

BILL OF QUANTITIES FOR CIVIL AND STRUCTURAL WORKS PART-A,B

NAME OF THE WORK : "WORKSHOP FOR UNIT 3 & 4 EXPANSION PROJECT AT IB THERMAL POWER

SI No	Item	Unit	Quantity	Rate	Amount(Rs.)
	NOTE:- 1. All work for the items written here should be carried out strictly as per technical specification given or as per instruction of consultant. 2. All drawings should be properly co-ordinate before executing the work.3. All rate should be quoted considering wastage and all labour payments as per requirement.				
	Excavation				
1	Earth work in excavation up to 2.6 mt depth in ordinary soil including & leveling the bed & depositing the excavated materials with in 50m, initial lead & 1.5m initial lift with all cost ,conveyance ,tools&plants labour,taxes duties & royalites complete as per direction of EIC .	cum	1972.72		
2	Backfilling in all positions and heights and descents in foundations, pits, pipe trenches, tunnels, sewer lines, around foundations and structures, in plinth etc with approved excavated material obtained within a lead of 500 m including reclaiming from spoil heaps at all heights, or reclaiming from dump at all depths, transporting, depositing and dressing complete in all respect all as per drawings, specifications and directions of the Engineer/Consultant, all tools, plant and labour complete in all respect:	cum	1321.72		
3	Supplying, filling, watering and compacting coarse sand in foundations , pipe trenches, pits, sewerlines, drainage lines, plinth, underneath flooring watering and ramming including all cost,conveyance, T&P, royalties taxes of all materials,tools and labour charges as per the direction of EIC.	cum	793.79		
4	Filling with selected, suitable STONE BOULDERS of 75mm-100 mm under the floor and other location as directed by the Project Manager. It shall be consolidating by manual means, ramming and watering including transportation, loading, unloading, carriage to dumping spot and all incidentals at all depth, levels, leads and lifts ,all cost conveyance,T&P, royalties taxes of materials and labour charges etc complete as per the direction of EIC.	cum	1123.50		
5	Providing and laying PCC M10 (1:3:6) using 25-40 mm size H.G crusher broken metal of approved quality including all cost conveyance,royalites taxes of all the materials and labour charges required for the work complete in all respects as per the direction of EIC.	cum	45.91		
6	Providing and laying in position machine mixed, design mix cement concrete of M-20 grade (with min. cement 320 kg per cum) in flooring including laying of concrete using 12 mm - 20 mm size crusher broken hard granite chips including providing pockets, openings recesses, chamfering wherever required, vibrating, tamping, curing etc. all complete but excluding the cost of centring, shuttering, finishing and reinforcement but including Admixtures in recommended proportions as per IS 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability. Rate shall include cost all materials, conveyance , royalties and taxes, loading and unloading cost of all labour,sundries, T&P etc.complete as per the direction of EIC	cum	839.58		

