ELECTRICAL SCOPE OF WORKS

FOR PHASE 1 PROJECT

PHILIPPINE SCIENCE HIGH SCHOOL-SOCSARGEN

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1 INTRODUCTION

The electrical system of Philippine Science High School SOCSARGEN Campus is need to be upgraded due to the increase of building construction in the campus thereby there is a growth of power consumption. Therefore, the school administration has decided for the upgrading of the transformer based on the total power loading of the entire campus as per master plan.

The project will be divided into two phases that covers Phase 1 and Phase 2. Phase 1 will be the first plan for installation of new transformers and other related electrical equipment and materials within the transformer pad.

On the other hand, it is necessary that electrical contractors shall conduct site inspection prior to submit proposal to ensure that scope of works are properly determined.

2 ELECTRICAL SCOPE OF WORKS

2.1 Removal of Existing Transformers & Accessories.

- The electrical contractor shall remove the existing transformers supplying the temporary energized buildings.
- The electrical contractor shall handover all removed electrical equipment and materials to campus administrator.

2.2 Disconnection, Wire pulling and Reconnection at New MDP for Academic Building II.

- The electrical contractor shall disconnect the overhead conductor supplying Academic Building II.
- Temporary reconnection of existing wires at New MDP dedicated for Academic Building II.

2.3 Transformer Pad Fence and High Tension Support.

- The electrical contractor shall supply and install of transformer pad fence on the roofdeck including CT concrete box.
- The electrical shall supply and install high tension support.

2.4 Lines & Hardwares.

- The electrical contractor shall supply and install lines and hardwares including electrical protection and related accessories.

2.5 Installation of New 3-333kVA Transformers and Accessories.

- The electrical contractor shall deliver the transformers at the project site without any additional cost of the project.
- The electrical contractor shall supply and install Three (3) 333 kVA transformers and accessories. Ensure that connections are properly connected based on the utility company standard.

2.6 Supply and Installation of Pipes and Fittings - Transformer to MDP

- The electrical contractor shall supply and installation of service entrance piping including service entrance cap and fittings.
- The electrical contractor shall install rigid metal conduit from service entrance cap to new Main Distribution Panel (MDP).
- The electrical contractor shall supply and installation of aluminum pipe for metering.

2.7 MDP; Main Circuit Breaker : 2500AT, 3P MCCB,
Branches: 3-630AT, 3P, 1-400AT, 3P, 3-250AT, 3P, 1-160AT, 3P
2-125AT, 3P, 1-100AT, 3P MCB's with Thermal-Magnetic Trip,
MDP with dedicated lugs, digital ammeter, voltmeter display and
grounding terminals including grounding system.

- The electrical contractor shall provide new Main Distribution Panel (MDP).
- The electrical contractor shall refer to electrical single line diagram for the details of MDP.
- The electrical contractor shall ensure that the MDP is powder coated.

2.8 Supply and Installation of Building Wires - Transformer to MDP

- The electrical contractor shall supply and installation of wires to be terminated at the transformer secondary side and penetrated to the new Main Distribution Panel.
- The electrical contractor shall refer to electrical single line diagram for the exact details of wires.

3 TESTING AND COMMISSIONING

- The electrical contractor shall conduct tests for the wires and transformers with the presence of School Administrator/Representative and electrical consultant.
- The electrical contractor shall submit report for the tests conducted.