10%) of the Total ABC of the project issued by a Local Universal or Local Commercial Bank. The amount of the committed Line of Credit MUST BE MACHINE VALIDATED. (See sample Bank Form per Annex II-A).

**a.2.2. For Philippine-Based Representative Company of the Foreign Manufacturer**

(i) Registration certificate from the Securities and Exchange Commission (SEC) for corporation, Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives;

(ii) Valid and current Business/Mayor’s permit issued by the city or municipality where the principal place of business of the prospective bidder is located

(iii) Duly notarized authorization of the Company’s representative (e.g. Secretary’s Certificate for Corporation, Special Power of Attorney for Sole Proprietor) with Specimen signature of the authorized representative to transact with PITC including address, telephone number, fax number and email address.

(iv) Valid and Current Written Appointment of the Philippine based company (as local representative of foreign supplier) issued by the foreign supplier.
Class “B” Document: (For Joint Venture)

The participating entities entering a Joint Venture Agreement (JVA) are to be treated as a single entity and shall be jointly and severally responsible or liable for the obligations and liabilities incurred by any partner to the JV pertinent to the project requirements. Hence, any Blacklisting Order and/or overdue deliveries intended for end-user or PITC shall apply to the JVA as the JV is deemed as one bidder.

a) For Joint Ventures, Bidder to submit either:
   (i) Copy of the JOINT VENTURE AGREEMENT (JVA) in case the joint venture is already in existence, or
   (ii) Copy of Protocol/Undertaking of Agreement to Enter into Joint Venture signed by all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful. (Annex III)

   In case the joint venture is not yet in existence, the submission of a valid JVA shall be within ten (10) calendar days from receipt by the bidder of the notice from the BAC that the bidder is the Lowest Calculated and Responsive Bid [Sec 37.1.4 (a) (i) of the 2016 Revised IRR of RA 9184]

   The JVA or the Protocol/Undertaking of Agreement to Enter into Joint Venture (Annex III) must include/specify the company/partner and the name of the office designated as authorized representative of the Joint Venture.

For Local Company Submit the following document:
   (i) Registration Certificate from the Securities and Exchange Commission (SEC) for corporations or from Department of Trade and Industry (DTI) for sole proprietorship, or from Cooperative Development Authority (CDA) for cooperatives;
   (ii) Valid and current Business/Mayor’s permit issued by the city or municipality where the principal place of business of the prospective bidder is located OR the equivalent document for Exclusive Economic Zones or Areas.
   (iii) Valid and Current Tax Clearance per Executive Order 398 and Revenue Memorandum Order No. 46-2018 reviewed and approved by the BIR;
   (iv) Copy of Audited Financial Statements for 2018 and 2017 (in comparative form or separate reports):
      (a) Independent Auditor’s Report;
      (b) Balance Sheet (Statement of Financial Position); and
      (c) Income Statement (Statement of Comprehensive Income).

   Each of the above statements must have stamped “received” by the Bureau of Internal Revenue (BIR) or its duly accredited and authorized institutions.

For Foreign JV Partner:
   (i) Valid and current certificate/license/authority to conduct/operate business issued by the regulatory authority in the country where the bidder is based;
   (ii) Valid and Current Tax Clearance per Executive Order 398 and Revenue Memorandum Order No. 46-2018 reviewed and approved by the BIR of the Philippines;

OR

Submission of valid and current PHILGEPS Certificate of Registration and Membership (Platinum Registration*) together with Annex A.

*Note: Bidder must ensure that all Class “A” Eligibility Documents are valid and current at the time of submission of PhilGEPS Certificate of Registration and Membership (Platinum Registration). In case any of the submitted Eligibility Documents are not valid and current at the time of submission of Platinum Registration, bidders are required to submit the valid and current documents including:

   For Local JV Partner: Audited Financial Statements for 2018 and 2017 (stamped received by the BIR or its duly accredited authorized institutions) together with the Platinum Registration

   For Foreign JV Partner: Corporate Financial Statement or Annual Report for 2018 or 2017.