7	Providing and laying in position machine mixed, design mix cement concrete of M-25 grade (with min. cement 320 kg per cum) including laying of concrete using 12 mm - 20 mm size crusher broken hard granite chips for reinforced cement concrete in raft, footings, pedestals, pile caps, retaining walls / walls (any thickness), columns, beams, stair cases, chajjas, sills, O.H / U.G water tanks, flat slab, suspended slab, inclined slab, roofs, lintels, fascia, pergola etc. including providing pockets, openings recesses, chamfering wherever required, vibrating, tamping, curing etc. all complete but excluding the cost of centring, shuttering, finishing and reinforcement but including Admixtures in recommended proportions as per IS 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability. Rate shall include cost all materials, conveyance , royalties and taxes, loading and unloading cost of all labour,sundries, T&P etc.complete as per the direction of EIC.				
a	RCC Column Base/Footing, RCC Chajja & Plinth Beam	cum	188.20		
b	RCC Column, RCC Floor Beam, RCC Floor Slab and RCC Lintel	cum	221.28		
8	Supplying and providing grouting (preferably with grouting powder Conbextra GP2) in foundation bolt holes, pockets and column bases after aligning and levelling of steel structures including cleaning holes and foundation tops, providing shuttering, mixing, placing, compacting and curing, all as per drawings, specifications and directions of the Engineer/Consultant, all materials, conveyance and taxes, loading and unloading cost of all labour,sundries, T&P labour etc.complete as per the direction of EIC. (GP2 CONSUMED IN 1 CUM =2400 KG)	cum	1.00		
9	Providing and fixing strong, rigid, smooth, levelled, and plumbed CENTERING AND SHUTTERING (Form work) including dismantling the same after the required intervals from the date of casting including cost of all materials, labour, conveyance, loading and unloading, taxes, royalties, scaffolding, sundries, tools and plants, etc., complete as per the direction of the Engineer-in-charge				
a)	for Floor Slab & RCC Chajja	Rmt.	599.53		
b)	for RCC Columns and Floor Beams	Rmt.	895.18		
c)	for RCC Lintels	Rmt.	121.41		
d)	for RCC Column Base/Footings & Plinth Beams	Sqm	754.70		
10	Supplying and placing in position high yield strength deformed bars / thermo mechanical treated bars any size any size and of grade Fe 500 and of , conforming to IS : 1139) for RCC work including straightening, cleaning decoiling, cutting, binding with 18 SWG black, soft annealed wire at every intersection, supplying and placing proper cover blocks, supports, chairs, overlaps, spacers, etc. for all height, depth and levels etc all complete. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement).	Qntl	1199.03		
11	Supplying , fabricating, erecting and fixing in position at and at all heights and depths above and below finished ground level M.S. foundation/anchor bolts for anchor box with/without sleeves for T-headed bolts, permanent steel shuttering (with or without anchor pin) for anchor bolt pockets (straight or tapered) with all nuts and washers for embedding in permanent concrete or masonry work, true to line, level and plumb including all connected works and adjustments in shuttering and reinforcement, all as per drawings, specifications and directions of the Engineer/Consultant, all materials, tools, plant and labour complete in all respect.	Kg	275.00		

12	Supplying , fabricating, erecting and fixing in position at and at all heights and depths above and below finished ground level M.S. Insert plates for embedding in permanent concrete or masonry work, true to line, level and plumb including all connected works and adjustments in shuttering and reinforcement, all as per drawings, specifications and directions of the Engineer/Consultant, all materials, tools, plant and labour complete in all respect	Kg	1773.00		
13	Supplying , fabricating, erecting and fixing in position at all heights and depths above and below finished ground level MS chequered plate/ M.S. plate covers , M.S gratings with structural steel work for support & stiffeners in floors, trenches, hatch, manholes etc, including supplying and applying complete in all respect painting with two coats of approved black bituminous paint over one coat of primer conforming to IS:2074 all as per drawings, specifications and directions of the Engineer/Consultant, all materials and labour complete in all respect	Qntl	22.17		
14	Dismantling and removing of R.C.C beams, columns, slabs, chajja, shelves, fins and parapet including stacking the useful materials for reuse and removing the debris including all cost of labour, materials, conveyance, taxes, T&P, etc., including all lead and lift all complete as per the directions of Engineer-in-Charge.	cum	4.77		
15	Dismantling of brick masonry work manually / by mechanical means including stacking the useful materials for reuse and removing the debris including all cost of labour, materials, conveyance, taxes, T&P, etc., including all lead and lift all complete as per the directions of Engineer-in-charge.	Cum	45.52		
16	Dismantling C.I Rain water pipes , manually or by mechanical means including stacking of pipes, including all cost of labour, materials, conveyance, taxes, T&P, etc., including all lead and lift all complete as per the direction of Engineer-in-Charge.	RM	65.00		
17	Removing old tarfelt from roof slab , cleaning the surface, lowering and removing the debris with in 50m lead including all cost of labour, materials, conveyance, taxes, T&P, etc., complete as per the direction of Engineer-in-Charge.	Sqm	590.40		
18	Dismantling and removing of doors and windows frames and shutters including transporting and stacking the useful materials for reuse and removing the debris including all cost of labour, materials, conveyance, taxes, T&P, etc., including all lead and lift all complete as per directions of Engineer-in-charge.	Sqm	388.26		
19	Providing Fly ash bricks masonry((in f&p) work using (230mmx110mmx75mm size) having crushing strength not less than 75Kg/Sqcm in cement mortar (1:6). Immersing the bricks in water before use in all necessary projection splays cutting, circular moulding, corbelling etc. Including cost of conveyance ,taxes & royalties, loading and unloading of all materials & cost of all labour, scaffolding ,watering & curing ,sundries, T & P etc. complete as per the direction of Engineer-in-charge .	cum	31.41		
20	Providing Fly ash bricks masonry (Super structure) work using (230mmx110mmx75mm size) having crushing strength not less than 75Kg/Sqcm in cement mortar (1:6). Immersing the bricks in water before use in all necessary projection splays cutting, circular moulding, corbelling etc. Including cost of conveyance ,taxes & royalties, loading and unloading of all materials & cost of all labour, scaffolding ,watering & curing ,sundries, T & P etc. complete as per the direction of Engineer-in-charge .	cum	143.62		

