

People's Television Network, Inc Broadcast Complex, Visayas Avenue, Diliman, Quezon City 1100 www.ptv.ph

PHILIPPINE BIDDING DOCUMENTS

(PROCUREMENT OF INFRASTRUCTURE PROJECT)

REBID: DESIGN AND BUILD OF PEOPLE'S TELEVISION NETWORK, INC. MARAWI REGIONAL CENTER – A TWO (2) STOREY STUDIO/TRANSMITTER BUILDING WITH ROOFDECK AND 80-FEET BIPOD ANTENNA TOWER

ITB No. 2021-0003R

Government of the Republic of the Philippines

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Glossary of Terms, Abbreviations, and Acronyms

ABC – Approved Budget for the Contract.

ARCC – Allowable Range of Contract Cost.

BAC – Bids and Awards Committee.

Bid – A signed offer or proposal to undertake a contract submitted by a bidder in response to and in consonance with the requirements of the bidding documents. Also referred to as *Proposal* and *Tender*. (2016 revised IRR, Section 5[c])

Bidder – Refers to a contractor, manufacturer, supplier, distributor and/or consultant who submits a bid in response to the requirements of the Bidding Documents. (2016 revised IRR, Section 5[d])

Bidding Documents – The documents issued by the Procuring Entity as the bases for bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and/or Consulting Services required by the Procuring Entity. (2016 revised IRR, Section 5[e])

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

CDA – Cooperative Development Authority.

Consulting Services – Refer to services for Infrastructure Projects and other types of projects or activities of the GOP requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the GOP to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies. (2016 revised IRR, Section 5[i])

Contract – Refers to the agreement entered into between the Procuring Entity and the Supplier or Manufacturer or Distributor or Service Provider for procurement of Goods and Services; Contractor for Procurement of Infrastructure Projects; or Consultant or Consulting Firm for Procurement of Consulting Services; as the case may be, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

Contractor – is a natural or juridical entity whose proposal was accepted by the Procuring Entity and to whom the Contract to execute the Work was awarded. Contractor as used in these Bidding Documents may likewise refer to a supplier, distributor, manufacturer, or consultant.

CPI – Consumer Price Index.

DOLE – Department of Labor and Employment.

DTI – Department of Trade and Industry.

Foreign-funded Procurement or Foreign-Assisted Project – Refers to procurement whose funding source is from a foreign government, foreign or international financing institution as specified in the Treaty or International or Executive Agreement. (2016 revised IRR, Section 5[b]).

GFI – Government Financial Institution.

GOCC – Government-owned and/or –controlled corporation.

Goods – Refer to all items, supplies, materials and general support services, except Consulting Services and Infrastructure Projects, which may be needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non-personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the Procuring Entity for such services. The term "related" or "analogous services" shall include, but is not limited to, lease or purchase of office space, media advertisements, health maintenance services, and other services essential to the operation of the Procuring Entity. (2016 revised IRR, Section 5[r])

GOP – Government of the Philippines.

Infrastructure Projects – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PCAB – Philippine Contractors Accreditation Board.

PhilGEPS - Philippine Government Electronic Procurement System.

Procurement Project – refers to a specific or identified procurement covering goods, infrastructure project or consulting services. A Procurement Project shall be described, detailed, and scheduled in the Project Procurement Management Plan prepared by the agency which shall be consolidated in the procuring entity's Annual Procurement Plan. (GPPB Circular No. 06-2019 dated 17 July 2019)

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

Section I. Invitation to Bid



People's Television Network, Inc Broadcast Complex, Visayas Avenue, Diliman, Quezon City 1100 www.ptv.ph

Invitation to Bid for

Rebid: Design and Build of People's Television Network, Inc. Marawi Regional Center – A Two (2) Storey Studio/Transmitter Building with Roof deck and 80-Feet Bipod Antenna Tower

ITB No. 2021-0003R

- 1. The *People's Television Network, Inc. (PTNI)*, through the *NDRRMC Budget 2018* intends to apply the sum of *Thirty-Two Million Four Hundred Thousand Pesos (PhP32,400,000.00)* being the Approved Budget for the Contract (ABC) to payments under the contract for *Rebid: Design and Build of People's Television Network, Inc. Marawi Regional Center A Two (2) Storey Studio/Transmitter Building with Roof deck and 80-Feet Bipod Antenna Tower, ITB No. 2021-0003R*. Bids received in excess of the ABC shall be automatically rejected at bid opening.
- 2. The *People's Television Network, Inc. (PTNI)* now invites bids for the above Procurement Project. Completion of the Works is required *Two Hundred Forty (240) Calendar Days*. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
- 3. Bidding will be conducted through open competitive bidding procedures using non-discretionary "pass/fail" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
- 4. Interested bidders may obtain further information from *People's Television Network*, *Inc* (*PTNI*) and inspect the Bidding Documents at the address given below from 9:00AM 5:00 PM.
- 5. A complete set of Bidding Documents may be acquired by interested bidders on 26 May 2021 from given address and website/s below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Twenty-Five Thousand Pesos (PhP 25,000.00). The Procuring Entity shall allow the bidder to present its proof of payment for the fees may be presented in person and/or through electronic means.
- 6. The *People's Television Network, Inc (PTNI)* will hold a **Pre-Bid Conference** on *July 21, 2021, 10:00 am* through videoconferencing/webcasting *via Zoom*, which shall be open to prospective bidders.

Meeting ID: 894 6227 8287

Passcode: 2021-0003R

- 7. Bids must be duly received by the BAC Secretariat through manual submission at the office address as indicated below, on or before *August 2, 2021, 10:00 am*. Late bids shall not be accepted.
- 8. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 16.
- 9. Bid opening shall be on August 2, 2021, 10:30 am at the given address below Bids and Awards Committee (BAC) Secretariat/Project Management Office (PMO), 3rd Floor, PTNI Broadcast Complex, Visayas Avenue, Diliman, Quezon City and/or through videoconferencing/webcasting via Zoom Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.

Meeting ID: 885 1704 6779 Passcode: 2021-0003R

- 10. The *People's Television Network, Inc (PTNI)* reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised Implementing Rules and Regulations (IRR) of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
- 11. Other Necessary information deemed relevant by the Procuring Entity

PTNI's Health and Safety Protocols in Procurement

To avoid transmission of Covid-19, the Bids and Awards Committee will observe strict health protocols at all times and as we shift to the new normal work guidelines, we will adapt new measures on procurement activities of the network.

Purchasing of Bid Documents

Interested Bidders may purchase the Bidding Documents through:

- 1. Cashier
 - Transaction will be done at entrance gate only.
 - Cashier is available from Mon-Fri, 9:00 AM 5:00 PM.
 - Inform the Secretariat at 0956-738-4512/0961-693-8333
- 2. PTNI's Bank Account (Land Bank of the Philippines).
 - Account Name: PTNI
 - Account Number: 3212100497
 - Email the proof of payment at bacsecretariat@ptni.gov.ph

Pre-Bid Conference

- 1) Pre-bid Conference will be done through videoconferencing.
- 2) All interested bidders must send through email at bacsecretariat@ptni.gov.ph, a letter of intent with the name of the company representative and his/her contact detail (mobile/telephone number and email address) to participate in the conference.
- 3) All interested bidders must send their clarifications and queries through email at bacsecretariat@ptni.gov.ph which will be answered through bid bulletin to be posted in PhilGEPS and Procuring Entity's Website.

Opening and Submission of Bids

- 1) PTNI will still require physical submission of bid tenders.
- 2) The bidder must submit its bid on time with proper label or sealing.
- 3) Bidder may have one (1) representative to attend physically during the Bid Opening whose shall enforce the following precautionary measures among themselves
 - Observe physical distancing
 - Submit a Barangay Health Emergency Response Team (BHERT) Certificate
 - Wear face mask (at least 3-ply surgical mask, preferably N95 mask) and face shield at all times
 - Submit duly accomplished Health Declaration Forms and COVID-19 Rapid Antigen Test (AgT) or RT-PCR Negative Test Results within 72 hours before the date of Opening of Bids. Bidders may also participate virtually and watch the activity through video conferencing via Zoom.
- 12. For further information, please refer to:

BAC Secretariat

People's Television Network, Inc. (PTNI) 3rd Floor, PTNI Broadcast Complex, Visayas Avenue, Diliman, Quezon City bacsecretariat@ptni.gov.ph 0956-738-4512 / 0961-693-8333

www.ptni.gov.ph

13. You may visit the following websites:

For downloading of Bidding Documents: ptni.gov.ph/procurement/ Procurement forms: https://www.gppb.gov.ph/downloadables.php

> er H. Salendab Atty. Jason Shah Chairperson, Bids and Awards Committee

Section II. Instructions to Bidders

1. Scope of Bid

The Procuring Entity, *People's Television Network, Inc. (PTNI)*, invites Bids for the *Design and Build of People's Television Network, Inc. Marawi Regional Center – A Two (2) Storey Studio/Transmitter Building with Roof deck and 80-Feet Bipod Antenna Tower*, with Project Identification Number *ITB No. 2021-0002*.

The Procurement Project (referred to herein as "Project") is for the construction of Works, as described in Section VI (Specifications).

2. Funding Information

- 2.1. The GOP through the source of funding as indicated below for NDRRMC Budget 2018 in the amount of Thirty-Two Million Four Hundred Thousand Pesos (PhP32,400,000.00)
- 2.2. The source of funding is:
 - a. NGA, the General Appropriations Act or Special Appropriations.

3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manual and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or invitation to bid by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have inspected the site, determined the general characteristics of the contracted Works and the conditions for this Project, such as the location and the nature of the work; (b) climatic conditions; (c) transportation facilities; (c) nature and condition of the terrain, geological conditions at the site communication facilities, requirements, location and availability of construction aggregates and other materials, labor, water, electric power and access roads; and (d) other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

4. Corrupt, Fraudulent, Collusive, Coercive, and Obstructive Practices

The Procuring Entity, as well as the Bidders and Contractors, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex "I" of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

5. Eligible Bidders

- 5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.
- 5.2. The Bidder must have an experience of having completed a Single Largest Completed Contract (SLCC) that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC adjusted, if necessary, by the Bidder to current prices using the PSA's CPI, except under conditions provided for in Section 23.4.2.4 of the 2016 revised IRR of RA No. 9184.

A contract is considered to be "similar" to the contract to be bid if it has the major categories of work stated in the **BDS**.

- 5.3. For Foreign-funded Procurement, the Procuring Entity and the foreign government/foreign or international financing institution may agree on another track record requirement, as specified in the Bidding Document prepared for this purpose.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.2 of the 2016 IRR of RA No. 9184.

6. Origin of Associated Goods

There is no restriction on the origin of Goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN.

7. Subcontracts

7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than fifty percent (50%) of the Project.

The Procuring Entity has prescribed that:

a. Subcontracting is not allowed.

