

TERMS OF REFERENCE

LIGHTS AND SOUND, VICTORIES OF THE REVOLUTION, IMUS MUSEUM

BACKGROUND:

The Imus Museum was constructed in 2002 inside the Old Spanish Cuartel compound in Imus, Cavite. It's a walking tour experience thru a maze of sequence of events showing the various battles and uprising of the districts of Cavite against the Spanish colonizers when the Philippine revolution broke out in 1896. Memorable battles took place in the province like in Noveleta, Imus, Binakayan-Dalahican, Zapote, Perez Dasmariñas/Pasong Santol and Alapan. These famous battles during the Philippine Revolution led to the declaration of Philippine Independence in 1898 are now known as the *Victories of the Revolution*.

The Provincial government of Cavite operated the museum thru the years. Most of the revenues came thru gate receipts from educational tours and visitors of the museum and augmented with funds from the LGU. The revenues generated cannot sustain the operation and maintenance of the museum, thus caused its eventual closure and deterioration.

This year, the Senate appropriated Forty Million Pesos, Php 40,000,000.00, thru the GAA of 2019 to fund the **Lights and Sound, Victories of the Revolution, Imus Museum** project of which the Tourism Infrastructure and Enterprise Zone Authority (TIEZA) is the designated implementer.

Due to the nature and complexity of the project requiring expertise in the field of history, culture, art works, theming works, audio video production, lighting design and actual construction works, TIEZA deemed it necessary to invite service providers (Designer-Builder) to pre-qualify and submit bid proposals for the Design and Build scheme of a **Lights and Sound Show for the Imus Museum** thru a competitive bidding process in accordance with all applicable provisions of the Philippine Procurement Law or Republic Act (RA) 9184.

OBJECTIVE

1. Development of a Lights and Sounds Show (LSS) for the Imus Museum under the Design and Build scheme wherein the Designer-Builder shall provide the detailed plans, technical knowledge, scope of works, specifications, PERT/CPM, supply and installation, equipment, labor, materials, tools, instruments, including construction works necessary for the completion of the project.
2. To construct and develop the Lights and Sounds Show based on TIEZA approved designs and specifications and compliant with the government rules and regulations, existing laws and internationally accepted standards.

DETAIL OF THE PROJECT

Name : Design and Construction of a Lights and Sounds Show for the Imus Museum.
Location : Imus Museum, Plaza Cuartel, Imus, Cavite

Specific Requirements:

Coverage	The interior area (650 square meter) of the Museum building known as the activity/show area.
Theme of the Lights and Sounds Show	Victories of the Revolution of Cavite against the Spaniards highlighting the bravery of spirit of the Filipinos.
Show Components	<ul style="list-style-type: none">• Voice over storyline of the show• Dioramic sets of events for the walk-thru presentation• Lights and sounds effects

Design Parameters

- The Lights and Sounds show should have a running time of 20-30 minutes only and should be able present significant circumstances of the revolution and impact its historical values and lessons to the visitors for the appreciation of our history as well as improvement of their vising experience.
- The show should be designed with a voice over narration of a storyline complemented by a walk thru presentation in series of organized diorama sets enhanced with audio, visual and lights effects.
- All the seven (7) memorable battles of the Victories of the Revolution should be the focal point of the show represented by diorama sets. Other relevant historical events of the Victories of the Revolution in the province should also be considered on the storyline.
- The show should be able present significant circumstances and impact the historical values and lessons of the revolution to the visitors for the appreciation of the events in our history as well as improvement of their vising experience.
- Design the layout and traffic flow plan of the show area in a manner that can accommodate a maximum of fifteen (15) visitors per team including Person-with-Disability (PWD) moving with ease and comfort with no overlapping of audio on the set sequences.
- Design the Lights and Sound component for maximum effect using modern and up-to-date technology and equipment that are best and latest models available in the market.
- Use lighting equipment that are energy efficient and LED Technology.
- Video quality or production should be in high definition or in higher resolution.
- Audio quality should be in digital format and high fidelity.
- The central equipment that controls the operation of the Lights and Sound show should be installed in a control room.
- Use computers with high specifications and the best and latest model in the market, include spare computer as back up.
- Design and fabrication of mannequins should be in life size form using sturdy materials and replicating in true form the persons or character they represent. Animatronics technology should be considered in the design of mannequins.
- Costumes used for the mannequins should be of high quality fabric and replicates the costumes used during the Spanish period.