21	Providing 6mm thick cement plaster with cement mortar of (1:4) to ceilings of roof slabs, stairs, landings, chajja, shelves, columns, beams and lofts etc. including roughening, scraping and cleaning and finishing the plastered surface smooth using wooden floats only to proper plumbs and level, making grooves and beads to give required ornamental finish as per drawings including cost of all materials, conveyance, loading and unloading, all taxes and royalties, all labour, scaffolding, watering and curing , sundries and T&P etc all complete as per direction of the Engineer -in-charge	Sqm	833.04		
22	Providing 16mm thick cement plaster mixed with water proofing compound (proportion 100 gram per 50 kg of cement) admixtures to the outer surface of brick masonry wall and RCC column and beam with cement mortar (1:6) including racking out joints, scraping and cleaning the surface and finishing the plaster surface smooth using wooden floats only to proper plumbs and level and making grooves and beads to give required ornamental finish as per drawings including cost of all materials, conveyance, loading and unloading, all taxes and royalties, all labour, scaffolding, watering and curing, sundries and T&P etc all complete as per direction of the Engineer -in-charge	Sqm	694.63		
23	Providing 12mm thick cement plaster to the inner surface of brick masonry wall and RCC column and beam with cement mortar (1:6) including racking out joints, scraping and cleaning the surface and finishing the plaster surface smooth using wooden floats only to proper plumbs and level and making grooves and beads to give required ornamental finish as per drawings including cost of all materials, conveyance, loading and unloading, all taxes and royalties, all labour, scaffolding, watering and curing, sundries and T&P etc all complete as per direction of the Engineer -in-charge	Sqm	617.86		
24	Supplying and laying 40 mm thick flooring with 6 mm thick (minimum overall) heavy duty metallic floor hardener topping course over a bedding layer screed concrete (1:1.5:3) topping course should be laid whilst the screed concrete is still green and the bleed water has evaporated and troweling to a smooth finish as per manufacturer's specification/ direction all as per drawing, specification and direction of the Engineer/Consultant.	Sqm	2798.60		
25	Providing & laying best quality Anti skid Ceramic floor tile of size 300mmx 300mm x 8mm of approved make confirming to IS-15622 specifications in floor over 25mm thick cement mortar (1: 1) to proper slope, line and level including cutting to required size and shape, fixing at corners and splays etc. Including finishing the joints with epoxy based water proofing grout to match the color and shade of tiles complete as per the design & drawing with cost of all materials, labour, conveyance, taxes,royalites T&P etc. All complete as per the direction of Engineer -in-charge.	Sqm	23.97		
26	Providing & fixing ceramic glazed wall tiles of (size-200mmx300mm) conforming to IS: 15622 specification of approved make and shades,in skirting and dados over 12mm thicks bed of cement mortar 1:3(1cement:1 coarse sand) and finishng the joint with epoxy based water proofing grout to match the shades of tiles complete as per the design & drawing with cost of all materials, labour, conveyance, taxes,royalites T&P etc. All complete as per the direction of Engineer -in-charge.	Sqm	69.78		

