

## **PART C2 PRICING DATA**

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## C2.1 PRICING INSTRUCTIONS

### PREAMBLE TO THE BILL OF QUANTITIES

1. The General Conditions of Contract, the Special Conditions of Contract, the Specifications (including the Project Specifications) and the drawings shall be read in conjunction with the Bill of Quantities.
2. The Bill includes items covering the cost of general liabilities and obligations, and the cost of construction or installation of temporary and permanent works.
3. All quantities given in the Bill of Quantities are provisional whether so marked as such or not, and are subject to re-measuring during the execution of the work. The validity of the contract will in no way be affected by differences between the quantities in the Bill of Quantities and the quantities finally certified for payment.
4. The amounts and rates inserted in the Bill of Quantities shall be the full inclusive cost to the Employer for the work described under each item. Such amounts and rates shall cover all costs, expenses, overheads and profits as may be required for construction of the work and, shall include for all general risks, liabilities, obligations, and taxes (excluding Value Added Tax) as described or implied in the documents on which the tender is based.
5. The measurement and payment clause of each standardised and particular specification, read together with the relevant clauses of the project specification set out the ancillary or associated activities which are included in the rates for the operations specified.
6. Descriptions in the Schedule may be abbreviated and tenderers are referred to the specifications and the project specifications for full definition of the requirements under that item. The payment clause reference in the Schedule refers to the applicable specification or project specification clause.
7. Should there be any conflict between definitions or specifications covering any item, the order of precedence shall be as follows:
  - i) The project specification
  - ii) Variations to a standardised or particular specification.
  - iii) The standardised or particular specification.
8. Read together, the above three specifications shall take precedence over any other publication or trade custom.
9. Should there be any conflict between the unit of measurement of any item in the Bill and the unit in any applicable specification, the unit in the Bills shall take precedence.
10. Unless stated to the contrary, all items are measured nett in accordance with the designs and specifications and no allowance is made for waste, working space or over-supply.
11. Unless stated to the contrary, all thicknesses are measured in their finished state.

12. The tenderer is at liberty to insert a rate of his choosing for each item in the Bill. However, he should note that the Engineer is obliged to base the assessment of rates for any additional work which may be authorised on the rates in the Bill.
13. An amount or rate is to be entered against each item in the Bill, whether quantities are stated or not. An item against which no amount or rate is entered will be considered to be covered by other amounts or rates in the Bill.
14. All items for which terminology such as “nil”, “inclusive” or “not applicable” have been added by the Tenderer will be regarded as having a nil rate which shall be valid irrespective of any change in quantities during the execution of the Contract.
15. The Tenderer shall fill in rates for all items where the words “rate only” appears in the “Total” column. The quoted rate shall apply in the event of work under this item being required. The Tenderer shall however, note that in terms of the Tender Data, the Tenderer may be asked to reconsider any such rates which the Employer may regard as unbalanced.
16. Where Provisional Sums or Prime Cost Sums are provided for in the Bill of Quantities, the Employer reserves the right during the execution of the works, to adjust the stated amounts upwards or downwards according to the work actually done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.
17. Each Preliminary and General (P&G) item is to be priced separately. A lump sum P&G price will not be accepted and if submitted, may render the Bill of Quantities unresponsive and therefore disqualified.
18. Incorrect entries shall not be erased or obliterated with correction fluid but must be crossed out neatly. The correct figures must be entered above or adjacent to the deleted entry, and the alteration must be initialled by the Tenderer.
19. Arithmetical errors found in the Bill of Quantities as a result of faulty multiplication or addition will be corrected by the Engineer at the tender evaluation stage, as set out in Clause F3.9 of the Standard Conditions of Tender.
20. The Tenderer shall complete the Bill in black ink.

## 21. METHOD OF MEASUREMENT

Quantities have generally been measured in accordance with SABS 1200 Standard Specifications where applicable.

### 21.1 DEMOLITIONS

- 21.1.1 All rates shall include for breaking up and removing from Site to a licensed dump site selected by the Contractor or delivery of materials to the Employer’s Stores on Site where specified and / or applicable.

### 21.2 STRUCTURAL STEELWORK AND METALWORK

- 21.2.1 Structural steel is generally measured in metric tonnes and quantities are generally rounded off to two decimal places.

- 21.2.1.1 Masses of steelwork shall be calculated in accordance with the mass list issued by the South African Institute of Steel Construction – Structural Steel Tables current at

enquiry dates and no allowance has or shall be made for rolling margins, binding wire or waste.