- Theming works, set design and production, props, special effects and other essentials should create a real life recreation of a scene.
- Recreate the entrance facade of the museum to look similar with the Spanish period.
- The use of projection mapping technology, holograms and multimedia equipment should also be considered in the design.
- Preparation of Detailed Design based on the approved Design Development Drawings and Design Parameters including any revisions and refinements as approved by the TIEZA.

DESIGN AND BUILD COMPONENTS

A. Conceptual Design

- *To be submitted by all prospective bidders as part of their Technical Proposal.*
 - *TIEZA shall provide the existing Floor Plan of the Imus Museum to all Prospective Bidders.*
1. Submission of a Preliminary Conceptual Design Plan for the Lights and Sound Show within the 650 sq. meter interior (show) area of the Imus Museum, to include among others:
 - Proposed Floor Plan of the activity/show area;
 - Lay-out and arrangements of the diorama sets for the seven municipalities/districts who took part in the Victories of the revolution.
 - Sequence flow of the show and Visitor traffic flow
 - Exits and entrances;
 - Concept overview of the show;
 2. Work Plan methodology in narrative form

B. Research and Design

- *These will be submitted by the winning bidder/ Designer-Builder for TIEZA approval in Ninety (90) Calendar Days reckoned seven (7) calendar days from the Notice to Proceed.*
 - *The Designer-Builder shall prepare the design based on the Design Parameters and Specifications provided by TIEZA.*
1. Conduct Historical Research, Site Surveys and Investigations for data needed for the Lights and Sounds Show not limited to:
 - Historical data of the Victories of the Revolution;
 - Narrative script of the historical storyline of show;
 - Certification from the National Historical Commission or any recognized government agency that all the researched materials (Historical data of the Victories of Revolution and Narrative script of the storyline) are true and correct prior to submission to TIEZA.
 - Location, dimension, floor elevation, contours, and other pertinent data:
 - existing museum building;
 - condition of the activity area inside the museum;
 - access and parking areas;
 - lighting and power utility;

Designer Builder shall submit five (5) sets of the research in A4 paper size, ring bound and five (5) USB electronic copies.

2. The Detailed Design Plan and Program of Work shall be submitted for TIEZA approval before proceeding to the Implementation Phase of the show, not limited to the following:
 - Detailed Architectural and lay-out and diorama plans
 - Picture-like rendition of all the diorama set
 - Detailed Architectural, Structural, Electrical and Lighting, Mechanical and Artistic Design Plan Drawings including finishes (Construction and Installation Plan);
 - Lights, Sound and Audio System detailed installation plan
 - Demolition and rehabilitation Plan for existing structures/ equipment, as necessary
 - Sequence and Visitor flow plan of the presentation.
 - Emergency Evacuation Plan showing routes and locations of exits and entrances.
 - Fire Suppression System Detailed Plan
 - All other construction/installation plans necessary for the implementation of the Light and Show;
 - Minimum requirements for Construction Safety and Health Program for the project.
 - Visual and audio walk-thru presentation of the show in electronic format.
 - Detailed estimate cost of the project
 - General Notes and Technical Specifications describing type and quality of materials and equipment to be used;
 - Summary and schedule of Works;

The Designer-Builder shall submit five (5) sets of hard and soft copies for all drawing plans, visuals and audio in ring bound A-3 paper size copies and USB electronic copies.

3. The Designer-Builder shall submit the Final Narrative Script of the Historical Storyline in five (5) ring bound A-4 paper size copies. An electronic audio voice-over of the Storyline shall likewise be submitted in five(5) USB sets.
4. Any errors, omissions, inconsistencies or inadequacies submitted by the contractor, or any submissions that do not comply with the requirements, shall be rectified, resubmitted and reviewed at the contractor's cost. If the contractor wishes to modify a design or document which has been previously submitted, reviewed and approved, the contractor shall notify TIEZA within a reasonable period of time and shall shoulder cost of such changes.

