

### **BILL OF QUANTITIES**

#### Preamble.

- 1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, Conditions of Contract, 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 CEO (GMDA) and valued at the rates and prices tendered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the CEO (GMDA) may fix within the terms of the Contract.
- 3. The rates and prices tendered in the prices Bill of Quantities shall, except in so far as it is otherwise provided under the Contract, include all constructional plant, labour, supervision, materials, erection of display board, sign/caution board, maintenance, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract.
- 4. The rates and prices shall be quoted entirely in Indian Currency.
- 5. A rate or price shall be entered against each item in the 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.
- 6. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the period Bill of Quantities, and where no item are provided the cost shall be deemed to be distributed among the rates and prices entered for the related Item of Work.
- 7. General directions and descriptions of work and materials are not necessarily repeated or summarized in the Bill of Quantities. References to the relevant sections of the contract documentation shall be made before entering rates or prices against each item in the Bill of Quantities.
- 8. The method of measurement of completed work for payment shall be in accordance with the specification for Road and Bridge Works published by the Ministry of Surface Transport (edition).
- 9. Error will be corrected by the Employer of any arithmetic errors pursuant to Clause 29 of the Instructions of the Bidders.
- 10. Rock is defined as all materials which in the opinion of the CEO (GMDA), require blasting, or the use of metal wedges and sledgehammers, or the use of compressed air drilling for its removal, and which cannot be extracted by ripping with a tractor of at least 150kw with a single rear mounted heavy duty ripper.

#### 79 FORM OF BID

Description of the Works:

"Extension of Noonmati Basin Drain up to ASIDC point Bamunimaidam( Construction of under ground RCC storm water Box drain and open drain from Assam Small Scale Industries Development Corporation (Bamunimaidan to Noonmati Refinery area)) to Noonmati Basin Drain."

BID

То

Address

1. We offer to execute the Works described above and remedy any defects therein conformity with the conditions of Contract, specification, drawings, Bill of Quantities and Addenda for the sum(s) of

2. We undertake, if our Bid is accepted, to commence the works as soon as is reasonably possible after the receipt of the CEO (GMDA)'s notice to commence, and to complete the whole of the works comprised in the Contract within the time stated in the document.

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- 3. We agree to abide by this Bid for the period of \_\_\_\_\_ days after the deadline date fixed for receiving the same, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- 4. Unless and until a formal Agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
- 5. We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this		d	ay of		20			
Signature authorized	to	sign	bids	in th for	e capacity o and	of on	behalf	_ duly of

(in block capitals or typed)

Address

Witness

Address

# Occupation

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## **BILL OF QUANTITIES**

	NAME OF BIDDER/FIRM					
SI. No	Items of works	Unit	Quantity	Rate (Rs.) In figure	Rate (Rs.) In words	Amount (Rs.)
1	<b>RCC Box conduit for stirm sewer/s:</b> Earthwork in excavation in all types of soil strata namely sandy soil. Calyey soil. Hard and soft rock, slushy/ marshy soil by mechanical/manual means including disposing of decomposed organic matter mixed with brickbats, broken glass panes, broken earthen pots etc. Removal of stumps and their deleterious matter in the proposed work, constant water pumping for dewatering/bailling out water, getting out the excavated surplus earth/debris/unserviceable material to a safe disposal place with all lead and lift etc. complete, as per technical specification & as approved by the engineer.					
	i) 0.00m to 1.50m below G.L.	Cum	4,743.75			0.00
	ii) 1.50m to 3.00 m below G. L.	Cum	4,743.75			0.00
	iii) 3.00m to 4.50 m below G.L.	Cum	4,743.75			0.00
2	Earth work in excavation for foundation of structures as per drawing and technical specifications. Including setting out . Construction of shoring and brching removal of stumps and other deleterious matter.dressing of sides and bottom and back filling with approved material V. Marsy soil manual means width dewatering	Cum	24,753.75			0.00
	Vi. Back Filling in Marsy foundation Pits	Cum	19,237.50			0.00
3	Pumping out waste etc using pumps (5/10HP) & motors; suction & delivery pipes with fuel and lubrication and necessary operators, helpers etc (Note: This item for pumping is only applicable for removal of waste water under written instruction of EIC & log book be maintained for each pump)	HP/ Hr	36,628.20			0.00