27	Supplying, fitting and fixing in position approved quality M.S. rolling shutters conforming to IS: 6248, pull and push type of partly sheeted partly grilled/fully grilled types as specified with all accessories, side guides, 20 gauge hood cover of hexagonal shape, locking arrangement, handles to operate rolling shutters, rolling grills of following types including cutting necessary holes in walls and grouting with cement concrete and finishing neatly all as per drawings, specifications and directions of the Engineer/Consultant, all materials, tools, plant and labour complete in all respect (measurement of rolling shutters shall be the same as that of clear wall opening)				
	Rolling Shutter	Kg	1362.81		
28	a) Supply and fixing of uPVC Sliding glazed uPVC Window made out of hollow multi-chambered uPVC sections having isolated drainage and reinforced through out with galvanised steel. The corners and joint shall be mitre cut and fusion welded. The 2 track & 3track outer frame of the window shall be made out of uPVC sections having an overall size of 60 mm x45 mm & 108 x 45 mm having wall thickness of 2.2 mm (Code:41201-02000 & 41201-01000), provided with steel reinforcement through out uPVC profile and size 13mm x 33 mm. Adaptor track of sizes (24mm X35mm) for bug mesh.The sashes/ shutters shall be made out of uPVC sections having an overall size of 39 mm x 58 mm having wall thickness of 2.2 mm(Code: 41201-03100) It is also reinforced with steel reinforcement through out of uPVC profile and size of 9 mm x 28 mm. Sliding screen system sash of sizes(18.5mmX42.5mm)shall be provided with fibre glass bug mesh.The glazing shall be provided of size 5mm thick toughened glass with the outer glass UV res joint and pligging with XYPEX concrte megamix mortar. (c) Water proofing horizontal/verticals slab with XYPEX concentrate@0.80kg/Sqmt.	Sqmt	224.80		
28	(b)Supply and fixing of uPVC ventilator made out of hollow multi-chambered uPVC sections having isolated drainage and reinforced through out with galvanised steel. The corners and joint shall be mitre cut and fusion welded etc. complete as per direction of EIC.	Nos	6.00		
29)	Supplying,fitting& fixing in position 32mm.thick single leaf commercial flush door shutter including cost conveyance , taxes of all materials required for the work and labour charges etc. complete as per direction of EIC.....etc. complete. (Service order No 2500001060, Date- 13.12.2017	Sqmt	6.93		
30	Providing and applying White washing 02 coats on old / new surface using best quality shell lime including thorough cleaning, rubbing out moss and loose scales etc and preparation of the surface area of application, including all cost, conveyance, T&P, taxes of all materials, scaffolding & labour charges etc. complete as per direction of Engineer-in-charge.	Sqmt	5050.08		

