

Section VI. Specifications

OVERVIEW

The Contractor shall perform all works called for in the plans, specifications and instructions for the project **Site Development: Rehabilitation of the Guardhouse, Track & Field and Improvement of Campus Grounds;** and **Installation of Main Power Supply Cable for the Residence Halls** of the Philippine Science High School - Main Campus, Agham Road, Diliman, Quezon City.

This project specifically covers the following:

A. Site Development

- A.1. Rehabilitation of the Guardhouses at the Vehicular Entrance and Exit Gates;
- A.2. Rehabilitation of the Grandstand Field;
- A.3. Rehabilitation of the Drainage and Manholes of the Perimeter Road;
- A.4. Installation of LED Street Lights;
- A.5. Rustproofing and Repainting of the Fence along Agham Road;
- A.6. Relocation of the Electric Pullout Manhole with Additional Duct Bank;
- A.7. Construction of Electrical Duct Banks from BRHA-1 and BRHA-2 going to the Powerhouse and Ground Improvement along the Constructed Duct Banks;
- A.8. Construction of Powerhouse Including Main and Distribution Feeder Lines;
- A.9. Construction of Covered Walks (BRHA-1, BRHA-2, Gazebo to Grandstand);

B. Installation of Main Power Supply Cable for the Residence Halls

The construction procedures shall be done in accordance with the DPWH Standard Specifications, and in full compliance with the approved plans and specifications of the end-user.

Pertinent notes appearing in the Contract Plans or Drawings shall also be considered as part and parcel of the Technical Specifications.

The contractor must abide by the minimum standards set by the applicable laws, ordinances, building codes and standards of the Republic of the Philippines and the professional organizations involved, or the requirements of the PSHS-MC. In any case of discrepancy, the higher quality specifications should prevail.

The contractor is expected to coordinate with the PSHS-MC in order to proactively anticipate any problems or issues, especially regarding Campus Safety and Security and Environmental Concerns, particularly water runoff management.

All trees must be preserved. All healthy shrubs and plants that will be affected by construction works should be identified for relocation or re-planting.

Existing sidewalks and other elements should be made good or repaired in the event of damage due to excavation or other construction works.

I. Equivalency of Standards and Codes

Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national, or relate to a particular country or region, other authoritative standards that ensure a substantially equal or higher quality than the standards and codes specified will be accepted subject to the Procuring Entity's representative's prior review and written consent. Differences between the standards specified and the proposed alternative standards shall be fully described in writing by the Contractor and submitted to the Procuring Entity's Representative at least twenty eight (28) days prior to the date when the Contractor desires the Procuring Entity's Representative's consent. In the event the Procuring Entity's Representative determines that such proposed deviations do not ensure substantially equal or higher quality, the Contractor shall comply with the standards specified in the documents.

II. Coordination with other parties involved

The Contractor is expected to work with and coordinate closely with regard to the specific Works covered by this project with the following:

1. ABAA (Arce-Bailon-Arce Architects), the consultant of the PSHS Main Campus for Architectural and Engineering Design
2. ORRA (Oscar R. Ruivivar and Associates), the consultant of the PSHS Main Campus for Project Management
3. The Management Committee of the PSHS Main Campus
4. Any designated personnel assigned to related tasks.

Specifically, the Project Manager/Construction Manager and Project Engineer/Architect of the Contractor should be available for regular meetings as set by the PSHS Main Campus, or as requested by any of the other personnel involved.

1. GENERAL REQUIREMENTS

1.1. Processing and Securing of Permits and Insurance

The contractor shall be responsible for securing the **Certificate of Electrical Inspection (CEI)** for the construction of the powerhouse and all necessary permits required by the government agencies concerned in the issuance of the CEI, which shall include but are not limited to Building Permits, ECC or CNC, etc., Contractor's All Risk Insurance & Third Party Liability and Workman's Compensation Insurance (CARI), and other insurances required by the Local

Government Unit (LGU), among others, including payment of assessed fees as may be required by the LGU and/or Regulating Agencies before the implementation of the project. All related documents shall be submitted to the Philippine Science High School - Main Campus.

