TERMS OF REFERENCE FOR SUPPLY, DELIVERY, INSTALLATION, INTEGRATION, AND TESTING AND COMMISSIONING OF MRT-7 STATIONS AND DEPOT ELECTRONICS NETWORKS

SMC INFRASTRUCTURE

MRT 7

SMC MASS RAIL TRANSIT 7 INC.

Department of Transportation 1899

SMC MASS RAIL TRANSIT 7 INC.

TERMS OF REFERENCE
(TOR)

SUPPLY, DELIVERY, INSTALLATION, INTEGRATION, AND TESTING AND COMMISSIONING OF MRT-7 STATIONS AND DEPOT ELECTRONICS NETWORKS

2025

TERMS OF REFERENCE FOR THE SUPPLY, DELIVERY, INSTALLATION, INTEGRATION, AND TESTING AND COMMISSIONING OF MRT-7 STATIONS AND DEPOT ELECTRONICS NETWORKS

1 Purpose

The purpose of this document is to outline the scope of work, and technical and commercial requirements for the prospective MRT7 Stations and Depot Electronics Network Contractor.

2 Project Overview

2.1 The SMC MRT7 is currently looking for a System Integrator who specializes in Fire Detection and Alarm Systems (FDAS) and Access Control Systems (ACS) Integration.

The System Integrator will facilitate the overall integration of the Stations and Depot Buildings FDAS and ACS systems, including the supply and installation of cables, equipment, workstations, servers, and other accessories at the Depot Compound, and Administration Building Operations and Control Center (OCC) to complete a functional system.

The Project

The MRT7 Project is approximately 26-km rail system, including 14 stations (see Table 1 below), from San Jose del Monte, Bulacan to North Avenue-EDSA, Quezon City. The MRT7 also includes a Depot, with stabling, test track, maintenance facilities, an Operation Control Center (OCC) for mainline operation and a Fire Command Center Room (FCCR) for the Depot area operation.

Table 1 – List of MRT 7 Stations

Structure	Station Number	Station Name	Platform Type
Elevated	1	North Avenue	Side
Depressed	2	Quezon Memorial	Center
Depressed	3	University	Side
Elevated	4	Tandang Sora	Side
Elevated	5	Don Antonio	Side
Elevated	6	Batasan	Side
At grade	7	Manggahan	Center
Elevated	8	Dona Carmen	Side
Elevated	9	Regalado	Side
Elevated	10	Mindanao	Side
Elevated	11	Quirino	Side
Elevated	12	Sacred Heart	Side
Elevated	13	Tala	Side
Elevated	14	San Jose del Monte	Side

3 Definition of Terms

3.1 **Access Control System (ACS) –** also known as *Security Management System (SMS),* is a security mechanism that manages who or what is allowed to access or use resources in a physical or digital environment. It ensures that only authorized individuals, devices, or entities can enter specific areas or access particular systems or data, while preventing unauthorized access.

3.2 **Advance Payment Bond** - A surety bond issued by a reputable financial firm acceptable to the Owner covering the full amount agreed during the Bid

3.3 **As-Built - Plan** shall be entirely a new set of drawings (A3 size or per Employer requirement) accurately depicting each and every part of the structures and facilities as actually built to be prepared by the contractor and submitted to the employer. All notes, dimensions, material specifications, construction methods, and other pertinent construction details shall correspond to the actual completed works.

3.4 **Bid Price** - the price quoted by the Contractor as indicated in the Proposal for the amount of cost of materials, plant and equipment, manpower, supervision, all necessary permits, overheads, profit, contingencies, toll fees, value added tax (VAT), any other statutory taxes, the cost of the preparation of the proposal including site visits and other related activities and any/all other costs and fees which may be incurred by the selected Contractor to complete the Works.

3.5 **Civil Contractor -** refers to the general contractor of the Stations and Depot Buildings specializing in civil, structural, and MEPF (Mechanical, Electrical, Plumbing, and Fire protection) works.

3.6 **Contractor or The Contractor -** refers to MRT7 Stations and Depot Electronics Networks Contractor. An individual or an organization with a juridical entity which has the necessary expertise, experience, capability, technology, manpower, equipment, financial resources, and other qualifications and competencies necessary to undertake and complete the Works in accordance with the TOR.