31	Providing and applying two coats of approved plastic emulsion paint shade (ASIAN/BERGER/Dulux) over a coat of primer on new work by means of roller to inside surface of new walls including preparation of base with a approved quality acrylic based putty and finishing the surface ,smooth including all cost of materials , labour, scaffolding , T&P etc. complete as per direction of EIC. (AR -2006 ,Page no-80, SI no-20)	Sqmt	3084.48		
32	Providing & Painting with Weatherproof Anti fungal Exterior emulsion Paint 02 (two) coats on old / new surface using approved Brand and shade Weatherproof paint (Asian / Dulux / Berger) including thorough cleaning, rubbing out moss and loose scales etc and preparation of the surface area of application, including all cost, conveyance, T&P, taxes of all materials, scaffolding & labour charges etc. complete as per direction of Engineer-in-charge.	Sqmt	1965.60		
33	Providing and applying "XYPEX concrete water proofing by crystallization" Or equivalent to be supported by at least two international test reports showing clear scanning electron microscopic (SEM) photographs of densified and mature crystals formation to plug all the capillary tracks and pores of the concrete permanently and permeability test as per IS 2720 conducted water more than 1.5 gms and not more than 1mm from the concrete surface.The product to be listed in ICC-ES EVALUTION REPORT INDEX january 2009 and the product should be green certified under any Ecolable program.The treatment to be carried out as per the technical details provided in the technical section of the tender on the concrete surface including cleaning all RCC surface as per manufactures's specification/ datasheet .10 years old performance certificate of the product shall be submitted to the Engineer-in-charge. (a) Cleaning of slabs and plugging of holes with XYPEX path & plug mortar, (b) Cutting the concrete at vertical and horizontal joint and plugging with XYPEX concrete megamix mortar. (c) Water proofing horizontal/verticals slab with XYPEX concentrate@0.80kg/Sqmt.	Sqm	500.00		
34	Grading plaster over the waterproofed roof slab with 1:2:2 concrete using bazuri as stone, maintaining slope properly as per guidance of architect or project manager.	Sqmt	1107.60		
35	Supply, Fabrication and erection (as per the fabrication drawings supplied) including transportation and delivery at site of Steel Structures consisting of Roof Steel Structures consisting of Roof trusses, purlins, side runners, etc. with surface preparation and one coat of primer paint at shop along with supply of bolts, nuts, washers, electrodes and paints as per the specifications or as directed by the Engineer and as shown on drawings,all materials,tools,plant and labour complete.	Qntl	350.00		
36	Painting of existing roof steel structures consisting of Roof trusses, purlins, side runners, etc. with surface preparation and one coat of approved primer paint at shop along with supply of paints.	Sqm	638.03		
37	Supply,fabrication,erection,transporting,cutting,placing and fixing in position at roof level Pre-colour coated GCI sheets of 0.40 mm total coated thickness (TCT) 0.45 BMT , as laid for ridging & flashing sheeting including fixing of self tapping self drilling screws with integral EPDM washer etc,pop rivet with EPDM washer ,non-hardening poly-sulphide or other approved sealant and mastic tapes and foam filler to prevent water penetration,all as per the specifications or as directed by the Engineer and as shown on drawings,all materials,tools,plant and labour complete.	sqm	1416.19		
38	Providing & fixing of colour coated ridges with 2.450m length in roof including drilling holes ,cost of M/S screw 50x8mm (ISI) conveyance taxes of all materials,labour charges T&P etc complete in all respect as per direction of EIC.	Rmt.	168.00		