- 1.2. The contractor shall be responsible for securing the Tree Cutting Permit form the Barangay and the DENR.

2. MOBILIZATION/ DEMOBILIZATION

- 2.1. Mobilization shall include all activities and associated costs for transportation of Contractor's personnel, equipment, and operating supplies to the site; establishment of temporary field offices, and other necessary general facilities for the Contractor's operation at the site;
- 2.2. Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not required or included in the contract from the site; including the disassembly, removal and site cleanup of temporary offices and other facilities assembled on the site specifically for this contract.

3. CONSTRUCTION SAFETY AND HEALTH PROGRAM

- 3.1. This item includes the provision of safety gadgets (belt, goggles, hard hat, working uniform and safety shoes) for all workers on the hard hat area.

4. PROJECT PHOTOGRAPHS

- 4.1. The contractor shall provide record photographs taken as, when and where directed by the Project Engineer at intervals of not more than one month. The photographs shall be sufficient in number and location to record the exact progress of the Works. The contractor shall provide one proof print of each photograph taken, and the electronic copy, in jpeg format of the photographs. The photographs retained by the Project Engineer will become the property of the Government and the Contractor shall supply approved albums to accommodate them. Two copies are to be signed by the Contractor, one of which will be signed by the Project Engineer and returned to the Contractor.
- 4.2. The contractor shall submit test results as required prior to the release of Progress Payments.
- 4.3. The Contractor shall submit As-Built Plans and Details to the Philippine Science High School - Main Campus prior to the release of the final Progress Payment. As-Built Plans shall be given in electronic format readable by the PSHS Main Campus, and 3 copies large sized prints.

5. SURVEY / SETTING OUT

- 5.1. The Contractor shall set out the works in relation to survey stations, markers, reference pegs and benchmarks which have been established. Great importance is attached to these stations and the Contractor shall safeguard and protect them from harm or loss at all times until completion of the Works.
- 5.2. The Contractor shall not be permitted to erect temporary buildings or structures on the site without the specific permission in writing of the Project Engineer including approval of the dimensions of such buildings or structures.

6. PROJECT BILLBOARD

- 6.1. The Contractor must provide project billboards showing information about the project.
- 6.2. The Project Billboard shall be strategically placed within the site vicinity; *(as provided on the General Guidelines and Legal Mandates of the Commission on audit to promote good governance and/or publicity for or otherwise relating to the Projects/Programs/Activities (PPA) shall be made at the least possible cost). Hence, for infrastructure projects, two (2) tarpaulin signboards must be suitably framed for outdoor display at the project location, and shall be posted as the award has been made. The design and format of the tarpaulin, shall have the following specifications:*
 - Tarpaulin, white, 8ft. x 8ft.
 - Resolution: 70 dpi
 - Font: Helvetica
 - Font Size: Main Information - 3"
 - Sub-Information - 1"
 - Font Color: Black

7. TEMPORARY FACILITIES/ FIELD OFFICE

- 7.1. This item includes the construction of temporary facilities for storage of materials and Contractor's Field Office.

8. SITEWORKS

- 8.1. EXCAVATION for foundations shall be done to depth and elevations indicated in the drawings. Excavation shall be extended until the required bearing capacity is attained. It shall be levelled properly and must be compacted up to disturbed bottom.
- 8.2. EARTHWORKS
 - Fill borrow materials. Granular, non-plastic materials from off-site source.

- Backfilling. Approved and clean materials. By backfilling of not more than 150mm thick, each layer thoroughly compacted and wetted by tamping or rolling. This shall extend to area as indicated in the plan.
- 8.3. BATTER BOARDS. Second Class pest free lumber assembled and rendered secure for proper delineation of structure line and grades.
- 8.4. SOIL POISONING AND TERMITE CONTROL. Contactor to use chemicals approved by the Fertilizer and Pesticide Authority, for soil foundation.
- 8.5. FOUNDATION
- Bottom of footing shall have a minimum depth as indicated in the plans. No footing shall rest on fill.
 - Footings and wall footings are designed for an allowable soil bearing capacity of 120 kPa.