3.7 **Electronics Networks** – refers to the integrated Fire Detection and Alarm System (FDAS), and Access Control System (ACS) networks that connect and operate seamlessly between the Stations and the Depot.

3.8 **Factory Acceptance Test (FAT) -** is a thorough inspection and testing process conducted at the manufacturer's facility before the delivery and installation of a product, system, or equipment. The purpose of the FAT is to verify that the equipment meets the specified requirements and functions as intended before it is shipped to the client or project site.

3.9 **Fire Alarm Control Panel (FACP) -** is the central hub of a fire alarm system, responsible for monitoring and controlling the system's operations. It processes signals from fire detection devices such as smoke detectors, heat detectors, and manual pull stations.

3.10 **Fire Detection and Alarm System (FDAS) -** It is a comprehensive system designed to detect the presence of fire or smoke in a building or area and alert people to the danger through alarms.

3.11 **Integration -** refers to the process of combining various subsystems or components particularly the FDAS or ACS into a single, unified network or system that functions cohesively. The goal is to ensure that different hardware, software, technologies, and processes work together smoothly and efficiently to meet specific objectives.

3.12 **Interface Coordination Document (ICD) -** is a document that outlines the details and requirements for the interaction and connection between different systems, components, or parties involved in a project. It is used to ensure that all interfaces between systems or elements are clearly defined, understood, and agreed upon by the stakeholders involved. This document typically includes:

1. Interface Descriptions: Detailed explanations of the connections between systems or components.
2. Technical Specifications: Information about the technical requirements, such as protocols, standards, and performance criteria.
3. Roles and Responsibilities: Clarification of which parties are responsible for each part of the interface.
4. Connection Points: Specific locations where systems or components will connect or interact.
5. Timeline/Delivery Requirements: Key dates or milestones for the implementation and coordination of the interface.
6. Testing and Verification: Procedures for testing the interface to ensure it functions correctly.

3.13 **MRT7** - refers to the Project

3.14 **Network or Networks** - refers to either the FDAS Network or the ACS Network. A set of devices, cables, and software that enable the collection and exchange of information and services between them.

3.15 **Network Configuration** - refers to the process of setting up and managing the parameters that control how devices, such as computers, routers, switches, and other network hardware, communicate with each other within a network. It involves adjusting settings for both hardware and software to ensure that the devices can communicate efficiently and securely.

3.16 **Owner -** refers to SMC, SMC MRT7, or SMC MRT7 Inc.

3.17 **Project** - refers to MRT7

3.18 **Proposal** - a required document submitted by the Contractor to SMC MRT7, which includes the proposal cover letter in printed form with attached documentary requirements and/or any other supporting documents that will signify the Contractor's qualification and competencies necessary to undertake and complete the works.

3.19 **Performance Standards** - the standards/metrics that indicate the performance thresholds, requirements, and expectations that must be met by the Contractor in accomplishing the Works.

3.20 **Performance Bond** - A surety bond issued by a reputable financial firm approved to the Owner amounting to 20% of the Agreed Contract Price and valid until the Taking-Over Date (or Completion of the Works)

3.21 **Retention Fund** - a form of security provided for in a construction contract, equivalent to ten percent (10%) of the Contract Price that is retained by the Owner as limited security for the due performance of the CONTRACTOR's obligations under the contract.

3.22 **SMC, SMC MRT7, or SMC MRT7 Inc.** - refers to the Owner of the MRT7

3.23 **System- refers to either FDAS or ACS -** a fully integrated set of electronic components and subsystems that work together to perform a specific task or function. These systems are typically composed of hardware components, such as conduit, cable, controller, sensors, and power supplies, as well as software that controls or manages the system's behavior.

3.24 **System Contractor –** refers to ROTEM – EEI Consortium (REC)

3.25 **Terms of Reference (TOR)** - a strategy-level document issued to prospective Contractor(s) that defines the tasks and duties required to a project contractor. The document also states the planned activities, expected outputs, project budget, working schedules, and job descriptions. It is used to judge about the performance of contractors, consultants, experts and other project stakeholder.