8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time through videoconferencing/webcasting as indicated in paragraph 6 of the **IB**.

9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the

IB, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

10. Documents Comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.
- 10.2. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. For Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.
- 10.3. A valid PCAB License is required, and in case of joint ventures, a valid special PCAB License, and registration for the type and cost of the contract for this Project. Any additional type of Contractor license or permit shall be indicated in the **BDS**.
- 10.4. A List of Contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen) assigned to the contract to be bid, with their complete qualification and experience data shall be provided. These key personnel must meet the required minimum years of experience set in the **BDS**.
- 10.5. A List of Contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

11. Documents Comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.
- 11.2. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.3. For Foreign-funded procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Alternative Bids

Bidders shall submit offers that comply with the requirements of the Bidding Documents, including the basic technical design as indicated in the drawings and specifications. Unless there is a value engineering clause in the **BDS**, alternative Bids shall not be accepted.

13. Bid Prices

All bid prices for the given scope of work in the Project as awarded shall be considered as fixed prices, and therefore not subject to price escalation during contract implementation, except under extraordinary circumstances as determined by the NEDA and approved by the GPPB pursuant to the revised Guidelines for Contract Price Escalation guidelines.

14. Bid and Payment Currencies

- 14.1. Bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.
- 14.2. Payment of the contract price shall be made in:
 - a. Philippine Pesos.

15. Bid Security

- 15.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.
- 15.2. The Bid and bid security shall be valid until [indicate date]. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

16. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.

The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission to the given website or any other electronic means, the Bidder shall submit an electronic

copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

17. Deadline for Submission of Bids

The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the **IB**.

18. Opening and Preliminary Examination of Bids

18.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

18.2. The preliminary examination of Bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all Bids rated "passed" using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, all Bids and combinations of Bids as indicated in the **BDS** shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid Security as required by **ITB** Clause 15 shall be submitted for each contract (lot) separately.
- 19.3. In all cases, the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184 must be sufficient for the total of the ABCs for all the lots participated in by the prospective Bidder.

20. Post Qualification

Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS), and other appropriate licenses and permits required by law and stated in the **BDS**.

21. Signing of the Contract

The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the **BDS**.

Section III. Bid Data Sheet

Bid Data Sheet

ITB Clause								
5.2	For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be:							
	DESIGN AND BUILD OF PEOPLE'S TELEVISION NETWORK, INC. MARAWI REGIONAL CENTER – A TWO (2) STOREY STUDIO/ TRANSMITTER BUILDING WITH ROOFDECK AND 80-FEET BIPOD ANTENNA TOWER							
7.1		ontracting is not a						
10.3	The r	equired PCAB lice	ense for this project is as follows:					
		AB License Categ e Range Medium						
10.4	The l	xey personnel must	meet the required minimum years of exp	perience set below:				
	1.	Detailed Design	Key Personnel					
		Required Professional	Minimum Qualification	Responsibility				
	1		Must be duly licensed Structural Engineer with at least 10 years experience in structural design and has undertaken projects with project cost of at least 50% of the ABC; with substantial knowledge in structural and earthquake design of building and broadcast tower structures.	Responsible for the conduct of structural design and evaluation of the structural elements of the building during the detailed engineering stage.				
	2	Design Architect	Must be duly licensed and an active member of Integrated and Accredited Professional Organization of Architects (IAPOA) with at least 10 years experience in the architectural design of commercial, academic or institutional facilities and corporate buildings, site planning and landscaping.	Responsible for the conduct of architectural designs and details of the project components and other aesthetic aspects during the detailed engineering stage.				
	3	Professional Electrical Engineer	Must be duly licensed with at least 10 years experience in building electrical design, lighting, power distribution, switches and panels and preferably knowledgeable in efficient lighting technologies and energy management.	 Responsible for the conduct of all electrical design and details during detailed engineering stage. 				

4.	Professional Mechanical Engineer	Must be duly licensed with at least 5 years experience in mechanical design and installations of HVAC and fire protection and suppression systems and preferably knowledgeable in emergent, alternative energy-efficient HVAC technologies.	 Responsible for the conduct of all mechanical design and details during detailed engineering stage
5.	Professional Electronics Engineer	Must be duly licensed with at least 5 years experience in building electronics design, as well as fire detection and alarm systems in buildings.	Responsible for the design and layout of data and communication facilities during the detailed engineering stage.
6.	Sanitary Engineer/ Registered Master Plumber	Must be duly licensed with at least 5 years experience in the design of building water supply and distribution systems, plumbing and sanitary systems and preferably knowledgeable in and emergent, alternative effluent collection and treatment systems.	 Responsible for the conduct of all sanitary design and details of the building during detailed engineering stage.
7.	Geotechnical Engineer	Must be duly licensed Civil Engineer with a post graduate degree in Geotechnical Engineering or PICE Specialization with at least 5 years experience in geotechnical evaluation.	Responsible for the conduct of all geotechnical investigation and analyses of soil investigation reports during detailed engineering stage.
8.	Cost/ Quantity/ Specifications Engineer	Must be duly licensed Civil Engineer with at least 5 years experience in the preparation of technical specifications and detailed analysis of all applicable unit prices.	 Responsible for the preparation of detailed cost estimation for items of work, materials specifications and updating of the detailed bill of quantities based on detailed engineering plans.

2. Construction Key Personnel

1.	Construction In-Charge	Must be a licensed Civil Engineer or Architect with at least 10 years professional experience with relevant experience in similar and comparable projects;	 Responsible for all aspects of the project implementation. 			
			 Responsible for construction management and supervision of phases of work. 			

2.	Supervising Architect (Architect In- Charge of Construction)	Must be duly licensed and an active member of Integrated and Accredited Professional Organization of Architects (IAPOA) with at least 10 years experience in similar and comparable projects and shall preferably be knowledgeable in the application of rapid construction technologies.	Responsible for the supervision of the architectural works during construction phase.
3.	Professional Electrical Engineer	Must be duly licensed with at least 5 years experience in building electrical design and installations, lighting, power distribution, switches and panels; preferably knowledgeable in efficient lighting technologies and energy management;	 Responsible for the supervision of all electrical works during construction.
4.	Professional Mechanical Engineer	Must be duly licensed with at least 5 years experience in mechanical design and installations of HVAC and fire protection systems and preferably knowledgeable in emergent, alternative energy-efficient HVAC technologies.	Responsible for the supervision of the mechanical works during construction.
5.	Professional Electronics Engineer	Must be duly licensed with at least 5 years experience in building electronics design and installation as well as fire detection and alarm systems in buildings.	Responsible for the supervision of all electronics work during construction.
6.	Sanitary Engineer/ Registered Master Plumber	Must be duly licensed with at least 10 years experience in the design of building water supply and distribution systems, plumbing and sanitary systems and preferably knowledgeable in and emergent, alternative effluent collection and treatment systems.	Responsible for the supervision of all plumbing and sanitary works during construction.
7.	Geodetic Engineer	Must be duly licensed Geodetic Engineer with at least 5 years experience in geodetic survey of building construction of similar nature.	 Responsible for all locations and surveys to ensure correct horizontal and vertical controls to be used as basis in the detailed engineering stage and actual stake-out; Responsible for the monitoring and supervision of the survey works during the construction phase.

	8.	Cost/ Quantity/ Specifications Engineer	Must be duly licensed Civil Engineer with at least 5 years experience in the preparation of technical specifications and detailed analysis of all applicable unit prices.	 Responsible for the qualification of the actual construction progress and related variation order; Responsible in quantity surveys and cost estimation for items of work for buildings and facilities of similar nature. 		
9. Materials Engineer			Must be duly licensed Civil Engineer with Level 1 or 2 DPWH Accreditation for Materials Engineer and at least 5 years experience in supervising materials investigations and quality control; must have a duly recognized experience in similar and comparable projects.	Responsible for organizing and supervising the sampling and testing of materials proposed for use in the project components, so as to ensure adequate quality control of the works being constructed.		
	10		Must have undergone the prescribed 40 hours of Construction Safety and Health Training (COSH), duly supported by a Certificate of Completion issued by any DOLE/BWC accredited entity with at least three (3) years of experience in construction projects.	Responsible to oversee full time the overall management of the Construction Safety and Health Program.		
10.5	The m	ninimum major eq	uipment requirements are the following	:		
	Equip		<u>Capacity</u> <u>Number of Units</u>			
		er Mixer ete Vibrator	3 2			
		ng Machine	2			
		r Tools	_			
	Electr	ic Grinder	3			
		ic Drill	3			
		ing Gun	3			
	Heat Other		3			
	Juici					
12	Alternative Bids is not allowed.					
15.1	The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts: a. The amount of not less than <i>two percent (2%) of ABC</i> , if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit;					
10.2	b.		not less than five percent (5%) of ABC	I if bid security is in Surety Bond.		
19.2	Partial bids are not allowed.					
20	List li	censes and permit	s relevant to the Project and the corresp	onding law requiring it.		
	None.					

Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, such as construction schedule and S-curve, manpower schedule, construction methods, equipment utilization schedule, construction safety and health program approved by the DOLE, and other acceptable tools of project scheduling.

The following documents shall be submitted by the winning bidder within **ten** (10) calendar days from the receipt of the Notice of Award:

- 1) Five(5) copies of the Duly signed Bar Chart/Construction Schedule, Cash Flow and S-curve
- 2) Five(5) copies of the Duly signed **PERT/CPM**
- 3) Five(5) copies of duly signed **List of Manpower with Manpower Deployment Schedule**
- 4) Five(5) copies of duly signed **List of Equipment with Equipment Utilization Schedule**
- 5) One(1) copy of duly signed **Construction Methodology** in narrative form
- 6) **Construction Safety and Health Program** approved by the Department of Labor and Employment
- 7) Contractor's All Risk Insurance Policy

Items 1 to 4 of the foregoing documents are subject to approval of the Procuring Entity or his duly authorized representative.

Section IV. General Conditions of Contract

1. Scope of Contract

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

2. Sectional Completion of Works

If sectional completion is specified in the **Special Conditions of Contract** (SCC), references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date shall apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).

3. Possession of Site

- 3.1 The Procuring Entity shall give possession of all or parts of the Site to the Contractor based on the schedule of delivery indicated in the SCC, which corresponds to the execution of the Works. If the Contractor 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 Contractor a Contract Time Extension and certify such sum as fair to cover the cost incurred, which sum shall be paid by Procuring Entity.
 - 3.2 If possession of a portion is not given by the above date, the Procuring Entity will be deemed to have delayed the start of the relevant activities. The resulting adjustments in contract time to address such delay may be addressed through contract extension provided under Annex "E" of the 2016 revised IRR of RA No. 9184.

4. The Contractor's Obligations

The Contractor shall employ the key personnel named in the Schedule of Key Personnel indicating their designation, in accordance with **ITB** Clause 10.3 and specified in the **BDS**, 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.