9. FORMS AND SCAFFOLDING

- 9.1. All forms for concrete works shall be properly braced or connected together so as to maintain the correct position and shapes of the concrete members. Forms shall be constructed sufficiently tightly to prevent bulging and seepage of water.
- 9.2. Forms shall not be removed until the concrete has attained sufficient strength to support its own weight and any loads that may be placed on it.

10. STRUCTURAL CONCRETE CLASS “A” (9 BAGS)

- 10.1. IN-SITU CONCRETE MIX. 3,500 psi; 28 days, 9 bags using one bagger mixer.
- 10.2. FOOTINGS, COLUMNS AND CONCRETE SLAB. Dimensions are to be sourced as indicated on the plans and to be verified by the authorized engineer of PSHS Main Campus.
- 10.3. All concrete works shall be done in accordance with the standard specifications for plain and reinforced concrete as adopted by the Government. Cement to be used shall be Portland cement or any equivalent brand more readily available in the locality and approved by the Architect/Engineer in-charge of construction.
- 10.4. Use class A (1:2:4) concrete mixture for all concrete works. Class a concrete shall be a mixture of 1 part cement, 2 parts fine aggregate (sand), 4 parts coarse aggregate (G3/4”) by volume, plus enough clean water to make the mixture into a pliable paste.
- 10.5. The fine aggregate for concrete shall consist of natural sand or of inert material with similar characteristics, having clean, hard and durable grains, free from organic matter or loam.

- 10.6. All steel reinforcing bars to be used in this construction shall consist of round deformed bars with lugs or projections on their sides to provide greater bond between the concrete and steel.
- 10.7. All reinforcing bars shall be accurately placed and secured against displacement by tying them together at each bar intersection with gauge no. 16 or 18 tie wire.
- 10.8. The steel reinforcing bars indicated for footing, columns, slabs, and other concrete members shall conform to the number, size and spacing as indicated in the drawing or schedule of steel reinforcement.
- 10.9. No metal reinforcement shall be installed in place unless it is free from rust and scale of other coatings, which will destroy or reduce bond with concrete.

11. MASONRY WORKS

- 11.1. Concrete Hollow Blocks: Non load bearing type with even texture and well-defined edges, with a minimum compressive strength of 350 psi.
- 11.2. Use 4" x 8" x 16" (125mm thick) masonry wall from top of wall footing up to bottom of floor slab.
- 11.3. Reinforcing bars and tie wires: Use 10mm in diameter vertical bars at 600mm on center and 10mm diameter horizontal bars at every third layer.
- 11.4. Mortar and plaster works: With mix and texture as required.
 - Mortar shall be composed of one (1) part Portland cement and three (3) parts sand.
 - Plastering shall consist of one (1) part Portland cement and two (2) parts sand.

12. WATERPROOFING WORKS

Furnish all labor, materials, equipment, plant and other facilities required to complete all waterproofing works as shown on the drawings and herein specified. All applications shall be strictly performed by an approved waterproofing Contractor.

All materials shall be Environmental Protection Agency (EPA) certified and approved.

Test waterproofed area by seventy-two (72) hours and check for any seepages.

12.1. Concrete Roof Decks

Note: Areas not stated above but requiring waterproofing by Procuring Entity shall be included in the scope of work. Thickness should be as per Manufacturer's Specifications and Installation depending on the Areas to be applied with.