3.26 **Warranty Bond** - A surety bond issued by a reputable financial firm approved to the Owner amounting to 10% of the Agreed Contract Price and valid for two (2) years or until issuance of Final Taking-Over Certificate.

4 Scope of Works

4.1 Under the terms of this document, together with the detailed specifications and plans provided, the Contractor is responsible for supplying and delivering all necessary resources to successfully complete the project. This includes providing the required labor, supervision, equipment, and materials needed for the full scope of work. Specifically, the Contractor shall ensure the supply, delivery, installation, integration, testing, and commissioning of the Electronics Network. If needed, the Contractor shall provide all appropriate interfacing materials for **Stations 1 through 12 and the Depot Buildings**, ensuring that all components and systems are integrated, functional, and fully operational in order to complete the overall system and network infrastructure as outlined.

4.2 Supply and installation of Fiber Optic Cable (FOC) and Shielded Twisted Pair (STP) dedicated to each network including line surge protection for interbuilding connection. Cable specifications shall comply with the project's engineering specifications, in line with the latest requirements of NFPA 70, NFPA 72, NFPA 130, the Philippine Electrical Code, the Philippine Electronics Code, and relevant international standards.

4.3 Supply and installation of a Fire Detection and Alarm System workstation computer and server, complete with monitoring and control software including its Graphical User Interface (GUI) and Historian, interface cards, L2 network switch, media converter and gateway, conduits, cables, an uninterruptible power supply (UPS), Printer, as well as network configuration and other accessories and devices necessary to complete the system. The workstation computer and software shall be compatible with the existing FDAS system installed from the Stations to the Depot buildings.

4.4 Supply and installation of Access Control System workstation computer and server, complete with monitoring and control software including its Graphical User Interface (GUI) and Historian, interface cards, L2 network switch, media converter and gateway, conduits, cables, an uninterruptible power supply (UPS), Printer, as well as network configuration, and other accessories and devices necessary to complete the system. The workstation computer shall be compatible with the existing ACS system installed from the Stations to the Depot buildings.

4.5 Supply and install workstation furniture consisting of a table and chairs designed specifically for computer use. The table shall accommodate up to four workstation computers. Ensure that all furniture complies with ergonomic standards to support comfortable and efficient computer operation, and that it is properly assembled and positioned to maximize workspace functionality.

4.6 The Contractor shall bear full responsibility for the ***creation and submission of comprehensive design drawings based on the proposed products***, ensuring that these designs align with the concept design, project specifications and project requirements. This includes preparing all necessary shop drawings, which provide detailed representations of the fabrication and assembly of components, as well as method statements outlining the procedures and processes for carrying out the work safely and efficiently. Additionally, the Contractor will be required to prepare Interface Coordination Documents (ICD), which define and manage the interactions between different systems or components within the project. The Contractor must also provide any other technical documents that may be required during the project's lifecycle, ensuring that all technical aspects are well-documented and meet the necessary standards for successful project execution.

4.7 The Contractor shall be responsible for establishing the interface connection, including all required materials, between the Contractor-provided L2 network switch and the System Contractor's Communication Equipment L2 network switch, located in the Communication Equipment Room (CER) of the Depot Administration Building.

4.8 The Contractor shall be responsible for establishing the interface connection and termination, including the required interface and termination materials, conduit and support (if any) between the Contractor-supplied cable and the Civil Contractor-installed FDAS FACP and/or ACS Core station.

4.9 The Contractor shall be responsible for the chipping works and restorations of any concrete, wall, and under-slab penetrations affected by the equipment, supports, and conduit installation.

4.10 The Contractor shall be responsible for coordinating and proactively interfacing with all other disciplines, including Station Civil Contractors, as well as third parties, in matters involving the Fire Alarm and Detection System, and Access Control System installation and networking.

4.11 The Contractor shall submit a Project Schedule, in Primavera, updated and issued to the Owner on a monthly basis. Timelines for the particular works shall be agreed upon with the Owner. The Project Schedule shall be in the form of a critical path network and shall show sequences of working and times intended by the Contractor and his nominated subcontractors/suppliers. The Projects Schedule must be fully resourced (resource loaded) to properly extract value of the Works done at any given time.