C. Implementation Phase

The Designer-Builder shall perform the construction works in 120 Calendar days after TIEZA approval of the Research and Design documents, which include but not limited to the following:

1. The Designer-Builder shall supply labor, materials and equipment, and other requirements deemed necessary for the construction/implementation of Light and Sound Show.
2. The Designer-Builder shall be responsible for obtaining all necessary information as to risks, contingencies, and other circumstances in which may affect the works and shall prepare and submit all necessary documents to meet all regulatory permits and approvals
3. The Designer-Builder shall execute the construction activities to complete the project in accordance with the approved architectural/ interior design and construction drawings and specifications in the highest degree of workmanship, integrity, and professionalism.
4. Secure compliance of the requirements of RA 11058 (its Implementing Rules and Regulations) and DOLE Department Order 198-18 specifically

the Basic Components of Company Occupational Safety and Health (OSH) Program and Policy (DO 198-18, Chapter IV, Section 12).

5. Prepare semi-monthly and monthly accomplishment reports supported with progress photographs and S-curve to monitor performance and as basis for progress billing.
6. Construction works shall conform to the requirements of TIEZA, National Building Code and other pertinent practices and codes in the Philippines as well as local rules, regulations and ordinances. The said design and construction works shall adhere to and abide by international best practices and standards.
7. The quality of materials to be furnished or work to be done shall be in accordance with the approved specifications and accepted by TIEZA. However, if specified materials are not available, the Designer-Builder shall immediately propose acceptable alternatives in writing to TIEZA.
8. The construction shall be finished with world-class workmanship to the satisfaction of the TIEZA.
9. A Dry-Run for Testing and Commissioning of the show's components and equipment shall be conducted.
10. The Lights and Sound Show, being a Historical event show, should have a Certification of correctness by a government Historical Agency and endorsed for public viewing.
11. A Final run of the Lights and Sound Show shall be conducted in the presence of representatives of the Proponent, concerned government agencies and Local Government Units.

D. Post-Implementation Phase

The Designer-Builder shall submit documents and conduct activities required within Thirty (30) Calendar Days reckoned from the completion of the Implementation Phase prior to acceptance of the project by TIEZA.

1. Transfer of Technology and Knowhow, thru on-the job trainings, submission of documents and brochures of equipment and other means to ensure the transfer of the overall operations of the Lights and Sound Show to the proponents.
2. As-built plans.
3. All documents processed and issued in favor of TIEZA during the construction period (Inspection reports, Building/ Mechanical/ Electrical reports and permits, Fire Safety Reports, Clearances, and other related documents).
4. Acceptance of Project by TIEZA.

ELIGIBILITY REQUIREMENTS

1. General

- a. The eligibility of design and build contractors shall be based on the legal, technical and financial requirements abovementioned. In the technical requirements, the design and build contractor (as solo or in joint venture/consortia) should be able to comply with the experience requirement under the IRR of R.A. 9184, where one of the parties (in a joint venture/consortia) should have at least one similar project, both in design and construction, with at least 50% of the cost of the Approved Budget of the Contract (ABC).

- b. If the bidder has no experience in design and build projects on its own, it may enter into subcontracting, partnerships, or joint venture with design or engineering firms for the design portion of the contract.
 - c. The bidder must have at least Ten (10) years experience in design and installation of audio, video, lighting and special effects.
 - d. The relevant provisions under Section 23.11.2.1 of the IRR of R.A. 9184 on eligibility requirements shall be observed.
2. Minimum Requirements of the Designer-Builder's Key Personnel

Research and Creative Team

- *History Expert* - Bachelor's Degree in Philippine History or related discipline with minimum of five (3) years' experience in research and writing of history of past events in a continuous, methodical narrative, organizing, analyzing, and interpreting relative significance of data gathered.
- *Director* - Orchestrates, interprets the script, pegs and specifies references and requirements for all aspects and elements comprising the Light and Sound Show. Must have a minimum of five (5) years' experience directing Audio Video Techniques, TV broadcasting, theater and film with good and mature understanding of the Philippine culture and history and versed in multi-media approaches in production.
- *Production Designer* - Interprets and translates into visually perceptible terms, looks and quality of the show in the form of plans, drawing, thumbnail sketches, full rendering, models, etc. Must have five (5) years' experience preferably in theater working as set and/or production designer.
- *Art Director* - Implements the production of all graphic design works of the show and assists the production designer in the performance of his/her duties. Must have at least five (5) years' experience and must have assisted designers whose works have consistently been produced.
- *Lights and Sounds Director*- responsible for all technical aspects of the show and must be knowledgeable in manual, mechanical as well as computer aided light and sound technology. Must have a minimum of five (5) years' experience as technical director in theatrical productions.
- *Special Effects Director* - designs and produces all mechanically, electronically or digitally generated special effects of the show such as motion, atmospherics, etc. Must have at least Five (5) year experience in film/theater and/or live show and knowledgeable with up-to- date special effects, prosthetics and robotics technology.
- *Licensed Architect/Interior Designer* - designs and plans the structures of the creative areas/spaces including enclave ramps, stairs, viewing spaces, control room and other interior areas that hold and convey the viewing public. Must have at least five (5) year experience in planning and design.
- *Computer Expert* - prepares construction and installation plans, working drawings for the project. Must be proficient and must have at least five (5) year experience in AutoCAD drawings, 3D renderings and computer programing.