In case the JV Partners opts to submit their Class “A” Documents, the Certificate of PhilGEPS Registration (Platinum Registration) shall remain as a post-qualification requirement to be submitted in accordance with Section 34.2 of the 2016 Revised IRR of RA 9184. “GPPB Circular 07-2017 dated 31 July 2017”

For other required Class “A” Eligibility Documents, submission by any of the partner(s) constitutes collective compliance. Provided, That the partner responsible to submit the NFCC shall likewise submit the Statement of All its Ongoing Contracts (Annex I)
**b) TECHNICAL DOCUMENTS**

**Bid security must be issued in favor of the PHILIPPINE INTERNATIONAL TRADING CORPORATION (PITC) in any of the following forms:**

1. Bid Securing Declaration per Annex IV;
2. Cash or Cashier’s/ Manager’s Check equivalent to at least 2% of the ABC;
3. Bank Guarantee/ Bank draft or Irrevocable LC equivalent to at least 2% of the ABC; OR
4. Surety bond callable upon demand equivalent to at least 5% of the ABC

<table>
<thead>
<tr>
<th>Description</th>
<th>Total ABC (₱) (VAT Inclusive)</th>
<th>Bid Security: 2% of ABC</th>
<th>5% of ABC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply, Delivery, Installation, Testing and Commissioning of Brand New Linear Accelerator with Stereotactic Radio Surgery (SRS) and Stereotactic Body Radiotherapy (SBRT) Capability and with Related Specialty Works for the University of the Philippines (Manila) – Philippine General Hospital (UPM-PGH)</td>
<td>300,000,000.00</td>
<td>600,000.00</td>
<td>1,500,000.00</td>
</tr>
</tbody>
</table>

**Notes:**

(a) The Cashier’s/Manager’s check shall be issued by a Local Universal or Commercial Bank.
(b) The Bank Draft/Guarantee or Irrevocable Letter of Credit shall be issued by a Local Universal or Local Commercial Bank.
(c) Should bidder opt to submit a Surety Bond as Bid Security, the surety bond must conform with the following:

1. Issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such bond. Together with the surety bond, a copy of a valid Certification from Insurance Commission must be submitted by the bidder which must state that the surety or insurance company is specifically authorized to issue surety bonds.
2. Callable upon demand
3. **Must specify the grounds for forfeiture of bid security as stated in Section II, ITB Clause 18.5, to wit:**
   - If a bidder:
     1. withdraws its bid during the period of bid validity specified in ITB Clause 17;
     2. does not accept the correction of errors pursuant to ITB Clause (b);
     3. has a finding against their veracity as stated in ITB Clause 29.2; or
     4. submission of eligibility requirements containing false information or falsified documents;
     5. submits bids that contain false information or falsified documents, or the concealment of such information in the bids in order to influence the outcome of eligibility screening or any other stage of the public bidding;
     6. allowing the use of one’s name, or using the name of another for purposes of public bidding;
     7. withdrawal of a bid, or refusal to accept an award, or enter into contract with the Government without justifiable cause, after the Bidder had been adjudged as having submitted the Lowest Calculated and Responsive Bid;
     8. refusal or failure to post the required performance security within the prescribed time;
Section IX. Checklist of Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ix)</td>
<td>refusal to clarify or validate in writing its bid during post-qualification within a period of seven (7) calendar days from receipt of the request for clarification</td>
</tr>
<tr>
<td>(x)</td>
<td>any documented attempt by a bidder to unduly influence the outcome of the bidding in his favor;</td>
</tr>
<tr>
<td>(xi)</td>
<td>failure of the potential joint venture partners to enter into the joint venture after the bid is declared successful; or</td>
</tr>
<tr>
<td>(xii)</td>
<td>all other acts that tend to defeat the purpose of the competitive bidding, such as habitually withdrawing from bidding, submitting late bids or patently insufficient bid, for at least three (3) times within a year, except for valid reason.</td>
</tr>
</tbody>
</table>

