

SPECIAL CONDITIONS OF CONTRACT FOR CIVIL ENGINEERING WORKS

1. The scope of contract generally covers complete civil engineering works required in connection with (i) including all ancillary works such as drains, diversions, alterations and additions to existing Civil Engineering Works and cleaning the site etc. complete as per the approved working drawings and instructions used to contractor from time to time. The contractor shall have to take the necessary precaution to safeguard against any damage to the neighboring existing structure and underground services etc.
2. The tenderer shall visit and is deemed to have visited the site and make himself thoroughly acquainted with the nature and requirement of the job, facilities of access for materials and removal of rubbish cost, of carriage, freights and other charges and shall allow in his tender for special difficulties if any in carrying out the work. He shall also include in his tender, charges for doing final surfacing to all repairs required to be done for any type of fixture, installation, etc. and for the removal of spoil arising of his contract.
3. The contract for the work is a complete one for labour, materials and workmanship including the use of construction equipments, tools and tackles. The contractor shall have to make his own arrangement for all materials required for the due performance of the contract.

All lap lengths in reinforcement rods have to be approved by the Engineer. Measurements of reinforcement will be inclusive of approved chairs, spacers, stays and overlaps.

4. The specifications and drawings given for execution, acceptance of construction and erection works are obligatory on the contractor for the construction works of NIT, Rourkela. If in the course of construction work, some additional problems arise, which are not covered by the given specifications, the contractor will be given proper instruction by the Engineer. Such instructions shall be observed in full by the contractor regarding specifications, drawings, method of conducting work, any other measures necessary for the fulfillment of construction. Verbal instructions be always got confirmed from the Engineers concerned, before execution by the contractor.
5. Specifications for the quality of building materials as also for the quality of construction work are given in corresponding sections of these specifications and / or the working drawings. Unless otherwise specified all materials and workmanship shall conform to the specifications attached and drawings supplied. Any item not covered by these, shall conform of the latest Indian Standard specifications.

6. Work shall be carried out in such a manner as not to interfere with or affect, retard or disturb the progress of other works being executed by other agencies. The contractor's rate shall include for any losses due to likely delay in coordinating with other works and interruption on account of inherent nature of the job, and as such, no extra claim will be admissible on such account.
7. If due to the design and other stipulations in the tender, or requirements at site, a particular sequence of overall constructional operations has to be followed due to which certain interruptions to any one or more types of work or items of execution are inherent, no claims for such interruption are admissible.
8. For carrying out the work, the contractor will be provided with two sets of working drawings.
9. All technical documents regarding the construction of works are generally given in the metric system and all works should be carried out according to the metric system. All documents concerning the work shall also be carried out in the metric system.
10. While carrying out the works the contractors should be provided for:-
 - a) Safety of personnel engaged on the construction.
 - b) Protection and safety of works during their progress.
 - c) Sanitary and hygienic condition of working and living for his workers, as per labour regulations.
11. In respect of portions of works which are likely to be embedded or covered up by the other works, the contractors shall submit them for technical inspection and have the necessary measurement and completion certificates duly signed by the engineer and contractor before letting such portions to be embedded or covered.
12. On completion of work, the contractor must submit to the engineer the following documents for the passing of the works:-
 - i) The technical documents according to which the work was carried out.
 - ii) A copy of the working drawing showing thereon all additions and alterations in the process of execution.
 - iii) Completion certificates for 'embedded' and 'covered up' works.
 - iv) Manufacture's certificates, guarantees and test certificates.
 - v) Certificates or control checking and test of materials.
13. The contractor shall submit to the engineer, in the form required by him and in the appointed time, the information regarding the progress of the work being carried out by them.