5. Performance Security

5.1. Within ten (10) calendar days from receipt of the Notice of Award from the Procuring Entity but in no case later than the signing of the contract by both

parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR.

5.2. The Contractor, by entering into the Contract with the Procuring Entity, acknowledges the right of the Procuring Entity to institute action pursuant to RA No. 3688 against any subcontractor be they an individual, firm, partnership, corporation, or association supplying the Contractor with labor, materials and/or equipment for the performance of this Contract.

6. Site Investigation Reports

The Contractor, in preparing the Bid, shall rely on any Site Investigation Reports referred to in the SCC supplemented by any information obtained by the Contractor.

7. Warranty

- 7.1. In case the Contractor fails to undertake the repair works under Section 62.2.2 of the 2016 revised IRR, 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.
- 7.2. The warranty against Structural Defects/Failures, except that occasioned-on force majeure, shall cover the period from the date of issuance of the Certificate of Final Acceptance by the Procuring Entity. Specific duration of the warranty is found in the **SCC**.

8. Liability of the Contractor

Subject to additional provisions, if any, set forth in the **SCC**, the Contractor's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Contractor is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

9. Termination for Other Causes

Contract termination shall be initiated in case it is determined *prima facie* by the Procuring Entity that the Contractor has engaged, before, or during the implementation of the contract, in unlawful deeds and behaviors relative to contract acquisition and implementation, such as, but not limited to corrupt, fraudulent, collusive, coercive, and obstructive practices as stated in **ITB** Clause 4.

10. Dayworks

Subject to the guidelines on Variation Order in Annex "E" of the 2016 revised IRR of RA No. 9184, and if applicable as indicated in the SCC, the Dayworks rates in the Contractor'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.

11. Program of Work

11.1. The Contractor shall submit to the Procuring Entity's Representative for approval the said Program of Work showing the general methods,

arrangements, order, and timing for all the activities in the Works. The submissions of the Program of Work are indicated in the SCC.

11.2. The Contractor 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 SCC. If the Contractor does not submit an updated Program of Work within this period, the Procuring Entity's Representative may withhold the amount stated in the SCC 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.

12. Instructions, Inspections and Audits

The Contractor shall permit the GOP or the Procuring Entity to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors of the GOP or the Procuring Entity, as may be required.

13. Advance Payment

The Procuring Entity shall, upon a written request of the Contractor which shall be submitted as a Contract document, make an advance payment to the Contractor in an amount not exceeding fifteen percent (15%) of the total contract price, to be made in lump sum, or at the most two installments according to a schedule specified in the **SCC**, subject to the requirements in Annex "E" of the 2016 revised IRR of RA No. 9184.

14. Progress Payments

The Contractor may submit a request for payment for Work accomplished. Such requests for payment shall be verified and certified by the Procuring Entity's Representative/Project Engineer. Except as otherwise stipulated in the SCC, materials and equipment delivered on the site but not completely put in place shall not be included for payment.

15. Operating and Maintenance Manuals

- 15.1. If required, the Contractor will provide "as built" Drawings and/or operating and maintenance manuals as specified in the **SCC**.
- 15.2. If the Contractor does not provide the Drawings and/or manuals by the dates stated above, or they do not receive the Procuring Entity's Representative's approval, the Procuring Entity's Representative may withhold the amount stated in the **SCC** from payments due to the Contractor.

Section V. Special Conditions of Contract

Special Conditions of Contract

GCC Clause			
2	No sectional completion of work.		
4.1	The Procuring Entity shall give possession of all parts of the Site to the		
	Contractor upon the issuance of <i>Notice to Proceed (NTP)</i> .		
6	The site investigation reports are:		
	 Soil Bearing Capacity Tests for a Two (2) Storey Commercial Building Boundary Relocation as per lot plan Terrain, Line and Grade Survey 		
7.2	In case of permanent structures, such as buildings of types 4 and 5 as classified under the National Building Code of the Philippines and other structures made of steel, iron, or concrete which comply with relevant structural codes (e.g., DPWH Standard Specifications), such as, but not limited to, steel/concrete bridges, flyovers, aircraft movement areas, ports, dams, tunnels, filtration and treatment plants, sewerage systems, power plants, transmission and communication towers, railway system, and other similar permanent structures: Fifteen (15) years.		
10	No dayworks are applicable to the contract.		
11.1	The Contractor shall submit the Program of Work to the Procurin Entity's Representative within <i>Ten</i> (10) calendar days of delivery the Notice of Award .		
11.2	The amount to be withheld for late submission of an updated Program of Work is <i>None</i> .		
13	The amount of the advance payment is		
	The Procuring Entity shall, upon a written request of the Contractor which shall be submitted as a Contract document, make an advance payment to the Contractor in an amount not exceeding fifteen percent (15%) of the total contract price, to be made in lump sum, or at the most two installments according to a schedule specified in the SCC, subject to the requirements in Annex "E" of the 2016 revised IRR of RA No. 9184.		
14	Materials and equipment delivered on the site but not completely put in place shall be included for payment.		
15.1	The date by which operating and maintenance manuals are required is a <i>month prior to project completion</i> .		
	The date by which "as built" drawings are required is a <i>month prior to project completion</i> .		
15.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required is <i>None</i> .		

Section VI. Specifications

SCOPE OF WORKS

(PERFORMANCE SPECIFICATIONS AND PARAMETERS)

Project Name: DESIGN AND BUILD OF PEOPLE'S TELEVISION NETWORK, INC. MARAWI REGIONAL CENTER – A TWO (2) STOREY STUDIO/TRANSMITTER BUILDING WITH ROOFDECK AND 80-FEET BIPOD ANTENNA TOWER

Location : Capitol Complex, Brgy. Buadi Sacayo, Marawi City, Lanao del Sur

Subject : SCOPE OF WORKS (SOW)

A. GENERAL INSTRUCTIONS

I. Bidder/Contractor's Eligibility Requirements

- 1. Legal/Government Permit and Clearances
 - 1.1 PhilGEPS Certificate of Registration Platinum Membership;
 - 1.2 DTI or SEC Registration Certificate
 - 1.3 Mayor's Permit
 - 1.4 BIR Tax Clearance
 - 1.5 PCAB License Category B Size Range Medium A for Buildings
- 2. Technical Components and Track Records
 - 2.1 The Bidder/Contractor shall exhibit that it has technical capability and experience in Design and Build projects, Broadcast/ Commercial Building with Roofdeck for at least ten (10) years.
 - 2.2 The Bidder/Contractor must have an experience of having completed a Single Largest Completed Contract (SLCC) that is similar to this project, equivalent to at least fifty percent (50%) of the Approved Budget for the Contract (ABC).

For this purpose, similar contracts shall refer to contracts which have the same major categories of work. Projects referred to as similar shall refer to the Design and Build of Two (2) Storey Broadcast/Commercial Building with Roofdeck.

The statement of the Bidder's SLCC shall be supported by the Notice of Award and/or Notice to Proceed, Project Owner's Certificate of Final Acceptance issued by the Owner other than the Contractor or the Constructors Performance Evaluation System (CPES) Final Rating, which must be at least satisfactory. In case of contracts with the private sector, an equivalent document shall be submitted.

- 2.3 Statement of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid.
- 2.4 In case of Joint Venture (JV), it must be a special PCAB License for JV Bidders.

- 2.5 If a Bidder/Contractor will participate in the bidding individually, Contractor's individual PCAB License must be submitted pursuant to Section 37 of RA 4566. If several Bidders/Contractors will participate in the bidding as Joint Venture (JV), a joint PCAB License must be submitted pursuant to Section 38 of RA 4566.
- 2.6 If applicable, the Bidder must submit the Joint Venture Agreement (JVA) with the disclosure of percentage of ownership of the parties.
- 2.7 The Bidder/Contractor must submit a computation of its Net Financial Contracting Capacity (NFCC), which must be at least equal to the ABC to be bid. Calculated as follows:

NFCC = [(Current assets minus Current liabilities) (15)] minus the value of all outstanding or uncompleted potion of the projects under ongoing contracts, including awarded contracts yet to be started coinciding with the contract for this project.

The values of the domestic bidder's current assets and current liabilities shall be based on the latest Audited Financial Statements (AFS) submitted to the BIR.

B. GENERAL SCOPE

I. BACKGROUND AND OBJECTIVE

People's Television Network, Inc. (PTNI) is proposing to build and establish a provincial station, a Two (2) – Storey Building with Roofdeck and 80-feet Bipod Antenna Tower which will be situated in Capitol Complex, Brgy. Buadi Sacayo, Marawi City, Lanao del Sur. It shall be structurally sound that can withstand a longest possible lifespan and architecturally/aesthetically well-designed.

The project implementation shall adopt the Design and Build Scheme guidelines under the Republic Act 9184 and its Revised Implementing Rules and Regulations.

II. PROJECT DESCRIPTION

The Project title is **Design and Build of a Two (2) Storey Studio/Transmitter Building with Roofdeck and 80Feet Bipod Antenna Tower**. It is a Two-storey building with roofdeck that will be a broadcast studio which will support the PTNI operations in Marawi City, Lanao del Sur.

III. PROJECT SITE

1. General

The proposed building will be constructed within Capitol Complex, Brgy. Buadi Sacayo, Marawi City, Lanao del Sur property with an approximate lot area of **206 sq.m.** The design and build contractor shall provide temporary access and protection for the structure.

2. Preliminaries

The design and build contractor shall conduct the necessary actual site investigations which will be used as their basis and reference for the detailed design, to wit;

- a. Existing Boundaries
- b. Terrain, Line and Grade Survey

- c. Location and Orientation of Utilities
- d. Soil and Geotechnical Investigations
- e. Existing Environmental Conditions

IV. PROJECT DEFINITION

1. General Requirement

The contractor shall design and build a two-storey broadcast studio and office building that is responsive to the needs of the end users, satisfies the requirements for the operations of the company, increase the employee's productivity and aesthetically elegant.

The contractor shall design the News studio, Production Control Room, PTNI integrated news room with Editing rooms, transmitter room as well as office spaces at ground floor and erection of 80-feet Bipod Antenna Tower at roof deck area.

206.00 sq.m.

2. Space Requirements

Ground Floor

2.1.