- **IF THE SUCCESSFUL BIDDER:**
  
  (xiii) fails to sign the contract in accordance with ITB Clause 32; or
  
  (xiv) fails to furnish performance security in accordance with ITB Clause 33

<table>
<thead>
<tr>
<th>No.</th>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ii)</td>
<td>Duly signed and completed Technical Bid Form. Bidder must use, accomplish and submit the Technical Bid Form attached as Annex V</td>
<td></td>
</tr>
<tr>
<td>(iii)</td>
<td>Duly signed/conformed Terms of Reference attached as Annex V-A</td>
<td></td>
</tr>
<tr>
<td>(iv)</td>
<td>Accomplished and signed Bidder’s Statement of Reference of Technical Specification/s attached as Annex V-A1</td>
<td></td>
</tr>
<tr>
<td>(v)</td>
<td>Duly conformed Scope of Works and Specifications (Annex V-B)</td>
<td></td>
</tr>
<tr>
<td>(vi)</td>
<td>Duly conformed Drawings and Plans (Annex V-C)</td>
<td></td>
</tr>
<tr>
<td>(vii)</td>
<td>Duly conformed Special Conditions of the Contract for the Related Specialty Works (Annex V-D)</td>
<td></td>
</tr>
</tbody>
</table>

Product Brochure and/or Technical Data Sheet in **Hard and Soft copy** for each of the brand/model of the equipment being offered showing compliance to the technical specifications

- 1. Linear Accelerator Machine
- 2. Fully integrated MV Imaging System (Portal Imaging Device)
- 3. Fully Integrated kV Imaging System
- 4. Respiratory Gating
- 5. Stereotactic Radiosurgery Planning System (Third Party)
- 6. Immobilization devices
- 7. Oncology Information System with Networking, Record and Verify System
- 8. Treatment Planning System

**Note:** If not in English, must be subject to requirement per Clause 11 of the Instructions to Bidders.
**For Foreign Manufacturers:** Certification that the bidder is a Manufacturer of the equipment being offered and also indicating/include the following statements: *(Annex V-E)*

**OR**

**For Local First Tier Distributors:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ix)</td>
<td>a) Copy of Valid and Current Certificate of Distributorship (as First Tier Distributor) issued by the principal manufacturer authorizing the bidder to sell/distribute the items subject of this bidding;</td>
</tr>
<tr>
<td></td>
<td>b) Certification from the Manufacturer of the equipment being offered also indicating/including the following statements: <em>(Annex V-E)</em></td>
</tr>
<tr>
<td></td>
<td>a. That the manufacturer has been in the business of manufacturing catheterization laboratory for at least 20 years</td>
</tr>
<tr>
<td></td>
<td>b. That the manufacturer and the first tier distributor have been in business partnership for the past five (5) years</td>
</tr>
<tr>
<td></td>
<td>c. That supplies, parts and accessories of the equipment shall be available for at least ten (10) years after expiration of the warranty period;</td>
</tr>
<tr>
<td></td>
<td>d. That service engineers are factory trained on service and repair;</td>
</tr>
<tr>
<td></td>
<td>e. Guarantee /support to Warranty to be issued by the bidder/(first tier distributor);</td>
</tr>
<tr>
<td></td>
<td>f. That at least one service engineer is available locally to provide quick on-site support.</td>
</tr>
<tr>
<td></td>
<td>g. That the equipment to be delivered and to be supplied must be of the latest model. All software must be of the latest version</td>
</tr>
<tr>
<td></td>
<td>h. That at least one manufacturer technical specialist (Physicist) must be available for assistance for one (1) month during the commissioning</td>
</tr>
<tr>
<td></td>
<td>i. That free upgrades of all software (clinical / technical) shall be included in the preventive maintenance of the machine by the supplier</td>
</tr>
<tr>
<td>(x)</td>
<td>Notarized Affidavit of Site Inspection <em>(per Annex VI)</em></td>
</tr>
<tr>
<td>(xi)</td>
<td>Bidder's License to Operate (LTO) as Medical Device Importer/Distributor from the Food and Drug Administration (FDA) - Center for Device Regulation, Radiation Health and Research (CDRRHR)</td>
</tr>
<tr>
<td>(xii)</td>
<td>Certificate of Product Registration (CPR) or Certificate of Exemption (COE) of the LINAC Machine from the Food and Drug Administration (FDA) - Center for Device Regulation, Radiation Health and Research (CDRRHR) for the Linear Accelerator</td>
</tr>
<tr>
<td>(xiii)</td>
<td>Certificate of compliance with the performance and safety requirements of the International Atomic Energy Agency in the name of the manufacturer of the Linear Accelerator Machine</td>
</tr>
<tr>
<td>(xiv)</td>
<td>Certificate of compliance with the International Organization for Standardization / International Electronic Commission (ISO / IEC) in the name of the manufacturer of the Linear Accelerator</td>
</tr>
<tr>
<td>(xvi)</td>
<td>List of Authorized Service Center/s in the Philippines and/or with available spare parts, indicating address, telephone &amp; fax numbers, email address and contact person;</td>
</tr>
<tr>
<td></td>
<td>In the event of closure of business, termination of franchisee/ service center, the supplier shall notify the UPM-PGH accordingly of the new service centers with telephone numbers and address who can provide the needed parts, supplies and service.</td>
</tr>
<tr>
<td></td>
<td>For the following:</td>
</tr>
<tr>
<td></td>
<td>• Linear Accelerator</td>
</tr>
<tr>
<td></td>
<td>• Air-Conditioning Systems</td>
</tr>
</tbody>
</table>
### Checklist of Requirements