4.12 The Contractor shall carry out the Works in strict compliance with the Owner's requirements and in accordance with its Bid and the agreed Project Schedule. If the Contractor is delayed in any area which may affect the date for completion, then it shall notify the Owner immediately giving the reason for the delay and the actions it proposes to take to mitigate such delay

4.13 The Contractor shall coordinate and interface with the Owner/ DOTr and other entities to facilitate completion of the works, such as securing the necessary permits and approvals from National, Regional and Local government agencies, whichever is necessary.

4.14 Throughout the development and construction phase, the Contractor is expected to consistently review and propose value engineering solutions to the Owner. This ensures that the solution remains cost-effective while meeting the necessary requirements and achieving fit-for-purpose results.

4.15 Before finalizing the detailed design phases based on the Contractor proposed equipment and materials, the Contractor shall identify and present any omissions from the requirements listed herein that, if included, would benefit the Owner and enhance the system's operation and performance.

4.16 The Contractor shall submit both the soft copy and the signed and sealed hard copy of the electronics network as-built plans before the acceptance of their installation and commissioning works.

4.17 The Contractor shall provide a maintenance and operation manual, as well as training and seminars for the operation and maintenance of Depot Electronics Network.

4.18 The Contractor shall provide a comprehensive recommended spare parts list for ensuring continuous equipment operation over a two-year period, including justification and metrics.

4.19 The Contractor shall provide spare parts sufficient for 2 years of continuous operation to ensure uninterrupted service and maintenance support.

4.20 In instances where materials pertinent to this scope are found to be unintentionally deficient or absent, the Contractor shall bear full responsibility for ensuring the completion of all deliverables, inclusive of both international and local materials. Furthermore, the Contractor is obligated to finalize the installation of all components within the agreed-upon timeframe.

4.21 **Testing and Commissioning**

The Contractor shall conduct the Testing and Commissioning activities in coordination with the Civil and System Contractors responsible for delivering the complete system.

This includes, but is not limited to, the following:

1. Standalone Test
2. Integration Test
3. Performance Test

4.22 **Operation and Maintenance Training**

To conduct Operation and Maintenance training for MRT7 personnel and the DOTR representative, or as otherwise assigned by SMC MRT7 Inc.

4.23 **Software Support and Upgrades**

1. **Software Support**

   Software support shall be provided for a period of three (3) years, commencing from the completion and acceptance of the project. Upon project completion and acceptance, the software shall be updated to the latest available version to ensure optimal performance and compatibility.

2. **Software Upgrades**

   All software upgrades shall be installed within three (3) years following project completion and acceptance. Upgrades include new or revised software licenses. To facilitate planning for system access and minimize disruption, the Owner shall be notified at least thirty (30) days in advance of any scheduled upgrades.

5 Implementation Phases

The project will be implemented in two phases.

5.1 **Phase 1: Station to Depot Admin OCC Integration**

This phase covers the integration of Fire Detection and Alarm System (FDAS), and the Access Control System (ACS) from various MRT7 Stations going to the Operation and Control Center (OCC) located at the Depot Administration Building. The purpose of this integration is to ensure seamless communication, coordinated response, and centralized monitoring and control between the Station and Depot to enhance safety and operational efficiency.

5.2 **Phase 2: Depot Buildings to Depot Admin FCCR Integration**

This phase covers the integration of the Fire Detection and Alarm System (FDAS) and the Access Control System (ACS) from the various buildings within the Depot compound, connecting them to the Fire Command Center Room (FCCR) located at the Depot Administration Building. The objective of this integration is to establish a centralized monitoring and control system for the entire Depot compound, thereby enhancing overall safety, coordination, and operational efficiency.

6 Specification and Design

6.1 ANNEX-A: Depot Electronics Network.

6.2 ANNEX-B: Overall Network Architecture

6.3 ANNEX-C1 & C2: Engineering Specification (Electronics)- Station, and Depot

6.4 ANNEX-D1 & D2: Technical Brochure of FDAS and ACS equipment provided by the Civil Contractor.

7 Power Requirements

7.1 The power for each system unit shall be supplied from an enclosed circuit breaker (ECB) with a Single-phase 230-volt AC (VAC) at 60 Hz, using a dedicated circuit provided by the Civil Contractor at the Operation Control Center Room (OCC Room).