The proposed building shall have an approximate total floor area of **588 sq.m.** consisting the following minimum space requirements:

4.1.	Ground Floor		200.00 Sq.m.		
	1. News Room with 2-Editing Rooms		=	40.00	sq.m.
	2. Master Control Room		=	10.00	sq.m.
	3. Multi-purpose Room		=	11.00	sq.m.
	4. Electrical Room		=	10.00	sq.m.
	5. Power house/Genset Room		=	13.00	sq.m.
	6. M/F Comfort Room & Pantry		=	13.00	sq.m.
	7. Other Areas		=	109.00	sq.m.
	a. Lobby Area				
	b. Hallway				
	c. Stair Well				
	d. 2 Parking Slots				
2.2.	Second Floor		=	175.0	00 sq.m.
	1. News Studio		=	97.00	sq.m.
	2. Production Control Room		=	21.00	sq.m.
	3. M/F Make-up Room with Toilet		=	12.00	sq.m.
	4. M/F Comfort Room		=	5.00	sq.m.
	5. Other Areas		=	40.00	sq.m.
	a. Lobby Area				-
	b. Hallway				
	c. Stair Well				
2.3.	Mezzanine Floor		=	32.0	0 sq.m.
	1. Equipment Room		=	7.00	sq.m.
	2. Engineering/Maintenance Room		=	13.00	sq.m.
	3. Technical Staff Room		=	12.00	sq.m.
2.4.	Roofdeck		=	175.0	00 sq.m.
	1. Transmitter Room		=	28.00	sq.m.

2. Quarter's Room with Toilet = 13.00 sq.m. 3. Open Deck/TVRO Farm = 119.00 sq.m. 4. Stair Well = 15.00 sq.m.

2.5. Site Development

- 1. Site Development shall include the following requirements:
 - b. Perimeter fence with main access gate.
 - c. Perimeter fence shall be at least 2.0 meter high.
 - d. Construction of 2 Parking slots
 - e. Construction of Power house and Electrical Room.

3. Design Concept

3.1. Site Development

Site development shall include perimeter fence, entrance gate, perimeter lights, storm drainage system and shall include power house and two (2) slots parking space.

3.2. Architectural Design Concept

Architectural Exterior design shall be modern look and well-designed façade which includes concrete ledges and canopies. Interior design shall include floor and wall finishes, as well as ceiling finishes, LED Lightings, furniture and acoustic consideration. Interior space should be conducive for working and shall enhance worker's productivity.

The building shall have a tempered glass and aluminum composite panels (acp) façade design with the logo of PTNI.

3.3. Structural Design Concept

Structural design shall include foundation, columns and beams, roof framing, floor framing and slab, stairs and parapet walls. Likewise, designer shall adopt conservative and economical design without compromising the safety factor and structural integrity. Conventional structural methodology shall be applied with the integration of contemporary approach for the conceptualization of structural design.

3.4. Electrical Design Concept

Electrical design shall include lighting design, power requirements, back-up power requirements, and power house. The use of power saving fixture is recommended. Also, electrical design should consider provisions for future expansions.

3.5. Mechanical Design Concept

Mechanical design shall include fire protection and suppression system, pumps and motors, and air-conditioning system. The use of power saving equipment is recommended. Air-conditioning capacity should be considered and shall conform to the operations of the procuring unit.

3.6. Electronics Design Concept

Peoples Television Network, Inc. (PTNI) is a government owned broadcast network composing of Television broadcast operations that requires information and communications requirements. Electronics design concept shall conform to the operations of the procuring unit.

3.7. Plumbing and Sanitary Design Concept

Plumbing and sanitary design concept shall include water and sanitary line, storm drainage system, septic tank, rain water harvesting system and comfort room design. The use of low flow and water saving fixture is recommended. Provisions for future expansion shall be considered.

No plumbing and sanitary line/pipes shall cross above News Studio Room and Production Control room to avoid leakages that may cause damages on lighting equipment and consoles installed inside each room.

V. GENERAL CODE AND STANDARDS

The design, specifications, and methodology shall conform to, but shall not be limited to the following standards set by the:

- (i) National Building Code of the Philippines (NBCP), latest edition
- (ii) National Structural Code of the Philippines (NSCP), latest edition
- (iii) Fire Code of the Philippines (PD 1185)
- (iv) Philippine Electrical Code (RA 184)
- (v) Philippine Mechanical Code
- (vi) Revised National Plumbing Code of the Philippines (RA 1378)
- (vii) Philippine Electronics Code

Applicable National and Local Regulations and Ordinances

VI. DETAILED DESIGN WORKS

1. General Conditions

The contractor shall perform architectural design process based on the basic requirements provided by the procuring unit and gathered information based on the site survey and investigations.

The contractor has the responsibility in securing the construction permits such as building, excavation, fencing, occupancy, occupational construction safety and health and other permits necessary for the project.

The contractor shall comply with the local government and PTNI regulations with regard to the project implementation.

2. Detailed Design

The contractor shall prepare and undertake the detailed architectural and engineering design within the government cost range and established preliminary design requirements.

The contractor must adhere to the National Building Code of the Philippines in the design but not limited to the following:

- a. Architectural Design
- b. Floor Plan Layout
- c. Civil and Engineering Design
- d. Structural Design
- e. Electrical Design
- f. Sanitary and Plumbing Design
- g. Mechanical Design
- h. Fire Protection and Suppression Design
- i. I.T. and Computer Network Cabling/Electronics Design

j. Materials and Finishing Schedule

2.1. Architectural Design Works

The contractor shall have the responsibility to understand the operations and organizational structure of PTNI. Space allocations and arrangement shall conform to the operations and transaction flow of the PTNI.

The building façade design shall adopt modern design. Architectural design and finishes shall conform but not limited to the following:

- 1) Exterior wall and building envelop shall be a combination of concrete, tempered glass, aluminum composite panels for cladding with steel frames.
- 2) Office partitions shall be concrete hollow blocks (CHB), glass walls, and acoustic engineered walls. Interior and exterior walls shall be auto-clave aerated concrete (AAC) panels.
- 3) Floor covering materials shall be 60cm x 60cm semi-polished granite tiles for general office area, lobby and other common areas, 30cm x 60cm for walls and 30cm x 30cm non-skid ceramic floor tiles for comfort rooms, plain cement finish with epoxy paint for News Studio flooring.
- 4) Use anti-static high-pressure laminated vinyl tiles raised floor systems for Master Control Room, Production Control Room and Transmitter room.
- 5) Roof deck slab and concrete roof shall be plain concrete topping finish with torch applied membrane-type waterproofing system.
- 6) Use acoustic ceiling panels for general office space area. Use gypsum board ceiling panels with paint on hallways and fiber cement board for all comfort rooms.
- 7) Use high pressure phenolic panels with hard plastic accessories and hardware for toilet and urinals partition.
- 8) Wall Acoustics/sound proofing, house lighting, Acoustic door and Fire exit door should be considered inside News Studio room.
- 9) All furniture shall be modern and functional. Office furniture shall be design and installed based on the minimum requirements of the office space.

2.2. Structural Design Works

The contractor shall perform structural design investigation and analysis and other structural design study for foundation, columns, beams, slabs and other structural member of the project, in accordance with the National Structural Code of the Philippines and other prevailing codes.

The contractor shall prepare structural design report and structural plans based from the design investigations and analysis. The following are the preliminary data to be used for the structural design analysis:

- i. Preliminary Survey and Mapping
- ii. Soil Bearing Capacity
- iii. Utility Location
- iv. Preliminary Noise Level Consideration Factors.

The prospective bidder shall perform necessary preliminary survey, investigations and analysis for the initial structural considerations, such as Standard Penetration Test (SPT) and Analysis, Site Survey and Site Relocation Survey. These preliminary studies shall be the basis in the structural design for the project.

The prospective bidder has to investigate and analyze noise levels near the building (roads/neighborhood) in order to properly design insulation and acoustics for studio and production control room.

The prospective bidder shall include the structural design for the **80Feet Bipod Antenna Tower** with a total Antenna Load of **150kgs** and consider a **280 kph Wind load** (Mindanao Area) located at **roof deck area** of the building.

2.3. Mechanical Design Works

Mechanical design works shall include air-conditioning and ventilation system, fire protection and suppression system.

2.3.1. Air-Conditioning and Ventilating System

The air-conditioning system requirement for the project shall be Variable Refrigerant Flow (VRF) direct-expansion inverter type system. ACU units shall be ceiling concealed type (News Room, Technical Staff Room, Multi-purpose Room, Production Control Room, Lobbies & Hallways), wall mounted type fan coil units (Make-up Room). Split Type Floor Mounted Inverter type Aircon (Transmitter Room). Air-Cooled Condensing Unit (ACCU) shall be located in roofdeck area for maintenance.

Comfort rooms, electrical room, mechanical and equipment rooms shall be provided with exhaust fan ventilating system. Air ventilation shaft shall be galvanized iron and installed above ceiling lines.

ACU shall be air-cooled, split type, multi-system air conditioner consisting of one outdoor unit with multiple indoor units (News Studio Room). Indoor units can be controlled systematically and individually. Refrigerant capacity should be considered. All units are subject for testing and commissioning.

The Contractor shall provide a back-up Floor Mounted Aircon Unit on Production Control Room.

Fan Coil Units (FCU) shall be installed on Studio walls to avoid moisture drips that may cause damage on Broadcast equipment.

2.3.2. Fire Protection and Suppression System

Fire protection design shall include fire alarm system and smoke detection system. Fire suppression design includes automatic fire sprinkler system, fire hose cabinets, portable fire extinguisher, fire hydrant and fire department connection system. Fire protection and suppression system must be addressable type.

Fire sprinkler heads shall be installed below Lighting Equipment in News Studio room.

Fire protection and suppression system shall conform to the following standards:

- a. ASHRAE Handbook
- b. NFPA 101 Life Safety Code
- c. NFPA 10 Portable Fire Extinguisher
- d. NFPA 14 Standard for the Installation of Standpipe and Hose System

- e. Fire Code of the Philippines
- f. Philippine Electronics Code

Design criteria shall conform but not limited to the following:

- a. Portable ABC classification 10 lbs. HFC 236FA "FE 36" fire extinguishers shall be strategically located and not more than 75ft. in distance.
- b. Generator, electrical, mechanical and equipment rooms shall be provided with portable fire extinguisher. Electrical room to be provided with "FE 36" portable fire extinguisher.
- c. Fire hose cabinet shall be made of sheet steel and consist of hose valve, discharge nozzle and hose for easy handling. The label of "HYDRANT" shall be affixed to the front of cabinets. Hose lengths shall be 1-1/2" diameter x 100 ft. (40mm diameter x 30m).
- d. Fire pump shall start automatically.
- e. The capacity of fire hose valve in dry stand pipe system shall be more than 100 GPM (379 L/min.) and the discharge pressure shall not less than 65 psi.
- f. Smoke detectors and alarm bells shall conform to the minimum requirements of the code. Smoke detection fixtures shall be IP based system with control panels and monitoring system.

Pump and motor system shall be incorporated in the design. It should accommodate the minimum requirements of the operation. All pumps, jockey and fire pumps should be UL listed and FM approved. Fire protection and suppression system is subject for testing and commissioning.