14. The power given to the representative of the contractor for signing technical certificates shall be indicated in a special letter addressed to the engineer.
15. The technical commission for the acceptance of covered work and unfinished work should consist of a representative each of :
 - (1) Employer
 - (2) Consultants.
 - (3) Contractor who has done the work, and
 - (4) Agency who accepts the work for continuation of the construction of the building or/ erection of equipment.
16. Contractor shall properly store all materials brought by him to the work site to prevent damage due to rain, wind direct exposure to sun etc. and also from theft, pilferage etc. The contractor shall maintain stocks of all materials required by him for the proper and speedy execution of his work.
17. The contractor shall make his own arrangement to procure all construction plant and equipment, tool and tackles etc. for his works.
18. All materials, construction plants and equipments etc. once brought by the contractor within the NIT area are not to be moved from there without the written authority from the engineer. Similarly, all enabling works built by the contractor for the main construction undertaken by him, are not to be dismantled and removed without authority from the Engineer.
19. The contractor shall at all times provide sufficient fencing, notice boards, lights, watchmen to protect and guard the works and provide all facilities and observe all the rules mentioned in the General Conditions of the Contract enclosed with the tender.
- 20.(a) Concrete and mortars are generally specified by the strength or the approximate proportions by volume respectively. The contractor may quote on the basis of their proportions. The concrete that will be used in the work shall be proved to be of requisite standard as laid down in the Indian standard specification and also by other intermediate test that may be prescribed for important construction. Batching by volume may be permitted at the discretion of the Engineer.
- (b) The quantities of all excavation, concrete, reinforcement steel work and shuttering as shown in the tender schedule are approximate. The rate quoted shall fully apply for any variations in the scope of work and the resulting quantities. The payment shall be made on actual quantities constructed and measured at site as per standard practice in conformity with I.S 1200.

21. The aggregate to be used in the work shall be hard, strong and durable and shall be clean and free from clay films and other adherent coating. These must be machine crushed, screened before mixing. Sand must be coarse and thoroughly screened before mixing. Mixing shall be done by an approved mechanical batch mixer or by portable concrete mixers.
22. In the areas of fill, filling shall not be done until foundations and underground work e.g. pipes cables, etc. are completed. Should the fill be done prior to such completion, the contractor shall do all excavation and protection work for doing the foundations, underground works etc. at his own cost.
- 23.(a) The specifications prescribe various tests at specified intervals for ascertaining the quality of his work done. If the tests prove unsatisfactory, the Engineer shall have liberty to order the contractor to redo the work done, in that period, and do order such alterations and strengthening that may be necessary at the cost of the contractor. The contractor shall be bound to carry out such orders failing which the rectification, will be done by the Engineer through other agencies and cost recovered from the contractor.
 - (b) Structure test :- The engineer shall instruct the contractor to make a loading test on the work or any part thereof at the contractors cost, if in his opinion such a test is necessary.
 - (c) Charges for all tests shall be borne by the contractor.
24. The contractor shall not allow any visitors on the works except with the approval of the Engineer.
25. The tenderers are required to quote rates against all the items of the attached Tender schedule, failing which their tender may not be considered.
26. All guarantees such as for waterproofing materials for the entire work as obtained from the manufacture shall be transferred to the employer by the contractor after completion of the work.
27. The contractor shall keep a competent and qualified engineer constantly, assisted by others, who will be responsible for carrying out of the work to the satisfaction of the engineer-in –charge. Any direction or instructions given to him in writing shall be held to have been given to the contractor.
28. The following guidelines should be followed in respect of calculation of theoretical consumption of cement for civil engineering works:-
 - i) Theoretical consumption will be calculated on the basis of design-mix.

- ii) In case of concretes and mortar specified in the contract on volumetric proportion basis, the calculation of theoretical consumption will be governed by analysis.
 - iii) The permissible wastage of cement over the theoretical consumption as indicated above will be upto 5%.
- 29.(a) Item of work not covered by the specification attached shall confirm of the latest version of Indian standard Specification.
- (b) The contractor shall employ such workers who possess good antecedent reports. The contractor shall be fully responsible for the conduct of his workman and shall ensure that his workers do not indulge in any criminal activities. In case of any loss suffered by the NIT due to theft, damage etc. caused by the contractor's workmen, the same will be made good by suitable recovery from the contractor's running bills without prejudice to other rights of the company under the contract and under the law.
- 30.a) The contractor should be conversant about the location & the condition of the surroundings before quoting the rates.
- b) The provision for approach road for bringing the building materials at the works site will be the responsibilities of the contractor at his cost.
31. The date of taking over of the building by the representative of NIT shall be taken as the date of completion of the building. The defects of construction which are within the scope of the contract shall be recovered and signed jointly by the contractor's representative. The recorded defects will have to be attended by the contractor and it shall be the sole responsibility of the contractor. Only after completion, finalization of accounts in respect of final bill will be taken up by the department. If the recorded defects are not attended to by the contractor within 15 days, the department will at its own discretion employ another agency at the risk and cost of the contractor to get those recorded defects attended without any further reference to the contractor.
32. The contractor shall deal with all aspect of their as well as their sub- contractors labour including industrial relations.
33. The contractor should ensure payment of all dues including retrenchment compensation, even if the labour is engaged by his sub-contractor.

**SPECIAL CONDITIONS OF CONTRACT
FOR CIVIL ENGINEERING WORKS**

**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA**