

SECTION-VI

Bill of Quantities

Notes for Unit Rate Contracts :

Objectives

The objectives of the Bill of Quantities are

- (a) to provide sufficient information on the quantities of Works to be performed to enable Bids to be prepared efficiently and accurately; and
- (b) when a Contract has been entered into, to provide a priced Bill of Quantities for use in the periodic valuation of Works executed.

In order to attain these objectives, Works should be itemized in the Bill of Quantities in sufficient detail to distinguish between the different classes of Works, or between Works of the same nature carried out in different locations or in other circumstances which may give rise to different considerations of cost. Consistent with these requirements, the layout and content of the Bill of Quantities should be as simple and brief as possible.

Content

The Bill of Quantities should be divided generally into the following sections:

- (a) Preamble;
- (b) Work Items (grouped into parts);
- (c) Day works Schedule;
- d) Provisional Sums; and
- (d) Summary.

Preamble

The Preamble should indicate the inclusiveness of the unit prices, and should state the methods of measurement which have been adopted in the preparation of the Bill of Quantities and which are to be used for the measurement of any part of the works.

Work Items

The items in the Bill of Quantities should be grouped into sections to distinguish between those parts of the Works which by nature, location, access, timing, or any other special characteristics may give rise to different methods of construction, or phasing of the Works, or considerations of cost. General items common to all parts of the works may be grouped as a separate section in the Bill of Quantities.

Day work Schedule

A Day work Schedule should be included only if the probability of unforeseen work, outside the items included in the Bill of Quantities, is high. To facilitate checking by the Employer of the realism of rates quoted by the Bidders, the Day work Schedule should normally comprise the following:

- (a) A list of the various classes of labor, materials, and Constructional Plant for which basic day work rates or prices are to be inserted by the Bidder, together with a statement of the conditions under which the Contractor will be paid for work executed on a day work basis.
- (b) Nominal quantities for each item of Day work, to be priced by each Bidder at Day work rates as bid. The rate to be entered by the Bidder against each basic Day work item should include the Contractor's profit, overheads, supervision, and other charges.

Provisional Sums

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the Summary Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises. Where such provisional sums or contingency allowances are used, the Contract Data should state the manner in which they will be used, and under whose authority (usually the Project Manager's).

Summary

The Summary should contain a tabulation of the separate parts of the Bill of Quantities carried forward, with provisional sums for Day work, for physical (quantity) contingencies, and for price contingencies (upward price adjustment) where applicable.

These Notes for Preparing Specifications are intended only as information for the Employer or the person drafting the Bidding documents. They should not be included in the final documents.

Bill of Quantities

1 Provisional Sum						
Procument Item Details						
SL. No	Item Description	Unit	Quantity	Unit Rate(NPR)	Amount(NPR)	
1	Insurance of Works, Plants,materials,loss and damage to equipment, Contractor"s workmen and employees and third party insurance against damage to other persons and property.	PS	1.0	125000.0	125,000.00	
2	All types of additional tests works during construcion phase: Concrete cube test, aggregate(AIV/ACV), sand, cement, water, rebar, sieve analysis(Wet+dry), UTM, Curshing strength of stone and others as per requirements and instructions of Engineer. (Payment shall be made as per actual bill plus VAT)	PS	1.0	73000.0	73,000.00	
2 Construction work						
Procument Item Details						
SL. No	Item Description	Unit	Quantity	Bidder's Rate (NPR)	Bidder's Rate (in words)	Total Amount (NPR)
1	Roadway excavation in all types of soil by mechanical means as per drawing and technical specification, including removal of stumps and other deleterious matter, with all lifts and lead as drawing and instruction of engineer.(905 DOR)	Cum	3541.93			
2	Roadway excavation in Ordinary and Hard Rock by mechanical means as per drawing and technical specification, including removal of stumps and other deleterious matter, with all lifts and lead as drawing and instruction of engineer.(905 DOR)	Cum	1517.97			
3	Earth work in excavation of foundation of structures, including construction of shoring and bracing, removal of stumps and other deleterious matter and backfilling with approved Material as per Drawing and Technical Specifications. Ordinary soil Mechanical Means	Cum	1912.23			
4	Providing and laying Random rubble stone masonry in cement mortar [cement(1) : sand(6)] in Structure all complete as per drawing and technical specifications. Spec. cl. No: 2600, 2607 (DOR)	Cum	936.0			
5	Providing and laying of hand pack Stone soling with 150 mm thick stones and packing with smaller stone on prepared surface as per Drawing and Technical Specifications. Spec. cl. No: 1006 ,10.8	Cum	328.85			

Procurement Item Details						
SL. No	Item Description	Unit	Quantity	Bidder's Rate (NPR)	Bidder's Rate (in words)	Total Amount (NPR)
6	Providing and laying of Machine mixed Plain Cement Concrete in Foundation complete as per Drawing and Technical Specifications. Grade M10 (Spec. cl. No: 2000)(DOR)	Cum	16.66			
7	Providing and laying of Machine mixed Plain Cement Concrete in Foundation complete as per Drawing and Technical Specifications. Grade M15 (Spec. cl. No: 2000)(DOR)	Cum	138.45			
8	Providing and laying of Machine mixed PCC For Reinforced Cement Concrete work in Roadway Rcc slab complete as per Drawing and Technical Specifications. Grade M20 (Spec. cl. No: 2000)(DOR)	Cum	144.72			
9	Plum Cement Concrete work. It includes all labour and material required for mixing, placing in position, vibrating, compaction, finishing, curing and all other incidentals required to produce concrete of specified strength as per the specification. Rate includes the work of making, fixing and removing of all centres and forms required for the work. (Concrete M15 grade + 40% Boulder in foundation) as per specification. Spec. cl. No: 24.21 (DOR)	Cum	203.0			
10	Supply of machine made hexagonal mesh type 100mm x 120 mm Gabion boxes / mattresses with diaphragms, with binding wire x swg, mesh wire 2.7 mm and selvedged wire 3.4 mm and lacing wire 2.2 mm, including placing in position including stretching, forming compartments; tying with bracing wires and tie wires; tying down the lid complete; and providing and filling stone / boulder in gabion boxes / mattresses etc. including dressing, bedding, bonding and all transportation as per specification. Spec. cl. No: 24.3,24.21 (DOR)	Cum	74.0			
11	Providing and laying Reinforcement including cutting, bending, binding, fixing in position and lead 30m. etc. all complete as per specification and drawing. Spec. cl. No: 2014	kg	5506.17			
12	Providing and laying R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand), lead upto 100m. A) 600mm diameter RCC hume pipe. Spec. cl. No: 701	Rm	62.5			
13	Providing, laying and fixing of Geotextile (filter fabrics), lead 30m	Sqm	51.0			

Total of Procurement Items	
Total Item Price	
VAT	
Grand Total	