

# Volume - III

## Bill of Quantities (BoQ)

**Preamble of Bill of Quantities**

1	The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, General and Particular Conditions, Technical Specifications, and Drawings.
2	The quantities given in the Bill of Quantities are estimated and provisional and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the rates and prices bid in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the client may fix within the terms of the Contract.
3	The rates and prices bid in the priced Bill of Quantities shall, except insofar as it is otherwise provided under the Contract, include all Constructional Plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes, and duties, together with all general risks, liabilities, and obligations set out or implied in the Contract.
4	A rate (or) price (without GST) shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of Items against which the Contractor has failed to enter a rate, or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
5	The whole cost of complying with the provisions of the Contract shall be included in the Items provided in the priced Bill of Quantities, and where no Items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.
6	General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the contract documentation shall be made before entering prices against each item in the priced Bill of Quantities.
7	The method of measurement of completed work for payment shall be in accordance with the Technical Specifications and Mode of Measurement will be as mentioned in the BoQ.

**Abstract**

<b>Sl. No.</b>	<b>Description</b>	<b>Amount in Rs.</b>
1.	Construction of RCC Minor Bridge Interconnecting Phase-1 & Phase 2A area in Origins, Chennai	
	<b>Sub-Total Amount in Rupees</b>	
	<b>Add GST .....%</b>	
	<b>Total Amount in Rupees</b>	
	<b>Total Amount in words Rupees</b>	

Construction of RCC Minor Bridge Interconnecting Phase-1 & Phase 2A area in Origins, Chennai

Sl. No.	Description	Unit	Quantity	Rate in Rs. (Excluding GST)	Amount in Rs.
1	Earthwork excavation in all stiff clay, stiff black cotton, hard red earth, shales, murrum, gravel, Stoney earth and earth mixed with small size boulders and to the required depth as may be directed except in hard rock requiring blasting inclusive of shoring strutting and baling out water wherever necessary, depositing the surplus earth in places shown clearing and levelling the site with an initial lead of 30 meter and lifts as specified hereunder etc., all complete in all respects complying with relevant standard specification (excluding refilling)				
	a) 0 to 2 m depth	Cum	1,660.00		
	b) 2 to 3 m depth	Cum	830.00		
	c) 3 to 4 m depth	Cum	830.00		
	d) 4 to 5 m depth	Cum	830.00		
	e) 5 to 6 m depth	Cum	830.00		
	f) 6 to 6.70 m depth	Cum	560.00		
2	Providing lime, cement, and soil mix with 30% of hydrated lime, 30% of cement and 40% of excavated soil at site laying in below foundation concrete, including levelling and ramming each layer up to finished level etc. complete. Complying with relevant standard specification, as per drawing and as directed by the Engineer in charge.	Cum	280.00		
3	Construction of granular sub-base by providing close graded Material conforming to Table 400-1, Grading I of MORT&H (Fifth Revision) specifications, in layers of maximum 150 mm. compacted thickness over compacted sub grade, to achieve a minimum soaked CBR value of 30% in accordance with standard specifications, including watering, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting by 8-10 M.T. vibratory power roller to achieve the desired standard proctor density of 98% (IS:2720 Part - 8) including surveying wherever necessary etc. complete as per Clause 401 of MORT&H specification and as directed by the Engineer, (Payment to be made for finished item of work after completion based on original and finished levels) - thickness as per road drawings.	Cum	930.00		