39)	Dismantling of roof sheeting and stacking all the old sheetings in warehouse outside the plant within a lead of 50m as as directed by the Engineer/Consultan	sqm	579.84		
40)	Providing and injecting chemical emulsion for anti-termite treatment and creating a continuous chemical barrier under and alround the room floors, top surface of plinth filling, junction of wall and floor along the external perimeter of the building, all excavated areas for foundations, trenches etc. complete as per specifications. (Plinth area of the building at ground floor only shall be measured for payment).Chlorpyriphos Emulsifiable concentrate 20% with 1% concentration.	Sqm	1064.00		
41)	Removing old lime or cement plaster from walls including racking out joints 12 mm deep and removing the debris with in 50m lead.	Sqm	375.00		
PLUMBING WORK					
1	Providing and Fixing Bowl for couple closet (European type W.C pan) with integral 'S' or 'P' trapconforming to IS 2556 : Part 8-2004, to the floor with wooden plug and chromium plated screws including jointing the trap with soil pipe in cement mortar (1:1) etc all complete as perspecification.	each	2.00		
2	Providing and Fixing bowl pattern urinal conforming to IS 2556 : Part 6-1996 including connecting the urinal of710x485x300 mm with Flush cock sizes respectively with waste pipe by means of white leadmixed with chopped hemp etc all complete as per Specification	each	6.00		
3	Providing and Fixing wash basins (size- 200mmx550x400xmm)with full pedestal for pillar taps conforming to IS 2556 : Part 4-2004 with CastIron or M S brackets painted white including cutting holes in walls and making good the damagesetc all complete as per direction of EIC.	each	6.00		
4	Providing and Fixing 15MM Pillar Cock	No.	4.00		
5	Providing and Fixing 15MM BIB Cock	no	2.00		
6	Providing and Fixing Health Faucet with 8mm dia 1mtr long Flexible Tube and Wall Hook	no	2.00		
7	Providing and fixing toilet paper holder	no	2.00		
8	Providing and fixing 600 mm towel rail	no	2.00		
9	Providing and fixing 600 mm x 900 mm mirror in position	no	4.00		
10	Providing and fixing Soap Holders	no	2.00		
11	Providing and fixing CPVC (supreeme/ashirbad make) for supply of water to all required positions , inlcuding cutting walls,providing bends, connections and clamps as per requirement. All joints to be sealed with proper solvent and to be make water tight.				
	a) 15 mm dia bore pipe	Rmt	5.00		
	b) 20mm dia bore pipe	Rmt	20.00		
	c) 25mm dia bore pipe	Rmt	110.00		
12	Providing and fixing P.V.C. waste pipe for wash basin including P.V.C. waste fittings complete.				
	a) Semi rigid pipe: 40 mm	No	6.00		
	b) Flexible pipe: 32mm	No	9.00		
13	Laying oriplast make class 2 grade soil or waste or gas pipe or rain water pipe including all bends , cover jali or traps as per standard practice, till nearest inspection chamber. All joints to be sealed with solvent and make watertight. If pipe is laid for connection to Inspection chambers to Septic tank or is laid in external surfaces then it will be covered with PCC (1:5:10) over it.				
	a) 100 mm dia pipe with proper slope	Rmt	150.00		
14	Providing and placing on terrace polyethylene water storage tank , ISI : 12701 marked of standard make (preferably Sintex) with cover and suitable locking arrangement in position as per drawing or instruction of project manager. Including making all inlet pipe, overflow and outlet pipe connections with c PVC gate valve and c pvc connections as per requirement. Including providing 1 no of gate valve of 1" dia outlet.				
	Capacity: 1000 Ltr	no	2.00		

15	Making underground septic chamber of clear internal size 1.2 m x 1.5 m x 1.5 m (depth) with a 0.9 m dia 1.2 mtrs depth soak pit connected to it .Including brick work, plaster and cover Rcc slab casting and a manwhol of 0.6 m dia, including all material , labour , wastage etc.	no	2.00		
16	Making 0.3m x 0.3m internal sized inspection chambers in position with 50mm thick RCC covers cast in situ. The Min depth of chamber will be 0.3 m and will depend on gradient required at site..Including brick work, plaster and cover Rcc slab casting and all material , labour , wastage etc.	no	5.00		