2.4. Sanitary and Plumbing Design Works

Sanitary and plumbing design shall conform to the following codes and standards:

- a. Revised National Plumbing Code of the Philippines
- b. Sanitation Code of the Philippines
- c. ASHRAE Handbook

The contractor shall design complete plumbing system including potable water line, sewer line, sanitary system, storm drain system including fixtures, piping system, fittings and appurtenances, equipment and machinery, facilities and other facility that is necessary for the project. The use of low-flow efficient fixtures and equipment is recommended. Technical drawings and specifications shall be clearly and properly defined.

Sanitary and plumbing design shall conform but not limited to the following:

- 1) Sanitary waste shall be drained by gravity to the sewer line system.
- 2) All drainage and sewer line shall be concealed, unexposed and covered type system.
- 3) Drainage plan shall be properly presented including flow, access hole distance, pipe and fitting sizes, invert elevations and other necessary information for the construction.
- 4) Catch basin and culvert design shall be in accordance to the design requirements.
- 5) Waste water from kitchen sink shall be provided with grease trap under the sink
- 6) Septic tank shall be 2-chamber system.

- 7) Storm drainage design shall be adequate.
- 8) All fixtures shall be individually vented.
- 9) Minimum slope for pipes shall be not lesser done 1 ½ %.
- 10) All roof drain shall be provided with strainer (dome type).
- 11) Storm drainage system for floors above grade level shall be drained by gravity to the drainage line at ground level.
- 12) Provide hose bib for site green areas, pump rooms, parking areas, and other utility rooms which requires water supply.
- 13) Provide Rain Water Collector Tank.
- 14) Booster pump and pressure tank, if any, shall be provided to meet the required minimum pressure.
- 15) Operating pressure of fixtures shall be considered.
- 16) Occupant water demand as per code requirement.
- 17) Provide isolation gate valve per floor.
- 18) Group fixtures shall be provided with isolation gate valve.
- 19) The design shall be on the basis of the source and volume of water supply, water consumption, piping network, and conveyance in accordance with the applicable laws, rules and regulations governing health, safety and sanitation.
- 20) Water storage tank shall be designed to accommodate fire and domestic uses where the number and size shall be supported with design computations.
- 21) Application, facilitation and Installation of permanent water supply connection from Local Service provider shall be included in the scope of work of the contractor.

Material specifications guidelines are the following:

- 1) Sewer and Vent System Pipes, vents, branch vents, waste lines and fittings shall be series 1000 Polyvinyl Chloride (PVC), locally available.
- 2) Storm Drainage System:
 - a. Roof drain shall be dome-type brass strainer.
 - b. Floor drain shall be square type stainless.
 - c. Downspouts and collectors shall be PVC including fittings.
- 3) Water Distribution System:
 - a. Potable and non-potable water lines and fittings shall be Polypropylene Pipes (PPR) PN-20 with Fusion Joint Connections DIN 16968/DIN 16969.
 - b. Fire water line shall be Black Iron (B.I.) pipe schedule 40.
- 4) Fixtures:
 - a. Water closet shall be flush valve type, siphon jet and low flow type fixtures with bidet.
 - b. Lavatory shall be under counter type.
 - c. Kitchen sink and utility sink shall be stainless and anti-bacterial type.

2.5. Electrical Design Works

The electrical design shall conform to the minimum requirements of the Philippine Electrical Code and Fire Code of the Philippines. The contractor shall design lighting and power systems including but not limited to the following:

- 1) General Lighting
- 2) Convenience Outlet
- 3) Grounding System

- a. Building Grounding
- b. Equipment/System Grounding
- c. Tower Grounding
- 4) Lightning Arrester
- 5) Prime Power Generator Set
- 6) Circuits and Breakers
- 7) Power Supply System (Permanent Electricity Facilities and Connection from Local Service Provider)
- 8) Back-up Power System
- 9) Other facilities and equipment that are necessary for the project

The electrical design shall include supply and installation of 10 kVA Uninterrupted Power Supply (UPS) for Production Control Room, Master Control Room, Editing rooms and News Studio including testing and commissioning.

The use of energy efficient and energy saving lights are mandatory. Power outlets are strategically located for easy access and convenience. Electrical load design should consider future expansion of the operation.

Generator Set should be a full silent type and won't disturb the studio operation during the live telecast. If necessary, a Noise blocker and/or additional silencer must be provided by the winning bidder at their own cost.

The winning bidder shall also provide Automatic Transfer Switch (ATS) as part of Generator Set.

2.6. Electronics Design Works

Electronics design for this project shall conform to the minimum requirements of Philippine Electronics Code and PTNI Marawi Regional Center for its operations and performance. The design shall include TV broadcast operations, IT communication system, LAN system, provisions on CCTV system and internal IT operations. Basic electronics requirements shall be incorporated to the design.

Electronics design shall include supply and installation of perforated cable trays.

Internet connection from Internet Service Provider shall be included in the scope works of the contractor.

2.7. Site Development Design Works

Site development design shall include perimeter fence, perimeter lighting, parking, storm drainage, manholes, main access gates, utilities and other facilities necessary for the operation of PTNI.

Power house shall be in accordance with the standards set by the local power utility. Water supply facilities shall meet the requirements set by the local water utility provider.

Site development shall include the design and construction of **Power house/ Genset Room & Electrical Room**.

2.8. Permits

The contractor has the responsibility to process, apply and secure necessary construction and operation permits as required by the authorities for the preparation, implementation, completion and occupation of the project.

Permits to be secured are the following:

- 1) Building Permit
- 2) Excavation Permit
- 3) Fencing Permit
- 4) Occupancy Permit
- 5) DENR Certificate
- 6) All other Necessary Permits

VII. CONSTRUCTION WORKS

The contractor shall perform the construction works based on the approved plans, materials specifications and contract documents. Construction works shall comply with the terms and conditions set forth governing quality, characteristics and properties of materials, methodology and testing.

The contractor shall perform the construction activities, but not limited to the following:

- 1. Mobilization / Demobilization
- 2. Site Clearing
- 3. Construction of Temporary Facilities
- 4. Excavation and Backfilling
- 5. Foundation Works
- 6. Structural Works
- 7. Architectural Works
- 8. Moisture and Thermal Protection
- 9. Electrical Works
- 10. Mechanical Works

- 11. Sanitary and Plumbing Works
- 12. Fire Protection and Suppression Works
- 13. Electronics Works
- 14. Interior Finishes
- 15. Furniture/Furnishing
- 16. Site Development
- 17. Other works stipulated in the construction plans and contract documents

All materials, equipment and finishes are subject for evaluation and approval prior to installation.

VIII. POST CONSTRUCTION WORKS

Post construction works includes testing and commissioning of the following:

- 1) Electrical System including Prime Power Generator Set and UPS
- 2) Grounding System (Building, System/Equipment and Tower)
- 3) Pumps and Motors
- 4) Fire Protection System
- 5) Air-Conditioning System
- 6) Plumbing/Sanitary System
- 7) Electronics System
- 8) Others required for testing and commissioning

The contractor shall submit testing and commissioning program and schedule. Likewise, the contractor shall submit the operations and maintenance manuals of all the equipment and machineries installed, incorporating the technical literature as designed and as actually installed, together with brochures and warranty certificates.

Waterline pipes shall be leak tested. Disinfection shall follow after passing the hydrostatic and pressure leak test in accordance with the standards of the Philippine National Standard for Drinking Water (PNSDW).

IX. <u>MINUMUM REQUIREMENTS FOR CONSTRUCTION OCCUPATIONAL SAFETY</u> AND HEALTH (COSH) PROGRAM

The contractor shall have the responsibility to observe and implement the minimum requirements for COSH set by the Department of Labor and Employment (DOLE), but not limited to the following:

a. Construction Safety and Health Committee

(a.1) Composition:

- (i) Construction-in-Charge or his representative as chairperson ex-officio
- (ii) General Construction Safety and Health Officer
- (iii) Construction Safety and Health Officers
- (iv) Safety Representative/Officer
- (v) Doctors, nurses and other health personnel pursuant to the requirements stated in Rule 1042 of the Occupational Safety and Health Services (OSHS)
- (vi) Workers' Representative

(a.2) Duties and Responsibilities:

- (i) The Construction-in-Charge or his representative shall act as the Chairperson of the committee.
- (ii) The committee shall conduct safety meetings at least once a month.
- (iii) The persons constituting the Safety and Health Committee shall, as far as practicable, be at the construction site whenever construction work is being undertaken.
- (iv) The committee shall continually plan and develop accident prevention programs.
- (v) The committee shall review reports of inspection, accident investigation and monitor implementation of the safety program.
- (vi) The committee shall provide necessary assistance to government authorities authorized to conduct inspection in the proper conduct of their activities.
- (vii) The committee shall initiate and supervise safety trainings for its employees.
- (viii) The committee shall conduct safety inspection at least once a month, and shall conduct investigation of work accidents and shall submit a regular report to DOLE.
- (ix) The committee shall initiate and supervise the conduct of daily brief safety meetings or toolbox meetings.
- (x) The committee shall prepare and submit to DOLE, reports on said committee meetings.
- (xi) The committee shall develop a disaster contingency plan and organize such emergency service units as may be necessary to handle disaster situations.

1. General Safety within Construction Premises

(b.1) The provision for personal protective equipment, danger signs, barricades, and safety instructions for workers, employees, public, and visitors, such as, housekeeping, walkway surfaces, means of access, i.e. stairs, ramps, floor openings, elevated walkways, runways, platforms and light.

(b.2) Personal Protective Equipment

(i) The Contractor shall provide adequate and approved type of protective equipment (hard hats, safety glasses with side-shields, rubber boots). Workers within the construction project site shall be required to wear the necessary Personal Protective Equipment (PPE) at all times.

- (ii) Construction workers who are working from unguarded surfaced six (6) meters or more above grade, temporary or permanent floor platform, scaffold or where they are exposed to the possibility of falls hazardous to life or limb, must be provided with safety harnesses and life lines.
- (iii) Specialty construction workers must be provided with special equipment, such as specialized goggles or respirators for welders and painters or paint applicators, and workers who worked in confined and enclosed spaces.
- (iv) All other persons who are either authorized or allowed to be at the construction site shall wear appropriate PPE.

(b.3) Safety Personnel

- (i) The Contractor shall provide for a full-time officer, who shall be assigned as the general construction safety and health officer to oversee full time the overall management of the Construction Safety and Health Program.
- (ii) The general construction safety and health officer shall frequently monitor and inspect any health and safety aspect of the construction work being undertaken. He shall also assist government inspectors in the conduct of safety and health inspection at any time whenever work is being performed or during the conduct of accident investigation.