#### (xvii) List and address of Manufacturer’s branch office, sales office and/or distributor’s office of the Linear Accelerator in the following:

- a) Any country in Europe
- b) USA or Canada; and
- c) Japan

#### (xviii) At least three (3) Certificates of Performance Evaluation (per Annex VII) with a rating of at least Very Satisfactory. One of the three (3) Certificates of Performance Evaluation should be issued by the Single Largest Completed Contract Client of the bidder per Annex I-A (Single Largest Completed Contract Client with similar contract defined as “radiographic equipment”).

However, the two (2) other Certificates of Performance Evaluation involving Linear Accelerator for two (2) completed contracts within the past ten (10) years must come from any Tertiary government or private hospital in the Philippines.

#### (xix) Proof of Authority of the bidder’s authorized representative/s:

- (a) **FOR SOLE PROPRIETORSHIP (IF OWNER OPTS TO APPOINT A REPRESENTATIVE):** Duly notarized Special Power of Attorney.
- (b) **FOR CORPORATIONS, COOPERATIVE OR THE MEMBERS OF THE JOINT VENTURE:** Duly notarized Secretary’s Certificate evidencing the authority of the designated representative/s.

**IN THE CASE OF UNINCORPORATED JOINT VENTURE:** Each member shall submit a separate Special Power of Attorney and/or Secretary’s Certificate evidencing the authority of the designated representative/s.

#### (xx) Omnibus Sworn Statements using the form prescribed. (Annex VIII)

- (a) Authority of the designated representative
- (b) Non-inclusion in blacklist or under suspension status
- (c) Authenticity of Submitted Documents
- (d) Authority to validate Submitted Documents
- (e) Disclosure of Relations
- (f) Compliance with existing labor laws and standards
- (g) Bidders Responsibilities
- (h) Did not pay any form of consideration

#### ENVELOPE 2: FINANCIAL DOCUMENTS

1. Completed and signed Financial Bid Form.
   Bidders must use, accomplish, sign and submit the following forms:

   - **Financial Bid Form per Annex IX**
   - **Detailed Financial Bid Form per Annex IX-A**

   **Bidder to submit in soft copy and printed copy of the following together with the Financial Bid Form**

   - Bill of Quantities
   - Detailed estimates including summary sheet indicating the unit prices of construction materials, labor rates, equipment rentals and **indirect costs** used in coming up with the bid.
   - Cash Flow per Quarter
   - Payments Schedule

**Note:** In case of inconsistency between the Checklist of Requirements for Bidders and the provisions in the Instruction to Bidders/Bid Data Sheet, the Instruction to Bidders/Bid Data Sheet shall prevail.