13. TRUSSES & ROOFING WORKS

- 13.1. The works include provision and installation of all roofing materials required by the project and as shown on plans to be approved by the Procuring Entity or its authorized representative. All members shall be in accordance with the approved steel framing plans and specifications, and to the entire satisfaction of the Procuring entity under the direct supervision of the Engineer-in-charge.
- 13.2. Use 2" x 3" x 1.2mm LC purlins arranged as specified in the plan details.
- 13.3. Use 1-1/2" x 1-1/2" x 4.5mm on all top chord, bottom chord, king post and web members.
- 13.4. Use 3" diam. Sched. 40 G.I. pipe on all posts, with connection details as shown on the plans.
- 13.5. Members shall be protected against corrosion using three applications of epoxy primer and epoxy reducer and with three final coatings of epoxy enamel with catalyst of grey color.
- 13.6. Roofing shall be Rib-type, Pre-painted, 0.60mm thick and of approved quality.
- 13.7. Sheets shall be laid with the end and side laps as indicated on the brochures or supplied drawings. Unless otherwise specified, the minimum side laps shall be connected to the purlins using the specifications supplied by the manufacturer or other approved equivalent connector.
- 13.8. Use roof sealant, Vulcaseal or equivalent.

14. STEEL WORKS

- 14.1. For doors and windows and louvers, refer to the specifications indicated on the plans.
- 14.2. All steel embers shall be protected against corrosion using three applications of epoxy primer and epoxy reducer and with three final coatings of epoxy enamel with catalyst of grey color.

15. ELECTRICAL WORKS

- 15.1. All works shall be in accordance with the governing codes and regulations of the latest edition of the Philippine Electrical Code, with the rules and regulations of the National and Local Authorities concerned in enforcement of electrical laws and ordinances and with the rules and regulations of the utility companies concerned.

- 15.2. Contractor shall furnish all labor, equipment and materials as may be approved by the Procuring Entity or his/her representative and shall perform all electrical rough-in works and Electrical fixtures.
- 15.3. Electrical Materials shall be specified in the electrical drawing details as shown in the plans and bill of quantities.

16. PAINTING WORKS

- 16.1. All painting materials shall be of approved brand. Use first class neutralizer primer, putty, tinting color and thinning solvents of the same brand.
- 16.2. Prior to painting works, all exposed finish hardware, electrical plates & fixtures, plumbing fixtures, toilet accessories, glasses and the like shall be adequately insulated/protected that these are not stained with paint and stain materials. All other surfaces which stain would endanger existing paint, should be taped and covered with paper or equal.
- 16.3. Apply the proper number of coats to affect a painted surface which is not transparent, looks full bodied when dried, and generally as recommended by the manufacturer for the respective paint types.
- 16.4. The walls and ceiling should be coated with paint that doesn't easily peel off or chip, does not contain lead, is resistant to water and moulding as well as repeated cleaning and disinfections.
- 16.5. For all areas specified for moisture protection shall be coordinated with painting procedures shown on brochures from manufacturers.

17. HAULING OF WASTE & DEMOLISHED MATERIALS

- 17.1. This item includes cleaning of all the excess and unnecessary materials and removing them from the site.

SCOPE OF WORKS

1. INTRODUCTION

The Philippine Science High School - Main Campus provides services and facilities, and supports programs which enhance the growth of the PSHS community. In PSHS-MC, as a help to continually provide its services, the implementation of Site Development project have been identified.

2. SCOPE OVERVIEW

The Scope of Works includes but not limited to the following:

A. Site Development

- A.1. Rehabilitation of the Guardhouses at the Vehicular Entrance and Exit Gates;
- A.2. Rehabilitation of the Grandstand Field;
- A.3. Rehabilitation of the Drainage and Manholes of the Perimeter Road;
- A.4. Installation of LED Street Lights;
- A.5. Rustproofing and Repainting of the Fence along Agham Road;
- A.6. Relocation of the Electric Pullout Manhole with Additional Duct Bank;
- A.7. Construction of Electrical Duct Banks from BRHA-1 and BRHA-2 going to the Powerhouse and Ground Improvement along the Constructed Duct Banks;
- A.8. Construction of Powerhouse Including Main and Distribution Feeder Lines;
- A.9. Construction of Covered Walks (BRHA-1, BRHA-1, Gazebo to Grandstand);

B. Installation of Main Power Supply Cable for the Residence Halls.

3. DESCRIPTION

The construction in general will be using mixed materials such as reinforced concrete structure, concrete hollow blocks (CHB), plain concrete and steel materials on trusses.