BILL OF QUANTITIES FOR ROAD WORKS

Item No	Description of item	Unit	Qty		
1	Excavation of any approved type of soil in approved borrow area by mechanical means loading into and transportation by mechanical means and unloading the soil within initial lead of 5 km on properly prepared and scientifically approved surface including spreading and levelling the earth in 22.5 cm layers to make ready for watering and compaction with Vibratory rollers and dozers including watering earthwork upto OMC condition and compaction by vibratory roller & dozer in layers not exceeding 22.5cm to required density in dams and dykes for all heights including construction, maintenance, watering and lighting of haul road, hire & running charges of all machineries, royalty, taxes and borrow area etc. complete as per the direction of E.I.C. (measurement of the fill to be taken on the finished compacted section under OMC condition.)	cum	5292.00		
2	Watering earthwork upto OMC condition and compaction by vibratory rollers and dozer in layers not exceeding 45 cm. to required density including hire and running charges of all the machineries complete as per direction of Engineer-in-charge. (measurement to be taken on the finished compacted section of the fill under OMC condition.		5292.00		
3	Supplying & spreading good laterite moorum of approved quality and consolidation with PRR after watering including hire and running charges of Tanker & PRR, turfing, watering and including cost , conveyance, royalty, taxes of all materials etc. Complete in all respect as per direction of Engineer in-charge	cum	735.00		
4	Providing collecting, stacking and conveying from stack and spreading moorum admixture in layers not exceeding 100mm, watering and compacting to the required density in O.M.C with PRR including hire and running charges of PRR, watering, cost, conveyance, royalty, taxes of all materials and labour charges etc. complete as per direction of Engineer-in-charge. (Hire and running charges of PRR= 697.39/hr)	cum	343.00		
5	Providing and applying tack coat using hot straight run bitumen of grade 80/100/emulsion grade bitumen including heating bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparation of the existing road surface as per specification including cost, conveyance taxes of all materials, labour charges, T&P, machineries etc complete as per direction of Engineer-In-Charge	sqm	1715.00		
6	Providing and laying 75 mm thick bituminous Mecadam with VG30 TPH hot mix plant with bitumen binder, transported to site, laid over a previously prepared surface with mechanical paver finisher to the required grade, level and alignment as per clause 504 of MoRT &H specification for road and bridge works(4th revision) including cost conveyance royalty taxes of all materials, labour charges, T&P , machineries , PPE etc all complete as per direction of Engineer-In-Charge.	cum	128.63		

7	Providing and lying 25 mm thick semi dense bitumen concrete with VG-30 TPH HMP by transporting the hot mix to work site lying with a Mechanical paver finisher to the required grade, level , alignment as per clause no 508 of MoRT&H specifications for road and bridge work (4th revision) including cost conveyance, royalty taxes of all materials, labour, T&P, Mechinaries etc complete in all respect as per direction of Engineer-In-Charge	Sqm	1715.00		
8	Blinding road surface with sand or gravel 6mm thick including all cost, conveyance, royalty taxes of materials, labour, T&P, PPE etc as per direction of Engineer in-charge	sqm	1715.00		
9	Earth work in excavation for box cutting in roads etc. for all types of soft & hard soil for a lifts, including pumping out water accumulating inside the excavation, adequate protection during the excavation, transporting the excavated earth/material to the designated areas/ places and disposal of excess unused full earth/ materials etc. Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the subgrade complete in all respects as per drawings, specification and direction of engineer to any lead within plant boundary wall. Complete in all respect as per direction of Engineer in-charge .	Cum	522.00		
10	Rough stones dry packing in aprons and reventment with hard granite stones 30cm and above size including all cost ,conveyance,T&P royalties,taxes of all materials and labour charges etc. completer as per direction of EIC.	Cum	522.00		
11	Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.	Sqm	435.00		
	NOTES:-				
	1. THE BASIC RATES GIVEN IN THE BOQ ARE EXCLUSIVE OF CARTAGE AND TAXES				
	2. ARCHITECT OR PROJECT MANAGER MAY CHANGE ANY ITEM AND RATE MAY BE MUTUALLY AGREED WITH CONTRACTOR				
	3 CLENT MAY CHANGE ANY ITEM AND ALSO CAN REMOVE ANY ITEM FROM SCOPE OF WORK				
	TOTAL C/O TO SUMMARY FOR CIVIL AND STRUCTURAL WORKS				