SI. No	Items of works	Unit	Quantity	Rate (Rs.) In figure	Rate (Rs.) In words	Amount (Rs.)
4	Barricading: Both sides of the roads with glow sign boards etc as per direction of EIC.	Rm	1,822.40			0.00
	Shuttering and shoring the earth at different levels in foundations where necessary with required prop, struts, planks, timbers, nails etc., including dewatering if necessry, complete as directed and specified (measurement to be taken in the face area timbered)					
5	a) Upto a depth of 1.5 metre	Sqm	4702.50			0.00
	ii) Above 1.5 m upto 3.00m depth	Sqm	4702.50			0.00
	iii) Above 3.00 m upto 4.50m depth	Sqm	4702.50			0.00
6	<b>Stone soling:</b> Providing soling in foundation and underfloor with stone/best quality picked jhamma brick, sandpacked and laid to the level and in panel after preparing the subgrade as directed including all labour and materials and if necessary dewatering, complete. Stone soling of thickness 150 mm.	Sqm	9199.80			0.00
7	<b>P.C.C.(1:3:6):</b> Plain cement concrete works with coarse aggregate of sizes 13 mm to 32 mm in foundation bed for footing steps, walls, brick works etc. as directed and specified including dewatering if necessary, and curing complete (shuttering where necessary shall be measured and paid separately)	Cum	1379.97			0.00
8	<b>R.C.C M30 grade of concrete</b> Providing and laying plain/ reinforcement works cement sand & 20 mm down graded stone aggregate including screening and cleaning of coarse aggregate, fine aggregate (sand) conforming to proper grading zone, both of approved quality and cement, as necessary, vibrating using mechanical means, cost of curing with water, including cost and carriage of all materials and including preparation of design mix. approval of the same by the Engineer-in-charge, cost for quality control, sampling, testing etc. Excluding cost of formwork and reinforcement all complete as per drawing and technical pecifications. Consupmtion of cement content will not be less than 340 kg/cum of OPC 43/53 grade (I) Using mixer Machine / Batching Plant.	Cum	10477.36			0.00

SI. No	Items of works	Unit	Quantity	Rate (Rs.) In figure	Rate (Rs.) In words	Amount (Rs.)
9	<b>Reinforcement:</b> Supplying, fitting and fixing in positions reinforcement bars (Fe-500) conforming to relevant I. S. Code for R.C.C. Work/R.B. Walling including straightening, cleaning, cutting and bending to proper shapes and length as per details, supplying and binding with 20 G annealed black wire and placing in position with proper blocks, supports, chairs, spacers etc. complete. (No extra measurement for lap, hook, chair, anchor etc. will be entertained in the measurement as they are included in the rate)	MT	868.36			0.00
10	<b>Shuttering : (Ply board)</b> Providing of formwork of 12 mm thick plywood board so as to give a rough finish including centering, shuttering and propping etc. height of propping and centering below supporting floor to ceiling not exceeding 4.0 m and removal of the same for in situ reinforcement concrete and plain concrete work in: Column, Pillars, Posts & strut of square/rectangular/ polygonal in plan or any shape like Tee/L. having plane vertical face; Flat surface such as soffits of suspended floors, roofs, landings, cantilever slabs, chajjas Iconies and the like					
	a) For P.C.C	Sqm	525.45			0.00
	b) For R.C.C	Sqm	39496.89			0.00
11	Supplying & Laying of NP3 RCC pipeline as per IS 458 in proper grade and alignment along with proper bedding as per approved drawing and design/as per direction of EIC.					
	a) 300 mm dia pipe	Rm	84.75			0.00
12	Brickwork in cement morter with 1st class brick including racking out joints and curing complete as directed. In superstructure above plinth level upto 1 st floor level In proportion 1:3 (1 cement:3 sand) 1) for Manhole	Cum	252.11			0.00
13	<b>Plastering:</b> 20 mm thick cement plaster in two coats on single or half brick walls for interior plastering up to 1 st floor level including arises internal rounded angles, chamfers and/ or rounded angles not exceeding 80 mm in girth and finished even and smooth including curing complete as directed. on rough side (backing coat 15 mm and finishing coat 5 mm thick)					

SI. No	Items of works	Unit	Quantity	Rate (Rs.) In figure	Rate (Rs.) In words	Amount (Rs.)
	a) In cement morter 1:3	Sqm	1017.00			0.00
14	Supplying fitting and fixing of concrete gratings of approved design with cement concrete (1:105:3) in proper level as per direction EIC	Nos	227			0.00
15	Supplying, fitting and fixing (with 1:1.5:3 cement concrete) in position R.C.C. Heavy Duty (35T) Manhole/ pit cover with frame of approved make (Heavy type)	Nos	227			0.00
16	Supply, fitting and fixing of C.I/M.S (PVC coated ) and PVC steps along the wall of well/screen chamber/ manhole/catchpit.	Kg	11896.50			0.00
17	Road restoration					
17.1	Construction of Subgrade and earthen shoulders with approved material obtained from borrow pits with all lifts & leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of table (300-2) (including compensation of earth) (a) (Including cost of testing of materials at site and laboratory as directed by the deptt.)	Cum	4766.34			0.00
17.2	a) GSB with close graded: a) Plant Mix method ( construction of granular sub-base by providing close graded material, mixing in a mechanical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with morter graded on prepared surface and compacting (with an initial lead of 5 km) ( including cost of testing of materials at site and laboratory as directed by the deptt.) for grading-I Material.	Cum	1025.76			0.00
17.3	b) Water Bound Macadam : Providing laying, spreading and compactingvstone aggregate of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber applying and brooming requisite type of screening/binding material to fill up the interstices of coarse aggregate, watering and compacting to thr required density (with an initial lead of 5.0 km ) etc. grading II (150 mm thick ) and grading III (75 mm thick)	Sqm	1067.85			0.00