4. DURATION

The Contract Duration is for a period of **one hundred twenty (120) calendar days**. The Construction of the Powerhouse Including Main and Distribution Feeder Lines is prioritized and is expected to be finished by June 30, 2018.

5. CONSTRUCTION

General Scope of Works:

The Contractor shall carry out all the Construction Works including the following but not limited to:

- 5.1. The Contractor shall be responsible for site preparation and installation of temporary fencing to secure work area, as well as necessary gates and access control system to the satisfaction of the PSHS-MC;
- 5.2. The Contractor shall make adequate site survey, verification and setting outs;
- 5.3. Processing and Securing of Permits and Insurance
The contractor shall be responsible for securing the **Certificate of Electrical Inspection (CEI)** for the Construction of the Powerhouse and all necessary permits required by the government agencies concerned in the issuance of the CEI, which shall include but are not limited to Building Permits, ECC or CNC, etc., Contractor's All Risk Insurance & Third Party Liability and Workman's Compensation Insurance (CARI), and other insurances required by the Local Government Unit (LGU), among others, including payment of assessed fees as may be required by the LGU and/or Regulating Agencies before the implementation of the project. All related documents shall be submitted to the Philippine Science - Main Campus.
The contractor shall be responsible for securing the Tree Cutting Permit form the Barangay and the DENR.
- 5.4. Mobilization shall include all activities and associated costs for transportation of Contractor's personnel, equipment, and operating supplies to the site; establishment of temporary field office and other necessary general facilities for the Contractor's operations at the site; premiums paid for performance and payment bonds, including co-insurance and re-insurance as applicable;
- 5.5. Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not included in the contract from the site; including the disassembly, removal and site cleanup of temporary offices and other facilities assembled on the site specifically for this contract;
- 5.6. Construction safety and Health program includes provision of safety gadgets (belts, goggles, hard hat, working uniform and safety shoes) for all workers in the hard hat area;
- 5.7. The Contractor shall make photographic reports and provide two (2) Project Billboards as indicated in the specifications;
- 5.8. The construction of temporary facilities;
- 5.9. All earth works including but not limited to excavation, grading, backfilling/earthfill and compaction to the required grades and levels as shown on the drawings;

- 5.10. Capping of all existing utility lines. Consult PSHS-MC before commencing work;
- 5.11. Use of forms and scaffoldings;
- 5.12. All concrete works shall be done in accordance with the standard specifications for plain and reinforced concrete adopted by the Government. Cement to be used shall be Portland cement or any other equivalent brand more readily available in the locality;
- 5.13. Concrete works include the in-situ pouring of concrete mixture (Class A, 3,500 psi, 28 days, 9 bags) for footings, columns, wall footing and concrete slabs of the buildings to be approved by PSHS-MC;
- 5.14. Concrete mix and steel reinforcement shall be approved by the Procuring Entity or his/her authorized representative;
- 5.15. Masonry works include erection of Concrete Hollow Blocks of non-load bearing type with even texture and well-defined edges, with a minimum compressive strength of 350 psi;
- 5.16. The trusses and roofing works include provision and installation of all roofing materials required by the project and as shown on plans to be approved by PSHS-MC;
- 5.17. Installation of doors and windows as shown on plans;
- 5.18. Steel works shall be painted with epoxy primer with final coating of epoxy enamel;
- 5.19. Painting works include painting of the exterior and interior walls and ceilings of the structure;
- 5.20. Prior to painting works, all exposed finish hardware, electrical plates & fixtures, and the like shall be adequately insulated/protected that these are not stained with paint and stain materials. All other surfaces which stain would endanger existing paint, should be taped and covered with paper or equal;
- 5.21. All electrical works shall be in accordance with governing codes and regulations of the latest edition of the Philippine Electrical Code, with the rules and regulations of the National and Local Authorities concerned in enforcement of electrical laws and ordinances and with the rules and regulations of the utility companies concerned;
- 5.22. Contractor shall furnish all labor, equipment and materials as may be approved by the Procuring Entity or his/her representative and shall perform all operations with electrical system shown in the drawings, their test and inspection complete in accordance with specifications and drawings and subject to terms and conditions of the contract and materials not specifically

mentioned to bring the electrical system to operating condition and ready for use by PSHS-MC;