Sl. No.	Description	Unit	Quantity	Rate in Rs. (Excluding GST)	Amount in Rs.
4	Supplying and filling in foundation, basement, with filling Red gravel in layers of not more than 15 cm thick well watered, rammed and consolidated including cost of necessary field tests to be carried out etc. complete complying with standard specification and as directed by the Engineer in charge.	Cum	360.00		
5	Removal of surplus earth available in the site, clearing the earth away 5 Km from the site and 200 mm layer with 95 % proctor density including conveyance charges loading, unloading, hire charges for lorry, diesel, charges and labour charges etc all complete and as directed by the engineer in charge.	Cum	4,150.00		
6	Providing M7.5 grade (RMC) plain Cement Concrete of (PCC) with water cement ratio not exceeding 0.45 with minimum cement content and design mix as per IS codes, using ordinary Portland cement - 53 grade, M sand, 20 mm and down size coarse aggregates, necessary approved admixtures as per requirement and using GGBS confirming to IS 12089 and IS 455 with all leads and lifts including laying, compaction of concrete, shuttering, curing, finishing etc complete. Complying with relevant standard specification and as directed by the Engineer in charge in all trapezoidal and rectangular drains. (The Basic rate for M7.5 grade concrete is Rs.4,200/- per Cum. Pl. refer the schedule A in the standard contract Document).	Cum	90.00		
7	Cement concrete M30 design mix (RMC) for all reinforced cement concrete works namely Raft, Grade beam, column, Slab, beams, Retaining walls and other similar works and other similar structures etc. with water cement ratio not exceeding 0.45 and minimum cement content of 360 kg per cubic metre, using ordinary Portland cement - 53 grade, M sand, 20 mm and down size coarse aggregates, necessary approved admixtures as per requirement and using GGBS content 160 kg per cubic metre in structural and non structural works excluding the cost of reinforcement grills, fabrication charges, shuttering and centering but including all leads etc, all complete. Mix design data has to be got approved engineer in charge before commencement of work. In foundation and Basement (The Basic rate for M30 grade concrete is Rs.5,460/- Per Cum. Pl. refer the schedule A in the standard contract Document)				
	a) Raft	Cum	520.00		
	b) Wall	Cum	180.00		
	c) Column / Pier	Cum	20.00		

Sl. No.	Description	Unit	Quantity	Rate in Rs. (Excluding GST)	Amount in Rs.
	d) Deck slab	Cum	500.00		
8	Supplying and erecting centering for plane surfaces such as RCC Raft, retaining walls, parapet walls, columns, beams, Slabs, etc with necessary supports and strutting above all heights with all cross bracings using MS Sheets made of 10 gauge thick welded with MS angle of Size 25mm x 25mm x 3mm for boarding laid over steel adjustable span of size 2m x 2m (expandable upto 3.60m) and supported by Steel Adjustable Telescopic Props of Size 2.40m x 3.00m (expandable upto 4.90m) made with outer steel pipe with Dia 50mm (3.60mm thick) and inner steel pipe with Dia 40mm (2.90mm thick) with Cross bracings provided at two levels at a spacing of 1.80m ,etc complete complying with standard specifications. Steel adjustable span and Steel Adjustable telescopic props shall be provided as directed by the Engineer in charge (Payment for centering shall be given after the concrete is laid).				
	a) For R.C.C. works in foundation and basement such as grid beam, plinth beam, raft beam, raft slab, column base, column footings, pile cap, and other similar nature of works etc all complete	Sqm	145.00		
	b) For plane surfaces such as slab, Lintel, beam, vertical slab, side slabs of boxing, vertical drops, facia, vertical wall, waffle slab etc.	Sqm	680.00		
	c) Form work for Vertical walls, parapet and similar works	Sqm	520.00		
	d) For circular columns / Pier	Sqm	100.00		
9	Supplying, fabricating and placing in position of TMT bars for reinforcement with Fe 550/550D grade steel for all structures in the Raft, Walls, column, beams, slab and other similar works including cost of GI binding wire (18 gauge), cutting, bending, tying etc, all complete complying with relevant standard specification and as directed by the Engineer in charge in all RCC Works . (Fe 550/550D Reinforcement rate is Rs.55,665/- per MT Pl. refer the schedule A in the standard contract Document) (The steel rods must be Fe 550/550D grade of approved brand with ISI marking and necessary test certificate to be produced before using it at site)	MT	164.00		
10	Plastering with cement mortar 1:3 (One of cement and three of M sand) 12 mm thick with scaffolding curing etc., complete complying with standard specification and as directed by the Engineer in charge.	Sqm	110.00		

Sl. No.	Description	Unit	Quantity	Rate in Rs. (Excluding GST)	Amount in Rs.
11	Painting the new walls (Interior & Exterior) with two coats of approved cement paint in addition to one coat of approved primer over concrete /cement plastered wall surfaces etc. including cost of cement paint, brushes, etc., complete complying with standard specification and as directed by the Engineer in charge.	Sqm	110.00		
12	Providing weep holes in RCC Walls with necessary 110mm Dia pipe (6kg/m <sup>2</sup> ) upto 0.80m length, wire mesh screen, necessary filling as per drawing etc complete complying with standard specifications and as directed by the Engineer in charge.	Each	30.00		
<b>Total Cost in Rupees without GST</b>					