

PUBLIC WORKS AND HOUSING DEPARTMENT

STANDARD SPECIFICATIONS

(Volume I)



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GOVERNMENT OF MAHARASHTRA

PUBLIC WORKS AND HOUSING DEPARTMENT.

STANDARD SPECIFICATIONS

Volume I

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INTRODUCTION

It has often been experienced that there is no uniformity in the wording of items and specifications in the tender papers prepared by various officers. In several cases, particularly where architectural features are involved the local officers are not in a position to bring out the full requirements of these features in the wording of items or in the specifications.

This situation gives rise to avoidable extra items during execution. It is also noticed that cropping up of extra items is mostly due to incorrect and ambiguous wording in the items of tender papers and specifications and in some cases due to not adhering to the details in the drawings. Similar situation exists in connection with road and bridge works. Although in the case of bridge works some headway has been made by the Design Organisation, even here, the approach has been mostly from the design point of view. It is necessary to have standardised items and specifications in the case of bridges also. In road works also, there is a large amount of diversity in the expressions used in the items and the specifications.

In the past, attempts were made in this direction but somehow or the other, this question was not pursued further.

Considering all the above difficulties and in view of urgency and importance of this matter, the post of Special Officer for Standard Specifications and Draft Tender Papers was created.

The work in the present form was started with the appointment of Shri A. G. Naik, Retired Superintending Engineer as Special Officer and two Assistants—Shri A. G. Borkar, Assistant Engineer and Shri K. S. Agashe, Deputy Engineer.

In view of the statutory obligation of adopting metric system the specifications have been drawn up in metric system alone on the basis of metric standards wherever they had been already evolved and adopting improvised equivalents where they were not available.

The Standard Specifications have been grouped into six main sections as below:—

- (1) Basic Materials.
- (2) General Items.
- (3) Bridge Work.
- (4) Cross Drainage Works.
- (5) Road Work.
- (6) Building Work.

These specifications will guide the technical staff of Buildings and Communications and Irrigation and Power Departments in construction works and in adoption of metric system.

K. V. JOGLEKAR, Chief Engineer.

Bombay, 1st January 1964.

INSTRUCTIONS

The Standard Specifications have been grouped under the following sections:

- A. Basic Materials.
- B. General Items.
- BR. Bridge Work.
- CD. Cross Drainage Works.
- Rd. Road Work.
- Bd. Building Works.

The first two sections over specifications for Basic Materials and General Items pertaining to all normal construction work. The other sections include specification for the various items of work which are required under those respective sections. The specifications under each section are distinguished by the prefix mentioned against each. The list of items under each section is given at the beginning of that section. Indian Standards have been adopted and referred to wherever necessary. A list of such Standards referred to, is given at the beginning of each section. These Standards should be available in the Divisions.

The wording of the items has been standardised to form the basis for preparing the list of items for the Standard Schedule of Rates. In order to avoid repeatation and to keep down the volume of write up, different alternatives like type of stone, type of mortar (cement or lime) proportion of mix of each type of mortar etc. which have to be actually used in a particular item of work have been included in the same item either as alternatives for deleting the unwanted alternatives or as blanks to be filled in while preparing the list. For purposes of Schedule of Rates, each item mentioned in the Specifications will have to be split up into a number of separate items to provide for each alternative or combination of alternatives and for each figure that will have to be filled up in the blanks where left. Whatever the alternative or combination of alternatives that may be retained in the item of the schedule and whatever figures may be included in the blanks for that item, the specifications drawn up for the item will be applicable for all the split up items.

For every one of such split up items, the number of the specification to be quoted in the tender and referred to will be the single number of the corresponding combined item which provides for all the alternatives and blanks in the Standard Specifications. The reference should include the prefix of the particular section, letter of the particular group and the serial number of the item. Thus in Bd. G.5, Bd. will refer to the section of Building Work, G will refer to Brick work group in that section and 5 will refer to the item No. 5 in the list of the items in that group.

The specifications for each item covers:-

- (i) general scope of the item,
- (ii) materials required,
- (iii) processing of the materials,
- (iv) construction operations,
- (v) finishing,
- (vi) all the elements which are included in the item, and
- (vii) mode of measurement, deductions to be made etc. and payment.

If specifications are to be added for any new items they may be drafted likewise.

The analysis of scheduled rate for any item will be framed to cover all the elements included in that item, as specified in the Standard Specifications.

These specifications shall be thoroughly studied before deciding whether any addition to the Standard Specifications is required or some portion is required to be modified due to new materials different processing, architectural ornamentation etc. Such additions or modifications shall be included in the special provisions to be mentioned in the specifications for the particular items, in addition to the reference made to the Standard Specifications.

Where necessary, the specifications have been supplemented by sketches for clarity. The Engineer shall also supply detailed drawings where required. When, however, any discrepancy is found between the drawing and the estimates or the specifications, the Engineer's decision as to which shall be followed shall be final. "Engineer" shall mean the Executive Engineer in charge of the work and shall include the Superior Engineer Officers of the Engineering Department of the Government of Maharashtra, i. e., the Superintending Engineer, Chief Engineer, etc.

Metric system has been adopted throughout these specifications for weights, measures, etc., but their equivalents in foot-pound-second units have also been given in brackets in most cases to give a proper idea of metric weights and measures. Rationalised metric standards have been adopted wherever they have been evolved or in use.

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