(b.4) Emergency Occupational Health Personnel and Facilities

- (i) The Contractor shall provide competent emergency health officer within the worksite duly complemented by adequate medical supplies, equipment and facilities. The services of a full-time registered nurse shall be required when the total number of workers exceeds 50 but not more than 200.
- (ii) Where the Contractor provides only a treatment room, he shall provide for his workers in case of emergency, access to the nearest medical clinic or to a medical clinic located within 5-kilometer radius from the workplace and can be reached in 25 minutes of travel. Such access shall include the necessary transportation facilities. In such situation, there shall be a written contract with the medical clinic to attend to such workplace emergencies.
- (iii) The engagement of an Emergency Health Provider for the construction project site shall be considered as having complied with the requirement of accessibility to the nearest hospital facilities.
- (iv) The Contractor shall always have in the construction site the required minimum inventory of medicines, supplies and equipment.

(b.5) Construction Safety Signages and Barricades

- (i) Construction Safety Signages shall be provided as a precaution and advisory to workers and the general public of the hazards existing in the worksite.
- (ii) Signage Procedure the signages shall be:
 - 1. Posted in prominent positions and at strategic locations.
 - 2. As far as practicable, be in the language understandable to most of the workers employed in the site.
 - 3. For non-raised floor areas, the attached yellow CAUTION sign shall be used when using yellow CAUTION tape.
 - 4. For non-raised floor areas, the attached red DANGER sign shall be used when using the red DANGER tape.
 - 5. Placed in designated areas at 1.2 meters from ground level, if there is no other more practicable height for placement.
 - 6. Regularly inspected and maintained in good condition to achieve its purpose.

- 7. Signages that are damaged, illegible, those no longer apply as to purpose, site or language, shall be removed or be replaced by the safety officer when needed.
- 8. Removed after the hazard is completely eliminated. If upon work completion the hazard is still present, the signage shall remain in place.
- 9. Designed and constructed following the Overall Dimensions of Safety Signs Formula as required by the Occupational Safety and Health Services (OSHS).
- 10. Specific with the type of hazard and should indicate the name of the contaminant/substance involved (for chemical hazards), and the type of PPE or respiratory equipment to be worn.

(iii) Posting of Signages shall include, but not limited to the following places:

- 1. Areas where there are risks of falling objects.
- 2. Areas where there are risks of falling, slipping, tripping among workers and the public.
- 3. Prior to entry in project sites, locations and its perimeter.
- 4. Where there is mandatory requirement on the usage of PPEs.
- 5. Areas where explosives and flammable substances are used or stored.
- 6. Approaches to working areas where danger from toxic or irritant airborne contaminants/substances may exist.
- 7. All places where contact with or proximity to electrical facility/equipment can cause danger.
- 8. All places where workers may come in contact with dangerous parts of machinery or equipment.
- 9. Locations of fire alarms and fire-fighting equipment.
- 10. Locations for instructions on the proper usage of specific construction equipment, tools.

(iv) Barricading Procedures – the following shall apply:

- 1. The contractor shall provide all necessary barricades, safety tapes, safety cones or safety lines as required in isolating or protecting an unsafe work area from other workers, pedestrians or vehicular traffic.
- 2. Barricades shall completely enclose the hazardous area and effectively limit unintentional or casual entry.
- 3. Barricades shall be three (3) feet vertical height from the ground, when no other more practical height specification is available.
- 4. Barricades shall be maintained in good condition to achieve its purpose.
- 5. Barricades that are damaged, faded or that no longer apply as to purpose, site or meaning, shall be removed or shall be replaced by the safety officer.
- 6. Barricade tape shall not be used on the floor as this presents a slipping hazard of its own.
- 7. In addition to using the proper warning tape, the contractor shall use the appropriate safety signage when barricading an area.
- 8. All barricades shall be removed after the hazard is completely eliminated.
- 9. Upon work completion, if the hazard is still present, the barricade shall remain in place.
- (v) Installation of barricades shall include, but not limited to the following worksites conditions:
 - 1. hazardous areas
 - 2. trip hazard
 - 3. robotic movement
 - 4. energized electrical works
 - 5. overhead suspended load test
 - 6. critical high-pressure test

- 7. chemical introduction
- 8. fall exposure
- 9. emergency response zone
- 10. unsafe condition zone
- 11. danger zone
- 12. confined and enclosed space

(b.6) Safety on Construction Heavy Equipment

In relation to heavy equipment operation in all construction sites, the following are required in the different phases of the project.

(i) Pre-Construction

The Contractor must ensure that appropriate certification is obtained from DOLE duly accredited organizations for the following:

- 1. All heavy equipment operators assigned at the project site must be tested and certified in accordance with a standard test prescribed by Technical Education and Skills Development Authority (TESDA) in coordination with its accredited organizations.
- 2. All heavy equipment must be tested and certified in accordance with the standards prepared by DOLE or its recognized organizations prior to commissioning of said equipment.

(ii) During Construction to Post Construction

The Contractor must ensure that the following conditions are met or complied with:

- 1. Load restriction of trailers carrying such heavy equipment, the height and width clearances as imposed by the DPWH shall be observed.
- 2. Only duly certified operators are allowed to operate their designated heavy equipment and must wear personal protective equipment.

(b.7) Safety and Health Information

- (i) Workers shall be adequately and suitably:
 - 1. Informed of potential safety and health hazards to which they may be exposed at their workplace.
 - **2.** Instructed and trained on the measures available for the prevention, control and protection against those hazards.
- (ii) Every worker shall receive instruction and training regarding general safety and health common to construction sites which shall include, but not limited to the following:
 - 1. The basic rights and duties of the workers at the construction site.
 - 2. The means of access and egress, both during normal work and in emergency situations.
 - 3. The measures for good housekeeping.
 - 4. The location and proper use of welfare and first-aid facilities.
 - 5. The proper care and use of the items or personal protective equipment and protective clothing provided the workers.
 - 6. The general measures for personal hygiene and health protection.
 - 7. The fire precautions to be taken.
 - 8. The action to be taken in case of any emergency.
 - 9. The requirements of relevant health and safety rules and regulations.
- (iii) The instruction, training and information materials provided shall be given in a language or dialect understood by the worker.
 - 1. Written, oral, visual and participative approaches shall be used to ensure that the worker has understood and assimilated the information.

- 2. Each supervisor or any person e.g. Foreman, lead man, and other similar personnel shall conduct daily tool box or similar meetings prior to the start of the operations for the day to discuss with the workers and to anticipate safety and health problems related.
- 3. No person shall be deployed in a construction site unless he has undergone a safety and health awareness seminar conducted by safety professionals or accredited organizations or other institutions recognized by DOLE.

(b.8) Construction Safety and Health Reports

- (i) The Construction Safety and Health Report shall include:
 - 1. Monthly summary of all safety and health committee meetings
 - 2. Summary of all accident investigations /reports
 - 3. Corrective/Preventive measures/action for each hazard
 - 4. Periodic hazards assessment with corresponding remedial measures for new hazards
 - 5. Safety promotions and trainings conducted/attended

(ii) Submission of Reports:

- 1. The Contractor shall be required to submit a monthly construction safety and health report to the Bureau of Working Conditions (BWC) copy furnished the DOLE Regional Office concerned.
- 2. In case of any dangerous occurrence or major accident resulting in death or permanent total disability, the concerned Contractor shall notify the appropriate DOLE Regional Office within twenty-four (24) hours from occurrence.
- 3. After the conduct of investigation by the concerned construction safety and health officer, the Contractor shall report all disabling injuries to the DOLE Regional Office on or before the 20th of the month following the date of occurrence of accident using the prescribed forms of the DOLE/BWC.

(b.9) Workers' Welfare Facilities

- (i) Adequate supply of safe drinking water:
 - 1. If the water is used in common drinking areas, it shall be stored in closed containers from which the water is dispensed through taps or cocks. Such containers shall be cleaned and disinfected at regular intervals but not exceeding fifteen (15) days.
 - 2. Notices shall be posted conspicuously in locations where there is water supply that is not for drinking purposes.
- (ii) Adequate sanitary and washing facilities
 - 1. Adequate facilities for changing, storing and drying of work clothes.
 - 2. Adequate accommodation for taking meals and shelter.
 - 3. Separate sanitary, washing and sleeping facilities for men and women workers.

(iii) Violations and Penalties

1. Pursuant to the provisions of D.O. 13 and as circumstances may warrant, the DOLE shall refer to the Philippine Contractors Accreditation Board (PCAB) its findings, after due process, on any act or omission committed by construction contractors in violation of this rule, labor standards, safety rules and regulations and other pertinent policies. Any such violation committed by construction contractors, whether general contractors or sub-contractors, shall constitute as prima facie case of a construction malperformance of grave consequence due to negligence, incompetence or malpractice contemplated under RA 4566 (Constructors' Licensing Law), as amended, and its Implementing Rules and Regulations.

- 2. In cases of imminent danger situations, the DOLE Regional Director shall issue a stoppage order pursuant to the provisions of Rule 1012.02 of the Occupational Safety and Health Services (OSHS) and other pertinent issuances for stoppage of operation or for other appropriate action to abate danger.
- 3. Pending the issuance of the order, the Contractor shall take appropriate measures to protect his workers.
- 4. The stoppage order shall remain in effect until the danger is removed or corrected permanently.
- 5. Non-compliance with the order shall be penalized under existing provisions of labor laws. All processes and/or procedures in the conduct of General Labor Standard's inspection including General Occupational Safety and Health/Technical Safety Inspection shall be governed by the provisions of Department Order No. 57-04 and its corresponding Manuals of Instructions

DESIGN AND CONSTRUCTION SCHEDULE *X*.

The project shall be implemented within the duration specified herein:

Detailed Design Phase - 30 calendar days b. Construction Phase - 180 calendar days c. Post Construction Phase - 30 calendar days - 240 calendar days

Total Project Duration

The contractor shall submit final detailed design plans, materials specifications and finishes, and bill of quantities fifteen (15) days upon receipt of Notice to Proceed for final approval by the Design and Build Committee or Technical Working Group.

Upon the approval of the final detailed design plans, the contractor shall secure all the necessary permits prior for construction.

XI. MINIMUM REQUIREMENTS FOR DESIGN AND CONSTRUCTION PERSONNEL

1. Detailed Design Key Personnel

	Required	Minimum Qualification	Responsibility
	Professional	·	-
1.	Structural	Must be duly licensed Structural	 Responsible for the conduct of
	Engineer	Engineer with at least 10 years	structural design and
		experience in structural design and	evaluation of the structural
		has undertaken projects with project	elements of the building
		cost of at least 50% of the ABC; with	during the detailed
		substantial knowledge in structural	engineering stage.
		and earthquake design of building	
		and broadcast tower structures.	
2.	Design Architect	Must be duly licensed and an active	 Responsible for the conduct of
		member of Integrated and Accredited	architectural designs and
		Professional Organization of	details of the project
		Architects (IAPOA) with at least 10	components and other
		years experience in the architectural	aesthetic aspects during the
		design of commercial, academic or	detailed engineering stage.
		institutional facilities and corporate	
		buildings, site planning and	
		landscaping.	

3.	Professional Electrical Engineer	Must be duly licensed with at least 10 years experience in building electrical design, lighting, power distribution, switches and panels and preferably knowledgeable in efficient lighting technologies and energy management.	 Responsible for the conduct of all electrical design and details during detailed engineering stage.
4.	Professional Mechanical Engineer	Must be duly licensed with at least 5 years experience in mechanical design and installations of HVAC and fire protection and suppression systems and preferably knowledgeable in emergent, alternative energy-efficient HVAC technologies.	 Responsible for the conduct of all mechanical design and details during detailed engineering stage
5.	Professional Electronics Engineer	Must be duly licensed with at least 5 years' experience in building electronics design, as well as fire detection and alarm systems in buildings.	 Responsible for the design and layout of data and communication facilities during the detailed engineering stage.
6.	Sanitary Engineer/	Must be duly licensed with at least 5 years' experience in the design of building water supply and	 Responsible for the conduct of all sanitary design and details of the building during detailed
	Registered Master Plumber	distribution systems, plumbing and sanitary systems and preferably knowledgeable in and emergent, alternative effluent collection and treatment systems.	engineering stage.
7.	•	distribution systems, plumbing and sanitary systems and preferably knowledgeable in and emergent, alternative effluent collection and	

3. Construction Key Personnel

1.	Construction In-	Must be a licensed Civil Engineer	or	 Responsible for all aspects
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	- CI	A 11,	C.1
2.	Charge	Architect with at least 10 years professional experience with relevant experience in similar and comparable projects; Must be duly licensed and an active	of the project implementation. Responsible for construction management and supervision of phases of work. Responsible for the
	Architect (Architect In- Charge of Construction)	member of Integrated and Accredited Professional Organization of Architects (IAPOA) with at least 10 years' experience in similar and comparable projects and shall preferably be knowledgeable in the application of rapid construction technologies.	supervision of the architectural works during construction phase.
3.	Professional Electrical Engineer	Must be duly licensed with at least 5 years' experience in building electrical design and installations, lighting, power distribution, switches and panels; preferably knowledgeable in efficient lighting technologies and energy management;	 Responsible for the supervision of all electrical works during construction.
4.	Professional Mechanical Engineer	Must be duly licensed with at least 5 years' experience in mechanical design and installations of HVAC and fire protection systems and preferably knowledgeable in emergent, alternative energy-efficient HVAC technologies.	 Responsible for the supervision of the mechanical works during construction.
5.	Professional Electronics Engineer	Must be duly licensed with at least 5 years' experience in building electronics design and installation as well as fire detection and alarm systems in buildings.	 Responsible for the supervision of all electronics work during construction.
6.	Sanitary Engineer/ Registered Master Plumber	Must be duly licensed with at least 10 years' experience in the design of building water supply and distribution systems, plumbing and sanitary systems and preferably knowledgeable in and emergent, alternative effluent collection and treatment systems.	 Responsible for the supervision of all plumbing and sanitary works during construction.
7.	Geodetic Engineer	Must be duly licensed Geodetic Engineer with at least 5 years' experience in geodetic survey of building construction of similar nature.	 Responsible for all locations and surveys to ensure correct horizontal and vertical controls to be used as basis in the detailed engineering stage and actual stake-out; Responsible for the monitoring and supervision of the survey

			works during the construction phase.
8.	Cost/ Quantity/ Specifications Engineer	Must be duly licensed Civil Engineer with at least 5 years' experience in the preparation of technical specifications and detailed analysis of all applicable unit prices.	 Responsible for the qualification of the actual construction progress and related variation order; Responsible in quantity surveys and cost estimation for items of work for buildings and facilities of similar nature.
9.	Materials Engineer	Must be duly licensed Civil Engineer with Level 1 or 2 DPWH Accreditation for Materials Engineer and at least 5 years' experience in supervising materials investigations and quality control; must have a duly recognized experience in similar and comparable projects.	Responsible for organizing and supervising the sampling and testing of materials proposed for use in the project components, so as to ensure adequate quality control of the works being constructed.
10.	Safety Officer	Must have undergone the prescribed 40 hours of Construction Safety and Health Training (COSH), duly supported by a Certificate of Completion issued by any DOLE/BWC accredited entity with at least three (3) years of experience in construction projects.	 Responsible to oversee full time the overall management of the Construction Safety and Health Program.

XII. SUBMITTALS AND DELIVERABLES

The prospective bidder / contractor shall submit **Detailed Architectural Concept, Detailed Design and Construction Plans** and **Detailed Report** during the Opening of Bids. Failure to comply of this section shall be a ground for disqualification.

All submittals are subject for review and approval of the PTNI-TWG. Shop drawings are required to submit if necessary, for the construction. All shop drawings and supplemental plans are subject for review and approval.

1. Detailed Architectural Concept

The Contractor shall submit the Detailed Architectural Concept, but not limited to the following the minimum requirements:

- 1. Site Development Plans
- 2. Exterior Perspectives
- 3. Floor Plans with Furniture Layout
- 4. Building Elevations (on all 4 sides)
- 5. Building Sections (minimum of 2 sections)
- 6. Schedule of Finishes, Doors and Windows
- 7. Architectural Interior Plans (Detailed Floor Plan, Reflected Ceiling Plan and Interior Elevations) for the Main Lobby, Hallways, and all other rooms.

2. Detailed Design and Construction Plans

The contractor shall submit the detailed design upon the approval of detailed architectural concept, but not limited to the following minimum requirements:

2.1 ARCHITECTURAL PLANS

- 1) Site Development Plan
- 2) Floor Plans with Furniture Layout
- 3) Elevations of All Sides
- 4) Building Sections
- 5) Reflected Ceiling Plans
- 6) Schedule of Doors and Window
- 7) Schedule of Interior Finishes

- 8) Schedule of Exterior Finishes
- 9) Schedule of Floor Finishes
- 10) Schedule of Walls Finishes
- 11) Schedule of Ceiling Finishes
- 12) Stair Details
- 13) Roof Slab Plan
- 14) Canopy Details
- 15) Other Architectural Miscellaneous Details

2.2 STRUCTURAL AND CIVIL PLANS

- 1) Structural General Notes and Specifications
- 2) Foundation Plan and Details
- 3) Slab on Grade plans and Details
- 4) Floor Framing Plans and Details
- 5) Roof Deck Framing Plans
- 6) Roof Framing Plans and Details
- 7) Schedule of Column Footings, Columns, Slab, Beams and Girder Details
- 8) Schedule of Reinforcement
- 9) Bi-pod Antenna Tower Structural Plan and Details
- 10) Other Structural Details

2.3 ELECTRICAL PLANS

- 1) Electrical General Notes and Specifications
- 2) Lighting Layout Plans
- 3) Power and Convenience Outlet Layout Plans
- 4) Grounding System Layout Plans
- 5) Schedule of Loads
- 6) Single Line Diagram
- 7) Power House Plans
- 8) Service Entrance Plans
- 9) Air-Condition System Power Layout Plans
- 10) Equipment and Machineries Power Layout Plans
- 11) Other Electrical Miscellaneous Details

2.4 MECHANICAL PLANS

- 1) Mechanical General Notes and Specifications
- 2) Pumps and Motors Layout Plans
- 3) Pump and Motor Details
- 4) Air-Condition System Layout Plans
 - a. Studio, Production Control Rooms
 - b. Offices
 - c. Transmitter Room
- 5) Air-Condition System Details
 - a. Studio, Production Control Rooms

- b. Offices
- c. Transmitter Room
- 6) Fire Suppression System Layout Plans
- 7) Fire Suppression System Details
- 8) Other Mechanical Miscellaneous Details

2.5 SANITARY AND PLUMBING PLANS

- 1) Sanitary and Plumbing General Notes and Specifications
- 2) Water Line Layout Plans
- 3) Sanitary and Plumbing Layout Plans
- 4) Plumbing System Isometric Diagram
- 5) Water Storage Tank/Rain Water Collector Tank Layout and Detail Plans
- 6) Toilet and Comfort Room Fixture Layout Plans
- 7) Other Sanitary and Plumbing Miscellaneous Details

2.6 ELECTRONICS PLANS

- 1) Electronics General Notes and Specifications
- 2) Data (LAN) Layout Plans
- 3) Telephone System Layout Plans
- 4) CCTV Cable Layout Plans
- 5) Server Room Details
 - a. Production Control Room
- 6) Fire Detection and Alarm System Layout Plans
- 7) Fire Detection and Alarm System Details
- 8) Other Electronics Miscellaneous Details

3. Detailed Reports

The contractor shall submit the following reports as part of the construction documents for the construction:

- 3.1 Structural Design Report
- 3.2 Detailed Bill of Materials and Cost Estimates
- 3.3 Construction PERT-CPM and Bar/GANTT Chart
- 3.4 Detailed Material Specifications and Finishes

All detailed reports shall be prepared on a Legal-size bond paper on ring/book bounded document.

4. As-Built Plans

The contractor shall prepare and submit As-Built Plans based on the actual construction accomplishments and emplacement of materials, equipment, furnishings, utilities and other information that is necessary for the operations and maintenance of the buildings.

The contractor shall also submit operations and maintenance manuals of the emplaced equipment and machineries for the reference of the operations and maintenance personnel.