SI. No	Items of works	Unit	Quantity	Rate (Rs.) In figure	Rate (Rs.) In words	Amount (Rs.)
17.4	c) Dense Graded Bituminous Macadam (Providing and laying dense bituminous macadam with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggrgate of specified grading, premixed with bituminous binder @ 4.0 to 4.5% by weight of total mix and filer transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the reqd grade level and alignment rolling with smooth wheeled , vibraory and tandem rollers to achieve the desired complete as per MoSRT&H cl.no.507 complete in all respect (including carriage up to initial lead of 5.0 km from quarry and carriage of mixed materials up to 10.00 km initial lea from mixing plant)(including cost of testing of materials at site and laboratory as directed by the deptt) A. with hydrated lime/cement as filler (Refer table 500-9 of MoSRT&H specification) a) (i) with 60/70 or VG-30 graded bitumen For grading II (19 mm nominal size)	Sqm	355.95			0.00
17.5	d) Bituminous Concrete (Providing and laying bituminous concrete with 100-120 TPH batch type hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading , premixed with bituminous binder @ 5.4 to 5.6% of mix and filler transporting the hot mix to work sote, laying with a hydrostatic paver finisher with sensor control to the reqd grade level and alignment rolling with smooth wheeled . vibratory and tandem rollers to achieve the desired compaction as per MoSRT&H cl no.509 complete in all respect (including carriage upto initial lead of 5.00km from quarry and carriage of mixed material upto 10.00 Km initial lead from mixing pplant) (including cost of testing of materials at site and laboratory as directed by the dept) A. with hydrated lime/cement as filler (Refer table 500-9 of MoSRT&H specification) a) (i) with 60/70 or VG-30 graded bitumen For grading II (19 mm nominal size)	Sqm	189.84			0.00
17.6	e)Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of rod surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means (including cost of testing of materials at site and laboratories as directed by the department) A. Primer @ 0.60 Kg per sqm B) (1) With bitumen emulsion CSS-1h Qty. 500 X 14=7000.00	Sqm	7910.00			0.00

SI. No	Items of works	Unit	Quantity	Rate (Rs.) In figure	Rate (Rs.) In words	Amount (Rs.)
17.7	<ul> <li>f)Providing and applying tack coat with bitumen emulsion pressure distributor at the rate 0.20 kg per sqm on the prepared bituminous/ granular surface cleaned with mechanical broom (Including cost of testing of materials at site and laboratory as directed by the department)</li> <li>(1) With Bitumen Emulsion CSS-1 h</li> <li>(b) Dry &amp; hungry bituminous surface Qty. 2 X 500 X 14 =14000.00</li> </ul>	Sqm	15820.00			0.00
18	<b>Removal of unserviceable soil/rubish etc.</b> with disposal upto 5 Km(removal of unserviceable soil/rubish including excavation, loading uploading and disposal upto 5Km lead but excluding replacement by suitable soil which shall be paid separately).	Cum	24204.60			0.00
19	<b>kerb stone:</b> construction of cement concrete kerb with top and bottom width 115 and 165mm respectively, 250mm high in M 20 grade PCC on M-10 grade foundation 150mm thick, foundation having 50mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per direction of EIC.	RM	1100.00			0.00
	<b>Pavement</b> : Providing Paver Block/Tiles of concrete graded M30 of 40mm thick or above of approved quality, size, shape of specified thickness over a leveling bedding layer of 30mm completed sand over a base course of WBM or PCC including where necessary finished with spreading, sweeping jointing sand and compacting the pavers using vibrating compactor as specified and directed by EIC.	Sqm	226.00			0.00
					Total	0.00
	TOTAL VALUE IN WORDS					

Note:- 1. Item for which no rate or price has been entered it will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the bill of quantities (Refer: ITB Clause 13.2 and GCC Clause 43.3).

2. Units rates and prices shall be quoted by the bidder in Indian rupee [ITB Clause 14.1].

3. Where there is a discrepancy between the rate in figures and words, the rates in words will govern. [ITB Clause 27.1(a)].

4. Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern [ITB Clause 27.1(b)].