8 Performance Standard

8.1 The Contractor shall have a minimum of ten (10) years of experience as an Electronics System Integrator and must have completed at least five similar projects within the past ten years.

8.2 Full-time Project Manager/ Engineers / Supervisors must be on site for management, quality control, and site supervision.

8.3 Project Manager with a minimum of 10 years of experience, including at least five (5) relevant infrastructure projects; a Registered Electronics Engineer.

8.4 Engineer in-charge supervising the work shall be a duly Registered Electronics Engineer with at least 5 years actual experience on this field of work, and supervised by a Professional Electronics Engineer with 10 years professional experience on this field required by R.A. 9292 and revised National Building Code.

8.5 The Interface Manager and Engineer shall be a licensed Electronics Engineer with over 10 and 5 years of experience, respectively, in Building Electronics and Auxiliary system integration.

8.6 To minimize the holding points of deliverables that may cause delays, subcontracting for Electronics works is strictly prohibited. The Contractor shall be fully responsible for all aspects of engineering, procurement, supervision, and installation activities, and must have a direct contact with the product manufacturers and/or suppliers.

8.7 Compliance to material submittal, and approval process prior to commencement of the works and required testing.

8.8 All materials to be used in the project shall be UL (Underwriters Laboratories) listed, ensuring that they meet rigorous safety and quality standards as recognized by the industry. This compliance ensures that the materials used are suitable for their intended application in fire detection and alarm systems, offering reliable performance and safety in accordance with established codes and regulations.

8.9 All materials to be supplied and installed shall be brand new and free from defects and must conform to the specifications.

8.10 Electronic equipment, devices and software from China, including those labeled 'Made in China,' are not allowed to be used in the project.

8.11 Before granting the approval for the manufacturing plant and products, the Owner will conduct a plant visit to assess the facility's readiness and the quality of the products being produced. During this visit, the Owner will review the manufacturing processes, inspect the plant's compliance with project specifications, and evaluate the overall operational capabilities. In addition, a Factory Acceptance Test (FAT) will be performed by the Owner, in collaboration with a representative from the Department of Transportation (DOTR) and the Contractor, prior to the delivery of the materials. The FAT will serve as a critical evaluation to verify that the plant and products meet the required technical specifications, performance standards, and regulatory requirements before they are approved for delivery or installation.

8.12 The Contractor must submit an Inspection Work Request (IWR) to SMC MRT7 to ensure the work meets the required specification.

8.13 Daily and Weekly Accomplishment Reports must be submitted and verified by SMC MRT7 Site Engineers.

8.14 Attendance to site management meetings when called for.

8.15 All employees of the Contractor at the jobsite shall wear T-shirts marked with Contractor’s company name and valid company I.D.

8.16 The work shall be executed in a workmanlike manner and in accordance with the best practices employed in modern construction/installations.

8.17 Stairways, passageways and all access ways shall be kept free from construction materials and obstructions at all times

8.18 The Contractor shall be fully responsible for safety, protection, security and convenience of its personnel, third parties and the public at large as well as its works, equipment, installation and the like to affect by the implementation of this project.

8.19 All works shall comply with applicable regulations of authorities having jurisdiction on the project.

8.20 All safety requirements are complied, and reports submitted on time.

8.21 Collection and disposal of garbage generated by the Contractor.

8.22 The Contractor is responsible for providing its own temporary power supply throughout the construction, testing, and commissioning phases.

8.23 Any damage to the system, facilities and equipment of the MRT7 due to the negligence, theft or pilferage, directly or indirectly caused by the Contractor personnel shall be immediately repaired, restored or replaced by the Contractor for its account. Any repair, restoration or replacement made by the MRT7 for the same purpose shall be deducted from any payable account of the Contractor.

9 Works Exclusion

9.1 Supply and installation of Conduits for Site development.

10 Warranty and Maintenance

All equipment, components, system software, furniture's, and parts furnished and installed by the Contractor shall be guaranteed against defects in materials and workmanship for 2 years from the acceptance of the System by the Owner. Any and all cost associated to repair, reprogram, or replace these components shall be the responsibility of the Contractor at no cost to the Owner during the warranty period. All corrective actions to equipment, devices and software modifications made to the system during warranty periods shall be updated on all user documentation and on user and manufacturer archived software disks. The Contractor shall respond to the Owner's request for warranty service within 24 standard working hours.

11 Commercial Conditions

11.1 Documents like these Terms of Reference and other necessary plans shall be furnished by SMC MRT7 to the Contractor.

11.2 Securing necessary permits and licenses and other similar documents required by the government and local government units shall be the responsibility of the Contractor including the cost imposed by those offices. SMC MRT7 will only assist the Contractorin the preparation of the request letter for the issuance of such permits/licenses.

11.3 The works shall be **LUMP SUM** in accordance with the agreed final Bid Proposal. Payment to the Contractor for the value of the Works completed shall be in accordance with the Contract.

11.4 The Contractor shall comply with the target completion duration of the Works which is **One Hundred-Eighty (180) Days** upon the issuance of Notice to Proceed. The Contractor shall investigate and determine specific limitations or restrictions considering the complexity of the Project. The Contractor shall consider an uninterrupted 24-hour work shifts in order to meet the target schedule for the Project.

11.5 If the Contractor fails to comply with the Contract completion date of the Works, SMC MRT7 will impose a penalty equivalent to 1/10th of 1% of the Contract Price per day of delay. The Contractor may request SMC MRT7 for an extension of time to complete the Works for valid and justifiable reasons, subject to the provisions of the Contract.

11.6 Additional commercial terms:

11.6.1 The Contractor to provide the following bonds and securities
Advance Payment Bond – A surety bond issued by a reputable financial firm acceptable to the Owner covering the full amount agreed during the Bid;
Performance Bond – A surety bond issued by a reputable financial firm approved to the Owner amounting to 20% of the Agreed Contract Price and valid until the Taking-Over Date (or Completion of the Works);
Warranty Bond - A surety bond issued by a reputable financial firm approved to the Owner amounting to 10% of the Agreed Contract Price and valid for two (2) years or until issuance of Final Taking-Over Certificate.;

11.6.2 Progress billings are subject to retention of 10%.

11.7 The Contractor will mobilize upon receipt of the Notice to Proceed.

11.8 The Contractor will submit their respective work schedule (in .xer format, Primavera P6) in accordance with the required completion duration.

11.9 Submission of Bid Proposal is at the close of business day on _____. Validity of the proposal shall be up to **six (6) months from submission**.

11.10 The Owner adopts a (2)-envelope system consisting of the **Technical** and **Commercial Proposal**. The proposals are to be separated and submitted in two (2) envelopes in hard and soft copies addressed to:

Ms. Susan Y. Yu
Sr. Vice President-Procurement
San Miguel Holdings Corporation
Podium B - SMC Head Office Complex
#40 San Miguel Avenue, Ortigas
Center, Mandaluyong City

All communications, queries and clarifications should be officially transmitted via email to the respective buyer per project.

jmorse@smhc.sanmiguel.com.ph
jcherrera@smhc.sanmiguel.com.ph

11.11 **Commercial Proposal** should include the following:

1. Covering Letter using bidder's company letter head indicating total cost proposal in words and figures duly signed by authorized signatory.
2. Bill of Quantities (BOQ) with Detailed Unit Price Analysis (DUPA) for each item.

Notes:

- *Proposed additional items must inserted at the bottom most of the BOQ*
- *File should be in in PDF and MS Office file.*

3. Comments (if any) on the draft contract. No comments upon submission are deemed to be reviewed and accepted by the bidder

11.12 **Technical Proposal** should include the following:

11.12.1 Updated Company profile including PCAB license, Mayors and Business Permits, SEC and DTI Registration Certificates, BIR Registration, BIR Imported Clearance Certificate, Bureau of Custom - Certificate of Registration.

11.12.2 Bill of Materials (BOM) (signed)

11.12.3 Audited Financial Statements of the company for the last three (3) years. (signed and notarized)

11.12.4 Gannt Chart / General Project schedule (signed)

11.12.5 Table of Organization (signed)

11.12.6 Man-power Schedule (signed)

11.12.7 CVs of Key Managers and Engineers that will be assigned to the project. (signed)

11.12.8 List of accredited product and equipment supplier. (signed)

11.12.9 List of completed projects over the past 10 years, along with ongoing similar projects and their contract amounts indicated. Supported with Owner's Certificate of Final Acceptance by the project owner. (signed with attachments e.g. PRC lic., training cert. etc.)

11.12.10 List of equipment and corresponding Preventive Maintenance Schedule needed to carry out this Project. (signed)

11.12.11 Duly Notarized Certification of Non-Inclusion in the Blacklist to any Government Authority. (signed and notarized)

11.12.12 Updated calibration certificates of the equipment and instruments.

11.12.13 Training certificates of technical, and safety personnel. (signed)

11.13 The Contractor acknowledges and affirms that it has conducted a thorough inspection of the Work Site and has fully informed itself of all site conditions, constraints, and circumstances that may affect the performance and pricing of the Works, prior to submitting its proposal. The Contractor shall not be entitled to any adjustment in the Contract Price or completion timeline due to conditions that could have been reasonably identified through proper site investigation and due diligence.

Note: The Contractor shall coordinate a site inspection prior to submitting its proposals, through ***Mr. Reynaldo Q. Quitevis, Deputy Project Director – Construction****.*

Email: rquitevis@smhc.sanmiguel.com.ph

12 Responsibility Matrix

Phase	Location	Particular	ROTEM	Civil Contractor	Contractor
Phase 1	Station	Communication Network (Station to Depot-OCC)	✓		
		L2 Network Switch (24-Ethernet port, + 4-SFP port)		✓	
		Fire Alarm Control Panel (FACP)		✓	
		Access Gathering Panel (AGP)		✓	
		Additional Gateway or Interface Card			✓
	Depot-OCC	FDAS Workstation Computer System			✓
		ACS Workstation Computer System			✓
		Control and Communication Cable (Workstation to CER Room)			✓
		Raceway and Conduit (Workstation to CER Room)			✓
		Additional Gateway or Interface Card			✓
		Table and Chair (p.s)			✓
		Other equipment and accessories to complete the system			✓
		L2 Network Switch(24-Ethernet port, + 4-SFP port)		✓	
Phase 2	Site Dev't	Site Devt. Underground Conduit (Interbuilding Connections)		✓	
		FDAS and ACS Control and Communication Cables (Interbuilding Connections)			✓
	Depot-Admin FCCR (CP2)	FDAS Workstation Computer System		✓	
		ACS Workstation Computer System		✓	
		L2 Network Switch (24-Ethernet port, + 4-SFP port)		✓	
		Raceway and Conduit (additional)			✓
		Additional Gateway or Interface Card			✓
		Table and Chair (p.s)			✓
		Other equipment and accessories to complete the system			✓
	Depot-O&M	Fire Alarm Control Panel (FACP)		✓	
		Access Gathering Panel (AGP)		✓	
		L2 Network Switch (24-Ethernet port, + 4-SFP port)		✓	
		Other equipment and accessories to complete the system			✓
	Aux. Building (CP3)	Fire Alarm Control Panel (FACP)		✓	
		Access Gathering Panel (AGP)		✓	
		L2 Network Switch (24-Ethernet port, + 4-SFP port)		✓	
		Other equipment and accessories to complete the system			✓
	Depot-TPSSR	Fire Alarm Control Panel (FACP)		✓	
		Access Gathering Panel (AGP)		✓	
		Other equipment and accessories to complete the system			✓
	Genset Building	FDAS Devices		✓	
		Access Gathering Panel (AGP)		✓	
		Other equipment and accessories to complete the system			✓
	PH1&2, STP	Fire Alarm Control Panel (FACP)		✓	
		Other equipment and accessories to complete the system			✓
	Guard Houses	FDAS Devices			✓
		Other equipment and accessories to complete the system			✓