- 5.23. Contractor shall be responsible for the restoration of all drainage pipes and other utility that might be affected or damaged during the implementation of the project;
- 5.24. Hauling of waste and demolished materials includes cleaning of all excess and unnecessary materials; and
- 5.25. Site house cleaning and demobilization of workforce and equipment include final grading and reinstatement of the site back to its original position.

Specific Scope of Works:

A. Site Development

A.1. Rehabilitation of the Guardhouses at the Vehicular Entrance and Exit Gates

1. Removal and replacement of the concrete roof slab with new concrete on steel deck of Guardhouse 1 & Guardhouse 2;
2. Replacement of the corroded reinforcing steel bars;
3. Installation of 0.60 x 0.60m homogenous floor tiles;
4. Provision and installation of aluminum framed windows as per plan;
5. Removal of the interior partitions at Guardhouse 2 and provision of additional toilets with toilet fixtures as indicated in the plans;
6. Painting of the interior and exterior walls.

A.2. Rehabilitation of the Grandstand Field

1. Relocation and Construction of concrete drainage with steel gratings as per plan;
2. Removal of the existing backfill of the oval field and replacement with sifted soil free from stones and rocks;
3. Proper disposal of other debris that may be found during the implementation of the project;
4. Backfilling with sifted soil, free from debris;
5. Leveling and compacting of the earth backfill;
6. Provision and planting of carabao grass on the oval field.

A.3. Rehabilitation of the Drainage and Manholes of the Perimeter Road

1. Excavation and backfill works;
2. Construction of additional manholes with covers as per plan;
3. Removal and replacement of the portion of the Portland Cement Concrete Pavement (PCCP) affected by the laying of 36" diam. Reinforced Concrete Pipe Culverts (RCPC);
4. Installation of 36" diam. RCPC adjacent to the Administrative Building going to the existing RCPC along Agham Road.

A.4. Installation of LED Street Lights

1. Construction of concrete pedestal as shown on plans;
2. Installation of hot dip galvanized lamp posts as per plan;

3. Installation of AWG No. 10 THHN Stranded copper wire on 32mm diam. PVC electric conduit complete with boxes and connectors;
4. Installation of with 90 watts, 9000 lumen output LED street lights with hot dip galvanized single arm as per plan.

A.5. Rustproofing and Repainting of the Fence along Agham Road

1. Removal of loose paint on the steel and concrete surfaces;
2. Application of primer to exposed steel and concrete surfaces;
3. Application of two coats epoxy enamel on steel surfaces and semi-gloss latex paint on concrete surfaces, color: BLACK for steel members, OFF WHITE for concrete members.

A.6. Relocation of the Electric Pullout Manhole at the Cafeteria Area with Additional Duct Bank

1. Excavation and backfill works;
2. Construction of new electric pullout manhole as per plan;
3. Construction of additional duct bank going to BRHM & GRHM;
4. Pouring of concrete on the duct bank forms;
5. Installation of feeder line cables on the electric duct bank.

A.7. Construction of Electrical Duct Banks from BRHA-1 and BRHA-2 going to the Powerhouse and Ground Improvement along the Constructed Duct Banks

1. Excavation and backfill works for the duct bank trench;
2. Installation of PVC conduits as per plans;
3. Formworks;
4. Pouring of concrete on the duct bank forms.

A.8. Construction of Powerhouse Including Main and Distribution Feeder Lines

1. Construction of powerhouse structure;
2. Construction of designed duct banks and pullout manhole;
3. Provision and installation of designed feeder lines;
4. Provision and installation of main distribution panels and switchgears;
5. Energizing of the powerhouse.