Production Team

- *Supervising Project Manager* –oversees the whole production in all of its logistical aspects impacting on the timelines, schedules, targets and coordinates with the team involved in the design. Must be a licensed Architect or Civil Engineer or Interior Designer and must have a minimum of three (3) years of experience in the construction management.
- *Sculptural Supervisor* – specializes in the fabrication of hyper-realistic still and moving mannequins and statues, as required in the design of specific segments of the Lights and Sounds Show. Must have at least five (5) years experience in this relatively new technical field is required.
- *Licensed Professional Electrical Engineer* – Must have at least Five (5) years of experience in the practice in electrical design and construction.
- *Licensed Professional Mechanical Engineer* – Must have at least five (5) years of experience in the practice in mechanical design and construction management including fire suppression systems.
- *Safety Officer* – must be an accredited safety practitioner by Department of Labor and Employment (DOLE) and must have undergone the prescribed 40 hrs of Construction Occupational Safety and Health training

The above listed personnel of the Design and Creative and Production Teams are required and shall work fulltime during the contract period. Prospective bidders shall attach each individual resume's, PRC licenses of the professional staffs, certificates of training and all other pertinent documents proving the said personnel expertise.

The main labor force, other support and administrative staffs not included but necessary for the completion of the project shall be provided by the Designer-Builder.

APPROVED BUDGET FOR THE CONTRACT

The Approved Budget for the Contract (ABC) shall be a total of **FORTY MILLION PESOS (P40, 000,000.00)** inclusive of VAT and all other applicable government permits and taxes. Said ABC shall cover the cost of Research and Detailed Design and Construction of the Lights and Sound Show of the Imus Museum.

PROJECT DURATION

DELIVERABLE	Duration
I. Research and Design Phase	90 Calendar Days
- Historical Research Report	
- Detailed Design and Program of Work	
II. Implementation Phase (per accomplishment basis)	120 Calendar Days
- 100% accomplishment for all fabrications, installations, dioramic sets, visuals, audio, equipment, etc..	
- Dry-run of the LSS for Testing and Commissioning of all components of the show.	
- Final Run of the LSS	
III. Post-Implementations Phase	30 Calendar Days

-Transfer of Technology, As-Built Plans, Acceptance of the Project.	
Total Project Duration	240 Calendar Days

The Total Project Duration (Research and Design, Implementation and Post-Implementation Phases) shall be a maximum of **Two Hundred Forty (240) Calendar Days** reckoned from seven (7) days upon receipt of the Notice to Proceed.

The Designer-Builder shall deliver the completed project to TIEZA, within the Total Project Duration, which shall signify its approval or comments for revision, alteration or modification, if any, before acceptance of the Project.

PAYMENT SCHEDULE

All deliverables of the Designer -Builder must be approved by TIEZA before the processing of payments.

DELIVERABLE	% of CONTRACT PRICE
I. Research and Design Phase	
Historical Research Report	15%
Detailed Design and Program of Work	10%
II. Implementation Phase (per accomplishment basis)	
1 st Billing - 50% accomplishment	25%
2 nd Billing- 100% accomplishment	25%
3 rd Billing - Dry Run, Testing and Commissioning, Final run of the LSS.	10%
III. Post-Implementations Phase	
Transfer of Technology, As-Built Plans, Documents and Acceptance.	15%