21.2.1.2 Should the mass of the steel actually used in the Works vary in any way from the above mass list, the variance shall be for the Contractor's account and the listed masses shall be strictly adhered to in all calculations affecting the mass of steel. The Contractor shall allow for rolling margins, a weld, shop bolts, etc., in the rates and not by a percentage addition to the mass.

21.2.1.3 All bolts, nuts and washers for site bolting of structural steelwork shall be calculated on the basis of 1,5% of the mass calculation of bolted items and costed at the rates applicable to the respective bolted items. No deduction shall be made for bolt holes and notches on rolled section only.

21.2.2 Rates for structural steelwork and metalwork shall include:

21.2.2.1 Fabrication, weld metal, all holes, shop bolts, rolling margins and waste, all fittings and connections included in the measured mass, all shims, laminated packs, wedges, comb shims, etc., and for shop preparation and shop painting of all surfaces or hot dip galvanising as required.

21.2.2.2 Temporary propping and bracing of steelwork during erection.

21.2.2.3 Priming before delivery and touching up primer or touching up galvanising with "Zinc Galv. 6" or other approved cold galvanising compound.

21.2.2.4 Rates for angles, frames, sleeves, bolts, inserts and other sundry metalwork shall include for casting into concrete unless otherwise specified.

21.2.2.5 Rates for gratings shall include for banding around perimeter.

21.2.2.6 Rates for hand and knee rails shall include for closed ends, angles, ramps, stanchions, etc.

### 21.3 PLUMBING AND DRAINAGE

21.3.1 Rates for pipes shall include if not allowed for in the schedule of quantities:

21.3.1.1 Bending pipes, jointing pipes of differing materials, jointing to taps, valves, traps, etc.

21.3.1.2 Nipples, sockets, collars, couplets, etc., concerned.

21.3.1.3 Supports, clips, saddles, holder bats, etc.

21.3.1.4 Fittings for pipes not exceeding 28mm diameter.

21.3.1.5 Excavation, selected fills blanket and main fill.

### 21.4 PAINTING

21.4.1 Painting to all work, including isolated components, sundry metalwork items, pipes, gutters, etc., shall be measured in m<sup>2</sup> unless otherwise described in the items.

21.4.1.1 Painting to structural steel shall be measured in tonnes.

21.4.1.2 Painting to handrails shall be measured to the actual length of hand rail and not individual components.

21.4.1.3 Narrow widths have been measured and added to the quantities for the associated major items.

## 21.5 TERMS USED

In this Schedule of Quantities the following expressions shall have the meanings hereinafter assigned to them unless otherwise described in the items concerned:-

- (i) "ALLOW" Where the word "allow" is used in any item of the Schedule of Quantities the sum entered by the Contractor is at his risk and shall cover all costs and charges in respect of the work referred to during the period of the Contract.
- (ii) "PROVIDE" Where the word "provide" is used and a sum has been inserted by the Engineer to cover the cost of any particular item of work, the sum so entered shall be dealt with in accordance with the provisions of the General Conditions of Contract.
- (iii) "BUDGETARY ALLOWANCE" Where the word "budgetary allowance" is used, the sum inserted by the Engineer to cover the cost of the particular item of work will be omitted during the Contract and the work will be measured in accordance with the procedure set out in the Schedule of Quantities and valued at the rates contained in the priced Schedule of Quantities for similar work.

## 22. APPROVED, DIRECTED OR SELECTED

22.1 The words "approved", "directed" or "selected" refer to the approval, direction or selection of the Engineer.

## 23. TRADE NAMES, PROPRIETARY BRANDS, ETC

All materials, fittings, furnishings, etc., specified under a Trade Name, Proprietary Brand or Catalogue Reference, shall be:

23.1 Used in strict accordance with the Manufacturer's latest printed instructions.

23.2 Either exactly as described or of equal quality, weight or specification and approved by the Engineer.

The Contractor shall first obtain written approval from the Engineer before goods are placed on order from a source of supply other than is specified herein. Such approval shall not be unreasonably withheld.

24. MATERIALS AND WORKMANSHIP

All materials shall be the best of their respective kinds specified and the workmanship shall be the standard defined for the trade tests required for such work and to the approval of the Engineer.

In all cases the materials and workmanship shall be in accordance with the latest edition of the relevant South African Bureau of Standards (SABS) or if not defined therein the British Standard Specification (BSS) or Code of Practice (BSCP) unless otherwise specified.

**The quantities given in this Schedule should not be used for ordering materials.**

## **C2.2 SCHEDULE OF QUANTITIES**