

SECTION - 1

SCOPE, SPECIFIC TECHNICAL REQUIREMENTS & QUANTITIES

1.1.0 SCOPE

1.1.1 The scope of work under this specification is Civil Works of 400kV Bay Extension Biharshariff being executed by Bharat Heavy Electricals Ltd. The Customer is Power Grid Corporation of India Limited.

1.1.2 The Civil Works shall generally include, *but not limited to*, following:

- (i) Equipment foundations.
- (ii) Cable trenches including precast covers & cable trench crossings.
- (iii) Drainage.
- (iv) Stone spreading including antiweed treatment,
- (v) Removal, cleaning & washing and relaying of the existing gravel/stone including antiweed treatment..
- (vi) Fire Wall
- (vii) Dismantling of RCC/CC structures
- (viii) Strengthening/Modification of existing reactor/transformer foundations
- (ix) Any other work required for the project.

1.1.3 The works to be performed in the above construction includes preparation of bar bending schedules, based on the drawings released for construction and getting the same approved by the Engineer-in-charge plus the execution of the work including providing of all labour, supervision, materials, scaffolding, power, fuel, construction equipments, tools and plants, supplies, transportation, all incidental items necessary for successful completion of the work including contractor's supervision and in strict accordance with the drawings and specifications and with inspection and testing standards. The nature of work shall generally involve excavation in all type of soil and rock including dewatering, shoring, strutting, and filling under and around structures, backfilling with available excavated earth around completed structures, cable trenches with covers, disposal of surplus soil, formwork, providing necessary steel embedments and other inserts, drainage work, stone spreading (including antiweed treatment, removal & relaying of existing gravel), concreting, brickwork, dismantling & disposal of existing concrete structures, Strengthening/Modification of existing reactor/transformer foundations as per technical specifications including dismantling, chipping of old concrete, scrapping, cleaning, application of necessary adhesives and straightening reinforcement from RCC including welding wherever necessary, stacking unconsumed serviceable and unserviceable material separately and disposal of unserviceable material within the substation

boundary etc. and other works in switchyard all complete as per detailed specification, drawings and directions of Engineer-in-charge.

1.2.0 SPECIFIC TECHNICAL REQUIREMENT

1.2.1 The specific technical requirements for the execution of civil works shall be as per Customer Technical Specification/IS. In case of any conflict between Standard Code and Technical Specifications, the provisions of Technical Specification shall prevail.

1.3.0 BILL OF QUANTITIES

1.3.1 The Bill of Quantity shall be as per pages from 1.3 to 1.7

1.3.2 The quantities indicated in the 'Bill of Quantity' are indicative and can vary to any extent. Contractor shall not be entitled for any claim for any such variation in the quantities.

1.3.3 The provision of Bill of Quantity, specifications and drawings shall be read in conjunction with each other and in case of conflict amongst them, the clarification shall be obtained from the Engineer-in-charge whose decision shall be final and binding.

1.3.4 Method of measurement:

1.3.4.1 Excavation shall be measured in cubic meters. The lateral dimensions to be considered for working out excavation quantity shall be the PCC dimension below the footing as per approved drawing. Nothing extra shall be paid for slope cutting, etc. Backfilling & disposal quantities shall be worked out based on the above dimensions only.

For other items, unless otherwise described the method of measurement as described in 'Method of Measurement of Building and Civil Engineering Works'-IS 1200(Part I to XXV) latest edition of BIS shall be followed.