GENERAL CONDITIONS

- The Designer-Builder shall conform strictly to the terms and conditions of this Terms of Reference, including abiding by best practices and respecting standards and guidelines of international agencies, bodies, and organizations.
- The Designer-Builder shall be solely responsible for the integrity of all research works, storyline, detailed engineering design and the performance of the structure irrespective of the approval/ confirmation by the TIEZA.
- The Designer-Builder shall deploy personnel having professional experience compatible with the undertaking, provide and maintain temporary office and living quarters for their project personnel with equipment, supplies, first aid cabinet and other utilities.
- The Designer-Builder shall adhere to the Department of Public Works and Highways (DPWH) relative to the conduct of construction activities, especially as regards to security and protocol.
- The Designer-Builder shall report to TIEZA any conditions which may prevent the Designer-Builder from performing the work according to requirements.
- The Designer-Builder shall comply with pertinent regulations and shall adopt safety measures, such as but not limited to: enclosures, shielding, covering, warning devices, off-limits signs, etc.

- The Designer-Builder shall strictly comply with the terms and conditions of the Contract it executed with TIEZA and maintain all warranties and representations in good standing for the duration of the contract period
- The Designer-Builder shall ensure compliance with the existing Labor Laws including the safety of the workers, guests, visitors, etc. on site.
- Representatives from TIEZA may, at any time, inspect the progress of the project and may issue a stoppage when the progress compromises or tends to compromise the integrity and security/ safety of the site and structures around the site.
- All relevant permits and corresponding fees as may be assessed by the local government units/ regulating agencies shall be for the account of the Designer-Builder.
- The Designer-Builder shall store his materials, equipment and tools in one place of the construction. The area shall be coordinated with TIEZA. It shall be kept neat and clean at all times. Any damage thereto or to the surrounding area/s arising from accident, paint spills, etc. shall be repaired and/or restored to its original condition. Likewise, extra care shall be taken in the storage of hazardous chemicals in order to avoid accidents, explosions and/or fires.
- The Designer-Builder shall ensure that its workers/employees will not loiter on other areas, or otherwise interfere or interact with the tourists/guests within the vicinity of the Imus Museum Compound.
- The Designer-Builder shall be responsible for the electric, water, sewage, and other utility connection needs of the project.
- The Designer-Builder shall coordinate with TIEZA or any of their authorized representatives in the performance of their jobs, so as to ensure that its tasks are performed excellently, promptly and safely.
- The Designer-Builder warrants, represents and undertakes reliability of the service and that their manpower complements are hardworking, qualified/reliable and dedicated to do the service required to the satisfaction of TIEZA.
- The Designer-Builder warrants to comply with the laws governing employees' compensation and labor standards.
- The Designer-Builder warrants to take all necessary precautions for the safety of all persons and properties at or near their area of work and shall comply with all the standard and established safety regulations, rules and practices.
- The Designer-Builder shall be liable for any loss, damage, or injury as may be due directly through the fault or negligence of its personnel. It shall assume sole and exclusive responsibility therefore, and TIEZA shall be specifically released from any responsibility arising therefrom.
- The Designer-Builder shall not assign, transfer, pledge any part nor interest in this project. Subcontracting, however, may be allowed provided that the former shall retain responsibility for the full compliance of all applicable provisions of this TOR.

CAVEAT

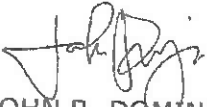
These Terms of Reference and its attachments shall be solely used by the prospective bidders in the preparation of their respective bids/proposals for the Design and Build Scheme of the LIGHTS AND SOUND, VICTORIES OF THE REVOLUTION, IMUS MUSEUM. Further, the procuring entity does not guarantee that the data are sufficient and up-to-date to the project at hand.

The winning consultant shall be responsible for the accuracy, completeness, and applicability of all data and information to be used in their work once chosen. The consultant shall be responsible for all the necessary studies, documents, information, and equipment pertinent to the production of the plans and reports. They shall likewise submit any other necessary and relevant research, study, data or report that may be reasonably requested by the TIEZA.

The work under this TOR shall be undertaken under the Design and Build scheme following the applicable procurement guidelines. The bidding procedure shall follow the relevant provisions of the Government Procurement Reform Act (RA 9184) and its 2016 Revised Implementing Rules and Regulations (RIRR) on the procurement of Design and Build services.

Other works not mentioned in this document but necessary to complete the works are considered included in the scope of works and bid submission. It is the bidders' responsibility to anticipate and include other items missed-out in this terms of reference.

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Concurred:


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