A.9. Construction of Covered Walks (BRHA-1, BRHA-2, Gazebo to Grandstand)

1. Excavation and backfilling works;
2. Concrete works;
3. Steel reinforcement for footings and pedestals;
4. Steel works for the main frame and supports;
5. Insulation works using pre-painted galvanized sheets;
6. Installation of light fixtures as shown on the plans.

B. Installation of Main Power Supply Cable for the Residence Halls

1. Provision and installation of 500MCM THHN/THWN stranded copper cable at BRHA-2;

2. Replacement of the main distribution panel with 350AT/400AF circuit breaker including enclosure at BRHA-2, existing distribution circuit breakers to be retained;
3. Re-tapping of the distribution circuits to the new main distribution panel at BRHA-2.

6. CONTRACTOR'S SCHEDULE & PROGRESS REPORTING

- a. Progress Reporting. Throughout the Contract duration, the Contractor shall be responsible for taking detailed and accurate measurements of the actual progress of all aspects of the works.
- b. Monthly Progress Report. The Contractor shall maintain a master Project Schedule to summarize the status of the work; work in progress and percentage completed. This summary report shall be updated and issued at the end of each month.
- c. Contractor shall submit during the entire duration of the contract a progress report after the 50%, 95% and 100% accomplishment, under cover of a transmittal sheet and shall include as a minimum the following:
 - Management/Executive Report (Narrative)
 - Construction Progress
 - Forecast for the next one month
 - Manpower (Management and Workforce)
 - Areas of Concern
 - Photographic Report
- d. Meetings. Contractor Key Personnel shall meet with PSHS-MC representative upon request of PSHS-MC to discuss matters related to the project. PSHS-MC shall arrange to record the minutes of meeting and the Contractor shall be given a copy.
- e. Kick Off Meeting. Immediately after the Notice to Proceed, a Kick off meeting shall be held between PSHS-MC and Contractor. The initial Kick off meeting and recorded minutes shall form the basis of the Project action plan and set up such requirements as Safety and Constructability Reviews. It shall also be used to introduce PSHS-MC and Contractor representatives associated with aspects of the work. The objectives of the kick off meeting are as follows:
 - Introduction all of PSHS-MC's and Contractor's Project Management Team, Engineering and Construction team personnel;
 - Convey and promote shared commitment of project expectations;
 - Review and establish understanding of Project Work Scope;
 - Review overall project schedule;
 - Establish project meetings requirements and frequency of meetings; and
 - Establish reporting requirements and frequency of reports.
- f. Minimum Mobilization of Key Personnel

- Project Manager. Full time from Contract award up to completion of Works, to be mobilized on site during the construction phase;
 - Site/Construction Engineer: full time from initiation of site mobilization activities up to provisional acceptance of the works.
- g. Testing Work. The testing work will include all tests and checks on:
- All concrete mixture poured on footings, columns, beams, and slabs and required tests on structural steel members and reinforcing bars;
 - Testing the effectiveness and workability of electrical lines and sewer lines;
 - House cleaning of the area in preparation of handover to PSHS-MC.
- h. Commissioning Punch List. This shall be established for the purpose of recording all discrepancies, damaged or missing materials, malfunctions, missing documents and any deviation from the design drawings and specifications or normal operating conditions. All punch list items must be cleared from the System list prior to project turn over.

7. CONTRACTOR'S UTILITIES CONSUMPTION

The Contractor shall pay their electric and water consumption bills. Sub meters shall be installed at the expense of the Contractor to determine their actual consumption.

8. CONFLICT IN REFERENCE DOCUMENTS

In case of any conflict between the technical requirement and specifications of this contract and the reference documents, or among the reference documents, the order of precedence is:

1. Basic Engineering Drawings
2. Scope of Works
3. Technical Specifications
4. National Standards for Building Construction
5. International Codes and Standards

The contractor shall notify any discrepancy found in the documentation to PSHS-MC in writing for clarification. PSHS-MC will respond to such request in writing.