

SECTION - 1

SCOPE, SPECIFIC TECHNICAL REQUIREMENTS &
BILL OF QUANTITIES

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1.1.0 SCOPE

1.1.1 The scope of work under this specification is Civil Works of Control Room Building for 400/220kV Substation at Aurangabad in Maharashtra, being executed by BHEL on turnkey basis. The Customer/Employer is Power grid Corporation of India Limited (PGCIL).

1.1.2 The Civil works shall generally include, *but not limited to*, following based on Employer/BHEL supplied drawings to be provided during detailed engineering:

- (i) Control Room Building.
- (ii) Any other civil work required for completion of the project.

1.1.3 The works to be performed in the above constructions include 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 including dewatering, shoring, strutting, and filling under and around structures, backfilling with available excavated earth around completed structures and disposal of surplus soil, concreting including reinforcement and formwork, providing necessary steel embedments and other inserts, brickwork, flooring and finishing in buildings, etc., all complete as per detailed specification, drawings and directions of Engineer-in-charge.

1.2.0 SPECIFIC TECHNICAL REQUIREMENTS

1.2.1 All technical requirements for the execution of civil works shall be as per CPWD Specification/PGCIL Technical Specification, Section: Civil Works (C/ENGG/SPEC/CIVIL/ Rev No.: 07, Page No. 16 of 35 to 27 of 35), (Refer SECTION 3). In case of any conflict between these, Customer's specifications shall prevail.

1.2.2 The quality requirements shall be as per PGCIL FQP (Refer SECTION-3).

1.2.3 Ready mix concrete pertaining to M20 grade of reputed manufacturer such as Lafarge, ACC, Ultra Tech, RMC Readymix India etc. or manufacturer of similar repute shall also be accepted for use in construction activity. Materials specification, workmanship and acceptance criteria of ready mix concrete shall be as per IS 456.

1.3.0 BILL OF QUANTITIES

1.3.1 The Bill of Quantities shall be as per pages 1.3 to 1.16

1.3.2 The quantities indicated in the 'Bill of Quantities' 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 Quantities, 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 metres. The lateral dimensions to be considered for working out excavation quantity shall be the PCC dimension below the footing as per approved drawing. The sides shall be considered vertical with the lateral dimension indicated above. Nothing extra shall be paid for slope cutting, etc irrespective of whatever is provided. 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.