5. Details of Submittals and Deliverables

- 5.1 Detailed Architectural Concept
 - i. Number of Copies
- 5 copies / sets

ii. Document Size

- 24" x 36" White/Blue Print Copy

5.2 Detailed Design and Construction Plans

a) Number of Copies - 5 copies / sets

b) Document Size - 24" x 36" White/Blue Print Copy

5.3 Detailed Reports

5.3.1 Structural Design Report

a) Number of Copies - 5 copies / sets

b) Document Size - 8.5" x 13" Legal Size c) Specifications - Ring/Book Bound

5.3.2 Detailed Bill of Materials and Cost Estimates

a) Number of Copies - 5 copies / sets

b) Document Size - 8.5" x 13" Legal Size c) Specifications - Ring/Book Bound

5.3.3 PERT-CPM and Bar Chart/S-Curve

a) Number of Copies - 5 copies / sets

b) Document Size - 24" x 36" White/Blue Print

5.3.4 Detailed Material Specifications and Finishes

a) Number of Copies - 5 copies / sets

b) Document Size - 8.5" x 13" Legal Size c) Specifications - Ring/Book Bound

5.3.5 As-Built Plans

a) Number of Copies - 1 copy / sets & 5 sets respectively

b) Document Size - 24" x 36" Plot (Tracing) & Blueprints

ANNEXES

ITEM	SPACE CLASSIFICATION	DESCRIPTION	INTENDED USER/PURPOSE
I.	General Working Space	An open plan, semi-private working space with low wall cubicle partition system, provided with staff table, complete with side drawers, among others. The interior finishes are combination of painting, and ceramics/granite for flooring.	 (1) Supervisor (2) Reporters/Anchors (3) Writers/Editors/ Cameramen (4) Engineering Unit
II.	News Studio Room	Shall be designed ready to accommodate variety of audiovisual equipment with special attention to acoustical separation from surrounding spaces, durable finishes to anticipate maximum use, movable partition, complete finishes and built-in conferencing tools and meeting functionality such as marker boards and projection screen/graphics board, equipped with ambient lighting with dimmable controls and special accent lighting used to allow user control for presentation purposes.	General use.
III.	Common Open Space	A common public space/area used for access, assembly and waiting area. The interior finishes are combination of painting, lamination, tiles, wood planks and panels.	General use.
IV.	Ancillary Space or Structure	A supplementary space used for special function as required by law. Architectural finishes should be considered according to the function of the space.	
V.	Utility Space	A supplementary space that is used for utility functions. Architectural finishes should be considered according to the function of the space.	 Comfort Room Stair Area Fire Exit Area Storage and Archives

A.1 SPACE DISTRIBUTION MATRIX

GROUND FLOOR	LEVEL								
Space/Area	No. of Occupants	Space Requirement	Equipment/Furnishing		Furniture/ Fixtures	Interior Finishes			
			Owner-Supplied	Contractor- Supplied	Contractor- Supplied	Floor	Wall	Ceiling	
News Room Department with Editing Rooms		News Room and Editing Rooms	1.Laptop 2.Printer 3.Speakers 4.Microphones 5.TV Monitor	1.ACU 2.LAN Connections 3.Telephones	By Owner's Scope of Work	60cmx60cm Non- skid Homogenous floor tiles (semi-polished)	Plain cement plaster painted finish with slated tempered glass walls	12mm thick Acoustic Ceiling Boards on T-runner framing system	
2. Master Control Room		Enclosed Working Space	1.Computer 2.Printer 3.Communications Equipment	1.ACU 2.LAN Connections 3.Telephones	By Owner's Scope of Work	Antistatic raised flooring on bare concrete slab	Plain cement plaster painted finish	Bare smooth off form and beam soffit painted finish	
3. Multi-purpose Room		Enclosed Working Space		1.ACU 2.LAN Connections 3.Telephone	By Owner's Scope of Work	60cmx60cm Non- skid Homogenous floor tiles (semi-polished)	Plain cement plaster painted finish	12mm thick Gypsum board on metal furring with cove lights design	
4. Electrical Room & Genset Room		Enclosed Working Space		1. Ventilation 2. Electrical Equipment 3. Generator	By Owner's Scope of	Smooth concrete slab-painted with self-leveling epoxy	Acoustic wall treatment sub-wall on plain cement	Bare smooth off form slab and beam soffit with special	

		Set	Work	paint	plastered masonry wall	acoustical treatment painted finish
5. Lobby Area and Hallway	Open Space with Waiting Area	1.ACU	1.Reception desk and chairs	60cmx60cm Homogenous floor tiles (polished)	Plain cement plaster painted finish	12mm thick Gypsum board on metal furring with cove lights design
6. Male/ Female Common Toilets and Pantry	Common Toilets and Pantry	1.Ventilation	1.Kitchen Sink 2.Plumbing Fixtures 3.Toilet Acc	30cmx30cm Non-skid Ceramic floor tiles	30cmx60cm Glazed Ceramic Wall tiles	1/4" Fiber-cement board on metal furring

GROUND FLO	GROUND FLOOR LEVEL										
Space/Area	No. of Occupants	Space Requirement	Equipment/Furnishing		Furniture/Fixtures	Interior Finishes					
			Owner- Supplied	Contractor- Supplied	Contractor- Supplied	Floor	Wall	Ceiling			
7. Main Stair					Stair Handrails and Railings	Non-skid Homogenous floor tiles with nosing profile	Plain cement plaster painted finish	Slab soffit painted finish			

A.2 SPACE DISTRIBUTION MATRIX

Space/Area	No. of Occupants	Space Requirement	Equipment/Furnishing		Furniture/Fixtures	Int	erior Finishes	
			Owner-Supplied	Contractor- Supplied	Contractor- Supplied	Floor	Wall	Ceiling
1. News Studio		Enclosed Working Space	1. Cameras 2. Communications Equipment 3. Speakers	1.ACU 2. Lighting Equipmen t 3. Telephones	By Owner's Scope of Work	Smooth concrete slab- painted with self-leveling epoxy paint	Plain cement plaster painted finish with special acoustical treatment	Bare smooth off form slab and beam soffit with special acoustical treatment painted finish
2. Production Control Room		Enclosed Working Space	1.Laptop 2.Printer 3.Audio Equipment	1.ACU 2. Lighting Equipmen t	By Owner's Scope of Work	Antistatic raised flooring on bare concrete slab	Plain cement plaster painted finish with special acoustical treatment	Bare smooth off form slab and beam soffit with special acoustical treatment painted finish
3. Make-up and Dressing Room		Enclosed Working Space		1.ACU 2. Mirrors 3. Lighting Equipmen t	1.Sofa 2.Tables 3.Chairs	60cmx60cm Non-skid Homogenous floor tiles (semi-polished)	Plain cement plaster painted finish	12mm thick Moisture resistant gypsum board on metal furring

4. Lobby Area and Hallway SECOND FLOO	OR LEVEL	Open Spa with Wait Area		1.ACU	1.Reception desk and chairs		60cm Homogenous les (polished)		cement painted	12mm thick Gypsum board on metal furring with cove lights design
Space/Area	_				Furniture/Fixtures			Interior Finishes		
	-	_	Owner-Supplied	Contractor- Supplied	Contractor-Supplied	d	Floor	Wall		Ceiling
5. Male/ Female Common Toilets		Common Toilets		1.Ventilation	1.Plumbing Fixtures 2.Toilet Accessories		Non-skid Ceramic floor tiles	Glazed C Wall tiles	eramic	1/4" Fiber- cement board on metal furring
6. Main Stair					1.Stair Handrails and Railings		Non-skid Homogenous floor tiles with nosing profile		cement painted	Slab soffit painted finish

A.3 SPACE DISTRIBUTION

MEZZANINE I	MEZZANINE FLOOR LEVEL										
Space/Area	No. of Occupants	Space Requirement	Equipment/	Furnishing	Furniture/Fixtures Interior Finishes						
			Owner-Supplied	Contractor- Supplied	Contractor- Supplied	Floor	Wall	Ceiling			

1. Technical Staff Room	Enclosed Working Space	1. Laptop 2.Printer	1.ACU 2. Telephones	1. Tables 2. Chairs	60cmx60cm Non- skid Homogenous floor tiles (semi- polished)	Plain cement plaster painted finish	Bare smooth off form slab and beam soffit painted finish
2. Engineering/ Maintenance Room	Enclosed Working Space	1. Laptop 2.Printer	1. ACU 2. Telephones	1.Tables 2.Chairs	60cmx60cm Non- skid Homogenous floor tiles (semi- polished)	Plain cement plaster painted finish	Bare smooth off form slab and beam soffit painted finish
3. Engineering/ Maintenance Room	Enclosed Working Space		1. ACU 2. Telephones	1.Tables 2.Chairs	60cmx60cm Non- skid Homogenous floor tiles (semi- polished)	Plain cement plaster painted finish	Bare smooth off form slab and beam soffit painted finish

A.4 SPACE DISTRIBUTION

ROOFDECK LEVEL

Space/Area	No. of Occupants	Space Requirement	Equipment/Furnishing		Furniture/ Fixtures	Interior Finishes		
			Owner- Supplied	Contractor- Supplied	Contractor-Supplied	Floor	Wall	Ceiling
1. Transmitter Room		Enclosed Working Space		1.ACU 2. Telephones	By Owner's Scope of Work	Antistatic raised flooring on bare concrete slab	Plain cement plaster painted finish	Bare smooth off form Slab and beam soffit painted finish

2. Quarter's with Comfort Room	Enclosed Working Space	1.Ventilation	1.Plumbing Fixtures 2.Toilet Accessories	Non-skid Ceramic floor tiles	Glazed Ceramic Wall tiles	Bare smooth off form Slab and beam soffit painted finish
3. Main Stair			1.Stair Handrails and Railings	Non-skid Homogenous floor tiles with nosing profile	Plain cement plaster painted finish	Slab soffit painted finish
4. Open Deck / TVRO Farm	Open Space			Plain cement floor topping with hardener provided with waterproofing membrane system	Plain cement plaster painted finish (steel troweled)	

SITE PICTURES









Section VII. Drawings

Section VIII. Bill of Quantities

	WORK ITEM	ESTIMATED TOTAL QUANTITY	UNIT PRICE (including tax) Pesos	PRICE (including tax) Pesos					
I.	Mobilization								
II.	Construction Safety & Health								
III.	Temporary Facility								
IV.	Earth Works								
V.	Form Works								
VI.	Rebar Works								
	SUB-TOTAL:								
(Peso)_									
Submitted by:									
Name of the Representative of the Bidder Date:									
Position									
	Name of the Bidder								

Section IX. Checklist of Technical and Financial Documents

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

- 2 (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages);
- (b) Registration certificate from Securities and Exchange Commission (SEC),
 Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative
 Development Authority (CDA) for cooperatives or its equivalent document;
 and
- (c) Mayor's or Business 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;
- (e) Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).

Technical Documents

- (f) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; and
- (g) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules; **and**
- (h) Philippine Contractors Accreditation Board (PCAB) License;

or

Special PCAB License in case of Joint Ventures;

and registration for the type and cost of the contract to be bid; and

② (i) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;

or

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Original copy of Notarized Bid Securing Declaration; and

- (j) Project Requirements, which shall include the following:
- a. Organizational chart for the contract to be bid;
 - b. List of contractor's key personnel (*e.g.*, Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;
 - c. List of contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be;
 - d. Detailed Architectural Concept;
 - e. Detailed Design and Construction Plans;
 - f. Detailed report; and
- (k) Original duly signed Omnibus Sworn Statement (OSS);

<u>and</u> if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.

Financial Documents

- The prospective bidder's audited financial statements, showing, among others, the prospective bidder's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission; and
- (m) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC).

Class "B" Documents

(n) If applicable, duly signed joint venture agreement (JVA) in accordance with RA No. 4566 and its IRR in case the joint venture is already in existence;

or

duly notarized statements from 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.

II. FINANCIAL COMPONENT ENVELOPE

(o) Original of duly signed and accomplished Financial Bid Form; and

Other documentary requirements under RA No. 9184

- (p) Original of duly signed Bid Prices in the Bill of Quantities; and
- Duly accomplished Detailed Estimates Form, including a summary sheet indicating the unit prices of construction materials, labor rates, and equipment rentals used in coming up with the Bid; and
- (r) Cash Flow by Quarter.

